Trio Stability - 2019 Annual Report

August 2019

Contents

1. PURPOSE

The purpose of the OceanaGold NZ Ltd (Waihi Operations) Trio Stability Annual Report is to comply with Condition 16 of Hauraki District Council (HDC) LUC RC-15774 and confirm that appropriate measures are being undertaken to minimise the risk of surface instability.

2. OBJECTIVES

As required by Condition 16 of RC 15774, Waihi Operations must submit an annual stability report for the Trio operation:

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

3. LOCATION, DEPTH, HEIGHT AND VOLUME OF STOPES (*c. 16a*)

Mining of the three main Trio vein systems is completed: Union, Trio and Amaranth have been mined and backfilled. The uppermost level is 972[1] and fill has been pushed up to within 1 m of the backs. All stopes are backfilled and on completion of stoping the 972 development drive was also backfilled with lime-dosed waste rock. Development drives and accesses to Trio have also been backfilled by paddock dumping to within 2 m of the backs.

The only accesses that have remained open are for access to the Correnso Underground Mine; the Union 972, 953 and 844. On each of these levels, the accesses to Trio and Amaranth have been filled as far as the tipples on each level.

No stoping was undertaken during the reporting period. Development activities during the reporting period consisted of the development of an exploration spiral decline and associated drives underneath the completed Trio works to facilitate access to ‘Trio Deeps’ (Figures 1 and 2).

[1] *Mining level nomenclature throughout this document has been abbreviated for ease of reading (it would normally have an mRL suffix).*

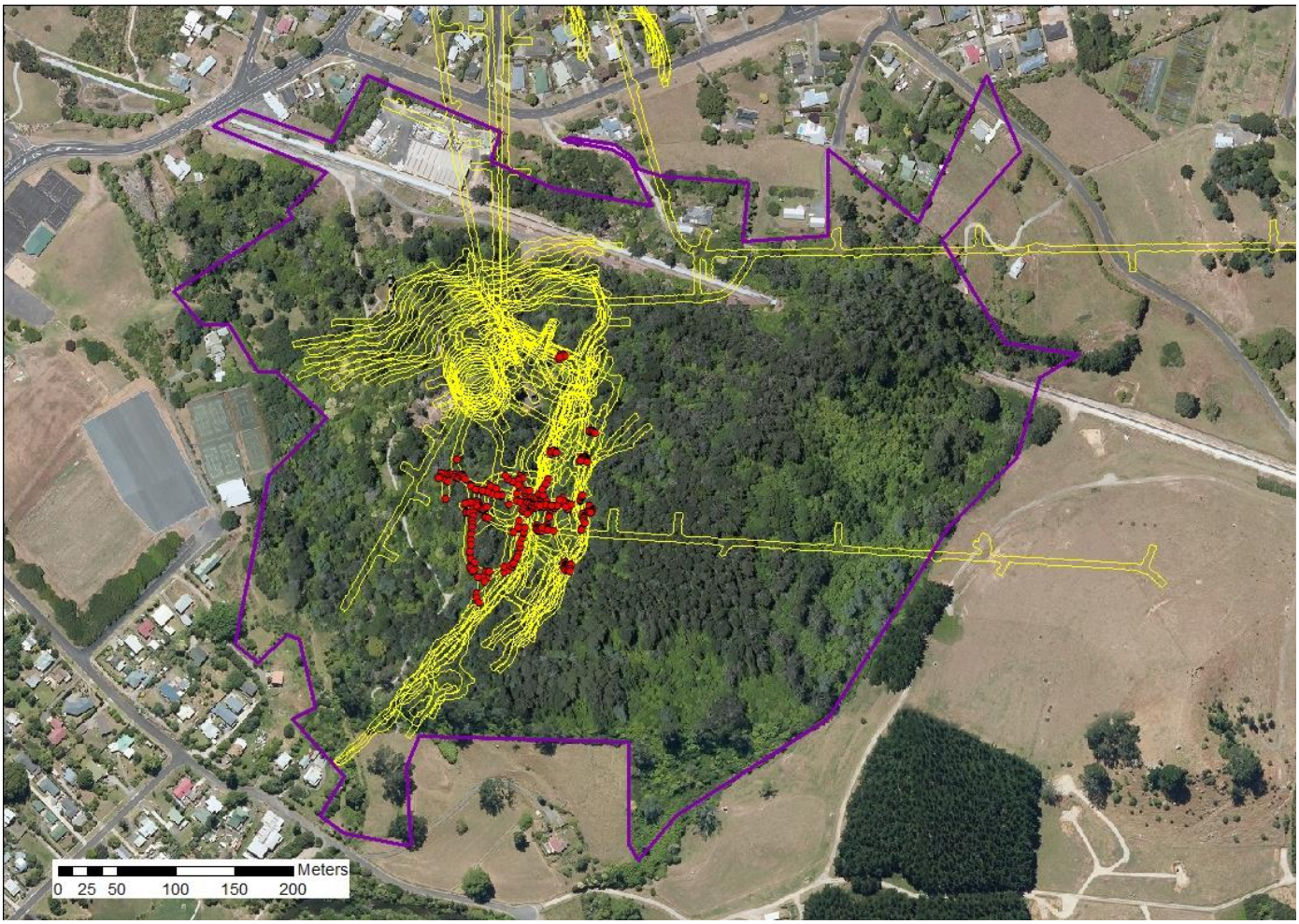

Figure 1: 2018-19 Trio Blasting (red dots indicate blast locations)

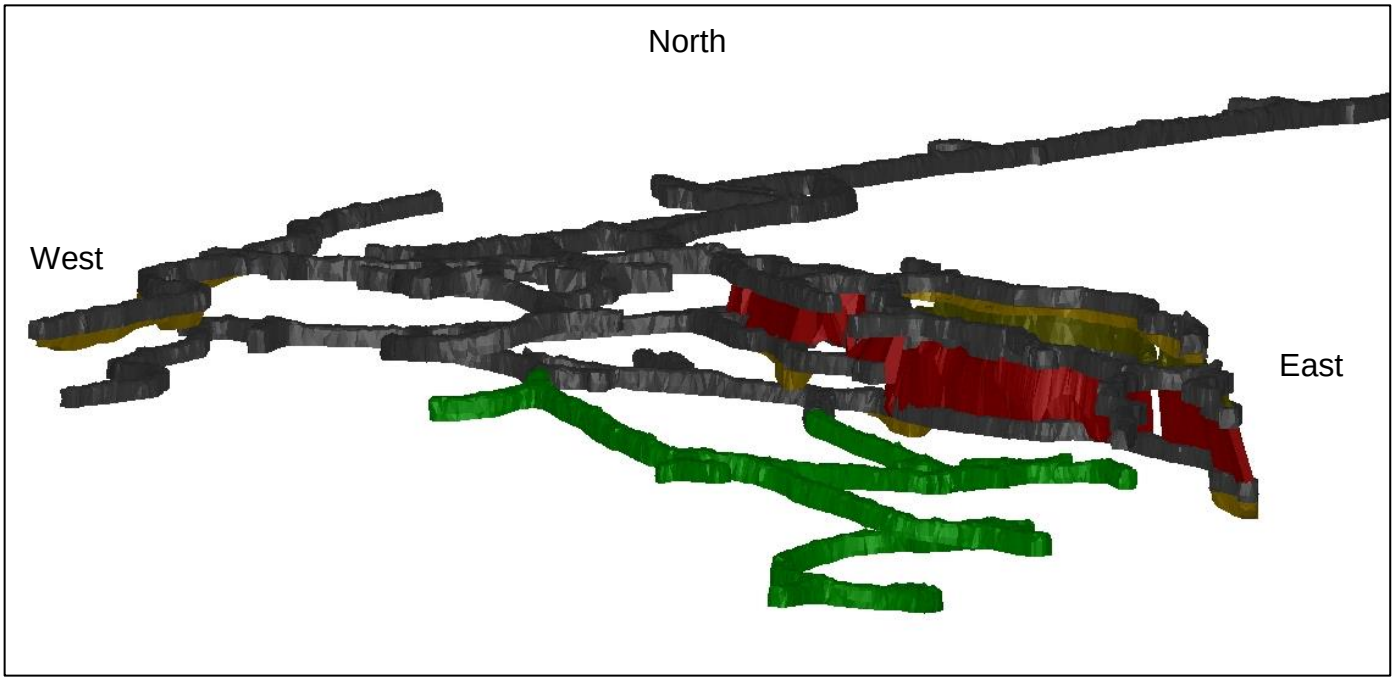

Figure 2: 2019 Oblique view of Trio Deeps Exploration drive (green).

4. BACKFILLING AND COMPACTION OF EACH STOPE (*c. 16b*)

No new backfilling has been required during the reporting period and the schematics for backfilling are unchanged (see figures 3a – 3c). All available stopes were backfilled during earlier reporting periods and no new stoping has been opened up.

5. GROUND CONDITIONS REVEALED BY MINE EXCAVATION (*c. 16c*)

Rock mass conditions encountered during development have been consistently good and only standard ground-support has been considered necessary. No additional reinforcement has been needed apart from cable bolts for turn-outs as is standard practice throughout the mine. Refer to the previous Trio Stability Annual Reports for details of past activity.

6. MEASURES AND OUTCOMES MANAGING THE RISKS OF SURFACE INSTABILITY (*c. 16d*)

The primary purpose of activity within the Trio area during 2018/19 was to develop access to Trio Deeps. Minor rehabilitation of a previous access has been carried out due to localised corrosion of ground support. No other rehabilitation has been necessary. None of the activities during the reporting period will have any impact on surface stability. Drive dimensions are of the order of 5 m high and 5 m wide and are more than 300 m below surface.

In relation to Condition 15 requirements:

- No stoping was undertaken during the period, therefore the prescribed mining technique and stope length was not a consideration.
- There were no instances during the period when close proximity to old workings was considered an issue.

7. CONCLUSION

Waihi Operations believes it has fully complied with Condition 16 of HDC LUC RC-15774 (and Condition 15 as Condition 16 relates to it) 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.

8. REFERENCES

Newmont Waihi Gold, 2014: Trio Stability, 2013-14 Annual Report. Unpublished Internal Report, Newmont, July 2014.

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OceanaGold Waihi Operations, 2016: Trio Stability, 2015-16 Annual Report. Unpublished Internal Report, OceanaGold NZ Ltd, July 2016.

OceanaGold Waihi Operations, 2017: Trio Stability, 2016-17 Annual Report. Unpublished Internal Report, OceanaGold NZ Ltd, July 2017.

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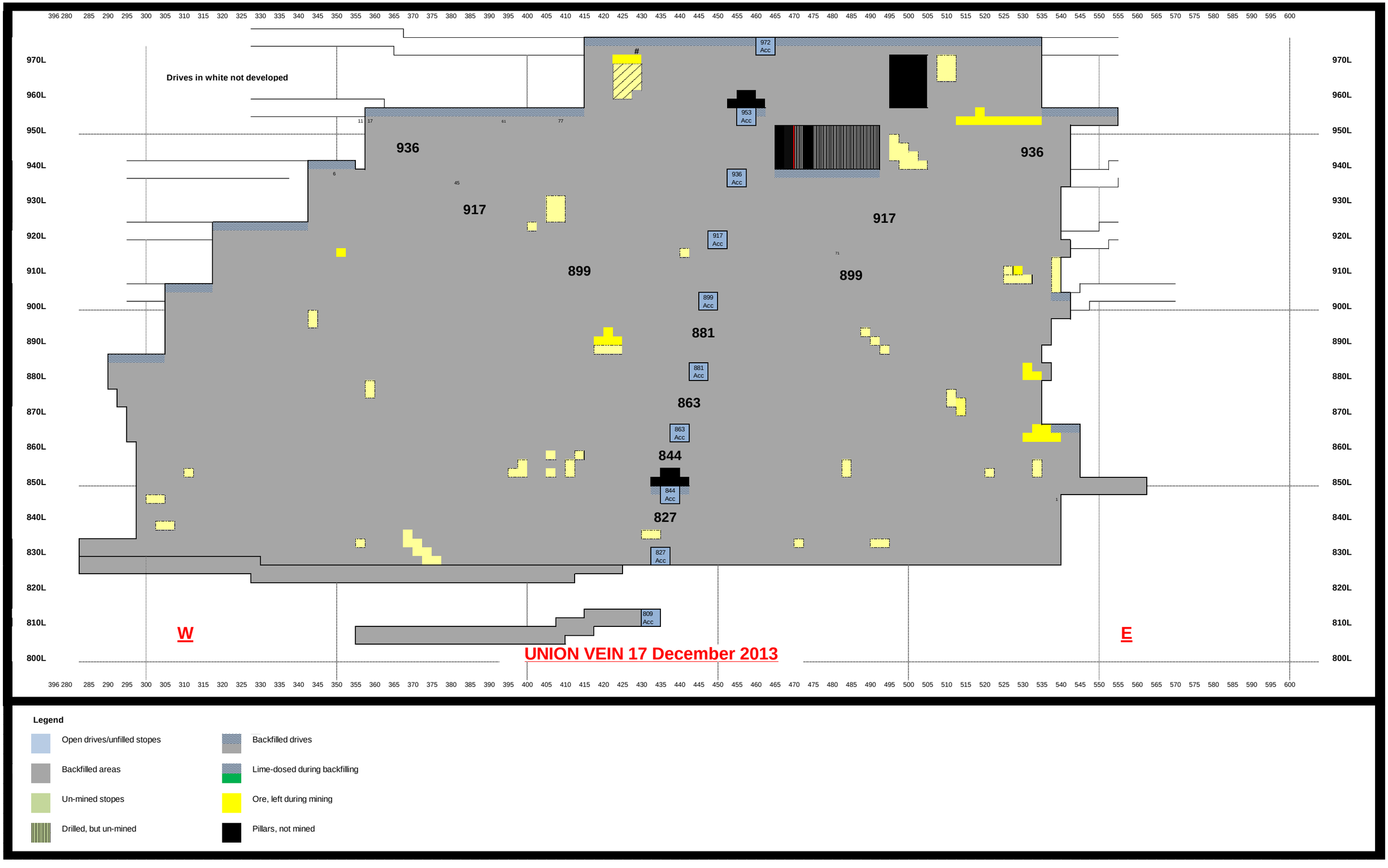

Figure 3a: Long view of Union Vein

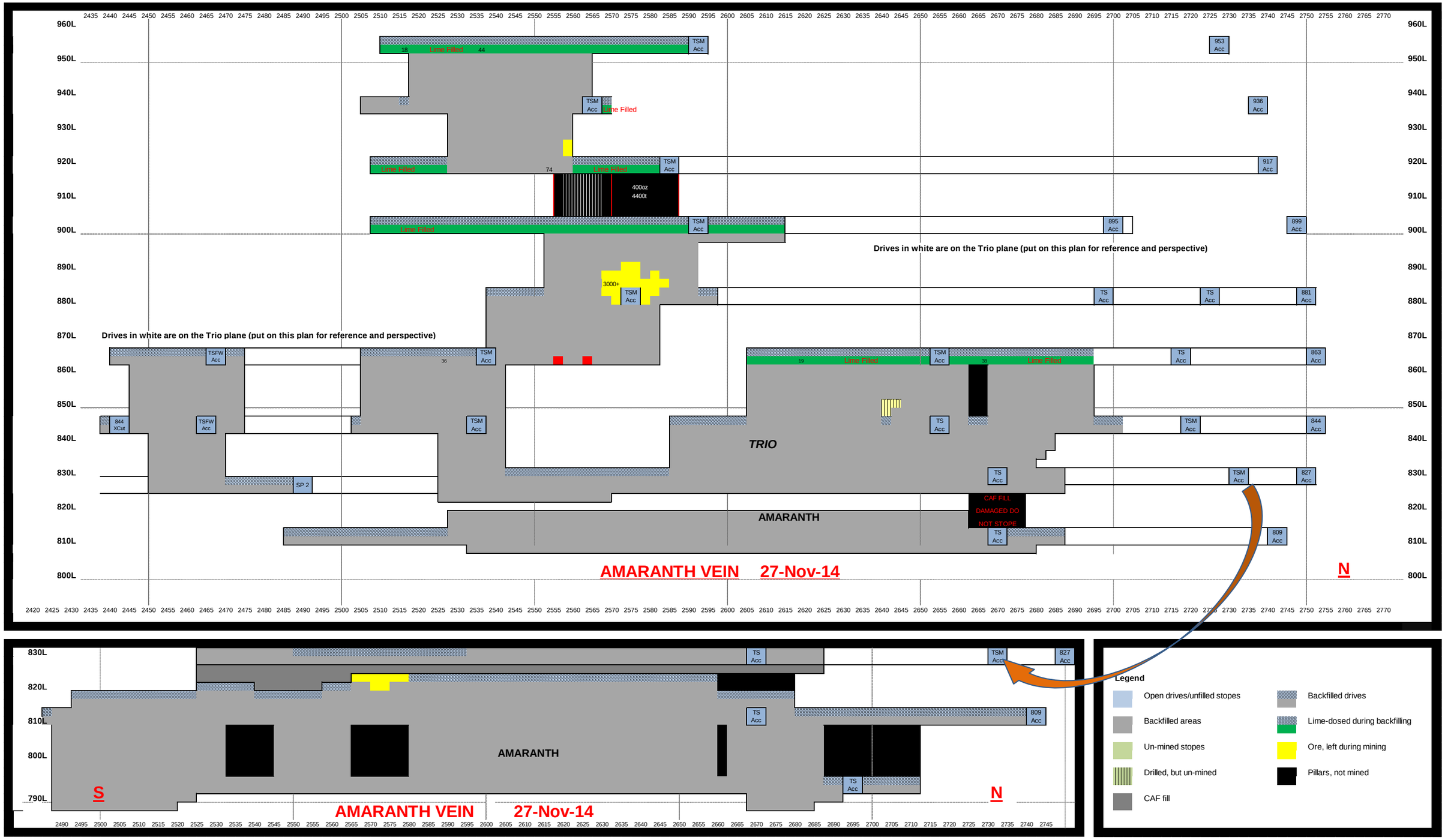

Figure 3b: Long view of Amaranth Vein

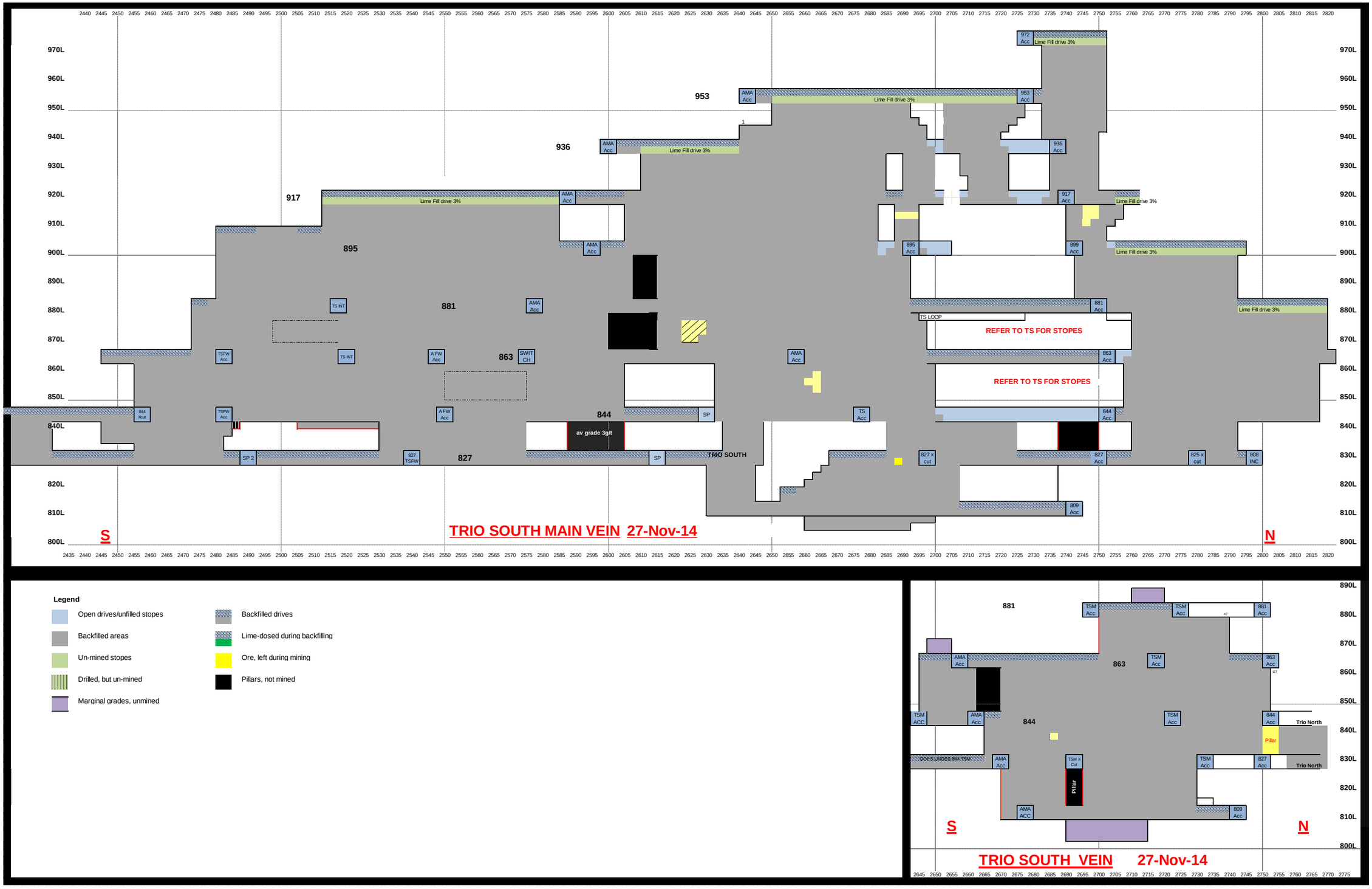

Figure 3c: Long view of Trio Mine