# Alderan completes drilling at Mizpah oxide gold deposit, Utah, USA



## HIGHLIGHTS

- **Alderan successfully completes 22-hole (1,797m) reverse circulation (RC) drilling programme under budget, ahead of schedule and with no safety incidents at Mizpah oxide gold deposit, Utah, USA.**
- **All holes traversed near surface oxidized, transition and primary sulphide bearing sediments. Oxidisation depths range from 7m to 30m from surface.**
- **Holes targeted high-grade near-surface oxide gold mineralisation which typically sit within thicker, lower grade gold mineralised zones. Historical (1984-89) high grade intersections include:**
  - **10.7m @ 2.2g/t Au from surface (MZ-49)**
  - **9.2m @ 2.1g/t Au from 6.1m downhole (MZ-87-32)**
  - **10.7m @ 2.0g/t Au from 3.1m downhole (MZ-87-048)**
  - **13.7m @ 1.7g/t Au from 30.5m downhole with last assay 9.1g/t Au (MZ-87-52)**
  - **12.2m @ 1.7g/t Au from surface (MZ-093)**
- **Alderan re-drilled Drum hole 9DD22-007, 150m down dip of Drum West Pit, to test near historical hole YC-174 which intersected 15.2m @ 4.5g/t Au. Earlier hole intersected 15.9m @ 0.42g/t Au in waste dump material at the top of the hole and 5.9m @ 1.2g/t Au at the bottom of the hole but did not reach target depth.**
- **Mizpah deposit is 2km from the historical Drum gold mine which produced 125Koz @ 1.2g/t Au (1984-89) in the same rock units.**
- **Mizpah gold assays are expected early in Q4, 2022.**
- **Alderan plans further soil sampling and preliminary metallurgical testwork at Detroit.**

***Figure 1**: Mizpah reverse circulation drill hole samples being prepared for transport.*

Alderan Resources Limited (ASX: AL8) (**Alderan** or the **Company**) is pleased to announce the successful completion of a reverse circulation (RC) drilling programme at its Mizpah oxide gold prospect, at the Detroit project in the Drum Mountains region of western Utah, USA.[1] A total of 22 holes (1,797m) were drilled with the focus on intersecting high-grade near-surface oxide gold mineralisation (see Figure 2 and Appendix 1 for hole details).

Mizpah is only 2km north of the historical Drum oxide gold mine which Alderan drilled in H1, 2022 with all verification holes intersecting gold including **6.6m @ 2.5g/t Au** within **17.8m @ 1.7g/t Au** in hole 9DD22-003.[2] Mizpah, which was drilled in the 1980's, sits in the same rocks as Drum but unlike the historical mine, it was never developed into a mining operation. Gold mineralisation at Mizpah remains from surface.

The Mizpah historical holes were drilled to an average depth of only 28m and did not evaluate the potential for primary gold mineralisation below the oxide zone. There are 40 historical holes which have final assays grading more than 0.5g/t Au, well above the cut-off grade for oxide heap leach gold deposits in the USA, with 20 of these having last assays grading more than 1.0g/t Au. The highest final assay down an historical hole is 9.1g/t Au in hole MZ-87-52.[3] All of Alderan's drill holes have traversed the oxide zone before ending in primary un-oxidised sediments.

Alderan completed historical drill hole constrained modelling of the Mizpah deposit which indicated exploration potential for 40-100Koz of gold grading 0.4-0.8g/t Au, however the deposit remains open down dip to the southwest and along strike to the north and south[3]. It should be noted that this exploration potential quantity and grade is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Alderan drillholes DD-MZ-20-006 and 3DDMZ-001, located 190m and 350m to the west-northwest of the deposit, intersected 83m @ 0.41g/t Au and 69.5m @ 0.18g/t Au respectively and indicate that Mizpah's mineralising system is significantly larger than historically outlined.[4]

Historical drill holes at Mizpah with high-grade, near-surface gold mineralised intersections in close proximity to Alderan holes include:

- MZ-049: **10.7m** @ **2.2g/t Au** within **15.2m** @ **1.6g/t Au** from surface
- MZ-87-32: **9.2m** @ **2.1g/t Au** within **22.9m** @ **1.0g/t Au** from 3.0m downhole
- MZ-87-048: **10.7m** @ **2.0g/t Au** within **16.8m** @ **1.4g/t Au** from 3.1m downhole
- MZ-87-52: **13.7m** @ **1.7g/t Au** within **29.0m** @ **0.9g/t Au** from 15.2m downhole with last assay 9.1g/t Au
- MZ-093: **12.2m** @ **1.7g/t Au** from surface
- MZ-17: **10.7m** @ **1.7g/t Au** within **18.3m** @ **1.2 g/t Au** from surface.

In addition to the Mizpah holes, a re-drill of Alderan hole 9DD22-007 at Drum was completed (see Figure 3). 9DD22-007, located 150m downdip to the west of the historical West Pit at Drum, was abandoned prior to reaching its target depth due to drill rods being lost down the hole in April 2022. It intersected 15.9m @ 0.42g/t Au in waste dump material at the top of the hole and 5.9m @ 1.2g/t Au at the bottom of the hole which ended at a depth of 109m. The re-drill hole, 9DPRC22-001, was drilled successfully to a depth of 130m.

**Alderan Managing Director Scott Caithness said:** *"The Mizpah reverse circulation drilling was successfully completed in under three weeks which has proved a very efficient and cost-effective programme for the Company. The holes indicate that oxidation extends to 7-30m from surface and is followed by a mixed oxide-primary transitional zone. They typically end in in un-oxidised primary quartzites containing fine grained pyrite.*

*"Samples have been submitted for analysis and initial gold assays are expected in early Q4, 2022."*

[1] *Refer Alderan ASX announcement dated 3 August 2022 for further information.*
[2] *Refer Alderan ASX announcement dated 5 April 2022 for further information.*
[3] *Refer Alderan ASX announcement dated 24 August 2021 for further information.*
[4] *Refer Alderan ASX announcement dated 25 May 2022 for further information.*

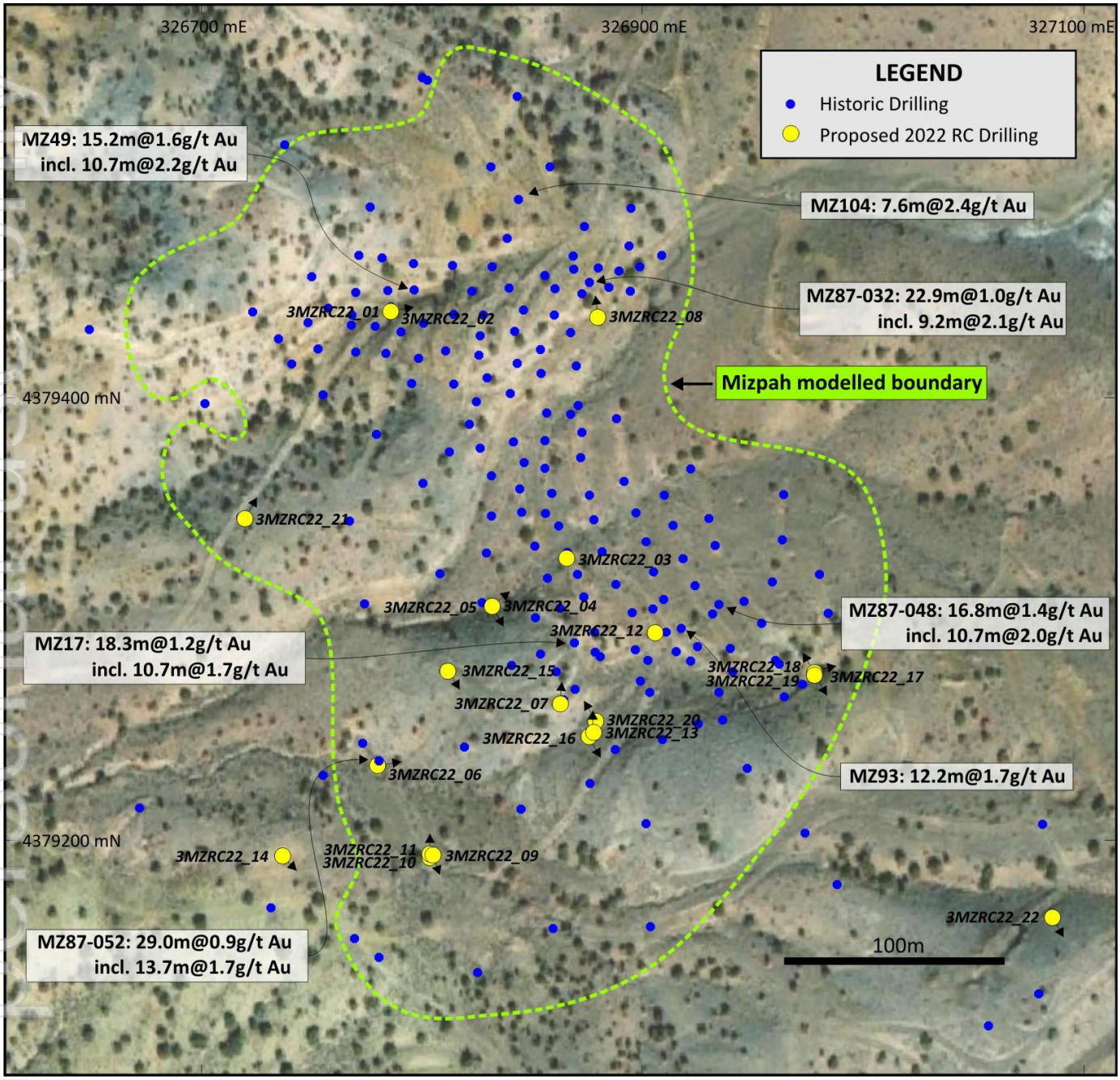


***Figure 2:*** *Mizpah block model outline based on historical drill data, selected near surface high grade historical drill intercepts and Alderan's completed RC holes. The Mizpah mineralisation dips at ~20º to the southwest from surface and is open to the west, north and south.*

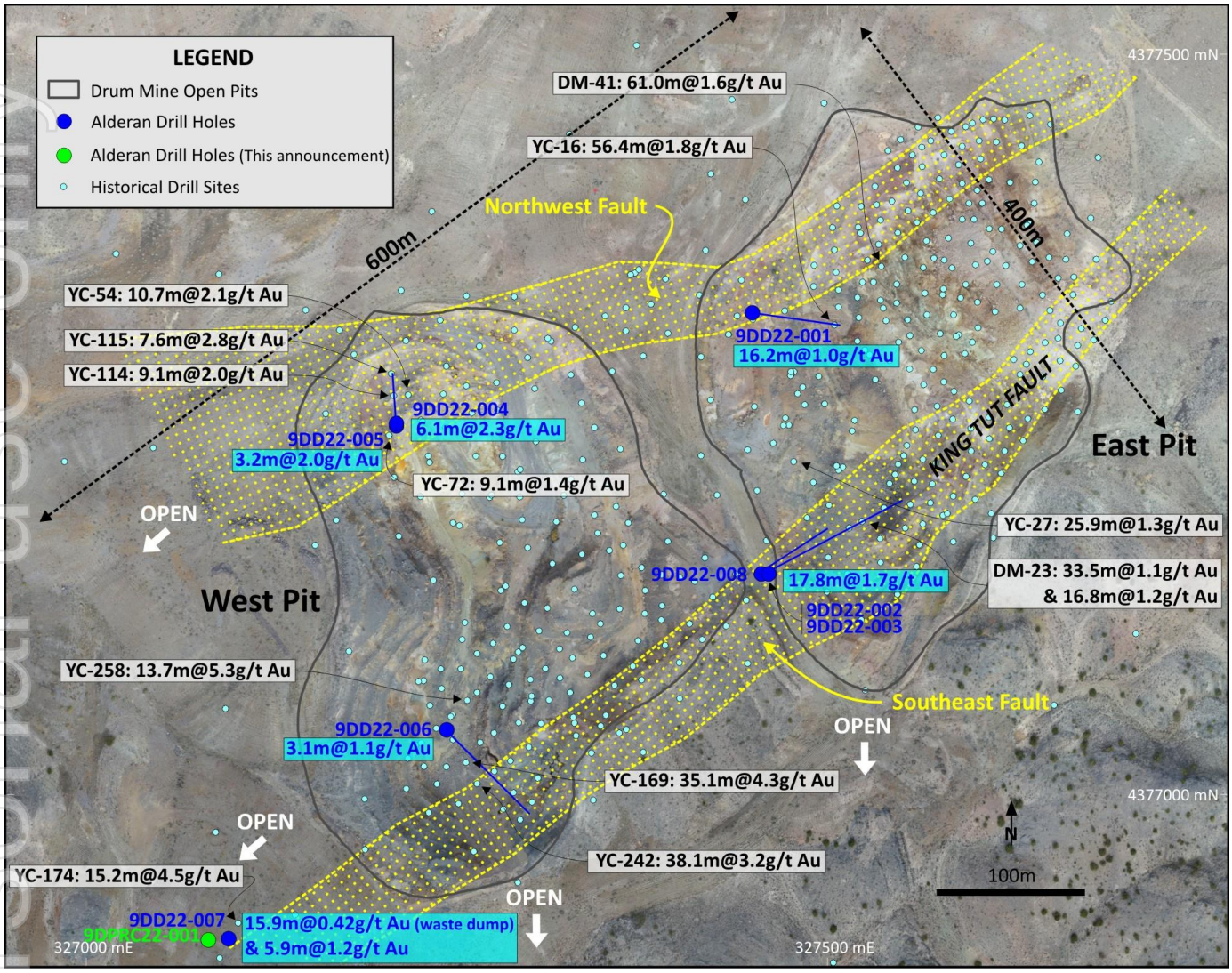


***Figure 3:*** *Drum historical gold mine showing pit outlines, interpreted major bounding faults, significant historical and Alderan drill intersections plus hole 9DPRC22-001 which is a re-drill of abandoned hole 9DD22-007.*

## Next Steps

Alderan has submitted all samples to the laboratory for gold analysis with results expected early in Q4, 2022. Drill logs are being finalised.

Planned work at Detroit includes infill soil sampling to better define the gold in soil anomalies identified from the broadly spaced 200m x 40m sampling programme completed 2021 and early 'sighter' metallurgical testing to obtain an indication of gold metallurgical recoveries.[5] This work is expected to be completed in Q4, 2022. Alderan will plan further drilling at Mizpah pending results from this drilling programme.

## Detroit Project

The Detroit Project is one of four Alderan projects (Figure 3) in Utah, USA. It lies within the Detroit Mining District, approximately 175km southwest of Salt Lake City, and contains numerous historical copper, gold and manganese mines. The district has been explored for copper and gold in the past by major mining companies such as Anaconda Copper, Kennecott, Newmont, BHP and Freeport-McMoRan but no one company was able to build a significant

[5] *Refer Alderan ASX announcements dated 27 June 2022 for further information.*

contiguous land position to enable district-wide modern exploration. The United States Geological Survey (**USGS**) has also explored the area, sampling extensive mineralised jasperoids.

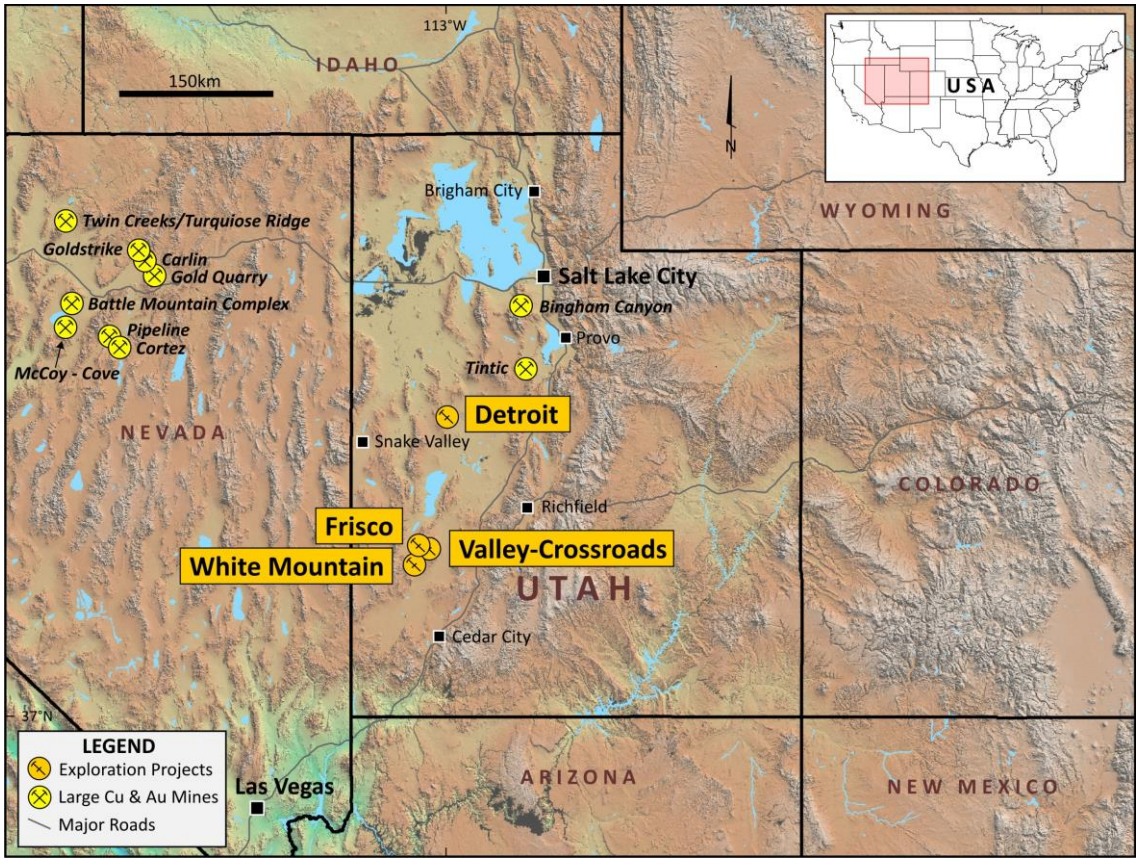


***Figure 4**: Alderan Resources project locations in western Utah.*

This announcement was authorised for release by the Board of Alderan Resources Limited.

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## Competent Persons Statement

The information contained in this announcement that relates to the exploration potential for the Mizpah oxide gold deposit is based on, and fairly reflects, information compiled by Dr Marat Abzalov, who is a Fellow of the Australian Institute of Mining and Metallurgy. Dr Abzalov is a consultant to Alderan and 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'. Dr Abzalov consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. Dr Abzalov holds securities in the Company.

The information in this announcement that relates to historical exploration results were reported by the Company in accordance with listing rule 5.7 on 24 August 2021, 5 April 2022, 25 May 2022, 27 June 2022 and 3 August 2022. The Company confirms it is not aware of any new information or data that materially affects the information included in the original announcements.

*Appendix 1: Drill hole location details*

| Drill hole ID | Easting* | Northing* | RL (m) | Dip | Azimuth | Depth (m) | Drill Type |
|---|---|---|---|---|---|---|---|
| 3MZRC22-01 | 326,786 | 4,379,440 | 1,904 | -90º | 0º | 50 | Reverse circulation |
| 3MZRC22-02 | 326,786 | 4,379,440 | 1,904 | -45° | 80° | 55 | Reverse circulation |
| 3MZRC22-03 | 326,866 | 4,379,328 | 1,905 | -90° | 0° | 70 | Reverse circulation |
| 3MZRC22-04 | 326,832 | 4,379,306 | 1,901 | -65° | 50° | 75 | Reverse circulation |
| 3MZRC22-05 | 326,832 | 4,379,306 | 1,901 | -65° | 150° | 90 | Reverse circulation |
| 3MZRC22-06 | 326,780 | 4,379,234 | 1,895 | -80° | 80° | 80 | Reverse circulation |
| 3MZRC22-07 | 326,863 | 4,379,262 | 1,906 | -60° | 5° | 85 | Reverse circulation |
| 3MZRC22-08 | 326,880 | 4,379,437 | 1,916 | -45° | 353° | 50 | Reverse circulation |
| 3MZRC22-09 | 326,805 | 4,379,193 | 1,899 | -60° | 160° | 125 | Reverse circulation |
| 3MZRC22-10 | 326,804 | 4,379,192 | 1,898 | -90° | 0° | 100 | Reverse circulation |
| 3MZRC22-11 | 326,804 | 4,379,193 | 1,899 | -60° | 0° | 90 | Reverse circulation |
| 3MZRC22-12 | 326,906 | 4,379,294 | 1,908 | -90° | 0° | 70 | Reverse circulation |
| 3MZRC22-13 | 326,878 | 4,379,249 | 1,903 | -50° | 0° | 65 | Reverse circulation |
| 3MZRC22-14 | 326,737 | 4,379,193 | 1,895 | -45° | 135° | 135 | Reverse circulation |
| 3MZRC22-15 | 326,812 | 4,379,277 | 1,905 | -65° | 150° | 77 | Reverse circulation |
| 3MZRC22-16 | 326,876 | 4,379,247 | 1,903 | -55° | 150° | 65 | Reverse circulation |
| 3MZRC22-17 | 326,978 | 4,379,275 | 1,916 | -45° | 78° | 60 | Reverse circulation |
| 3MZRC22-18 | 326,978 | 4,379,276 | 1,916 | -50° | 330° | 40 | Reverse circulation |
| 3MZRC22-19 | 326,978 | 4,379,275 | 1,916 | -55° | 150° | 40 | Reverse circulation |
| 3MZRC22-20 | 326,879 | 4,379,254 | 1,903 | -60° | 330° | 85 | Reverse circulation |
| 3MZRC22-21 | 326,720 | 4,379,346 | 1,900 | -50° | 25° | 90 | Reverse circulation |
| 3MZRC22-22 | 327,086 | 4,379,165 | 1,935 | -70° | 150° | 200 | Reverse circulation |
| 9DPRC22-01 | 327,082 | 4,376,903 | 1,817 | -90° | 0° | 130 | Reverse circulation |

*NAD83-z1