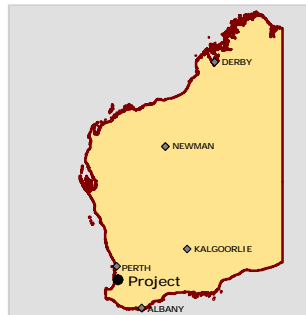


LOCATION MAP



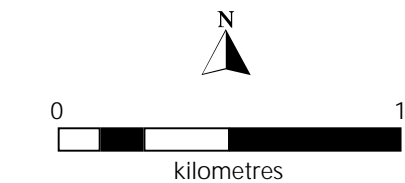
Location: F:\136\4\GIS\Workspaces\Groundwater Model

LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

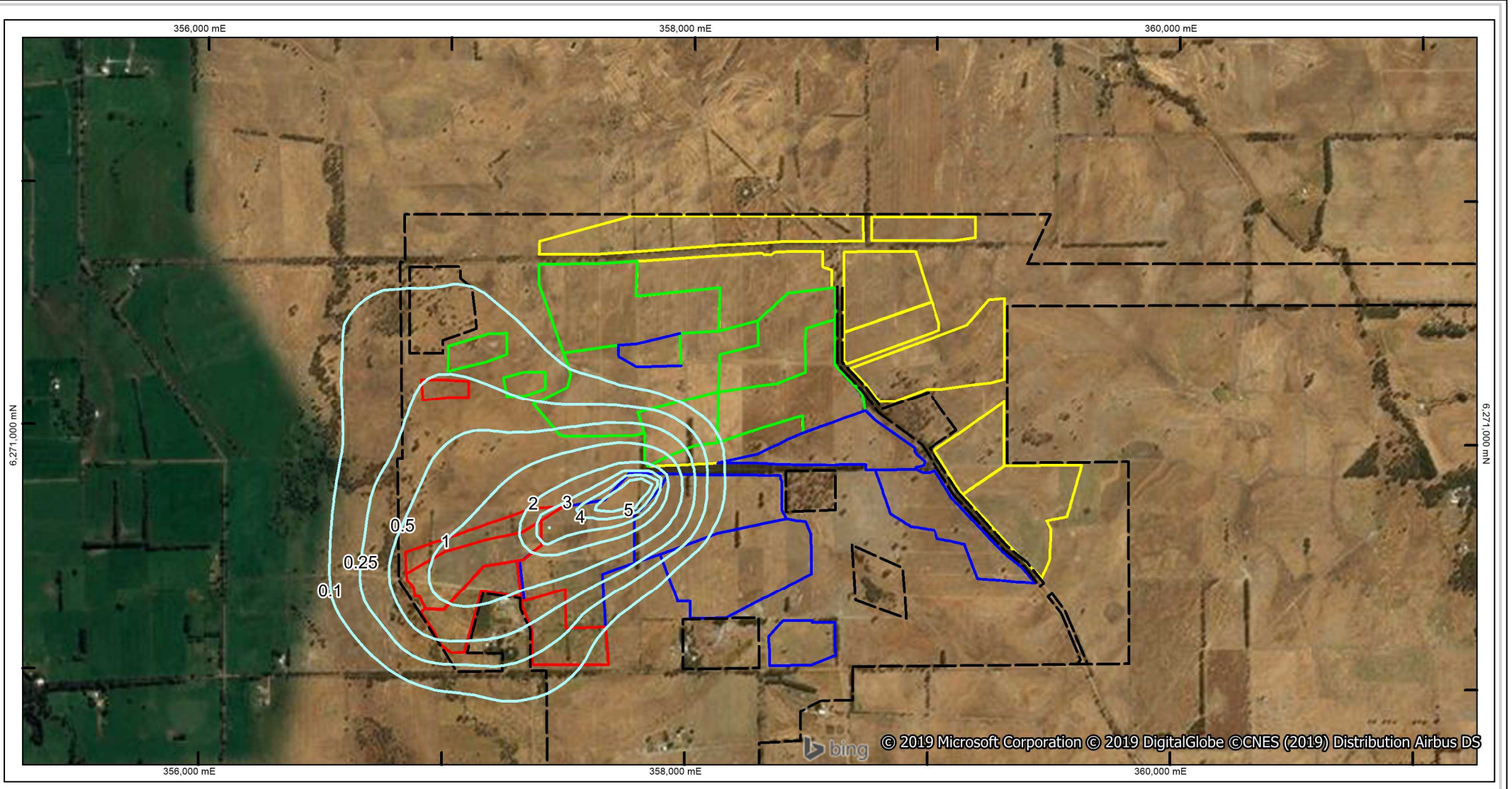


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 92  
 Q3 – 2021  
 CONTOURS OF  
 PREDICTED DRAWDOWN  
 IN SUPERFICIAL AQUIFER  
 WET CONDITIONS





LOCATION MAP



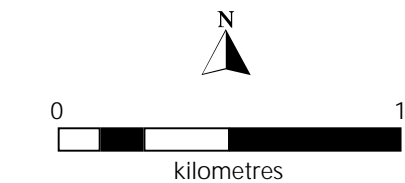
Location: F:\136\4.GIS\Workspaces\Groundwater Model

LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- - - Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

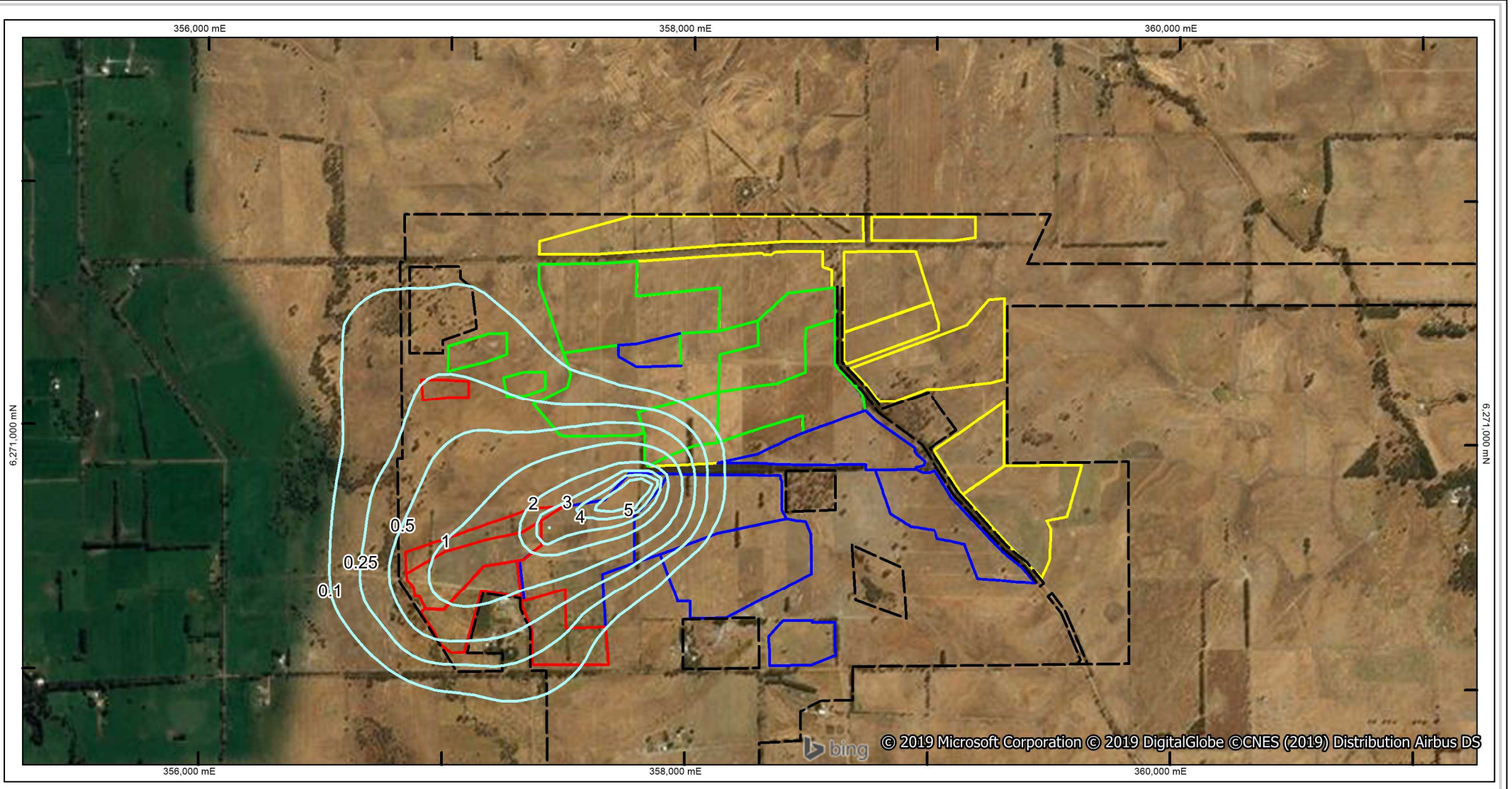


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 93**  
**Q4 – 2021**  
**CONTOURS OF**  
**PREDICTED DRAWDOWN**  
**IN SUPERFICIAL AQUIFER**  
**WET CONDITIONS**



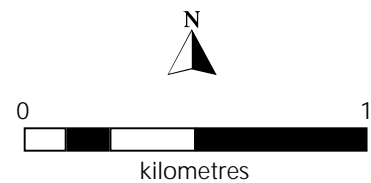


LOCATION MAP



LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- Potential Disturbance Envelope



AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

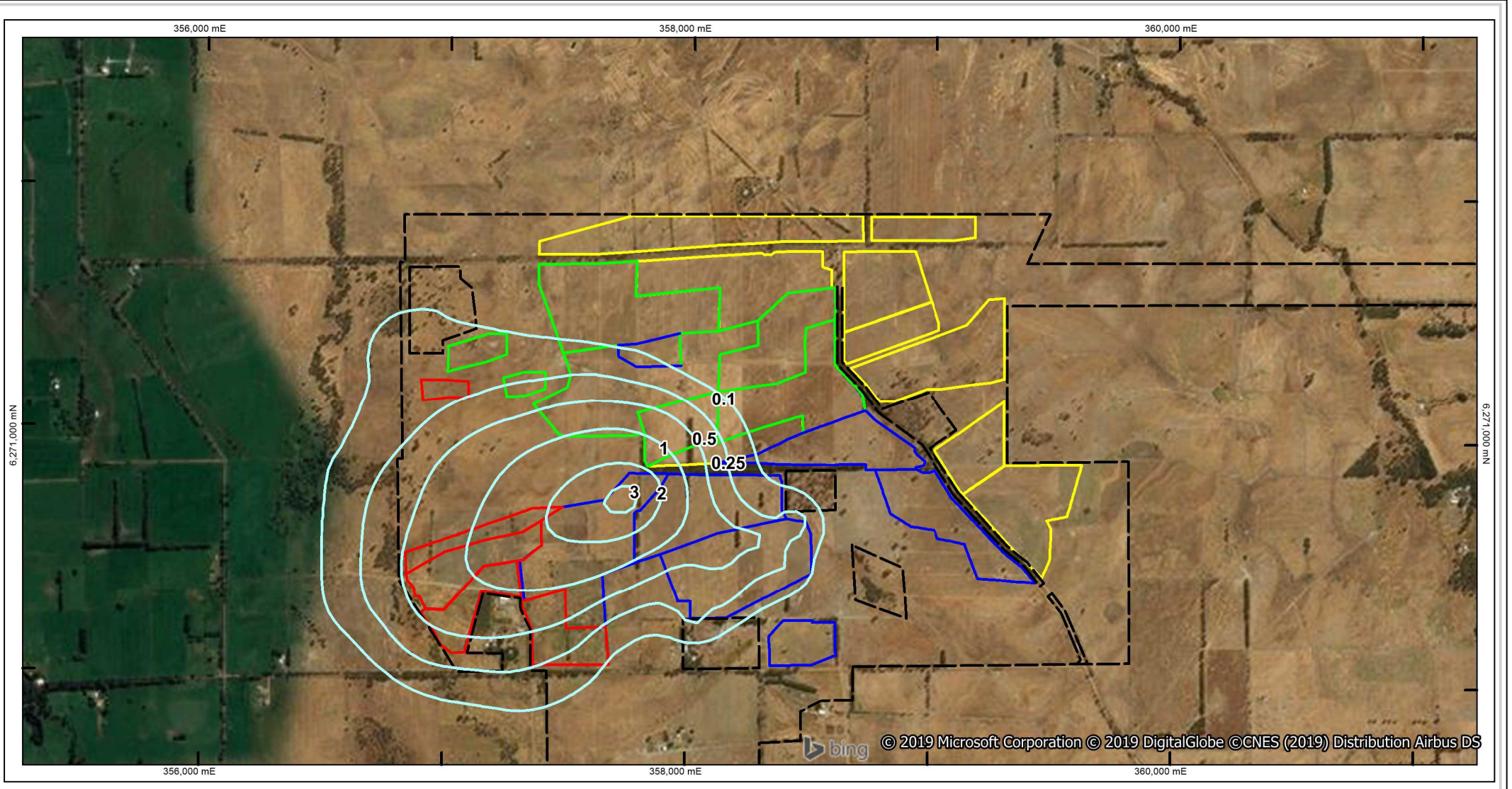
REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 94**  
**Q1 – 2022**  
**CONTOURS OF**  
**PREDICTED DRAWDOWN**  
**IN SUPERFICIAL AQUIFER**  
**WET CONDITIONS**





LOCATION MAP



LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- Potential Disturbance Envelope



AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

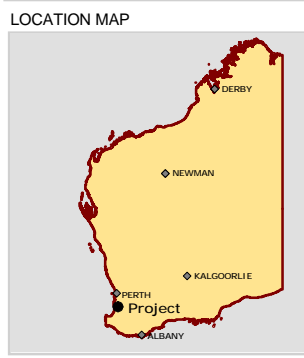
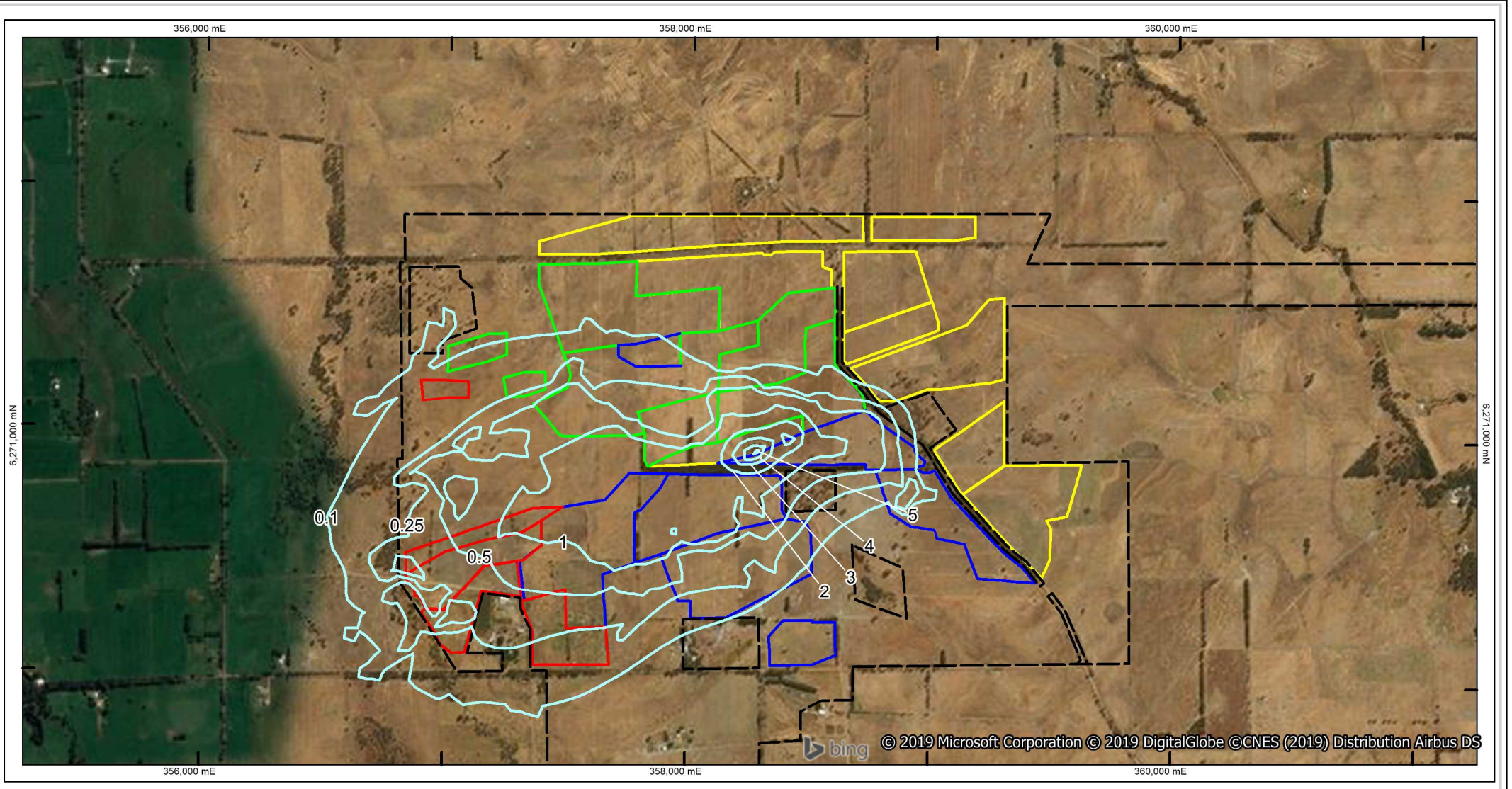
REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

NOTES & DATA SOURCES:  
 Mine outlines provide by Doral

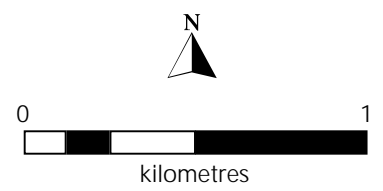


**FIGURE 95**  
**Q2 – 2022**  
**CONTOURS OF**  
**PREDICTED DRAWDOWN**  
**IN SUPERFICIAL AQUIFER**  
**WET CONDITIONS**





- LEGEND**
- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
  - Mining outline for year 2021
  - Mining outline for year 2022
  - Mining outline for year 2023
  - Mining outline for year 2024
  - Potential Disturbance Envelope



AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

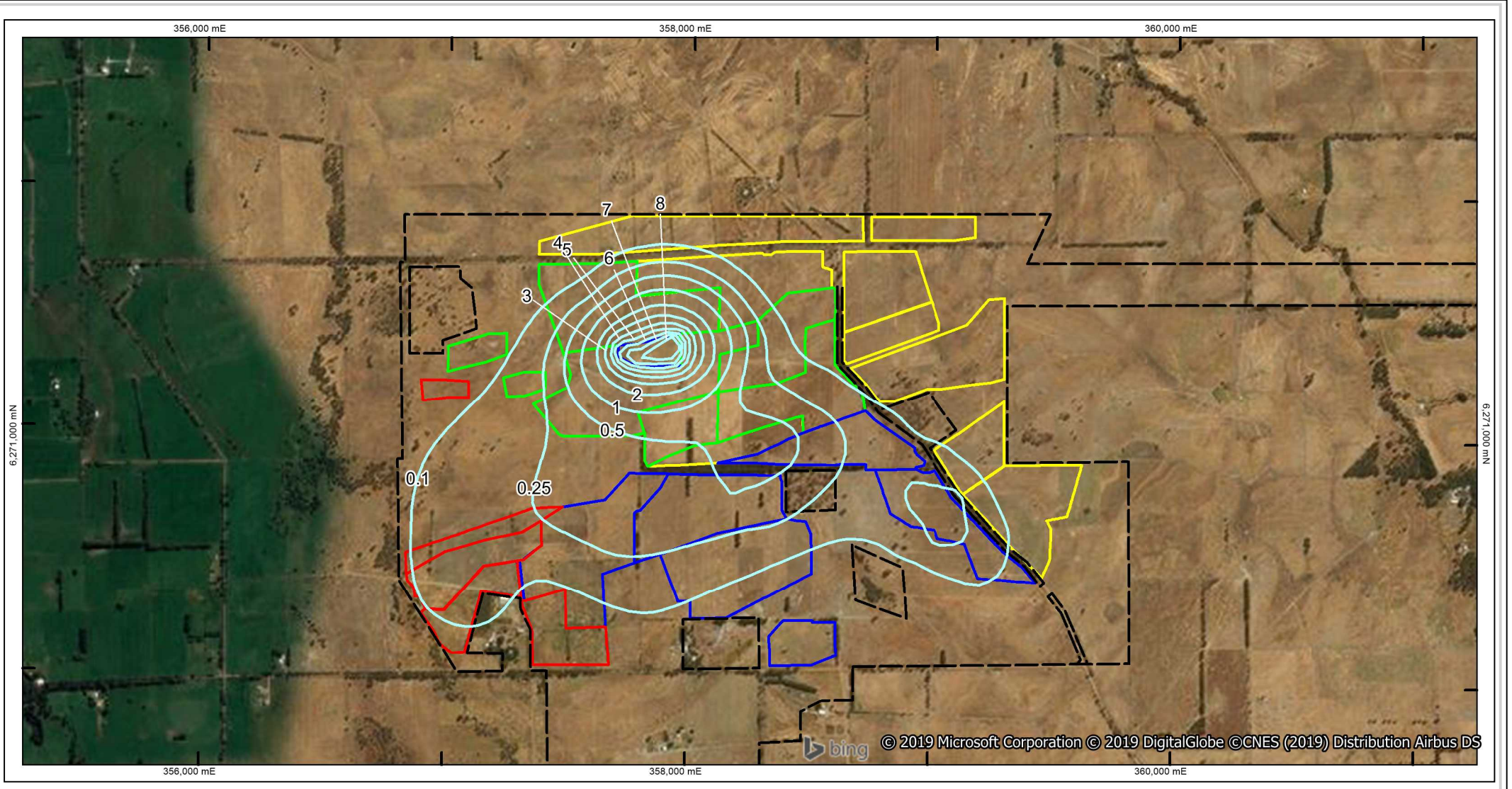
REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 96**  
**Q3 – 2022**  
**CONTOURS OF**  
**PREDICTED DRAWDOWN**  
**IN SUPERFICIAL AQUIFER**  
**WET CONDITIONS**





LOCATION MAP



LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2023
- Mining outline for year 2022
- Mining outline for year 2024
- Potential Disturbance Envelope



AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

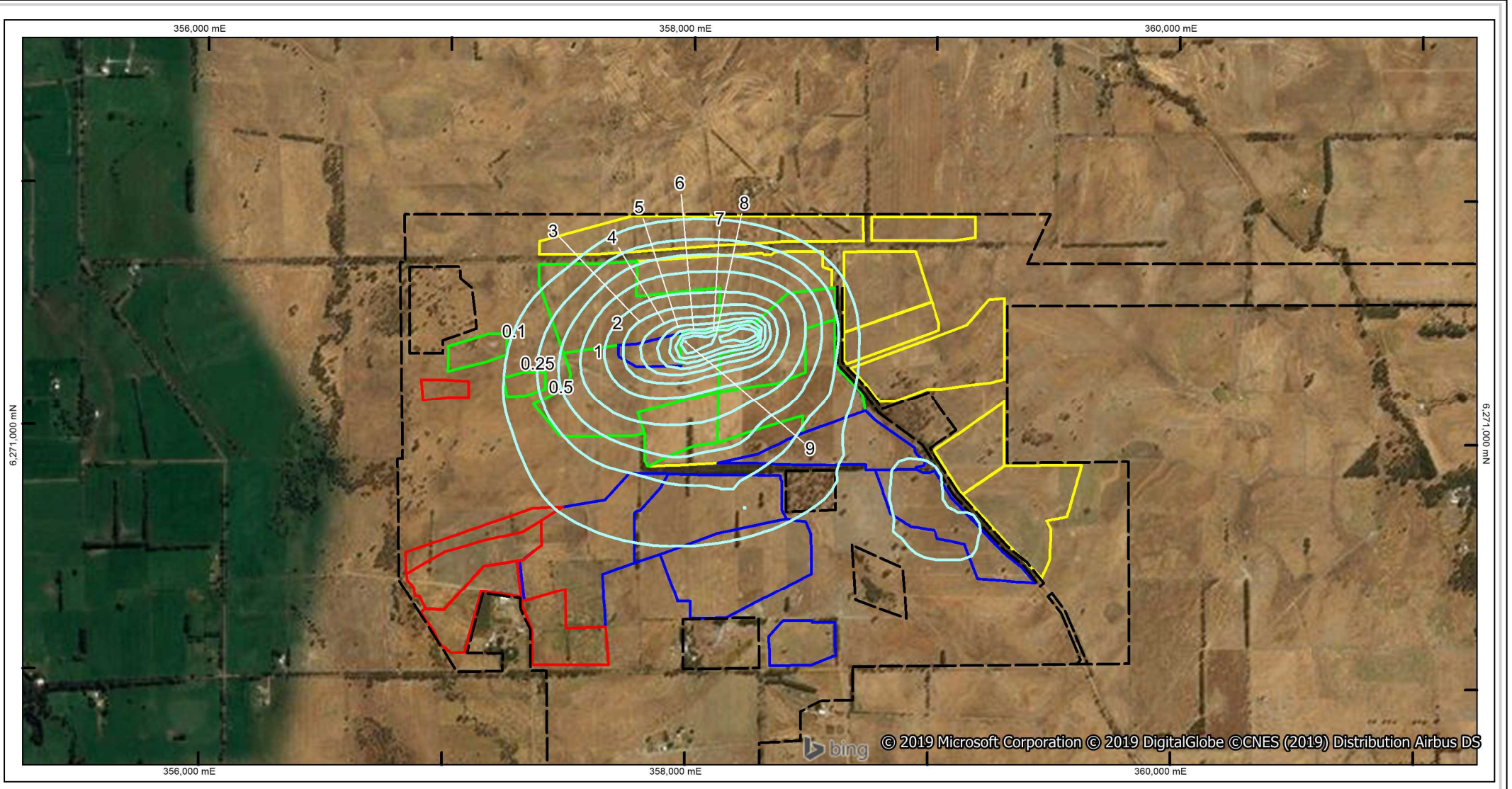
REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 97**  
**Q4 – 2022**  
**CONTOURS OF**  
**PREDICTED DRAWDOWN**  
**IN SUPERFICIAL AQUIFER**  
**WET CONDITIONS**





LOCATION MAP

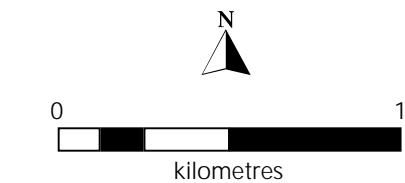


LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2023
- Mining outline for year 2022
- Mining outline for year 2024
- - - Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

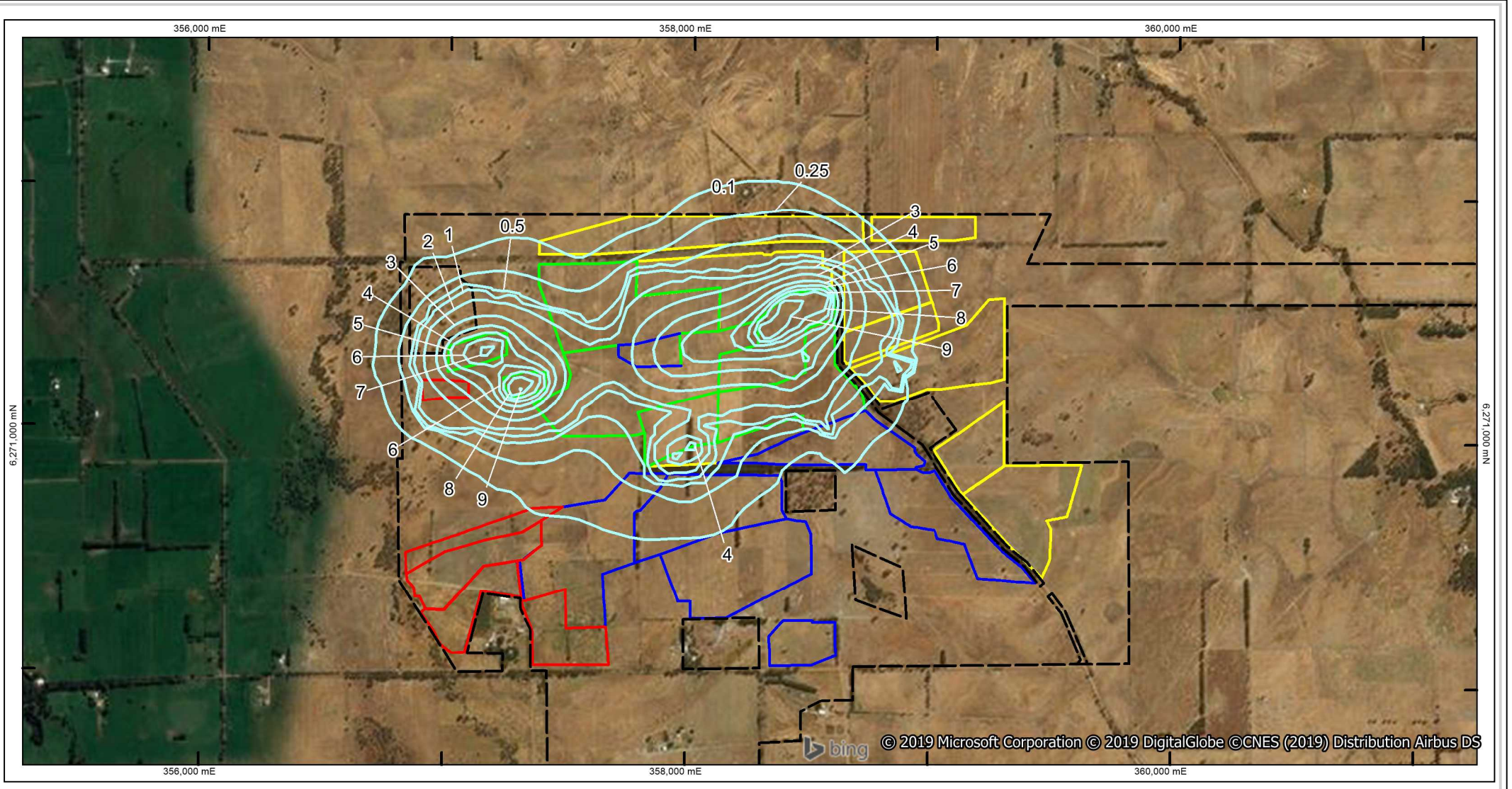


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 98**  
**Q1 – 2023**  
**CONTOURS OF**  
**PREDICTED DRAWDOWN**  
**IN SUPERFICIAL AQUIFER**  
**WET CONDITIONS**



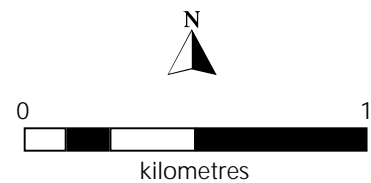


LOCATION MAP



LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- Potential Disturbance Envelope



AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

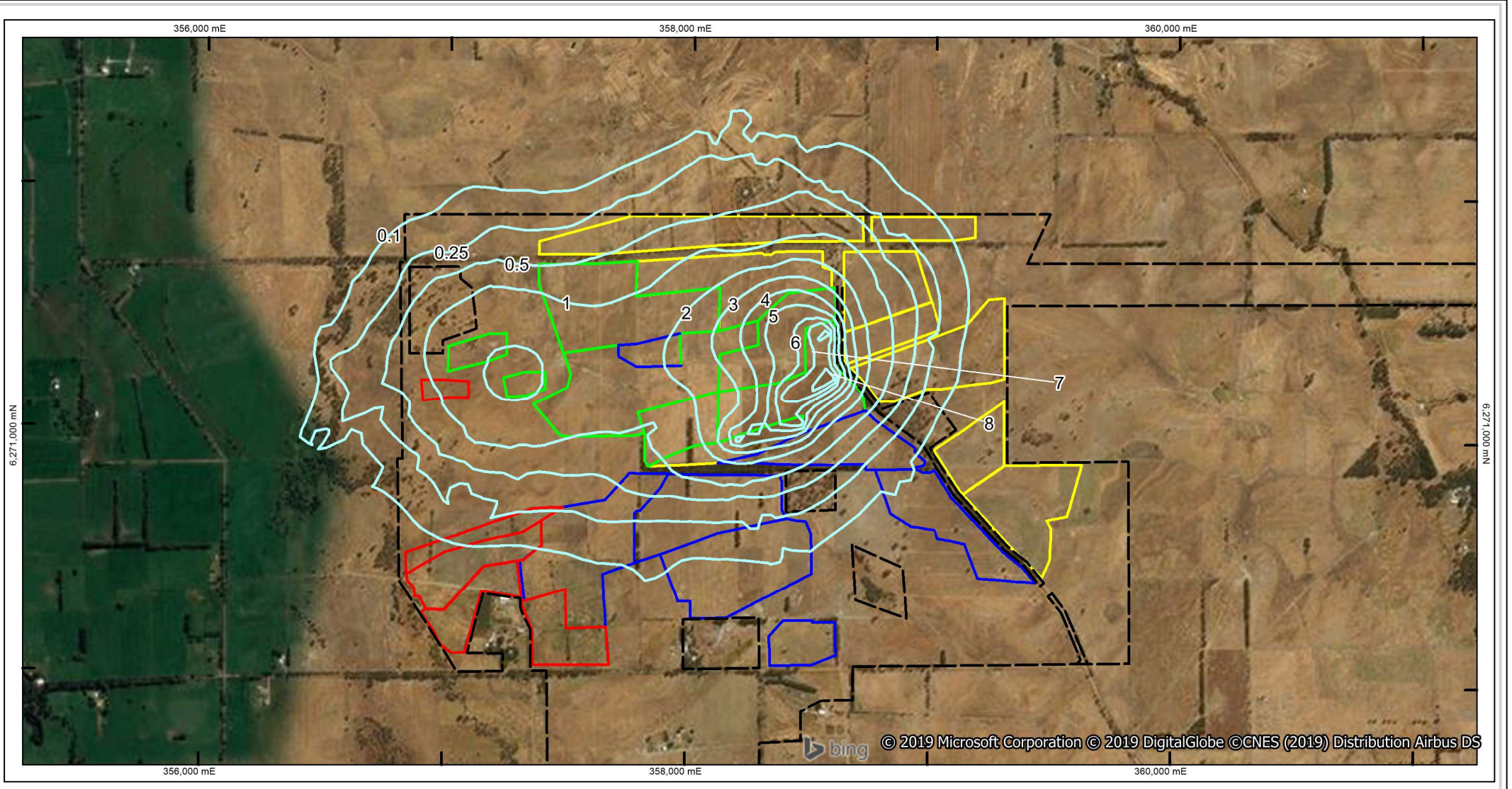
REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 99  
 Q2 – 2023  
 CONTOURS OF  
 PREDICTED DRAWDOWN  
 IN SUPERFICIAL AQUIFER  
 WET CONDITIONS





LOCATION MAP

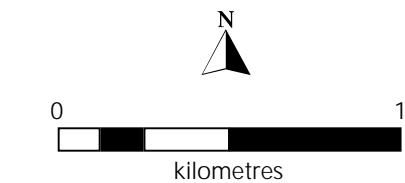


LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2023
- Mining outline for year 2022
- Mining outline for year 2024
- - - Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

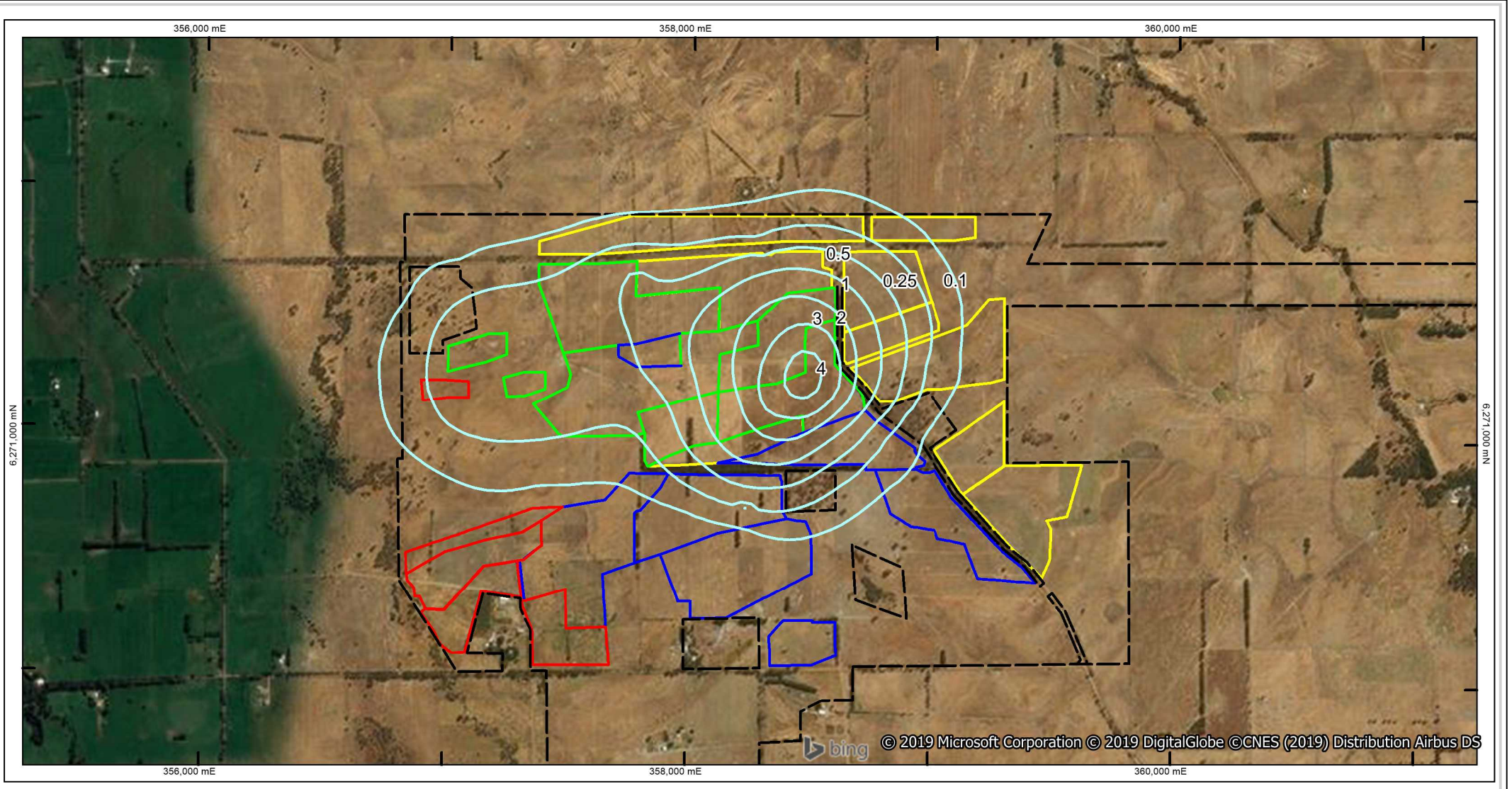


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 100**  
**Q3 – 2023**  
**CONTOURS OF**  
**PREDICTED DRAWDOWN**  
**IN SUPERFICIAL AQUIFER**  
**WET CONDITIONS**





LOCATION MAP

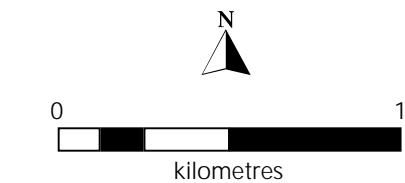


LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

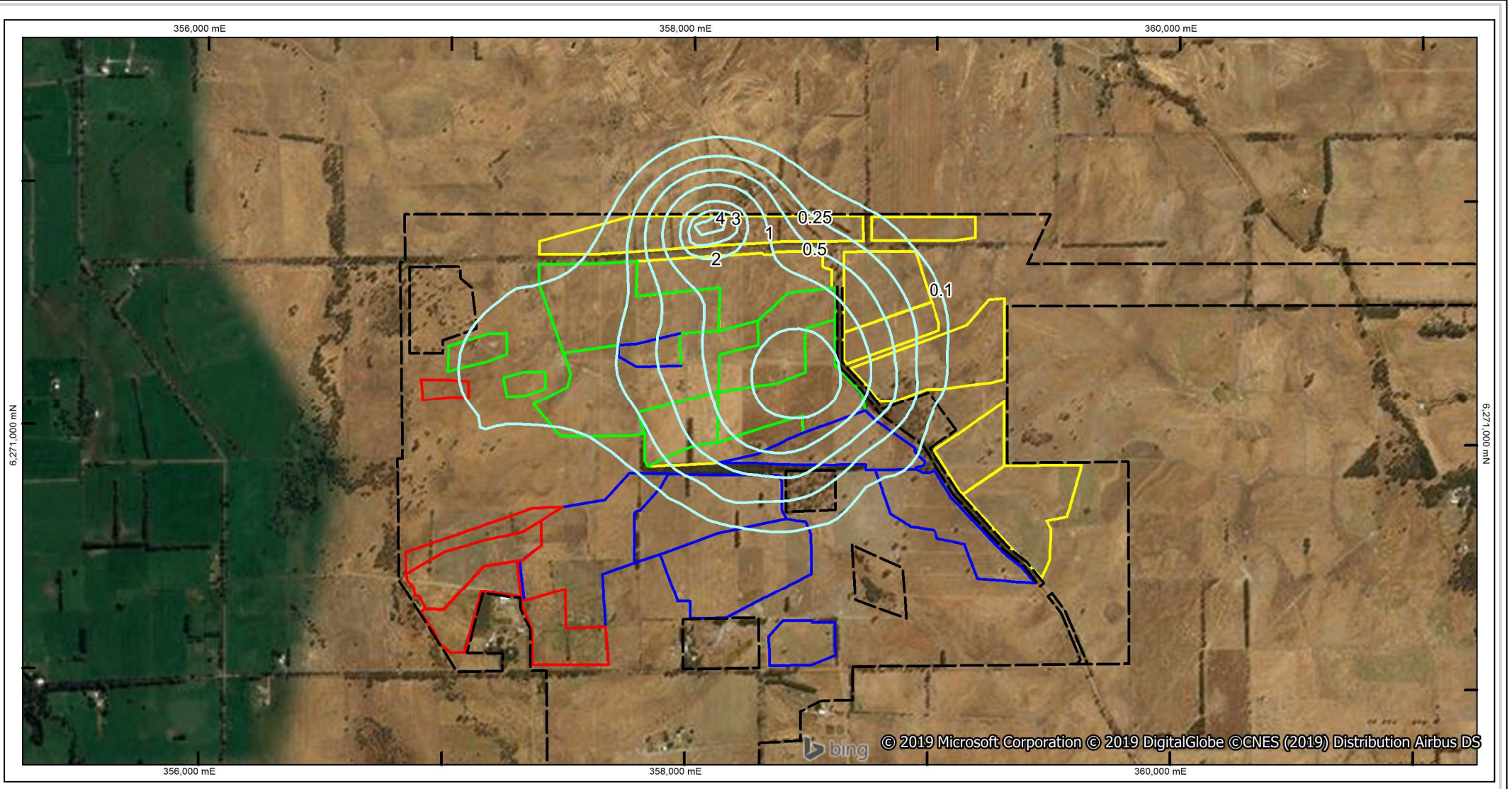


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 101**  
**Q4 – 2023**  
**CONTOURS OF**  
**PREDICTED DRAWDOWN**  
**IN SUPERFICIAL AQUIFER**  
**WET CONDITIONS**





LOCATION MAP

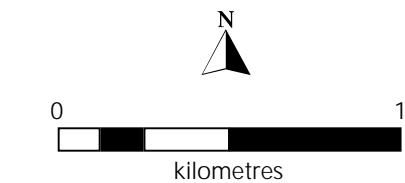


LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- - - Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

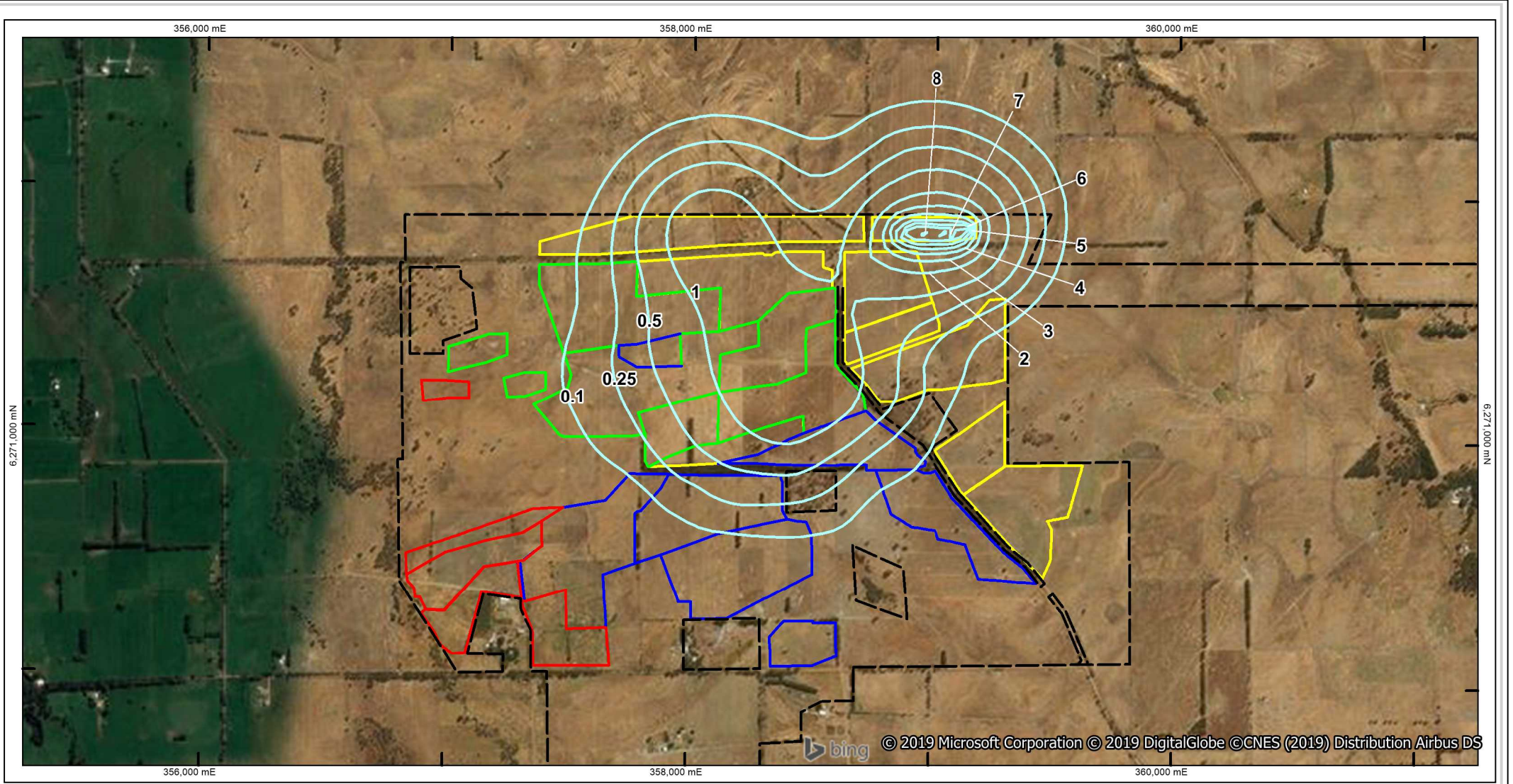


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 102  
 Q1 – 2024  
 CONTOURS OF  
 PREDICTED DRAWDOWN  
 IN SUPERFICIAL AQUIFER  
 WET CONDITIONS





LOCATION MAP

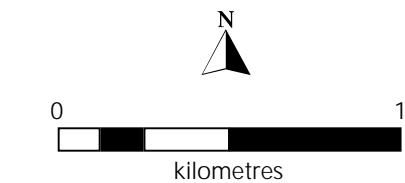


LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

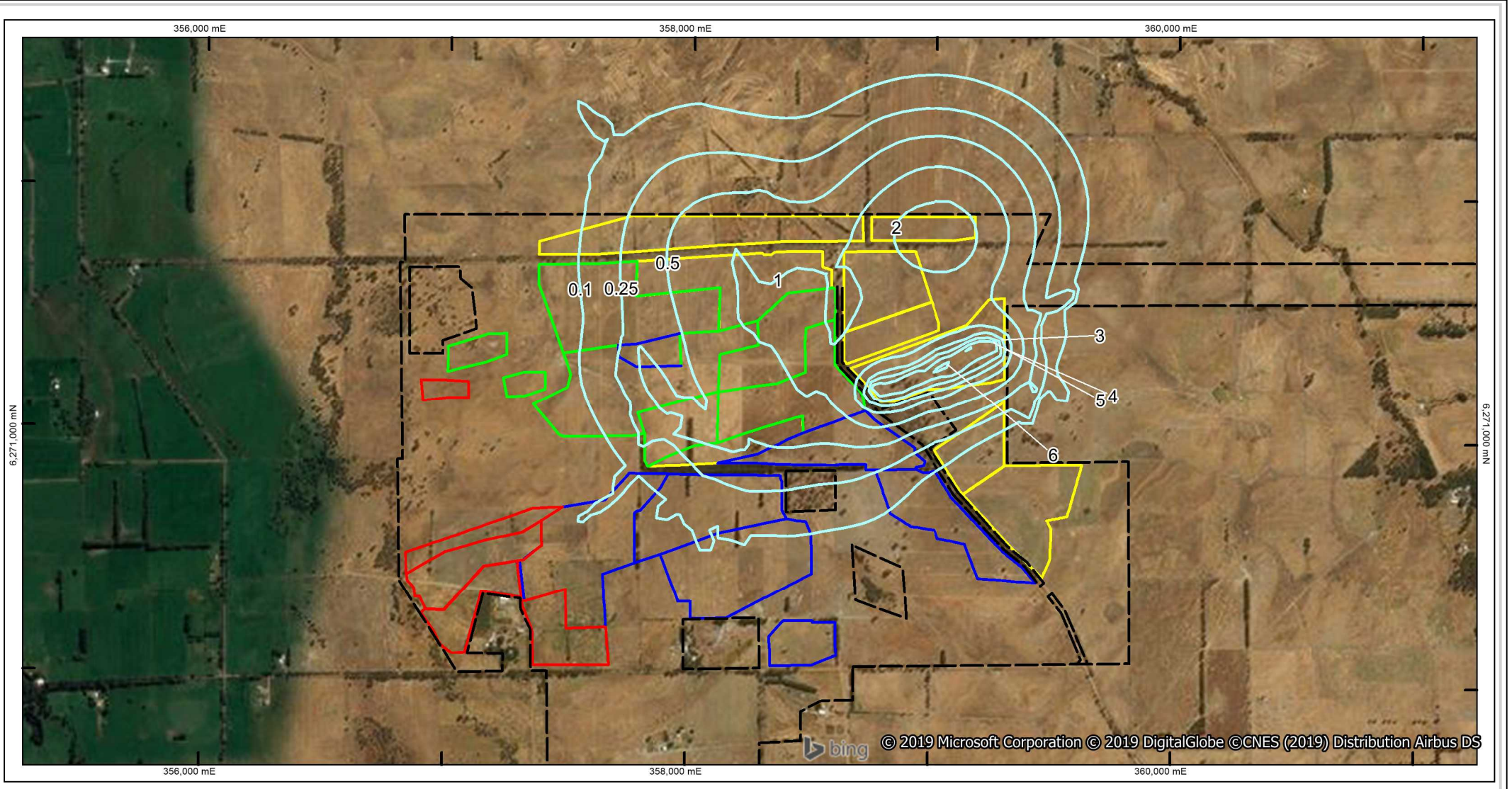


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 103  
 Q2 – 2024  
 CONTOURS OF  
 PREDICTED DRAWDOWN  
 IN SUPERFICIAL AQUIFER  
 WET CONDITIONS





LOCATION MAP



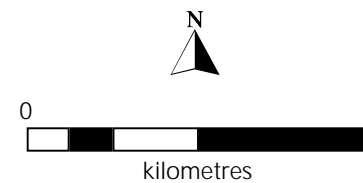
Location: F:\136\4.GIS\Workspaces\Groundwater Model

LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2022
- Mining outline for year 2023
- Mining outline for year 2024
- Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

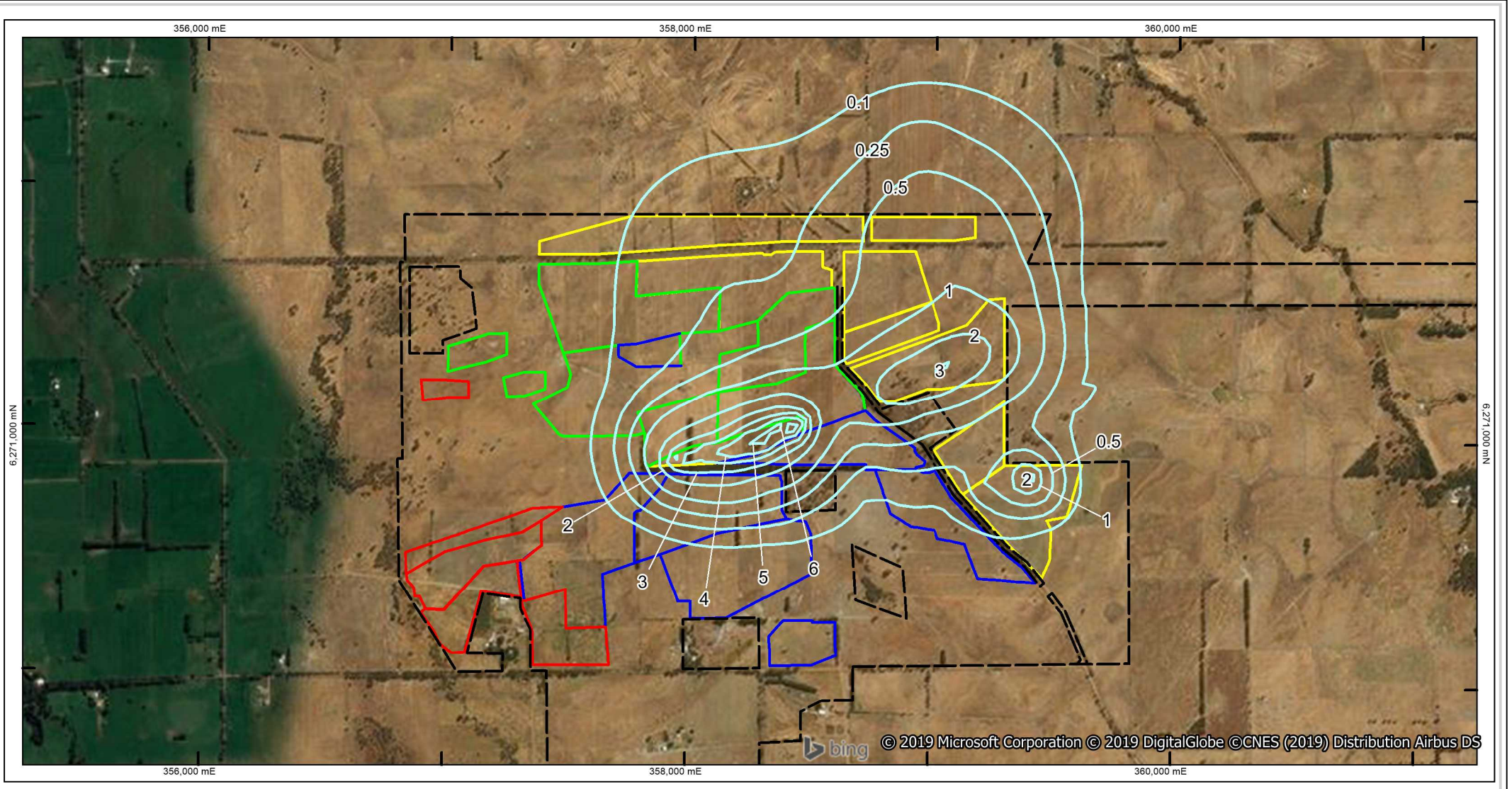


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 104  
 Q3 – 2024  
 CONTOURS OF  
 PREDICTED DRAWDOWN  
 IN SUPERFICIAL AQUIFER  
 WET CONDITIONS





LOCATION MAP



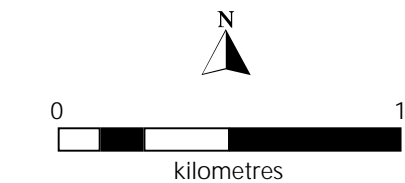
Location: F:\136\4.GIS\Workspaces\Groundwater Model

LEGEND

- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9
- Mining outline for year 2021
- Mining outline for year 2023
- Mining outline for year 2022
- Mining outline for year 2024
- - - Potential Disturbance Envelope

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

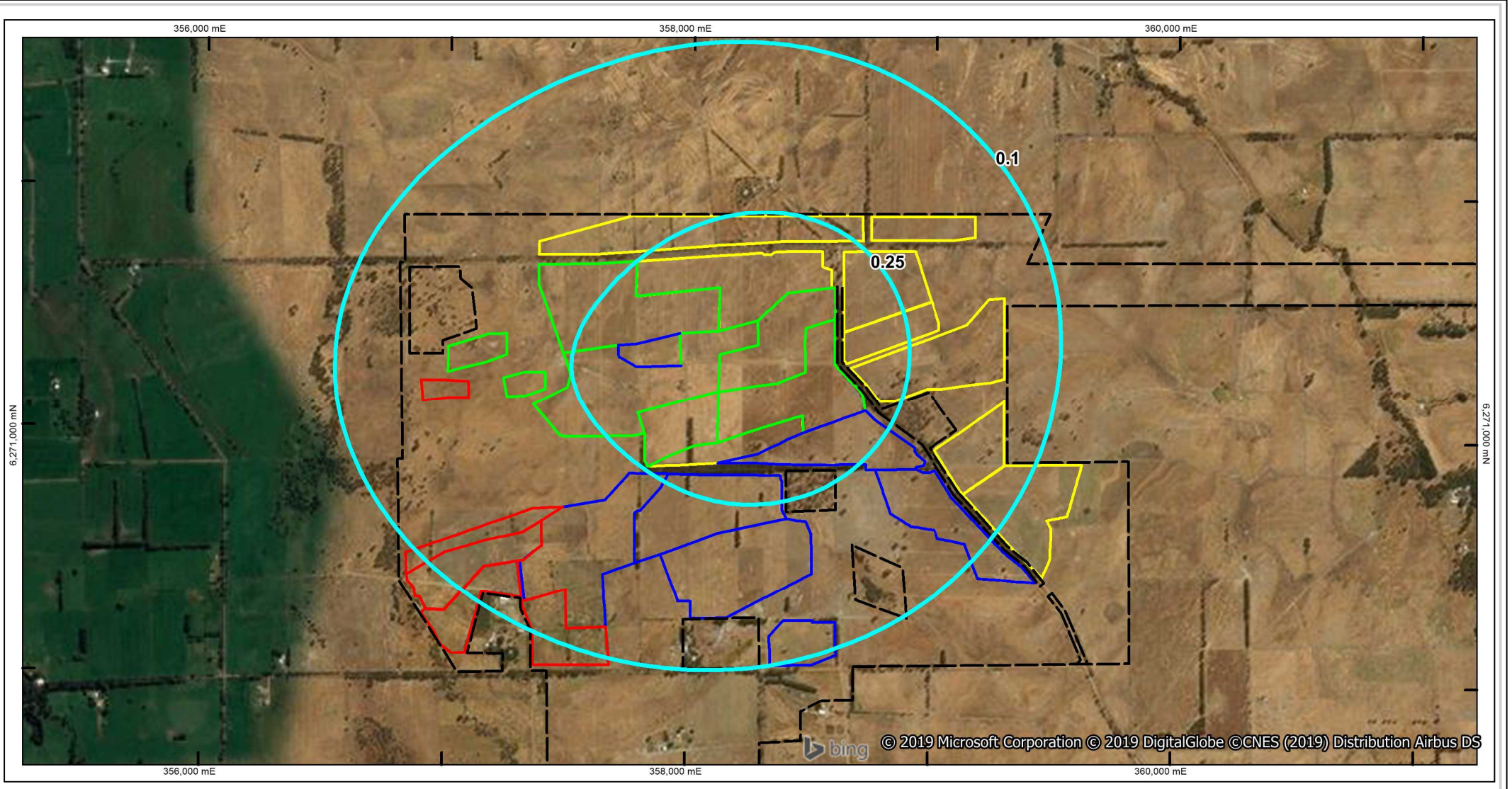


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 105  
 Q4 – 2024  
 CONTOURS OF  
 PREDICTED DRAWDOWN  
 IN SUPERFICIAL AQUIFER  
 WET CONDITIONS





LOCATION MAP

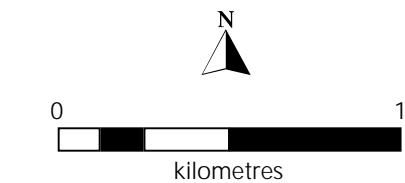


LEGEND

- Drawdown in metres at 0.1, 0.25
- Mining outline for year 2021
- Mining outline for year 2022
- Potential Disturbance Envelope
- Mining outline for year 2023
- Mining outline for year 2024

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

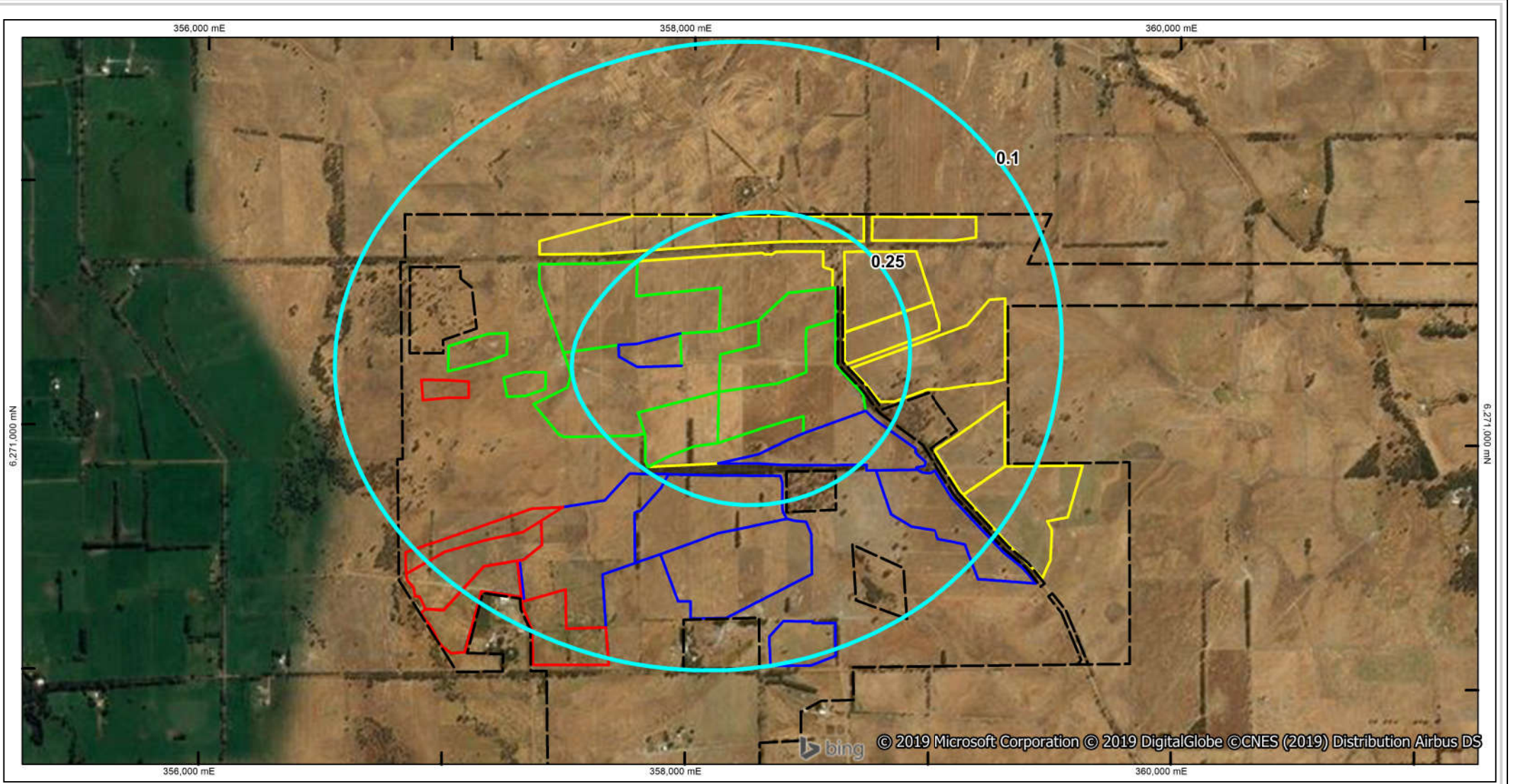


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 106  
 SEPTEMBER 2023  
 CONTOURS OF  
 PREDICTED DRAWDOWN  
 IN LEEDERVILLE AQUIFER  
 DRY CONDITIONS





LOCATION MAP



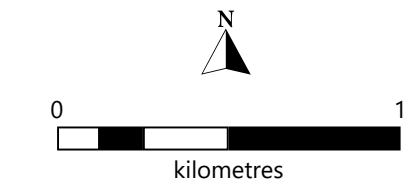
Location: F:\13614\GIS\Workspaces\Groundwater Model

LEGEND

- Drawdown in metres at 0.1, 0.25
- Mining outline for year 2021
- Mining outline for year 2022
- Potential Disturbance Envelope
- Mining outline for year 2023
- Mining outline for year 2024

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

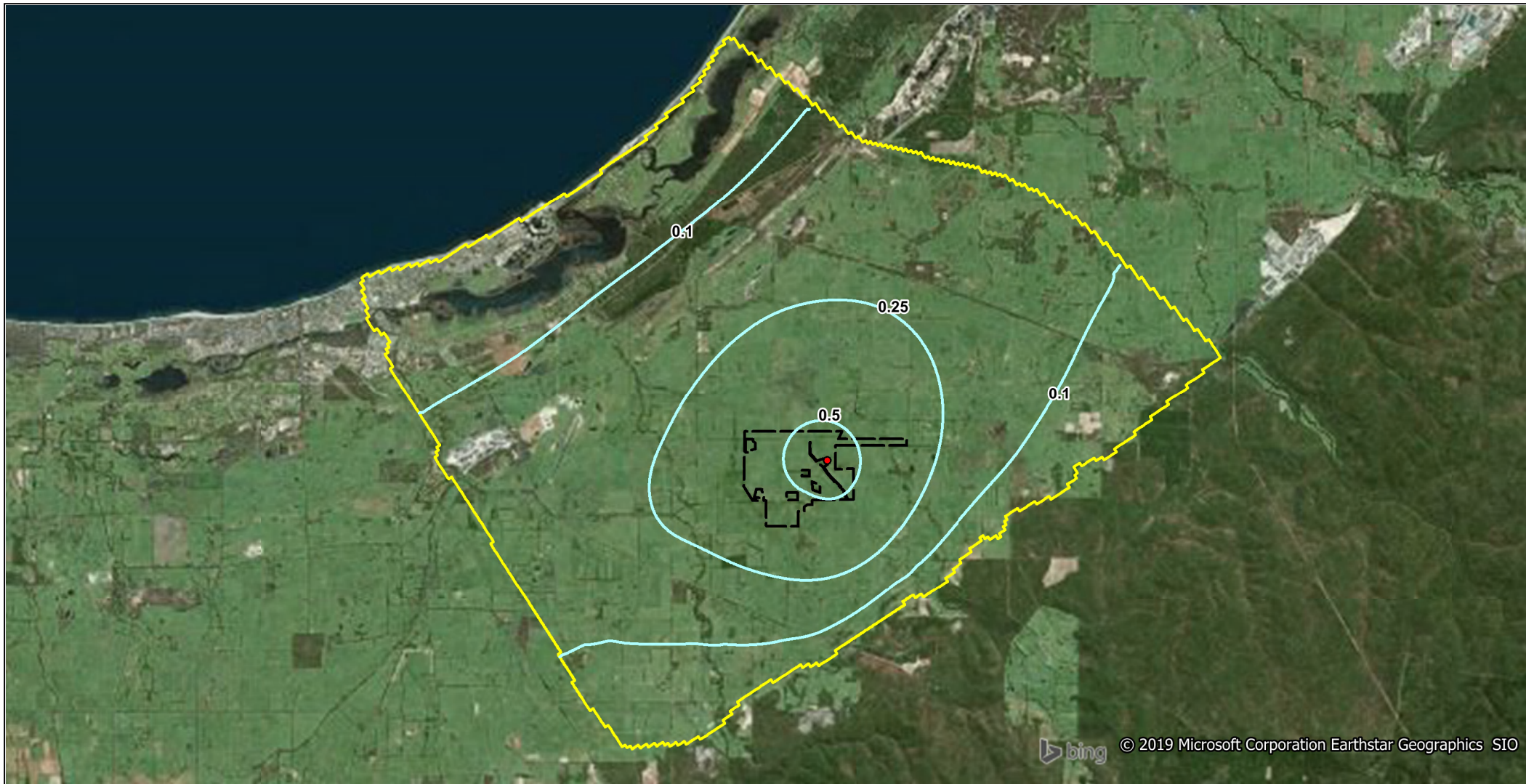


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 107  
 SEPTEMBER 2023  
 CONTOURS OF  
 PREDICTED DRAWDOWN  
 IN LEEDERVILLE AQUIFER  
 WET CONDITIONS



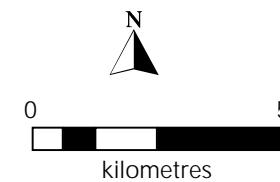


LOCATION MAP



LEGEND

- Groundwater model boundary
- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3
- Potential Disturbance Envelope
- Doral Yarragadee Production Bore YA\_PB01



AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

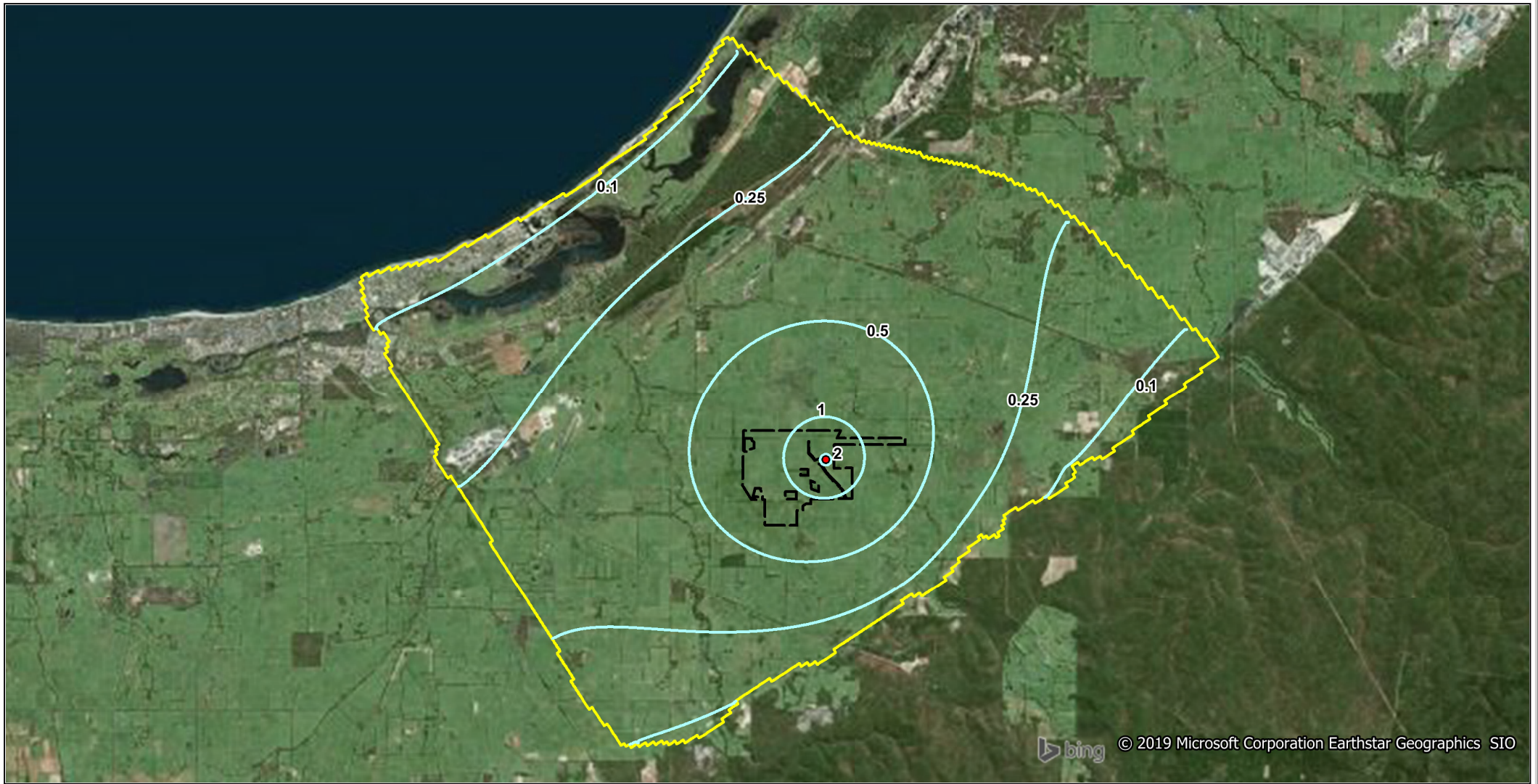
REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

NOTES & DATA SOURCES:  
 Mine outlines provide by Doral

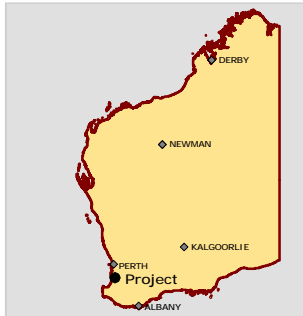


**FIGURE 108**  
**PREDICTED CONTOURS OF**  
**DRAWDOWN IN LEEDERVILLE**  
**AQUIFER AT END OF MINING**  
**FOR DRY CONDITIONS IN**  
**WATER SUPPLY ONLY**





LOCATION MAP

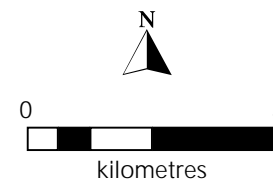


LEGEND

- Groundwater model boundary
- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3
- Potential Disturbance Envelope
- Doral Yarragadee Production Bore YA\_PB01

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

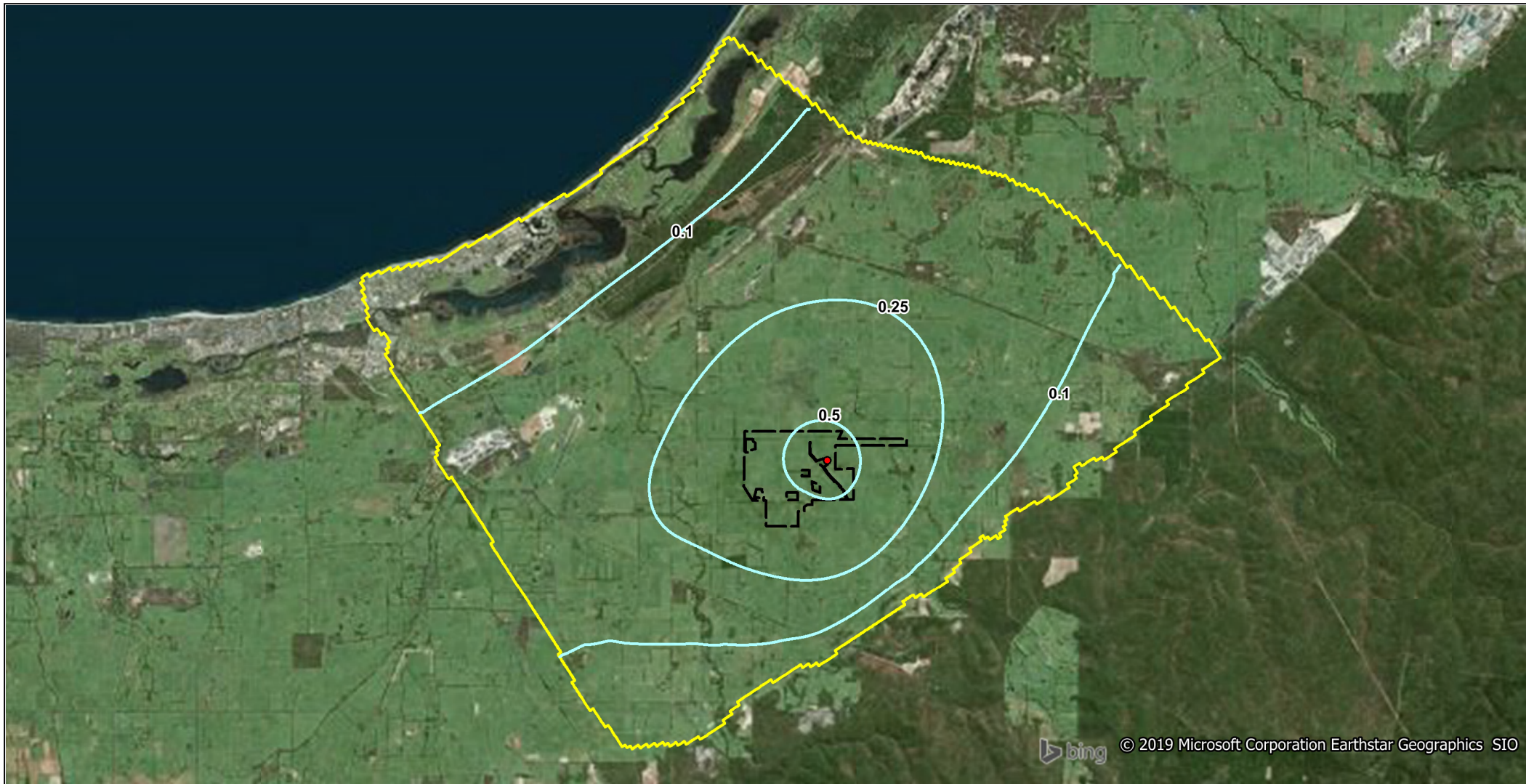


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 109**  
**PREDICTED CONTOURS OF**  
**DRAWDOWN IN YARRAGADEE**  
**AQUIFER AT END OF MINING**  
**FOR DRY CONDITIONS IN**  
**WATER SUPPLY ONLY**





LOCATION MAP

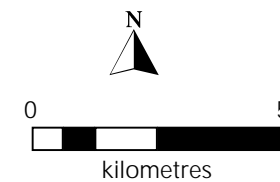


LEGEND

- Groundwater model boundary
- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3
- Potential Disturbance Envelope
- Doral Yarragadee Production Bore YA\_PB01

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

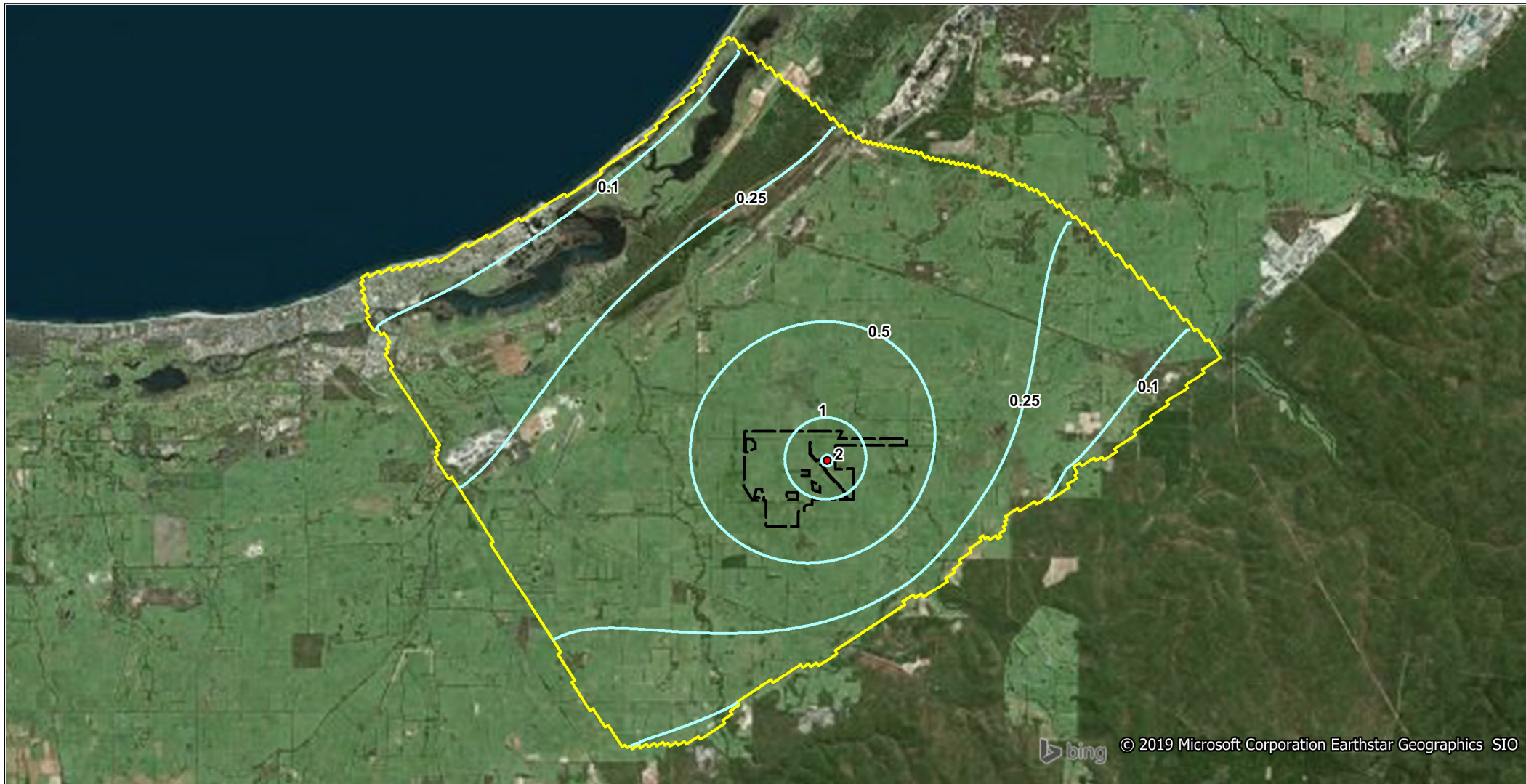


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 110**  
**PREDICTED CONTOURS OF**  
**DRAWDOWN IN LEEDERVILLE**  
**AQUIFER AT END OF MINING**  
**FOR WET CONDITIONS IN**  
**WATER SUPPLY ONLY**





LOCATION MAP

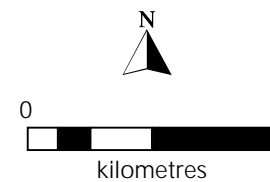


LEGEND

- Groundwater model boundary
- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3
- Potential Disturbance Envelope
- Doral Yarragadee Production Bore YA\_PB01

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

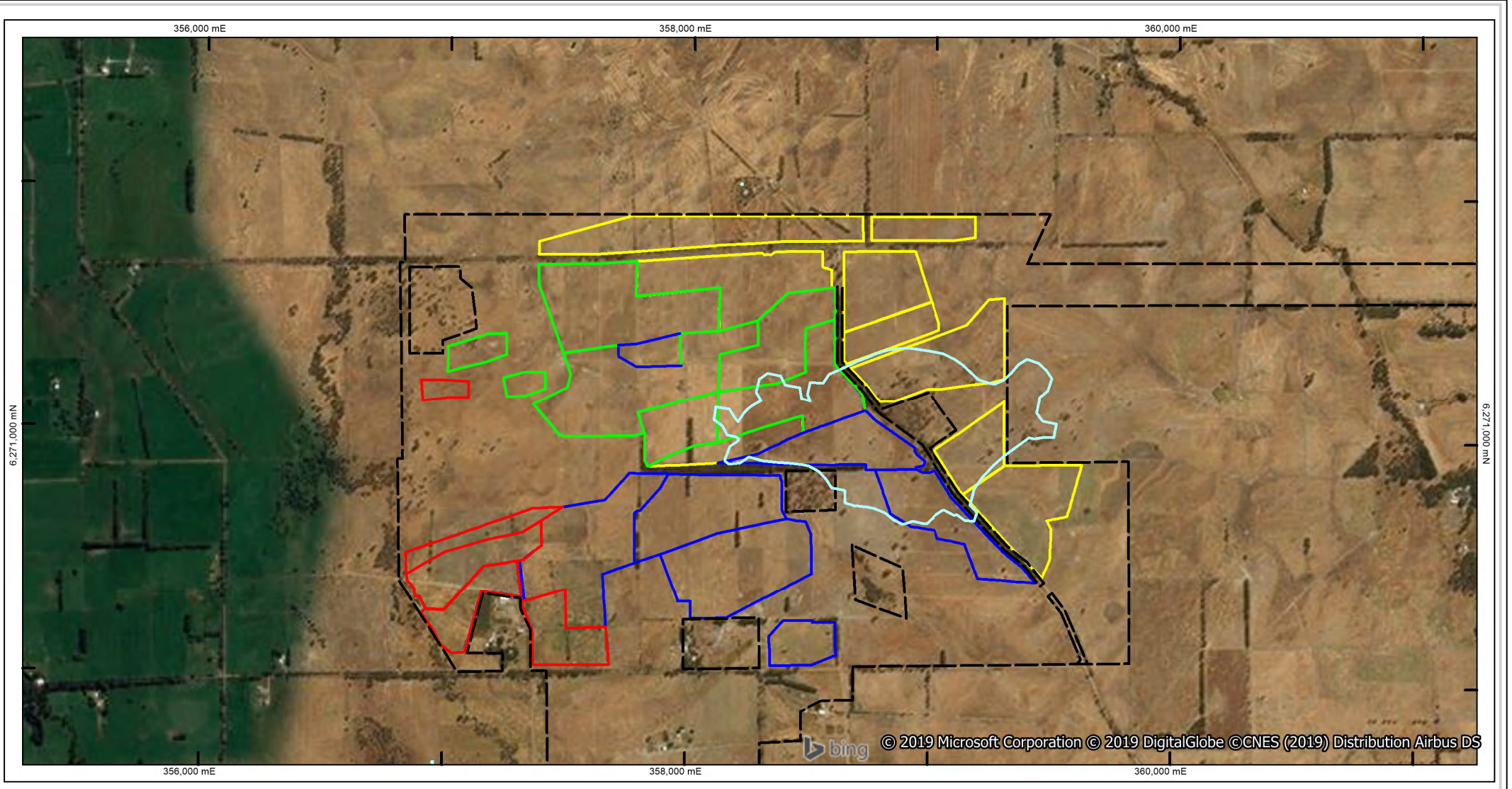


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 111**  
**PREDICTED CONTOURS OF**  
**DRAWDOWN IN YARRAGADEE**  
**AQUIFER AT END OF MINING**  
**FOR WET CONDITIONS IN**  
**WATER SUPPLY ONLY**





LOCATION MAP

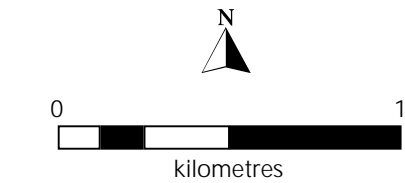


LEGEND

- Drawdown in metres at 0.1
- Mining outline for year 2021
- Mining outline for year 2022
- - - Potential Disturbance Envelope
- Mining outline for year 2023
- Mining outline for year 2024

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

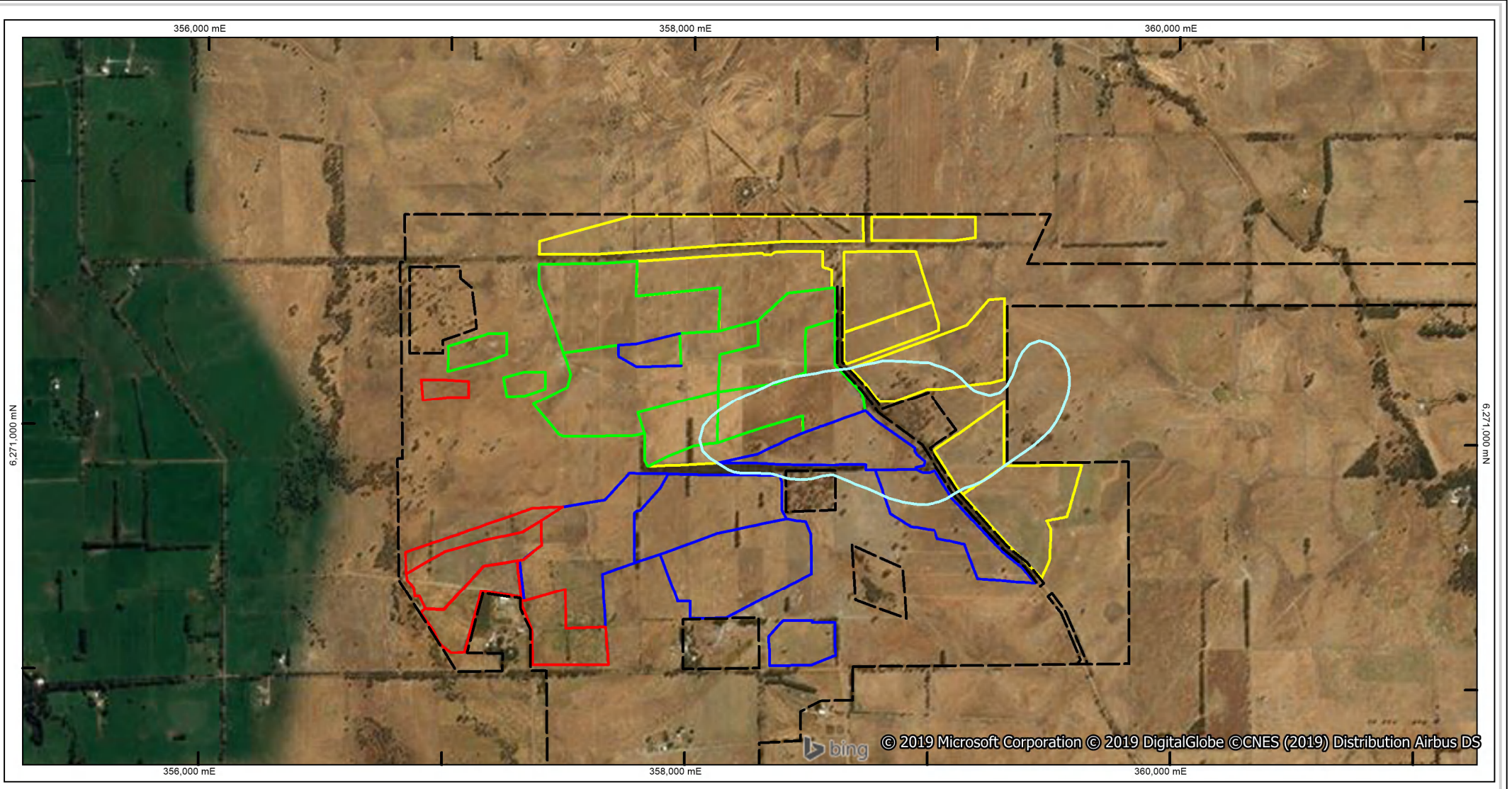


NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**FIGURE 112**  
**JULY – 2026**  
**PREDICTED CONTOURS OF**  
**DRAWDOWN IN SUPERFICIAL**  
**AQUIFER AT CLOSURE FOR**  
**DEWATERING SCENARIOS FOR**  
**DRY CONDITIONS**





LOCATION MAP



Location: F:\136\4.GIS\Workspaces\Groundwater Model

LEGEND

- Drawdown in metres at 0.1
- Mining outline for year 2021
- Mining outline for year 2022
- - - Potential Disturbance Envelope
- Mining outline for year 2023
- Mining outline for year 2024

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

NOTES & DATA SOURCES:  
 Mine outlines provide by Doral

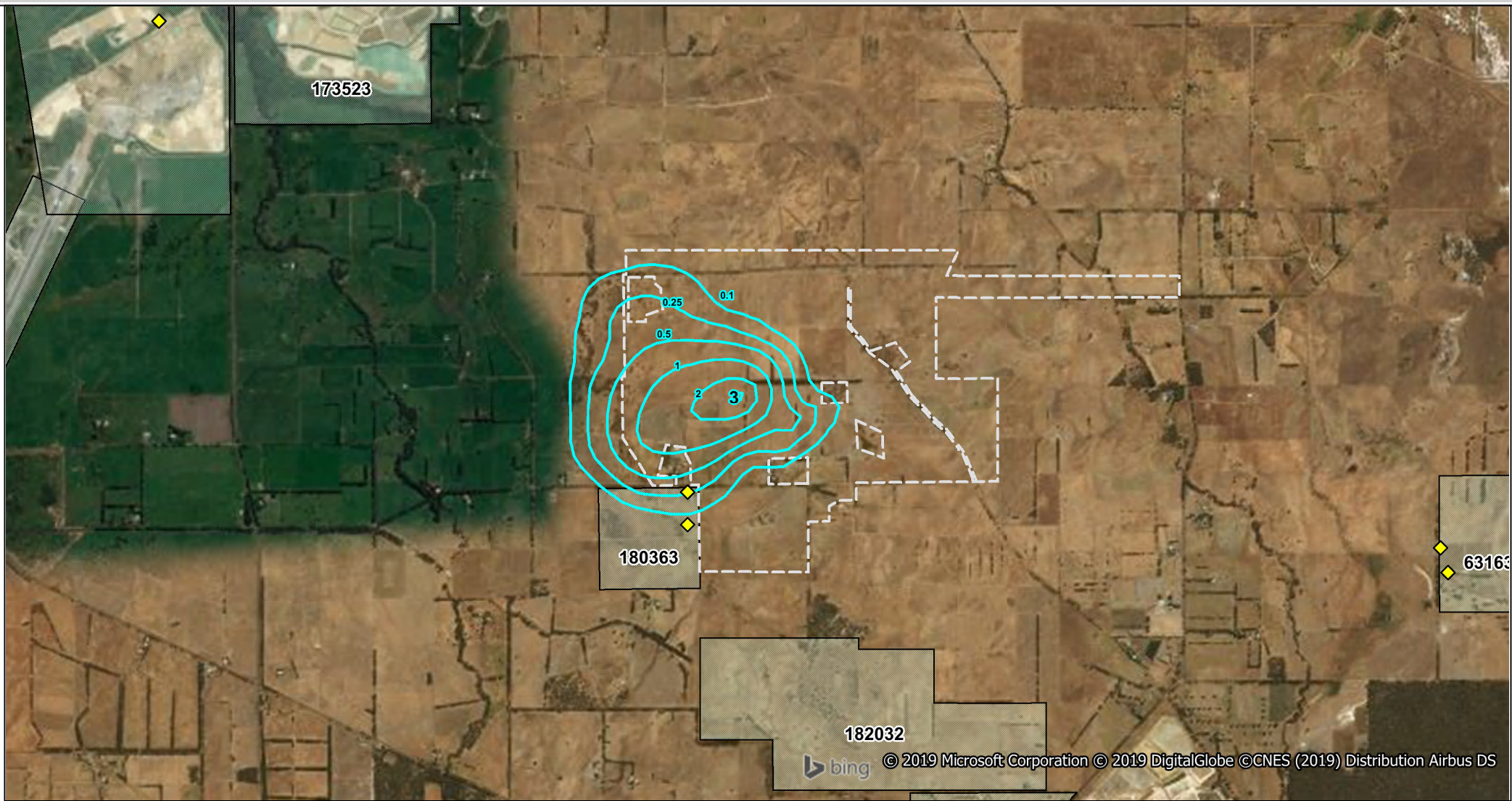


kilometres



**FIGURE 113**  
**JULY – 2026**  
**PREDICTED CONTOURS OF**  
**DRAWDOWN IN SUPERFICIAL**  
**AQUIFER AT CLOSURE FOR**  
**DEWATERING SCENARIOS FOR**  
**WET CONDITIONS**





LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3
- DWER Superficial Aquifer Licenced Users
- ◆ DWER Superficial Aquifer Licenced Users Drawpoints

AUTHOR: BDK  
 DRAWN: BDK  
 DATE: 20/10/19

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136D

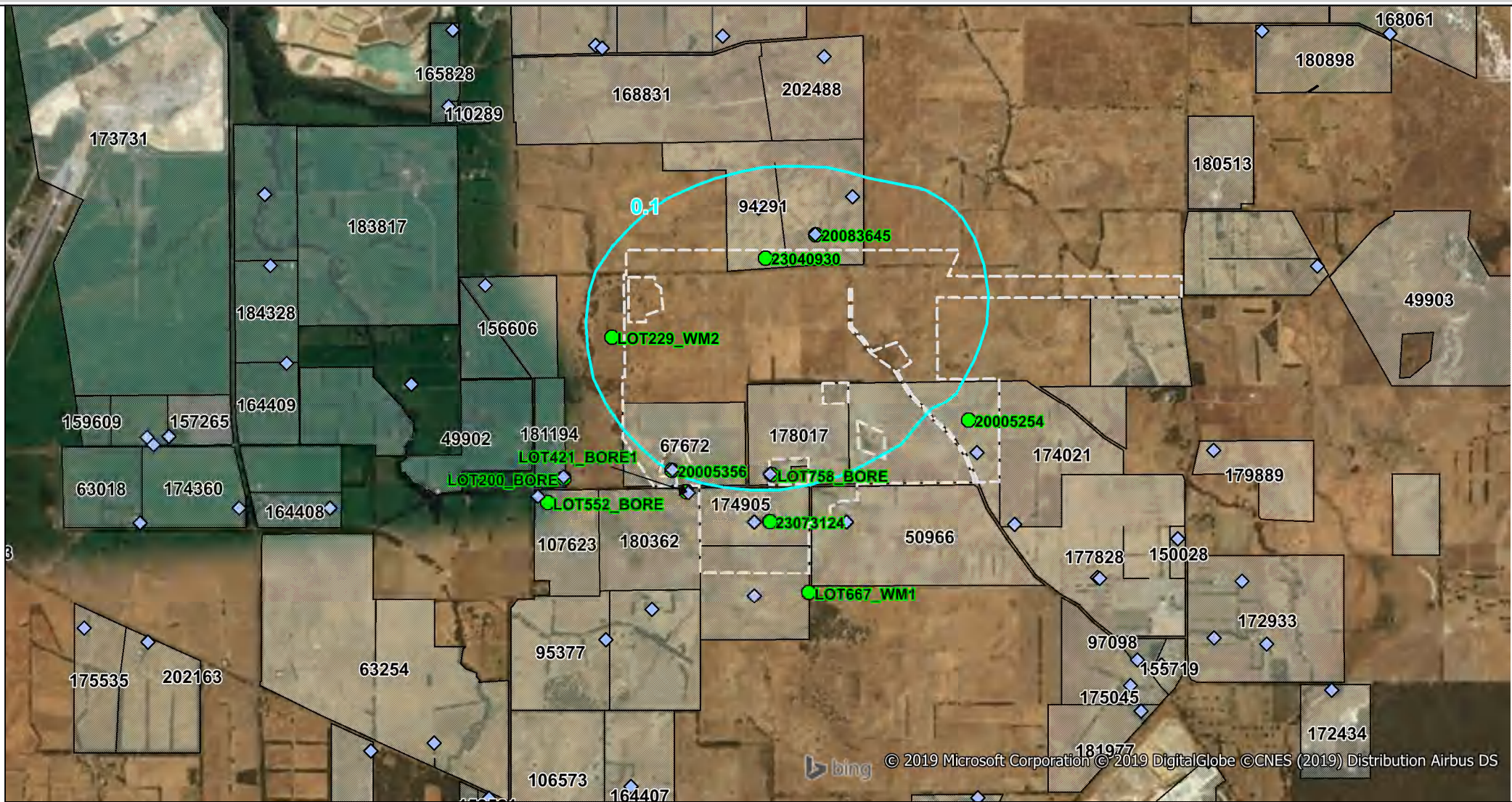
NOTES & DATA SOURCES:



FIGURE 114

Q2 - 2022  
 CONTOURS OF PREDICTED  
 DRAWDOWN IN SUPERFICIAL  
 AQUIFER DRY CONDITIONS AND  
 OTHER GROUNDWATER USERS





LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- DWER Leederville Aquifer Licenced Users
- 0.1 m Drawdown Contour
- DWER Leederville Aquifer Licenced Users Drawpoint
- DWER WIN Database Leederville Aquifer Bores

AUTHOR: BDK  
 DRAWN: BDK  
 DATE: 20/10/19

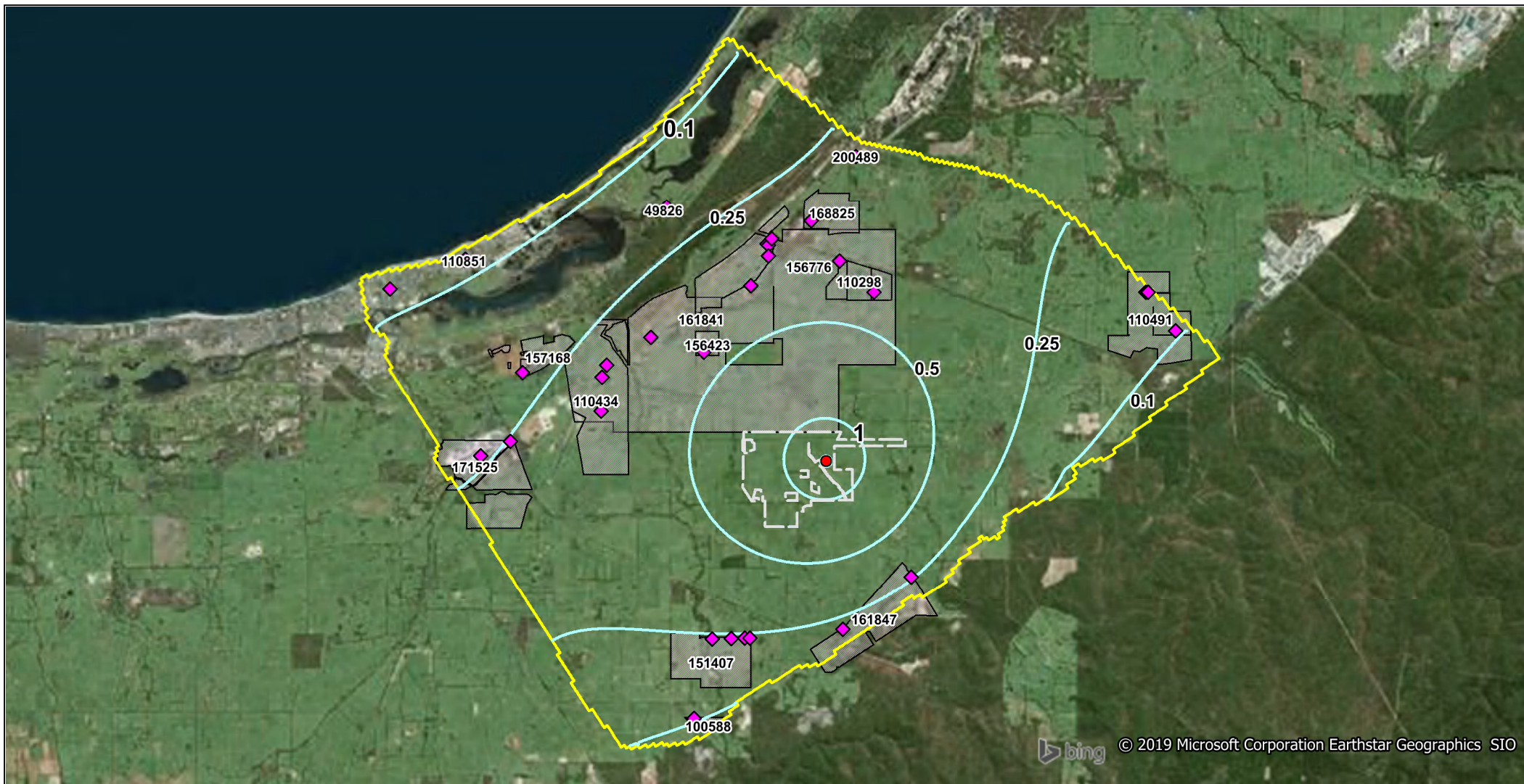
REPORT NO: 007  
 REVISION: a  
 JOB NO: 136D

NOTES & DATA SOURCES:



FIGURE 115  
 CONTOURS OF PREDICTED  
 DRAWDOWN OF 0.1M IN  
 LEEDERVILLE AQUIFER DRY  
 CONDITIONS AND OTHER  
 GROUNDWATER USERS





bing © 2019 Microsoft Corporation Earthstar Geographics SIO

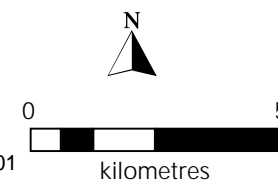
LOCATION MAP



LEGEND

- Groundwater model boundary
- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2, 3
- Potential Disturbance Envelope

- DWER Yarragadee Aquifer Licenced Other Users
- DWER Yarragadee Aquifer Licenced Other Users Drawpoint
- Doral Yarragadee Production Bore YA\_PB01



AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

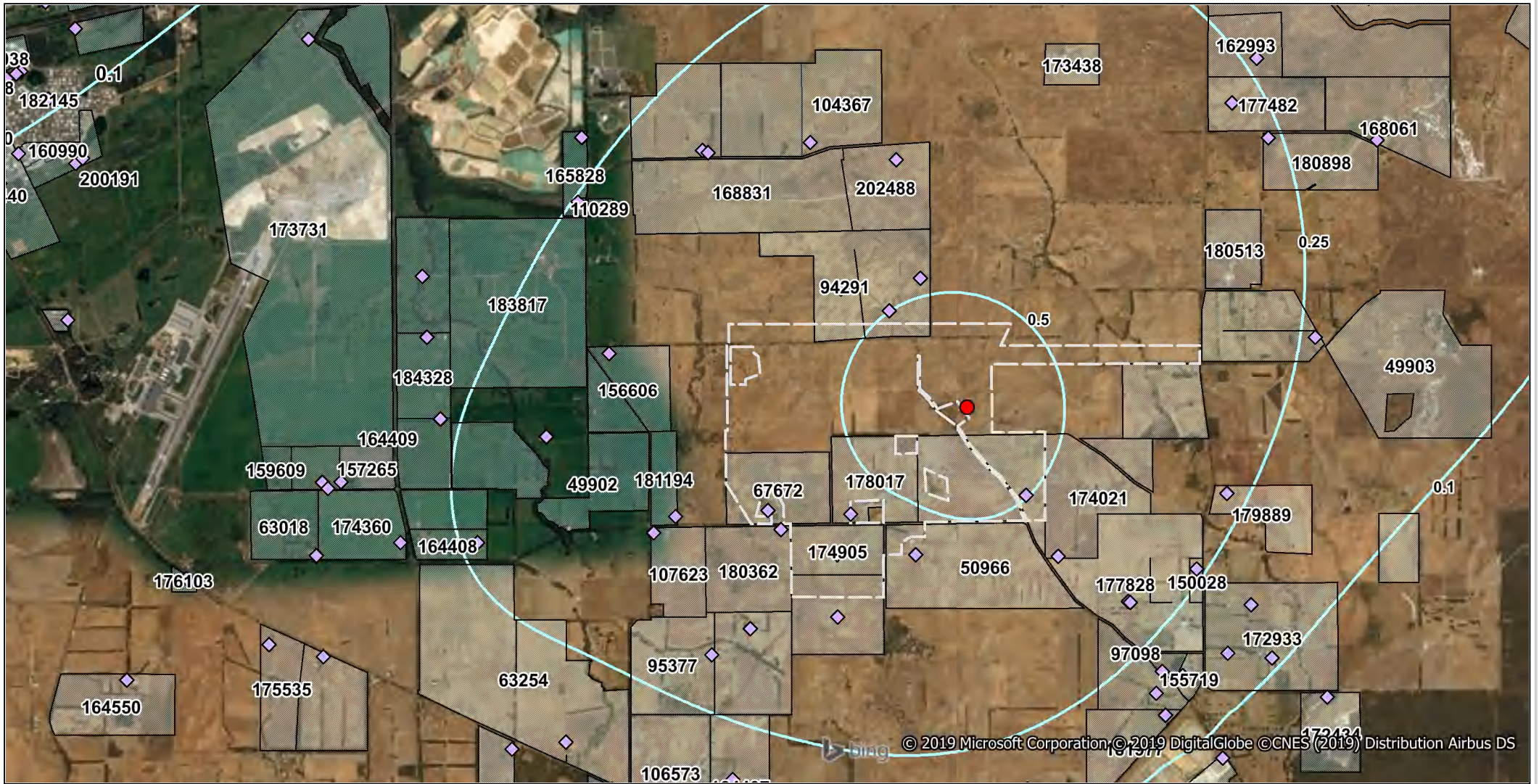
NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



FIGURE 116

PREDICTED CONTOURS OF DRAWDOWN IN YARRAGADEE AQUIFER AT END OF MINING FOR DRY CONDITIONS IN WATER SUPPLY ONLY AND OTHER GROUNDWATER USERS





LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Boundary
- Drawdown in metres at 0.1, 0.25, 0.5, 1, 2
- DWER Leederville Aquifer Licenced Other Users
- DWER Leederville Aquifer Licenced Other Users Drawpoint
- Doral Yarragadee Production Bore YA\_PB01

AUTHOR: GC  
 DRAWN: LDS  
 DATE: 18/10/2019

REPORT NO: 007  
 REVISION: a  
 JOB NO: 136

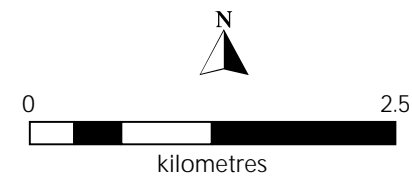


FIGURE 117

PREDICTED CONTOURS OF  
 DRAWDOWN IN LEEDERVILLE  
 AQUIFER AT END OF MINING FOR  
 DRY CONDITIONS IN WATER  
 SUPPLY ONLY AND OTHER  
 GROUNDWATER USERS

NOTES & DATA SOURCES:  
 Mine outlines provide by Doral



**APPENDIX A**  
**BORELOGS**





ABEC | Environmental | Consulting

### Borehole Log

**Borehole No:**  
YA\_MB01S

**CLIENT:** Doral Mineral Sands  
**PROJECT:** Yalyalup  
**LOCATION:** Yalyalup  
**JOB NUMBER:** DMS17-004

**DATE COMMENCED:** 12.12.17  
**DATE COMPLETED:** 12.12.17  
**LOGGED BY:** D Bourke  
**CHECKED BY:** G Alexander

**Driller:** Wallis      **Drilling Method:** Aircore      **Surface RL:** 23.46mAHD      **Easting:** 357253.17  
**Bore details:** Class 18PVC      **Weather:** Fine      **Datum:** MGA94      **Northing:** 6270020.75  
**50mm diameter**      **Total Depth of Hole:** 7.0m      **Top of Casing RL:**  
**Static Water Level:**

| Depth (mBGL) | GRAPHICAL LOG         | LITHOLOGICAL DESCRIPTION                                   | WELL CONSTRUCTION |
|--------------|-----------------------|--|-------------------|
| ~0.75        | Surface casing height | Surface casing height 0.72m above surface level            |                   |
| 0.50         |                       | Cream, fine grained, good sorted, sand.                    |                   |
| 1.00         |                       |  |                   |
| 1.50         |                       | Brown/brown-grey, medium grained, good sorted, clayey sand |                   |
| 2.00         |                       |  |                   |
| 2.50         |                       |  |                   |
| 3.00         |                       |  |                   |
| 3.50         |                       | Brown, ironstone   |                   |
| 4.00         |                       |  |                   |
| 4.50         |                       | Grey, clay   |                   |
| 5.00         |                       |  |                   |
| 5.50         |                       |  |                   |
| 6.00         |                       |  |                   |
| 6.50         |                       |  |                   |
| 7.00         |                       |  |                   |





ABEC | Environmental | Consulting

### Borehole Log

Borehole No:  
YA\_MB02S

**CLIENT:** Doral Mineral Sands  
**PROJECT:** Yalyalup  
**LOCATION:** Yalyalup  
**JOB NUMBER:** DMS17-004

**DATE COMMENCED:** 12.12.17  
**DATE COMPLETED:** 12.12.17  
**LOGGED BY:** D Bourke  
**CHECKED BY:** G Alexander

**Driller:** Wallis      **Drilling Method:** Aircore      **Surface RL:** 20.23mAHD      **Easting:** 356759.62  
**Bore details:** Class 18PVC      **Weather:** Fine      **Datum:** MGA94      **Northing:** 6270882.49  
**50mm diameter**      **Total Depth of Hole:** 9.0m      **Top of Casing RL:**  
**Static Water Level:**

| Depth (mBGL) | GRAPHICAL LOG         | LITHOLOGICAL DESCRIPTION   | WELL CONSTRUCTION |
|--------------|-----------------------|--|-------------------|
| ~1.0         | Surface casing height | PVC surface casing height 0.94m above surface level                      |                   |
| 0.50         |                       | Grey brown, good sorted, medium to coarse grained, clayey sand           |                   |
| 1.00         |                       |  |                   |
| 1.50         |                       | Orange brown, laterite   |                   |
| 2.00         |                       |  |                   |
| 2.50         |                       |  |                   |
| 3.00         |                       | Grey, good sorted, medium to coarse grained, sandy clay                  |                   |
| 3.50         |                       |  |                   |
| 4.00         |                       |  |                   |
| 4.50         |                       | Grey, poor to moderately sorted, grit, clayey sand. Wet                  |                   |
| 5.00         |                       |  |                   |
| 5.50         |                       |  |                   |
| 6.00         |                       | Grey, moderately sorted, medium to very coarse grained, clayey sand. Wet |                   |
| 6.50         |                       |  |                   |
| 7.00         |                       |  |                   |
| 7.50         |                       |  |                   |
| 8.00         |                       |  |                   |
| 8.50         |                       |  |                   |
| 9.00         |                       |  |                   |





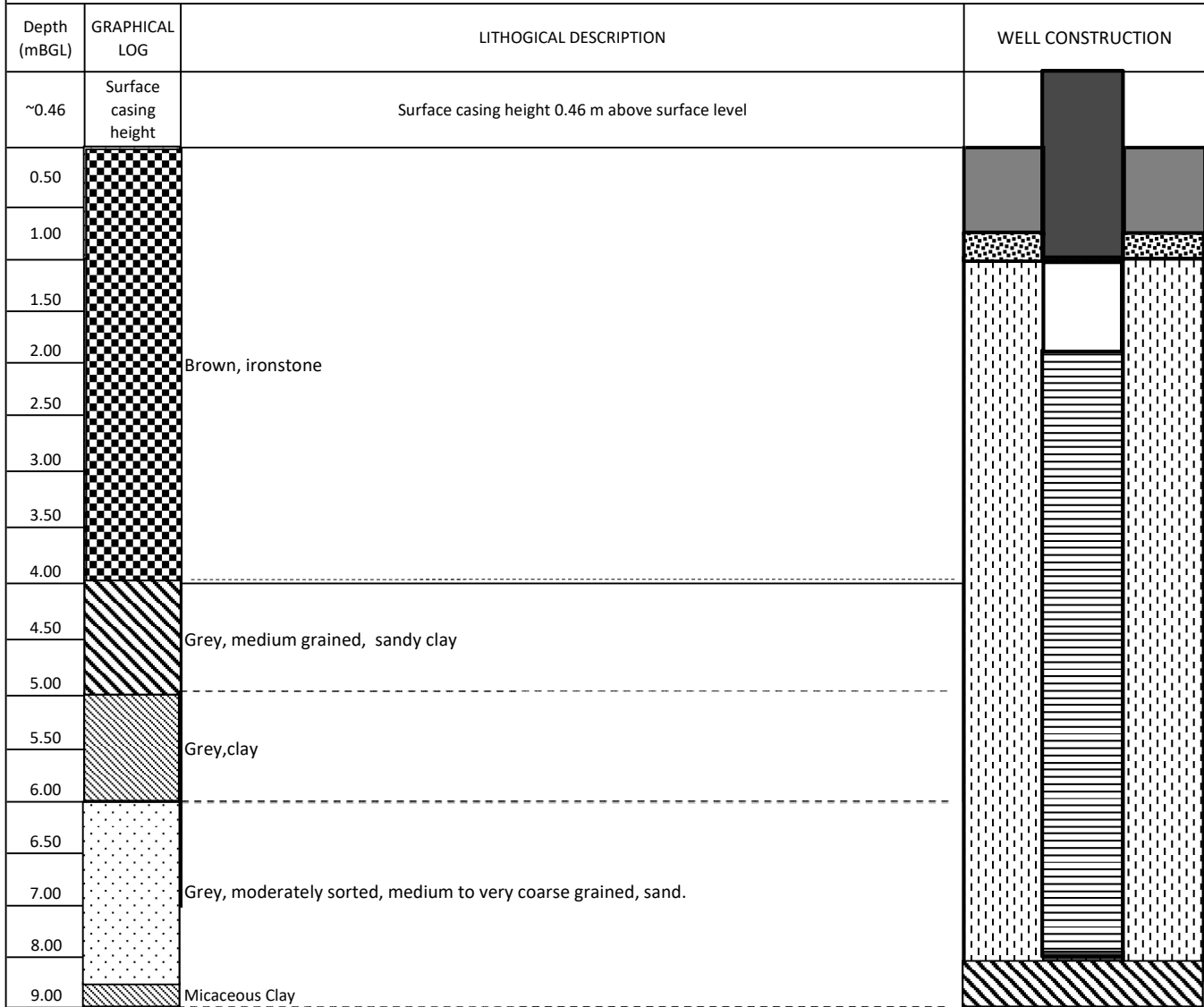
### Borehole Log

Borehole No:  
YA\_MB03S

**CLIENT:** Doral Mineral Sands  
**PROJECT:** Yalyalup  
**LOCATION:** Yalyalup  
**JOB NUMBER:** 136D

**DATE COMMENCED:** 01.06.19  
**DATE COMPLETED:** 01.06.19  
**LOGGED BY:** R Olivier  
**CHECKED BY:**

**Driller:** Aquatech      **Drilling Method:** Mud rotary      **Surface RL:** 18.76 mAHD      **Easting:** 356989  
**Bore details:** Class 18PVC      **Weather:** Fine      **Datum:** MGA94      **Northing:** 6271678  
**Static Water Level:**      **Total Depth of Hole:** 9 m      **Top of Casing RL:**







ABEC | Environmental | Consulting

### Borehole Log

**Borehole No:**  
YA\_MB04S

**CLIENT:** Doral Mineral Sands  
**PROJECT:** Yalyalup  
**LOCATION:** Yalyalup  
**JOB NUMBER:** DMS17-004

**DATE COMMENCED:** 12.12.17  
**DATE COMPLETED:** 12.12.17  
**LOGGED BY:** D Bourke  
**CHECKED BY:** G Alexander

**Driller:** Wallis      **Drilling Method:** Aircore      **Surface RL:** 22.86mAHD      **Easting:** 357788.68  
**Bore details:** Class 18PVC      **Weather:** Fine      **Datum:** MGA94      **Northing:** 6270637.28  
**Static Water Level:**      **Total Depth of Hole:** 9.0m      **Top of Casing RL:**

| Depth (mBGL) | GRAPHICAL LOG         | LITHOLOGICAL DESCRIPTION  | WELL CONSTRUCTION |
|--------------|-----------------------|---|-------------------|
| ~0.75        | Surface casing height | PVC surface casing height 0.71m above surface level                       |                   |
| 0.50         |                       | Cream, good sorted, fine to coarse grained, clayey sand                   |                   |
| 1.00         |                       |   |                   |
| 1.50         |                       |   |                   |
| 2.00         |                       |   |                   |
| 2.50         |                       | Orange brown, ironstone   |                   |
| 3.00         |                       |   |                   |
| 3.50         |                       | Grey brown, moderately sorted, medium to very coarse grained, clayey sand |                   |
| 4.00         |                       |   |                   |
| 4.50         |                       | Grey, clay  |                   |
| 5.00         |                       |   |                   |
| 5.50         |                       | Grey, good sorted, medium to coarse grained, sandy clay. Wet              |                   |
| 6.00         |                       |   |                   |
| 6.50         |                       | Grey, good sorted, medium to coarse grained, clayey sand. Wet             |                   |
| 7.00         |                       |   |                   |
| 7.50         |                       | Grey, good sorted, medium to coarse grained, sand. Wet                    |                   |
| 8.00         |                       |   |                   |
| 8.50         |                       | Grey, moderately sorted, medium to coarse grained, sand. Wet              |                   |
| 9.00         |                       |   |                   |