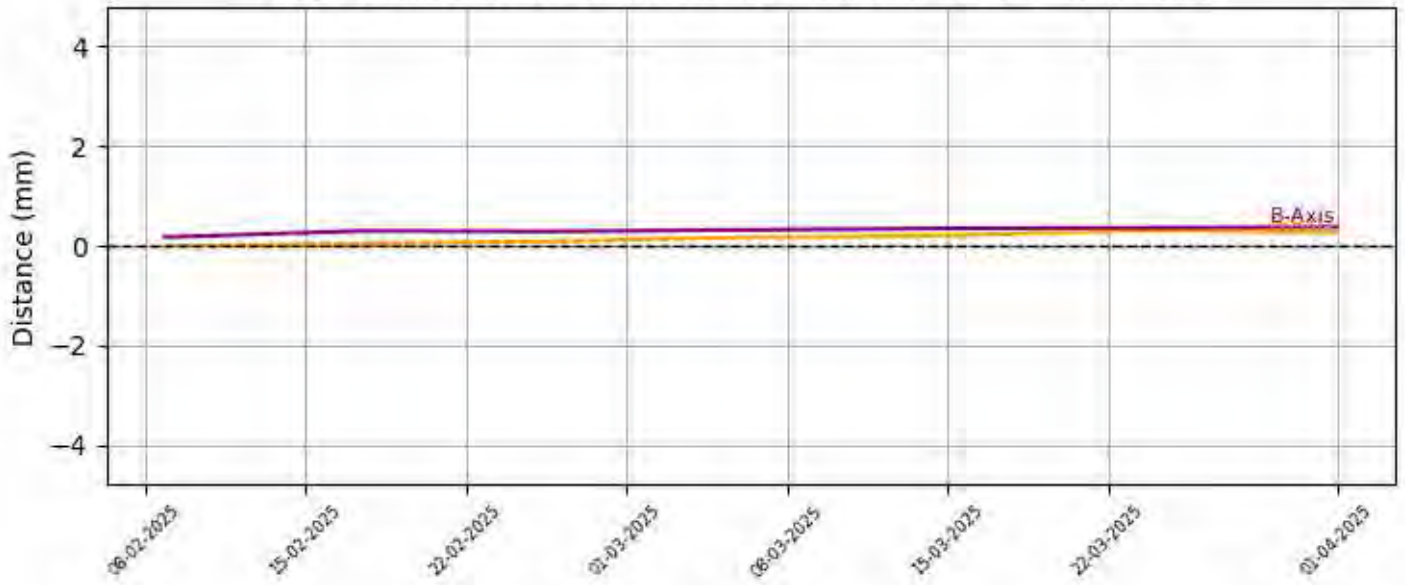
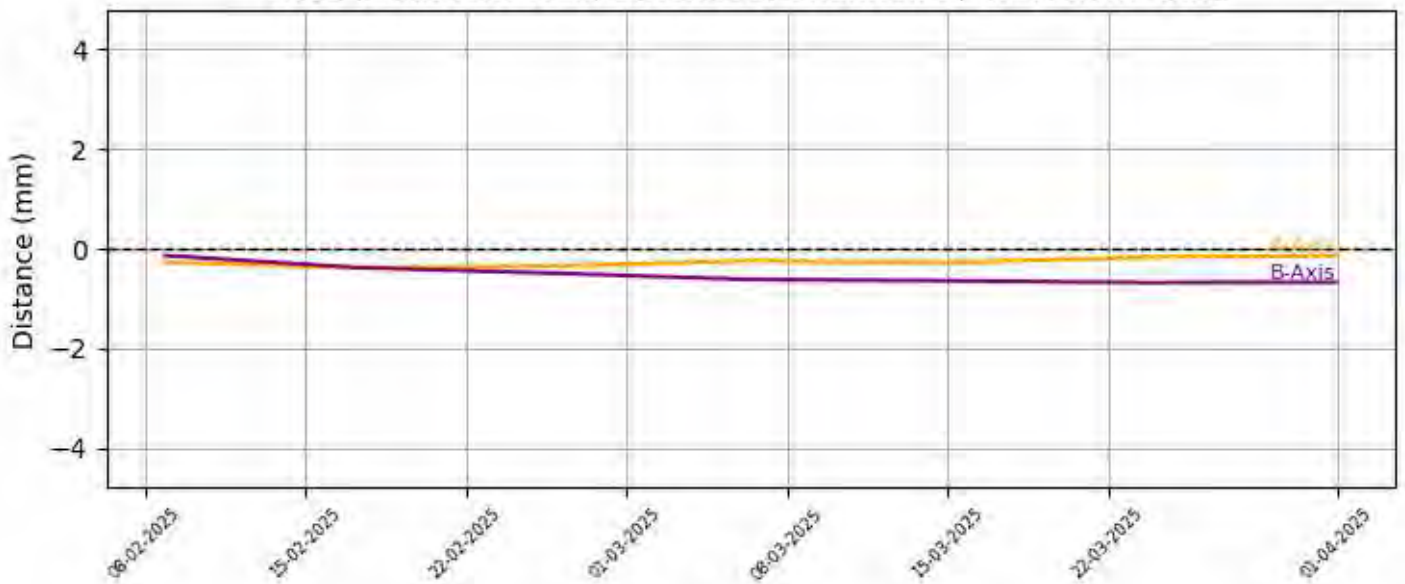


# Unit View

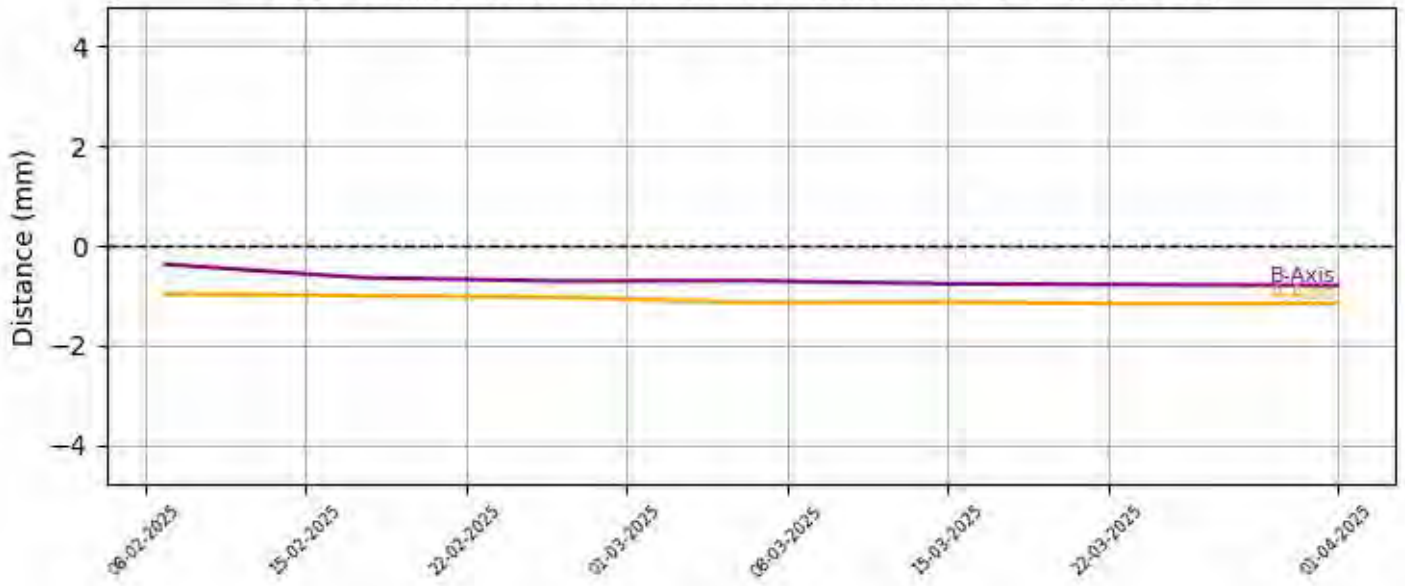
## IN02 (Southern Wall) Extended, Channel: 1, Elevation: -23.4



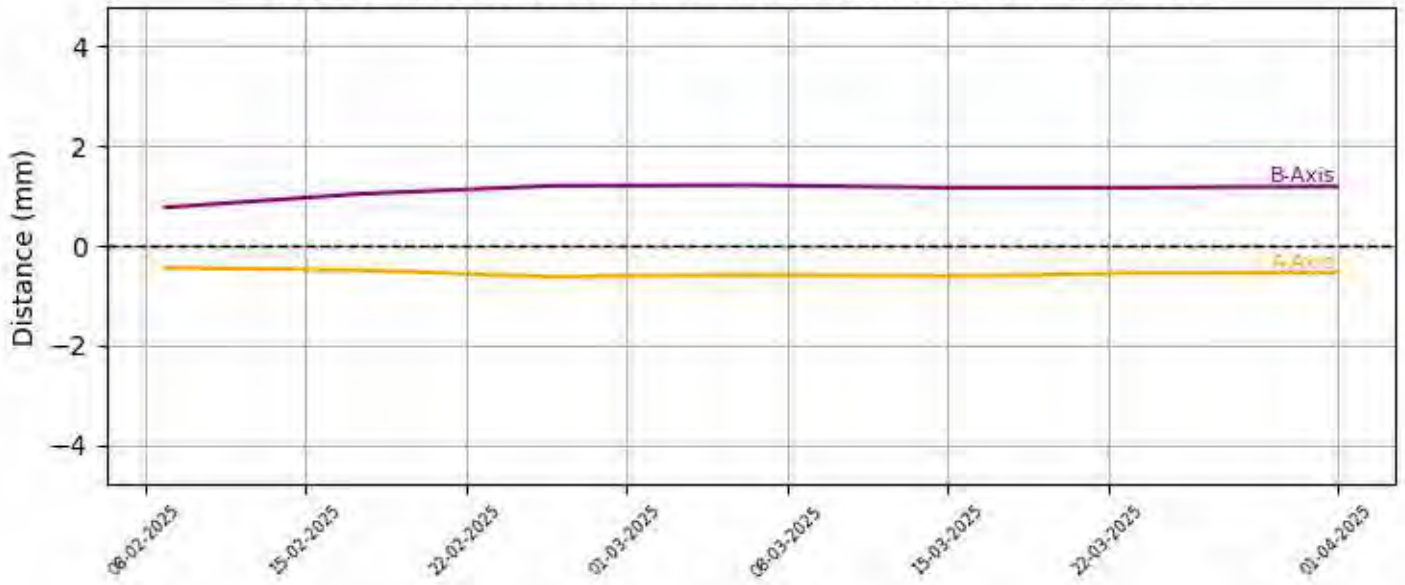
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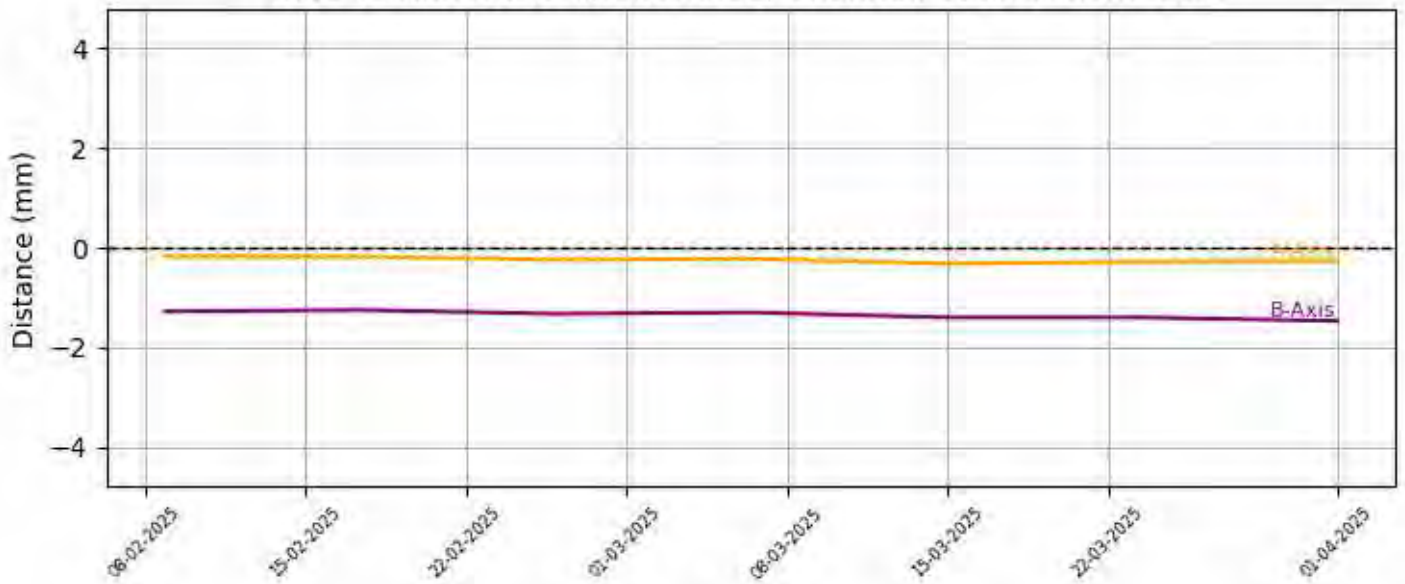
IN02 (Southern Wall) Extended, Channel: 3, Elevation: -19.4



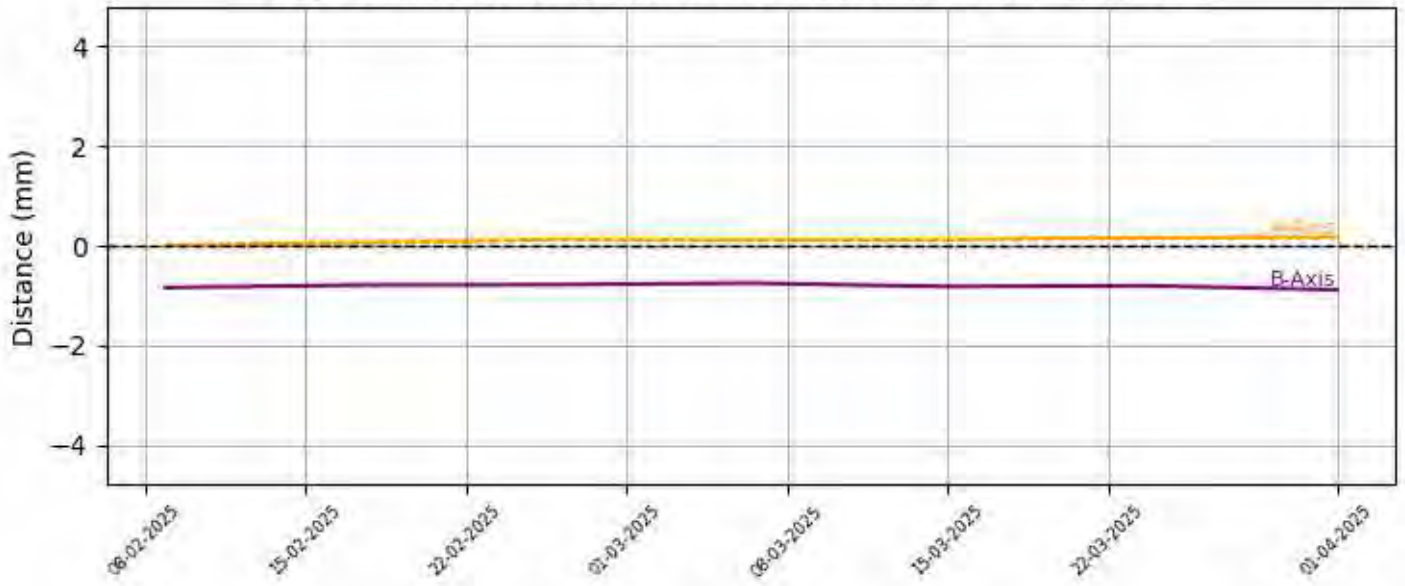
IN02 (Southern Wall) Extended, Channel: 4, Elevation: -17.4



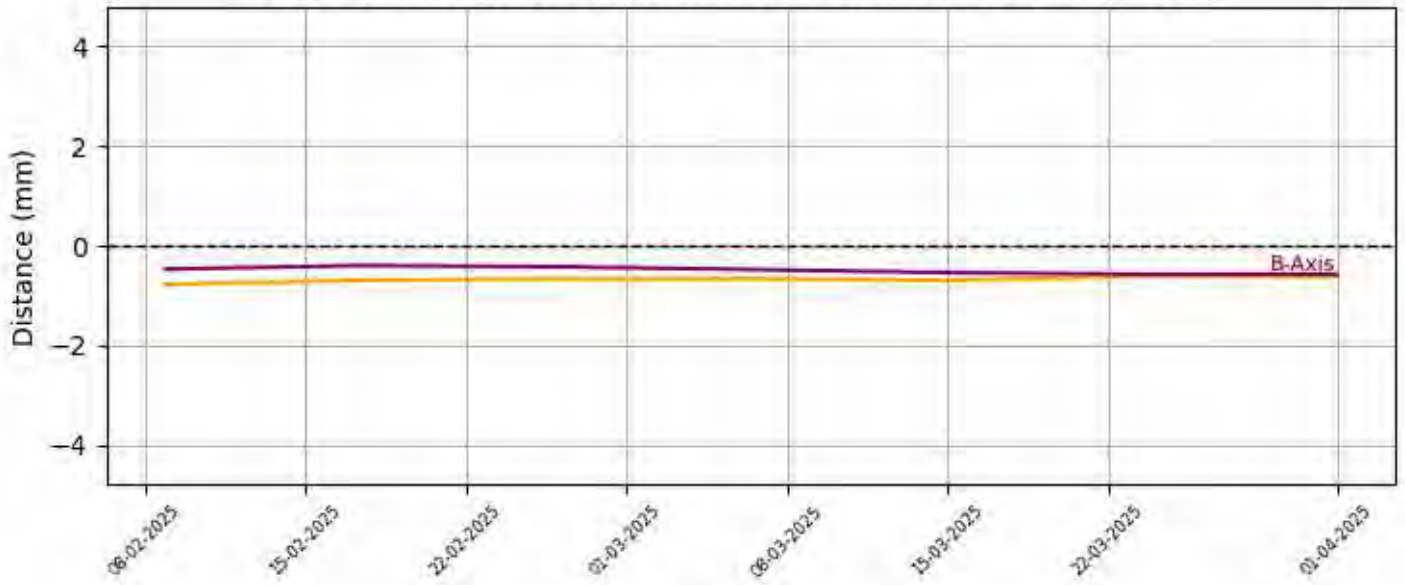
IN02 (Southern Wall) Extended, Channel: 5, Elevation: -15.4



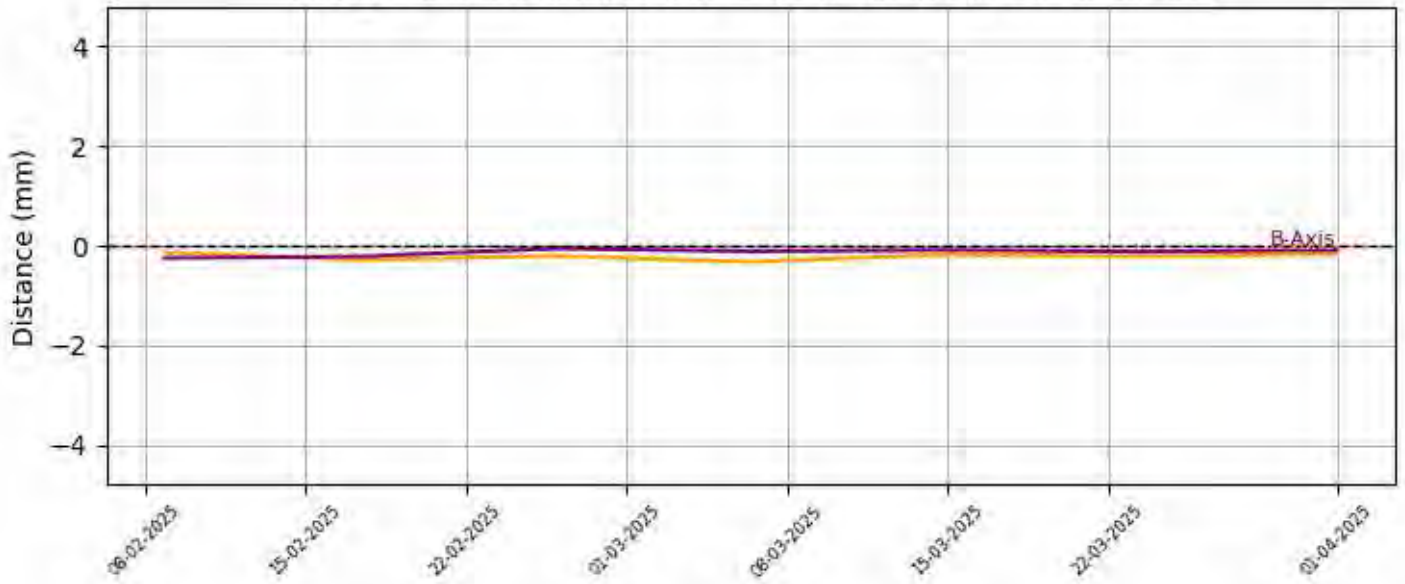
IN02 (Southern Wall) Extended, Channel: 6, Elevation: -13.4



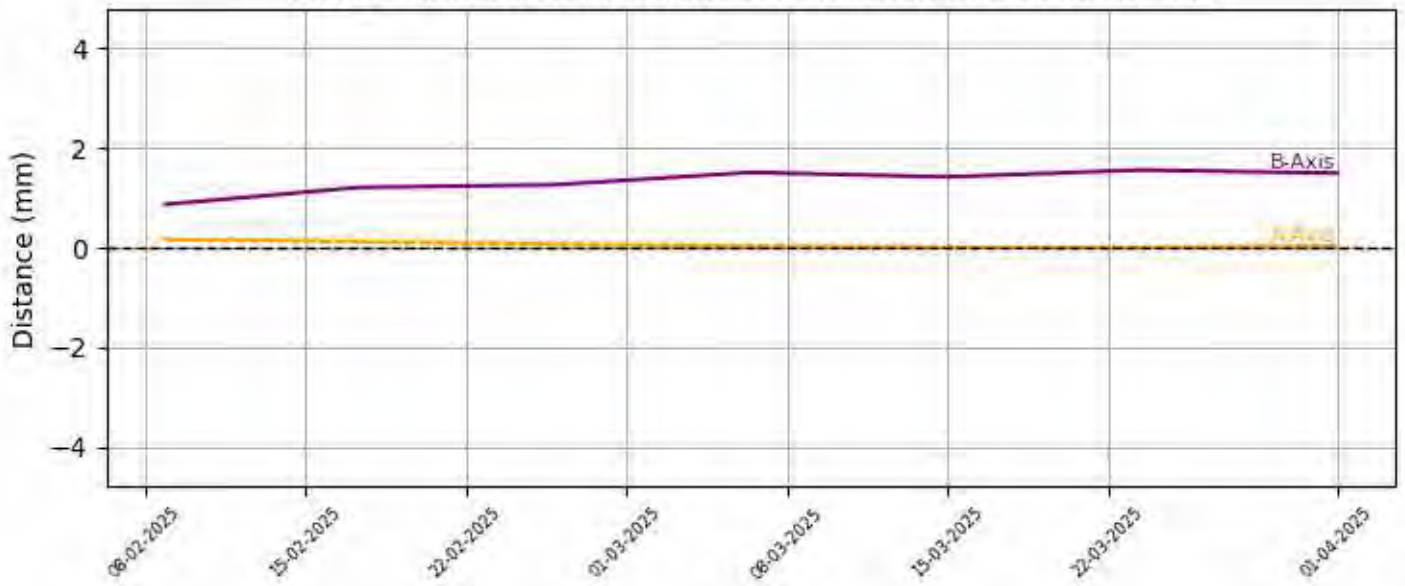
IN02 (Southern Wall) Extended, Channel: 7, Elevation: -11.4



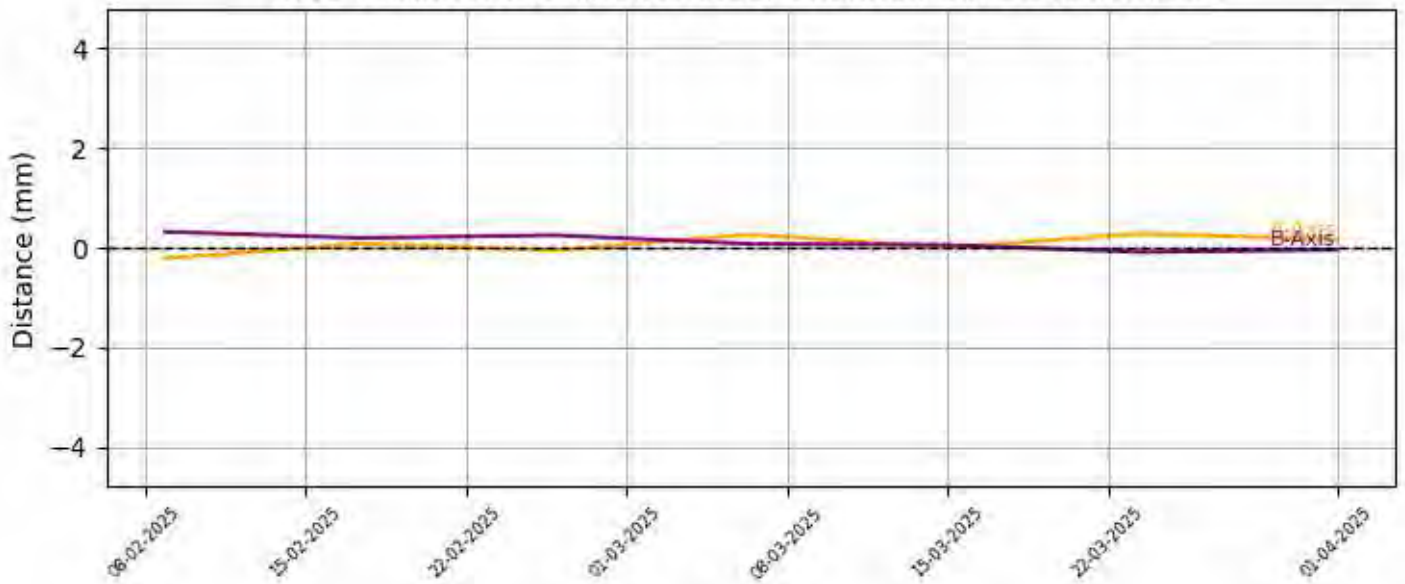
IN02 (Southern Wall) Extended, Channel: 8, Elevation: -9.4



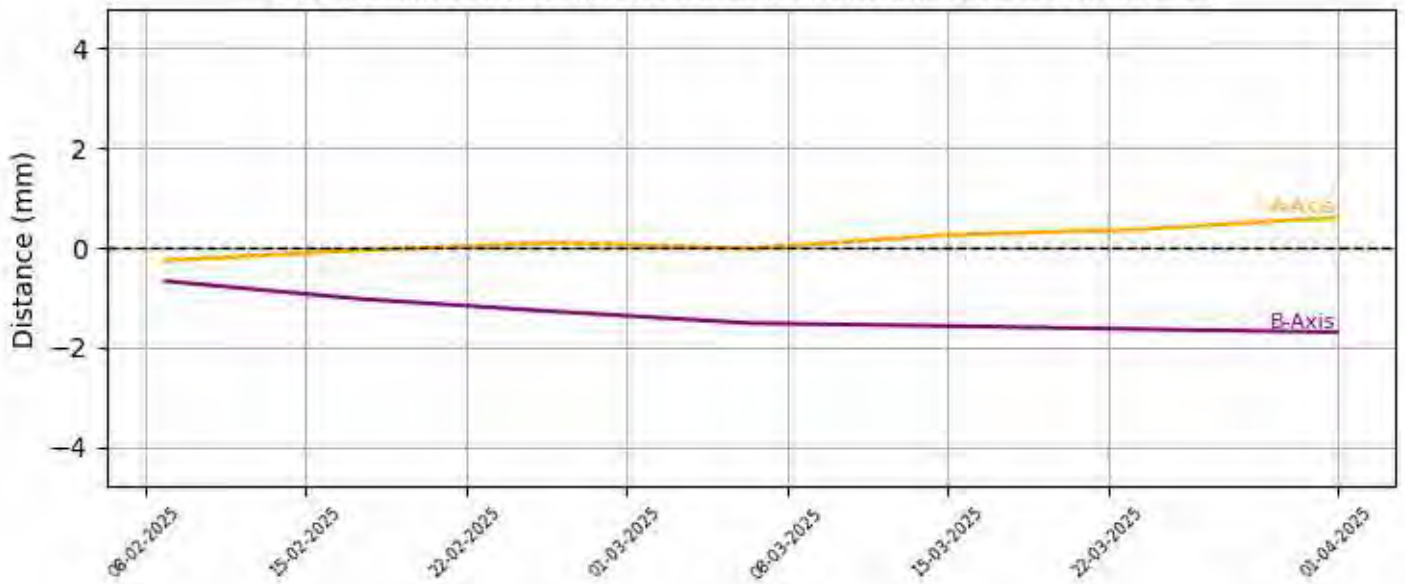
IN02 (Southern Wall) Extended, Channel: 9, Elevation: -7.4



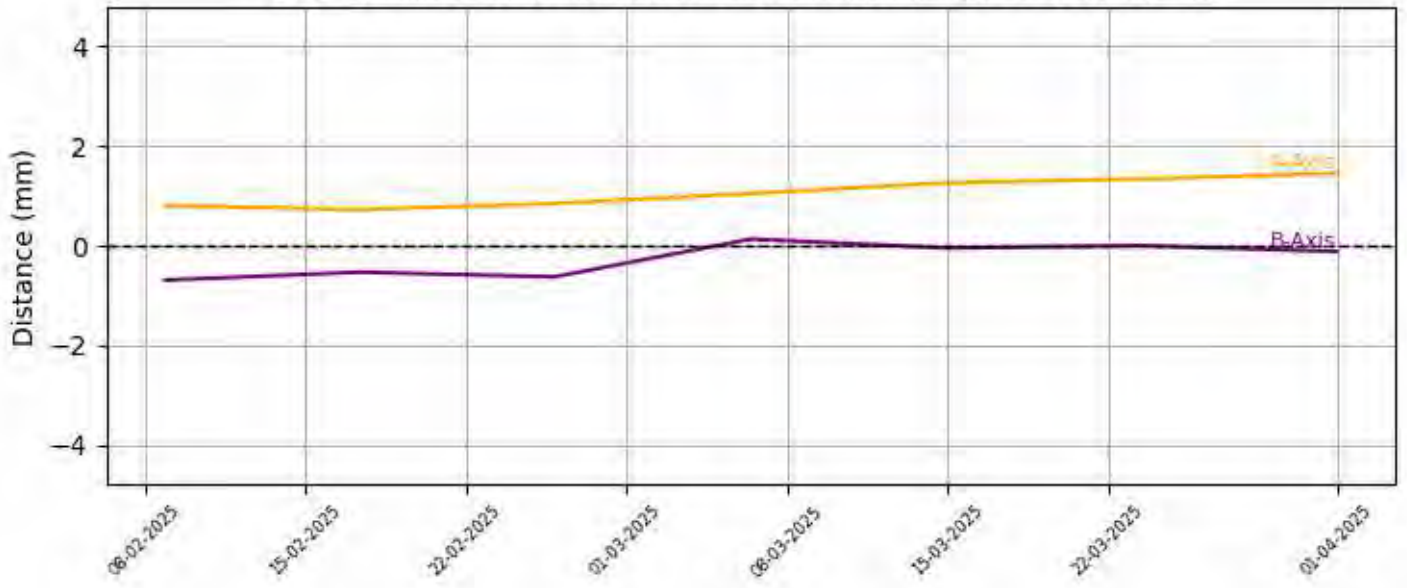
IN02 (Southern Wall) Extended, Channel: 10, Elevation: -5.4



IN02 (Southern Wall) Extended, Channel: 11, Elevation: -3.4



IN02 (Southern Wall) Extended, Channel: 12, Elevation: -1.4



# **Appendix G**

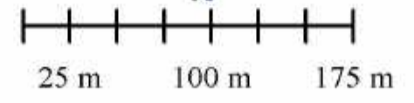
**TSF2 and TSF4 volume survey**

412500 m

413000 m



# Greenbushes Operations



FILL LEVELS IN REFERENCE TO 279.7 RL PLANE

January 2025 (07/01/2025)

Projection: MGA Z50 Datum: GDA2020

6252000 m

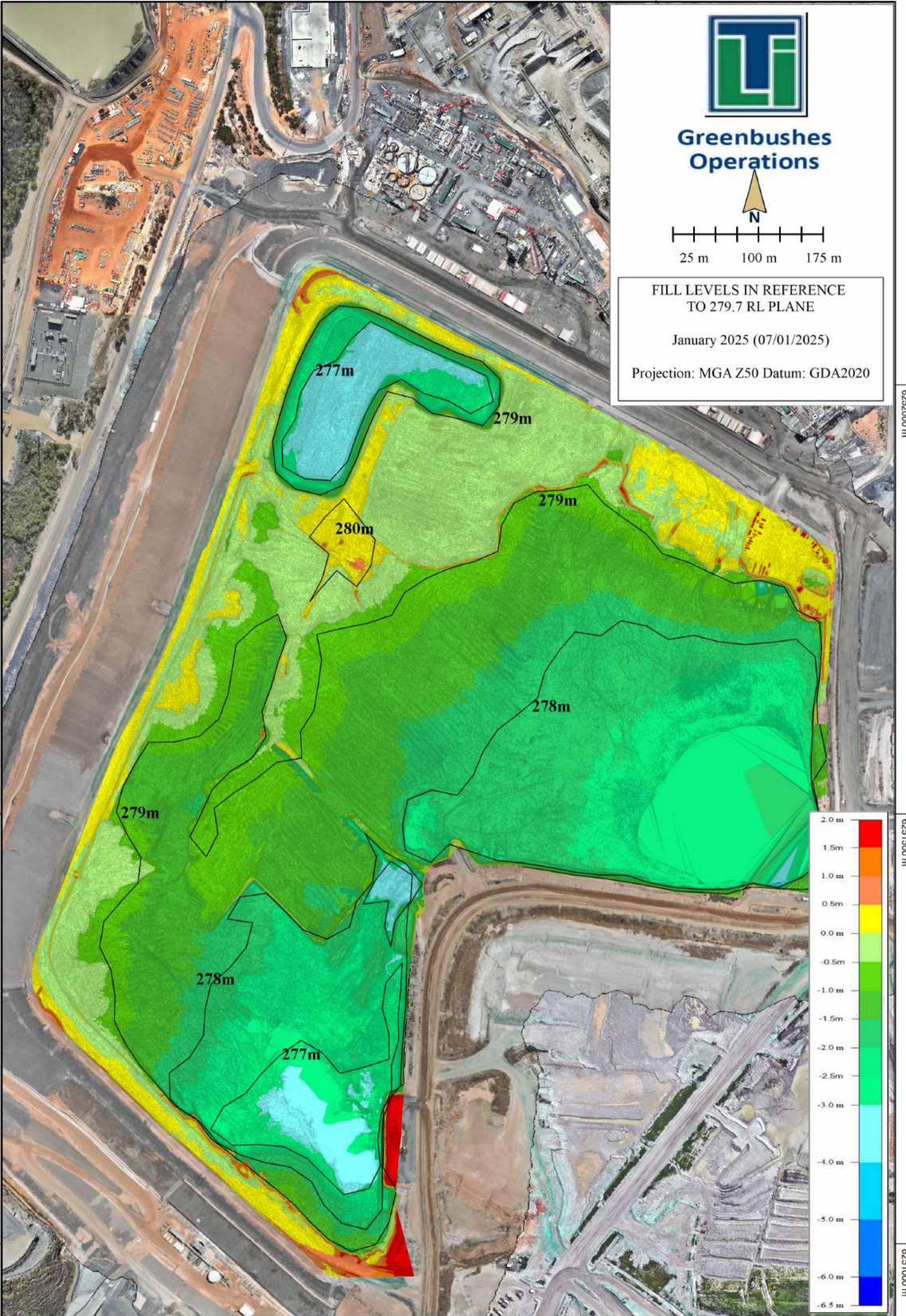
6251500 m

6251000 m

6252000 m

6251500 m

6251000 m



412500 m

413000 m

6252500 m

412500 m

413000 m

6252500 m



**Greenbushes  
Operations**



0 m 100 m 200 m

FILL LEVELS IN REFERENCE  
TO 279.7 RL PLANE

February 2025 (08/02/2025)

Projection: MGA Z50 Datum:  
GDA2020

6252000 m

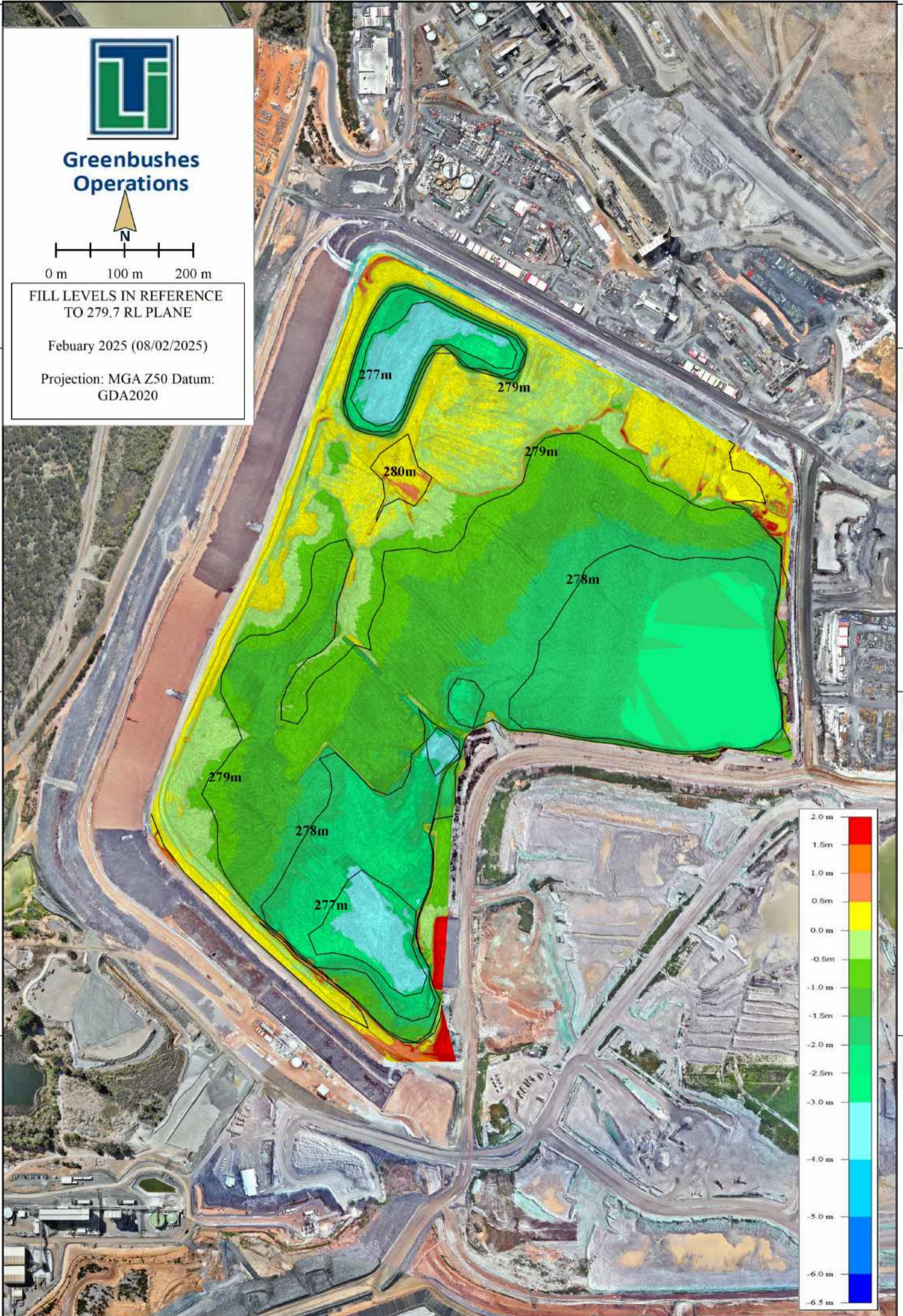
6251500 m

6251000 m

6252000 m

6251500 m

6251000 m



412500 m

413000 m

6252500 m

412500 m

413000 m

6252500 m



**Greenbushes  
Operations**



0 m    100 m    200 m

FILL LEVELS IN REFERENCE  
TO 279.7 RL PLANE

March 2025 (10/03/2025)

Projection: MGA Z50 Datum:  
GDA2020

6252000 m

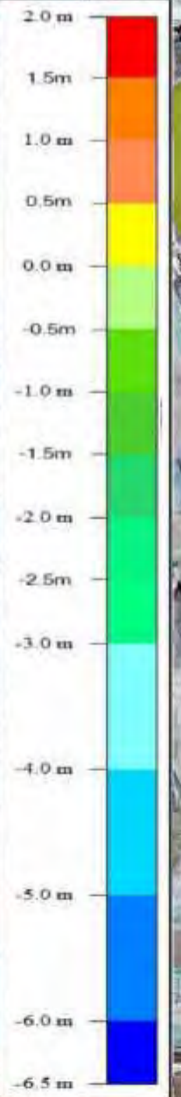
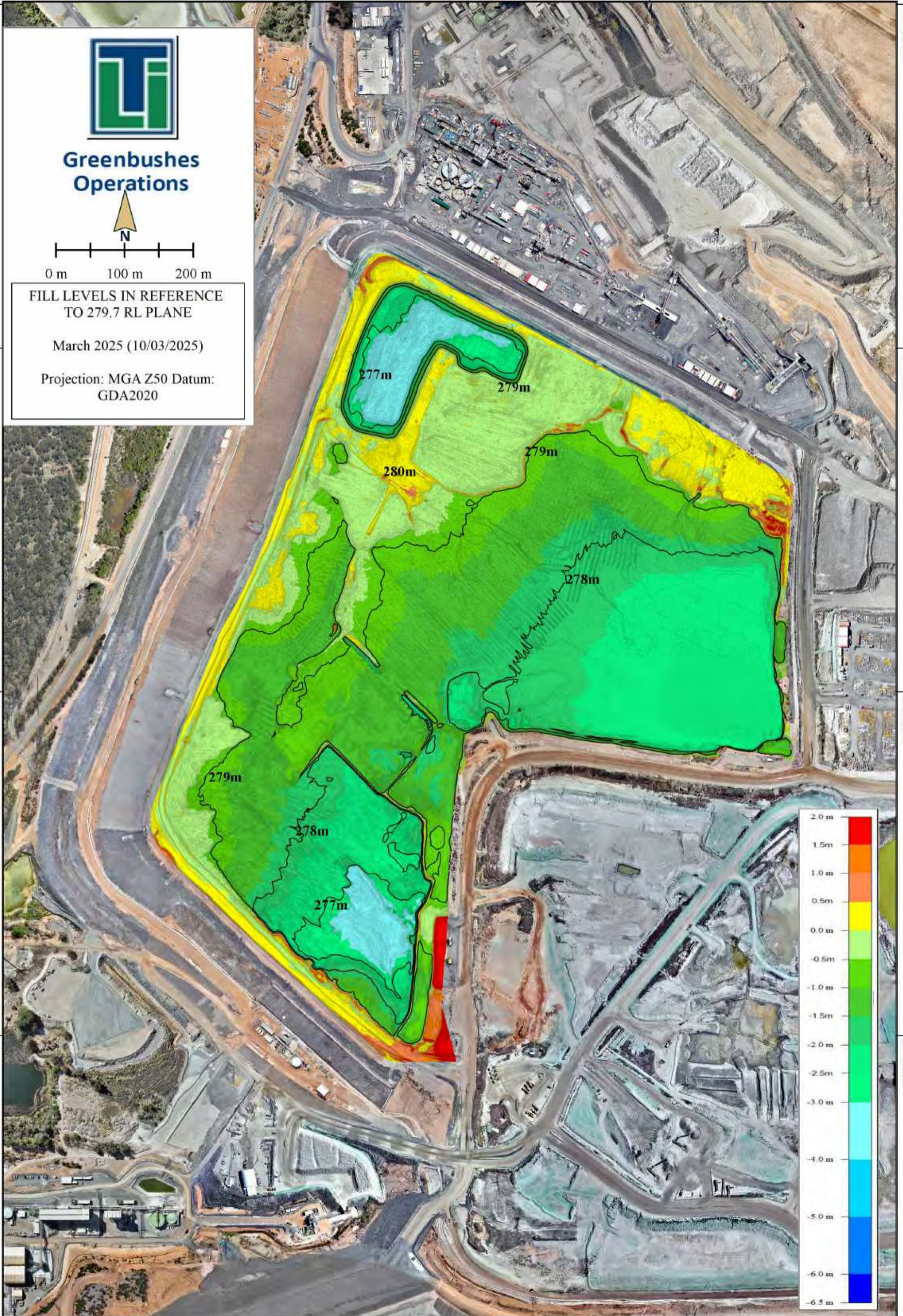
6251500 m

6251000 m

6252000 m

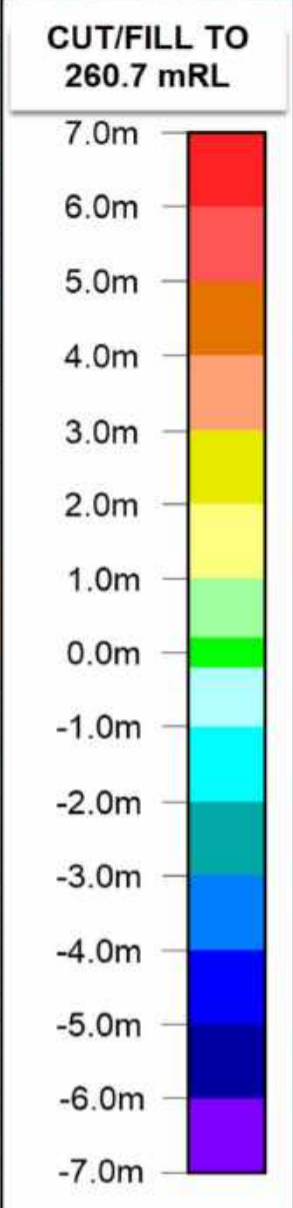
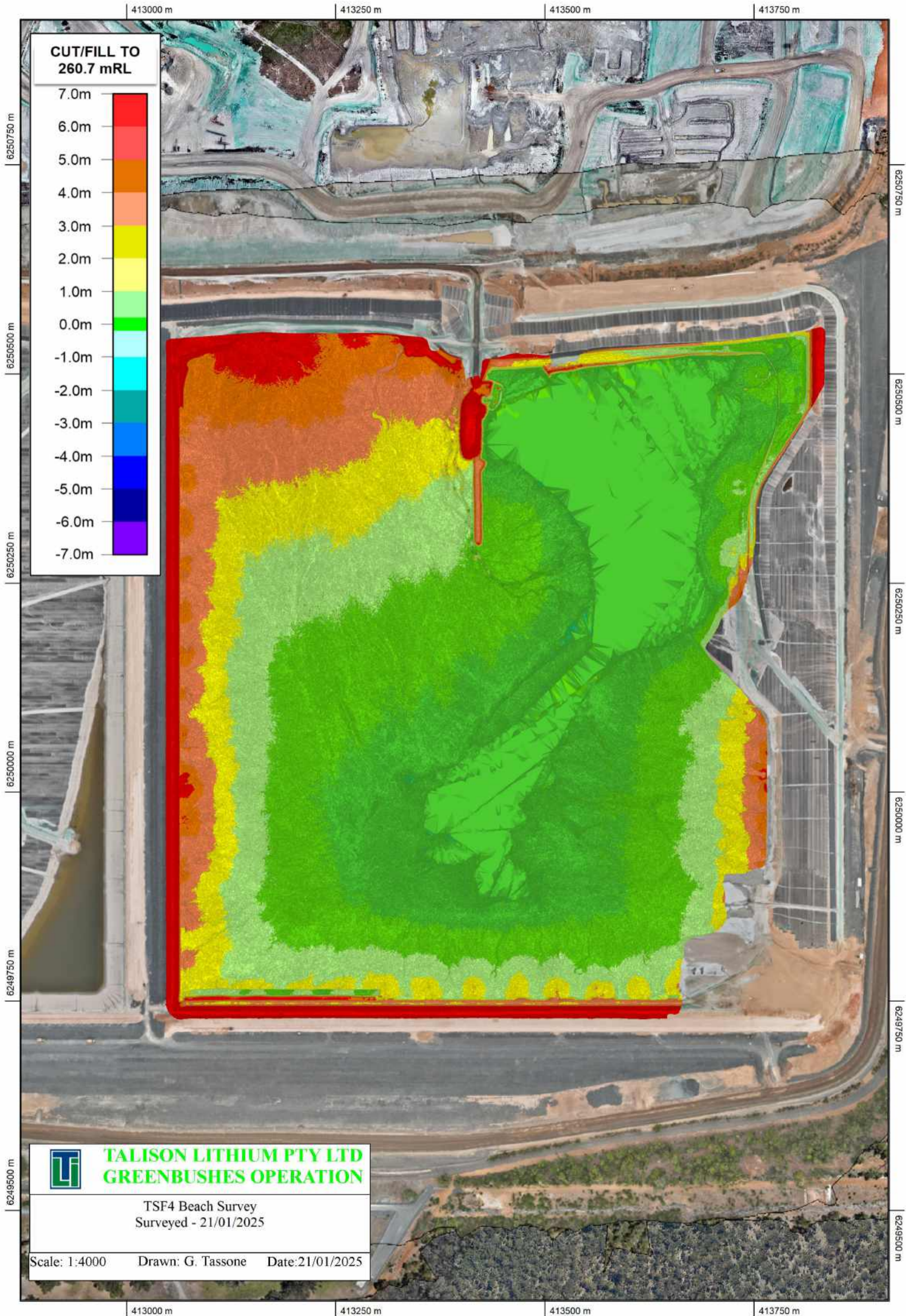
6251500 m

6251000 m



412500 m

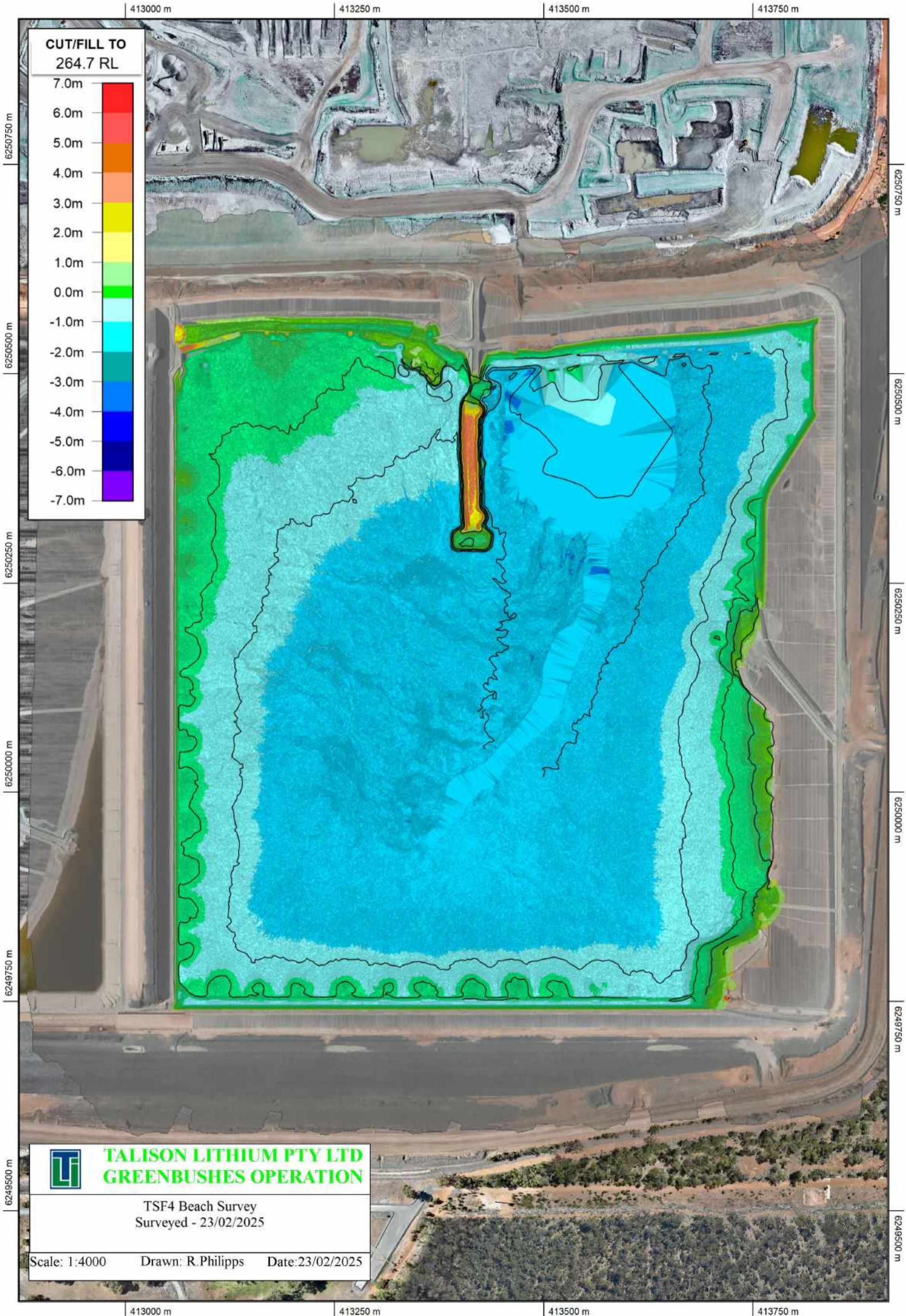
413000 m



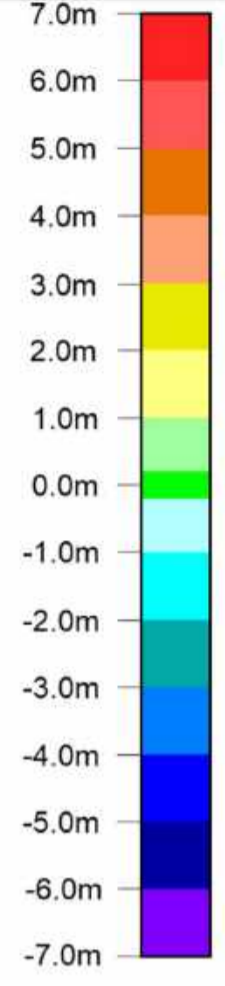
**TALISON LITHIUM PTY LTD**  
**GREENBUSHES OPERATION**

TSF4 Beach Survey  
 Surveyed - 21/01/2025

Scale: 1:4000    Drawn: G. Tassone    Date: 21/01/2025



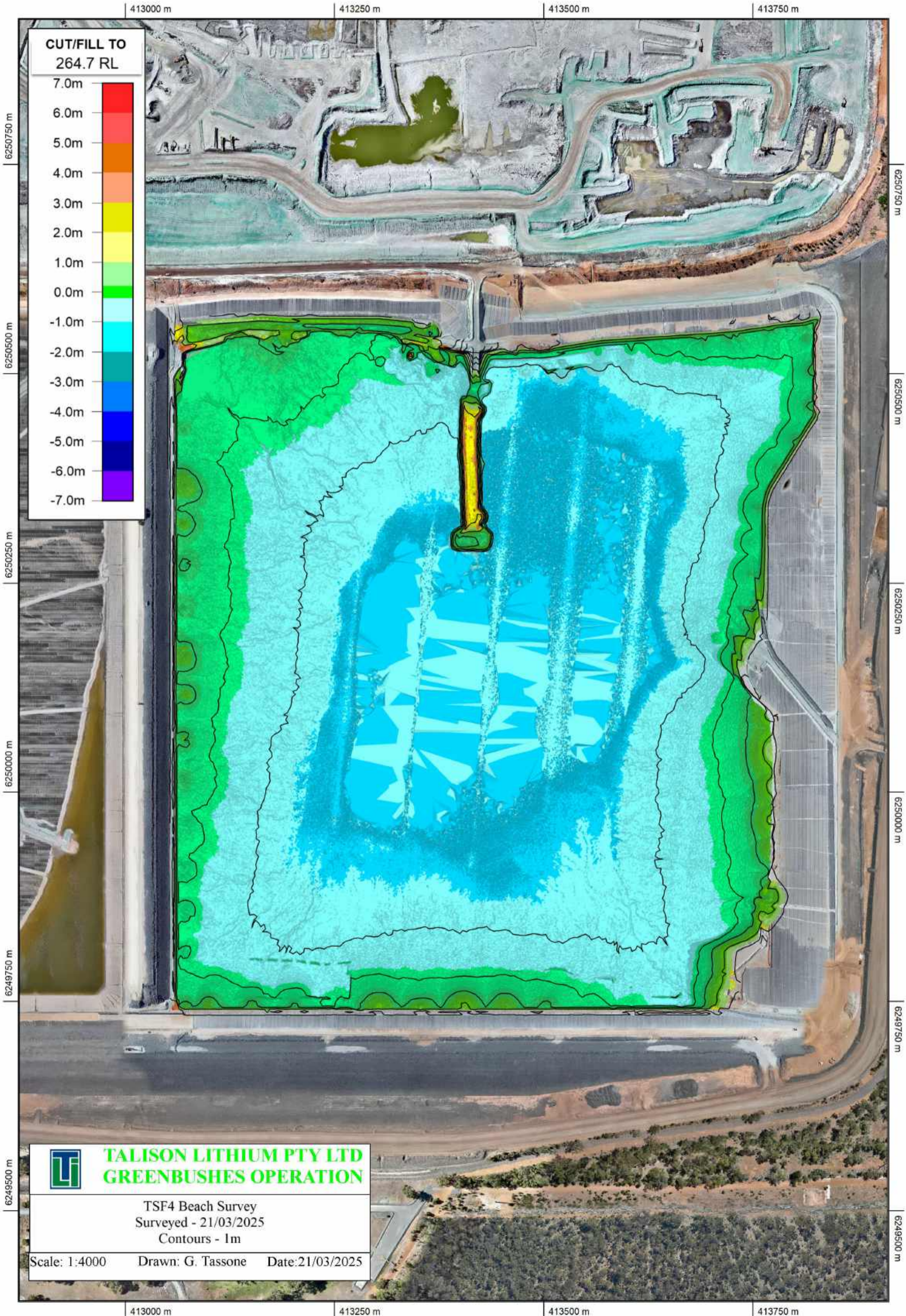
CUT/FILL TO  
264.7 RL



 **TALISON LITHIUM PTY LTD**  
**GREENBUSHES OPERATION**

TSF4 Beach Survey  
Surveyed - 23/02/2025

Scale: 1:4000    Drawn: R.Philipps    Date: 23/02/2025





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# Talison Lithium Pty Ltd Greenbushes Lithium Mine Expansion

## Quarterly Monitoring Report (July to September 2025)

December 2025



<b>Project name</b>		Talisson TSF Quarterly Monitoring					
<b>Document title</b>		Talisson TSF Quarterly Monitoring   Talisnon TSF Quarterly report (July – September 2025)					
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			<b>Name</b>	<b>Signature</b>	<b>Name</b>	<b>Signature</b>	<b>Date</b>
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# 1. Introduction

## 1.1 Purpose of this report

The purpose of this report is to document the review of the TSF monitoring data for July 2025 to September 2025 and to capture any findings and recommendations (refer to section 9 of this report). The following data was reviewed:

- TSF production data
- Decant pond level readings for TSF2 and TSF4
- Decant return rates for TSF2 and TSF4
- Volumes pumped out of the seepage sumps for TSF2 and TSF4
- Aerial survey to show beach development and pond management
- Beach volume reports for TSF2 (July and August 2025 only) and TSF4
- General Piezometer Reports for TSF1, TSF2, TSF3 and TSF4
- Deformation monitoring data
  - o Survey data for TSF2 and TSF4
  - o GNSS monitoring data for TSF2
  - o General Inclinator Reports

No monitoring bore readings were received for the quarter.

## 1.2 Scope and limitations

This report has been prepared by GHD for Talison Lithium Pty Ltd and may only be used and relied on by Talison Lithium Pty Ltd for the purpose agreed between GHD and Talison Lithium Pty Ltd as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Talison Lithium Pty Ltd arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

## 1.3 Acronyms, terms and abbreviations

Table 1.1 defines the acronyms, terms and abbreviations used in this report.

Table 1.1 Acronyms, terms and abbreviations

Acronyms, terms or abbreviations	Definition
GHD	GHD Pty Ltd
GNSS	Global Navigation Satellite System
Talison	Talison Lithium Pty Ltd
TSF	Tailings Storage Facility
VWP	Vibrating wire piezometer

## 2. Monitoring program

The TSF monitoring program currently in place at the site is summarised in Table 2.1.

Table 2.1 Available monitoring system and frequency

Monitoring type	TSF 1	TSF2	TSF 3	TSF4
Vibrating Wire Piezometers (VWP)	<p><b>Upstream tailings (7 No.)</b></p> <p>TSF1-CPT20-01 TSF1-CPT20-03 TSF1-CPT20-05 TSF1-CPT20-07 TSF1-CPT20-09 TSF1-CPT20-10 TSF1-CPT20-11</p> <p><b>Crest (5 No.)</b></p> <p>TSF1-CPT20-12 TSF1-CPT20-14 TSF1-CPT20-15 TSF1-CPT20-16 TSF1-CPT20-17</p> <p><b>Downstream berm (5 No.)</b></p> <p>TSF1-CPT20-02 TSF1-CPT20-04 TSF1-CPT20-06 TSF1-CPT20-08 TSF1-CPT20-13</p>	<p><b>Section A</b></p> <p>CPT2023-01A Shallow CPT2023-01A Deep CPT2023-01B Shallow CPT2023-01B Deep CPT2023-01C Shallow CPT2023-01C Deep</p> <p><b>Section B</b></p> <p>CPT2019-02A Shallow CPT2019-02A Deep CPT2023-02B Shallow CPT2023-02B Intermediate CPT2023-02B Deep CPT2019-02C Shallow CPT2019-02C Deep</p> <p><b>Section C</b></p> <p>CPT2019-03A Shallow CPT2019-03A Deep CPT2023-03B CPT2019-03C Shallow CPT2019-03C Intermediate CPT2019-03C Deep</p> <p><b>Section D</b></p> <p>CPT2023-04A Shallow CPT2023-04A Deep CPT2023-04B</p>	<p><b>Crest (6 No.)</b></p> <p>VWP2023-01A Shallow VWP2023-01A Deep VWP2023-02A Shallow VWP2023-02A Deep VWP2023-03A Shallow VWP2023-03A Deep</p>	<p><b>Soft Clay Layer (3 No.)</b></p> <p>VWP – 01 VWP – 02 VWP – 03</p> <p><b>TSF4 Cell 1 Embankment (23 No.)</b></p> <p>PZ01 A, C, D, E, F PZ02 A, B, C, D, E, F PZ03 A, B, C, D, E, F PZ 07 PZ 08 PZ 09A, 09B (Divider embankment) PZ 10 PZ 11</p> <p><b>TSF4 Cell 2 Embankment (15 No.)</b></p> <p>PZ04 A, C, D, E, F PZ05 A, B, C, D, E PZ06 A, B, C, D, E</p>

Monitoring type	TSF 1	TSF2	TSF 3	TSF4
		CPT2023-04B Shallow CPT2023-04B Deep CPT2019-04C Shallow CPT2019-04C Deep  <b>Section E</b> CPT2019-05A Shallow CPT2023-05A Intermediate CPT2019-05A Deep CPT2023-05B Shallow CPT2023-05B Intermediate CPT2019-05B Deep  <b>VWPs installed in 2020</b> TSF2-CPT20-01 TSF2-CPT20-02 TSF2-CPT20-04 TSF2-CPT20-05 TSF2-CPT20-07 TSF2-CPT20-13		
Monitoring bores (MB)	MB07/02 - MB07/07 (6 no.) MB17/07D, MB17/07S (2 No.) MB17/08S (1 No.) MB1, MB1A, MB2A (3 No.)	MB13/01 - MB13/8 (8 No.) HYD001 - HYD006 (6 No.)	MB01/06, MB01/07, MB02 (3 No.)	MB – 24/01 S/I/D to MB – 24/08 S/I/D (24 No.)
Survey pins	Ten survey pins were installed in May 2020	TSF2 – 77 TSF2 - 78 TSF2 - 79 TSF2 - 80 TSF2 - 81 TSF2 – 82 TSF2 – 83 TSF2 – 84 TSF2 – 85 TSF2 – 86 TSF2 – 87 TSF2 – 88 TSF2 – 89 TSF2 Check 1 TSF2 Check 2 TSF2 Check 3	None	<b>TSF4 Cell 1</b> SM04 SM05 SM06 SM07 SM09 SM10 SM11 SM12 SM13 SM14 SM15 SM16 SM17
Satellite monitoring	None	GNSS satellite monitoring (7 nos.)	None	None
Inclinometer	None	None	None	<b>TSF4 Cell 1</b> IN02

Monitoring type	TSF 1	TSF2	TSF 3	TSF4
				<b>TSF4 Cell 2</b> IN01
Decant water collection sumps	None	Seepage Sump 0 Seepage Sump 1 Seepage Sump 2 Seepage Sump 3  (Measured weekly)	None	Sump A (SS A) Sump B (SS B) Sump C (SS C) Sump D (SS D)  (Measured weekly)
Decant pond level	N/A	Recorded daily	N/A	Recorded daily
Aerial survey and photography	Not undertaken	Monthly	Not undertaken	Monthly
Production data	N/A	Recorded daily at the process plant	N/A	Recorded daily at the process plant
Rainfall	Data recorded by the Bureau of Meteorology, Western Australia			

The locations of all VWPs, monitoring bores, survey pins, GNSS survey points and inclinometers are shown in the figures included in Appendix B. The installation details of the VWPs are also provided in Appendix B.

Details of the functional and non-functional piezometers for TSF1, TSF2, TSF3 and TSF4 as of 30 September 2025 are provided in Table 2.2.

**Table 2.2** Details of piezometer function for the quarter

Monitoring equipment	Location	No. of working instruments	No. of non-working instruments	Total no.	Percentage working as of 30 September 2025
<b>TSF1</b>					
Piezometers	-	2	15	17	12%
<b>TSF2</b>					
Piezometers	Section A	6	0	6	100%
	Section B	6	1	7	86%
	Section C	5	1	6	83%
	Section D	6	1	7	86%
	Section E	5	1	6	83%
	VWPs installed in 2020	0	6	13	0%
<b>TSF3</b>					
Piezometers	-	6	0	6	100%
<b>TSF4</b>					
Piezometers	Construction VWPs	2	1	3	67%
	Cell 1	23	0	23	100%
	Cell 2	15	0	15	100%

## **3. Tailings production overview**

### **3.1 General**

Four plants produce tailings:

1. Technical Grade Plant (TGP)
2. Chemical Grade Plant 1 (CGP1)
3. Chemical Grade Plant 2 (CGP2)
4. Tailings Retreatment Plant (TRP)

### **3.2 Planned production**

The 2024 Deposition Schedule (October 2024) which was provided by Talison forecast a total deposition of 1,215,438 t of tailings solids for the quarter.

### **3.3 Actual production**

A total of 4,133,206 m<sup>3</sup> of slurry, comprising 1,240,518 tonnes of tailings solids, was produced from the four plants from 1 July 2025 to 30 September 2025. The production data is detailed in Table 3.1.

Table 3.1 Production data

Month	TGP		CGP1		CGP2		TRP		Total solids (t)	Total flow (m <sup>3</sup> )
	Flow (m <sup>3</sup> )	Solids (t)	Flow (m <sup>3</sup> )	Solids (t)	Flow (m <sup>3</sup> )	Solids (t)	Flow (m <sup>3</sup> )	Solids (t)		
2022	5,166,846	200,148	3,184,119	1,114,996	1,451,105	7,232,936	2,275,625	944,428	3,710,677	17,859,526
2023	3,089,353	113,769	1,881,952	644,008	2,694,484	788,569	2,069,488	894,976	2,441,321	10,034,911
2024	5,319,962	215,535	3,230,064	1,059,740	5,287,123	1,368,863	3,434,711	1,535,566	4,179,704	17,271,859
<b>2025 (Q1)</b>	<b>1,151,287</b>	<b>42,058</b>	<b>739,586</b>	<b>262,180</b>	<b>1,308,870</b>	<b>337,717</b>	<b>858,148</b>	<b>435,432</b>	<b>1,077,388</b>	<b>4,057,891</b>
January 2025	494,434	20,361	265,922	88,862	434,191	119,838	313,383	160,411	389,472	1,507,929
February 2025	323,972	14,574	212,903	73,016	425,182	108,670	249,188	114,257	310,517	1,211,245
March 2025	332,882	7,122	260,760	100,303	449,498	109,210	295,577	160,763	377,339	1,338,717
<b>2025 (Q2)</b>	<b>1,321,210</b>	<b>56,373</b>	<b>675,070</b>	<b>296,875</b>	<b>1,398,621</b>	<b>392,343</b>	<b>810,001</b>	<b>477,862</b>	<b>1,223,452</b>	<b>4,204,901</b>
April 2025	444,894	17,104	227,238	98,943	493,174	140,424	274,577	160,879	417,350	1,439,883
May 2025	455,925	17,777	215,936	97,341	452,006	122,576	292,943	174,963	412,658	1,416,810
June 2025	420,391	21,491	231,896	100,590	453,440	129,343	242,481	142,020	393,445	1,348,208
<b>2025 (Q3)</b>	<b>1,364,917</b>	<b>62,090</b>	<b>626,048</b>	<b>292,304</b>	<b>1,304,862</b>	<b>383,607</b>	<b>837,379</b>	<b>502,517</b>	<b>1,240,518</b>	<b>4,133,206</b>
July 2025	476,309	21,458	236,346	113,632	425,920	133,373	237,898	144,546	413,009	1,376,474
August 2025	434,815	18,792	189,381	85,007	479,467	135,881	288,833	168,820	408,500	1,392,497
September 2025	453,793	21,840	200,321	93,665	399,474	114,353	310,648	189,151	419,009	1,364,236

## 4. TSF1

### 4.1 Piezometers

A summary of the behaviour of active piezometers at TSF1 is provided in Table 4.1 and the graphical representation for the quarter is provided in Appendix D. The long-term trends over the last 12 months, and a quarterly trend are presented in the Table 4.1. Trigger levels are not defined for TSF1 as it is not operational.

The active piezometers exhibited expected behaviour patterns for the monitoring period; however, TSF1-CPT20-16 recorded an increase in pressure in July 2025. This VWP stopped returning readings after 11 July 2025. This piezometer is located close to the TSF2 decant pond which is expected to influence the readings. ***The reason why the piezometer has stopped returning readings should be investigated and addressed.***

A total of 12 piezometers did not return any frequency readings this quarter.

Recent changes to the status of the piezometers were:

- TSF1-CPT20-16's status is listed as "Disconnected" in the General Piezometer Report but returned readings at the start of the quarter until 11 July 2025.

**Table 4.1** Review comments for TSF1 VWP

Piezo ID	VWP serial no.	Location	Northing (m)	Easting (m)	Sensor RL (m)	Data received until	Quarterly review comments
TSF1- CPT20-02	2002725	Downstream berm	413911.29	6251484.20	256.20	30/09/2025	Dry at the start of the quarter and then increasing.
TSF1-CPT20-06	2002739		6250567.77	413554.33	253.85	30/09/2025	Steady trend for the quarter
TSF1-CPT20-08	2002738		6250582.07	413064.56	243.58	April 2025	Disconnected
TSF1-CPT20-16	2002723	Crest	6251412.58	413037.08	259.87	11/07/2025	Increasing trend in July. No readings returned after 11 July 2025.

**Table 4.2** Summary of non-functional piezometers for TSF1

Piezo ID	VWP serial no.	Location	Northing (m)	Easting (m)	Sensor RL (m)	Data received until
TSF1-CPT20-01	2002732	Upstream tailings	6251478.28	413820.67	264.27	September 2024
TSF1-CPT20-03	2002733		6251004.37	413843.87	265.36	October 2024
TSF1-CPT20-05	2002731		6250704.79	413543.26	263.14	April 2024
TSF1-CPT20-07	2002728		6250701.19	413060.39	258.41	September 2023
TSF1-CPT20-09	2002730		6250896.55	412775.18	256.58	March 2022
TSF1-CPT20-10	2002726		6251174.76	412781.50	254.82	August 2023
TSF1-CPT20-11	2002727		6251340.22	413033.35	258.32	April 2023
TSF1-CPT20-12	2002729	Crest	6251620.49	413292.92	261.89	No record on the server
TSF1-CPT20-14	2002720		6250903.79	412706.86	258.67	December 2023
TSF1-CPT20-15	2002718		6251176.66	412704.98	258.70	September 2022
TSF1-CPT20-17	2002736		6251638.07	413188.84	260.49	No record on the server
TSF1-CPT20-04	2002740	Downstream berm	6251019.84	413946.05	248.70	March 2023
TSF1-CPT20-13	2002734		6251032.9	414003.69	244.52	December 2021

## 5. TSF2

### 5.1 Tailings deposition

#### 5.1.1 Deposition volumes

##### 5.1.1.1 Production data

Based on the monthly production records a total of 314,833 m<sup>3</sup> of slurry, comprising 91,243 tonnes of tailings solids, was deposited into TSF2 during the quarter.

##### 5.1.1.2 Aerial survey

An aerial survey (.dxf file) was provided for July and August, refer to Appendix G. The monthly change in the TSF2 tailings volume, based on the beach volume report provided by Talison, is provided in Table 5.1. The total volume of material within TSF2, based on the monthly aerial surveys, shows a net decrease in stored material in TSF2 in both surveys.

Table 5.1 TSF2 monthly volume change

Period	Tailings increase as per survey (m <sup>3</sup> )
July 2025 (up to 8/07/2025)	-3,637*
August 2025 (up to 5/08/2025)	-12,523*

\*The negative value indicates that the volume within the TSF has decreased

#### 5.1.2 Estimation of remaining capacity

The estimated remaining capacity for TSF2 is provided in Table 5.2 and is estimated by determining the volume remaining between the surface of the TSF in September 2025 and the final beach profile. The final beach profile has the following properties:

- The maximum tailings beach level is RL 1279.7 m
- The beach slope is 0.1% for the first 150 m, 2.5% for the next 80 m and then 1.5% for the next 150 m.

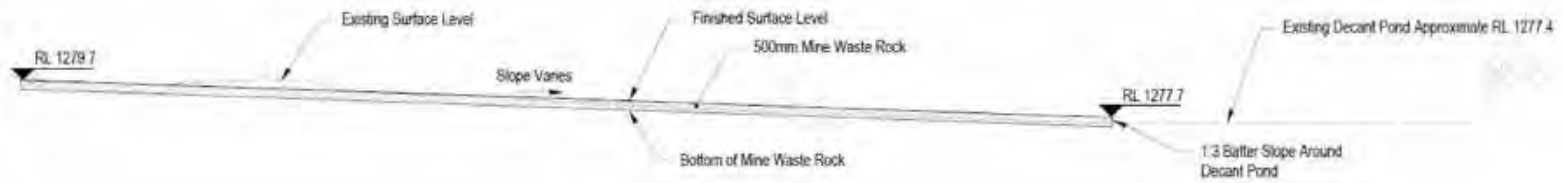
Table 5.2 TSF2 remaining capacity (calculated from .dxf files provided)

Survey date	Remaining capacity in the TSF (m <sup>3</sup> ) as per survey
08/07/2025	298,575
05/08/2025	304,163

TSF2 is planned to be re-profiled and capped with mine waste rock to manage dust generation. A design for the re-profiling has been provided to Talison and the surface has been partially reprofiled. The final re-profiled surface and a cross section are shown in Figure 5.1 and Figure 5.2.



Figure 5.1 TSF2 re-profiling final surface



**A SECTION**  
 Fig. 01 SCALE: H 1:2500 V 1:250

Figure 5.2 TSF2 Section A

## 5.2 Water balance

### 5.2.1 Decant pond levels

The recorded TSF2 decant pond levels since 1 January 2024 are shown in Figure 5.3 and the quarterly levels are shown in Figure 5.4. The decant pond is monitored daily.

Over the quarter the recorded decant pond level predominately varied between approximately RL 1276.5 m and RL 1278 m. On 2 September 2025 the water level was recorded above the maximum operating level at approximately RL 1279 m. The decant pond level returned to RL 1277.8 m the following day. The decant level was not recorded and the records state “water below gauge” occasionally in July and September 2025. This is reflected as gaps in the graph shown in Figure 5.4.

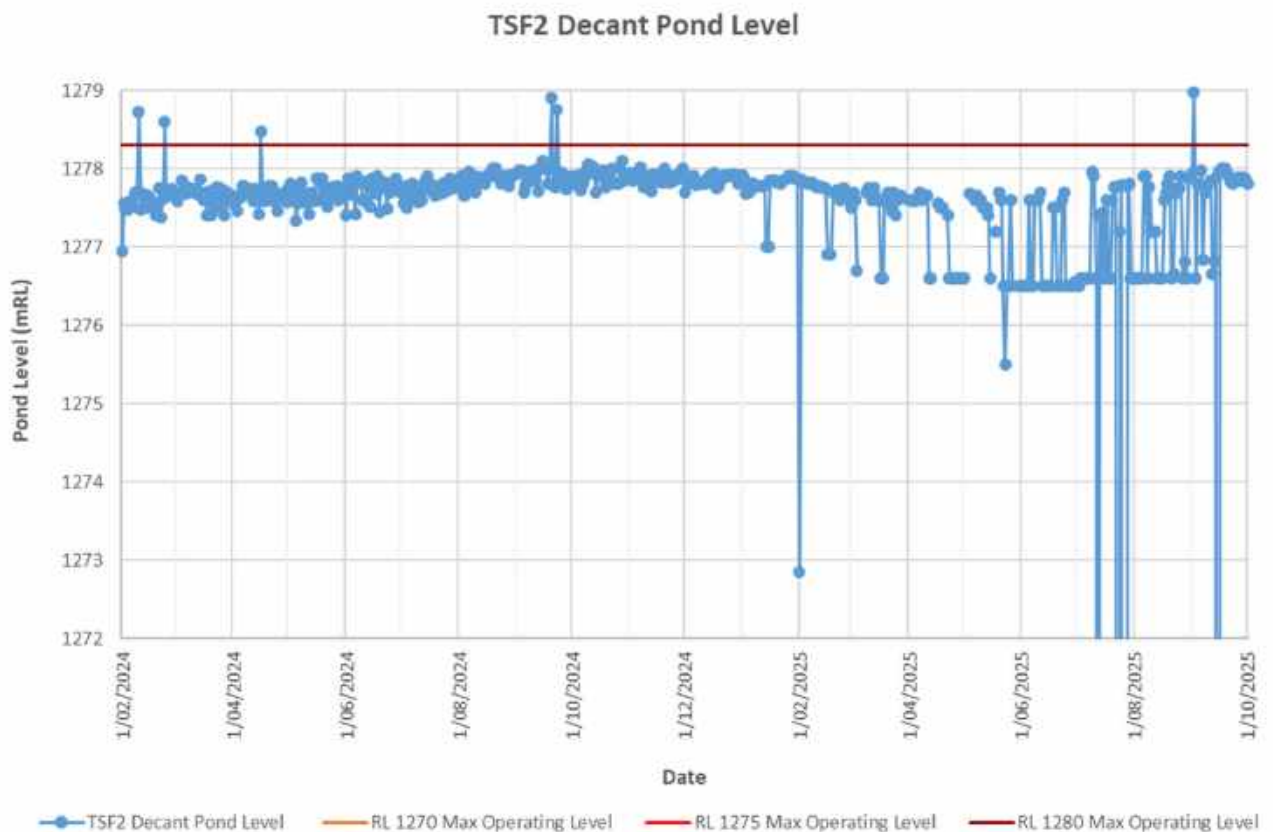


Figure 5.3 TSF2 decant pond level since 1 January 2024

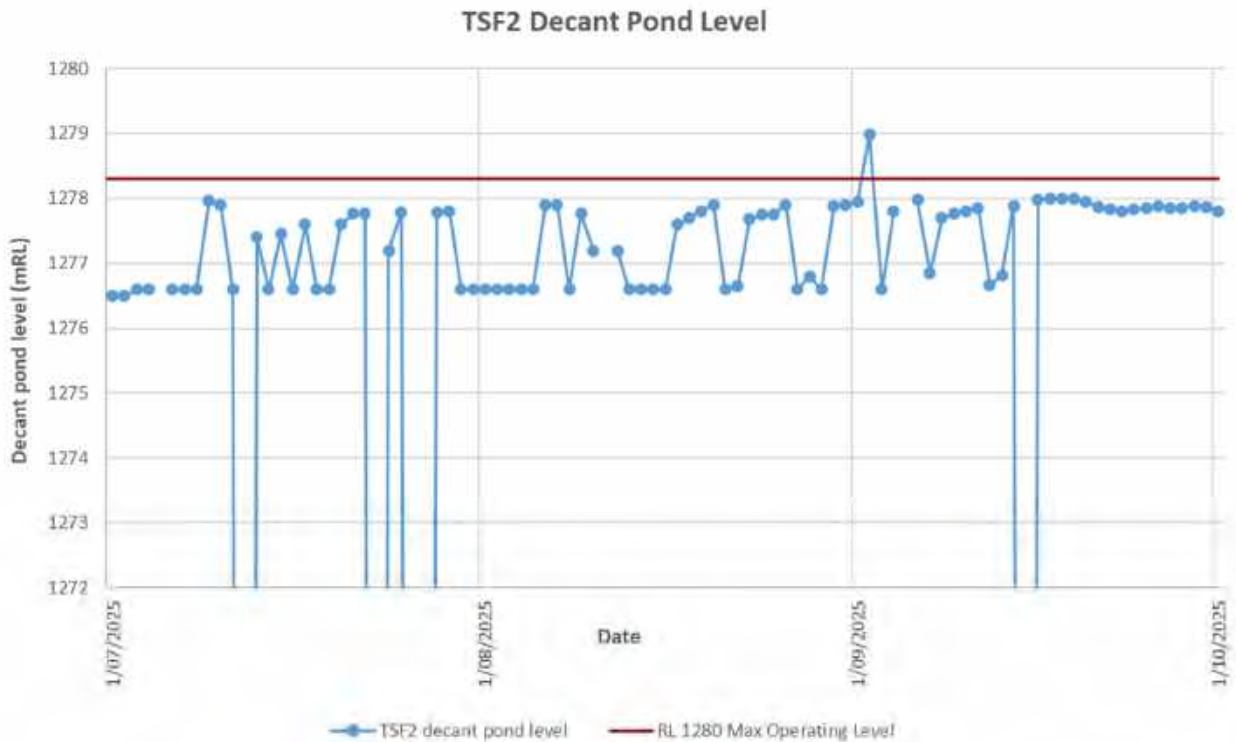


Figure 5.4 TSF2 decant pond level for the quarter (July – September 2025)

## 5.2.2 Decant return water volume

The decant return pumps transfer water from the decant pond to Clear Water Dam (CWD). Table 5.3 shows the recorded volume of decant water pumped from the TSF2 decant pond to CWD for the quarter.

Deposition during these months was ongoing, and there also were several rain events during this time. **The decant pump should be operated continuously in order to minimise the volume of water stored on the TSF.**

Table 5.3 Decant return value for TSF2

Summation	TSF2 Decant to CWD Electric Pump 95 (m <sup>3</sup> )	TSF2 Decant to CWD Electric Pump 96 (m <sup>3</sup> )
July	5,186	43,158
August	35,734	48,384
September	56,156	0
<b>Total</b>	<b>97,076</b>	<b>91,542</b>

## 5.2.3 Seepage/collection sump flows

There are four collection sumps (Seepage Sump 0 (SS0), Seepage Sump 1 (SS1), Seepage Sump 2 (SS2), Seepage Sump 3 (SS3)) that collect seepage from TSF2. The locations of the seepage sumps are shown in Figure 5.5. The seepage sumps collect seepage from the underdrainage system and transfer the collected seepage as follows:

- SS0 pumps directly to CWD
- SS1 pumps directly to CWD, and if the water level rises above the high level, SS1 overflows into SS2
- SS2 typically pumps to CWD, but when needed, it can also pump to SS3.
- SS3 pumps to CWD and Tin Shed Dam

The flows in collection sumps are recorded weekly, and the measured flows for each sump are plotted in Figure 5.6. The monthly pumped volumes are shown in Table 5.4.

As shown on Figure 5.6 the recorded volumes of pumped seepage have historically been high, with a median volume of approximately 60,000 m<sup>3</sup> per week over the last 18 months. **The TSF2 seepage system should be reviewed, and an inspection of the component flowmeters, pumps and pipework should be undertaken to confirm that the recorded seepage flows are an accurate representation of the magnitude of the seepage being collected from the TSF.**

Table 5.4 TSF2 sump flows

Month	Volume (m <sup>3</sup> )
July	279,280
August	266,472
September	223,228
<b>Total</b>	<b>769,680</b>

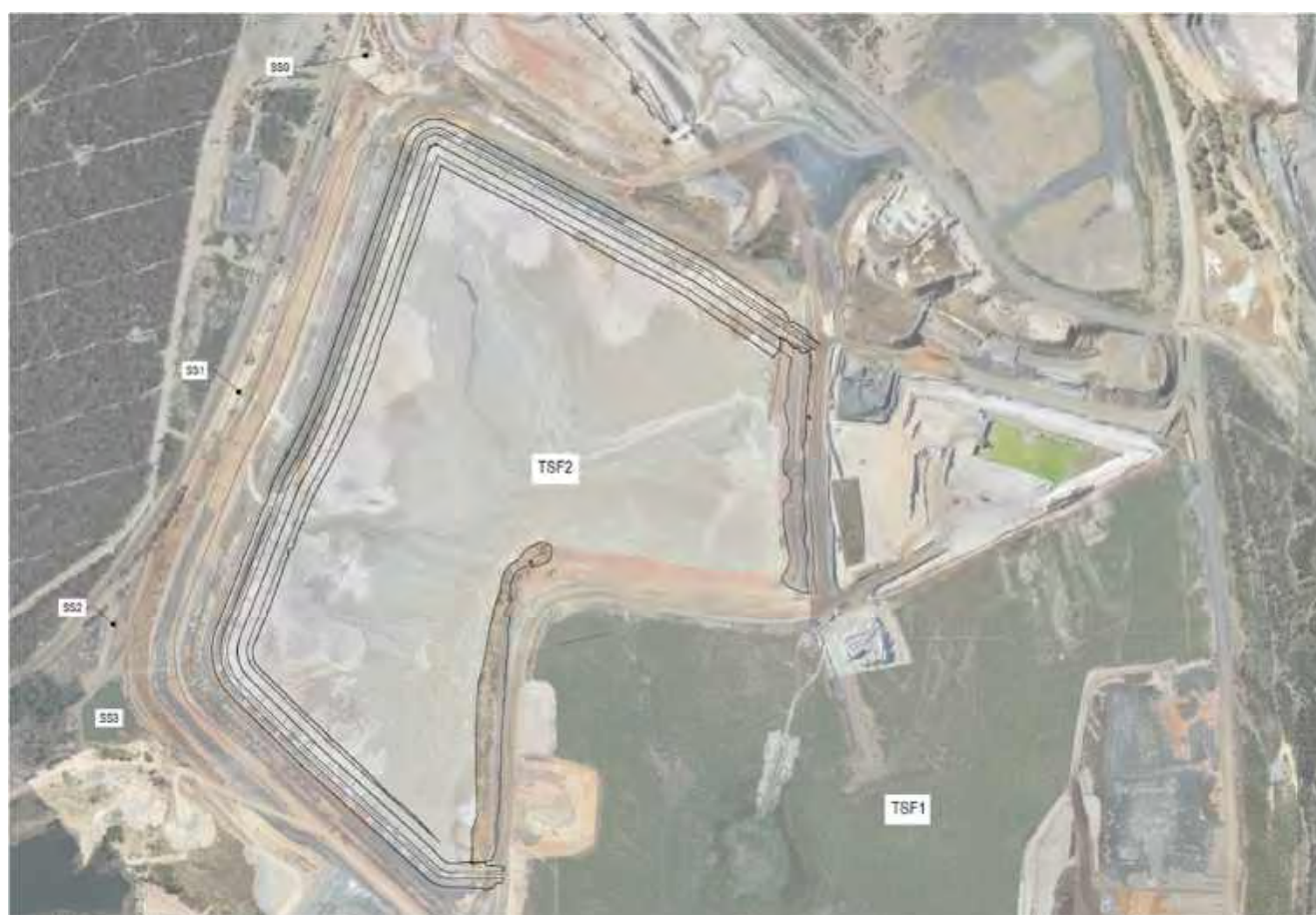


Figure 5.5 TFS2 Sump locations

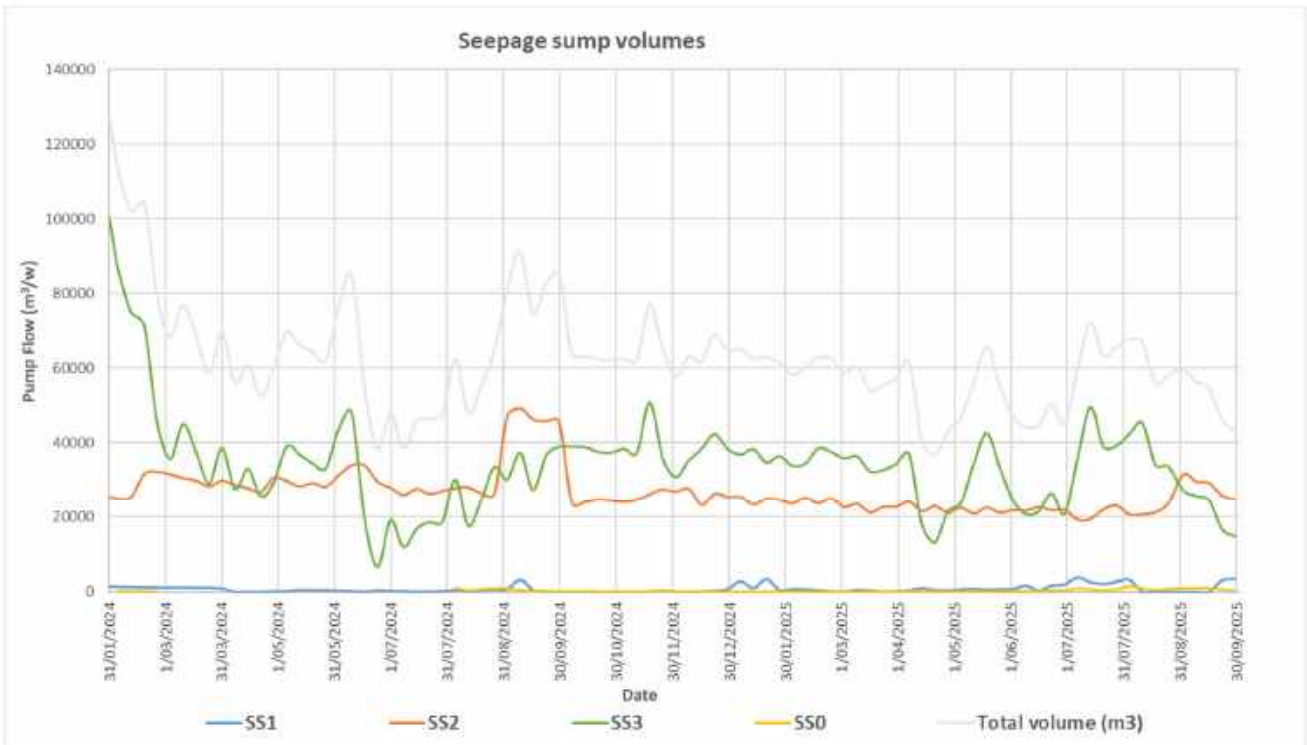


Figure 5.6 Volume of water pumped out of the seepage sumps

### 5.2.4 Rainfall

The rainfall data was obtained from the Bureau of Meteorology station in Bridgetown<sup>1</sup>, Western Australia. The recorded rainfalls are provided in Table 5.5.

The catchment area for TSF2 is 660,782 m<sup>2</sup>. The calculated total inflow into TSF2 due to rainfall was 321,008 m<sup>3</sup> for the quarter.

Table 5.5 Rainfall details

Month	Maximum rainfall received in a day (mm)	Total rainfall (mm)
July 2025	62.8	224.2
August 2025	23.8	165.8
September 2025	22.6	95.8
<b>Total</b>		<b>485.8</b>

### 5.2.5 Evaporation

The monthly recorded evaporation was obtained from the Department of Primary Industries and Regional Development’s Balingup Station (BP001)<sup>2</sup>. The recorded pan evaporation at the Balingup station is shown in Table 5.6. A pan coefficient of 0.7 was adopted to adjust the recorded pan evaporation to estimate evaporation from the TSF2 decant pond.

The calculated outflow due to evaporation for the quarter is shown in Table 5.7.

<sup>1</sup> Station 009617, <http://www.bom.gov.au/climate/dwo/IDCJDW6013.latest.shtml>

<sup>2</sup> <https://weather.agric.wa.gov.au/station/BP001>

Table 5.6 Recorded pan evaporation at Balingup<sup>2</sup>

Month	Pan Evaporation (mm)
July 2025	35
August 2025	64.4
September 2025	95.9

Table 5.7 Evaporation outflow for TSF2 (m<sup>3</sup>)

Month	Pond area (m <sup>2</sup> )	Evaporation (m <sup>3</sup> )	Remarks
July 2025	79,672	1,952	Pond area estimated from aerial image.
August 2025	73,150	3,298	Pond area estimated from aerial image.
September 2025	70,000	4,699	Pond assumed to be similar to July and August 2025
<b>Total</b>		<b>9,949</b>	

## 5.2.6 Interstitial water loss estimate

The following assumptions were applied to estimate the interstitial water loss:

- The in-situ density of the tailings is 1.4 t/m<sup>3</sup>
- The tailings are fully saturated
- The tailings SG is 2.67

Table 5.8 presents the estimated interstitial water retained in the tailings for the quarter.

Table 5.8 TSF2 interstitial water

Month	Interstitial water estimate (m <sup>3</sup> )
July 2025	17,364
August 2025	13,636
September 2025	-
<b>Total</b>	<b>31,000</b>

## 5.2.7 Water balance summary

The overall water balance for the quarter is presented in Table 5.9.

The difference between the inflows and outflows for the quarter was estimated to be -397,579 m<sup>3</sup>. As discussed in section 5.2.3 there is a significant volume of water which is recorded as being pumped from the seepage sumps, the seepage arrangement should be reviewed to determine whether this is representative.

The impact of varying decant pond volume is not included in the assessment and seepage through the floor of the TSF has not been quantified. However, the seepage collection system is expected to convey the majority of the seepage and seepage through the floor is expected to have only a minor impact on the overall water balance.

Table 5.9 Overall water balance for TSF2

Item	Values (m <sup>3</sup> )
<b>Inflow</b>	
Deposition (water)	280,661
Rain inflow	321,008

Item	Values (m <sup>3</sup> )
<b>Total inflow</b>	<b>601,668</b>
<b>Outflow</b>	
Evaporation	9,949
Collected seepage in sumps	769,680
Decant return	188,618
Interstitial loss	31,000
<b>Total outflow</b>	<b>999,247</b>
<b>Balance</b>	<b>-397,579</b>

## 5.3 Piezometers

### 5.3.1 General

VWPs at TSF2 have been installed in 5 different sections (Sections A to E). The locations of the VWPs are shown in Figure 5.7. The locations of the VWPs in cross section are shown in Appendix B. A total of 32 piezometers are currently installed in these five sections. A number of piezometers are not returning readings (Table 5.15). **VWPs not returning readings should be repaired or replaced.**

The provided General Piezometer Report shows data from the previous three months. Sections 5.3.2 to 5.3.6 describe the piezometers in Sections A to E respectively.

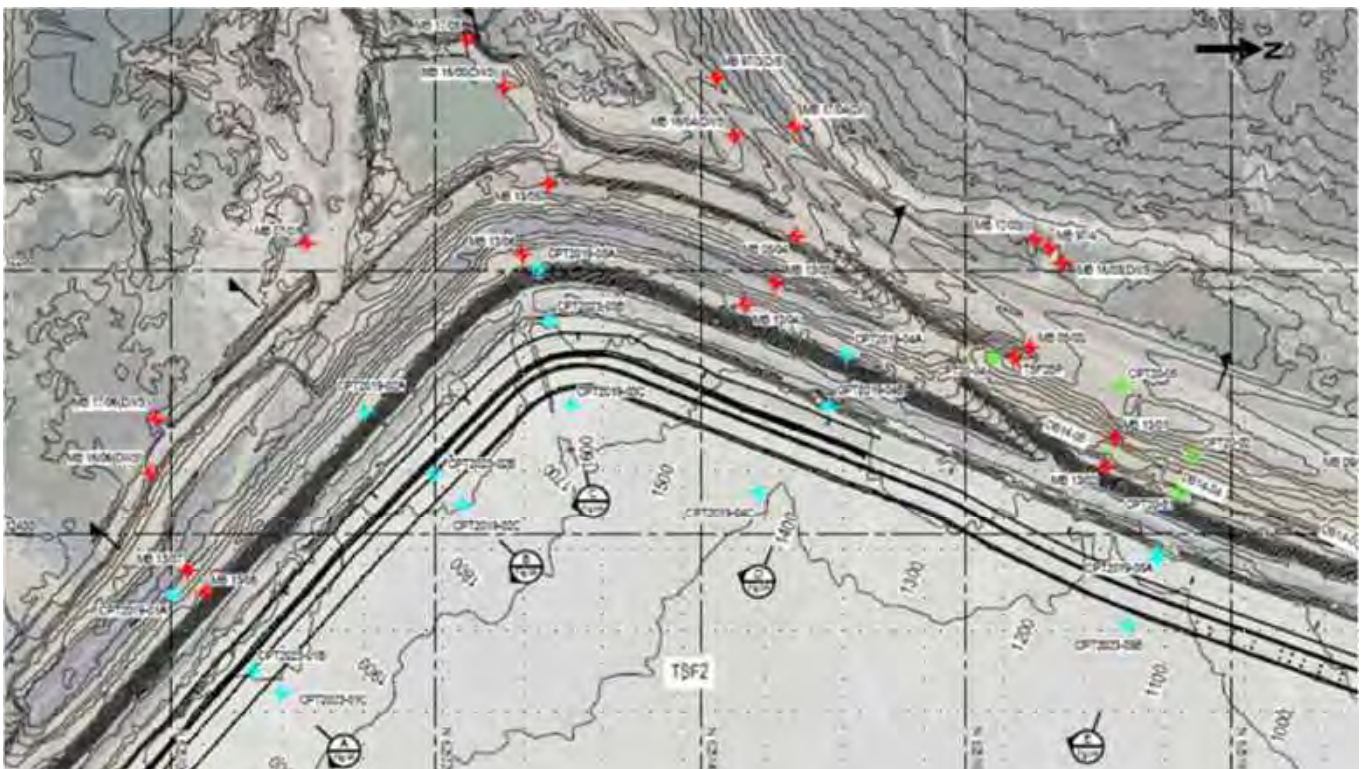


Figure 5.7 TSF2 VWP section locations

### 5.3.2 Section A

Six VWPs are installed in TSF2 Section A. All the VWPs were active, and the recorded readings were below the trigger level.

A summary of the behaviour of the active VWPs for the quarter is provided in Table 5.10. The VWP quarterly reports, including plots of the VWP readings, are included in Appendix D.

### 5.3.3 Section B

Seven VWPs are installed in section B in TSF2 of which six are returning readings. Five of the VWP recorded readings were below the trigger levels. VWP CPT2023 -02B Intermediate returned readings above the trigger level. ***The cause of the elevated pressure recorded by VWP CPT2023 -02B Intermediate should be reviewed.***

A summary of the behaviour of the active VWPs for the quarter is provided in Table 5.11. The VWP quarterly reports, including plots of the VWP readings, are included in Appendix D.

### 5.3.4 Section C

There are six VWPs installed in Section C.

VWP CPT2019 – 03C deep showed an increase during Q2 of 2025 and the pressure has remained at this level over Q3 2025. Inspection of the aerial imagery indicated reprofiling work in the area of this VWP which may have caused the increase in recorded pressure. ***This piezometer should be monitored closely to see whether the readings continue to increase, stabilise or reduce.***

A summary of the behaviour of the active VWPs for the quarter is provided in Table 5.12. The VWP quarterly reports, including plots of the VWP readings, are included in Appendix D.

### 5.3.5 Section D

There are seven VWPs installed in Section D and five of these returned readings for the quarter. VWP CPT2019 - 04C deep was damaged and stopped returning readings from September 2023. VWP CPT2019 – 04B Shallow was reported as disconnected in Talison’s provided report but returned readings during the quarter.

The provided General Piezometer Report lists CPT2019-04B Shallow and CPT2019-04B Deep with the same Piezometer name “CPT2019-04B”. ***For clarity these piezometers should be renamed.***

VWPs CPT2023 04A deep and shallow are recording readings above the trigger levels. ***These VWPs are planned to be replaced.***

VWP CPT2023 04B was previously not functional and was repaired in February 2025. No trigger level was developed for this VWP when the TSF2 trigger levels were developed in June 2024. ***A trigger level should be developed for this VWP.***

A summary of the behaviour of the active VWPs for the quarter is provided in Table 5.13. The VWP quarterly reports, including plots of the VWP readings, are included in Appendix D.

### 5.3.6 Section E

There are six VWPs installed in section E. Four of these VWPs were installed in 2023. Two of the VWPs (CPT2019-05A Shallow and Deep), installed in 2019, stopped returning readings in September 2023 and have not been repaired yet (Refer Table 5.15).

The behaviour of these piezometers is provided in Table 5.14. The VWP quarterly reports, including plots of the VWP readings, are included in Appendix D.

All the VWPs recorded readings below the trigger level for the quarter.

### 5.3.7 VWPs installed in 2020

Records show that six VWPs were installed in 2020. The six VWPs are currently not returning readings. Refer Table 5.15 for details. ***The 2020 piezometers are planned to be repaired.***

Table 5.10 Review comments for TSF2 VWP (Section A)

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
CPT2023-01A Shallow	80392	-	-	-	245.56	253.0	30/09/2025	Steady trend for the quarter
CPT2023-01A Deep	80394	-	-	-	233.56	250.0	30/09/2025	Steady trend for the quarter
CPT2023-01B Shallow	80407	Upstream toe	6251062	412501	248.66	260.0	30/09/2025	Decreasing trend for the quarter
CPT2023-01B Deep	80411				235.66	258.0	30/09/2025	Decreasing trend for the quarter
CPT2023-01C Shallow	80412	Crest	6251083	412519	253.8	263.0	30/09/2025	Dry - steady trend at sensor RL for the quarter
CPT2023-01C Deep	80406				240.7	260.0	30/09/2025	Decreasing trend for the quarter

Table 5.11 Review comments for TSF2 VWP (Section B)

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
CPT2019-02A Deep	1901842	Downstream berm	6251147	412307	233.69	247.5	30/09/2025	Steady trend for the quarter
CPT2023-02B Shallow	78704	Upstream toe	6251198	412354	241.83	254.5	30/09/2025	Steady trend for the quarter
CPT2023-02B Intermediate	78687				236.83	253.0	30/09/2025	Above trigger level, steady trend for the quarter.
CPT2023-02B Deep	78688				234.33	252.5	30/09/2025	Steady trend for the quarter
CPT2019-02C Deep	1901849				239.99	256.0	30/09/2025	Increasing trend for the quarter.

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
CPT2019-02C Shallow	1901832	Upstream tailings	6251220	412377	249.99	258.5	30/09/2025	Decreasing trend for the quarter

Table 5.12 Review comments for TSF2 VWPs (Section C)

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
CPT2019-03A Deep	1901825	Downstream Berm	6251277	412199	235.97	247.4	17/09/2025	Increasing trend for the quarter
CPT2019-03A Shallow	1901559				243.97	249.0	17/09/2025	Steady trend for the quarter
CPT2019-03C Shallow	1901838	Upstream tailings	6251302	412302	249.94	259.5	17/09/2025	Dry - Steady readings at sensor level
CPT2019-03C Intermediate	1901839				237.94	256.0	17/09/2025	Increasing trend for the quarter
CPT2019-03C Deep	1901848				231.94	254.5	17/09/2025	Steady trend for the quarter

Table 5.13 Review comments for TSF2 VWPs (Section D)

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
CPT2023-04A Shallow	80389	Downstream berm	6251513	412253	242.74	250.0	30/09/2025	Above the trigger level. Increasing trend for the quarter.
CPT2023-04A Deep	80544				235.24	248.4	30/09/2025	Above the trigger level. Increasing trend for the quarter.

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
CPT2023-04B	80542	Crest	6251497	412303	243.87	-	30/09/2025	Steady trend for the quarter
CPT2019-04B Shallow	62521				234.87	252.0	30/09/2025	Steady trend for the quarter
CPT2019-04B Deep	62522				231.87	251.0	30/09/2025	Steady trend for the quarter
CPT2019-04C Shallow	1901845	Upstream tailings	6251443	412368	251.29	259.5	30/09/2025	Decreasing trend for the quarter

Table 5.14 Review comments for TSF2 VWPs (Section E)

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
CPT2019-05A	1901844	Crest	6251744	412414	232.86	253.0	30/09/2025	Steady trend for the quarter
CPT2023-05A Intermediate	78693	Crest	6251743	412419	238.63	252.0	30/09/2025	Increasing trend for the quarter
CPT2023-05B Shallow	80417	Upstream tailings	6251722	412468	254.5	257.0	30/09/2025	Steady trend for the quarter
CPT2023-05B Intermediate	80418				239.0	253.5	30/09/2025	Increasing trend for the quarter
CPT2023-05B Deep	80405				232.5	252.5	30/09/2025	Increasing trend for the quarter

Table 5.15 TSF2 VWPs not returning readings

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Data received until
<b>Section B</b>						
CPT2019-2A Shallow	1901561	Downstream berm	6251147	412307	243.69	March 2025
<b>Section C</b>						
CPT2023-03B	80541	Crest	6251285	412238	244.40	-
<b>Section D</b>						
CPT2019-04C Deep	1901850	Upstream tailings	6251443	412368	238.79	September 2023

Piezo ID	VWP Serial no.	Location	Northing	Easting	Sensor RL (m)	Data received until
<b>Section E</b>						
CPT2019-05A Shallow	1901858	Crest	6251744	412414	243.86	September 2023
CPT2019-05A Intermediate	1901846				235.86	September 2023
<b>2020 VWPs</b>						
TSF2-CPT20-01	2002735	Downstream berm	6,251,761.00	412,368.02	212.45	No data
TSF2-CPT20-02	2002724	Downstream berm	6,251,771.30	412,339.56	219.39	November 2022
TSF2-CPT20-04	2002719	Downstream berm	6,251,619.99	412,266.69	227.67	April 2024
TSF2-CPT20-05	2002737	Downstream berm	6,251,716.02	412,287.47	238.06	September 2021
TSF2-CPT20-07	2002722	Downstream berm	6,251,957.70	412,384.01	222.29	November 2023
TSF2-CPT20-13	2002721	Downstream berm	6,252,025.70	412,409.56	222.12	September 2023

## 5.4 Deformation monitoring

### 5.4.1 Survey pins

There are 16 survey points at TSF2 (TSF277 – TSF289, TSF2-Check1, TSF2-Check2 and TSF2-Check3) which are surveyed monthly.

The movement of the survey points is recorded in the east-west direction, north-south direction and elevation. The movement of the pins is assessed relative to the base survey.

A base survey was carried out on 5 June 2024 after the survey pins were installed however in October 2024 the site coordinate system was moved to MGA 2020. **Historical readings between June 2024 and October 2024 should be transformed to MGA 2020 so long term trends can be identified and assessed.**

The relative movement of survey pins between October 2024 and September 2025 is presented in Table 5.16. Plots of the relative movement from October 2024 to 15 September 2025 are provided in Figure 5.8, Figure 5.9 and Figure 5.10. No readings were received for TSF2 – 80, TSF2 – 81, TSF2 Check 1 and TSF2 Check 2 for the quarter.

The positive movement in east-west direction indicates movement towards the east side, and for the north-south direction, a positive movement indicates movement towards the north direction. The positive RL value indicates a rise in the pin level and a negative value indicates subsidence at that point in the embankment.

The embankment crest has experienced overall settlement of up to approximately 80 mm, corresponding to 0.3% of the 30 m embankment height. This is within the typically expected range for rockfill embankments (Hunter and Fell, 2003).

Table 5.16 Summary of movement of survey pins (mm) (October 2024 to 17 September 2025)

Survey Pin ID	East-west direction	North-south direction	RL
TSF2-77	2 <sup>1</sup>	-3 <sup>1</sup>	-1
TSF2-78	-8 <sup>2</sup>	-17 <sup>2</sup>	4 <sup>2</sup>
TSF2-79	-12	-17 <sup>2</sup>	3 <sup>2</sup>
TSF2-80	No data received	No data received	No data received
TSF2-81	No data received	No data received	No data received
TSF2-82	-2	-32	-11
TSF2-83	13	-17	-48
TSF2-84	6	-11	-31
TSF2-85	-6	-12	16
TSF2-86	6	10	-10
TSF2-87	3	3	-27
TSF2-88	25	4	-20
TSF2-89	2	-12	9
TSF2-check1	No data received	No data received	No data received
TSF2-check2	No data received	No data received	No data received
TSF2-check3	5	-2	-8

<sup>1</sup> These movements are based on relative movement between October 2024 and August 2025 as the September 2025 readings recorded movements in excess of 400 m. This is expected to be due to a data entry error.

<sup>2</sup> These movements are based on relative movement between January 2025 and September 2025 as no data was provided for these pins between October 2024 and December 2024.

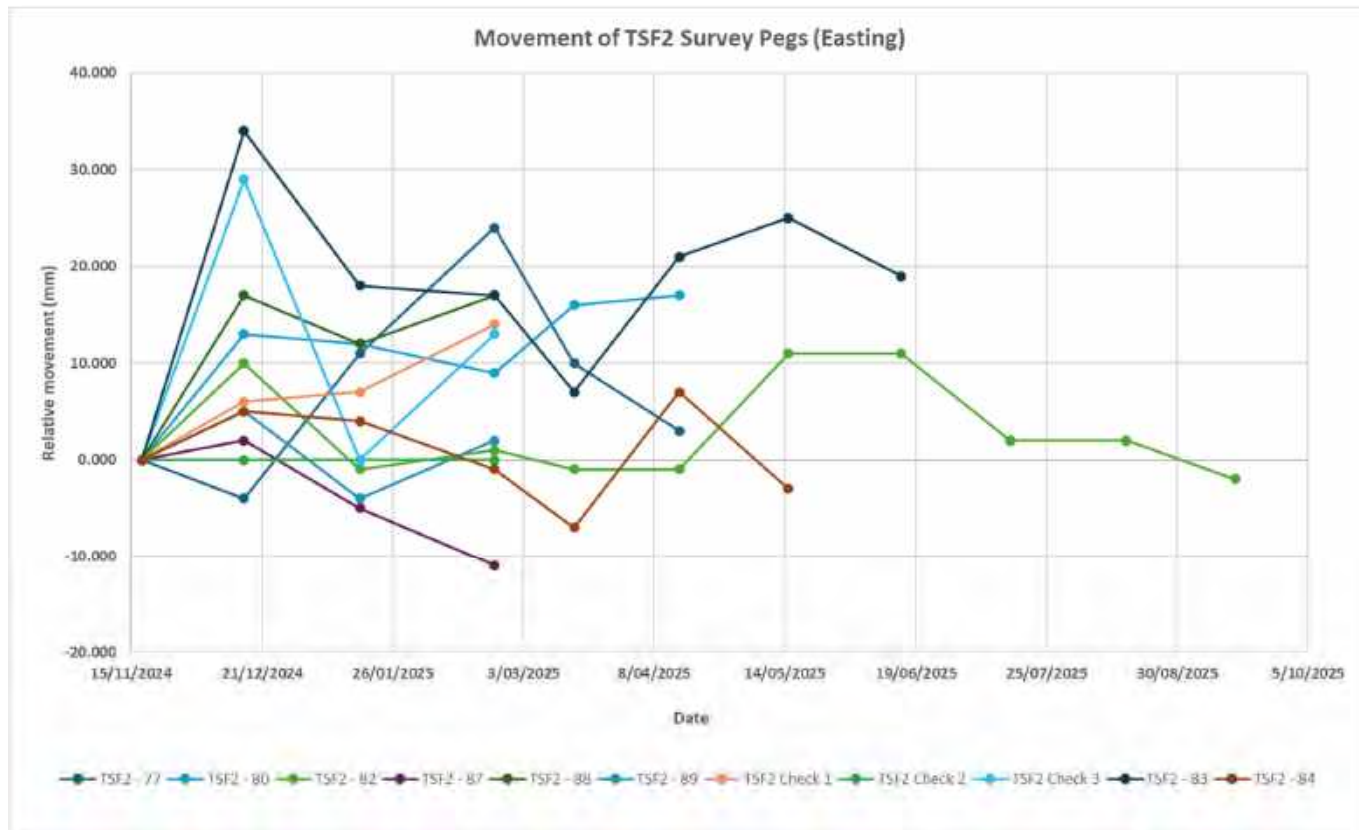


Figure 5.8 Movement of TSF2 survey pins in east – west direction

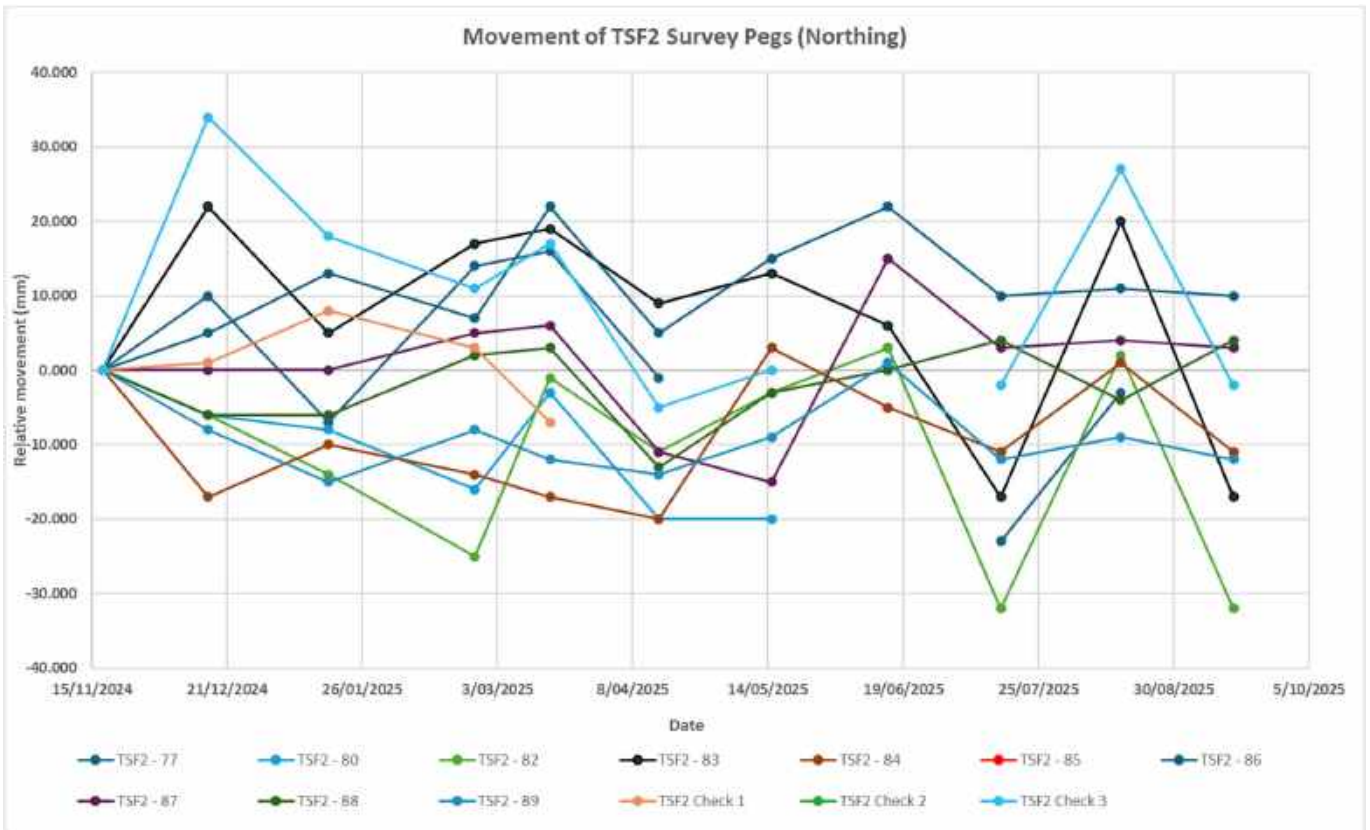


Figure 5.9 Movement of TSF2 survey pins in north - south direction

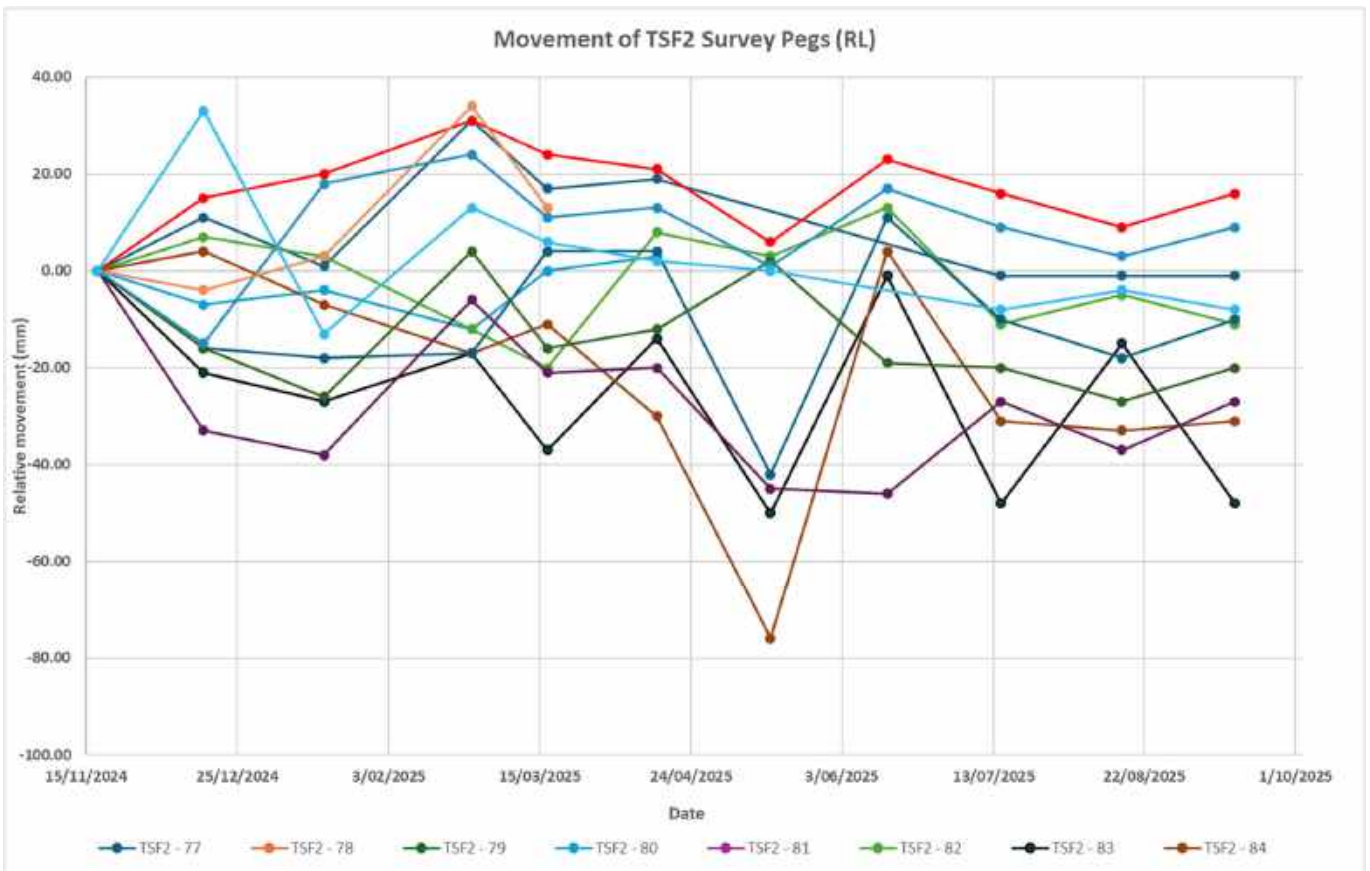


Figure 5.10 Movement of TSF2 survey pins in RL

## 5.4.2 GNSS deformation monitoring

Readings from seven GNSS units were provided for review. The GNSS units are:

- GNSS-Maranup-01 (base unit)
- GNSS-TSF2-02
- GNSS-TSF2-03
- GNSS-TSF2-04
- GNSS-TSF2-05
- GNSS-TSF2-06
- GNSS-TSF2-07

The recorded movement is presented in the Tailings Storage Facility GNSS Monitoring Report included in Appendix E. The provided GNSS Monitoring Reports included data from the previous six months.

The GNSS data shows no significant displacement however it is difficult to assess any trends in data due to the scale of the graphs. ***The GNSS graphs Y axis scale is recommended to be changed to improve readability. The extents should be +/- 0.5 m.***

# 6. TSF3

## 6.1 Piezometers

Six piezometers are installed in TSF3.

All the piezometers in TSF3 are operational and recording readings below the sensor level. A summary of the behaviour of the VWP's for the quarter is presented in Table 6.1.

The majority of the piezometers showed an increase over the quarter. This is anticipated to be due to the presence of the PCH Contractors office, workshop and laydown yard which has recently been established on the TSF. ***The VWP readings should be closely monitored to confirm the dissipation of the temporarily increased pore pressure.***

**Table 6.1**      *Review comments for TSF3 VWP*s

<b>Piezo ID</b>	<b>Serial no.</b>	<b>Northing</b>	<b>Easting</b>	<b>Sensor RL (m)</b>	<b>Data received until</b>	<b>Review Comments (September 2025)</b>
TSF3-VWP2023 -1A Shallow	80537	411836.039	411836.039	252.75	30/09/2025	Dry (below the sensor level)
TSF3-VWP2023 -1A Deep	80543			248.75	30/09/2025	Initially dry (below the sensor level) then increasing by the end of the quarter
TSF3-VWP2023 -2A Shallow	80364	411884.016	6250732.54	247.84	30/09/2025	Increasing trend for the quarter.
TSF3-VWP2023 -2A Deep	80545			243.84	30/09/2025	Initially dry (below the sensor level) then increasing by the end of the quarter
TSF3-VWP2023 -3A Shallow	80395	411920.217	6250729.342	250.84	30/09/2025	Initially dry (below the sensor level) then increasing by the end of the quarter
TSF3-VWP2023 -3A Deep	80209			246.84	30/09/2025	Initially dry (below the sensor level) then increasing by the end of the quarter

# 7. TSF4

## 7.1 Tailings deposition

### 7.1.1 Deposition volumes

#### 7.1.1.1 Production data

Based on the monthly production records a total of 3,818,372 m<sup>3</sup> of slurry, comprising 1,149,275 tonnes of tailings solids, was deposited into TSF4 during the quarter.

#### 7.1.1.2 Aerial survey

Tailings were first deposited into TSF4 Cell 1 on 19 January 2024.

The volume of tailings deposited into TSF4 over this quarter is shown in Table 7.1. The volume of tailings was calculated (by others) from the monthly aerial surveys, as shown in Appendix G.

The volume of tailings deposited into Cell 2 was not provided. This was noted to be due to the large extent of water on the surface of Cell 2.

The volume of tailings deposited into Cell 1, as estimated by the aerial survey, totals approximately 887,000 m<sup>3</sup> for July and August. A negative deposition volume was recorded in September. Comparing the July and August survey results to the input tonnages recorded for the facility in July and August (approximately 730 t) results in a very low in-situ density for these months within the TSF, which is not anticipated to be accurate.

GHD generated a high level volume estimate based on comparison of the survey of TSF4 on 26 June 2025 and 22 September 2025. The approximate difference in tailings volume between these two surveys was 769,100m<sup>3</sup>. The corresponding tonnage of solids deposited into TSF4 in this period was 1,096,978 t. This equates to a density of approximately 1.4 t/m<sup>3</sup> which aligns with expectations for the facility.

Table 7.1 TSF4 deposition volumes

Period	Tailings deposited into Cell 1 as per survey (m <sup>3</sup> )	Cumulative tailings deposited in Cell 1 (m <sup>3</sup> )	Tailings deposited into Cell 2 as per survey (m <sup>3</sup> )	Cumulative tailings deposited in Cell 2 (m <sup>3</sup> )
<b>2024</b>		<b>2,875,611</b>		<b>0</b>
<b>2025 Q1</b>	<b>940,001</b>	<b>3,815,612</b>		<b>0</b>
<b>2025 Q2</b>	<b>667,013</b>	<b>4,492,624</b>	<b>886,616</b>	<b>886,616</b>
<b>2025 Q3</b>				
July 2025 (up to 21/07/2025)	428,134	4,920,758	Not provided	Not provided
August 2025 (up to 21/08/25)	458,770	5,379,528	Not provided	Not provided
September 2025 (up to 22/09/25)	-160,029	5,219,499	Not provided	Not provided

### 7.1.2 Estimation of remaining capacity

Construction of the embankment raise to RL 1270 m was completed in Q3 2025 and tailings can be deposited up to RL 1267.9 m. The estimated capacity is typically calculated by subtracting the deposited volume, based on the aerial survey data provided by Talison, from the total design capacity of the TSF (GHD, 2025). This calculation has

not been undertaken for this quarter as the volume of tailings deposited in Cell 2 was not calculated from the aerial survey information, and the volumes quoted for Cell 1 do not align with the production records, refer to Section 7.1.1.2.

### 7.1.3 In-situ tailings density

The reconciled, average tailings in-situ density is typically estimated using survey and production data provided by Talison. This calculation was not undertaken for this quarter, refer to Section 7.1.1.2 for further discussion.

## 7.2 Water balance

### 7.2.1 Decant pond levels

The recorded daily decant pond levels at TSF4 Cell 1 are shown in Figure 7.2 and Figure 7.3. The Cell 1 decant level remained below the maximum operating level at all times, however the Cell 2 decant level exceeded the maximum operating level on 21 September 2025 and remained above this level. ***The decant pond should be continuously pumped out of the facility to maintain the decant level below the maximum operating level at all times.***

Inspection of the aerial imagery showed a large decant pond was present during the quarter as shown in Figure 7.1. The decant pond was located within 200 m of the embankment which is not in accordance with the operating procedures outlined in the OMM. ***The decant pond should be maintained at least 200 m from the perimeter embankments.***

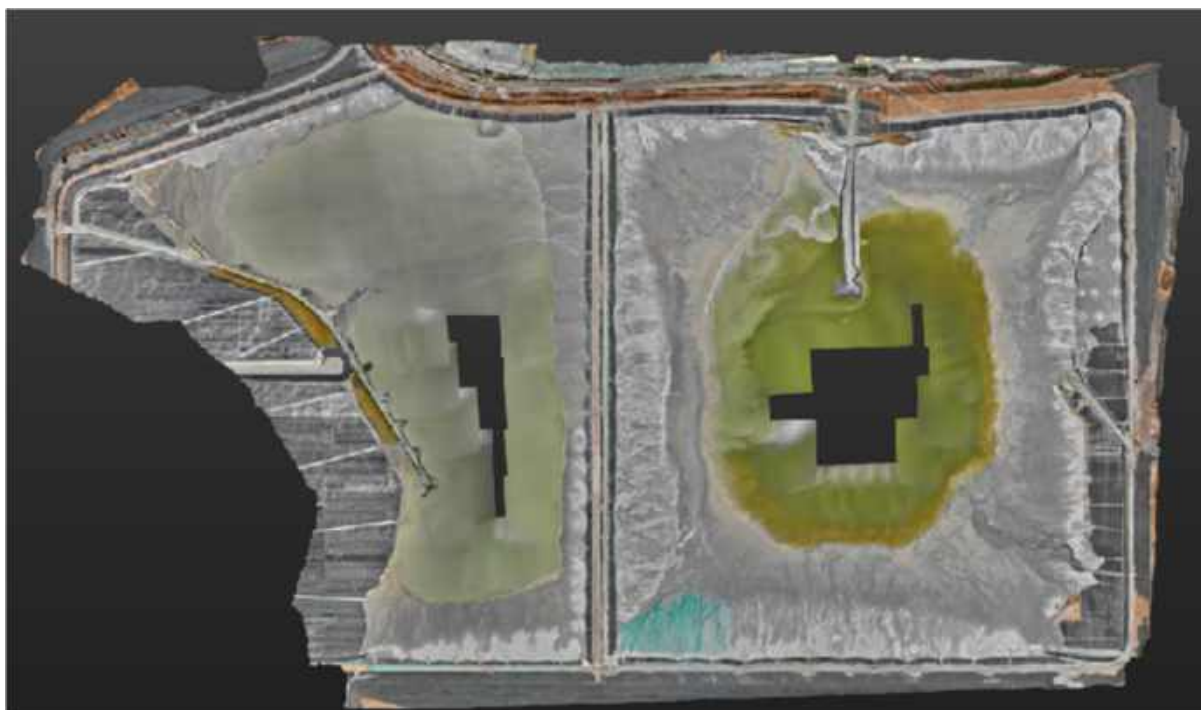


Figure 7.1 TSF4 aerial imagery – 22 September 2025

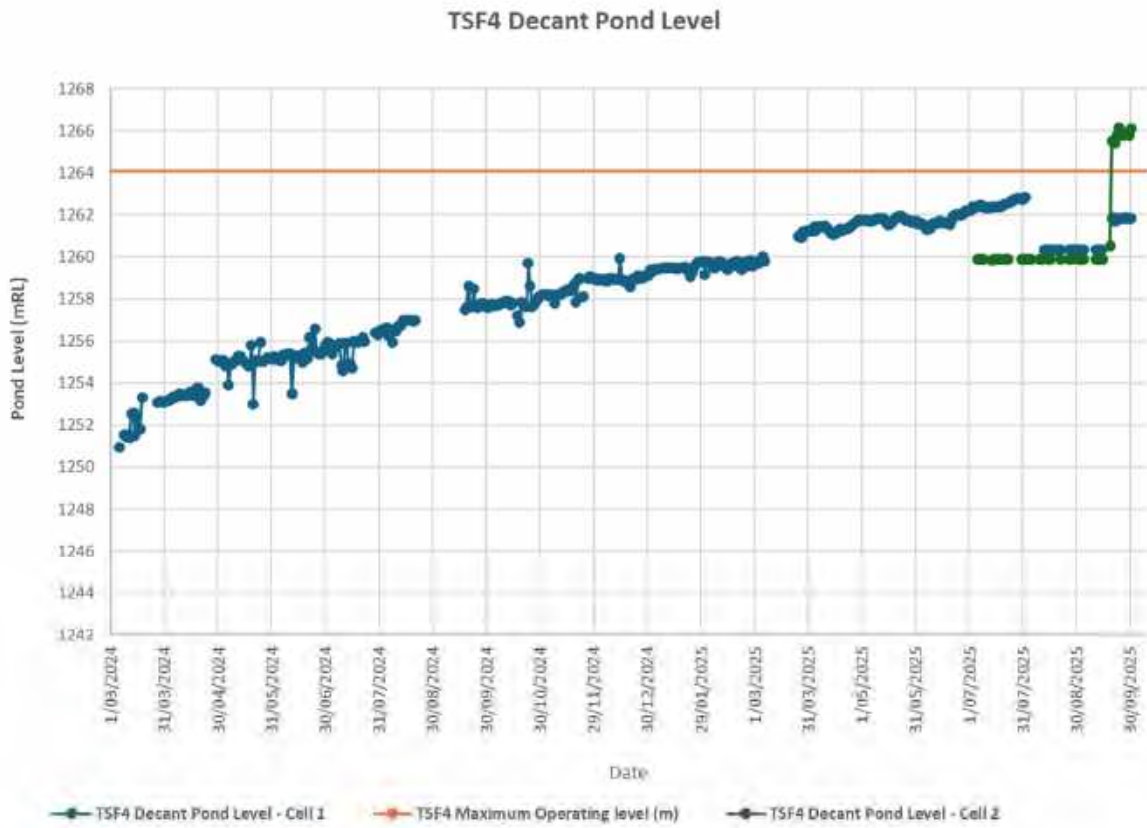


Figure 7.2 Decant Pond level for TSF4 Cell 1 & Cell 2 since 1 January 2024

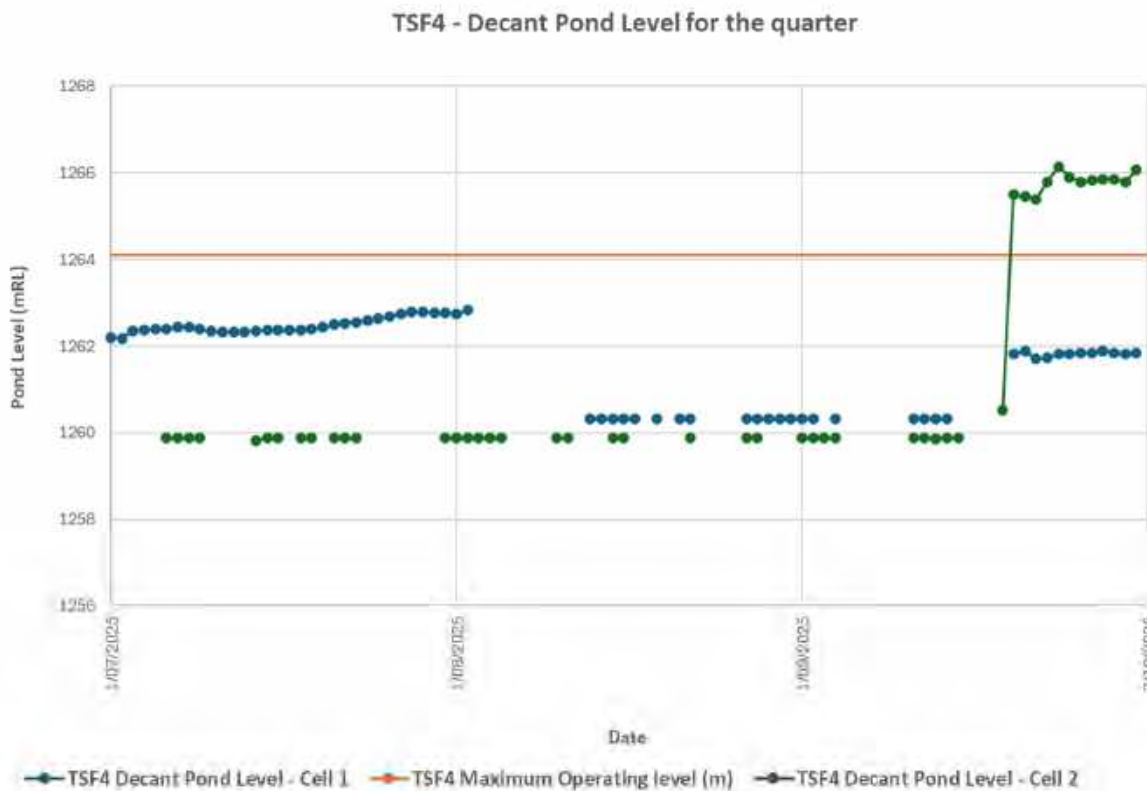


Figure 7.3 Decant Pond level for TSF4 Cell 1 & Cell 2 (July – September 2025)

## 7.2.2 Decant return water volume

The volume of decant water pumped from the TSF4 decant ponds to CWD is shown in Table 7.2.

Table 7.2 Decant water return volume (m<sup>3</sup>)

Period	TSF4 Decant to CWD (Pump PP62)	TSF4 Decant to CWD (Pump PP132)	TSF4 Decant to CWD (Pump PP32)	Monthly Total
July 2025	627,874	162,323	547,170	1,337,367
August 2025	408,288	427,995	327,241	1,163,524
September 2025	410,742	446,895	52,673	910,310
<b>Quarter total</b>				<b>3,411,201</b>

## 7.2.3 Seepage sump flows

There are four collection sumps associated with TSF4, Sumps A to D. A total of **1,982,694 m<sup>3</sup>** was pumped from these sumps between 1 July 2025 and 30 September 2025. Figure 7.4 shows the seepage sump flows for the year to date. This volume is a significant increase compared to the volume pumped between first and second quarter of 2025 and is likely due to rainfall runoff from the downstream embankment face and other toe drain catchment areas.

The water collected in the collection sumps is currently pumped back to the decant pond. **Water collected in the seepage sumps should be pumped to CWD to avoid adding additional water onto the TSF.**

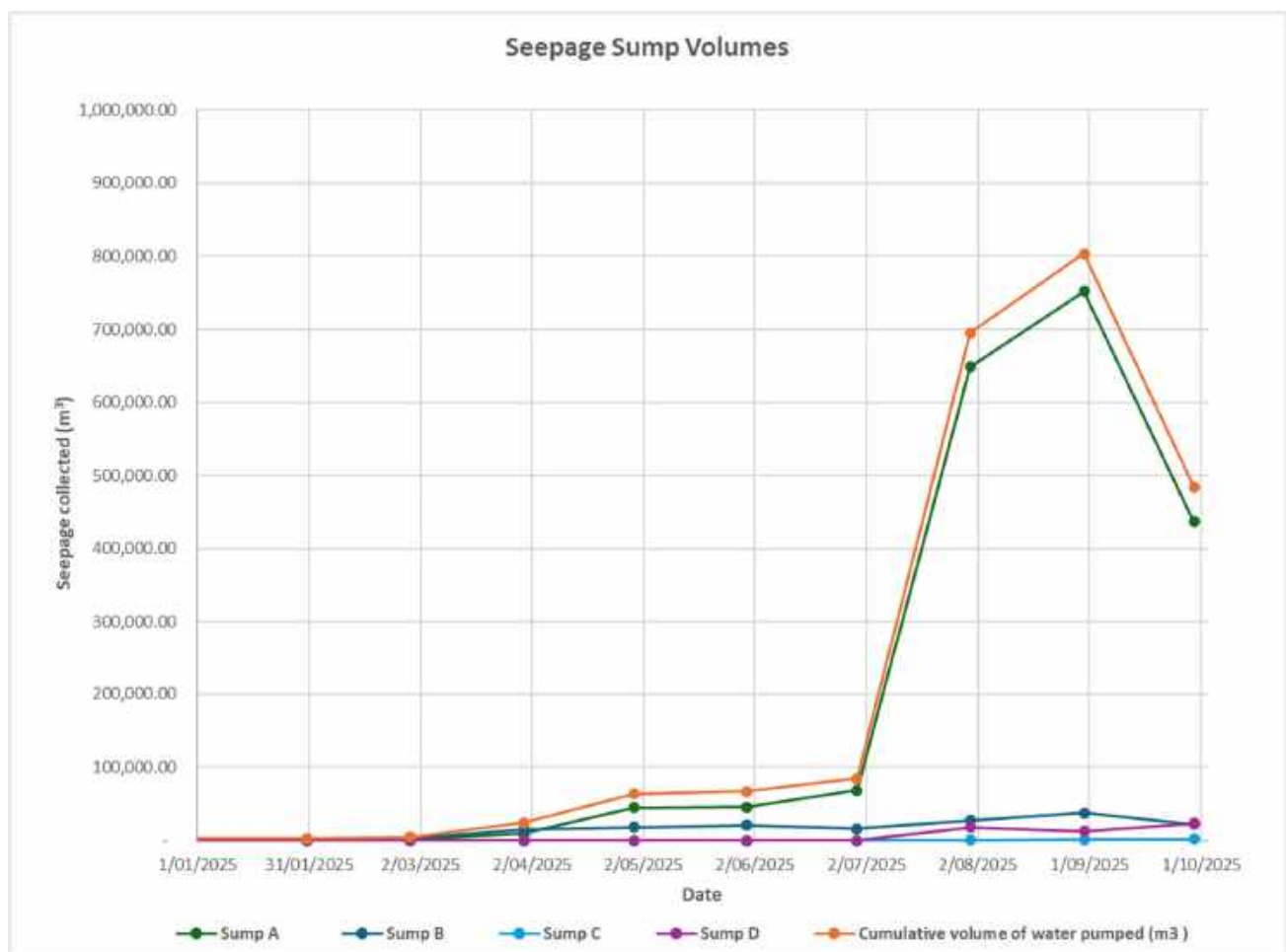


Figure 7.4 Volume of water pumped in Sumps A and B

## 7.2.4 Rainfall

The rainfall data adopted for TSF2 was also adopted for TSF4. Refer to Section 5.2.4 for details.

The total catchment area (Cell 1 and Cell 2) for TSF4 is 1,488,173 m<sup>2</sup>. The calculated total inflow into TSF4 due to rainfall was 722,954 m<sup>3</sup> for the quarter.

## 7.2.5 Evaporation

The monthly evaporation rate adopted for TSF2 was also adopted for TSF4. Refer to Section 5.2.5 for details.

The calculated monthly outflow due to evaporation is shown in Table 7.3.

**Table 7.3** Evaporation outflow for TSF4 (m<sup>3</sup>)

Month	Total pond area for Cell 1 & Cell 2 (m <sup>2</sup> )	Evaporation (m <sup>3</sup> )	Remarks
July 2025	425,195	10,417	Pond area calculated from QGIS, from .tiff file
August 2025	516,515	23,284	Pond area calculated from QGIS, from .tiff file
September 2025	454,560	30,515	Pond area calculated from QGIS, from .tiff file
<b>Total</b>		<b>64,216</b>	

## 7.2.6 Seepage losses

The assumed seepage rate of 0.013 m<sup>3</sup>/s/m<sup>2</sup> which was adopted for the TSF4 RL 1275 m design (GHD, 2025) was also adopted for the purpose of this water balance. Seepage was assumed to occur underneath the tailings beach area in Cell 1 and Cell 2.

The estimated seepage losses for July – September 2025 are shown in Table 7.4.

**Table 7.4** Seepage losses for TSF4

Month	Seepage loss (m <sup>3</sup> )
July 2025	1,379
August 2025	1,379
September 2025	1,335
<b>Total</b>	<b>1,714</b>

## 7.2.7 Interstitial water loss estimate

The following assumptions were applied to estimate the interstitial water loss:

- The in-situ density of the tailings is 1.4 t/m<sup>3</sup>
- The tailings are fully saturated
- The tailings SG is 2.67

Table 5.8 presents the estimated interstitial water retained in the tailings for the quarter.

**Table 7.5** TSF2 interstitial water

Month	Interstitial water estimate (m <sup>3</sup> )
July 2025	122,957
August 2025	125,153
September 2025	142,360

Month	Interstitial water estimate (m <sup>3</sup> )
Total	390,471

## 7.2.8 Water balance summary

An overall water balance was not developed for the quarter due to the significant inflow of rainwater captured from the downstream embankment of the TSF in Seepage Sump A. As recommended in Section 7.2.3 seepage sump flows should be redirected to Clear Water Dam to prevent adding additional water into the TSF. **Direct measurement of the seepage from the TSF should be implemented to enable the assessment of the water balance to be representative during months with high rainfall.**

## 7.3 Piezometers

### 7.3.1 Piezometers installed to monitor pressure during construction

Low strength zones comprising soft clay were identified beneath the very stiff to hard laterite in the southern portion of TSF4 during a geotechnical investigation in June 2018. The nature of the soft clay was such that pore pressures were expected to increase during rapid loading. Three piezometers were installed to monitor the pore pressure in the soft clay layer during construction.

The construction of the TSF4 Cell 1 starter embankment (RL 1265 m) was completed in March 2024. The pore pressure during the construction period remained between the natural ground level (NGL) and the piezometer tip.

TSF4 VWP1 exceeded its trigger level during third quarter of 2025. This is anticipated to be a result of construction activities in the area (rock placement). **This piezometer should be monitored closely to see whether the readings continue to increase, stabilise or reduce.** TSF4-VWP2 stopped returning readings at the end of March 2025. **This piezometer should be investigated and repaired.**

Review comments for these VWPs are summarised in Table 7.6 and the readings are shown in Figure 7.5.

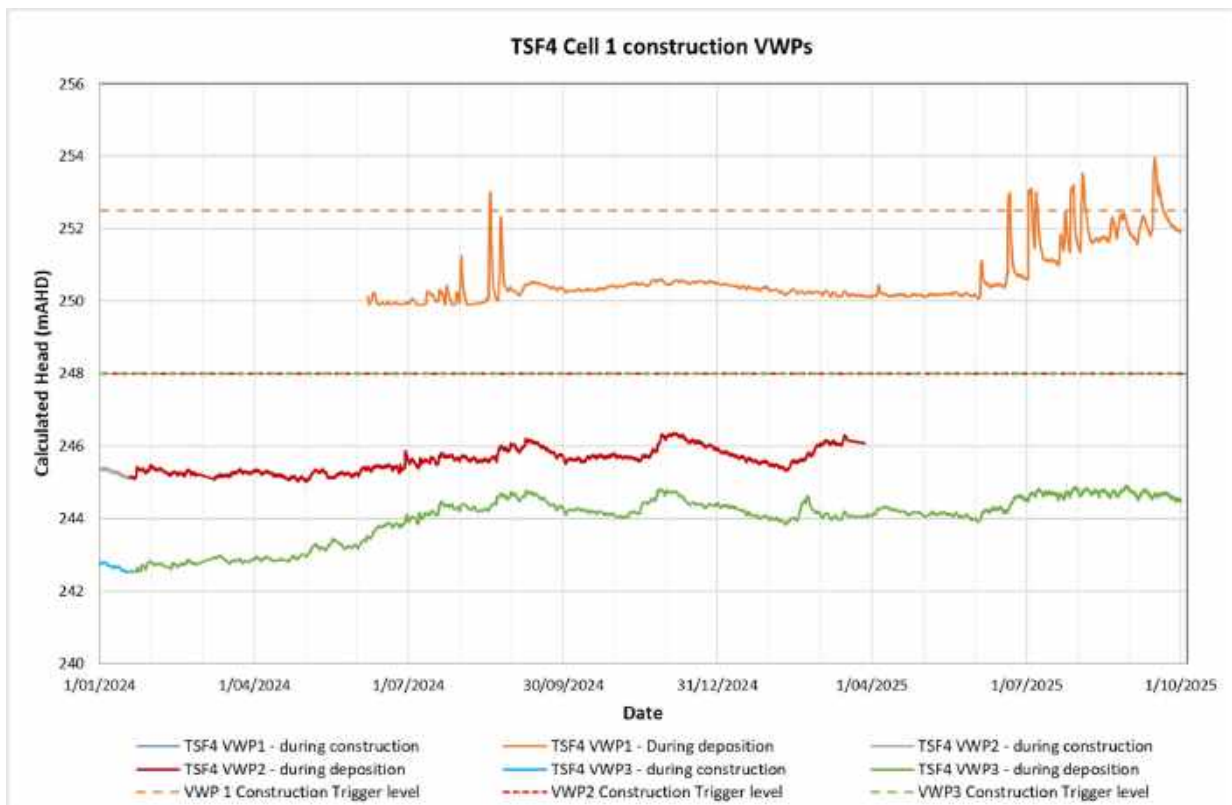


Figure 7.5 Construction VWPs (TSF4 Cell 1)

## 7.3.2 Piezometers installed to monitor pressure during operation

### 7.3.2.1 TSF4 Cell 1

23 VWP's were installed in TSF4 Cell 1.

PZ01A appeared to be recorded as PZ 01B in the provided General Piezometer Reports. ***This should be reviewed and corrected to PZ01A in the monitoring database.***

VWP TSF4-PZ02B was mostly dry for the quarter but showed elevated readings for a number of days in September. The readings returned to dry (below sensor level) immediately afterwards. This is expected to be a due to a readings error/fault, and not representative of the pore pressure at this location.

VWP's TSF4-PZ03A and TSF4-PZ03B are currently under review, refer to the January to March 2025 Quarterly Monitoring Report for details. These VWP's recorded a decrease over the quarter as shown in Table 7.7.

All other VWP's returned readings below the trigger levels.

A summary of the behaviour of the active VWP's for the quarter is provided in Table 7.7. The VWP quarterly reports, including plots of the VWP readings, are included in Appendix D.

### 7.3.2.2 TSF4 Cell 2

15 VWP's were installed in TSF4 Cell 2.

A summary of the behaviour of the active VWP's for the quarter is provided in Table 7.8. The VWP quarterly reports, including plots of the VWP readings, are included in Appendix D.

Table 7.6 Review comments for TSF4 construction VWP's

Piezo ID	Serial no.	Easting	Northing	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
TSF4-VWP1	1832267	412856	6249618	249.9	252.5	30/09/2025	Increasing trend for the quarter and overall. Exceeded the trigger level in July and September.
TSF4-VWP2	1701537	413054	6249623	240.5	248.0	31/03/2025	Steady trend until the end of March 2025 when readings stopped.
TSF4-VWP3	1800721	413132	6249626	239.9	248.0	30/09/2025	Increasing trend for the quarter and overall.

Table 7.7 Review comments for TSF4 Cell 1 VWP's

Piezo ID	Serial no.	Easting	Northing	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
TSF4 -PZ01A	80246	413,831	6,250,518	258.8	263.0	30/09/2025	Dry (below sensor level)
TSF4 -PZ01C	369097	413,863	6,250,518	263.2	263.2	30/09/2025	Mostly dry (below sensor level)
TSF4 -PZ01D	369093	413,863	6,250,518	254.6	260.5	30/09/2025	Increasing trend for the quarter
TSF4 -PZ01E	369101	413,870	6,250,518	263.4	263.4	30/09/2025	Mostly dry (below sensor level)
TSF4 -PZ01F	369085	413,870	6,250,518	257.7	261.0	30/09/2025	Steady trend for the quarter

Piezo ID	Serial no.	Easting	Northing	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
TSF4 - PZ02A	80320	413,536	6,249,743	253.9	259.0	30/09/2025	Dry (below sensor level)
TSF4 - PZ02B	79276	413,536	6,249,743	255.9	260.0	30/09/2025	Dry mostly (below sensor level) with some exceptional readings by the end of quarter
TSF4 - PZ02C	369099	413,536	6,249,701	260.3	260.3	30/09/2025	Steady trend for the quarter
TSF4 - PZ02D	369081	413,536	6,249,701	250.3	258.5	30/09/2025	Steady trend for July and August, dry in September
TSF4 - PZ02E	369096	413,536	6,249,685	260.8	260.8	30/09/2025	At sensory level in July and August, dry in September
TSF4 - PZ02F	79269	413,536	6,249,685	253.8	257.0	30/09/2025	Dry (below sensor level)
TSF4 - PZ03A	79266	413,161	6,249,753	249.4	257.0	30/09/2025	Increasing trend for the initial half of the quarter and then downward trend in the second half of the quarter.
TSF4 - PZ03B	79267	413,161	6,249,753	251.4	258.0	30/09/2025	Increasing trend for the initial half of the quarter and then downward trend in the second half of the quarter.
TSF4 - PZ03C	77969	413,161	6,249,701	251.0	258.0	30/09/2025	Dry (below sensor level)
TSF4 - PZ03D	369092	413,161	6,249,701	241.0	256.0	30/09/2025	Steady trend for the quarter
TSF4 - PZ03E	369446	413,161	6,249,666	250.7	254.0	08/09/2025	Dry at times, steady trend at sensor level otherwise.
TSF4 - PZ03F	369441	413,161	6,249,666	243.7	253.0	08/09/2025	Increasing trend for the quarter
TSF4 - PZ07	369094	413,882	6,250,485	250.0	260.0	30/09/2025	Increasing trend for the quarter
TSF4 - PZ08	369100	413,327	6,249,679	234.0	250.0	08/09/2025	Increasing trend for the quarter
TSF4 - PZ09A	370015	413,018	6,250,010	249.5	251.00	30/09/2025	Steady trend for the quarter
TSF4 - PZ09B	370006	413,018	6,250,010	259.50	259.50	30/09/2025	Dry (below sensor level)
TSF4-PZ10	369095	413,394	6,249,627	248.4	248.4	30/09/2025	Decreasing trend for the quarter
TSF4 - PZ11	369090	413,394	6,249,627	248.4	248.4	08/09/2025	Mostly dry (below sensor level)

Table 7.8 Review comments for TSF4 Cell 2 VVPs

Piezo ID	Serial no.	Easting	Northing	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
TSF4 - PZ04A	369041	412867	6249838	255.5	259.0	30/09/2025	Steady trend for the quarter. Dry at times.

Piezo ID	Serial no.	Easting	Northing	Sensor RL (m)	Trigger level (m)	Data received until	Quarterly review comments
TSF4 - PZ04C	369088	412867	6249701	261.2	261.2	30/09/2025	Mostly dry (below sensor level)
TSF4 - PZ04D	369089			251.2	257.0	30/09/2025	Steady trend. Approximately at sensor level for the quarter.
TSF4 - PZ04E	369087	412867	6249686	261.1	261.1	30/09/2025	Dry (below sensor level)
TSF4 - PZ04F	369084			254.1	256.0	30/09/2025	Steady trend for the quarter
TSF4 - PZ05A	79292	412428.414	6250613.972	256.70	256.7	30/09/2025	Approximately at sensor level for the quarter. Dry at times.
TSF4 - PZ05B	80241			246.70	253.0	30/09/2025	Steady trend for the quarter
TSF4 - PZ05C	79283	412444.191	6250568.48	257.60	259.0	30/09/2025	Dry (below sensor level)
TSF4 - PZ05D	79273			247.60	257.0	30/09/2025	Steady trend for the quarter
TSF4 - PZ05E	369060	412459.555	6250523.851	257.10	260.0	30/09/2025	Approximately at sensor level for the quarter. Dry at times.
TSF4 - PZ06A	79270	412515.209	6250644.074	255.70	255.7	30/09/2025	Dry (below sensor level)
TSF4 - PZ06B	79264			245.70	252.0	30/09/2025	Steady trend for the quarter
TSF4 - PZ06C	79293	412530.986	6250598.582	258.50	262.0	30/09/2025	Steady trend for the quarter
TSF4 - PZ06D	80311			248.50	258.0	30/09/2025	Increasing trend for the quarter
TSF4 - PZ06E	80229	412557	6250593	254.10	263.0	30/09/2025	Dry (below sensor level)

## 7.4 Deformation monitoring

### 7.4.1 Survey pins

17 settlement survey pins have been installed at TSF4 Cell 1. The installation details and baseline data, based on the 1270 mRL Construction Reports, for the survey pins are provided in Table 7.9.

Table 7.9 Survey markers installation details

Survey Marker	Easting (m)	Northing (m)	RL (m)
SM 01	412267	6250507	270.272
SM 02	412456	6250572	270.165
SM 03	412630	6250633	270.025
SM 04	413033.1	6250515.54	270.129
SM 05	413032.9	6250315.6	270.100

Survey Marker	Easting (m)	Northing (m)	RL (m)
SM 06	413032.9	6250115.24	270.161
SM 07	413033.7	6249915.31	270.070
SM 08	412839	6249713	269.956
SM 09	413048.9	6249713.08	270.178
SM 10	413251	6249712.96	269.928
SM 11	413451	6249713.02	269.899
SM 12	413651	6249713.06	269.949
SM 13	413850.9	6250529.14	270.107
SM 14	413850.9	6250345.36	270.047
SM 15	413050.1	6249638.97	245.766
SM 16	413244.1	6249638.92	254.763
SM 17	413408.1	6249639	254.845

The first survey of the markers, following construction, was undertaken on 9 June 2025. Comparison of the Easting and Northing records from June 2025 survey with the installation details presented in Table 7.9 indicates that movements in excess of 1 m had occurred. This is not expected to reflect the actual movement of the embankment. **Review of the installation details as compared to the routine survey should be undertaken to determine the cause of the discrepancy.**

The relative movement of the survey markers in the Easting and Northing directions compared to the June 2025 survey is presented below in Figure 7.6 and Figure 7.7. Settlement of the embankment crest compared to the baseline survey is presented in Figure 7.8. Movement up to 26 mm was recorded in the Easting and Northing direction and the embankment crest has experienced overall settlement of up to approximately 70 mm. These movements are within the expected range.

The survey data provided noted that survey records that are missing from this data (SM8, SM9, SM10, SM11, SM12, SM13, SM14) were not accessible, due to water completely filling the area.

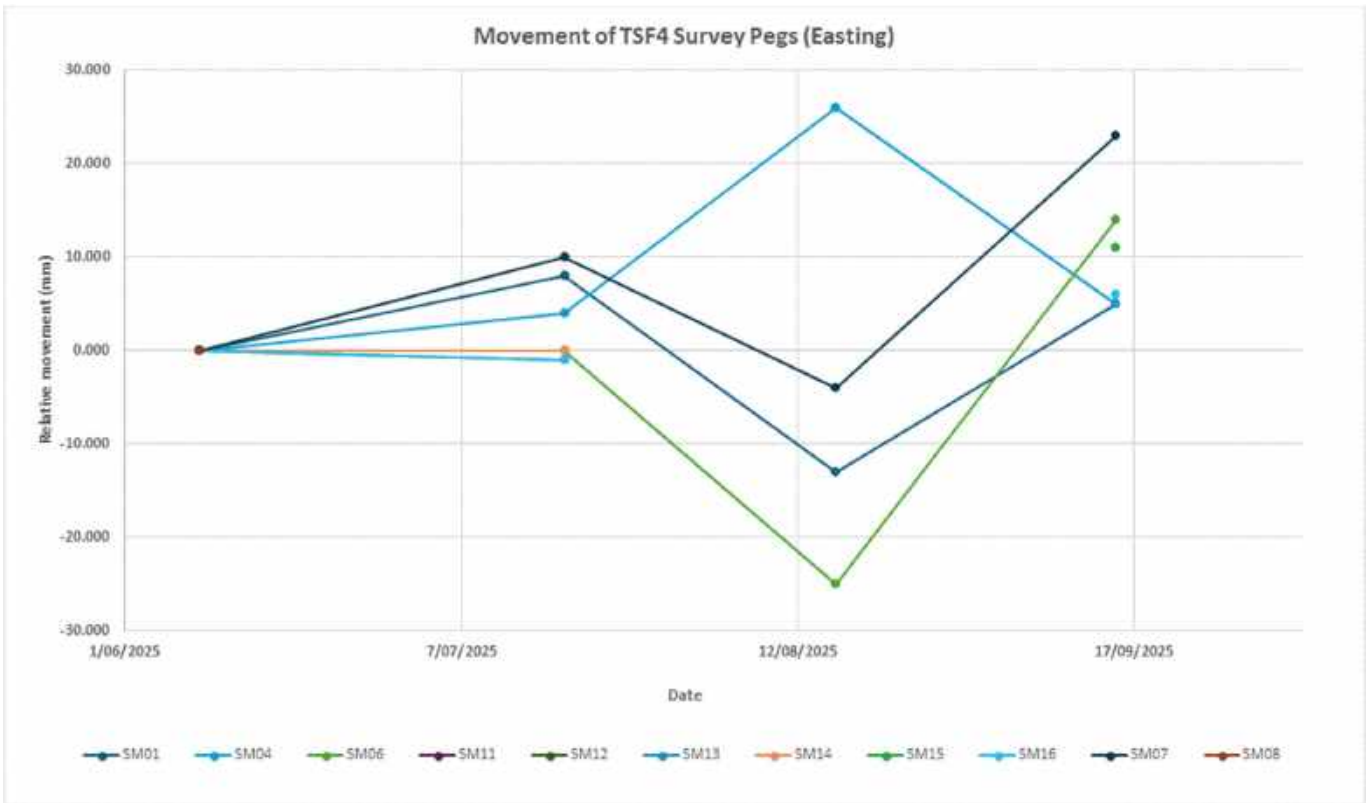


Figure 7.6 Movement of TSF4 survey pins in east – west direction

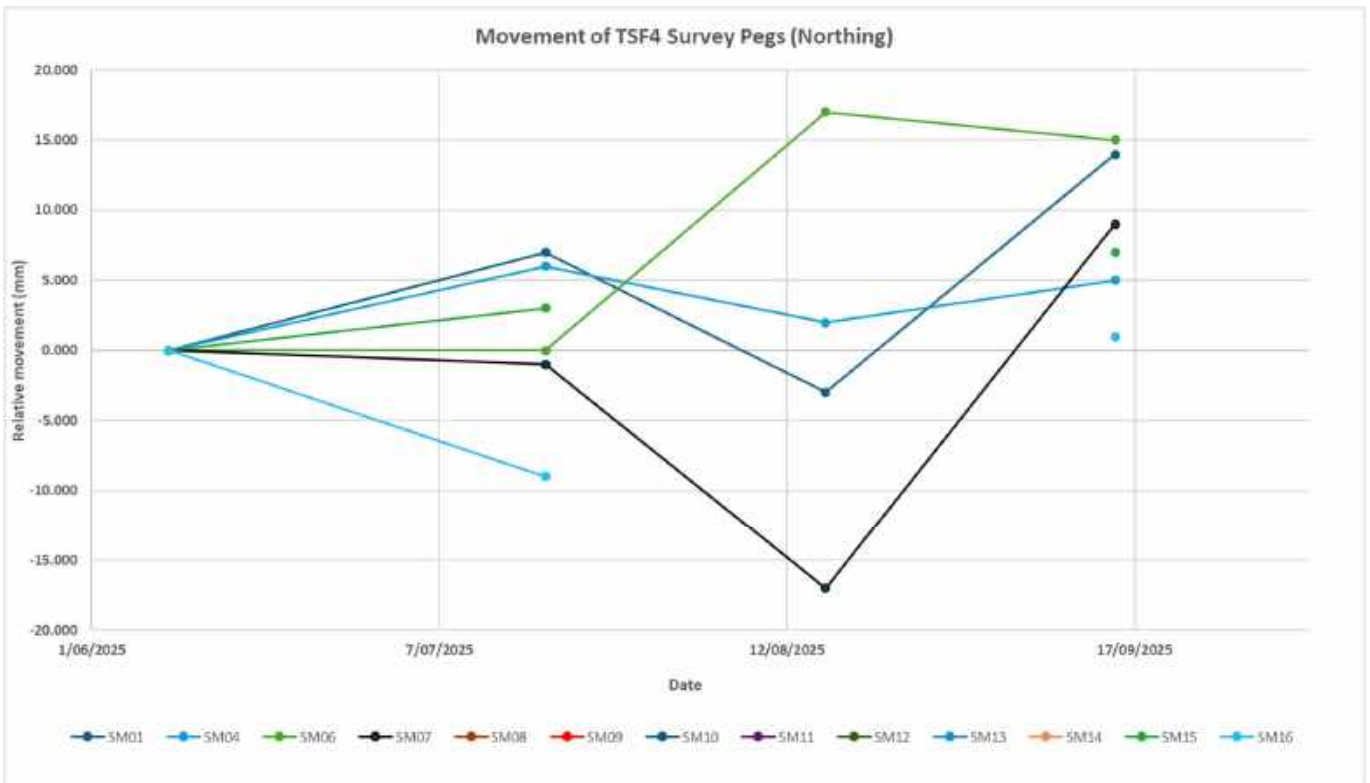


Figure 7.7 Movement of TSF4 survey pins in north - south direction

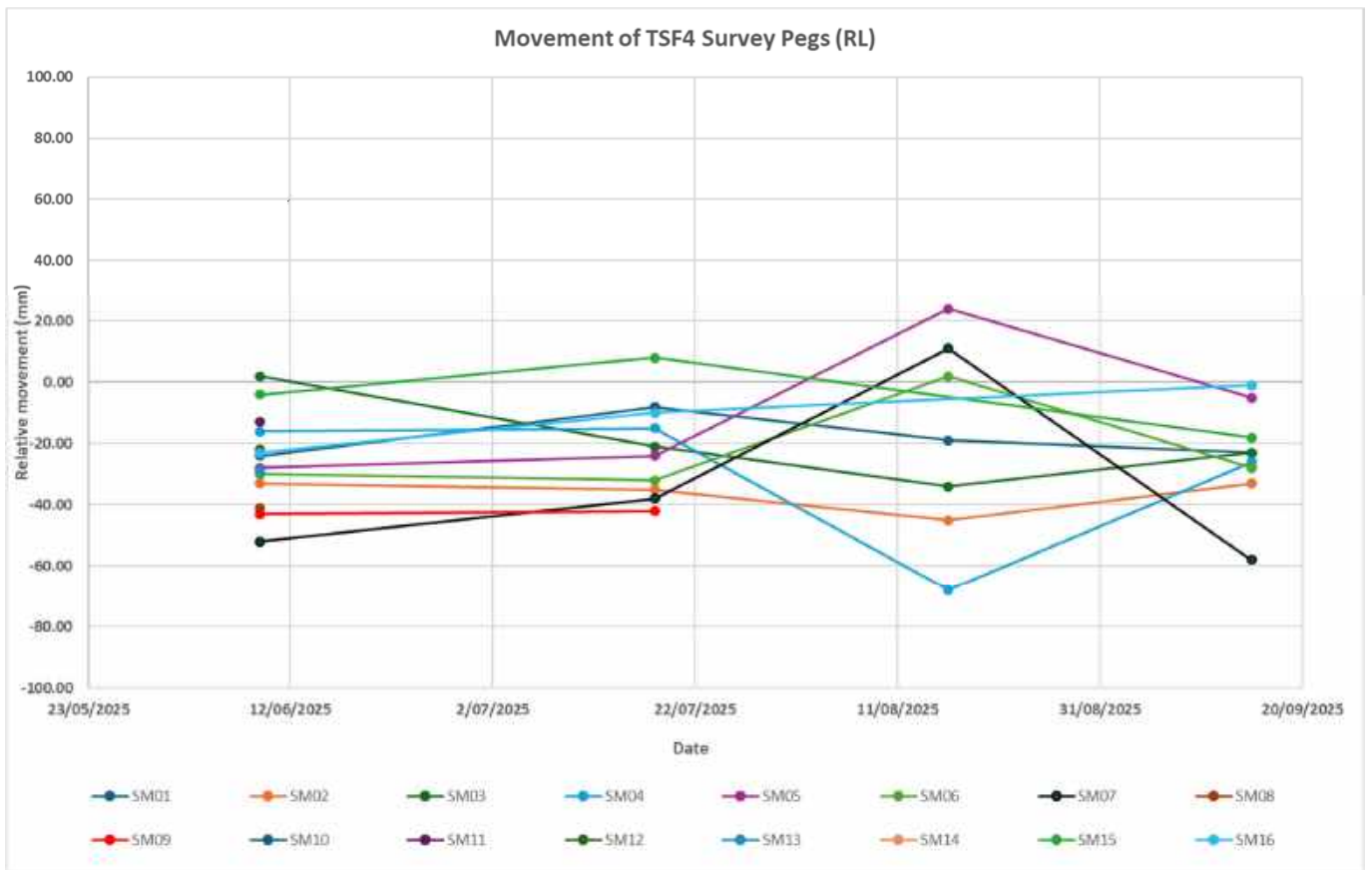


Figure 7.8 Movement of TSF4 survey pins in RL

## 7.4.2 Inclinerometers

Two inclinometers were installed as part of the RL 1265 m embankment raise. The inclinometer sensor depths are summarised in Table 7.10. The locations of these inclinometers are provided in Appendix B. The inclinometers were raised recently as part of RL 1270 m embankment raise construction works.

Table 7.10 Inclinerometers details (TSF4 Cell 1 and Cell 2)

Inclinometer 01 (IN 01) – Northern Embankment Cell 2			Inclinometer 02 (IN 02) – Southern embankment Cell 1		
Channel no.	Sensor RL (m AHD)	Sensor length (m)	Channel No.	Sensor RL (m AHD)	Sensor length (m)
Channel 1 (Deep)	250.3	2	Channel 1 (Deep)	245.0	2
Channel 2	252.3	2	Channel 2	247.0	2
Channel 3	254.3	2	Channel 3	249.0	2
Channel 4	256.3	2	Channel 4	251.0	2
Channel 5	258.3	2	Channel 5	253.0	2
Channel 6	260.3	2	Channel 6	255.0	2
Channel 7	262.3	2	Channel 7	257.0	2
			Channel 8	259.0	2
			Channel 9	261.0	2
			Channel 10 (Shallow)	263.0	2

The inclinometer measures movement in two directions (north-south direction and east-west direction). Movement in the north or east direction is positive and movement in south or west direction is negative. The recorded movement of Inclinometer no. 1 (IN01) and Inclinometer no. 2 (IN02) over the quarter is provided in Appendix F.

The movements recorded for both inclinometers were within expected limits and the resultant movements for both IN01 and IN02 were approximately 0.05% of the embankment height.

## 8. Groundwater monitoring and monitoring boreholes

### 8.1 General

Ground water monitoring is carried out using level data and samples from monitoring boreholes.

The boreholes in TSF1 and TSF2 are damaged and no longer monitored. Once the remaining in TSF1 is complete the purpose of the monitoring boreholes should be reviewed and, if they are required for environmental monitoring purposes, they should be repaired or replaced.

There are no monitoring boreholes in TSF3.

24 ground water monitoring wells were installed along the southern perimeter of TSF4 (referred to as Southern Perimeter Wells) between the 9 August and 29 August 2024. The wells were installed at eight monitoring locations (Refer Figure 8.1) targeting different depths as follows:

- Shallow (targeting the perched laterite zone)
- Intermediate (targeting the saprolitic clays)
- Deep depths (targeting the weathered basement)



Figure 8.1 Southern perimeter wells (24 nos.)

## 8.2 Ground water quality monitoring

Ground water sampling was undertaken in October 2024 and November 2024. The findings were summarised in the October 2024 monthly monitoring report.

## 8.3 Groundwater level monitoring

Groundwater levels in the monitoring boreholes were recorded on 17 September 2024 and 17 October 2024.

No new data has been provided for review.

# 9. Recommendations

A summary of the recommendations which have been made for the quarter is presented in Table 9.1.

The complete list of action items is included in Appendix A.

Table 9.1 2025 July to September Recommendations

Recommendation Number	Report Section	Recommendation
<b>TSF1</b>		
2025-Q3-1	4.1	VWP TSF1-CPT20-16. The reason why the piezometer has stopped returning readings should be investigated and addressed.
<b>TSF2</b>		
2025-Q3-2	5.2.2	The decant pump should be operated continuously in order to minimise the volume of water stored on the TSF.
2025-Q3-3	5.2.3	The TSF2 seepage system should be reviewed, and an inspection of the component flowmeters, pumps and pipework should be undertaken to confirm that the recorded seepage flows are an accurate representation of the magnitude of the seepage being collected from the TSF.
2025-Q3-4	5.3.1	VWPs not returning readings should be repaired or replaced.
2025-Q3-5	5.3.3	The cause of the elevated pressure recorded by VWP CPT2023 -02B Intermediate should be reviewed.
2025-Q3-6	5.3.4	VWP CPT2023 – 03C Deep. This piezometer should be monitored closely to see whether the readings continue to increase, stabilise or reduce.
2025-Q3-7	5.3.5	The provided General Piezometer Report lists CPT2019-04B Shallow and CPT2019-04B Deep with the same Piezometer name “CPT2019-04B”. For clarity these piezometers should be renamed.
2025-Q3-8	5.3.5	VWPs CPT2023 04A deep and shallow. These VWPs are planned to be replaced.
2025-Q3-9	5.3.5	VWP CPT2023 04B. A trigger level should be developed for this VWP.
2025-Q3-10	5.3.7	The 2020 piezometers are planned to be repaired.
2025-Q3-11	5.4.1	Historical survey readings from June to October 2024 should be transformed to MGA 2020 so trends can be identified and assessed
2025-Q3-12	5.4.2	The GNSS graphs Y axis scale is recommended to be changed to improve readability. The extents should be +/- 0.5 m.
<b>TSF3</b>		
2025-Q3-13	6.1	The VWP readings should be closely monitored to confirm the dissipation of the temporarily increased pore pressure.
<b>TSF4</b>		

Recommendation Number	Report Section	Recommendation
2025-Q3-14	7.2.1	The decant pond should be continuously pumped out of the facility to maintain the decant level below the maximum operating level at all times.
2025-Q3-15	7.2.1	The decant pond should be maintained at least 200 m from the perimeter embankments.
2025-Q3-16	7.2.3	Water collected in the seepage sumps should be pumped to CWD to avoid adding additional water onto the TSF.
2025-Q3-17	7.3.1	TSF4-VWP1. This piezometer should be monitored closely to see whether the readings continue to increase, stabilise or reduce
2025-Q3-18	7.3.1	TSF4-VWP2. This piezometer should be investigated and repaired.
2025-Q3-19	7.3.2.1	PZ01A appeared to be recorded as PZ 01B in the provided General Piezometer Reports. This should be reviewed and corrected to PZ01A in the monitoring database.
2025-Q3-20	7.4.1	Review of the survey marker installation details as compared to the routine survey should be undertaken to determine the cause of the discrepancy.

## 10. References

GHD, 2025. TSF4 RL 1275 Raise Detailed Engineering Design Report, 12635322-GHD-00-00-RPT-CI-00001, Revision 0, 12 March 2025.

Hunter and Fell, 2003. The Deformation Behaviour of Embankment Dams, University of New South Wales, February 2003.

# Appendices

# **Appendix A**

## **Action Items Schedule**

### Action Items

No.	Action	Month identified
<b>Tailings Storage Facility 1</b>		
2025-Q1-1	VWP TSF1 CPT08. The VWP should be investigated and repaired.	March, 2025
2025-Q3-1	VWP TSF1-CPT20-16. The reason why the piezometer has stopped returning readings should be investigated and addressed.	September, 2025
<b>Tailings Storage Facility 2</b>		
2025-Q1-4	In order to assess longer term trends the piezometer reports should include data from the preceding twelve months.	March, 2025
2025-Q1-5	VWP CPT2023 -02B Intermediate. The piezometer calibration data used for the previous GHD interpretation and the Talison reporting should be reviewed and compared to determine the cause of this discrepancy.	March, 2025
2025-Q1-7	VWP CPT2019 - 04C deep. The VWP should be repaired.	March, 2025
2025-Q1-8	VWPs CPT2023 04A deep and shallow. The cause of the high pore pressure readings is being reviewed.	March, 2025
2025-Q1-9	VWP CPT2023 04B. A trigger level should be developed for this VWP.	March, 2025
2025-Q1-10	VWPs CPT2019-05A Shallow and Deep. These VWPs should be repaired	March, 2025
2025-Q1-11	The 2020 piezometers should be repaired or replaced.	2024
2025-Q1-12	Historical survey readings from June to October 2024 should be transformed to MGA 2020 so trends can be identified and assessed	November 2024
2025-Q1-13	The GNSS graphs Y axis scale is recommended to be changed to improve readability. The extents should be +/- 0.5 m.	March, 2025
2025-Q3-2	The decant pump should be operated continuously in order to minimise the volume of water stored on the TSF.	September, 2025
2025-Q3-3	The TSF2 seepage system should be reviewed, and an inspection of the component flowmeters, pumps and pipework should be undertaken to confirm that the recorded seepage flows are an accurate representation of the magnitude of the seepage being collected from the TSF.	September, 2025
2025-Q3-5	The cause of the elevated pressure recorded by VWP CPT2023 -02B Intermediate should be reviewed.	September, 2025
2025-Q3-6	VWP CPT2023 – 03C Deep. This piezometer should be monitored closely to see whether the readings continue to increase, stabilise or reduce.	September, 2025
2025-Q3-7	The provided General Piezometer Report lists CPT2019-04B Shallow and CPT2019-04B Deep with the same Piezometer name "CPT2019-04B". For clarity these piezometers should be renamed.	September, 2025
<b>Tailings Storage Facility 3</b>		
2025-Q3-13	The VWP readings should be closely monitored to confirm the dissipation of the temporarily increased pore pressure.	March, 2025
<b>Tailings Storage Facility 4</b>		
2025-Q1-15	PZ01A appeared to be recorded as PZ 01B in the provided General Piezometer Reports. This should be reviewed and corrected to PZ01A in the monitoring database.	March, 2025
2025-Q1-16	PZ03A and B. The impact of the simultaneously increasing readings should be investigated.	March, 2025
2025-Q3-14	The decant pond should be continuously pumped out of the facility to maintain the decant level below the maximum operating level at all times.	September, 2025
2025-Q3-15	The decant pond should be maintained at least 200 m from the perimeter embankments.	September, 2025
2025-Q3-16	Water collected in the seepage sumps should be pumped to CWD to avoid adding additional water onto the TSF.	September, 2025
2025-Q3-17	TSF4-VWP1. This piezometer should be monitored closely to see whether the readings continue to increase, stabilise or reduce	September, 2025
2025-Q3-18	TSF4-VWP2. This piezometer should be investigated and repaired.	September, 2025
2025-Q3-20	Review of the survey marker installation details as compared to the routine survey should be undertaken to determine the cause of the discrepancy.	September, 2025

# **Appendix B**

**Instrumentation locations**



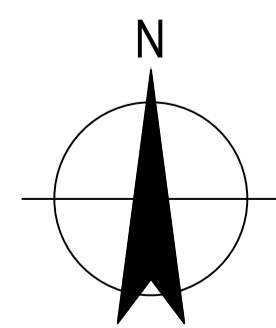
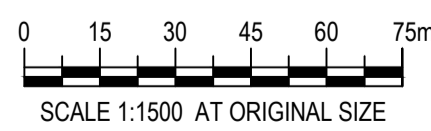
**LEGEND:**

MB MONITORING BORE LOCATION

MONITORING BORE LOCATIONS		
ID	EASTING	NORTHING
MB01/5	411783.0926	6250299.321
MB01/6	411785.5601	6250305.05
MB01/7	411730.8794	6250306.819
MB01/8	411735.9966	6250305.669
MB2	411932	6250799

THIS DRAWING INCLUDES COLOURED INFORMATION COPIES OF THIS DRAWING MUST BE PRODUCED IN COLOUR

BASE SURVEY SUPPLIED BY:  
TALISON LITHIUM PTY LTD  
RECEIVED ON: JULY 2021  
CO-ORDINATE GRID: MGA94-50  
LEVEL DATUM: MINE DATUM



Talison Lithium Pty Ltd  
Talison Monthly Monitoring

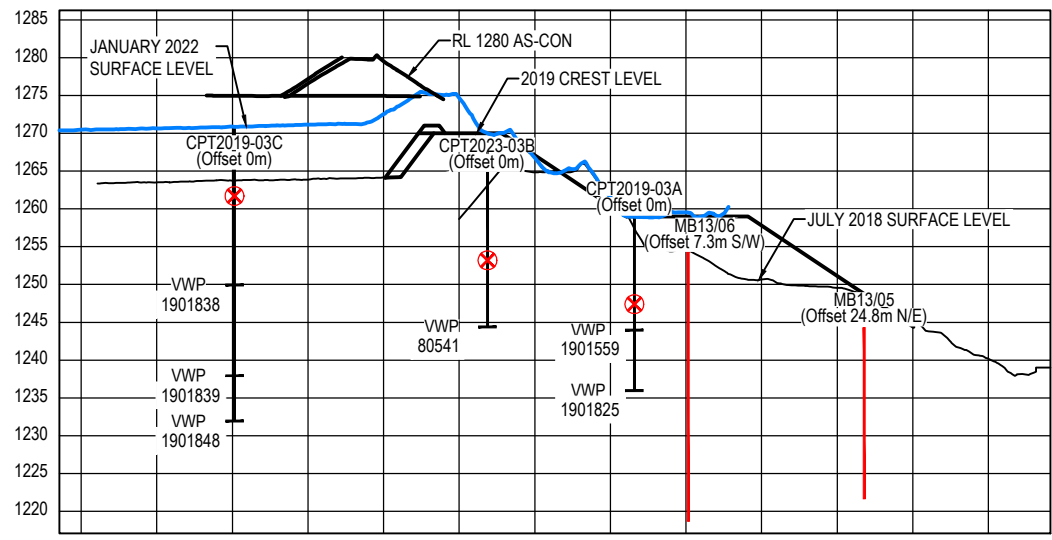
Instrumentation Plan  
TSF3

Job Number | 12546961

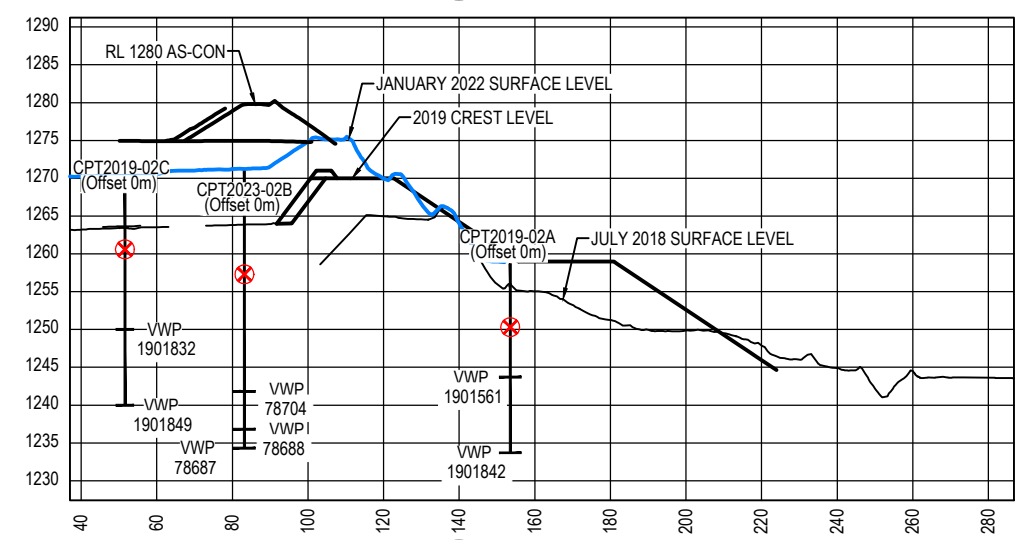
Revision | A

Date | Apr 2022

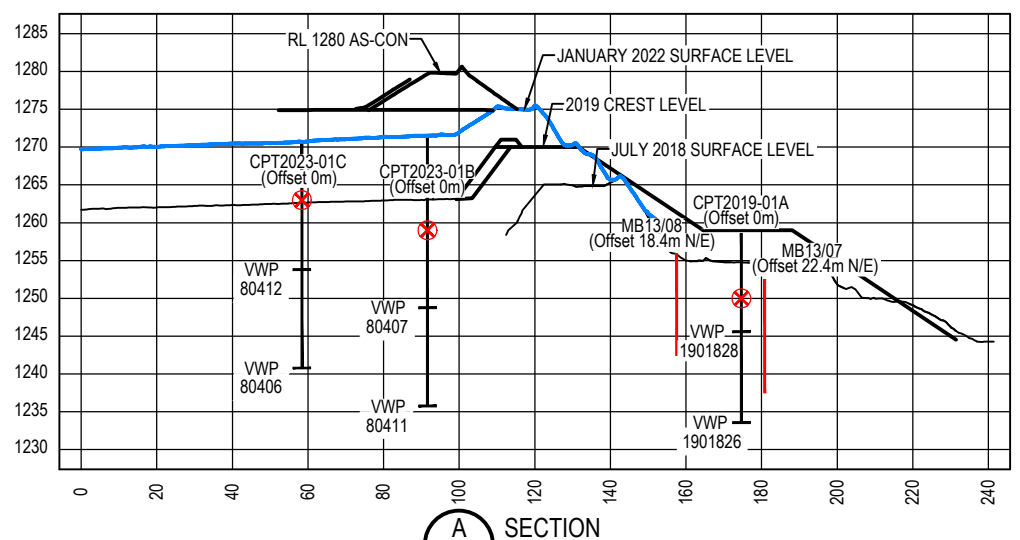
Figure 03



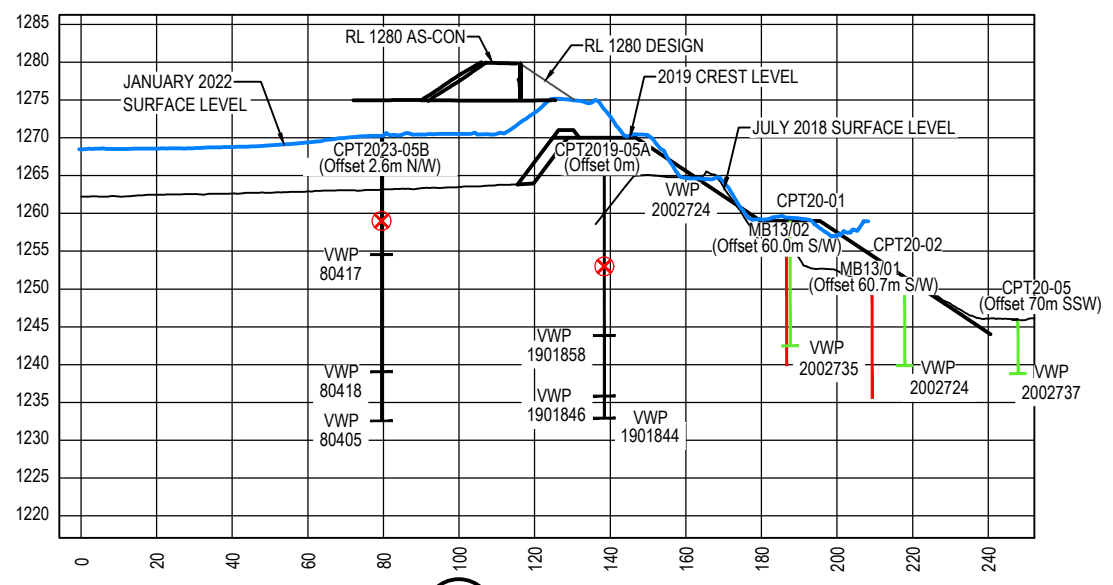
**C SECTION**  
Fig 02 SCALE H 1:1000 V 1:500



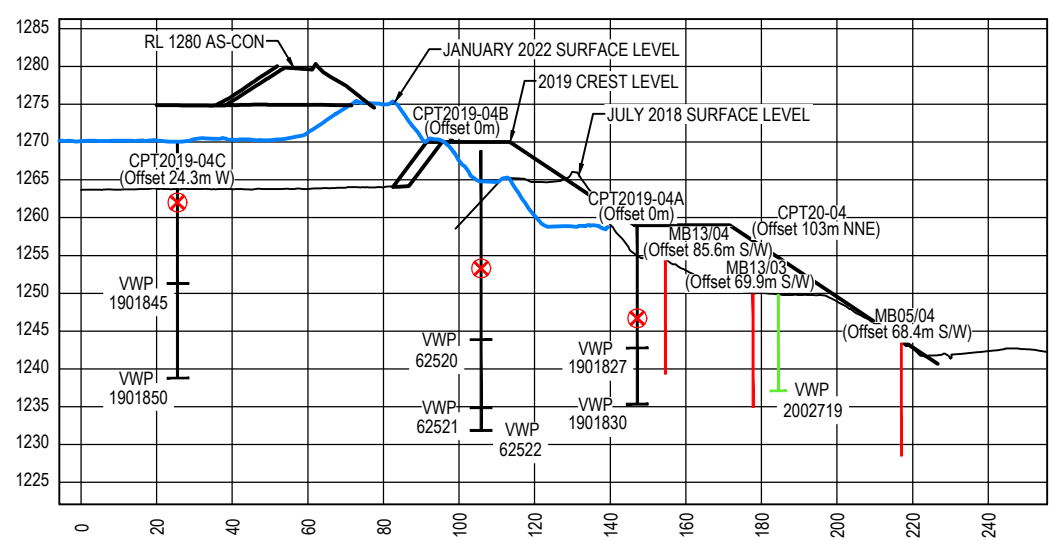
**B SECTION**  
Fig 02 SCALE H 1:1000 V 1:500



**A SECTION**  
Fig 02 SCALE H 1:1000 V 1:500



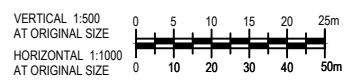
**E SECTION**  
Fig 02 SCALE H 1:1000 V 1:500



**D SECTION**  
Fig 02 SCALE H 1:1000 V 1:500

**LEGEND:**  
 VWP — VIBRATING WIRE PIEZOMETER  
 — MONITORING BORE  
 — JANUARY 2022 SURFACE LEVEL  
 ⊗ TRIGGER LEVEL

VWP LOCATIONS		
CPT ID	SENSOR ID	MATERIAL AT SENSOR TIP
CPT2019-01A	1901826	Residual soil
CPT2019-01A	1901828	Embankment Fill - Earthfill
CPT2023-01B	80411	Residual soil
CPT2023-01B	80407	Tailings - Granular
CPT2023-01C	80406	Tailings - Granular
CPT2023-01C	80412	Residual soil
CPT2019-02A	1901842	Residual soil
CPT2019-02A	1901561	Tailings - Granular
CPT2023-02B	78687	Residual soil
CPT2023-02B	78688	Residual soil
CPT2023-02B	78704	Tailings - Cohesive
CPT2019-02C	1901849	Residual soil
CPT2019-02C	1901832	Tailings - Cohesive
CPT2019-03A	1901825	Slimes
CPT2019-03A	1901559	Tailings - Granular
CPT2023-03B	80541	Tailings - Granular
CPT2019-03C	1901838	Tailings - Granular
CPT2019-03C	1901839	Slimes
CPT2019-03C	1901848	Residual soil
CPT2019-04A	1901830	Tailings - Granular
CPT2019-04A	1901827	Tailings - Granular
CPT2019-04B	62522	Slimes
CPT2019-04B	62520	Tailings - Granular
CPT2019-04B	62521	Slimes
CPT2019-04C	1901845	Tailings - Granular
CPT2019-04C	1901850	Slimes
CPT2019-05A	1901844	Residual soil
CPT2019-05A	1901846	Tailings - Granular
CPT2019-05A	1901858	Tailings - Cohesive
CPT2023-05B	80418	Tailings - Granular
CPT2023-05B	80417	Tailings - Cohesive
CPT2023-05B	80405	Residual soil



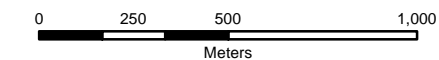
Talison Lithium Pty Ltd  
 Talison Monthly Monitoring  
 Instrumentation Plan  
 TSF2 Cross Sections

Job Number | 12546961  
 Revision | B  
 Date | Jul 2022  
**Figure 04**

BASE SURVEY SUPPLIED BY:  
 TALISON LITHIUM PTY LTD  
 RECEIVED ON: JULY 2021  
 CO-ORDINATE GRID: MGA94-50  
 LEVEL DATUM: MINE DATUM



GREENBUSHES OPERATIONS  
**LONG TERM MONITORING BENCHMARKS  
 AND SETTLEMENT MARKERS**



1:20,000  
 Projection: MGA Zone 50 Datum: GDA94

Department: Mining	Date: 4/08/2020
Figure: LTM	Status:
Drawn by BR	Requested by
Internal Reference T:07-03-01	Sheet Size A3

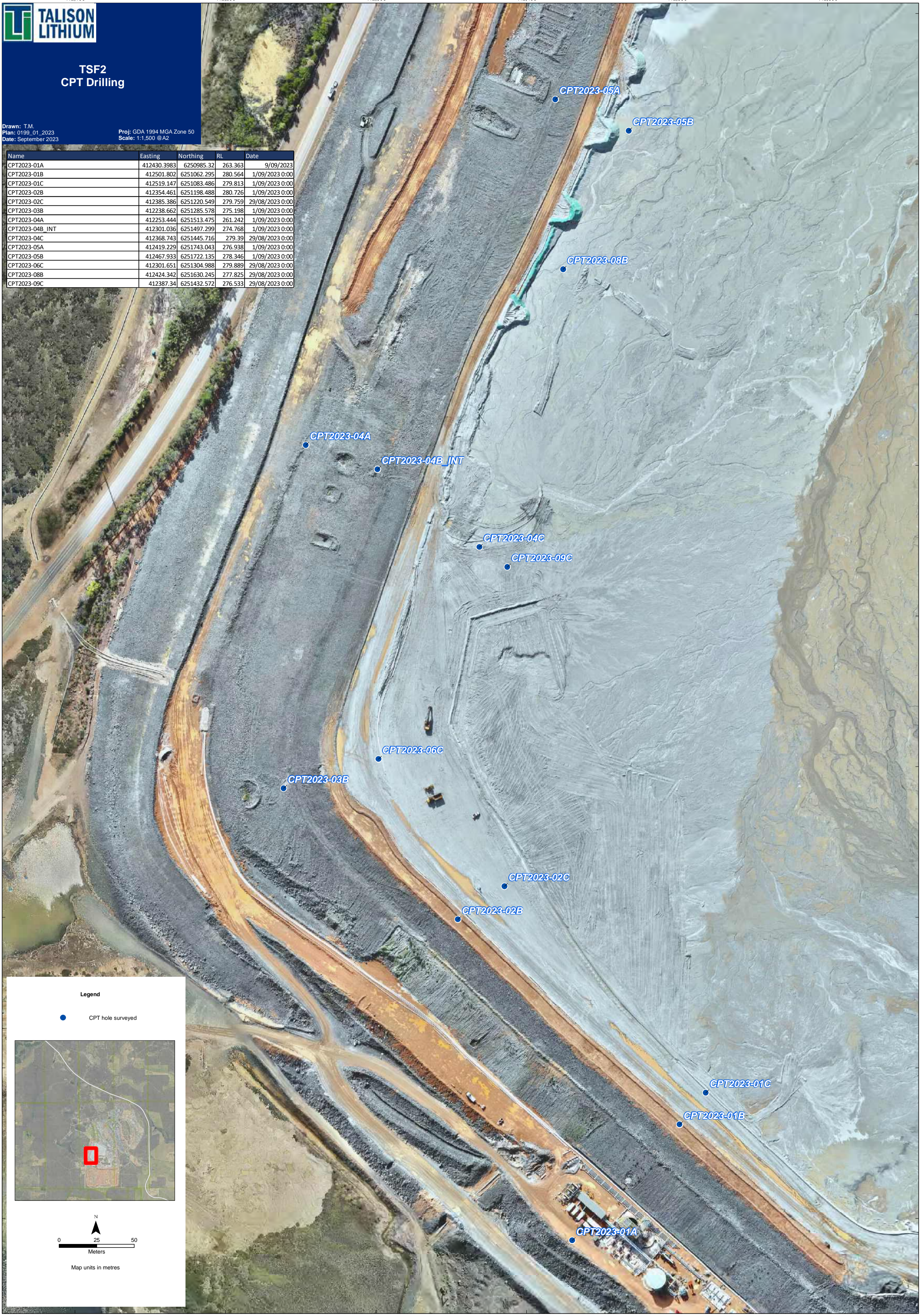
**Legend**

- Long Term Monitoring Points
- Clearwater Settlement Markers
- TSF2 Settlement Marks

# TSF2 CPT Drilling

Drawn: T.M.  
 Plan: 0199\_01\_2023  
 Date: September 2023  
 Proj: GDA 1994 MGA Zone 50  
 Scale: 1:1,500 @A2

Name	Easting	Northing	RL	Date
CPT2023-01A	412430.3983	6250985.32	263.363	9/09/2023
CPT2023-01B	412501.802	6251062.295	280.564	1/09/2023 0:00
CPT2023-01C	412519.147	6251083.486	279.813	1/09/2023 0:00
CPT2023-02B	412354.461	6251198.488	280.726	1/09/2023 0:00
CPT2023-02C	412385.386	6251220.549	279.759	29/08/2023 0:00
CPT2023-03B	412238.662	6251285.578	275.198	1/09/2023 0:00
CPT2023-04A	412253.444	6251513.475	261.242	1/09/2023 0:00
CPT2023-04B_INT	412301.036	6251497.299	274.768	1/09/2023 0:00
CPT2023-04C	412368.743	6251445.716	279.39	29/08/2023 0:00
CPT2023-05A	412419.229	6251743.043	276.938	1/09/2023 0:00
CPT2023-05B	412467.933	6251722.135	278.346	1/09/2023 0:00
CPT2023-06C	412301.651	6251304.988	279.889	29/08/2023 0:00
CPT2023-08B	412424.342	6251630.245	277.825	29/08/2023 0:00
CPT2023-09C	412387.34	6251432.572	276.533	29/08/2023 0:00



**Legend**

- CPT hole surveyed

0 25 50  
Meters

Map units in metres

412,100 412,200 412,300 412,400 412,500 412,600

6,251,800 6,251,700 6,251,600 6,251,500 6,251,400 6,251,300 6,251,200 6,251,100 6,251,000

412500 m

413000 m

6252000 m

6252000 m

6251500 m

6251500 m

6251000 m

6251000 m

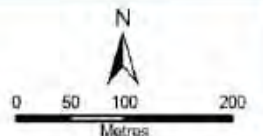


412500 m

413000 m



**GNSS  
Locations  
at TSF2**



Proj: GDA 1994 MGA Zone 50  
Scale: 17,000 @A4

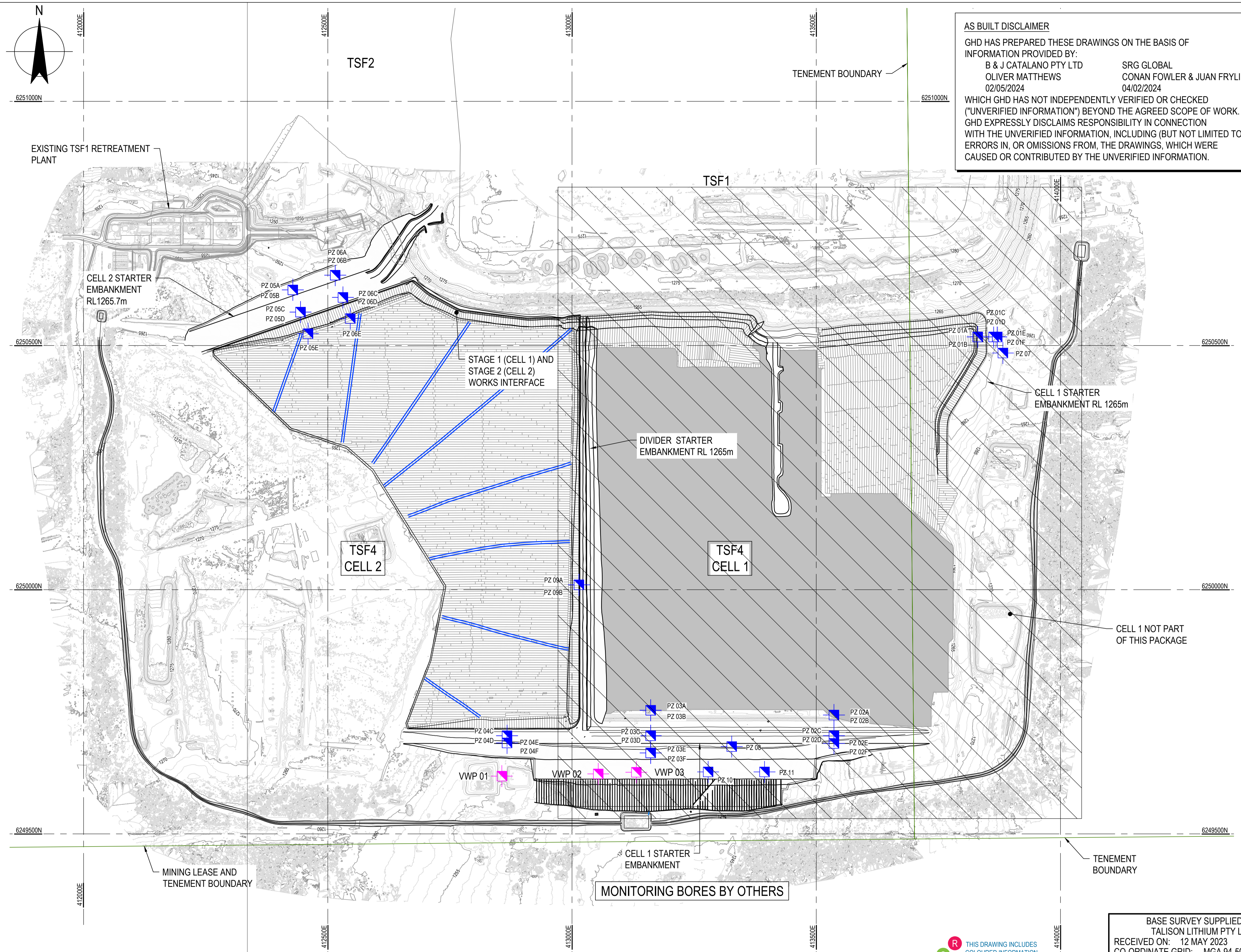
**TSF3 Services Area  
Geotech Drilling**

Drawn: T.M.  
Plan: 0206\_02\_2023  
Date: September 2023  
Proj: GDA 1994 MGA Zone 50  
Scale: 1:1,000 @A2

Name	Easting	Northing	RL	Date
TSF3CPT02	411887.2	6250511	256.575	8/09/2023
TSF3CPT01	411898.3	6250383	256.806	8/09/2023

NAME	Easting	Northing	Elevation
TSF3-VWP2023-1A	411836.039	6250736.825	259.42
TSF3-VWP2023-2A	411884.016	6250732.54	259.463
TSF3-VWP2023-3A	411920.217	6250729.342	259.505





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 OLIVER MATTHEWS CONAN FOWLER & JUAN FRYLINCK  
 02/05/2024 04/02/2024  
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- NOTES:**
- ALL DIMENSIONS ARE IN METRES (m) UNLESS OTHERWISE NOTED.
  - ALL RL'S ARE IN METRES TO LOCAL MINE DATUM (M).
  - ALL DRAWING REFERENCES ARE PREFIXED BY "12613531-GHD-00-00-DRG-".
  - FOR PIEZOMETER DETAILS REFER TO DRAWING CI-00016.
  - EXISTING PIEZOMETERS TO BE PROTECTED.
  - CELL 1 WORKS BY OTHERS.

- LEGEND:**
- VWP 01 EXISTING VWP LOCATIONS
  - PZ 01 PROPOSED VWP LOCATIONS

**PROPOSED PIEZOMETER SETOUT TABLE**

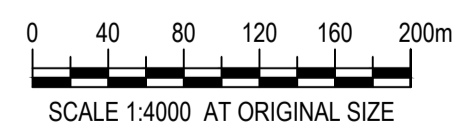
POINT ID	EASTING	NORTHING	TIP RL (m)
PZ 01A	413831	6250518	1258.8
PZ 01C	413863	6250518	1263.2
PZ 01D	413870	6250518	1254.6
PZ 01E	413870	6250518	1263.4
PZ 01F	413870	6250518	1257.7
PZ 02A	413536	6249743	1253.9
PZ 02B	413536.04	6249700.96	1255.9
PZ 02C	413536.04	6249700.96	1260.3
PZ 02D	413536.09	6249685	1250.3
PZ 02E	413536.09	6249685	1260.8
PZ 02F	413536.09	6249685	1253.8
PZ 03A	413161	6249753	1249.4
PZ 03B	413161	6249753	1251.4
PZ 03C	413160.85	6249701	1251.0
PZ 03D	413160.85	6249701	1241.0
PZ 03E	413161.15	6249666	1250.7
PZ 03F	413161.15	6249666	1243.7
PZ 04C	412867	6249701	1261.2
PZ 04D	412867	6249701	1251.2
PZ 04E	412867	6249686	1261.1
PZ 04F	412867	6249686	1254.1
PZ 05A	412428.48	6250614.03	1256.7
PZ 05B	412428.48	6250614.03	1246.7
PZ 05C	412444.22	6250568.57	1257.6
PZ 05D	412444.22	6250568.57	1247.6
PZ 05E	412459.52	6250524.28	1257.1
PZ 06A	412515.28	6250644.06	1255.7
PZ 06B	412515.28	6250644.06	1245.7
PZ 06C	412531.06	6250598.50	1258.5
PZ 06D	412531.06	6250598.50	1248.5
PZ 06E	412544.78	6250558.8	1254.1
PZ 07	413882	6250485	1250.0
PZ 08	413327.07	6249679.04	1234.0
PZ 09A	413018.42	6250009.81	1249.5
PZ 09B	413018.42	6250009.81	1259.5
PZ 10	413278.75	6249626.82	1248.4
PZ 11	413394.2	6249626.86	1248.4

**EXISTING PIEZOMETER COORDINATES**

POINT ID	EASTING	NORTHING	RL (m)
VWP 01	412856	6249618	1255.8
VWP 02	413054	6249623	1247.7
VWP 03	413132	6249626	1246.4

BASE SURVEY SUPPLIED BY:  
 TALISON LITHIUM PTY LTD  
 RECEIVED ON: 12 MAY 2023  
 CO-ORDINATE GRID: MGA 94-50  
 LEVEL DATUM: MINE DATUM

PLAN  
 SCALE 1:4000



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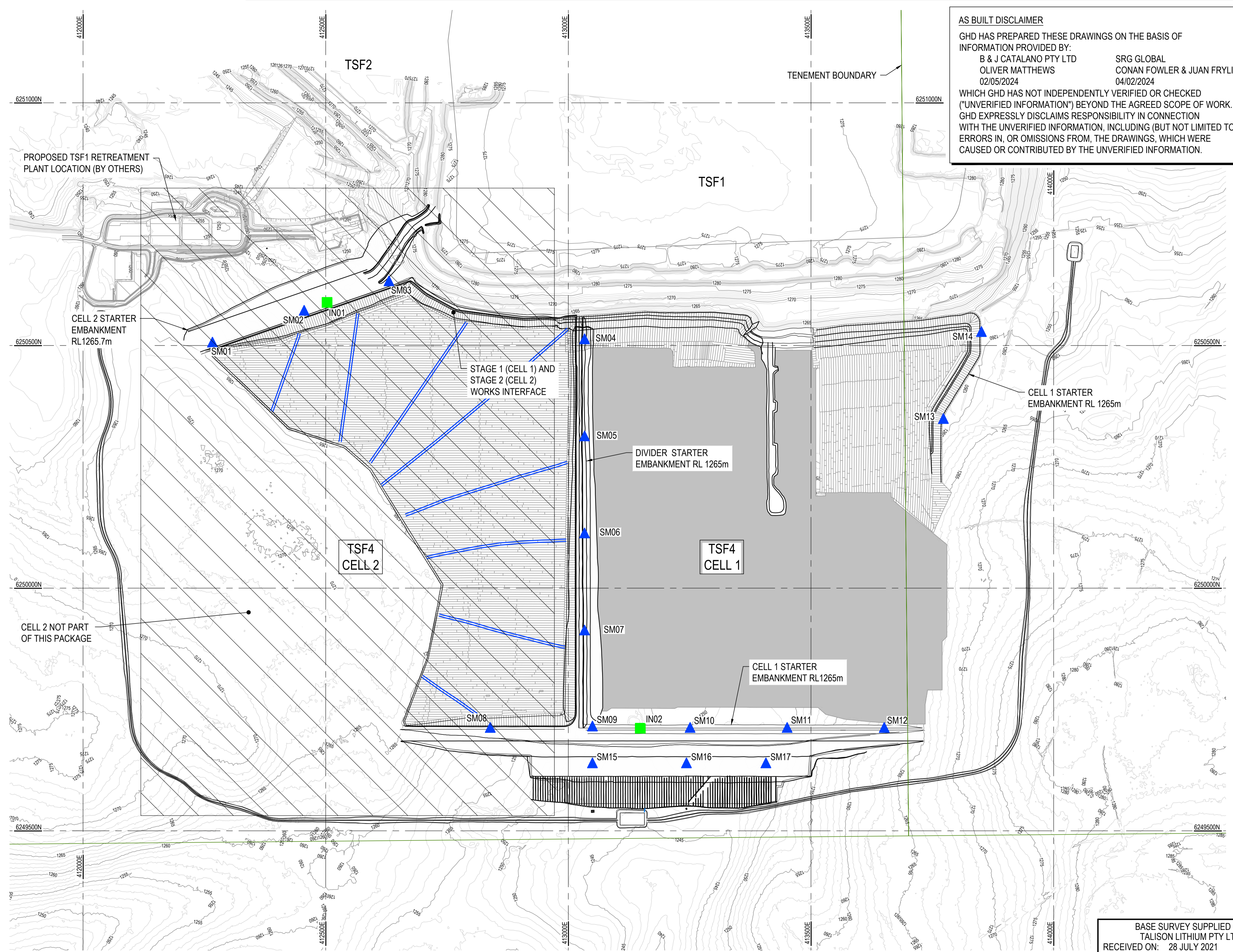
Project No.  
12613531

Client TALISON LITHIUM PTY LTD  
 Project TSF4 CELL 2  
 Status AS CONSTRUCTED

Drawing Title INSTRUMENTATION PLAN  
 PIEZOMETERS

Size  
A1

12613531-GHD-00-00-DRG-CI-00014  
 Drawing No. Rev C02



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- NOTES:**
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  - FOR DETAILS REFER TO DRAWING 61-37226-C030.
  - ALL RL'S ARE IN METRES TO LOCAL MINE DATUM (m).
  - DRAWING TO BE PRINTED IN COLOUR.

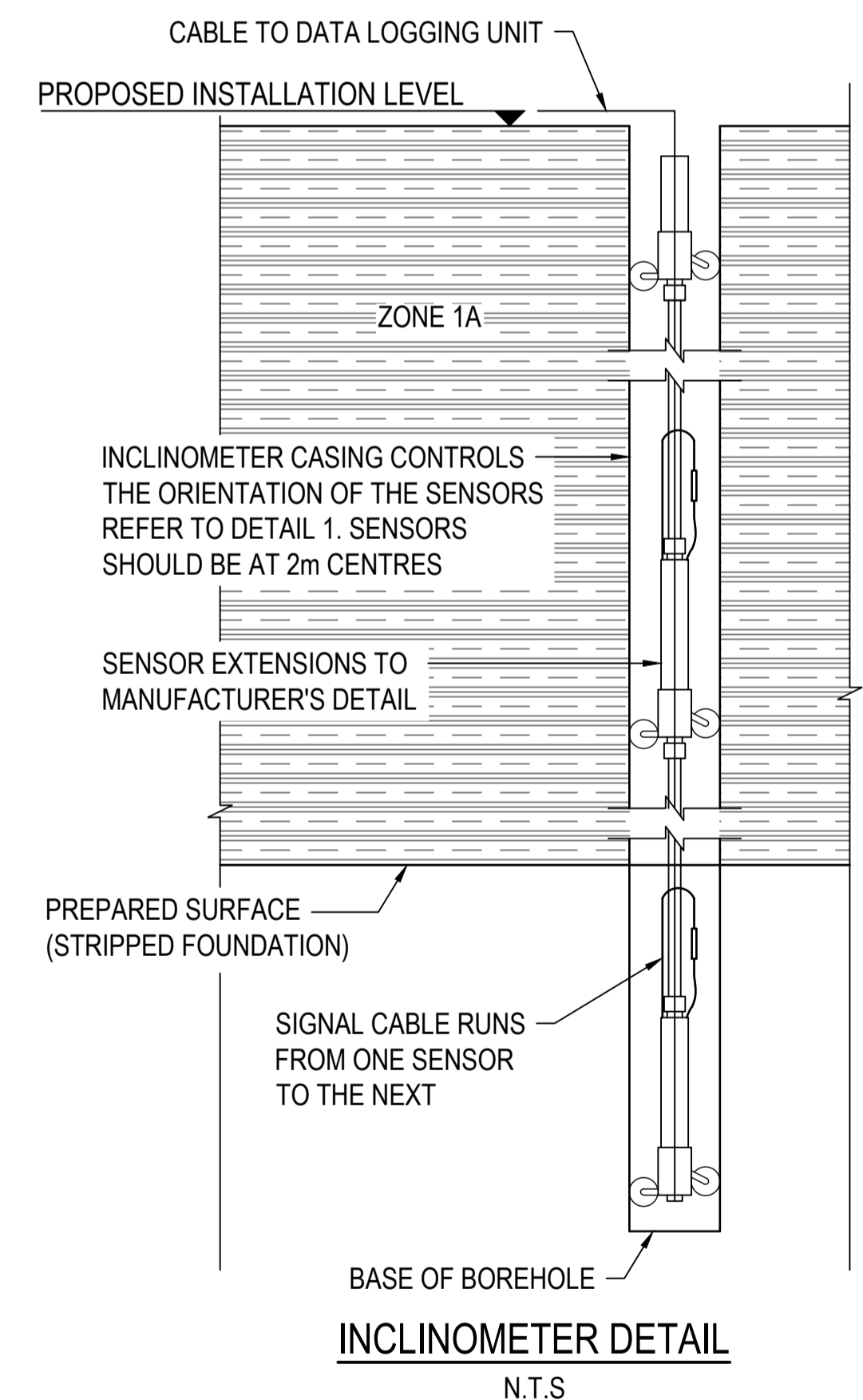
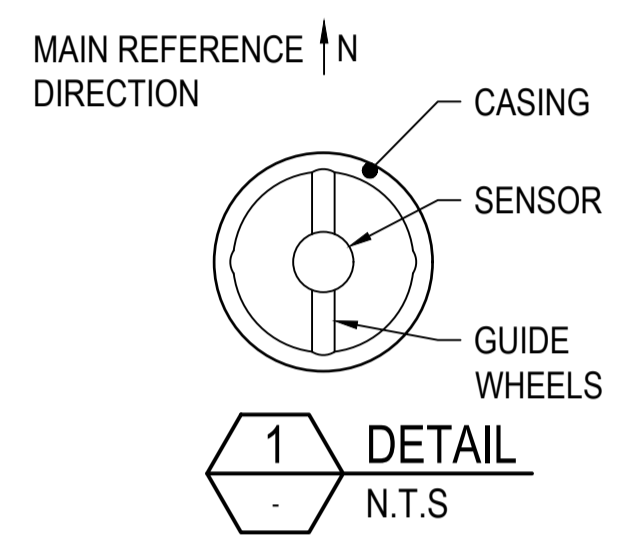
- LEGEND:**
- SURVEY MARKERS
  - INCLINOMETER / SETTLEMENT GAUGE

**INCLINOMETER SETOUT TABLE**

POINT	EASTING	NORTHING
IN01	412503	6250589
IN02	413148	6249711

**SURVEY MARKER SETOUT TABLE**

POINT	EASTING	NORTHING
SM01	412267	6250507
SM02	412456	6250572
SM03	412630	6250633
SM04	413033	6250514
SM05	413033	6250314
SM06	413033	6250114
SM07	413033	6249914
SM08	412839	6249713
SM09	413050	6249716
SM10	413251	6249713
SM11	413451	6249713
SM12	413651	6249713
SM13	413773	6250350
SM14	413851	6250529
SM15	413050	6249640
SM16	413243	6249640
SM17	413407	6249640

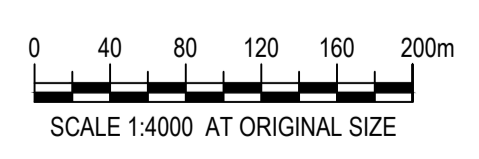


BASE SURVEY SUPPLIED BY:  
 TALISON LITHIUM PTY LTD  
 RECEIVED ON: 28 JULY 2021  
 CO-ORDINATE GRID: MGA 94-50  
 LEVEL DATUM: MINE DATUM

PLAN  
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**AS CONSTRUCTED**

BG	JF	CH	25/06/24
BG	ppCH	CH	20/12/22
BG	GB	ppGB	18/03/22
BG	GB	CH	19/01/22
Drawn	Job Manager	Project Director	Date



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TALISON LITHIUM PTY LTD  
 object TSF4 CELL 1  
 le INSTRUMENTATION PLAN  
 SURVEY MARKERS AND INCLINOMETERS  
 Drawing No: **61-37226-C029**  
 Rev: **3**

### Instrumentation Details for TSF1, TSF2, TSF3 and TSF4

TSF1	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata
	TSF1-CPT20-01	413,820.67	6,251,478.28	279.770	9/09/2020	Probedrill	TBC	2002732	16343	1	15.50	264.27	TBC
	TSF1-CPT20-02	413,911.29	6,251,484.20	272.700	12/10/2020	Hagstrom	TBC	2002725	16452	1	16.50	256.20	TBC
	TSF1-CPT20-03	413,843.87	6,251,004.37	281.860	16/09/2020	Probedrill	TBC	2002733	16698	1	16.50	265.36	TBC
	TSF1-CPT20-04	413,946.05	6,251,019.84	268.370	18/10/2020	Hagstrom	TBC	2002740	16709	1	20.00	248.37	TBC
	TSF1-CPT20-05	413,543.26	6,250,704.79	275.040	9/09/2020	Probedrill	TBC	2002731	16612	1	11.90	263.14	TBC
	TSF1-CPT20-06	413,554.33	6,250,567.77	267.850	13/10/2020	Hagstrom	TBC	2002739	16711	1	14.00	253.85	TBC
	TSF1-CPT20-07	413,060.39	6,250,701.19	275.010	9/09/2020	Probedrill	TBC	2002728	16756	1	16.60	258.41	TBC
	TSF1-CPT20-08	413,064.56	6,250,582.07	268.580	16/10/2020	Hagstrom	TBC	2002738	16368	1	25.00	243.58	TBC
	TSF1-CPT20-09	412,775.18	6,250,896.55	275.580	8/09/2020	Probedrill	TBC	2002730	16705	1	19.00	256.58	TBC
	TSF1-CPT20-10	412,781.50	6,251,174.76	275.820	9/09/2020	Probedrill	TBC	2002726	16432	1	21.00	254.82	TBC
	TSF1-CPT20-11	413,033.35	6,251,340.22	276.220	9/09/2020	Probedrill	TBC	2002727	16303	1	17.90	258.32	TBC
	TSF1-CPT20-12	413,292.92	6,251,620.49	277.890	14/09/2020	Probedrill	TBC	2002729	16315	1	16.00	261.89	TBC
	TSF1-CPT20-13	414,003.69	6,251,032.90	256.020	10/10/2020	Hagstrom	TBC	2002734	16704	1	11.50	244.52	TBC
	TSF1-CPT20-14	412,706.86	6,250,903.79	276.670	4/10/2020	Hagstrom	TBC	2002720	16652	1	18.00	258.67	TBC
	TSF1-CPT20-15	412,704.98	6,251,176.66	276.700	8/10/2020	Hagstrom	TBC	2002718	16675	1	18.00	258.70	TBC
	TSF1-CPT20-16	413,037.08	6,251,412.58	276.370	6/10/2020	Hagstrom	TBC	2002723	16412	1	16.50	259.87	TBC
TSF1-CPT20-17	413,188.84	6,251,638.07	274.990	2/10/2020	Hagstrom	TBC	2002736	16657	1	14.50	260.49	TBC	

TSF2	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata
	CPT2019-01A	412,445.00	6,251,001.00	258.580	21/06/2019	Groundwave	Slope Indicator	1901826	14440	1	25.00	233.58	Residual Soil
	CPT2019-01A			258.580	21/06/2019	Groundwave	Slope Indicator	1901828	14440	2	13.00	245.58	Embankment Fill - Earthfill
	CPT2019-01B	412,502.00	6,251,063.00	263.760	2/07/2019	Probedrill	Slope Indicator	1901851	15114	1	28.00	235.76	Residual Soil
	CPT2019-01B			263.760	2/07/2019	Probedrill	Slope Indicator	1901856	15114	3	15.00	248.76	Tailings - Granular
	CPT2019-01C	412,524.00	6,251,088.00	263.790	2/07/2019	Probedrill	Slope Indicator	1901823	15114	2	10.00	253.79	Tailings - Granular
	CPT2019-01C			263.790	2/07/2019	Probedrill	Slope Indicator	1901837	15114	4	23.00	240.79	Residual Soil
	CPT2019-02A	412,307.00	6,251,147.00	258.690	21/06/2019	Groundwave	Slope Indicator	1901842	14520	1	25.00	233.69	Residual Soil
	CPT2019-02A			258.690	21/06/2019	Groundwave	Slope Indicator	1901561	14520	2	15.00	243.69	Tailings - Cohesive
	CPT2019-02B	412,354.00	6,251,199.00	264.810	2/07/2019	Probedrill	Slope Indicator	1901852	15254	2	30.50	234.31	Residual Soil
	CPT2019-02B			264.810	2/07/2019	Probedrill	Slope Indicator	1901853	15254	3	28.00	236.81	Residual Soil
	CPT2019-02B			264.810	2/07/2019	Probedrill	Slope Indicator	1901854	15254	4	23.00	241.81	Tailings - Cohesive
	CPT2019-02C	412,377.00	6,251,220.00	264.990	5/07/2019	Probedrill	Slope Indicator	1901849	15254	1	25.00	239.99	Residual Soil
	CPT2019-02C			264.990	5/07/2019	Probedrill	Slope Indicator	1901832	15254	5	15.00	249.99	Tailings - Cohesive
	CPT2019-03A	412,199.00	6,251,277.00	258.970	20/06/2019	Groundwave	Slope Indicator	1901825	15212	1	23.00	235.97	Slimes
	CPT2019-03A			258.970	20/06/2019	Groundwave	Slope Indicator	1901559	15212	2	15.00	243.97	Tailings - Granular
	CPT2019-03B	412,237.00	6,251,285.00	268.390	27/06/2019	Probedrill	Soil Instruments	62511	15315	1	24.00	244.39	Tailings - Granular
	CPT2019-03C			264.940	4/07/2019	Probedrill	Slope Indicator	1901838	15315	2	15.00	249.94	Tailings - Granular
	CPT2019-03C			264.940	4/07/2019	Probedrill	Slope Indicator	1901839	15315	3	27.00	237.94	Slimes
	CPT2019-03C	412,302.00	6,251,302.00	264.940	4/07/2019	Probedrill	Slope Indicator	1901848	15315	4	33.00	231.94	Residual Soil
	CPT2019-04A			258.770	20/06/2019	Groundwave	Slope Indicator	1901830	15082	1	23.50	235.27	Tailings - Cohesive
	CPT2019-04A	412,264.00	6,251,510.00	258.770	20/06/2019	Groundwave	Slope Indicator	1901827	15082	2	16.00	242.77	Tailings - Granular
	CPT2019-04B			268.870	21/06/2019	Groundwave	Soil Instruments	62522	15082	3	37.00	231.87	Slimes
	CPT2019-04B	412,303.00	6,251,497.00	268.870	21/06/2019	Groundwave	Soil Instruments	62520	15082	4	25.00	243.87	Tailings - Granular
	CPT2019-04B			268.870	21/06/2019	Groundwave	Soil Instruments	62521	15082	5	34.00	234.87	Slimes
	CPT2019-04C	412,368.00	6,251,443.00	263.790	28/06/2019	Probedrill	Slope Indicator	1901845	15214	1	12.50	251.29	Tailings - Granular
	CPT2019-04C			263.790	28/06/2019	Probedrill	Slope Indicator	1901850	15214	2	25.00	238.79	Slimes
	CPT2019-05A	412,414.00	6,251,744.00	268.860	22/06/2019	Groundwave	Slope Indicator	1901844	14495	1	36.00	232.86	Residual Soil
	CPT2019-05A			268.860	22/06/2019	Groundwave	Slope Indicator	1901846	14495	2	33.00	235.86	Tailings - Granular
	CPT2019-05A			268.860	22/06/2019	Groundwave	Slope Indicator	1901858	14495	3	25.00	243.86	Tailings - Cohesive

CPT2019-05B	412,468.00	6,251,721.00	264.570	19/06/2019	Probedrill	Slope Indicator	1901841	15207	1	10.00	254.57	Tailings - Granular
CPT2019-05B			264.570	19/06/2019	Probedrill	Slope Indicator	1901833	15207	2	25.50	239.07	Tailings - Cohesive
CPT2019-05B			264.570	19/06/2019	Probedrill	Slope Indicator	1901834	15207	3	32.00	232.57	Residual Soil

TSF2-2020	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Location
	TSF2-CPT20-01	412,368.02	6,251,761.00	259.450	21/09/2020	Hagstrom	Slope Indicator	2002735	14495	5	47.00	212.45	Embankment-Upper Bench
	TSF2-CPT20-02	412,339.56	6,251,771.30	250.390	23/09/2020	Hagstrom	Slope Indicator	2002724	33221	5	31.00	219.39	Embankment-Lower Bench
	TSF2-CPT20-03	412,222.19	6,251,523.17	249.750	TBC	TBC	Slope Indicator	TBC	TBC	TBC	26.20	223.55	Embankment-Lower Bench
	TSF2-CPT20-04	412,266.69	6,251,619.99	249.930	10/09/2020	Probedrill	Slope Indicator	2002719	16316	1	22.26	227.67	Embankment-Lower Bench
	TSF2-CPT20-05	412,287.47	6,251,716.02	245.760	8/09/2020	Probedrill	Slope Indicator	2002737	33221	5	7.70	238.06	Toe Line
	TSF2-CPT20-06	412,339.68	6,251,837.76	246.490	TBC	Probedrill	Slope Indicator	TBC	TBC	TBC	13.60	232.89	Toe Line
	TSF2-CPT20-07	412,384.01	6,251,957.70	247.910	8/09/2020	TBC	Slope Indicator	2002722	16700	1	25.62	222.29	Toe Line
	TSF2-CPT20-08	412,426.09	6,252,077.46	250.980	TBC	TBC	Slope Indicator	TBC	TBC	TBC	4.32	246.66	Toe Line
	TSF2-CPT20-09	412,193.52	6,251,687.04	241.930	9/09/2020	TBC	Slope Indicator	TBC	TBC	TBC	10.80	231.13	Toe Line
	TSF2-CPT20-10	412,263.98	6,251,687.04	245.150	TBC	TBC	Slope Indicator	TBC	TBC	TBC	19.78	225.37	Toe Line
	TSF2-CPT20-11	412,320.18	6,251,777.80	245.860	TBC	TBC	Slope Indicator	TBC	TBC	TBC	15.22	230.64	Toe Line
	TSF2-CPT20-12	412,347.97	6,251,862.21	246.870	TBC	TBC	Slope Indicator	TBC	TBC	TBC	11.18	235.69	Toe Line
	TSF2-CPT20-13	412,409.56	6,252,025.70	248.980	TBC	Probedrill	Slope Indicator	2002721	16610	1	26.86	222.12	Toe Line

TSF2 2023 - Replacement VWPs	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata
	CPT2023-01A Deep	412,430.39	6,250,985.32	263.363	1/09/2023	Hagstrom	GeoMotion	80392	82610	1	29.80	233.56	Residual Soil
	CPT2023-01A Shallow			263.363	1/09/2023	Hagstrom	GeoMotion	80394		2	17.80	245.56	Embankment Fill
	CPT2023-01B Deep	412,501.80	6,251,062.30	280.564	1/09/2023	Probedrill	GeoMotion	80411	55618	1	44.90	235.66	Residual Soil
	CPT2023-01B Shallow			280.564	1/09/2023	Probedrill	GeoMotion	80407		2	31.90	248.66	Tailings - Granular
	CPT2023-01C Deep	412,519.15	6,251,083.49	279.813	1/09/2023	Probedrill	GeoMotion	80406	15207	2	39.10	240.71	Residual Soil
	CPT2023-01C Shallow			279.813	1/09/2023	Probedrill	GeoMotion	80412		1	26.00	253.81	Tailings - Granular
	CPT2023-02B Deep	412,354.46	6,251,198.49	280.726	1/09/2023	Probedrill	GeoMotion	78688	37285	2	46.40	234.33	Residual Soil
	CPT2023-02B Intermediate			280.726	1/09/2023	Probedrill	GeoMotion	78687		1	43.90	236.83	Residual Soil
	CPT2023-02B shallow			280.726	1/09/2023	Probedrill	GeoMotion	78704		3	38.90	241.83	Tailings - Cohesive
	CPT2023-03B	412,238.66	6,251,285.58	275.198	1/09/2023	Hagstrom	GeoMotion	80541	87285	1	30.80	244.40	Tailings - Granular
	CPT2023-04A Deep	412,253.44	6,251,513.47	261.242	1/09/2023	Hagstrom	GeoMotion	80544	84740	1	26.00	235.24	Tailings - Cohesive
	CPT2023-04A Shallow			261.242	1/09/2023	Hagstrom	GeoMotion	80389		2	18.50	242.74	Tailings - Granular
	CPT2023-04B	412,301.04	6,251,497.30	274.768	1/09/2023	Hagstrom	GeoMotion	80542	82245	1	29.80	244.97	Tailings - Granular
	CPT2023-05A	412,419.23	6,251,743.04	276.930	1/09/2023	Hagstrom	GeoMotion	78693	83838	1	38.30	238.63	Tailings - Granular
	CPT2023-05B Deep	412,467.93	6,251,722.14	278.346	1/09/2023	Probedrill	GeoMotion	80405	84610	1	45.85	232.50	Residual Soil
	CPT2023-05B Intermediate			278.346	1/09/2023	Probedrill	GeoMotion	80418		2	39.35	239.00	Tailings - Cohesive
	CPT2023-05B shallow			278.346	1/09/2023	Probedrill	GeoMotion	80417		3	23.85	254.50	Tailings - Granular

TSF3 2023	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata	
	TSF3-CPT01	411,887.20	6,250,511.00	256.575	8/09/2023	Probedrill	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Tailings
	TSF3-CPT02	411,898.30	6,250,383.00	256.806	8/09/2023	Probedrill	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Tailings
	TSF3-VWP2023-1A Shallow	411,836.04	6,250,736.83	259.420	22/09/2023	Hagstrom	GeoMotion	80537	82607	1	6.67	252.75	Embarkment	
	TSF3-VWP2023-1A Deep			259.420	22/09/2023	Hagstrom	GeoMotion	80543		2	10.67	248.75	Embarkment/Foundation	
	TSF3-VWP2023-2A Deep	411,884.02	6,250,732.54	259.463	22/09/2023	Hagstrom	GeoMotion	80545	81357	1	15.63	243.84	Embarkment	
	TSF3-VWP2023-2A Shallow			259.463	22/09/2023	Hagstrom	GeoMotion	80364		2	11.63	247.84	Embarkment/Foundation	
	TSF3-VWP2023-3A Shallow	411,920.22	6,250,729.34	259.505	22/09/2023	Hagstrom	GeoMotion	80395	83897	1	8.67	250.84	Embarkment	
	TSF3-VWP2023-3A Deep			259.505	22/09/2023	Hagstrom	GeoMotion	80209		2	12.67	246.84	Embarkment/Foundation	

TSF4 2018	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata
	VWP-01	412,856.30	6,249,618.30	255.800	25/07/2028		Slope indicator	1832267	43192	n/a	5.90	249.90	Soft Clay layer
	VWP-02	413,053.70	6,249,622.90	247.700	25/07/2028		Slope indicator	1701537	43153	n/a	7.20	240.50	Soft Clay layer
	VWP-03	413,131.70	6,249,626.20	246.400	25/07/2028		Slope indicator	1800720	43743	n/a	6.50	239.90	Soft Clay layer

TSF4 2023	TSF4 Cell 1													
	TSF4 - PZ01A	413,831.00	6,250,518.00	259.760		Geo-motion	Soil instruments	80246	85313	1	0.96	258.80		
	TSF4 - PZ01B			Not Installed										
	TSF4 - PZ01C	413,863.00	6,250,518.00	264.700		Geo-motion	Geosense	369097	85313	2	1.50	263.20		
	TSF4 - PZ01D			264.700		Geo-motion	Geosense	369093	85313	3	10.10	254.60		
	TSF4 - PZ01E	413,870.00	6,250,518.00	264.900		Geo-motion	Geosense	369101	85313	4	1.50	263.40		
	TSF4 - PZ01F			264.900		Geo-motion	Geosense	369085	85313	5	7.20	257.70		
	TSF4 - PZ02A	413,536.00	6,249,743.00	254.700		Geo-motion	Soil instruments	80320	89602	1	0.80	253.90		
	TSF4 - PZ02B			254.700		Geo-motion	Soil instruments	79276	85252	1	-1.20	255.90		
	TSF4 - PZ02C	413,536.04	6,249,700.96	265.000		Geo-motion	Geosense	369099	85252	2	4.70	260.30		
	TSF4 - PZ02D			265.000		Geo-motion	Geosense	369081	85252	3	14.70	250.30		
	TSF4 - PZ02E	413,536.09	6,249,685.00	265.000		Geo-motion	Geosense	369096	85252	4	4.20	260.80		
	TSF4 - PZ02F			265.000		Geo-motion	Soil instruments	79269	85252	5	11.20	253.80		
	TSF4 - PZ03A	413,161.00	6,249,753.00			Geo-motion	Soil instruments	79266	85347	1		249.40	Suspended piezometer	
	TSF4 - PZ03B					Geo-motion	Soil instruments	79267	85347	2		251.40	Suspended piezometer	
	TSF4 - PZ03C	413,160.85	6,249,701.01	265.000		Geo-motion	Soil instruments	77969	85347	3	14.00	251.00		
	TSF4 - PZ03D			265.000		Geo-motion	Geosense	369092	85347	4	24.00	241.00		
	TSF4 - PZ03E	413,161.15	6,249,666.01	260.100		Geo-motion	Geosense	369446	85357	1	9.40	250.70		
	TSF4 - PZ03F			260.100		Geo-motion	Geosense	369441	85357	2	16.40	243.70		
	TSF4 - PZ07	413,882.00	6,250,485.00	264.900		Geo-motion	Geosense	369094	119004	1	14.90	250.00		
	TSF4 - PZ08	413,327.07	6,249,679.04	264.900		Geo-motion	Geosense	369100	85357	3	30.90	234.00		
	TSF4 - PZ10	413,394.00	6,249,627.00	254.100		Geo-motion	Geosense	369095	85347	5	5.70	248.40		
	TSF4 - PZ11	413,411.00	6,249,641.00	254.100		Geo-motion	Geosense	369090	85357	4	5.70	248.40		
	TSF4 Cell 2													
	TSF4 - PZ04A	412,867.00	6,249,746.25	256.157		Geo-motion	Geosense	369041	85305	1	0.65	255.51		
	TSF4 - PZ04B	Not Installed												
	TSF4 - PZ04C	412,867.00	6,249,701.00	264.800		Geo-motion	Geosense	369088	85305	2	3.60	261.20		
	TSF4 - PZ04D			264.800		Geo-motion	Geosense	369089	85305	3	13.60	251.20		
TSF4 - PZ04E	412,867.00	6,249,686.00	264.800		Geo-motion	Geosense	369087	85305	4	3.70	261.10			
TSF4 - PZ04F			264.800		Geo-motion	Geosense	369084	85305	5	10.70	254.10			

TSF4 - PZ05A	412,428.41	6,250,613.97	262.400		Geo-motion	Soil instruments	79292	85299	1	5.70	256.70	
TSF4 - PZ05B			262.400		Geo-motion	Soil instruments	80241	85299	2	15.70	246.70	
TSF4 - PZ05C	412,444.19	6,250,568.48	265.700		Geo-motion	Soil instruments	79283	85299	3	8.10	257.60	
TSF4 - PZ05D			265.700		Geo-motion	Soil instruments	79273	85299	4	18.10	247.60	
TSF4 - PZ05E	412,459.56	6,250,523.85	257.100		Geo-motion	Geosense	369060	85299	5	0.00	257.10	
TSF4 - PZ06A	412,515.21	6,250,644.07	262.500		Geo-motion	Soil instruments	79270	84235	1	6.80	255.70	
TSF4 - PZ06B			262.500		Geo-motion	Soil instruments	79264	84235	2	16.80	245.70	
TSF4 - PZ06C	412,530.99	6,250,598.58	265.700		Geo-motion	Soil instruments	79293	84235	3	7.20	258.50	
TSF4 - PZ06D			265.700		Geo-motion	Soil instruments	80311	84235	4	17.20	248.50	
TSF4 - PZ06E	412,557.00	6,250,593.00	255.000		Geomotion	Soil instruments	80229	84235	5	0.90	254.10	
<b>Divider wall</b>												
TSF4 - PZ09A	413,014.00	6,250,010.00	264.900		Geo-motion	Geosense	370015	84367	1	15.40	249.50	
TSF4 - PZ09B			264.900		Geo-motion	Geosense	370006	84367	2	5.40	259.50	

# **Appendix C**

**Instrumentation details**

### Instrumentation Details for TSF1, TSF2, TSF3 and TSF4

TSF1	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata
	TSF1-CPT20-01	413,820.67	6,251,478.28	279.770	9/09/2020	Probedrill	TBC	2002732	16343	1	15.50	264.27	TBC
	TSF1-CPT20-02	413,911.29	6,251,484.20	272.700	12/10/2020	Hagstrom	TBC	2002725	16452	1	16.50	256.20	TBC
	TSF1-CPT20-03	413,843.87	6,251,004.37	281.860	16/09/2020	Probedrill	TBC	2002733	16698	1	16.50	265.36	TBC
	TSF1-CPT20-04	413,946.05	6,251,019.84	268.370	18/10/2020	Hagstrom	TBC	2002740	16709	1	20.00	248.37	TBC
	TSF1-CPT20-05	413,543.26	6,250,704.79	275.040	9/09/2020	Probedrill	TBC	2002731	16612	1	11.90	263.14	TBC
	TSF1-CPT20-06	413,554.33	6,250,567.77	267.850	13/10/2020	Hagstrom	TBC	2002739	16711	1	14.00	253.85	TBC
	TSF1-CPT20-07	413,060.39	6,250,701.19	275.010	9/09/2020	Probedrill	TBC	2002728	16756	1	16.60	258.41	TBC
	TSF1-CPT20-08	413,064.56	6,250,582.07	268.580	16/10/2020	Hagstrom	TBC	2002738	16368	1	25.00	243.58	TBC
	TSF1-CPT20-09	412,775.18	6,250,896.55	275.580	8/09/2020	Probedrill	TBC	2002730	16705	1	19.00	256.58	TBC
	TSF1-CPT20-10	412,781.50	6,251,174.76	275.820	9/09/2020	Probedrill	TBC	2002726	16432	1	21.00	254.82	TBC
	TSF1-CPT20-11	413,033.35	6,251,340.22	276.220	9/09/2020	Probedrill	TBC	2002727	16303	1	17.90	258.32	TBC
	TSF1-CPT20-12	413,292.92	6,251,620.49	277.890	14/09/2020	Probedrill	TBC	2002729	16315	1	16.00	261.89	TBC
	TSF1-CPT20-13	414,003.69	6,251,032.90	256.020	10/10/2020	Hagstrom	TBC	2002734	16704	1	11.50	244.52	TBC
	TSF1-CPT20-14	412,706.86	6,250,903.79	276.670	4/10/2020	Hagstrom	TBC	2002720	16652	1	18.00	258.67	TBC
	TSF1-CPT20-15	412,704.98	6,251,176.66	276.700	8/10/2020	Hagstrom	TBC	2002718	16675	1	18.00	258.70	TBC
	TSF1-CPT20-16	413,037.08	6,251,412.58	276.370	6/10/2020	Hagstrom	TBC	2002723	16412	1	16.50	259.87	TBC
TSF1-CPT20-17	413,188.84	6,251,638.07	274.990	2/10/2020	Hagstrom	TBC	2002736	16657	1	14.50	260.49	TBC	

TSF2	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata
	CPT2019-01A	412,445.00	6,251,001.00	258.580	21/06/2019	Groundwave	Slope Indicator	1901826	14440	1	25.00	233.58	Residual Soil
	CPT2019-01A			258.580	21/06/2019	Groundwave	Slope Indicator	1901828	14440	2	13.00	245.58	Embankment Fill - Earthfill
	CPT2019-01B	412,502.00	6,251,063.00	263.760	2/07/2019	Probedrill	Slope Indicator	1901851	15114	1	28.00	235.76	Residual Soil
	CPT2019-01B			263.760	2/07/2019	Probedrill	Slope Indicator	1901856	15114	3	15.00	248.76	Tailings - Granular
	CPT2019-01C	412,524.00	6,251,088.00	263.790	2/07/2019	Probedrill	Slope Indicator	1901823	15114	2	10.00	253.79	Tailings - Granular
	CPT2019-01C			263.790	2/07/2019	Probedrill	Slope Indicator	1901837	15114	4	23.00	240.79	Residual Soil
	CPT2019-02A	412,307.00	6,251,147.00	258.690	21/06/2019	Groundwave	Slope Indicator	1901842	14520	1	25.00	233.69	Residual Soil
	CPT2019-02A			258.690	21/06/2019	Groundwave	Slope Indicator	1901561	14520	2	15.00	243.69	Tailings - Cohesive
	CPT2019-02B	412,354.00	6,251,199.00	264.810	2/07/2019	Probedrill	Slope Indicator	1901852	15254	2	30.50	234.31	Residual Soil
	CPT2019-02B			264.810	2/07/2019	Probedrill	Slope Indicator	1901853	15254	3	28.00	236.81	Residual Soil
	CPT2019-02B			264.810	2/07/2019	Probedrill	Slope Indicator	1901854	15254	4	23.00	241.81	Tailings - Cohesive
	CPT2019-02C	412,377.00	6,251,220.00	264.990	5/07/2019	Probedrill	Slope Indicator	1901849	15254	1	25.00	239.99	Residual Soil
	CPT2019-02C			264.990	5/07/2019	Probedrill	Slope Indicator	1901832	15254	5	15.00	249.99	Tailings - Cohesive
	CPT2019-03A	412,199.00	6,251,277.00	258.970	20/06/2019	Groundwave	Slope Indicator	1901825	15212	1	23.00	235.97	Slimes
	CPT2019-03A			258.970	20/06/2019	Groundwave	Slope Indicator	1901559	15212	2	15.00	243.97	Tailings - Granular
	CPT2019-03B	412,237.00	6,251,285.00	268.390	27/06/2019	Probedrill	Soil Instruments	62511	15315	1	24.00	244.39	Tailings - Granular
	CPT2019-03C			264.940	4/07/2019	Probedrill	Slope Indicator	1901838	15315	2	15.00	249.94	Tailings - Granular
	CPT2019-03C			264.940	4/07/2019	Probedrill	Slope Indicator	1901839	15315	3	27.00	237.94	Slimes
	CPT2019-03C	412,302.00	6,251,302.00	264.940	4/07/2019	Probedrill	Slope Indicator	1901848	15315	4	33.00	231.94	Residual Soil
	CPT2019-04A			258.770	20/06/2019	Groundwave	Slope Indicator	1901830	15082	1	23.50	235.27	Tailings - Cohesive
	CPT2019-04A	412,264.00	6,251,510.00	258.770	20/06/2019	Groundwave	Slope Indicator	1901827	15082	2	16.00	242.77	Tailings - Granular
	CPT2019-04B			268.870	21/06/2019	Groundwave	Soil Instruments	62522	15082	3	37.00	231.87	Slimes
	CPT2019-04B	412,303.00	6,251,497.00	268.870	21/06/2019	Groundwave	Soil Instruments	62520	15082	4	25.00	243.87	Tailings - Granular
	CPT2019-04B			268.870	21/06/2019	Groundwave	Soil Instruments	62521	15082	5	34.00	234.87	Slimes
	CPT2019-04C	412,368.00	6,251,443.00	263.790	28/06/2019	Probedrill	Slope Indicator	1901845	15214	1	12.50	251.29	Tailings - Granular
	CPT2019-04C			263.790	28/06/2019	Probedrill	Slope Indicator	1901850	15214	2	25.00	238.79	Slimes
	CPT2019-05A	412,414.00	6,251,744.00	268.860	22/06/2019	Groundwave	Slope Indicator	1901844	14495	1	36.00	232.86	Residual Soil
	CPT2019-05A			268.860	22/06/2019	Groundwave	Slope Indicator	1901846	14495	2	33.00	235.86	Tailings - Granular
	CPT2019-05A			268.860	22/06/2019	Groundwave	Slope Indicator	1901858	14495	3	25.00	243.86	Tailings - Cohesive

CPT2019-05B	412,468.00	6,251,721.00	264.570	19/06/2019	Probedrill	Slope Indicator	1901841	15207	1	10.00	254.57	Tailings - Granular
CPT2019-05B			264.570	19/06/2019	Probedrill	Slope Indicator	1901833	15207	2	25.50	239.07	Tailings - Cohesive
CPT2019-05B			264.570	19/06/2019	Probedrill	Slope Indicator	1901834	15207	3	32.00	232.57	Residual Soil

TSF2-2020	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Location
	TSF2-CPT20-01	412,368.02	6,251,761.00	259.450	21/09/2020	Hagstrom	Slope Indicator	2002735	14495	5	47.00	212.45	Embankment-Upper Bench
	TSF2-CPT20-02	412,339.56	6,251,771.30	250.390	23/09/2020	Hagstrom	Slope Indicator	2002724	33221	5	31.00	219.39	Embankment-Lower Bench
	TSF2-CPT20-03	412,222.19	6,251,523.17	249.750	TBC	TBC	Slope Indicator	TBC	TBC	TBC	26.20	223.55	Embankment-Lower Bench
	TSF2-CPT20-04	412,266.69	6,251,619.99	249.930	10/09/2020	Probedrill	Slope Indicator	2002719	16316	1	22.26	227.67	Embankment-Lower Bench
	TSF2-CPT20-05	412,287.47	6,251,716.02	245.760	8/09/2020	Probedrill	Slope Indicator	2002737	33221	5	7.70	238.06	Toe Line
	TSF2-CPT20-06	412,339.68	6,251,837.76	246.490	TBC	Probedrill	Slope Indicator	TBC	TBC	TBC	13.60	232.89	Toe Line
	TSF2-CPT20-07	412,384.01	6,251,957.70	247.910	8/09/2020	TBC	Slope Indicator	2002722	16700	1	25.62	222.29	Toe Line
	TSF2-CPT20-08	412,426.09	6,252,077.46	250.980	TBC	TBC	Slope Indicator	TBC	TBC	TBC	4.32	246.66	Toe Line
	TSF2-CPT20-09	412,193.52	6,251,687.04	241.930	9/09/2020	TBC	Slope Indicator	TBC	TBC	TBC	10.80	231.13	Toe Line
	TSF2-CPT20-10	412,263.98	6,251,687.04	245.150	TBC	TBC	Slope Indicator	TBC	TBC	TBC	19.78	225.37	Toe Line
	TSF2-CPT20-11	412,320.18	6,251,777.80	245.860	TBC	TBC	Slope Indicator	TBC	TBC	TBC	15.22	230.64	Toe Line
	TSF2-CPT20-12	412,347.97	6,251,862.21	246.870	TBC	TBC	Slope Indicator	TBC	TBC	TBC	11.18	235.69	Toe Line
	TSF2-CPT20-13	412,409.56	6,252,025.70	248.980	TBC	Probedrill	Slope Indicator	2002721	16610	1	26.86	222.12	Toe Line

TSF2 2023 - Replacement VWPs	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata
	CPT2023-01A Deep	412,430.39	6,250,985.32	263.363	1/09/2023	Hagstrom	GeoMotion	80392	82610	1	29.80	233.56	Residual Soil
	CPT2023-01A Shallow			263.363	1/09/2023	Hagstrom	GeoMotion	80394		2	17.80	245.56	Embankment Fill
	CPT2023-01B Deep	412,501.80	6,251,062.30	280.564	1/09/2023	Probedrill	GeoMotion	80411	55618	1	44.90	235.66	Residual Soil
	CPT2023-01B Shallow			280.564	1/09/2023	Probedrill	GeoMotion	80407		2	31.90	248.66	Tailings - Granular
	CPT2023-01C Deep	412,519.15	6,251,083.49	279.813	1/09/2023	Probedrill	GeoMotion	80406	15207	2	39.10	240.71	Residual Soil
	CPT2023-01C Shallow			279.813	1/09/2023	Probedrill	GeoMotion	80412		1	26.00	253.81	Tailings - Granular
	CPT2023-02B Deep	412,354.46	6,251,198.49	280.726	1/09/2023	Probedrill	GeoMotion	78688	37285	2	46.40	234.33	Residual Soil
	CPT2023-02B Intermediate			280.726	1/09/2023	Probedrill	GeoMotion	78687		1	43.90	236.83	Residual Soil
	CPT2023-02B shallow			280.726	1/09/2023	Probedrill	GeoMotion	78704		3	38.90	241.83	Tailings - Cohesive
	CPT2023-03B	412,238.66	6,251,285.58	275.198	1/09/2023	Hagstrom	GeoMotion	80541	87285	1	30.80	244.40	Tailings - Granular
	CPT2023-04A Deep	412,253.44	6,251,513.47	261.242	1/09/2023	Hagstrom	GeoMotion	80544	84740	1	26.00	235.24	Tailings - Cohesive
	CPT2023-04A Shallow			261.242	1/09/2023	Hagstrom	GeoMotion	80389		2	18.50	242.74	Tailings - Granular
	CPT2023-04B	412,301.04	6,251,497.30	274.768	1/09/2023	Hagstrom	GeoMotion	80542	82245	1	29.80	244.97	Tailings - Granular
	CPT2023-05A	412,419.23	6,251,743.04	276.930	1/09/2023	Hagstrom	GeoMotion	78693	83838	1	38.30	238.63	Tailings - Granular
	CPT2023-05B Deep	412,467.93	6,251,722.14	278.346	1/09/2023	Probedrill	GeoMotion	80405	84610	1	45.85	232.50	Residual Soil
	CPT2023-05B Intermediate			278.346	1/09/2023	Probedrill	GeoMotion	80418		2	39.35	239.00	Tailings - Cohesive
	CPT2023-05B shallow			278.346	1/09/2023	Probedrill	GeoMotion	80417		3	23.85	254.50	Tailings - Granular

TSF3 2023	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata	
	TSF3-CPT01	411,887.20	6,250,511.00	256.575	8/09/2023	Probedrill	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Tailings
	TSF3-CPT02	411,898.30	6,250,383.00	256.806	8/09/2023	Probedrill	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Tailings
	TSF3-VWP2023-1A Shallow	411,836.04	6,250,736.83	259.420	22/09/2023	Hagstrom	GeoMotion	80537	82607	1	6.67	252.75	Embankment	
	TSF3-VWP2023-1A Deep			259.420	22/09/2023	Hagstrom	GeoMotion	80543		2	10.67	248.75	Embankment/Foundation	
	TSF3-VWP2023-2A Deep	411,884.02	6,250,732.54	259.463	22/09/2023	Hagstrom	GeoMotion	80545	81357	1	15.63	243.84	Embankment	
	TSF3-VWP2023-2A Shallow			259.463	22/09/2023	Hagstrom	GeoMotion	80364		2	11.63	247.84	Embankment/Foundation	
	TSF3-VWP2023-3A Shallow	411,920.22	6,250,729.34	259.505	22/09/2023	Hagstrom	GeoMotion	80395	83897	1	8.67	250.84	Embankment	
	TSF3-VWP2023-3A Deep			259.505	22/09/2023	Hagstrom	GeoMotion	80209		2	12.67	246.84	Embankment/Foundation	

TSF4 2018	CPT ID	Easting (m)	Northing (m)	CPT RL (m)	Date Installed	Installer	VWP Manufacturer	VWP Serial #	Readout box ID Node	Channel No	Depth (m)	VWP Sensor RL (m)	Target Strata
	VWP-01	412,856.30	6,249,618.30	255.800	25/07/2028		Slope indicator	1832267	43192	n/a	5.90	249.90	Soft Clay layer
	VWP-02	413,053.70	6,249,622.90	247.700	25/07/2028		Slope indicator	1701537	43153	n/a	7.20	240.50	Soft Clay layer
	VWP-03	413,131.70	6,249,626.20	246.400	25/07/2028		Slope indicator	1800720	43743	n/a	6.50	239.90	Soft Clay layer

TSF4 2023	TSF4 Cell 1													
	TSF4 - PZ01A	413,831.00	6,250,518.00	259.760		Geo-motion	Soil instruments	80246	85313	1	0.96	258.80		
	TSF4 - PZ01B			Not Installed										
	TSF4 - PZ01C	413,863.00	6,250,518.00	264.700		Geo-motion	Geosense	369097	85313	2	1.50	263.20		
	TSF4 - PZ01D			264.700		Geo-motion	Geosense	369093	85313	3	10.10	254.60		
	TSF4 - PZ01E	413,870.00	6,250,518.00	264.900		Geo-motion	Geosense	369101	85313	4	1.50	263.40		
	TSF4 - PZ01F			264.900		Geo-motion	Geosense	369085	85313	5	7.20	257.70		
	TSF4 - PZ02A	413,536.00	6,249,743.00	254.700		Geo-motion	Soil instruments	80320	89602	1	0.80	253.90		
	TSF4 - PZ02B			254.700		Geo-motion	Soil instruments	79276	85252	1	-1.20	255.90		
	TSF4 - PZ02C	413,536.04	6,249,700.96	265.000		Geo-motion	Geosense	369099	85252	2	4.70	260.30		
	TSF4 - PZ02D			265.000		Geo-motion	Geosense	369081	85252	3	14.70	250.30		
	TSF4 - PZ02E	413,536.09	6,249,685.00	265.000		Geo-motion	Geosense	369096	85252	4	4.20	260.80		
	TSF4 - PZ02F			265.000		Geo-motion	Soil instruments	79269	85252	5	11.20	253.80		
	TSF4 - PZ03A	413,161.00	6,249,753.00			Geo-motion	Soil instruments	79266	85347	1		249.40	Suspended piezometer	
	TSF4 - PZ03B					Geo-motion	Soil instruments	79267	85347	2		251.40	Suspended piezometer	
	TSF4 - PZ03C	413,160.85	6,249,701.01	265.000		Geo-motion	Soil instruments	77969	85347	3	14.00	251.00		
	TSF4 - PZ03D			265.000		Geo-motion	Geosense	369092	85347	4	24.00	241.00		
	TSF4 - PZ03E	413,161.15	6,249,666.01	260.100		Geo-motion	Geosense	369446	85357	1	9.40	250.70		
	TSF4 - PZ03F			260.100		Geo-motion	Geosense	369441	85357	2	16.40	243.70		
	TSF4 - PZ07	413,882.00	6,250,485.00	264.900		Geo-motion	Geosense	369094	119004	1	14.90	250.00		
	TSF4 - PZ08	413,327.07	6,249,679.04	264.900		Geo-motion	Geosense	369100	85357	3	30.90	234.00		
	TSF4 - PZ10	413,394.00	6,249,627.00	254.100		Geo-motion	Geosense	369095	85347	5	5.70	248.40		
	TSF4 - PZ11	413,411.00	6,249,641.00	254.100		Geo-motion	Geosense	369090	85357	4	5.70	248.40		
	TSF4 Cell 2													
	TSF4 - PZ04A	412,867.00	6,249,746.25	256.157		Geo-motion	Geosense	369041	85305	1	0.65	255.51		
	TSF4 - PZ04B			Not Installed										
	TSF4 - PZ04C	412,867.00	6,249,701.00	264.800		Geo-motion	Geosense	369088	85305	2	3.60	261.20		
	TSF4 - PZ04D			264.800		Geo-motion	Geosense	369089	85305	3	13.60	251.20		
TSF4 - PZ04E	412,867.00	6,249,686.00	264.800		Geo-motion	Geosense	369087	85305	4	3.70	261.10			
TSF4 - PZ04F			264.800		Geo-motion	Geosense	369084	85305	5	10.70	254.10			

TSF4 - PZ05A	412,428.41	6,250,613.97	262.400		Geo-motion	Soil instruments	79292	85299	1	5.70	256.70	
TSF4 - PZ05B			262.400		Geo-motion	Soil instruments	80241	85299	2	15.70	246.70	
TSF4 - PZ05C	412,444.19	6,250,568.48	265.700		Geo-motion	Soil instruments	79283	85299	3	8.10	257.60	
TSF4 - PZ05D			265.700		Geo-motion	Soil instruments	79273	85299	4	18.10	247.60	
TSF4 - PZ05E	412,459.56	6,250,523.85	257.100		Geo-motion	Geosense	369060	85299	5	0.00	257.10	
TSF4 - PZ06A	412,515.21	6,250,644.07	262.500		Geo-motion	Soil instruments	79270	84235	1	6.80	255.70	
TSF4 - PZ06B			262.500		Geo-motion	Soil instruments	79264	84235	2	16.80	245.70	
TSF4 - PZ06C	412,530.99	6,250,598.58	265.700		Geo-motion	Soil instruments	79293	84235	3	7.20	258.50	
TSF4 - PZ06D			265.700		Geo-motion	Soil instruments	80311	84235	4	17.20	248.50	
TSF4 - PZ06E	412,557.00	6,250,593.00	255.000		Geomotion	Soil instruments	80229	84235	5	0.90	254.10	
<b>Divider wall</b>												
TSF4 - PZ09A	413,014.00	6,250,010.00	264.900		Geo-motion	Geosense	370015	84367	1	15.40	249.50	
TSF4 - PZ09B			264.900		Geo-motion	Geosense	370006	84367	2	5.40	259.50	

# **Appendix D**

**Piezometer reports**

# General Piezometer Report

## Report Information

Reporting Period: 01-07-2025 to 30-09-2025

Date of Issue: 07-10-2025

Prepared For: Talison Greenbushes

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# 1. Summary

This document provides a general inventory and detailed statistical overview of all active piezometers for the period from **01-07-2025 to 30-09-2025**. The report is structured by Tailings Storage Facility (TSF) and then by individual monitoring sections.

## 2. General Inventory

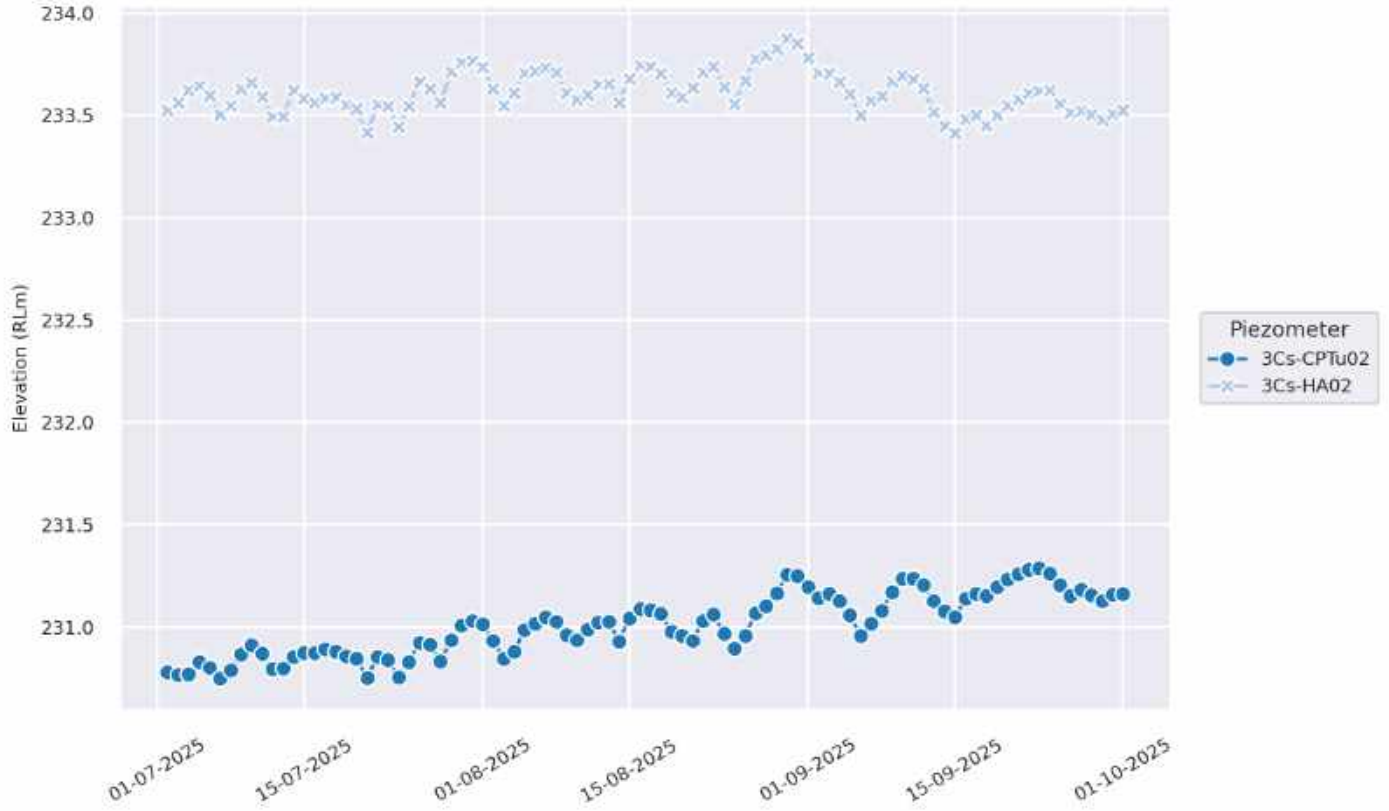
### 2.1. 3Cs TSF

Name	Piezo ID	Section	Status	Current RLM	Last Reading	TARPS
3Cs-CPTu02	80414	Section-Default	Active	231.138	07-10-2025 14:00	-
3Cs-HA01	80404	Section-Default	Disconnected	-	-	-
3Cs-HA02	80393	Section-Default	Active	233.579	07-10-2025 14:00	-

**Section: Section-Default**

Piezometer	Min (kPa)	Max (kPa)	Average (kPa)	Q1 - Q3 (kPa)	TARPS
3Cs-CPTu02	230.69	231.3	231.01	230.88 - 231.14	-
3Cs-HA02	233.35	233.89	233.61	233.54 - 233.69	-

Combined elevation readings for section



Time Series of 3Cs-CPTu02 (80414)



Time Series of 3Cs-HA02 (80393)



## 2.2. TSF1

Name	Piezo ID	Section	Status	Current RLM	Last Reading	TARPS
TSF1-CPT20-01	2002732	-	Disconnected	270.341	12-09-2024 20:30	-
TSF1-CPT20-02	2002725	-	Active	257.016	07-10-2025 14:00	-
TSF1-CPT20-03	2002733	-	Disconnected	268.940	28-10-2024 10:00	-
TSF1-CPT20-04	2002740	-	Archived	-	-	-
TSF1-CPT20-05	2002731	-	Archived	268.848	16-05-2023 16:00	-
TSF1-CPT20-06	2002739	-	Active	255.399	07-10-2025 14:00	-
TSF1-CPT20-07	2002728	-	Archived	266.402	01-07-2023 00:00	-
TSF1-CPT20-08	2002738	-	Disconnected	255.583	30-04-2025 14:30	-
TSF1-CPT20-09	2002730	-	Archived	-	-	-
TSF1-CPT20-10	2002726	-	Archived	-	-	-
TSF1-CPT20-11	2002727	-	Archived	-	-	-
TSF1-CPT20-13	2002734	-	Archived	-	-	-
TSF1-CPT20-14	2002720	-	Archived	263.242	16-05-2023 16:00	-
TSF1-CPT20-15	2002718	-	Archived	-	-	-
TSF1-CPT20-16	2002723	-	Disconnected	267.735	11-07-2025 16:00	-

**Section: -**

Piezometer	Min (kPa)	Max (kPa)	Average (kPa)	Q1 - Q3 (kPa)	TARPS
TSF1-CPT20-02	256.25	257.05	256.51	256.33 - 256.69	-
TSF1-CPT20-06	255.09	255.62	255.38	255.3 - 255.46	-
TSF1-CPT20-16	266.81	267.86	267.5	267.25 - 267.84	-

Combined elevation readings for section



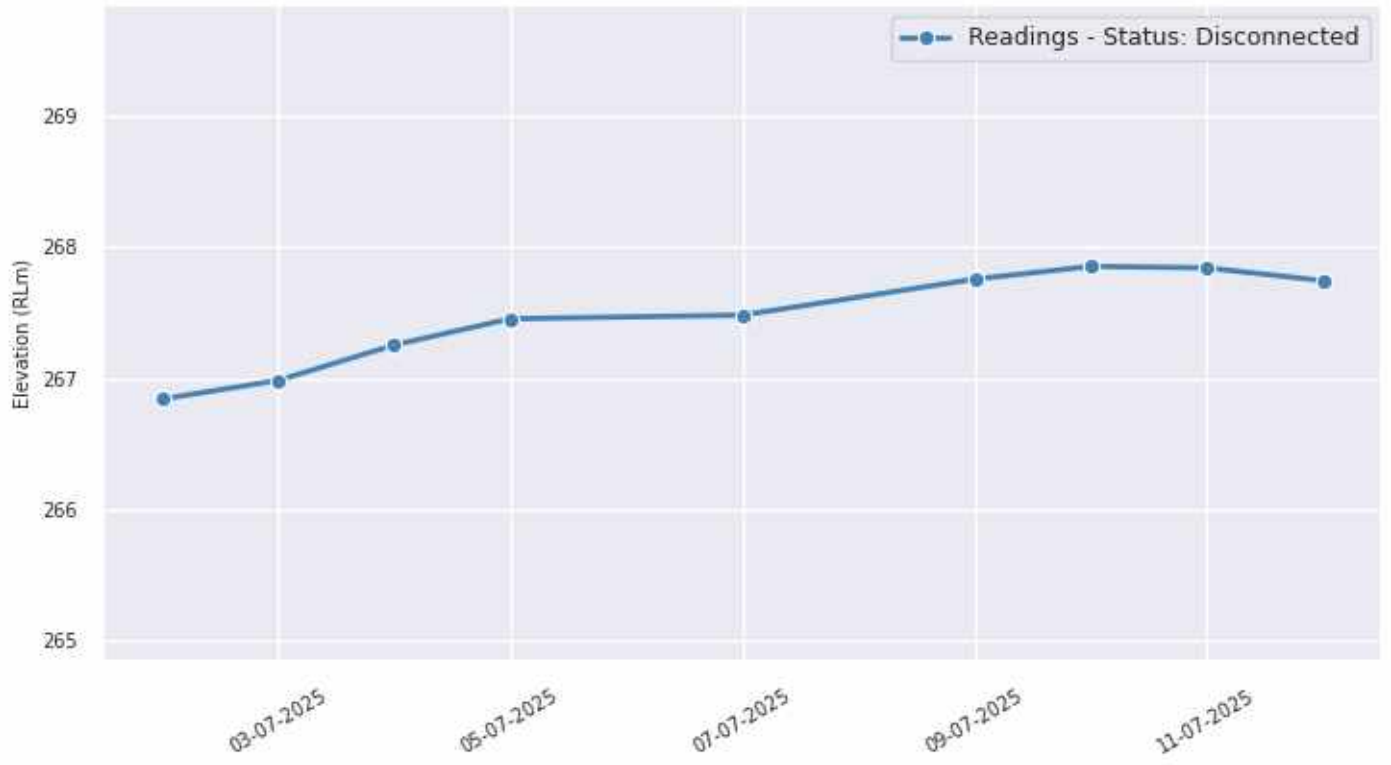
Time Series of TSF1-CPT20-02 (2002725)



Time Series of TSF1-CPT20-06 (2002739)



Time Series of TSF1-CPT20-16 (2002723)



## 2.3. TSF2

Name	Piezo ID	Section	Status	Current RLM	Last Reading	TARPS
CPT2019-01A	1901826	Section A	Archived	-	-	250.000
CPT2019-01A	1901828	Section A	Archived	-	-	250.000
CPT2019-01B	1901856	Section A	Archived	-	-	259.000
CPT2019-01B	1901851	Section A	Archived	-	-	259.000
CPT2019-01C	1901837	Section A	Archived	-	-	263.000
CPT2019-01C	1901823	Section A	Archived	-	-	263.000
CPT2023-01A Deep	80394	Section A	Active	246.915	07-10-2025 14:00	250.000
CPT2023-01A Shallow	80392	Section A	TARP Warning	251.883	07-10-2025 14:00	253.000
CPT2023-01B Deep	80411	Section A	Active	252.696	07-10-2025 14:00	258.000
CPT2023-01B Shallow	80407	Section A	Active	251.541	07-10-2025 14:00	260.000
CPT2023-01C Deep	80406	Section A	Active	253.088	07-10-2025 14:00	260.000
CPT2023-01C Shallow	80412	Section A	Active	253.770	07-10-2025 14:00	263.000
CPT2019-02A Deep	1901842	Section B	TARP Warning	246.084	07-10-2025 14:00	247.500
CPT2019-02A Shallow	1901561	Section B	Archived	270.863	17-06-2025 12:00	248.500
CPT2019-02B	1901852	Section B	Archived	-	-	257.300
CPT2019-02B	1901854	Section B	Archived	-	-	257.300
CPT2019-02B	1901853	Section B	Archived	-	-	257.300
CPT2019-02C Deep	1901849	Section B	Active	249.308	07-10-2025 14:00	256.000
CPT2019-02C Shallow	1901832	Section B	Active	253.643	07-10-2025 14:00	258.500
CPT2023-02B Deep	78687	Section B	Active	242.208	07-10-2025 14:00	252.500
CPT2023-02B Intermediate	78688	Section B	TARP Alarm	256.718	07-10-2025 14:00	253.000
CPT2023-02B Shallow	78704	Section B	Active	248.145	07-10-2025 14:00	254.500
CPT2019-03A Deep	1901825	Section C	Disconnected	244.143	17-09-2025 07:00	247.400
CPT2019-03A Shallow	1901559	Section C	Disconnected	244.970	17-09-2025 07:00	249.000
CPT2019-03B	62511	Section C	Archived	-	-	251.000
CPT2019-03C Deep	1901848	Section C	Disconnected	246.471	17-09-2025 07:00	254.500
CPT2019-03C Intermediate	1901839	Section C	Disconnected	248.851	17-09-2025 07:00	256.000
CPT2019-03C Shallow	1901838	Section C	Disconnected	249.587	17-09-2025 07:00	259.500
CPT2019-04A	1901827	Section D	Archived	246.029	16-05-2023 12:30	246.700
CPT2019-04A	1901830	Section D	Archived	275.137	18-09-2023 12:00	246.700
CPT2019-04B	62520	Section D	Disconnected	352.844	19-05-2023 08:30	253.300
CPT2019-04B	62521	Section D	Active	244.565	07-10-2025 14:00	252.000
CPT2019-04B	62522	Section D	Active	244.171	07-10-2025 14:00	251.000
CPT2019-04C	1901850	Section D	Disconnected	244.918	22-09-2023 04:00	262.000
CPT2019-04C Shallow	1901845	Section D	Disconnected	253.592	02-10-2025 22:00	259.500
CPT2023-04A Deep	80544	Section D	TARP Alarm	250.821	07-10-2025 14:00	248.500
CPT2023-04A Shallow	80389	Section D	TARP Alarm	252.080	07-10-2025 14:00	250.000
CPT2023-04B	80542	Section D	Active	248.195	07-10-2025 14:00	-
TSF2-CPT20-04	2002719	Section D	Archived	-	-	-

TSF2-CPT20-07	2002722	Section-Default	Disconnected	228.642	16-05-2023 12:30	-
TSF2-CPT20-13	2002721	Section-Default	Archived	-	-	-
CPT2019-05A	1901858	Section E	Active	234.261	07-10-2025 14:00	253.000
CPT2019-05A	1901846	Section E	Archived	248.127	31-05-2023 23:30	253.000
CPT2019-05A	1901844	Section E	Archived	239.755	31-05-2023 23:30	253.000
CPT2019-05B	1901841	Section E	Archived	-	-	259.000
CPT2019-05B	1901833	Section E	Archived	-	-	259.000
CPT2019-05B	1901834	Section E	Archived	-	-	259.000
CPT2023-05A Intermediate	78693	Section E	Active	240.943	07-10-2025 14:00	252.000
CPT2023-05B Deep	80405	Section E	TARP Warning	250.656	07-10-2025 14:00	252.500
CPT2023-05B Intermediate	80418	Section E	Active	249.675	07-10-2025 14:00	253.500
CPT2023-05B Shallow	80417	Section E	Active	254.011	07-10-2025 14:00	257.000
TSF2-CPT20-01	2002735	Section E	Archived	-	-	-
TSF2-CPT20-02	2002724	Section E	Archived	-	-	-
TSF2-CPT20-05	2002737	Section E	Archived	-	-	-

**Section: Section A**

Piezometer	Min (kPa)	Max (kPa)	Average (kPa)	Q1 - Q3 (kPa)	TARPS
CPT2023-01A Deep	246.71	247.05	246.89	246.84 - 246.93	250.0
CPT2023-01A Shallow	251.88	251.92	251.9	251.89 - 251.9	253.0
CPT2023-01B Deep	252.51	253.12	252.77	252.67 - 252.81	258.0
CPT2023-01B Shallow	251.41	251.83	251.61	251.55 - 251.65	260.0
CPT2023-01C Deep	252.89	253.52	253.15	253.05 - 253.2	260.0
CPT2023-01C Shallow	253.71	253.79	253.76	253.75 - 253.78	263.0

Combined elevation readings for section



Time Series of CPT2023-01A Deep (80394)



Time Series of CPT2023-01A Shallow (80392)

