Exhibited

This planning application is open for public comment until 21 September 2026

Reference no	**PLN-26-0177**
Site	**CT 34014/1, EVANDALE ROAD WESTERN JUNCTION**
Proposed Development	**Landfilling and stormwater infrastructure at Western Junction**
Zone	**26.0 Utilities**
Use class	**Utilities**

Written representations may be made during this time to the General Manager;
mailed to PO Box 156, Longford, Tasmania 7301,
delivered to Council offices or
a pdf letter emailed to planning@nmc.tas.gov.au

(no special form required)

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NORTHERN MIDLANDS COUNCIL

PLANNING APPLICATION

FOR BUILDINGS, WORKS AND CHANGE OF USE

(E.g. Residential houses, sheds, carports, retaining walls, visitor accommodation, commercial development, signage etc.)

Office Use Only:

The Proposal

Description of proposal: Redevelopment of Western Junction (WEJ) void to improve presentation of area, usablity of the site and provide a more appropriate interface with the surrounding area. Work to encompass:

1. Installation of drainage infrastructure to connect existing void culverts and support permanent placement of material in void

2. Commence filling the void with 1100 m3 of excavated material from works at TasRai's East Tamar Junction and 350 m3 of material residing at WEJ

Material already in the void to be retained permanently within void.

Building Tasmania have provided endorsement for the proposal

Driveway construction material:	N/A

The Land

Site address:	TasRail Western Junction adjacent to Evandale Rd
Title reference:	C/T: 34014/1
Existing buildings on site:	Nil, void sits between Evandale road & TasRail South & Western Lines
Existing use of site:	Nil - drainage pathway

Applicant justification of any variation/discretion to the *Tasmanian Planning Scheme – Northern Midlands*

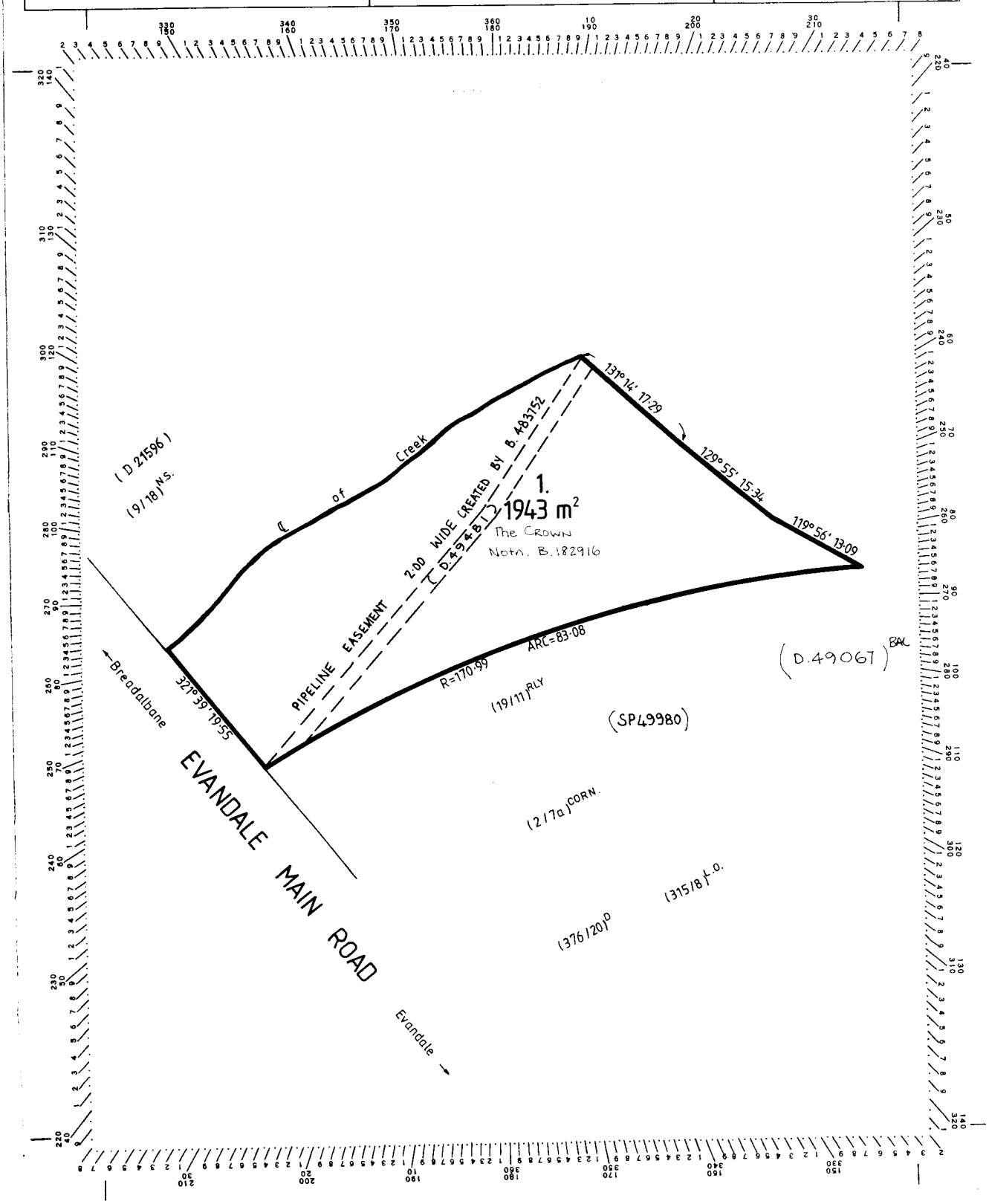
Hydrology report has indicated negligible risk of flooding of road or rail following installation of drainage infrastructure.

No ecological receptors have been recorded from the onsite ecological survey.

All material proposed to be placed inside the WEJ void has been accompanied by an external reuse assessment. All material has been determined to be suitable for reuse within the void, noting that following pipework installation all catchment water will bypass the void entirely.

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Owner: Leila Kathleen Chugg	PLAN OF SURVEY by Surveyor P.J. Alexander of land situated in the LAND DISTRICT OF CORNWALL PARISH OF BREADALBANE	Registered Number: D34014
Title Reference: C.T. 2853-14		Approved Effective from:
Grantee: Part of 806a. Gtd. to Joseph Kirkby	SCALE 1:500 MEASUREMENTS IN METRES	Recorder of Titles

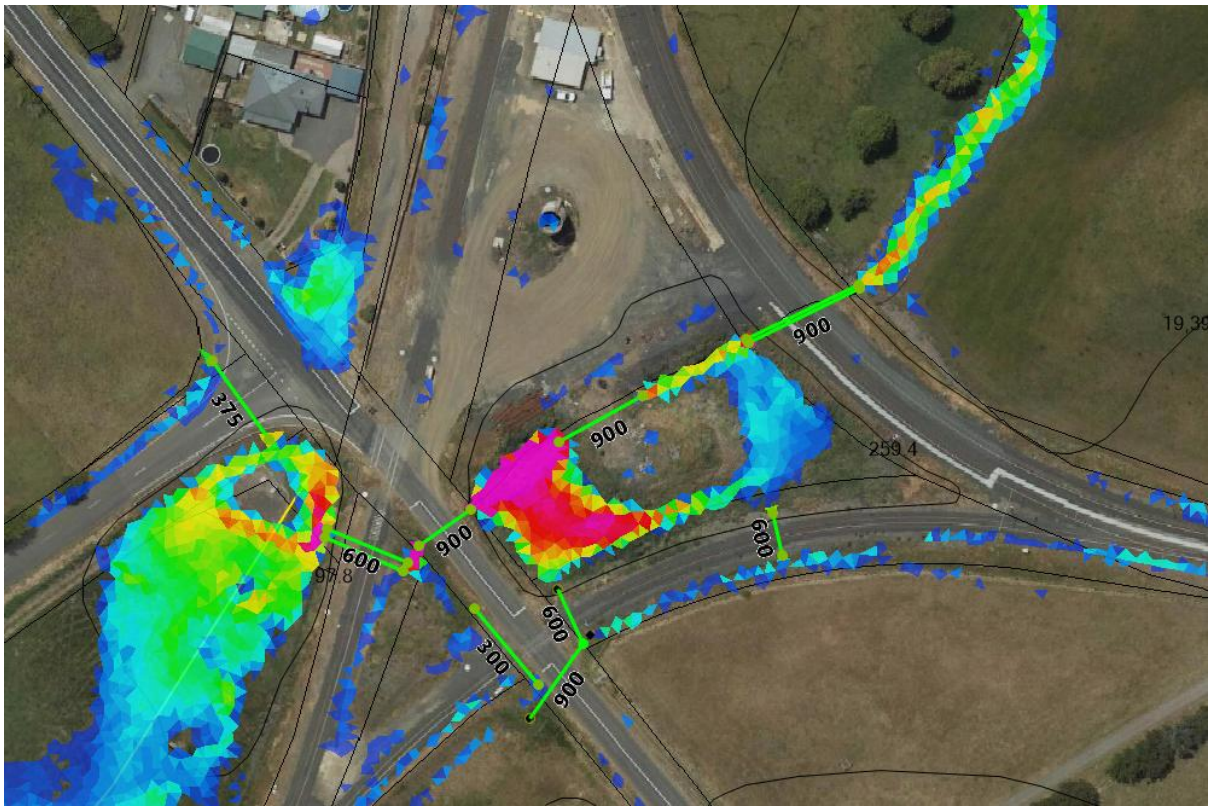


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HYDRODYNAMICA

STORMWATER ASSESSMENT FOR TASRAIL

WESTERN JUNCTION VOID



MARCH 2026

HYDRODYNAMICA
44 PENQUITE ROAD LAUNCESTON TAS 7250

Exhibited

Project: Western Junction Void Stormwater Assessment

Authors: Cameron Oakley
Consulting Engineer
BEng (Hons), BTech (Env.), MBA
Building services provider No. 949718126

DATE	NATURE OF REVISION	REVISION NUMBER
06/03/2026	DRAFT	0

This document has been prepared per the scope of agreed services upon between Hydrodynamica (H-DNA) and the client. To the best of H-DNA's understanding, this document represents the Client's intentions at the time of printing of the document. In preparing this document H-DNA has relied upon data, surveys, analysis, designs, plans and other information provided by the client, and other individuals and organisations referenced herein. Except as otherwise stated in this document, H-DNA has not verified the accuracy or completeness of such data, surveys, analysis, designs, plans and other information.

No responsibility is accepted for use of any part of this document in any other context or for any other purpose by third parties.

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1. ABBREVIATIONS

AEP	Annual Exceedance Probability
ARR	Australian Rainfall and Runoff
CC	Climate change
DEM	Digital Elevation Model
H-DNA	Engineering Consultant, Hydrodynamica
SSP3-7.0	A high-emissions climate change prediction 'regional rivalry' Shared Socio-economic Pathway
TSFM	Tasmanian Strategic Flood Mapping

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2. INTRODUCTION

Hydrodynamica was engaged to provide a stormwater assessment for Western Junction by TasRail. TasRail are interested in filling the approximately 5000m^3 void found in title 34014/1, situated between Evandale Road, the Western Line and the Northern Line. Refer to Figure 1.



Figure 1. Western Junction Void (Google Streetview 2023)

Springvale Creek collects flow from a 120-hectare catchment which extends west from the junction, refer to Figure 2. Runoff from this catchment, and smaller subcatchments next to Evandale Road and the rail lines, contribute flows to the void. Figure 3 shows the 1% AEP climate change Tasmanian Strategic Flood Mapping extent for the area.

Our assessment utilised hydrological and hydraulic methods to assess how flooding in and around the void area will be affected filling it and piping the flow path.

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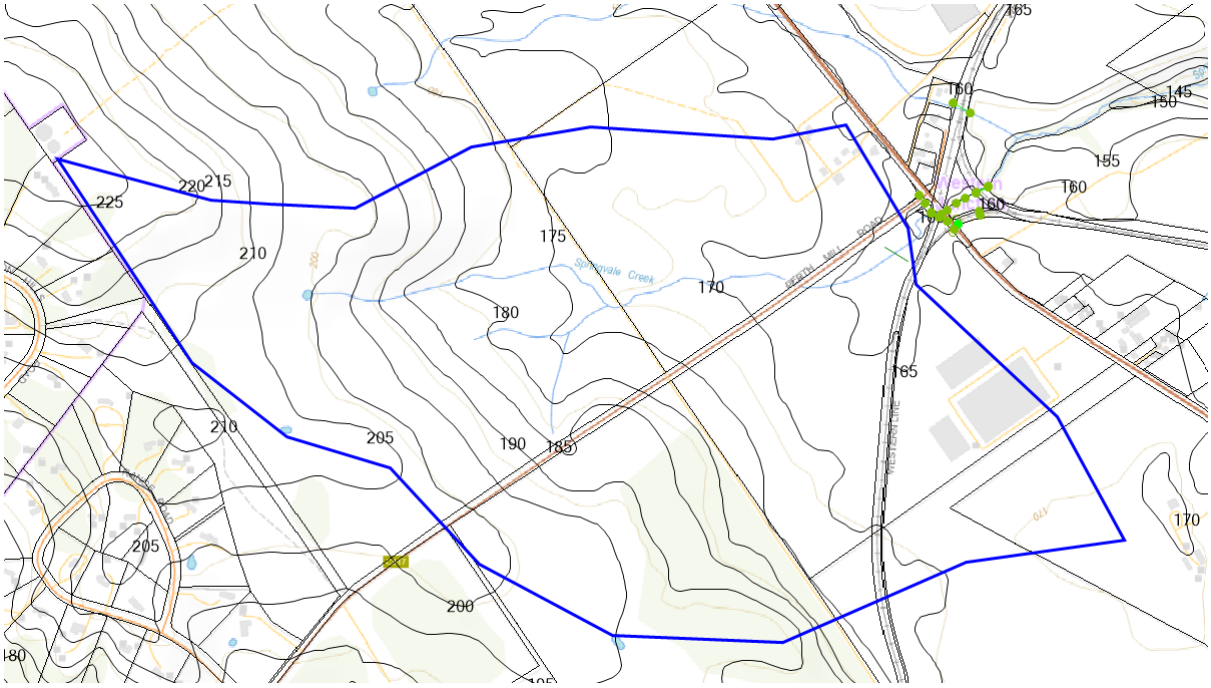


Figure 2. Springvale Creek catchment above Evandale Road



Figure 3. TSFM 1% AEP CC flood extent

Exhibited

3. MODEL SETUP & PEAK FLOW ESTIMATES

The 120-hectare Springvale Catchment was modelled in RORB to find peak flows upstream of Evandale Road in the 10% AEP, 1% AEP, and 1% AEP SSP3-7.0. These peak flows were then imported into an Infoworks ICM 1D-2D model a line source hydrograph. The ICM model also included local catchment runoff using the direct rainfall (rain on grid model).

The RORB model, which used default ARR Data hub hydrology, determined a 1% AEP peak flow of 2.17 m^3/s. This model used the default RORB manual K_c principal routing factor = 2.51. The value for 'm', which accounts for non-linearity in the network, was set to the default recommended value of m = 0.8.

Pervious hydrology was set to the default ARR data hub loss parameters:

- Initial loss (IL) = 19mm
- Continuing Loss (CL) = 5.2 mm/hr

The RORB model layout is shown in Figure 4.

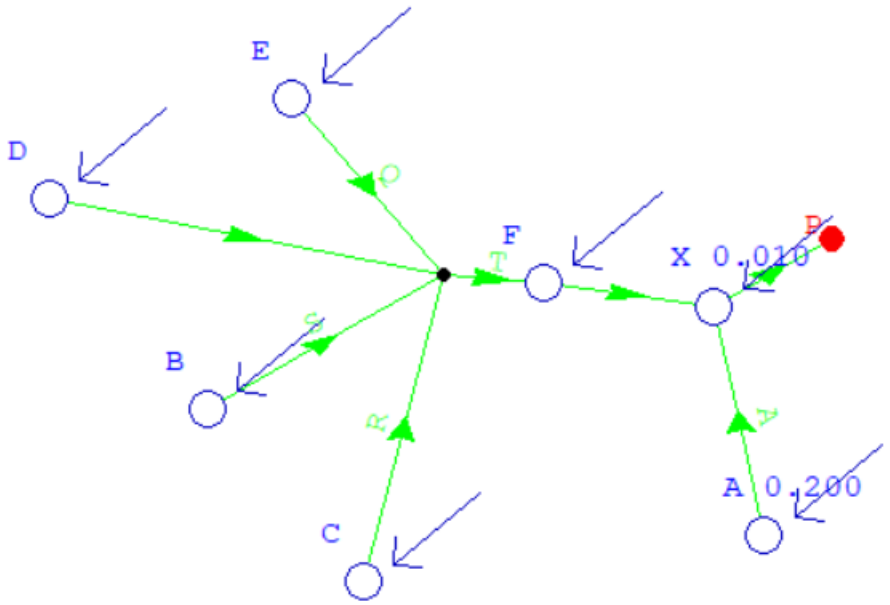


Figure 4. RORB model layout

To confirm the RORB model was providing reasonable results the model was checked against another RORB model, which utilised the Dyer K_c equation, a 1D RAFTS hydrology Infoworks ICM lumped catchment model, a Rational Method calculation, and the Regional Flood Frequency Estimation (RFFE) BETA Model (https://rffe-2021.wmawater.com.au/).

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The results of these models are presented in Table 1:

Model type	Peak Flow (m^3/s)
RORB peak (Dyer K_c)	4.64
RORB peak (default K_c)	2.17
ICM Lump	1.68
Rational Method	1.54
RFFE BETA	1.54

Table 1. Springvale Creek1% AEP peak flow estimates

Table 1 shows the default K_c RORB fits the other method peak flows well, where as the Dyer K_c version provides much larger flow rates. This aligns with our findings from RORB modelling undertaken on the nearby Sheepwash Creek catchment in Perth for Northern Midlands Council. Hence the default K_c model was adopted.

For the 1% AEP SSP3-7.0 2090 climate change model hydrology for pervious surfaces was adjusted as per ARR Data Hub recommendations:

- Initial loss (IL) = 21.47mm
- Continuing Loss (CL) = 6.03 mm/hr

The model resulted in the following peak flow rates:

AEP	Peak Flow (m^3/s)	Storm Duration (hours)
10%	0.87	2
1%	2.17	1
1% CC	6.81	0.75

Table 1. Springvale Creek peak flow estimates

The Infoworks ICM 1D-2D model utilised Manning's n roughness values were generally in accordance with *A preliminary Mannings-n layer to support regional flood modelling in Tasmania* (Tasmanian Government, 2020).

The following roughness definitions were used:

- RailReserve Low_n
- Grassed_Mod_n
- Sealed_Surf_Low_n

A maximum $4m^2$ triangular mesh was created. Figure 5 shows the Infoworks model extent and features.

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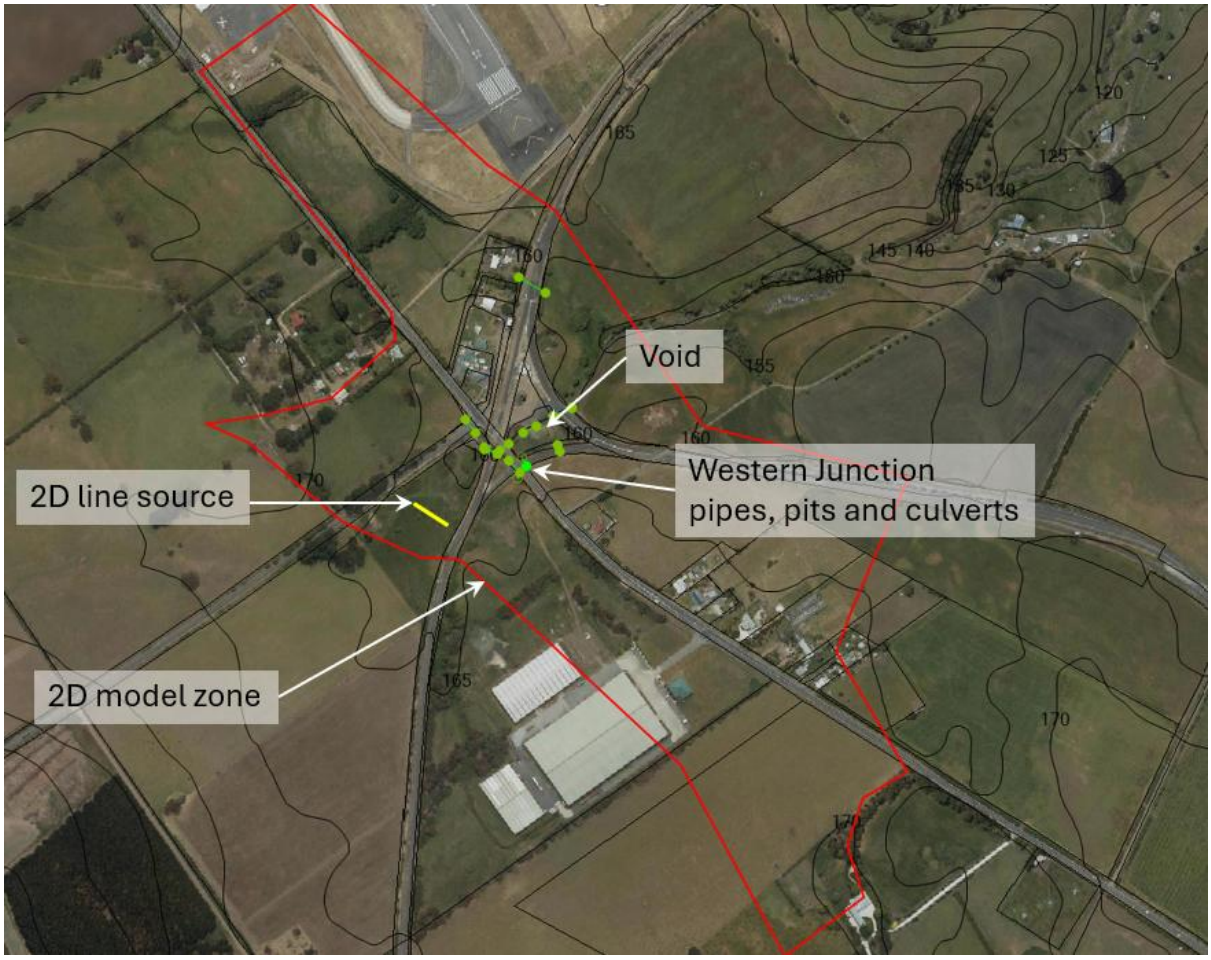


Figure 5. Infoworks ICM model layout

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4. MODELLING RESULTS

4.1 Existing stormwater system

Full flood depth maps are provided in Appendix A. For discussion they are presented as screenshots here. Figure 6 shows the depths displayed.

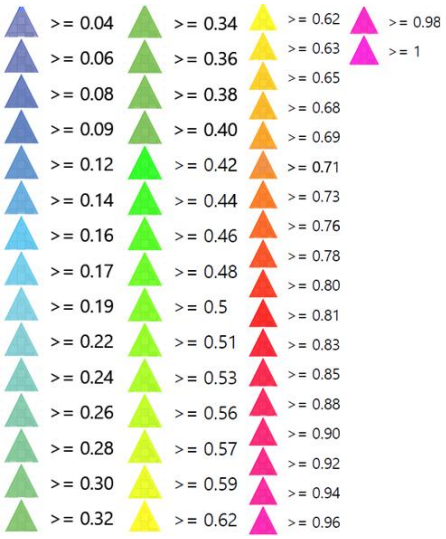


Figure 6. Displayed flood depths (metres)

Pipe colours are displayed on the following basis:

- **Green** pipes are not surcharged. The water level is below the soffit level at both ends of the pipe.
- **Blue** pipes have a water level at the upstream and / or downstream end of the pipe that is above the soffit level, and the flow is less than or equal to the pipe's full capacity.
- **Magenta** pipes have a water level at the upstream and / or downstream end of the pipe is greater than the soffit level, and the flow is greater than the pipe's full capacity (flow is pressurised).

Results of the current catchment and void show a buildup of floodwater upstream (west) of Evandale Road and in between Perth Mill Road and Western line. Inflows to the void via the Evandale Road culvert are 1 m^3/s in the 10% AEP, 1.96 m^3/s in the 1% AEP, and 3.17 m^3/s in the 1% AEP CC event.

Inflow to the void is limited by the capacity of the twin DN600 culverts under the Western line, and then by the single DN900 culvert under Evandale Road which discharges to the void. The culverts under the rail south of the void only collect local runoff collected by rail drains.

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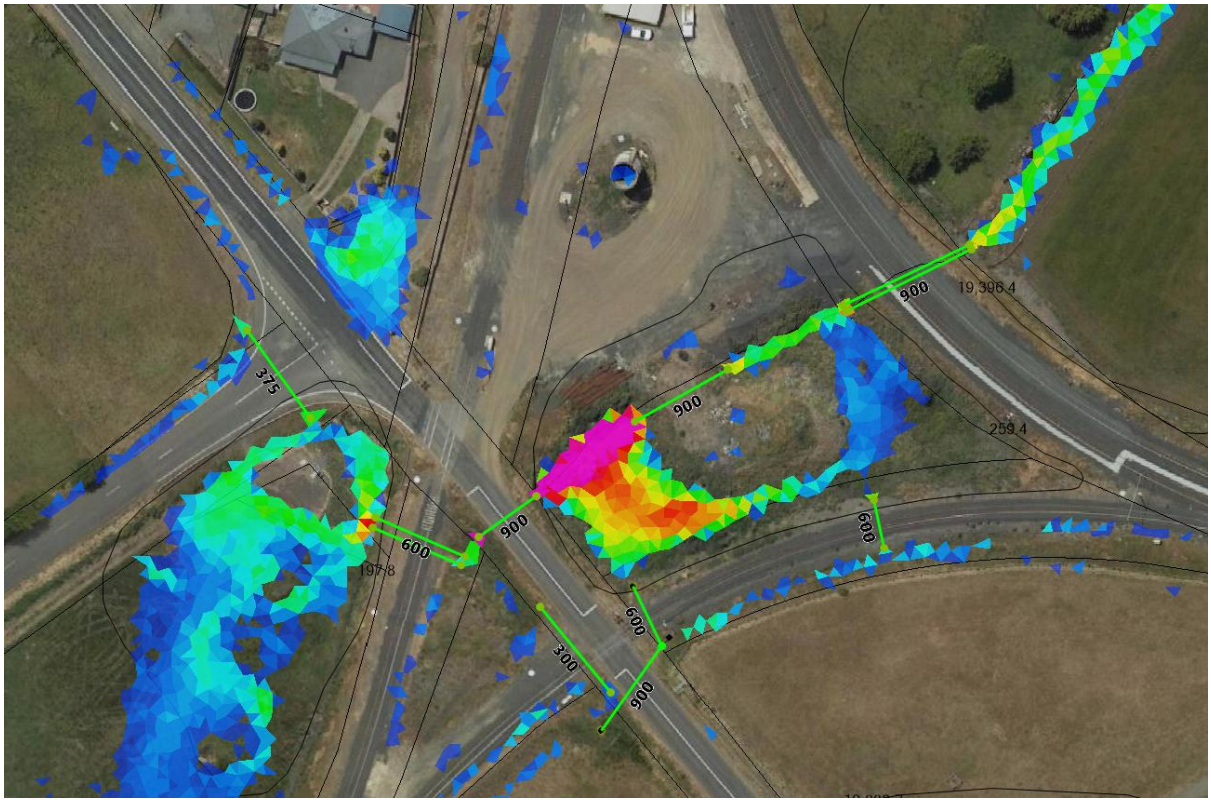


Figure 7. 10% AEP flood depths

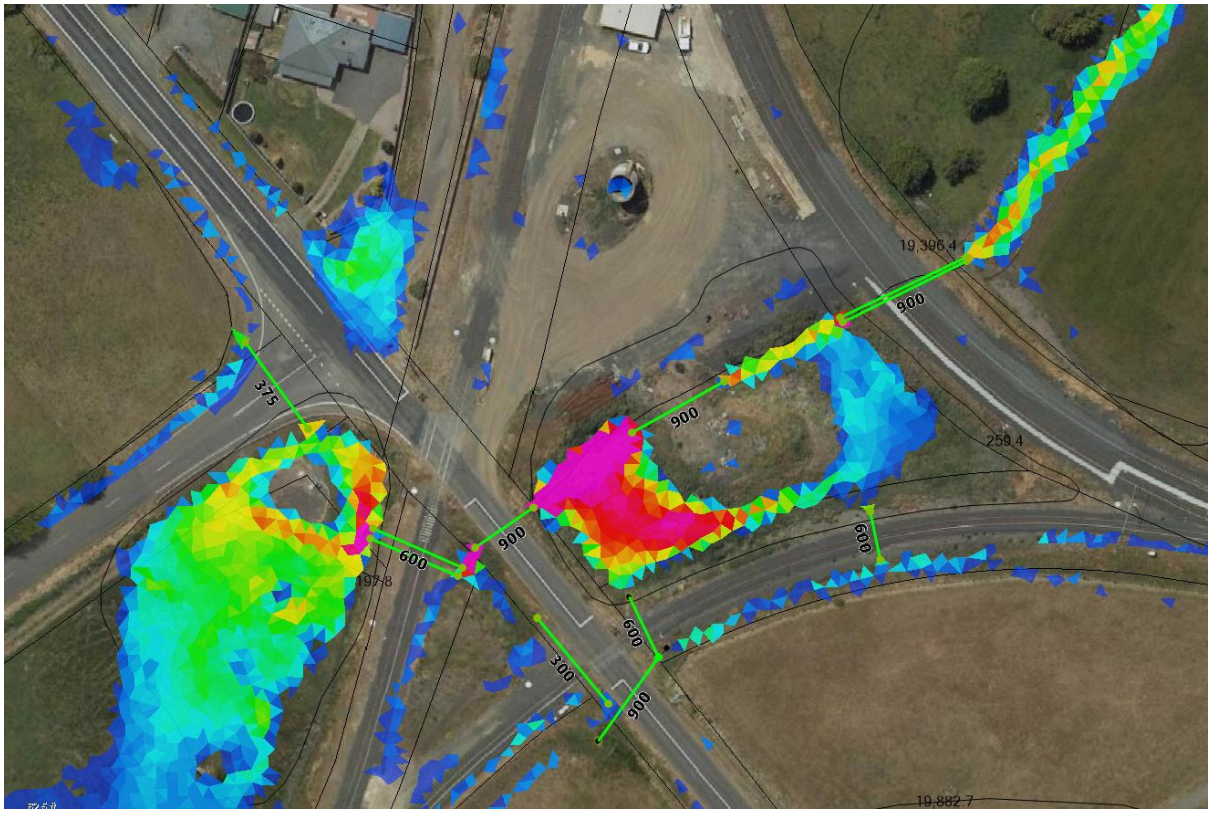


Figure 8. 1% AEP flood depths

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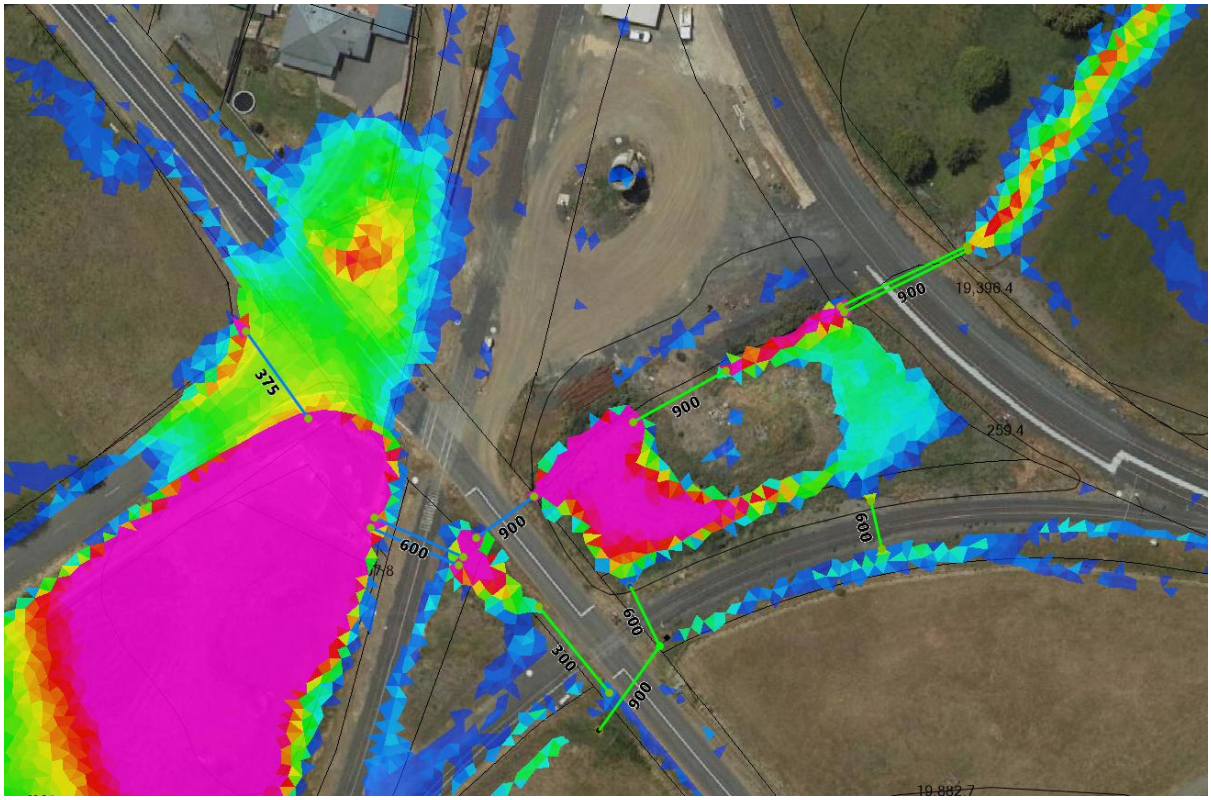


Figure 9. 1% AEP CC flood depths

In the 1% AEP CC we see Evandale Road overtopping west of the void. This overflow does not pass to the void but rather is collected in the low-lying area on the southern side of 381 Evandale Road.

4.2 Filling the void

The DEM was updated to include filling of the void, and pit and pipework linking those pipes. The void fill totalled 5200m^3. Two low points were shaped into the surface with pits modelled for the collection of local runoff.

It should be noted that the existing twin DN900 pipes which exit the void are kept, in the model there appears to be only one model as, for modelling purposes, the number of barrels for this pipe is set to 2.

New pipes and pits are highlighted in Figure 10. Full flood depth maps are for this scenario provided in Appendix B

Exhibited



Figure 10. Proposed pipe arrangement

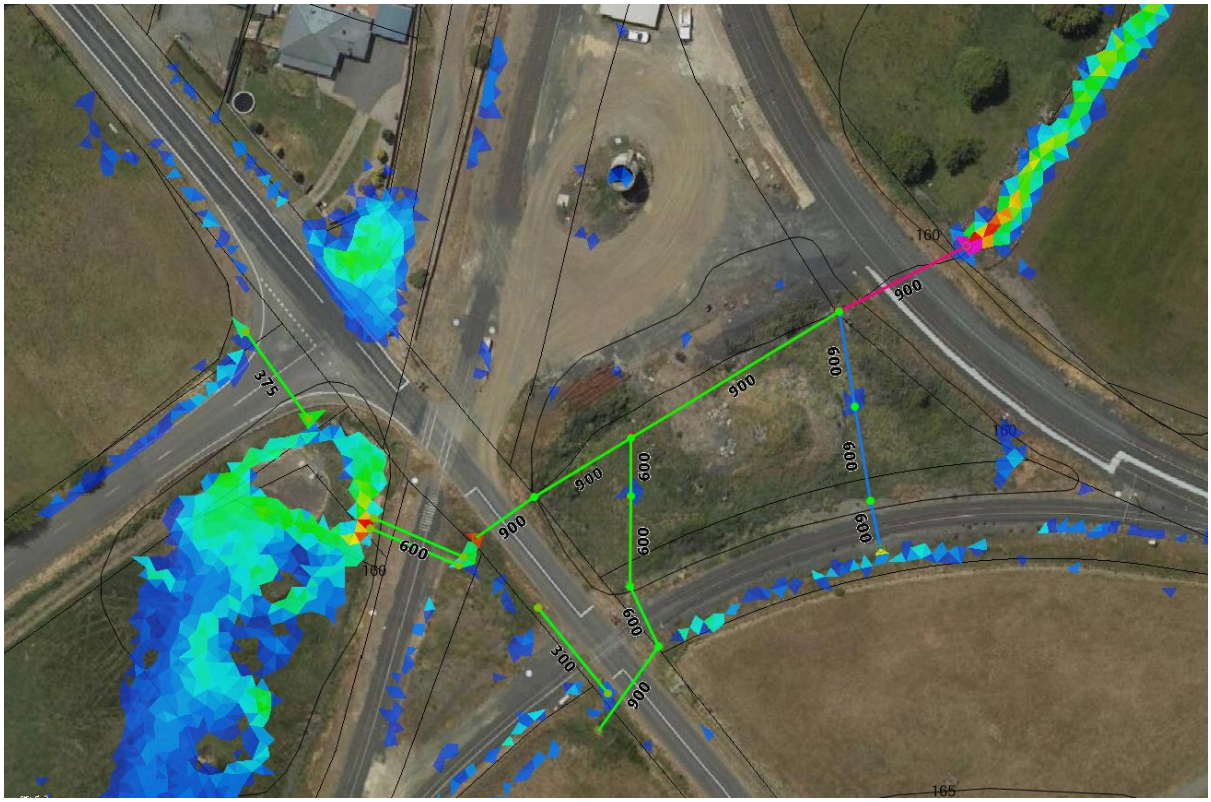


Figure 11. 10% AEP flood depths (void filled)

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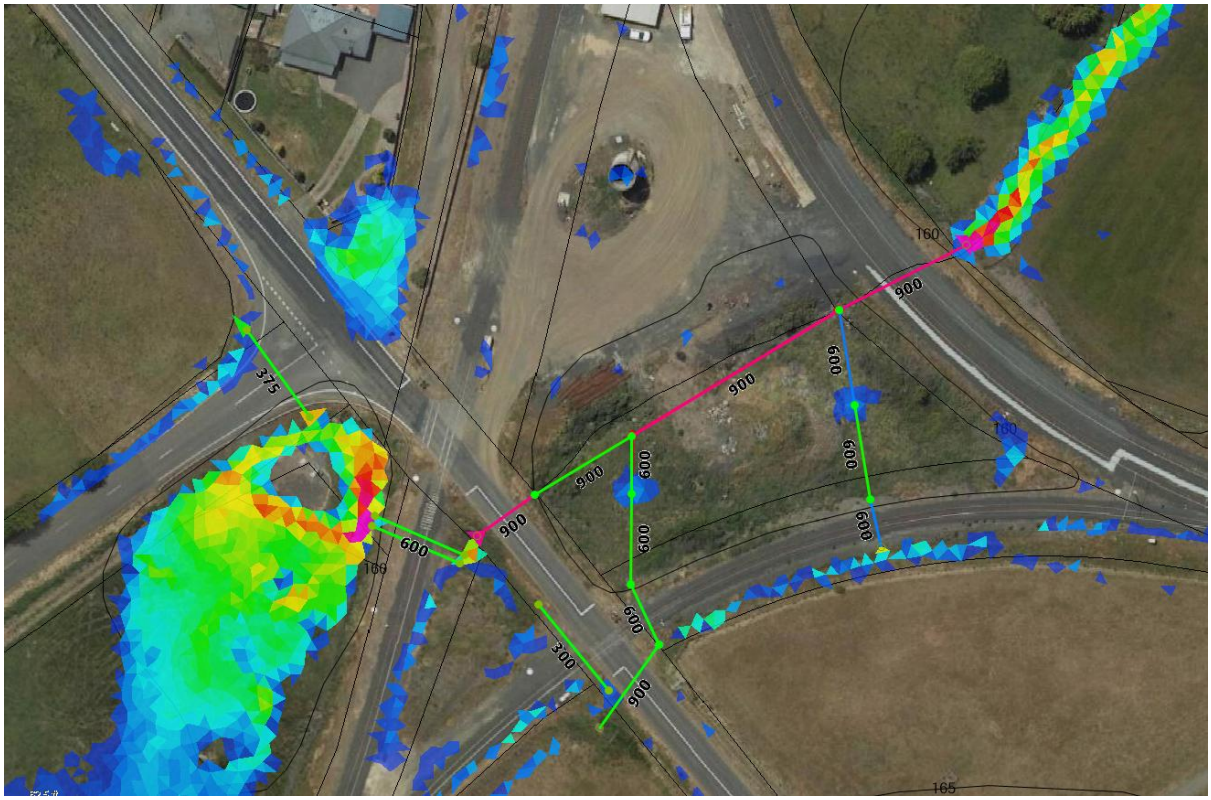


Figure 12. 1% AEP flood depths (void filled)

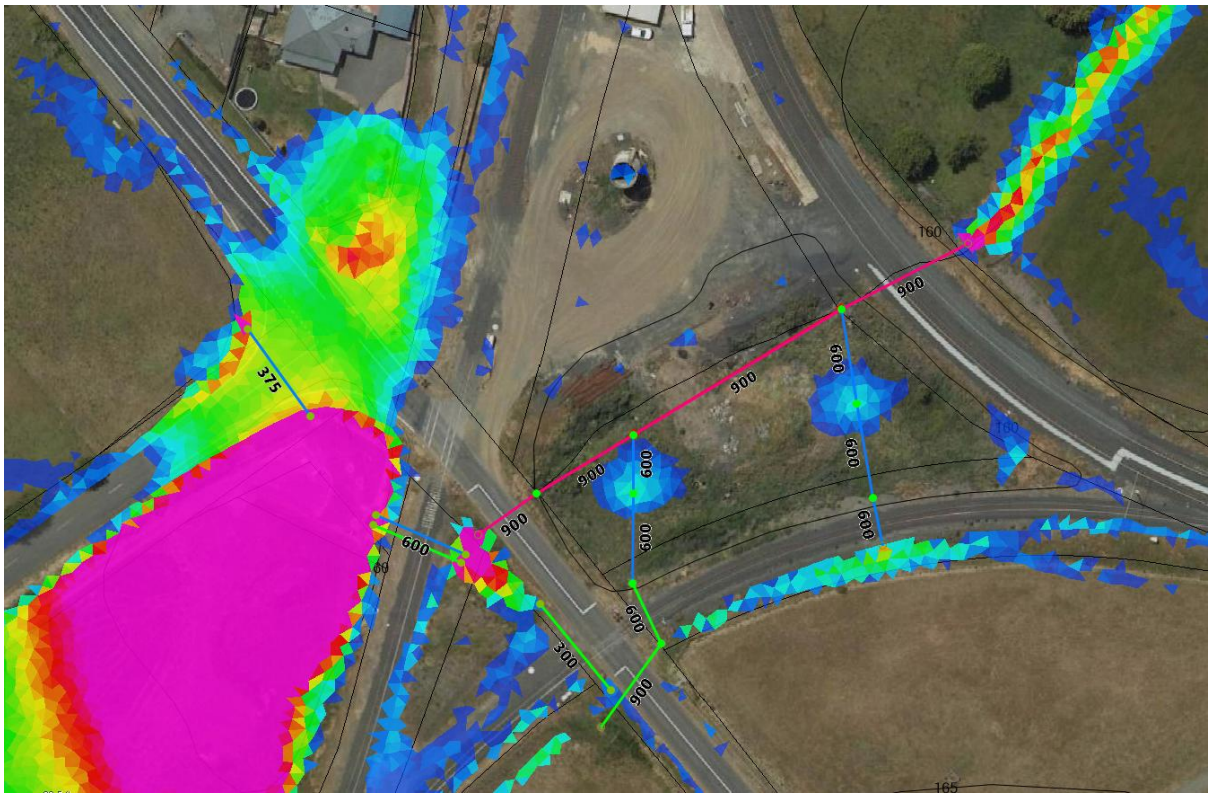


Figure 13. 1% AEP CC flood depths (void filled)

Exhibited

5. DISCUSSION

It was found that the proposed filling and pipework worked well. There was a very minor 10mm increase to flood levels upstream of the void, which would not lead to a discernible change in the flood regime or hazard levels in the area.

The peak flow and velocity results for the at the downstream end of the system, where the system discharges to 369 Evandale Road, are as follows:

	Existing		Void filled	
AEP	Flow (m3/s)	Velocity (m/s)	Flow (m3/s)	Velocity (m/s)
10%	1.03	0.70	1.07	0.75
1%	1.99	1.18	2.05	1.02
1% CC	3.35	1.69	3.75	1.40

Table 2. System outlet flow and velocity

Although flow has marginally increased in the 1% AEP events modelling shows the peak velocity at the outlet decreased slightly. This is considered unlikely as the existing outlets will remain. As such these results are probably to do with minor changes to the void fill scenario model that were needed to ensure stability of the model and not actually results that would be expected in the real world. It would be expected that while 1% AEP velocity would remain similar, due to a similar flow rate, the 1% AEP CC velocity would increase to the vicinity of 2 m/s.

However, due to the low likelihood of the 1% AEP CC flow, at least for the near future, it is recommended that downstream outlet and erosion protection works only be undertaken if there is existing evidence of erosion.

Exhibited

6. REFERENCES

A preliminary Mannings-n layer to support regional flood modelling in Tasmania, © State of Tasmania, 2020.

Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors) Australian Rainfall and Runoff: A Guide to Flood Estimation, © Commonwealth of Australia (Geoscience Australia), 2019.

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NOTES

1.0 GENERAL

1.01 ALL WORK FOR STORMWATER SERVICES & ROADWORKS TO BE IN ACCORDANCE WITH LGAT STANDARD DRAWINGS..

1.03 PRIOR TO ANY EXCAVATION, CONTRACTOR IS TO LOCATE ALL EXISTING UNDERGROUND SERVICES.

1.04 STRIP TOPSOIL FROM ENTIRE AREA OF ROADWAYS AND EXTERNAL AREAS THAT ARE TO BE CUT OR FILLED. STOCKPILE TOPSOIL ON SITE.

1.06 SERVICE TRENCHES UNDER TRAFFICKED AREAS SHALL BE BACKFILLED WITH COMPACTED GRANULAR BACKFILL.

1.07 FINISH TOPS OF MANHOLES TO MATCH ADJACENT FINISHED SURFACE LEVELS AND GRADE

2.0 GENERAL EARTHWORKS NOTES

2.01 ALL EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED ENGINEERING DRAWINGS, PROJECT SPECIFICATIONS, RELEVANT AUTHORITY REQUIREMENTS AND CURRENT AUSTRALIAN STANDARDS.

2.02 THE CONTRACTOR SHALL VERIFY ALL EXISTING SURFACE LEVELS, SITE CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORKS.

2.03 THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING SERVICES BEFORE COMMENCING EARTHWORKS. ANY DAMAGE TO SERVICES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

2.04 ALL VEGETATION, TOPSOIL, ORGANIC MATERIAL, RUBBISH, DELETERIOUS MATERIAL AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM AREAS TO BE FILLED OR CONSTRUCTED UPON.

2.05 TOPSOIL SHALL BE STRIPPED TO THE DEPTH REQUIRED TO REMOVE ORGANIC MATERIAL AND STOCKPILED FOR REUSE OR DISPOSAL AS DIRECTED.

2.06 FILL MATERIAL SHALL BE FREE OF VEGETATION, RUBBISH, ORGANIC MATTER, LARGE ROCKS, FROZEN MATERIAL AND OTHER DELETERIOUS SUBSTANCES.

2.07 ALL FILL SHALL BE PLACED IN ACCORDANCE WITH R22 EARTHWORKS (JUNE 2012)

2.08 STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD MAXIMUM DRY DENSITY (SMDD) IN ACCORDANCE WITH AS 1289 UNLESS OTHERWISE SPECIFIED.

2.09 FILL BELOW ROAD PAVEMENTS, BUILDING PADS AND HARDSTAND AREAS SHALL BE COMPACTED TO A MINIMUM OF 98% SMDD OR AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.

2.10 BATTER SLOPES SHALL BE TRIMMED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS AND STABILISED AGAINST EROSION.

2.11 EARTHWORKS SHALL BE UNDERTAKEN IN A MANNER THAT PREVENTS PONDING OF WATER AND ENSURES POSITIVE DRAINAGE AT ALL TIMES.

2.12 THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO COMMENCEMENT OF EARTHWORKS AND MAINTAIN THEM FOR THE DURATION OF THE WORKS.

2.13 COMPACTION TESTING SHALL BE UNDERTAKEN AT FREQUENCIES SPECIFIED BY THE PROJECT SPECIFICATION OR GEOTECHNICAL ENGINEER.

2.14 ALL TESTING SHALL BE UNDERTAKEN BY A NATA ACCREDITED TESTING AUTHORITY.

2.15 THE CONTRACTOR SHALL MAINTAIN SAFE BATTER SLOPES AND EXCAVATIONS IN ACCORDANCE WITH ALL RELEVANT WORK HEALTH AND SAFETY REQUIREMENTS.

2.16 UPON COMPLETION OF EARTHWORKS, THE CONTRACTOR SHALL PROVIDE A CERTIFICATE OF COMPLIANCE AND ALL RELEVANT TEST RESULTS VERIFYING COMPLIANCE WITH THE SPECIFICATION.

2.17 ALL FINISHED SURFACES SHALL BE TRIMMED TO THE LEVELS AND GRADES SHOWN ON THE DRAWINGS AND SHALL BE FREE OF SOFT SPOTS, RUTTING OR OTHER DEFECTS.

2.18 ANY VARIATIONS TO THE APPROVED EARTHWORKS DESIGN SHALL BE REFERRED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION.

3.0 DRAINAGE CONSTRUCTION NOTES

3.01 ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED ENGINEERING DRAWINGS, PROJECT SPECIFICATIONS, RELEVANT AUTHORITY REQUIREMENTS AND CURRENT AUSTRALIAN STANDARDS.

3.02 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS AND EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING SERVICES PRIOR TO EXCAVATION. ANY DAMAGE TO EXISTING SERVICES SHALL BE MADE GOOD AT THE CONTRACTOR'S EXPENSE.

3.03 ALL STORMWATER DRAINAGE WORKS SHALL COMPLY WITH THE REQUIREMENTS OF R32 - DRAINAGE; CULVERTS, PIPELINES AND RELATED STRUCTURES.

3.04 TRENCHING, BEDDING, PIPE LAYING, BACKFILLING AND COMPACTION SHALL BE UNDERTAKEN IN ACCORDANCE WITH R32 - DRAINAGE; CULVERTS, PIPELINES AND RELATED STRUCTURES & LGAT STANDARD DRAWINGS

3.05 REINFORCED CONCRETE PIPES SHALL BE OF THE CLASS AND DIAMETER SPECIFIED ON THE DRAWINGS AND SHALL COMPLY WITH AS 4058.

3.06 PIPE BEDDING MATERIAL SHALL CONSIST OF APPROVED GRANULAR MATERIAL COMPACTED TO THE REQUIREMENTS SPECIFIED HEREIN OR AS DIRECTED BY THE SUPERINTENDENT.

3.07 MINIMUM COVER OVER DRAINAGE PIPES SHALL BE AS SHOWN ON THE DRAWINGS. WHERE MINIMUM COVER CANNOT BE ACHIEVED, ADDITIONAL PROTECTION MEASURES SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.

3.08 PIPE JOINTS SHALL BE WATERTIGHT AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

3.09 DRAINAGE PITS SHALL BE CONSTRUCTED TO THE DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS. CONCRETE SHALL HAVE A MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH OF 32 MPA UNLESS NOTED OTHERWISE.

3.10 PIT BASES SHALL BE FORMED WITH SMOOTH BENCHING GRADED TOWARDS OUTLET PIPES TO PREVENT PONDING.

3.11 PIT COVERS AND GRATES SHALL BE SUITABLE FOR THE INTENDED TRAFFIC LOADING AND SHALL COMPLY WITH THE RELEVANT AUTHORITY REQUIREMENTS.



3.12 ALL PITS AND PIPES SHALL BE SET OUT TO THE LINE AND GRADE SHOWN ON THE DRAWINGS. ANY DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER PRIOR TO CONSTRUCTION.

3.13 PIPE INVERT LEVELS SHOWN ON THE DRAWINGS ARE DESIGN LEVELS. THE CONTRACTOR SHALL VERIFY LEVELS AND MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SYSTEM.

3.14 BACKFILL WITHIN ROAD PAVEMENTS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD MAXIMUM DRY DENSITY (SMDD) OR AS REQUIRED BY THE RELEVANT ROAD AUTHORITY.

3.15 BACKFILL OUTSIDE PAVEMENT AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% SMDD UNLESS OTHERWISE SPECIFIED.

3.16 COMPACTION TESTING SHALL BE UNDERTAKEN AT FREQUENCIES SPECIFIED BY THE PROJECT SPECIFICATION AND RELEVANT AUTHORITY REQUIREMENTS.

3.17 THE CONTRACTOR SHALL MAINTAIN EFFECTIVE EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE DURATION OF THE WORKS.

3.18 ALL STORMWATER INFRASTRUCTURE SHALL BE CLEANED AND FREE OF DEBRIS UPON COMPLETION OF CONSTRUCTION.
THE DRAINAGE SYSTEM SHALL BE INSPECTED BY THE SUPERINTENDENT PRIOR TO BACKFILLING AND UPON COMPLETION OF WORKS.

3.19 CCTV INSPECTION OF PIPELINES SHALL BE UNDERTAKEN WHERE REQUIRED BY THE RELEVANT AUTHORITY OR PROJECT SPECIFICATION.

3.20 ANY VARIATIONS FROM THESE DRAWINGS SHALL NOT BE UNDERTAKEN WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.

3.21 UPON COMPLETION OF WORKS, THE CONTRACTOR SHALL PROVIDE AS-CONSTRUCTED SURVEY INFORMATION IN THE FORMAT REQUIRED BY THE APPROVING AUTHORITY.

3.22 THE CONTRACTOR SHALL IMPLEMENT ALL NECESSARY WORKPLACE HEALTH AND SAFETY MEASURES IN ACCORDANCE WITH APPLICABLE LEGISLATION AND SITE-SPECIFIC SAFETY REQUIREMENTS.

N

DRAWING SERIES:

G01	COVER
G02	STANDARD DRAWINGS
C01	SITE PLAN
C02	LONGSECTION (LINE 1)
C03	LONGSECTION (LINES 2 & 3)
C04	TRENCH & PAVEMENT DETAILS
C05	PIT SW 1/1 DETAIL
C06	FINISHED SURFACE RENDERS
C07	EXISTING SURFACE RENDERS

COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
	.		
	.		
	.		

STATUS: PRELIMINARY

CIVILVISION CONSULTING
CREATIVE ENGINEERING

20b Loone Lane
Spreyton TAS 7310

Mob: 0412 439 184

ABN: 66 644 575 468

info@civilvisionengineering.com

PROJECT:
LOT FILL AND DRAINAGE
EVANDALE RD, WESTERN JUNCTION

CLIENT:
TASRAIL

DRAWING TITLE:
COVER

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
N.T.S	17/06/2026	MS	JM

PROJECT NO:	DRAWING NO:	REVISION:
26043	G01	0

Exhibited



STANDARD DRAWINGS (LGAT)

STORMWATER

TSD-SW02.v3	MANHOLES 100 - 600 DIA. PIPES GENERAL ARRANGEMENTS
TSD-SW03.v3	MANHOLES 100 - 600 DIA. PIPES BENCHING DETAILS
TSD-SW28.v3	GUIDELINES FOR SEDIMENT CONTROL

N

COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
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STATUS: PRELIMINARY

CIVILVISION CONSULTING
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Spreyton TAS 7310
Mob: 0412 439 184
ABN: 66 644 575 468
info@civilvisionengineering.com

PROJECT:
LOT FILL AND DRAINAGE
EVANDALE RD, WESTERN JUNCTION

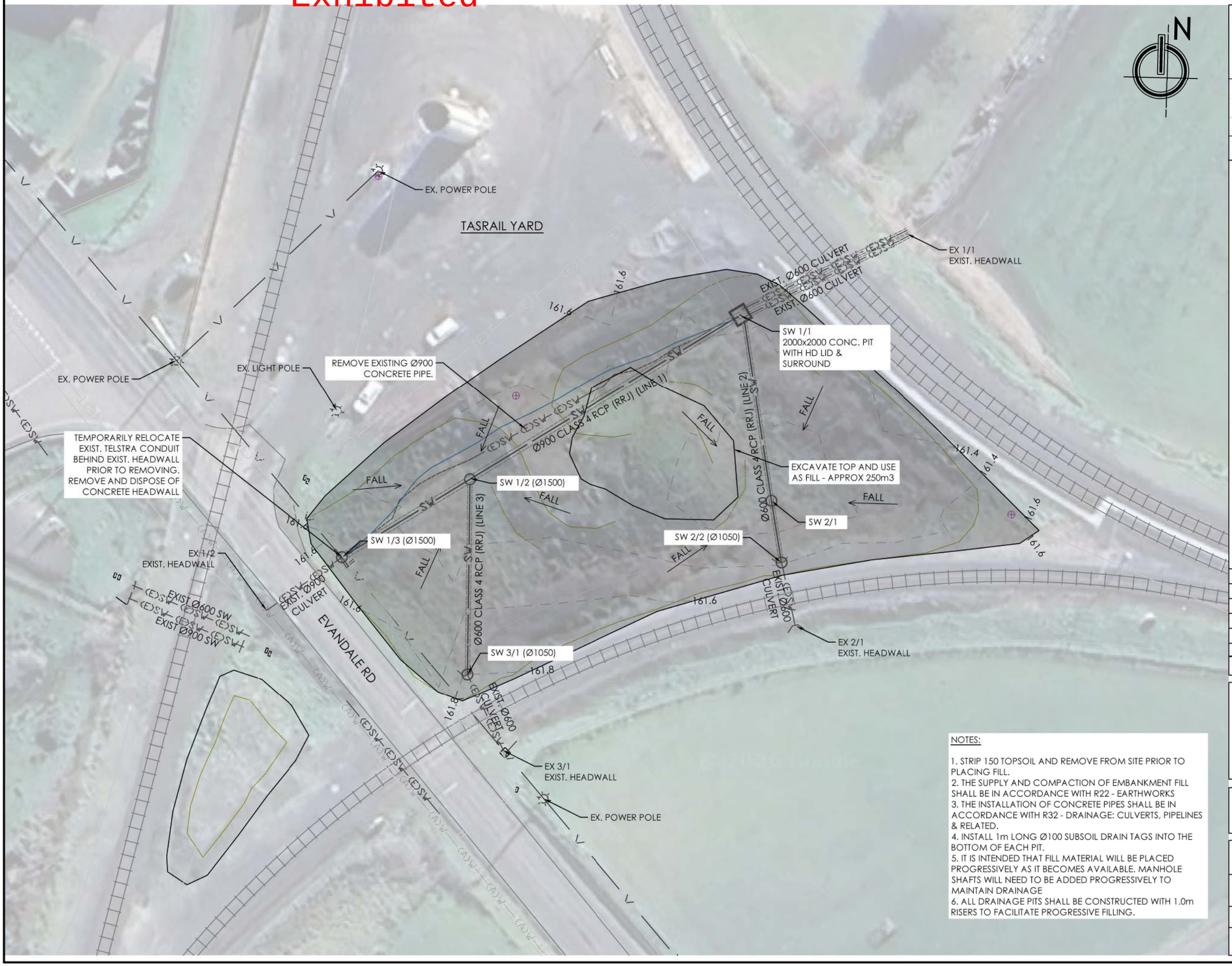
CLIENT:
TASRAIL

DRAWING TITLE:
STANDARD DRAWINGS

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
N.T.S	17/06/2026	MS	JM

PROJECT NO:	DRAWING NO:	REVISION:
26043	G02	0

Exhibited



LEGEND

- EXISTING STORMWATER
- ABANDONED WATER
- EXISTING TELECOM
- EXISTING OVERHEAD ELECTRICITY
- NEW STORMWATER
- FILLED AREA
  AREA : 3430m2
  VOLUME: 5600m3 APPROX.

WARNING

ALL SERVICES SHOWN ARE APPROXIMATE ONLY.
NO GUARANTEE CAN BE GIVEN THAT ALL RELEVANT SERVICES ARE SHOWN.
IT REMAINS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY AND CONFIRM TRUE POSITION OF ALL SERVICES PRIOR TO COMMENCING CONSTRUCTION.

COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
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	.		

STATUS: PRELIMINARY

NOTES:

1. STRIP 150 TOPSOIL AND REMOVE FROM SITE PRIOR TO PLACING FILL.
2. THE SUPPLY AND COMPACTION OF EMBANKMENT FILL SHALL BE IN ACCORDANCE WITH R22 - EARTHWORKS
3. THE INSTALLATION OF CONCRETE PIPES SHALL BE IN ACCORDANCE WITH R32 - DRAINAGE: CULVERTS, PIPELINES & RELATED.
4. INSTALL 1m LONG Ø100 SUBSOIL DRAIN TAGS INTO THE BOTTOM OF EACH PIT.
5. IT IS INTENDED THAT FILL MATERIAL WILL BE PLACED PROGRESSIVELY AS IT BECOMES AVAILABLE. MANHOLE SHAFTS WILL NEED TO BE ADDED PROGRESSIVELY TO MAINTAIN DRAINAGE
6. ALL DRAINAGE PITS SHALL BE CONSTRUCTED WITH 1.0m RISERS TO FACILITATE PROGRESSIVE FILLING.

CIVILVISION CONSULTING
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info@civilvisionengineering.com

PROJECT:
LOT FILL AND DRAINAGE
EVANDALE RD, WESTERN JUNCTION

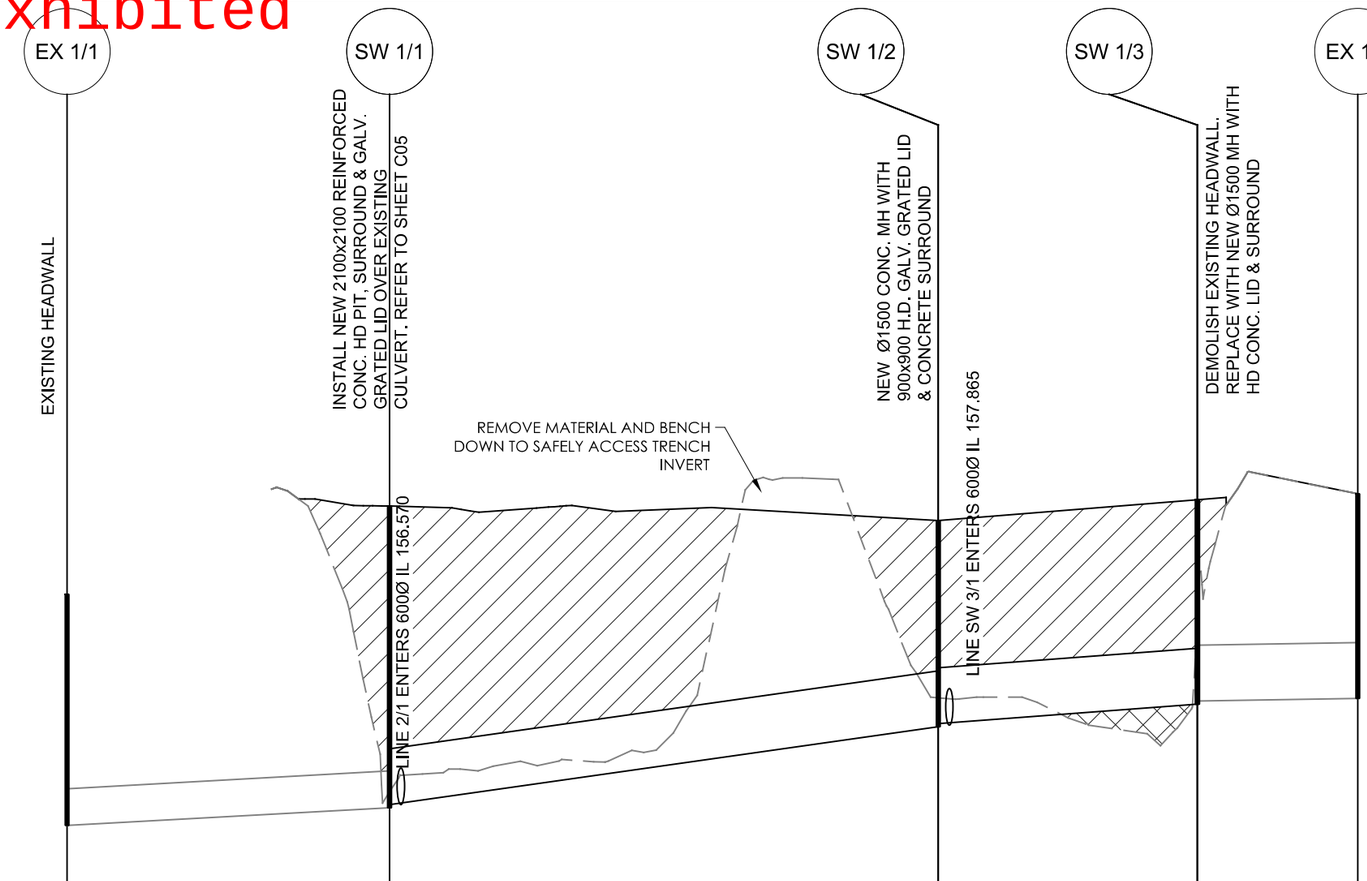
CLIENT: TASRAIL

DRAWING TITLE: SITE PLAN

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:200	17/06/2026	MS	JM

PROJECT NO:	DRAWING NO:	REVISION:
26043	C01	0

Exhibited



PIPE DETAILS	EXISTING 2/Ø600 BRICK SW	Ø900 CLASS 4 RCP (RRJ)	Ø900 CLASS 4 RCP (RRJ)	EXISTING Ø900 BRICK
SLOPE %	1.10%	2.73%	1.50%	0.35%
DATUM RL 152.2				
DEPTH TO INVERT	4.92	4.82 3.36	3.31 3.33	3.28 3.33
INVERT LEVEL	156.23 156.52	156.62 157.84	157.89 158.21	158.26 158.30
FINISHED SURFACE	161.44	161.20	161.54	161.64
EXISTING SURFACE	156.78	158.31	160.09	161.64
CHAINAGE	0.00 26.29	71.01	92.15	105.22
	26.29	44.72	21.15	13.07

STORMWATER LONGITUDINAL SECTION FOR LINE 1
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

LEGEND

COMPACTED FILL

COMPACTED PIPE BEDDING

COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
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	.		

STATUS: PRELIMINARY

REV:

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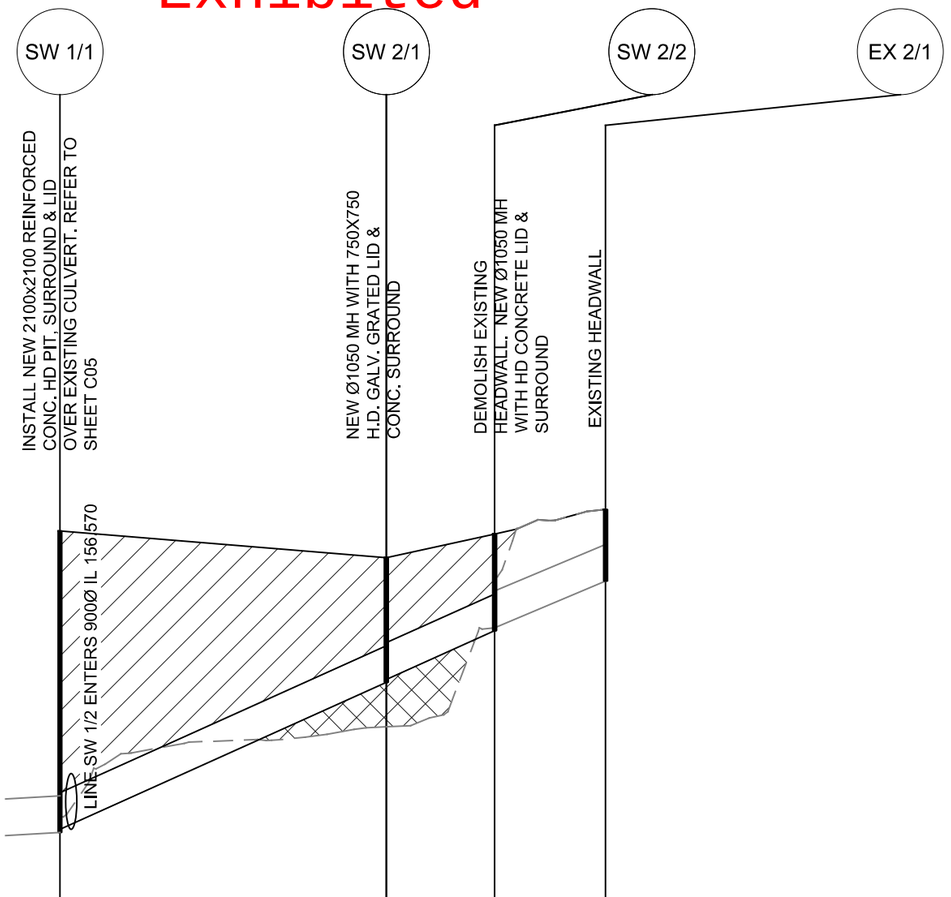
PROJECT:
LOT FILL AND DRAINAGE
EVANDALE RD, WESTERN JUNCTION

CLIENT:
TASRAIL

DRAWING TITLE:
LONGSECTION - STAGE 1

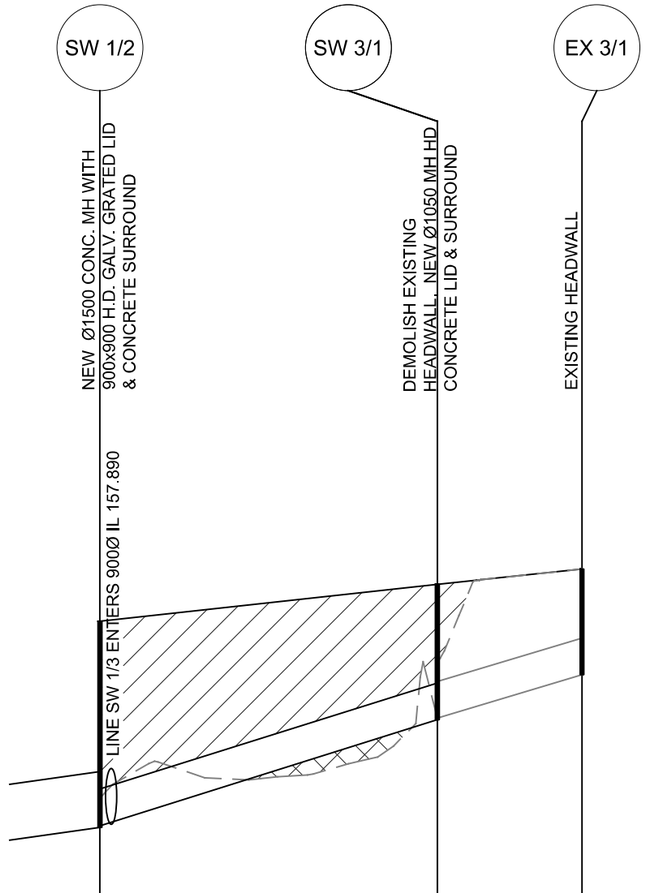
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
AS_SHOWN	17/06/2026	MS	JM
PROJECT NO:	DRAWING NO:		REVISION:
26043	C02		0

Exhibited



PIPE DETAILS								
SLOPE %		Ø600 CLASS 4 RCP (RRJ) 9.00%			Ø600 CLASS 4 RCP (RRJ) 9.00%		EXISTING Ø600 8.38%	
DATUM RL 152.6								
DEPTH TO INVERT	4.92	4.87		2.03	1.98	1.58	1.53	1.17
INVERT LEVEL	156.52	156.57		158.97	159.02	159.81	159.86	160.62
FINISHED SURFACE		161.44		161.00		161.39		161.79
EXISTING SURFACE		156.78		158.24		159.86		161.79
CHAINAGE		0.00		26.61		35.43		44.48
			26.61		8.81		9.06	

STORMWATER LONGITUDINAL SECTION FOR LINE 2
SCALES: HORIZONTAL 1:500 VERTICAL 1:100



		Ø600 Class 4 RCP RRJ 6.10%			EXISTING Ø600 6.00%			
RL 153.9								
	3.36	3.31		2.21	2.18		1.72	
	157.84	157.89		159.57	159.62		160.33	
		161.20		161.80			162.05	
		158.31		159.62			162.05	
		0.00		27.51			39.30	
			27.51			11.79		

STORMWATER LONGITUDINAL SECTION FOR LINE 3
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

LEGEND

COMPACTED FILL

COMPACTED PIPE BEDDING

COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
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	.		
	.		

STATUS: PRELIMINARY

REV:

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PROJECT:
LOT FILL AND DRAINAGE
EVANDALE RD, WESTERN JUNCTION

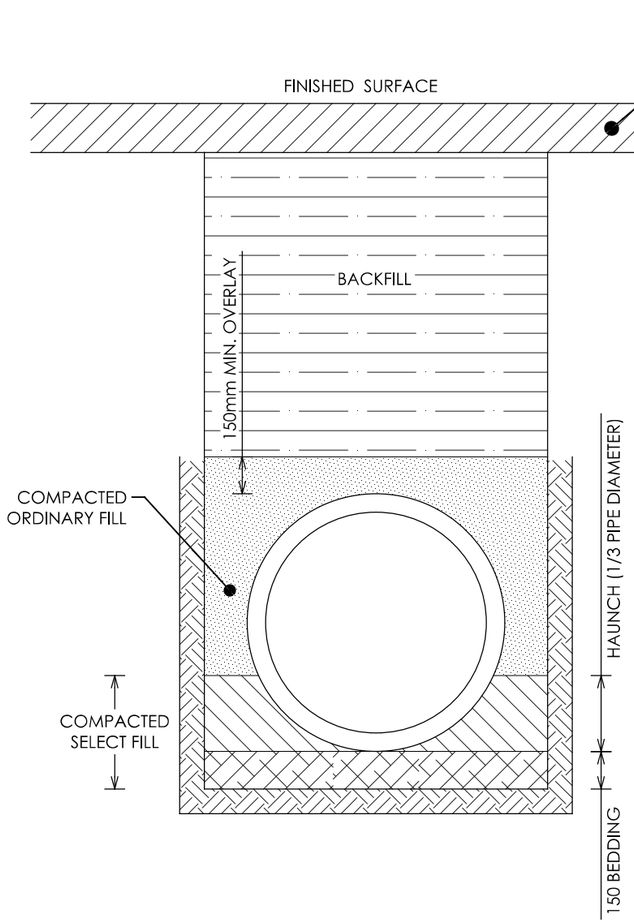
CLIENT:
TASRAIL

DRAWING TITLE:
LONGSECTION - STAGE 2

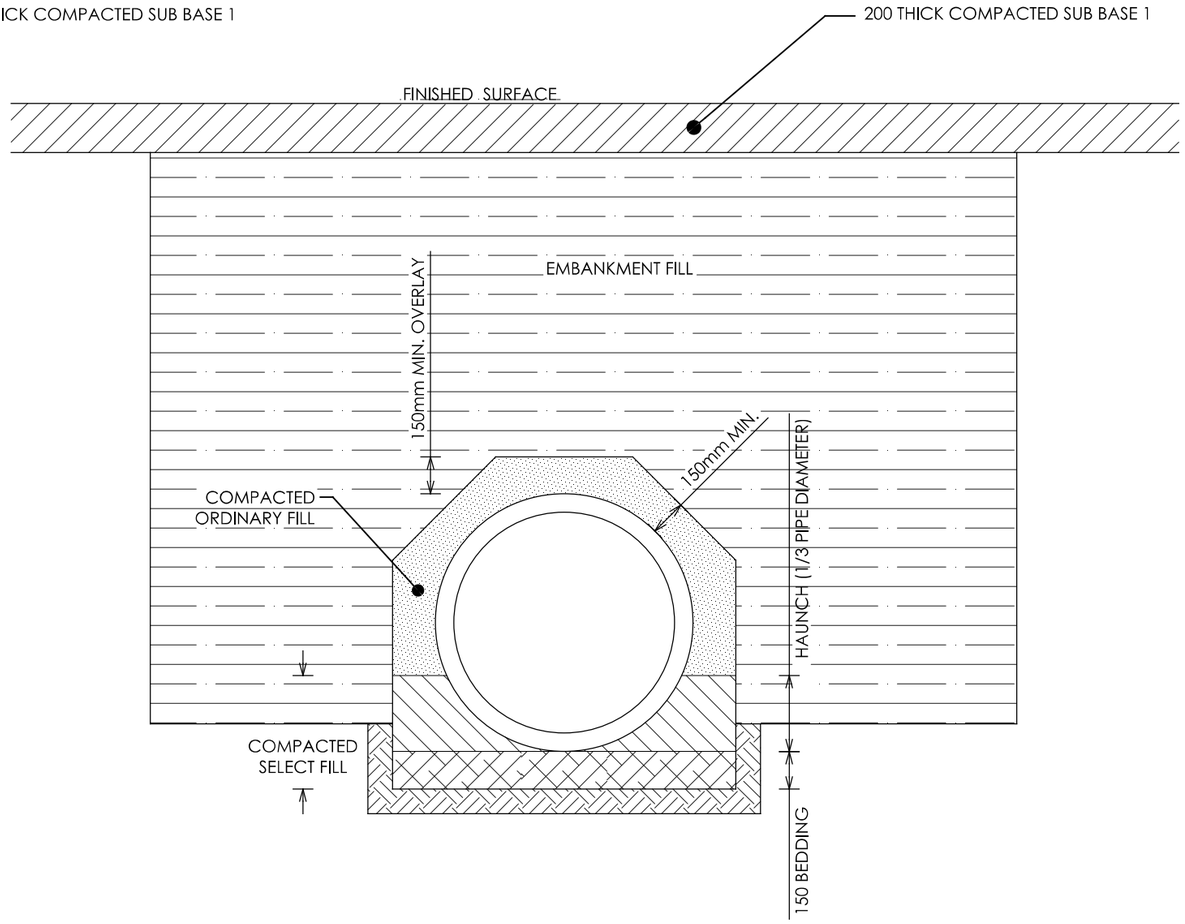
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
AS_SHOWN	17/06/2026	MS	JM

PROJECT NO:	DRAWING NO:	REVISION:
26043	C03	0

Exhibited



TRENCH



EMBANKMENT

COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
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	.		

STATUS: PRELIMINARY

REV:

CIVILVISION CONSULTING
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PROJECT:
LOT FILL AND DRAINAGE
EVANDALE RD, WESTERN JUNCTION

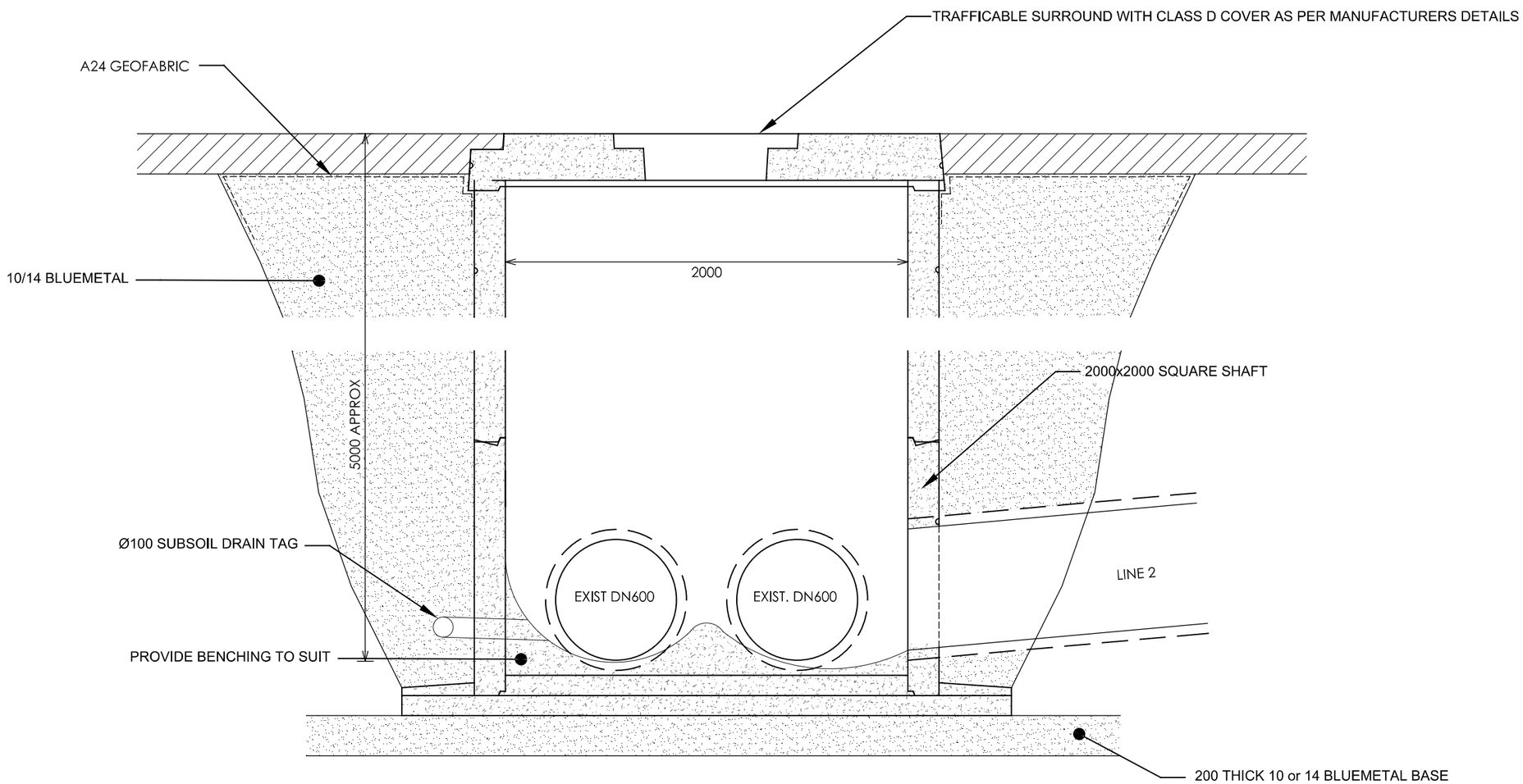
CLIENT:
TASRAIL

DRAWING TITLE:
TRENCH & PAVEMENT DETAILS

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
AS_SHOWN	17/06/2026	MS	JM

PROJECT NO:	DRAWING NO:	REVISION:
26043	C04	0

Exhibited



PIT SW 1/1
SCALE 1:40

NOTES:

1. PIT BASE, SHAFT & SURROUND TO BE DESIGNED BY MANUFACTURER TO HEAVY DUTY STANDARD

COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
	.		
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	.		

STATUS: PRELIMINARY

REV:
CIVILVISION CONSULTING
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EVANDALE RD, WESTERN JUNCTION

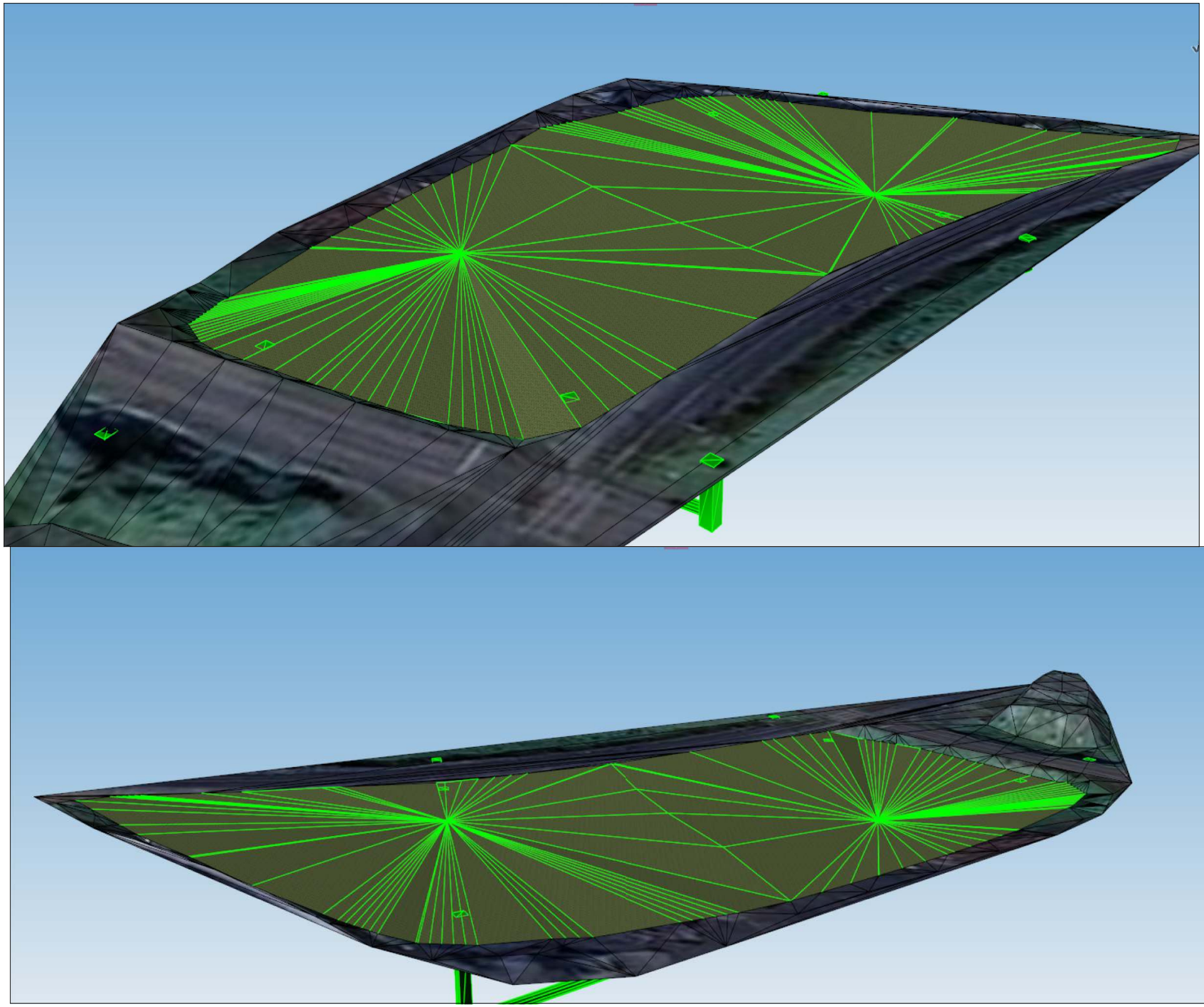
CLIENT:
TASRAIL

DRAWING TITLE:
PIT SW 1/1 DETAIL

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
AS_SHOWN	17/06/2026	MS	JM

PROJECT NO:	DRAWING NO:	REVISION:
26043	C05	0

Exhibited



COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
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STATUS: PRELIMINARY

REV:

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PROJECT:
LOT FILL AND DRAINAGE
EVANDALE RD, WESTERN JUNCTION

CLIENT:
TASRAIL

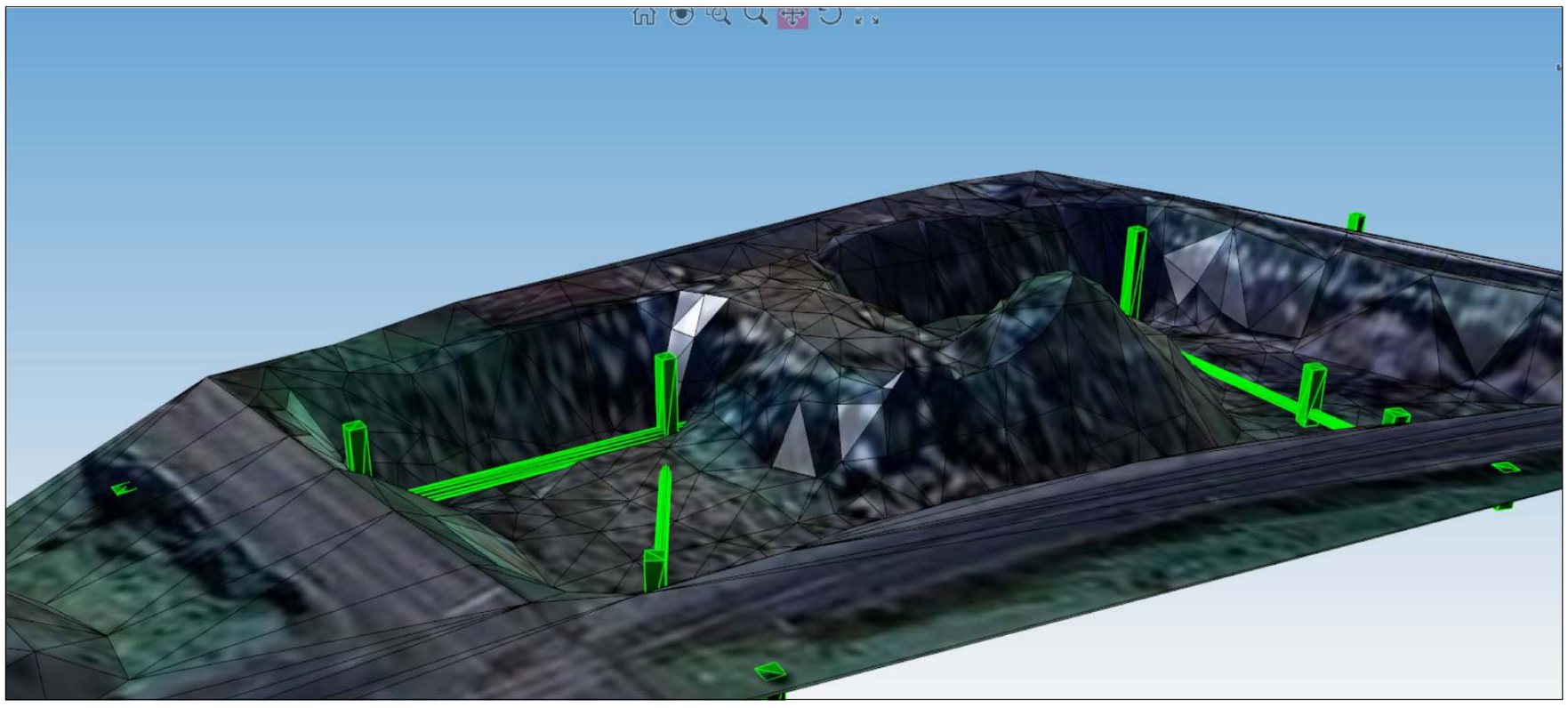
DRAWING TITLE:
FINISHED SURFACE RENDERS

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
AS_SHOWN	17/06/2026	MS	JM

PROJECT NO:	DRAWING NO:	REVISION:
26043	C06	0

Exhibited





COUNCIL APPROVAL

TASRAIL APPROVAL

REV:	DESCRIPTION:	BY:	DATE:
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STATUS: PRELIMINARY

REV:
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PROJECT:
LOT FILL AND DRAINAGE
EVANDALE RD, WESTERN JUNCTION

CLIENT:
TASRAIL

DRAWING TITLE:
EXISTING SURFACE RENDERS

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
AS_SHOWN	17/06/2026	MS	JM
PROJECT NO:	DRAWING NO:		REVISION:
26043	C07		0

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ECOtas
Environmental Consulting Options Tasmania

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0407 008 685
ABN 83 464 107 291

TasRail

ATTENTION: Bowen Wagenknecht (Environmental Advisor/Safety, Health & Environment)

11 Technopark Drive

Kings Meadows TAS 7249

21 August 2026

Dear Bowen

RE: Natural Values Assessment culvert works and material infill
Western Junction, Tasmania

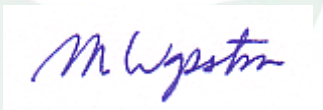
Please find following a statement of findings on the natural values assessment of the proposed culvert works and material infill at the confluence of the Western and Southern rail lines, Western Junction, Tasmania.

The present statement is intended to facilitate further consideration of the relevant provisions of the Natural Assets Code of the *State Planning Provisions* under the *Tasmanian Planning Scheme – Northern Midlands Local Provisions Schedule*, specifically as they relate to the presence of the Waterway and Coastal Protection Area overlay.

Note that this statement and attached database reports do not constitute legal advice. It is recommended that formal advice be sought from the relevant agency prior to acting on any aspect of this report.

Please do not hesitate to contact me further if additional information is required.

Kind regards



Mark Wapstra
Senior Scientist/Manager

Exhibited

NATURAL VALUES ASSESSMENT OF CULVERT WORKS AND MATERIAL INFILL, WESTERN JUNCTION, TASMANIA



Environmental Consulting Options Tasmania (ECO*tas*) for TasRail

21 August 2026

Mark Wapstra
28 Suncrest Avenue
Lenah Valley, TAS 7008

ABN 83 464 107 291
email: mark@ecotas.com.au
web: www.ecotas.com.au

mobile ph.: 0407 008 685

Exhibited

NATURAL VALUES ASSESSMENT OF CULVERT WORKS AND MATERIAL INFILL, WESTERN JUNCTION, TASMANIA

SUPPORT DOCUMENTATION FOR PLANNING APPROVALS

Prepared by Brian French & Mark Wapstra for TasRail, 21 August 2026

Preamble

TasRail engaged Environmental Consulting Options Tasmania (ECO*tas*) to provide advice in relation to natural values assessment of the proposed culvert works and material infill at the confluence of Western and Southern rail lines, Western Junction, Tasmania (Figures 1-4). It is proposed to connect a series of existing culverts to enable the infill of ca. 0.3 ha (3,100 m^2) depression between the southern and western rail lines at the eastern margin of the Western Junction rail yards to expand the size of the existing hardstand at the site. The depression forms a section of the north-"flowing" Springvale Creek, which passes under Evandale Road on the southwestern side of the depression and exits under the southern line railway formation to the northeast via an existing culvert. The depression contains 1,785 m^3 of historically stockpiled material. The depression is clearly evident in topographic greyscale (LiDAR) imagery (Figure 4).

Details of the proposal are outlined within Civilvision Consulting (2026) for detailed design of the proposed infrastructure works, Pitt & Sherry (2026a & 2026b) for analysis of the suitability for the reuse of stockpile materials (mainly rail formation ballast spoil) from both the East Tamar Junction and Western Junction areas to fill the void, and within Hydrodynamica (2026) for a hydrological assessment including modelling of stormwater flows of Springvale Creek. The findings of these assessments need to be referred to in conjunction with planning considerations discussed within the context of the present statement.

This statement considers vegetation types, threatened flora and fauna and makes brief comments on other natural values matters usually considered under DNRET's *Guidelines for Natural Values Surveys – Terrestrial Development Proposals* (such as vegetation types, declared weeds, and plant and animal disease issues). Furthermore, this statement is intended to facilitate further consideration of the relevant provisions of the Natural Assets Code, specifically as they relate to the presence of the Waterway and Coastal Protection Area overlay to satisfy C7.6.1 P1 of the Natural Assets Code of the *State Planning Provisions* under the *Tasmanian Planning Scheme – Northern Midlands Local Provisions Schedule*.

Site details

Address: Evandale Road, Western Junction, Tasmania, 7212 (Figures 1-3)

Tenure: Authority Crown (Building Tasmania – Transport) surrounded by Casement (State Rail Network) (Figure 5)

PID: 0; C.T.: 34014/1; LPI: 4790156 (Authority Crown title)

Tasmanian Planning Scheme Zoning: Utilities (Figure 6)

Overlays (relevant to the present assessment): Waterway and Coastal Protection Area (Natural Assets Code) – see further discussion below (Figure 7)

Drainage feature:

The site where spoil is intended to be utilised to infill is mostly subject to the Waterway and Coastal Protection Area (WCPA) overlay (Figure 7) associated with the mapped location of Springvale Creek. This is based on the "blue hydrographic line" as per LISTmap (see Figures 2 & 3). Springvale Creek is an ephemeral drainage feature, which to the west/southwest of Western Junction lacks a defined channel, essentially occurring as a depression in paddocks utilised for stock grazing and some cropping. Springwater Creek enters the Western Junction

Exhibited

yard area to the southwest of Evandale Road and crosses Western Junction in a northeasterly direction, essentially underneath the rail infrastructure via a series of existing culverts with the culvert outflow to the eastern side of Western Junction.

Initial interpretation of "watercourse"

The *State Planning Provisions* define a watercourse to mean "a defined channel with a natural or modified bed and banks that carries surface water". To that end, virtually every "channel" could be construed as a "watercourse" and this could be extended to constructed drains, whether concrete-lined, simple road/rail table drains or a minor dip in the topography created by artificial means. It does not seem logical that the *State Planning Provisions* would have been constructed to allow this almost all-encompassing interpretation. This view is supported by the purpose statement (C7.1.1) of the Natural Assets Code that refers to the "…natural ecological function of watercourses…". Further to this, the definition of the "waterway and coastal protection area" in the Natural Assets Code indicates it to mean "land…(b)… but does not include a piped watercourse or piped drainage line".

The site assessment found limited evidence of the Springvale Creek drainage feature that could be properly construed as a "watercourse" within the intent of the *State Planning Provisions*. On this basis, it is challenging to indicate that the Natural Assets Code should be applied to this proposal. However, the provisions of the Code are reviewed below, preceded by a simple review of the natural values present within the part of the site proposed for management of spoil.

Assessment

Preliminary database checks

LISTmap was examined to determined existing vegetation mapping and known sites for threatened flora and fauna. Database reports were produced under DNRET's *Natural Values Atlas* (DNRET 2026), the Forest Practices Authority's *Biodiversity Values Database* (FPA 2026) and the Commonwealth *Protected Matters Report* (CofA 2026) to support the assessment process (all appended for reference).

Site assessment

The field assessment was conducted on 25 Mar. 2025 by Brian French (ECO*tas*) in the company of Jason Burns (TasRail). The site was accessed on foot under Track Safety Awareness such that all works could be discussed, and relevant section examined.

The study area (Figures 1-3) was assessed for the presence of threatened flora, fauna, vegetation types and potentially invasive weed species.

The results are listed under ***Findings*** below.

Findings

Vegetation types

Available TASVEG mapping (TASVEG versions 3.0 to Live all identical) (Figure 7) indicates where works are proposed, and indeed the greater area, is entirely mapped as agricultural land

Exhibited

(TASVEG code: FAL). This is incorrect. The site, including the entire Western Junction Yard and Evandale Road, is better mapped under the TASVEG vegetation classification system as "permanent easements" (TASVEG code: FPE) which is described as (Kitchener & Harris 2013+, updated Nov. 2025):

> "native vegetation that is maintained in a modified state within infrastructure easements, such as under power transmission lines and along transportation verges, etc."
>
> and
>
> "vegetation in easements that are no longer managed and that has returned to a more natural state is better mapped to a native vegetation mapping unit determined on the basis of the dominant species composition".

In essence, all vegetation between an active rail line and the edge of the easement should comprise "managed" vegetation in some point in time and therefore be mapped as FPE. The site assessment found that the proposal area is best mapped as FPE; however, at a fine scale, could be mapped as a weed infestation (TASVEG code: FWU) due to the site being entirely dominated by introduced invasive weed species. At this juncture, we have not provided a revised vegetation map as this should be properly undertaken as a broader re-mapping exercise of the vegetation within the greater area, not as a piecemeal update of a small area.

No vegetation types classified as threatened under Schedule 3A of the Tasmanian *Nature Conservation Act 2002* will be disturbed by the current proposal.

No vegetation types listed as threatened under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* were detected from the proposed works area, such that a referral under the Act is not warranted in relation to this value.

It is clear that the proposed culvert works and spoil management will not materially impact on any areas of "native vegetation" as intended by the definition of such under the *State Planning Provisions*, viz. "means plants that are indigenous to Tasmania including trees, shrubs, herbs and grasses that have not been planted for domestic or commercial purposes".

Threatened flora

Database information indicates that the part of the site proposed for spoil management does not support known populations of flora listed as threatened on either the Tasmanian *Threatened Species Protection Act 1995* or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999* (Figure 8).

The site assessment did not detect any such species or likely potential habitat of several species.

Threatened fauna

Database information indicates that the part of the site proposed for culvert works and spoil management does not support known populations of fauna listed as threatened on either the Tasmanian *Threatened Species Protection Act 1995* or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999* (Figure 10). Site assessment did not detect any such species, nor significant potential habitat of such species.

There are sighting-type records of species in the greater area such as of the eastern barred bandicoot (*Perameles gunnii*) and Tasmanian devil (*Sarcophilus harrisii*), indicating the likely presence of these species (Figure 9). Other threatened species that may utilise the greater area include the masked owl (*Tyto novaehollandiae* subsp. *castanops*), wedge-tailed eagle (*Aquila audax* subsp. *fleayi*), and growling grass frog (*Ranoidea* [syn. *Litoria*] *raniformis*). No evidence of critical habitat features (e.g. dens, nests, waterbodies, areas of prime habitat likely to be cleared) was detected from the proposal site or surrounds.

Exhibited

Declared weeds

Gorse (*Ulex europaeus*), crack willow (*Salix ×fragilis* nothovar. *fragilis*) and blackberry (*Rubus* sp.) are present within the proposal area. However, the proposal will essentially eliminate these species by virtue of the depression being filled. The main concern is for machinery and vehicles leaving the proposed works area if they are moving to a weed-free area.

Any further management actions should aim to minimise the risk of introducing weeds and distributing weeds to other areas due to the invasive species noted within the works areas. Importantly, the current distribution of weed species needs to be further contained to minimise the potential spread of these species to surrounding areas via the movement of contaminated soil/materials and machinery. The key to this will be hygiene protocols for machinery, vehicles and personnel exiting the works area, particularly if they are leaving the site with contaminated soil present.

Several planning manuals provide guidance on appropriate management actions, which can be referred to develop site-specific prescriptions for any proposed works in each of the areas. These manuals include:

- Allan, K. & Gartenstein, S. (2010). *Keeping It Clean: A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens*. NRM South, Hobart;
- Rudman, T. (2005). *Interim* Phytophthora cinnamomi *Management Guidelines*. Nature Conservation Report 05/7, Biodiversity Conservation Branch, Department of Primary Industries, Water & Environment, Hobart;
- Rudman, T., Tucker, D. & French, D. (2004). *Washdown Procedures for Weed and Disease Control*. Edition 1. Department of Primary Industries, Water & Environment, Hobart; and
- DPIPWE (2015). *Weed and Disease Planning and Hygiene Guidelines – Preventing the Spread of Weeds and Diseases in Tasmania*. Department of Primary Industries, Parks, Water & Environment, Hobart.

Chytrid fungus and other freshwater pathogens

Native freshwater species and habitat are under threat from freshwater pests and pathogens including *Batrachochytrium dendrobatidis* (chytrid frog disease), *Mucor amphibiorum* (platypus mucor disease) and the freshwater algal pest *Didymosphenia geminata* (didymo) (Allan & Gartenstein 2010). Freshwater pests and pathogens are spread to new areas when contaminated water, mud, gravel, soil and plant material or infected animals are moved between sites. Contaminated materials and animals are commonly transported on boots, equipment, vehicles tyres and during road construction and maintenance activities. Once a pest pathogen is present in a water system it is usually impossible to eradicate. The manual *Keeping it Clean: A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens* (Allan & Gartenstein 2010) provides information on how to prevent the spread of freshwater pests and pathogens in Tasmanian waterways wetlands, swamps and boggy areas.

Springvale Creek "flows" through the proposed works site. This is an ephemeral drainage feature that was dry at the time of the initial survey (late March 2025). It is recommended to assume that the disease is absent and to manage operations as to minimise the risk of introducing the pathogen. At the site, the following specific actions are recommended:

- ensure that vehicles, machinery, equipment, materials and personnel adhere to the general hygiene protocols provided in *Keeping it Clean: A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens* (Allan & Gartenstein 2010); and
- ensure that access tracks are well-drained such that water does not pool for long periods, minimising the opportunity for the disease to establish and persist, and ensuring that frog species are restricted to non-anthropogenic habitats in the adjacent forest/natural streams.

Exhibited

Natural assets

Under the Natural Assets Code of the *State Planning Provisions*, "natural assets" are taken to mean "biodiversity, environmental flows, natural streambank and streambed condition, riparian vegetation, littoral vegetation, water quality, wetlands, river condition and waterway and/or coastal values". This is mentioned to indicate that the site assessment did not detect any such "natural assets" within the part of the site proposed for works.

Consideration of planning scheme requirements

The key matter that will require addressing is Performance Criteria P1 of Clause C7.6.1 of the Natural Assets Code related to the Waterway and Coastal Protection Area overlay associated with the "blue hydrographic line" labelled as "Springvale Creek".

The Purpose of the Natural Assets Code is stated as:

C7.0 Natural Assets Code

C7.1 Code Purpose

The purpose of the Natural Assets Code is:

C7.1.1 To minimise impacts on water quality, natural assets including native riparian vegetation, river condition and the natural ecological function of watercourses, wetlands and lakes.

C7.1.2 To minimise impacts on coastal and foreshore assets, native littoral vegetation, natural coastal processes and the natural ecological function of the coast.

C7.1.3 To protect vulnerable coastal areas to enable natural processes to continue to occur, including the landward transgression of sand dunes, wetlands, saltmarshes and other sensitive coastal habitats due to sea-level rise.

C7.1.4 To minimise impacts on identified priority vegetation.

C7.1.5 To manage impacts on threatened fauna species by minimising clearance of significant habitat.

RESPONSE: Of these purpose statements, C7.1.1 has possible application, although it is reiterated that the site does not support the type of natural values mentioned in the purpose statement viz. no natural "riparian vegetation", no "river condition" per se; however, "natural ecological function of [a] watercourse" has application because the site can be reasonably construed as a "watercourse".

The Code has the following application:

C7.2 Application of this Code

C7.2.1 This code applies to development on land within the following areas:

(a) a waterway and coastal protection area;

C7.2.2 This code does not apply to use.

RESPONSE: C7.2.1(a) is applicable.

The Development Standards for Buildings and Works (C7.6) and specifically those for Buildings and Works within a Waterway and Coastal Protection Area or Future Coastal Refugia Area (last not relevant to this site) are stated below:

C7.6 Development Standards for Buildings and Works

C7.6.1 Buildings and works within a waterway and coastal protection area or a future coastal refugia area

Objective: That buildings and works within a waterway and coastal protection area or future coastal refugia area will not have an unnecessary or unacceptable impact on natural assets.

Exhibited

RESPONSE: While there will be works within the technical overlay, it is very difficult to anticipate a scenario in which such works would "have an unnecessary or unacceptable impact on natural assets" given the wholly modified status of the site and that water flow will not be impeded and arguably, the installation of the culverts under the site will facilitate less risk of water (or catchment) contamination from the industrial use of the area above. That is, we do not find the intent of the objective statement will be compromised by the proposal.

The Acceptable Solution A1 of C7.6.1 is stated as:

> A1
>
> Buildings and works within a waterway and coastal protection area must:
>
> (a) be within a building area on a sealed plan approved under this planning scheme;
>
> (b) in relation to a Class 4 watercourse, be for a crossing or bridge not more than 5 m in width; or
>
> (c) if within the spatial extent of tidal waters, be an extension to an existing boat ramp, car park, jetty, marina, marine farming shore facility or slipway that is not more than 20% of the area of the facility existing at the effective date.

RESPONSE: In our interpretation, these provisions are either not met or are not applicable such that the Performance Criteria must be addressed.

The Performance Criteria P1.1 of C7.6.1 is stated as:

> P1.1
>
> Buildings and works within a waterway and coastal protection area must avoid or minimise adverse impacts on natural assets, having regard to:

RESPONSE: Under the Code, "natural assets" are taken to mean "biodiversity, environmental flows, natural stream bank and stream bed condition, riparian vegetation, littoral vegetation, water quality, wetlands, river condition and waterway and/or coastal values" i.e. they have broad definition and potential application. That said, in this case the highly modified status of the part of the site where works will be undertaken (i.e. installation of culverts and infilling) do not include any such "natural assets" beyond maintaining the "environmental flow" of Springvale Creek. Essentially, this makes it a logical impossibility to "avoid or minimise adverse impacts" (or indeed any impacts), such that P1.1 is not met by default.

Further consideration is given to the sub-clauses of P1.1. With respect to the phrase "…having regard to…", this is considered in the manner referred to in *S and S McElwaine and A Hamilton v West Tamar Council and Growth Developments Pty Ltd [2021] TASCAT 4 (17 November 2021)*, where TASCAT stated: "the requirement to 'have regard to' does not elevate P2.1(a) to (f) to mandatory requirements that the proposal must satisfy. The tribunal need only consider those subparagraphs in ascertaining whether the proposal complies with clause E8.6.1 P2.1".

Below the sub-criteria of P1.1 are addressed in turn.

> (a) impacts caused by erosion, siltation, sedimentation and runoff;

RESPONSE: To our interpretation, this provision is either not applicable or met by default because there will unlikely be any "erosion, siltation, sedimentation and runoff". In fact, the culvert installation and connection works will contain any potential sediment contamination from the existing open 'hole' allowing Springvale Creek unrestricted passage through the site with essentially no risk of "erosion, siltation, sedimentation and runoff". Furthermore, modelling by Hydrodynamica (2026) suggests that the flow rate of Springvale Creek will be reduced, which minimises risk of erosion. P1.1(a) does not appear to have further "work" to do in relation to these risks.

> (b) impacts on riparian or littoral vegetation;

RESPONSE: Not applicable (there is no "riparian vegetation" because this would imply the presence of a watercourse for the riparian vegetation to be associated with; there is no littoral vegetation).

Exhibited

(c) maintaining natural streambank and streambed condition, where it exists;

RESPONSE: Not applicable (there is no natural streambank and/or streambed condition that exists).

(d) impacts on in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation;

RESPONSE: Not applicable (there is no natural formed watercourse such that there can be no impact to the non-existent in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation as these features are entirely absent).

(e) the need to avoid significantly impeding natural flow and drainage;

RESPONSE: Not applicable - there is no alteration to the natural flow and drainage of Springvale Creek).

(f) the need to maintain fish passage, where known to exist;

RESPONSE: Not applicable – the site will not support native fish.

(g) the need to avoid land filling of wetlands;

RESPONSE: Not applicable (no wetlands present).

(h) the need to group new facilities with existing facilities, where reasonably practical;

RESPONSE: To our interpretation, this provision is not relevant to the present proposal.

(i) minimising cut and fill;

RESPONSE: Uncertain application in relation to the present proposal per se, except to indicate the proposal is in regard to "spoil" rather than "cut and fill"; irrespective of this, "cut and fill" cannot be minimised – works need to occur that create "spoil" from either East Tamar Junction and/or Western Junction (the "cut") that needs to be placed within the depression (the "fill"). Furthermore, the proposal will avoid unwanted fill from unknown sources by external parties and will improve the visual amenity and use of the site.

(j) building design that responds to the particular size, shape, contours or slope of the land;

RESPONSE: Not relevant to present proposal (no buildings).

(k) minimising impacts on coastal processes, including sand movement and wave action;

RESPONSE: Not applicable (not a coastal situation).

(l) minimising the need for future works for the protection of natural assets, infrastructure and property;

RESPONSE: Once the culvert installation and connection works are complete, the only future works will be further infilling to bring the depression levels in line with the existing railway formation. Given water will flow through culvert inflow to outflow without disruption (and considering the absence of natural assets within the void), this is not anticipated to impact natural assets.

(m) the environmental best practice guidelines in the *Wetlands and Waterways Works Manual*; and

RESPONSE: These may be applicable because there will be works within a "waterway"; however, beyond minimising sediment deposition into the ephemeral Springvale Creek, the recommendations within *Wetlands and Waterways Works Manual* have very limited application as this manual assumes natural or semi-natural ecological or geomorphological habitats/environments which are absent.

(n) the guidelines in the *Tasmanian Coastal Works Manual*.

RESPONSE: Not applicable (these are not coastal works).

Based on the above review, and setting aside the interpreted possibility of the non-applicability of the Natural Assets Code because of the absence of any "natural" watercourse, examination of P1.1 of C7.6.1 indicates that the proposal should fully satisfy all relevant provisions without the need for specific mitigation conditions.

Exhibited

Note that this statement does not constitute legal advice, and provides our interpretation of the provisions of the *State Planning Provisions*, which may not represent the views of Northern Midlands Council or other agencies. It is recommended that formal advice be sought from the relevant agency prior to acting on any aspect of this report.

REFERENCES

CofA (Commonwealth Australia) (2026). *Protected Matters Report* for a polygon defining the study area, dated 19 Aug. 2026. [appended]

Civilvision Consulting (2026). *Lot Fill and Drainage, Evandale Rd, Western Junction* – Series of plans outlining the proposal including detailed works plans and 3D modelling of proposed infrastructure. Civilvision Consulting for TasRail, dated 17 June 26. [appended]

de Salas, M.F. & Baker, M.L. (2026). *A Census of the Vascular Plants of Tasmania, including Macquarie Island*. Tasmanian Herbarium, Hobart. [for nomenclature of scientific names of vascular plants]

DNRET (Department of Natural Resources and Environment Tasmania) (2026). Natural Values Atlas report: *ECOtas_TasRail_WesternJcnHole* for a polygon defining the proposal area (centred on 518137mE 5399512mN), buffered by 5 km, dated 19 Aug. 2026. [appended]

DPIPWE (Department of Primary Industries, Parks, Water & Environment) (2015, updated by NRE Tas 2021). *Guidelines for Natural Values Surveys – Terrestrial Development Proposals*. Department of Primary Industries, Parks, Water & Environment, Hobart.

de Salas, M.F. (Ed.) (2026+). *Flora of Tasmania Online*. Tasmanian Herbarium, Hobart. www.tmag.tas.gov.au/floratasmania. [for nomenclature of scientific names of vascular plants]

FPA (Forest Practices Authority) (2026). *Biodiversity Values Database* report, specifically the species' information for grid reference centroid 518137mE 5399512mN (nominally the centroid of the *Natural Values Atlas* report), buffered by 2 km and 5 km for records of threatened flora and fauna, respectively, hyperlinked species' profiles and predicted range boundary maps, dated 19 Aug. 2026. [appended]

Hydrodynamica (2026). *Stormwater Assessment for TasRail – Western Junction Void.* Hydrodynamica for TasRail, March 2026.

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Pitt & Sherry (2026). *Re: P.26.0676 – TasRail Western Junction Waste Classification – Rev00.* Letter report by Pitt&Sherry Pty Ltd for TasRail, 10 Aug. 2026.

Wapstra, M. (2026). *The Little Book of Common Names for Tasmanian Plants*. Flying Duck Publishing, Hobart.

Exhibited

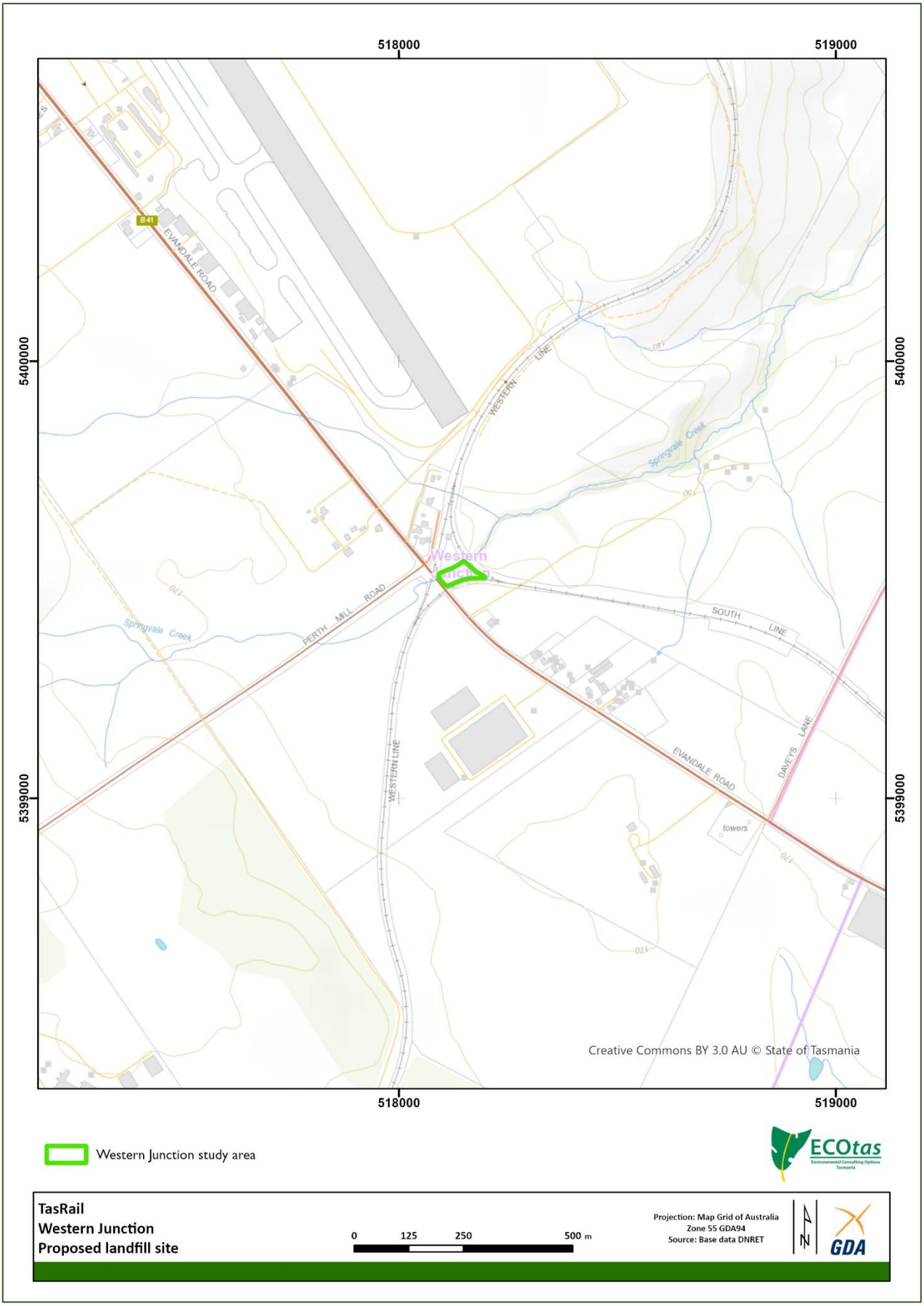


Figure 1. Location of proposed works area

Exhibited

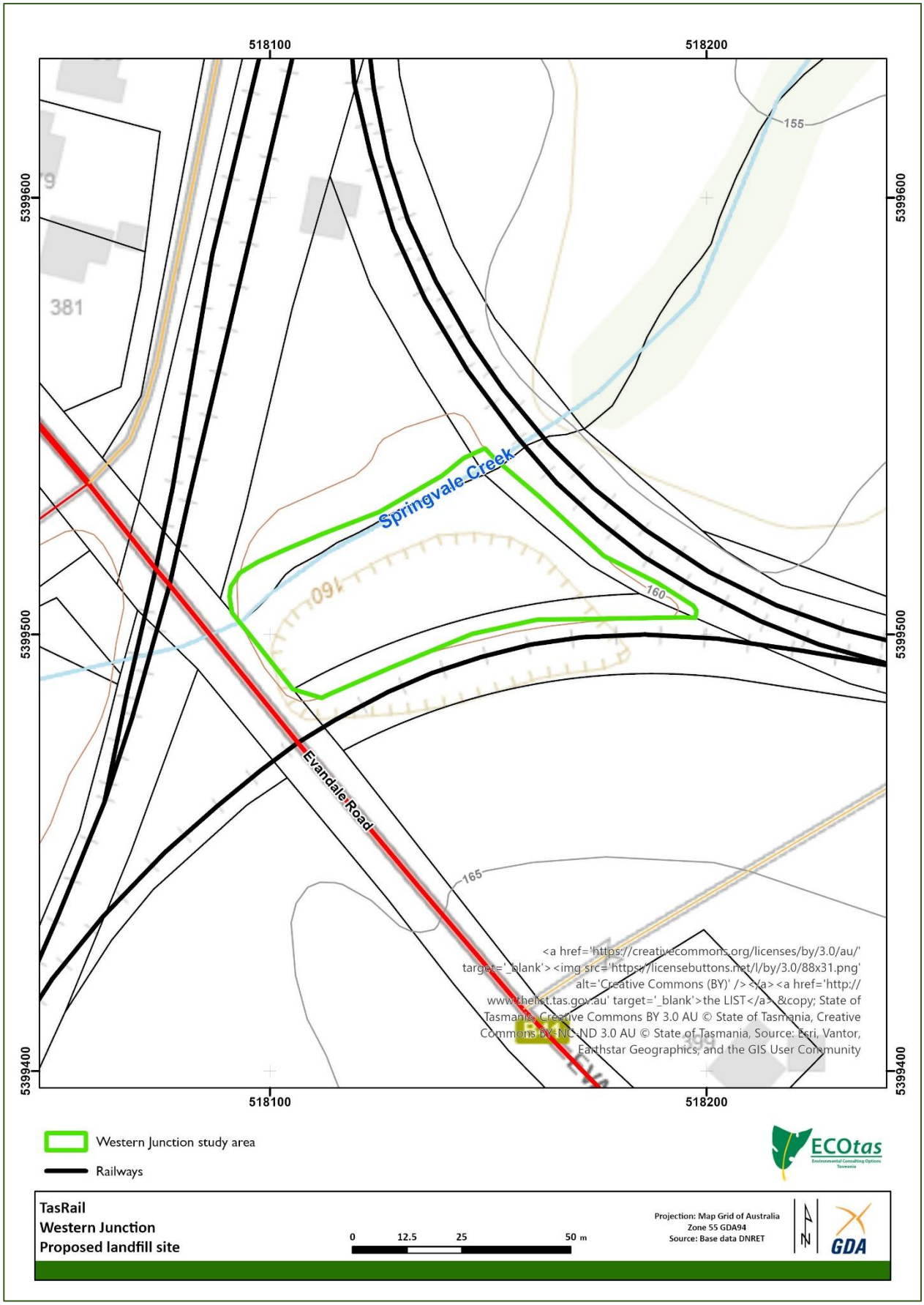


Figure 2. Topographic detail of proposed works area with topographic and cadastral boundaries indicated

Exhibited

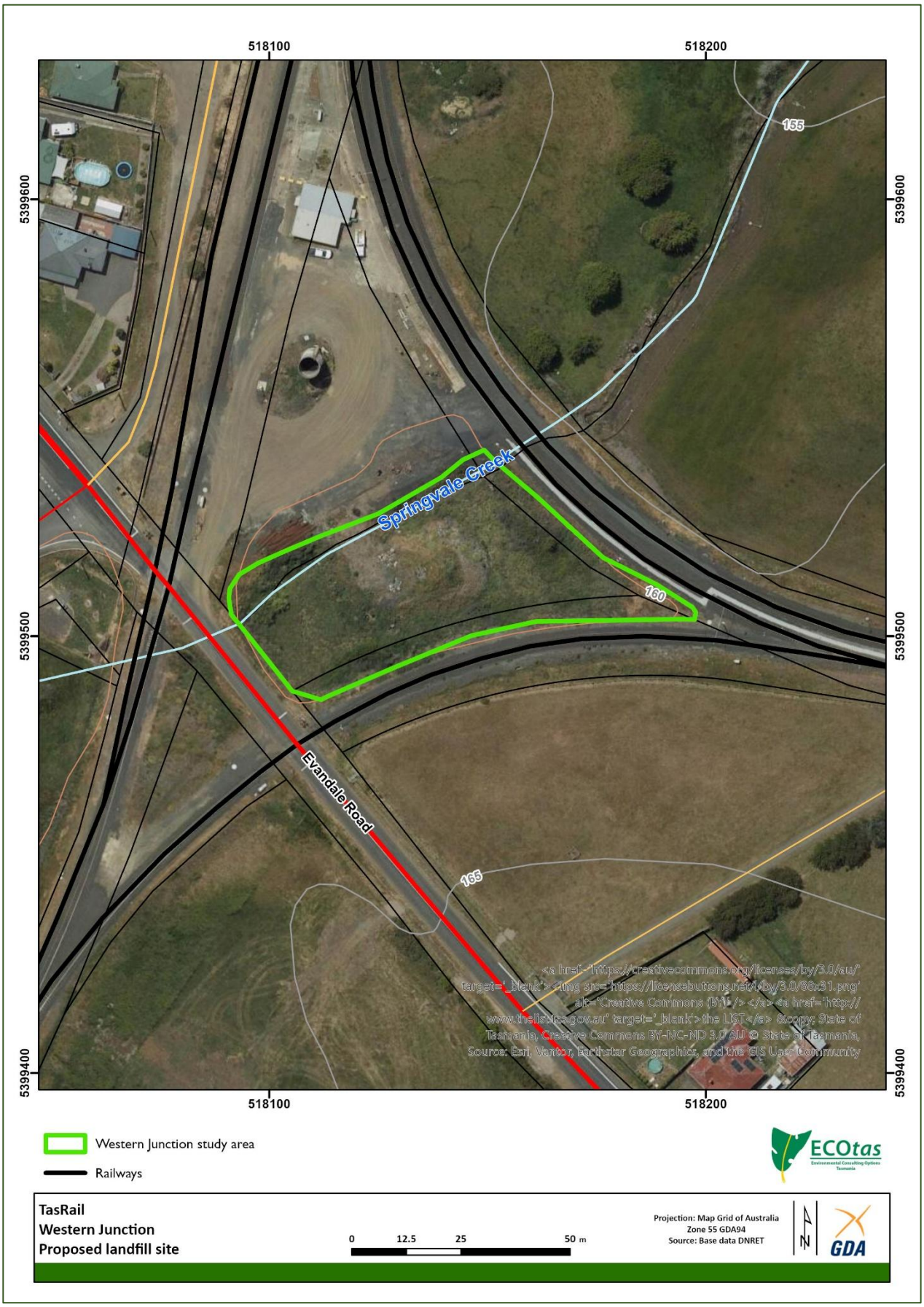


Figure 3. Aerial imagery of proposed works area with topographic and cadastral boundaries indicated

Exhibited



Figure 4. Hillshade grey (LiDAR) of proposed works area

Exhibited

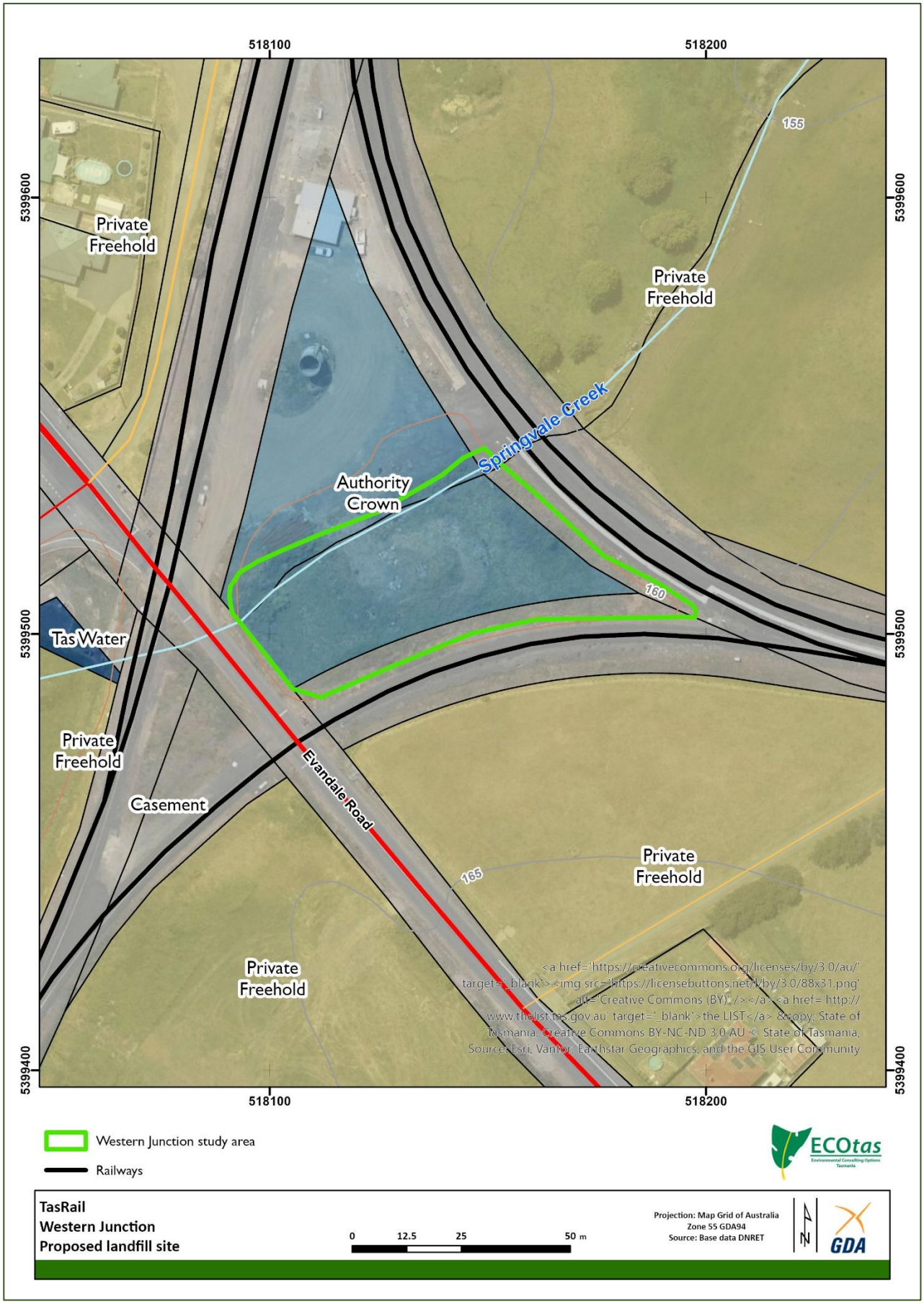


Figure 5. Land tenure of proposed works area

Exhibited



Figure 6. Zoning of assessment area and surrounds pursuant to *Tasmanian Interim Planning Scheme – Northern Midlands*

Exhibited

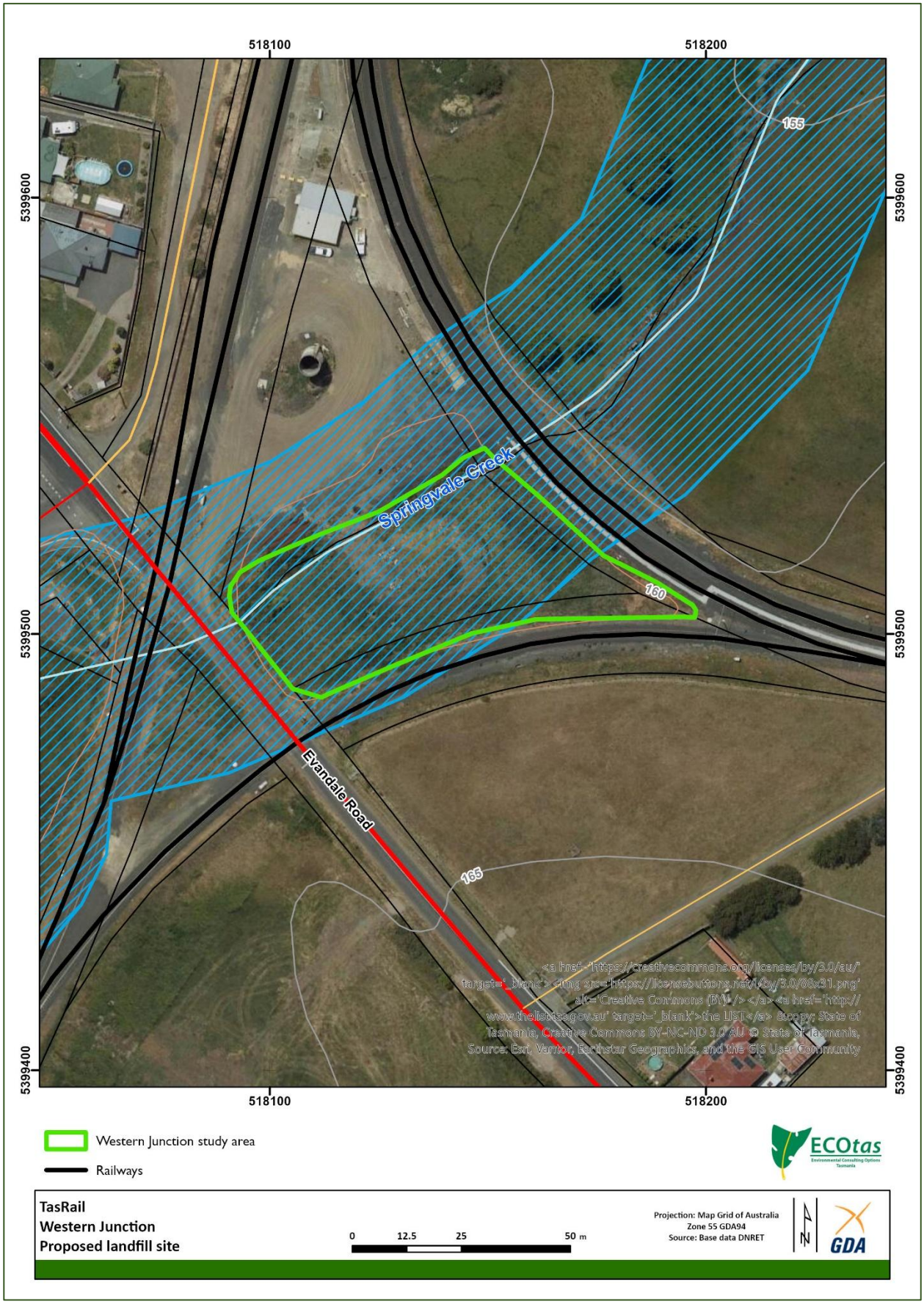


Figure 7. Extent of Waterway and Coastal Protection Area (Natural Assets Code) overlay within proposal area and surrounds pursuant to *Tasmanian Interim Planning Scheme – Northern Midlands*

Exhibited

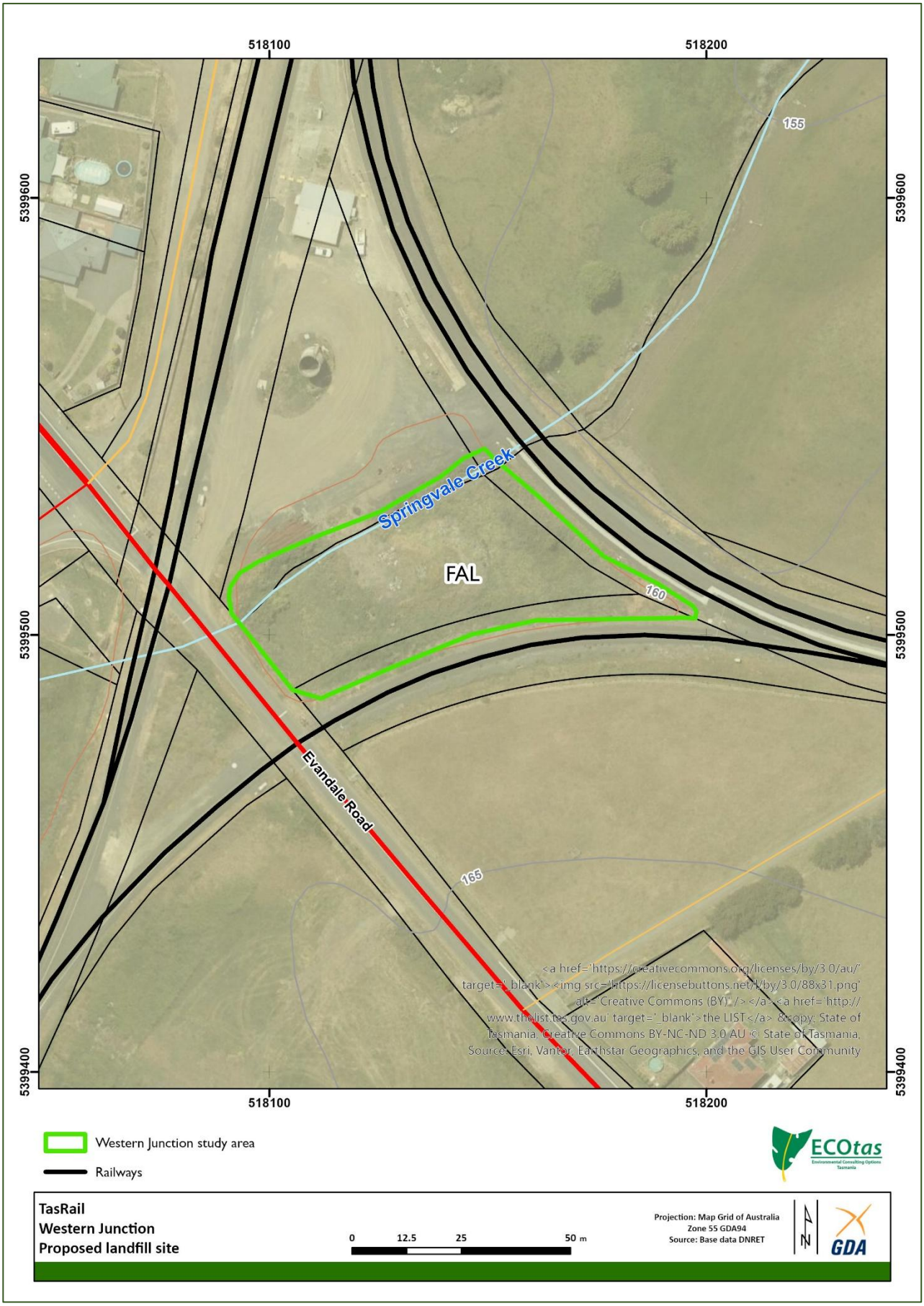


Figure 8. Existing TASVEG mapping of proposed works area and surrounds (refer to text for code)

Exhibited



Figure 9. Threatened fauna database records near proposal area and surrounds

Exhibited

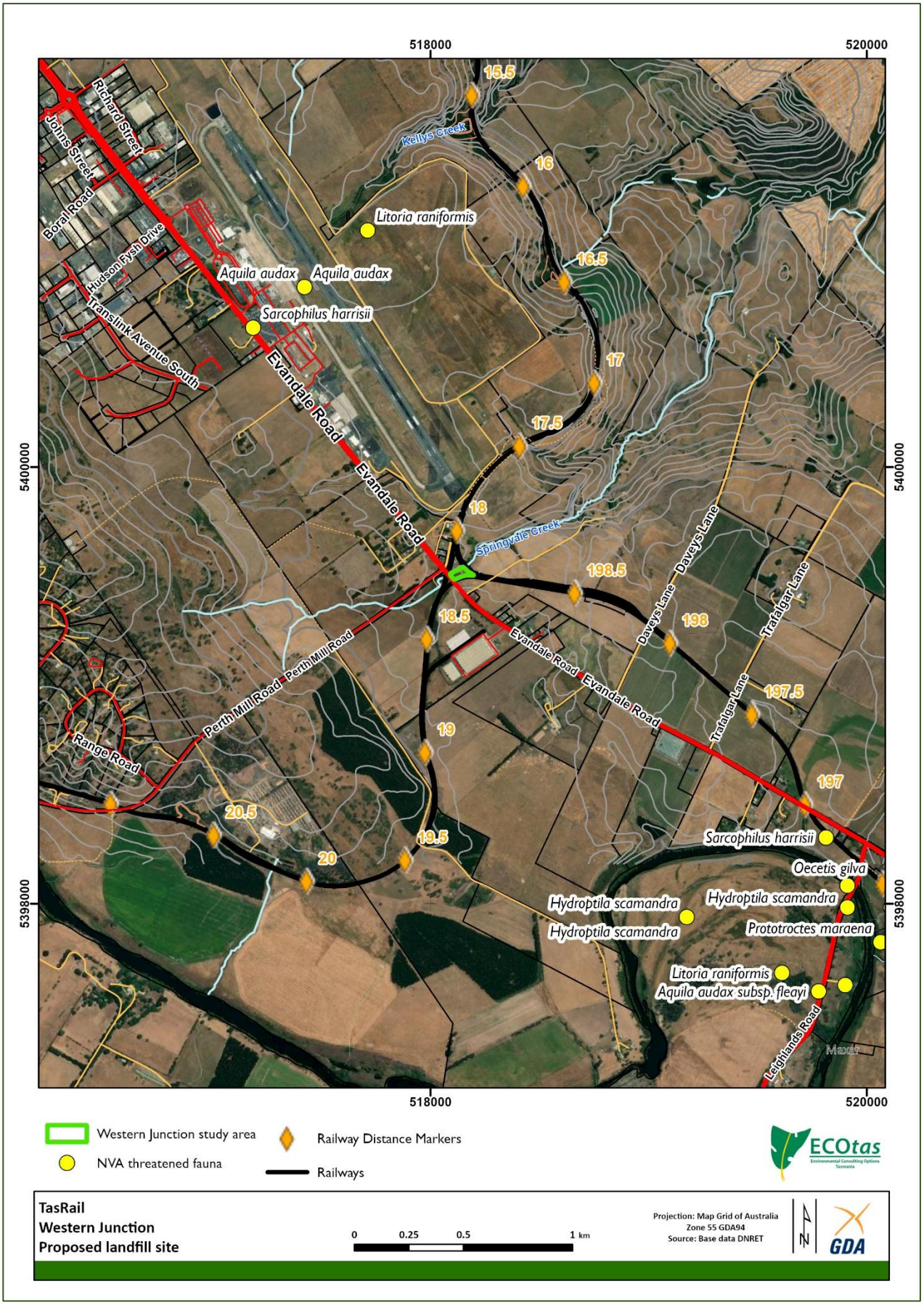


Figure 10. Threatened flora database records near proposal area and surrounds

Exhibited



Plate 1. View southwest with Evandale Road in background and blackberry (*Rubus* sp.) on left and crack willow (*Salix* × *fragilis* nothovar. *fragilis*) on right within Springvale Creek



Plate 2. View east with Springvale Creek in foreground with blackberry (*Rubus* sp.) and gorse (*Ulex europaeus*) scattered across site

Exhibited



Plate 3. View north from existing fill in centre of area



Plate 4. View west across depression with culvert of Rosevale Creek visible in centre of image

Exhibited

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Brisbane
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10 August 2026

Mr Bowen Wagenknecht
Environmental Advisor
Tasmanian Railway Pty Ltd
11 Techno Park Drive
KINGS MEADOWS Tasmania 7249

Dear Bowen,

Re: P.26.0676 – TasRail Western Junction Waste Classification – Rev00

1. Background

Tasmanian Railway Pty Ltd (TasRail) is exploring an opportunity to reuse spoil material within an approximate 2,140 square metre (m^2) void area at Western Junction (WEJ) (refer to Figure 1 and Figure 2). The volume of the void has been estimated by TasRail at approximately 5,200 cubic metres (m^3). TasRail is proposing to backfill the void with existing stockpiled and in-situ soils from the following:

- Historical stockpiled soils within the void (referred to as the Void Stockpile) which consist of approximately 1,785 m^3
- Stockpiled material which is located across the road (referred to as the Roadside Stockpile) which consists of approximately 285 m^3; and
- Stockpiled material adjacent to a tower (referred to as the Tower Stockpile) which consists of approximately 65 m^3.

Sampling of the stockpiles and base of the void earmarked for backfilling at WEJ was completed by TasRail at locations shown in Figure 3 (overview) with detailed locations shown in Figure 4 to Figure 6.

Reporting has been completed by Pitt & Sherry (Operations) Pty Ltd (pitt&sherry) via this letter report, which provides a summary of sampling works and findings.

Exhibited



Figure 1: Overview of the Western Junction Void area (supplied by TasRail)



Figure 2: Overview of the void location within Western Junction (supplied by TasRail)

Exhibited

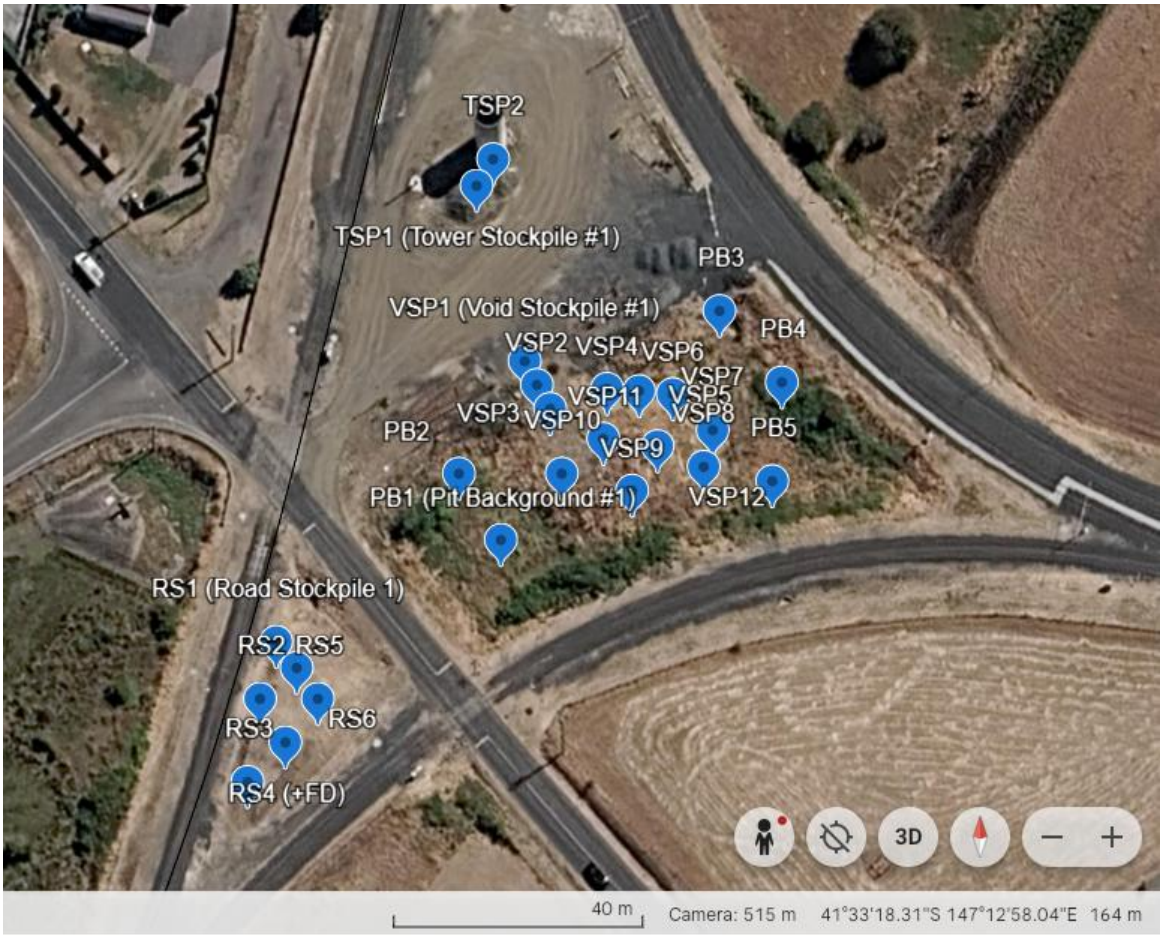


Figure 3: Overview of sampling locations within Western Junction (supplied by TasRail)



Figure 4: Detailed view of void base and Void Stockpile sampling locations (supplied by TasRail)

Exhibited

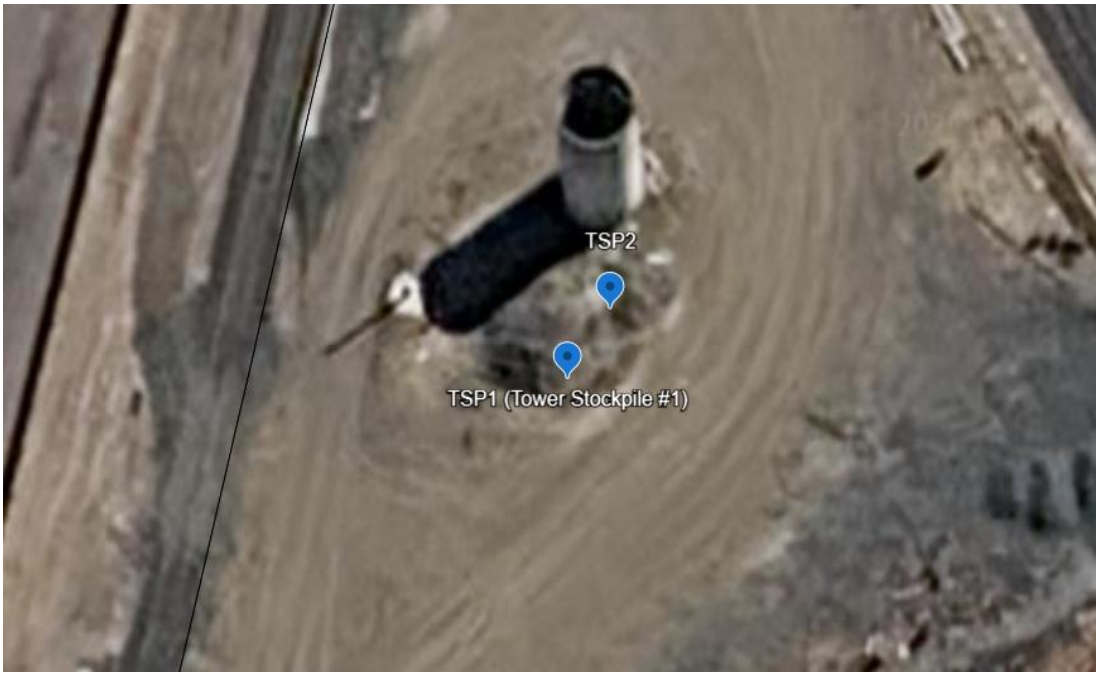


Figure 5: Detail of Tower Stockpile sampling locations (supplied by TasRail)



Figure 6: Detail of Road Stockpile sampling locations (supplied by TasRail)

Exhibited

2. Objectives

The objectives of this waste classification and reuse area sampling and reporting were:

- To collect soil samples from the base of the proposed reuse area, i.e. the void (also referred to as the pit, e.g. samples prefixed PB for pit base), and from the existing stockpiles located at WEJ (samples prefixed RS for Roadside Stockpile, TS for Tower Stockpile and VS for Void Stockpile) and, to assess the suitability of the stockpiled soils for reuse within the void
- To compile and compare analytical results to ASC NEPM[1], IB105[2] and to the proposed reuse area's (i.e. void) concentrations; and
- To compile a brief letter report (this document), including supporting documentation, findings and reuse recommendations.

3. Completed Works

3.1 Sampling Details

Details of the waste classification and reuse area sampling are provided in Table 1.

Table 1: Sampling details

Activity	Details
Sampling date	• 3 June 2026
Sample collection	• Anthony Williams (Environmental Specialist, TasRail) and Bowen Wagenknecht (Environmental Advisor, TasRail)
Sample locations	• Sample locations are shown in Figure 3 to Figure 6
Sampling rationale	• TasRail conducted sampling at WEJ in general accordance with ASC NEPM and EPA Victoria Publication 702.2 (Soil sampling for waste soils) ○ **1,785 m^3 Void Stockpile**: based on a homogenous composition, and in accordance with EPA Vic Publication 702.2 for volumes greater than 250 m^3, a total of **12 samples** were taken across the stockpile at different depths to generally classify the material. ○ **285 m^3 Roadside Stockpile**: Based on a homogenous composition (confidently assumed given this material was placed as part of historical project work), **6 samples** were taken across the stockpile at different depths to generally classify the material. ○ **65 m^3 Tower Stockpile**: Based on a homogenous composition (confidently assumed given this material was placed as part of historical project work), **2 samples** were taken across the stockpile at different depths to generally classify the material. ○ **2,150 m^2 Pit Base (reuse area): 5 samples** were taken to characterise background levels in accordance with AS 4482.1 – 2005 Sample Density Table. • Field data including descriptions and locations were captured for each collected sample (refer to Attachment A). • Field quality assurance and quality control (QA/QC) ○ 2 duplicate samples were taken

[1] *National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended 2013* (ASC NEPM).
[2] *Information Bulletin No. 105 - Classification and Management of Contaminated Soil for Disposal*, Version 3, 2018, Environment Protection Authority Tasmania

Exhibited

Activity	Details
	○ A rinsate sample was taken from the reused digging tool (pick) ○ Experienced environmental staff completed the sampling • A sample of geofabric encountered at one sample location was tested for presence of asbestos fibres • Samples were placed in a chilled esky prior to dispatch
Contaminants of potential concern (CoPCs)	Samples were tested for the expected CoPCs related to TasRail operations and tested CoPCs comprised: • Hydrocarbons – benzene, toluene, ethyl benzene and xylenes and naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAHs) and total petroleum hydrocarbons / total recoverable hydrocarbons (TPH / TRH) (due to rolling stock oils, and potential cargo) • Metals – arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), zinc (Zn) and mercury (Hg).
Sample containers	• Samples were collected in laboratory-supplied receptacles, suitable for the CoPCs to be tested.
Sample collection	• Soil samples collected from stockpile and reuse area locations using a pick and gloved hand; and • The sample containers were filled with minimal headspace (where possible), sealed, labelled, and placed on ice in two eskies.
Sample description	• Sample descriptions were noted on the field sheet (Attachment A); and • Representative images are also provided on the field sheet (Attachment A).
Decontamination	Sampling contamination and cross-contamination mitigation procedures included: • The pick was wiped clean between sampling locations • Single-use disposable nitrile gloves were used and changed after the collection of each sample • New laboratory-supplied receptacles were used for each sample; and • Each sample container was sealed immediately upon filling.
Samples for analysis	• Primary samples: ○ Waste classification – all stockpile soil samples were submitted to the laboratory for analysis of total concentrations of identified CoPCs ○ Reuse area – all pit base soil samples were submitted to the laboratory for analysis of total concentrations of identified CoPCs • QA/QC samples: ○ Two duplicate samples, FD01 and FD02, were collected from sampling locations PB2 and RS4 respectively; and ○ One rinsate sample (Rinsate_PP) was collected from the pick.
Sample transport	• A Chain of Custody (CoC) form was completed, dated, and submitted to the laboratory with the single batch of samples (Attachment B); and • The samples were sent by courier on the day after collection for overnight transport to the ALS Laboratory Springvale, Victoria, for analysis under CoC conditions.
Laboratory analysis	• All samples were submitted to the National Association of Testing Authorities (NATA)-accredited ALS Laboratory in Springvale (Accreditation No. 825) for testing of nominated CoPCs; and • The laboratory documents are provided in Attachment B.
Holding times	• All samples were received by the laboratory within the required holding times for the individual parameters tested • Samples were received chilled at between 3.9 and 5.2 degrees Celsius (°C) which is within the recommended maximum temperature of 6°C (important for preservation of analytes with short holding times such as volatile organic compounds (VOCs)); and

Exhibited

Activity	Details
	• Samples were extracted for analysis by the laboratory within the required holding times for the individual parameters tested.
Quality assurance and quality control (QA/QC)	• Sampling was undertaken by TasRail environmental staff experienced with soil and contaminant sampling. The sampling methodology was agreed prior to sampling with a Senior Principal Environmental Consultant (Fiona Keserue-Ponte of pitt&sherry) and CEnvP SC[3] • Refer to 'decontamination' details above for sample handling • Refer to 'samples for analysis' details above for QA/QC samples • All samples were placed in portable chiller boxes and kept chilled on ice • The samples were sent by courier on the day after collection for overnight transport to the ALS Laboratory Springvale, Victoria, for analysis under CoC conditions; and • ALS is a NATA-accredited laboratory and runs internal QA/QC checks which are documented in its quality control and interpretive quality control reports (Attachment B) and discussed in Section 4.6.

4. Observations and Analytical Results

4.1 Observations

Soil descriptions – refer to the field sheet (Attachment A) for detailed sample descriptions. In summary:

- Pit Base – profile consisted of dark brown clayey loam
- Void Stockpile – profile consisted primarily of clayey silts, with some gravels and loam
- Roadside Stockpile – profile consisted of clayey silts; and
- Tower Stockpile – profile consisted of clayey silts.

Odour – no hydrocarbon odours were noted during sampling. This is further confirmed by the laboratory results for volatile (BTEXN), volatile TPH (C_6-C_9) / TRH (F1 fractions) and semi-volatile TPH (C_{10}-C_{14}) / TRH (F2 fractions) which were all below the laboratory limits of reporting (LORs) (refer to Attachment B & Attachment C).

Staining – no staining was observed (refer to Attachment A).

Other observations – no building demolition rubble (BDR) or potential asbestos-containing materials (ACM) were observed at any of the investigation locations during sampling. Some bitumen was apparent on the surface of the Void Stockpile at location VSP6. Geofabric was also present at Void Stockpile location VSP7 (Attachment A). Geofabric was sampled to confirm presence or absence of asbestos containing materials. The result is discussed in Section 4.3.

[3] Certified Environmental Practitioner Site Contamination specialist (CEnvP SC), certified under the Environment Institute of Australia and New Zealand.

Exhibited

4.2 Analytical Results and Comparison to Adopted Assessment Criteria

The summary table of analytical results compared to ASC NEPM and IB105 criteria is provided in Attachment C.

Assessment of geofabric found at VSP7 for the presence / absence of asbestos containing materials was completed by Prensa and documented in: *Asbestos Bulk Sample Analysis Report – Western Junction, Evandale Road, Western Junction TAS*, June 2026 (refer to Attachment D).

Copies of the ALS Laboratory Certificate of Analysis and related documentation including Chain of Custody documentation, Sample Receipt Notification and QA/QC reports are provided in Attachment B.

4.3 Findings

4.3.1 Indicative IB105 classification of material from sampled locations

Reported concentrations of tested CoPCs for the stockpiles demonstrate that materials from all WEJ stockpiles are classified under IB105 as **Level 2 – low level contaminated soil** based on the following:

- **Void Stockpile** – 95% upper confidence limit on the mean (UCL) of reported concentrations of Cr, Ni, and Zn.
- **Roadside Stockpile** – 95% UCL of reported concentrations of As, Cu, and Ni. One individual exceedance of Level 1 criteria for benzo(a)pyrene (B(a)P) also occurred in one sample; and
- **Tower Stockpile –** individual reported concentrations of Ni, Zn, and one B(a)P concentration exceeded Level 1 criteria; 95% UCL were also calculated although only two samples are included in the Tower Stockpile dataset.

Furthermore, for comparison purposes, Pit Base (PB) samples would also be classified as Level 2 low level contaminated soil based on 95% UCL of reported concentrations of Cr, Ni, if they were to be excavated and disposed offsite, which they are not. In addition, one location reported a Level 2 Zn concentration.

4.3.2 Proposed Reuse Area Characterisation

Site assessment criteria are typically selected based on the following rationale:

- Land zoning and the most sensitive use permissible under that zoning: the void area is within an area that is zoned ‘Utilities’ which is consistent with commercial / industrial land use described under the ASC NEPM
- Proposed land use or new zoning: no change in land use is proposed; and
- Onsite or adjacent sensitive receptors, including human and ecological: the closest residential receptor is approximately 100 m southeast of the void area. The void area is located in the upper reaches of the drainage line which feeds to Springvale Creek, however the void is effectively bunded within the triangular area formed by the junction of the South Line and Western Line. Furthermore, the surrounding catchment surface water flows will bypass the void via the planned installation of concrete culverts and pipework.

On the basis of the above, commercial / industrial criteria have been adopted for this stockpile soils reuse assessment.

Reported concentrations of tested CoPCs within the proposed reuse area (the void / Pit Base samples) are:

- **Human health** – within the ASC NEPM commercial / industrial health investigation levels (HILs) and health screening levels (HSLs) for all parameters

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- **Ecological** – generally within than the ASC NEPM commercial / industrial ecological investigation levels (EILs) / **most conservative** added contaminant limits (ACLs)[4] and ecological screening levels (ESLs) with the exception of the following:
    - Total Ni – concentrations ranged from 54 to 91 mg/kg with an average concentration of 73 mg/kg and a 95% UCL of 85 mg/kg, which exceeds the most conservative EIL of 55 mg/kg[5]; and
    - Total Zn – concentrations ranged from 74 to 213 mg/kg with an average concentration of 127 mg/kg and a 95% UCL of 178 mg/kg, which exceeds the most conservative EIL of 110 mg/kg[6].

4.3.3 Waste spoil suitability for reuse

WEJ stockpile material samples were compared to ASC NEPM commercial / industrial HILs / HSLs and EILs / ESLs (as applicable) to assess their suitability for reuse within the void area from a human health and ecological risk perspective. Based on the similarity of reported results within individual stockpile locations (roadside stockpile, tower stockpile, and void stockpile) these are discussed as an aggregate unless otherwise noted.

Reported concentrations of tested CoPCs within the stockpiled materials are:

- **Human health** – within the ASC NEPM commercial / industrial HILs and HSLs for all parameters
- **Ecological** – generally within than the ASC NEPM commercial / industrial EILs / **most conservative** added ACLs[7] and ESLs with the exception of the following:
    - Total Cu – RS03 reported a total concentration of 321 mg/kg, which exceeds the conservative site-specific EIL of 85 mg/kg[8], and the calculated 95% UCL (185 mg/kg) for the Roadside Stockpile was also above the EIL. Total Cu concentrations at all other sampled locations / stockpiles were within the conservative Cu EIL
    - Total Ni – concentrations ranged from 21 to 172 mg/kg with the majority exceeding the conservative EIL of 55 mg/kg. The 95% UCL of each of the stockpiles are also above the conservative Ni EIL; and
    - Total Zn – concentrations ranged from 41 to 598 mg/kg with the majority exceeding the conservative EIL of 110 mg/kg. The 95% UCL of each of the stockpiles are also above the conservative Zn EIL.

Observations made during the sampling (and shown in photographs in Attachment A) report the presence of ballast / blue metal gravel throughout the stockpiles. These materials are generally naturally elevated in metals concentrations such as Cr, Ni, manganese and occasionally As.

The geofabric sample tested by Prensa returned a negative result for asbestos. Refer to Attachment D.

Considering the above, i.e. background concentrations in the void (pit base) and the reported concentrations in the WEJ stockpiles, the stockpile soils within the WEJ area are considered **suitable for reuse** in the void from a site use perspective (i.e. commercial / industrial use) given:

- Their concentrations are similar to the concentrations within the void (pit base). Comparison of 95% UCLs of the Pit Base samples against the combined stockpile samples shows that the stockpile samples have CoPC concentrations within the same order of magnitude as the Pit Base samples
- There are no exceedances of human health criteria
- The exceedances of ecological criteria are exceedances of very conservative adopted ACLs in the absence of site-specific background values

[4] Adopted as conservative EILs for several metals (Cr, Cu, Ni and Zn).
[5] Most conservative ACL adopted as the conservative Ni EIL.
[6] Most conservative ACL adopted as the conservative Zn EIL.
[7] Adopted as very conservative EILs for several metals: Cr, Cu, Ni and Zn.
[8] Most conservative ACL adopted as the conservative Cu EIL. Commercial / industrial ACLs for Cu range from 85 to 1,200 mg/kg with all reported total Cu concentrations below the upper ACL.

Exhibited

- Some metal exceedances are likely due to naturally occurring metals concentrations in the blue-metal gravels in the stockpiles, which would have very low bioavailability due to the solid nature of the gravels
- The void is located within a triangle formed by joining railway lines which does not have any significant ecological values; and
- The void is a hole in the ground into which the soils can be backfilled and will therefore be effectively contained and have very limited ecological exposure.

4.3.4 Assessment of suitability of spoil material for reuse within void area

As outlined above, the stockpiled WEJ soils are considered suitable for reuse within the void area. Based on the reported CoPC concentrations, the WEJ void area would optimally be backfilled in the following indicative order:

1. Tower Stockpile materials – ideally into the base of the void or not at surface
2. Roadside Stockpile materials – ideally into the base of the void or not at surface; and
3. Void Stockpile materials – ideally into the base of the void and covering the Tower and Roadside stockpile materials.

The order is indicative. The final desired topography and geotechnical properties may dictate the order of use. From a CoPC perspective, the Void Stockpile are considered the most suitable to be placed as 'capping' materials within the void.

4.4 IB105 Requirements

IB105 notes that the Environment Protection Authority Tasmania (EPA) encourages effective waste management by promoting on-site reuse, where appropriate, as the preferred option for dealing with surplus soil. An assessment of the environmental and human health hazards associated with the disposal / reuse option must be conducted by a suitably qualified environmental consultant. IB105 also notes that fill material may contain contaminants above background levels and therefore may not be suitable for all uses, in particular in sensitive human or ecological settings.

The suitability for reuse conclusions and the associated recommendations made above are consistent with the intent of IB105 and the *Environment Management and Pollution Control Act 1994* (EMPCA) and are based on:

- The reuse areas being within an operational commercial / industrial facility, in within the rail corridor
- The source areas of the WEJ stockpiles and the proposed reuse area (WEJ void) are all used for railway transport purposes
- The 95% UCL on the mean of the WEJ stockpiles have been compared to the 95% UCL of the void (reuse area) and the adopted ASC NEPM human health and ecological criteria for commercial / industrial use, and the concentrations in the reuse area are similar to those in the stockpiles, none of the concentrations exceed human health criteria and ecological exceedances are predominantly due to the presence of blue-metal gravel / ballast which is naturally high in some heavy metals (e.g. Ni) and those metals will not be readily bioavailable as they are bound into the gravel/rock matrix
- The Tower Stockpile reported 95% UCL BaP of 0.3 mg/kg and one individual concentration of 0.21 mg/kg BaP, both of which exceed IB105 Level 1 criterion, however they are within the ASC NEPM ESL of 1.4 mg/kg BaP in the commercial / industrial setting, and the recommendation is to bury this stockpile at the base of the void
- There are no sensitive human receptors on or within 100 m of the reuse area
- There are no sensitive ecological receptors within the reuse area as it is a triangle modified and effectively bunded by intersecting railway lines

Exhibited

- The soils will essentially be buried within the existing void and will have little to no ecological exposure. No groundwater is present in the void; and
- Relevant recommendations have been made (Section 5.2) to manage the existing WEJ stockpiles the nominated reuse area. Effective implementation of these recommendations should mitigate impacts.

4.5 Temporary Stockpiling

All efforts should be made to ensure that existing WEJ stockpiled materials are effectively contained, and ideally covered, to prevent dust generation and sediment runoff. The stockpiles should **not** be located near existing stormwater / drainage lines.

4.6 QA/QC assessment

The following provides a summary of the QA/QC assessment for the waste classification and reuse area sampling undertaken at WEJ.

Preservation: Sample Receipt Notification (Attachment B) indicated the samples were received chilled at between 3.9 and 5.2 °C which is within the recommended temperature range of below 6°C; temperature is important for preservation of analytes with short holding times such as VOCs.

Duplicates: Two blind field duplicate samples were taken from primary sample locations PB2 (duplicate FD01) and RS4 (duplicate FD02). Analytical results are tabulated in Attachment C, and laboratory reports are provided in Attachment B. Where these could be calculated, the relative percentage differences (RPDs) are within acceptable ranges for all tested parameters.

Rinsate: One rinsate sample was taken from the sampling tool (pick) and submitted to the laboratory for analysis as per the primary samples. Analytical results are tabulated in Attachment C, and laboratory reports are provided in Attachment B. All reported concentrations were below the LORs indicating that cross-contamination between samples from the sampling equipment was unlikely to have occurred and field sampling decontamination procedures between locations were adequate.

Trip Blank: No trip blank sample was taken as part of the sampling program. No odours or staining were observed whilst onsite, however, and reported volatile hydrocarbons concentrations were generally <LOR, hence cross-contamination of samples by VOCs is not likely.

Laboratory: The ALS laboratory QA/QC compliance assessment summary report is provided in Attachment B:

- Method blanks – no method blank outliers occurred
- Laboratory controls – no laboratory control outliers occurred
- Matrix spikes – no matrix spike outliers occurred
- Laboratory duplicates – one laboratory duplicate analysis returned a relative percentage difference (%RPD) for Cr based on sample VSP06 of 22.9% when the required limit is 0-20%. The reported Cr concentration at VSP06 was within the range of other reported values within Void Stockpile samples. This outlier demonstrates the heterogeneity of the soils, however given the number of samples in the dataset, the overall waste classification and soil characterisation for reuse is considered robust and fit for purpose for this assessment
- Surrogate recoveries – for all regular sample matrices, where applicable to the methodology, no surrogate recovery outliers occurred
- Holding times – no analysis holding time outliers occurred; and

Exhibited

- QC sample frequency – less than expected number of QC samples for PAH/Phenols for laboratory duplicates and matrix spikes in *water*. The reduced laboratory duplicates and matrix spike frequency does not change the conclusions of this assessment, since only one water sample was submitted as a rinsate, phenols were note a CoPC and PAHs were generally reported a very low or below LOR concentrations in soil samples, hence the risk of cross contamination from PAHs and phenols is considered very low.

On the basis of the QA/QC procedures applied during sampling (Table 1, Section 3.1) and the QA/QC results outlined and discussed above, the analytical data are considered to be representative of the concentrations of tested CoPCs in the sampled soils at the time of sampling and are suitable for the purposes of this waste classification and reuse area sampling assessment.

The Prensa report for the one geofabric sample is provided in Attachment D and includes NATA accreditation and asbestos testing in accordance with relevant standards.

5. Conclusions and Recommendations

5.1 Conclusions

In-situ and stockpile sampling was undertaken by TasRail within and adjacent to the WEJ void area. Analysis of submitted samples and waste classification reporting based on the sampling program has been conducted by pitt&sherry and documented within this letter report.

The **waste classification of onsite stockpiles (based on 95% UCL and individual concentrations)** shows the following:

- **Void Stockpile** – Level 2 (due to reported individual concentrations of As, Cr, Ni, Zn, and BaP)
- **Roadside Stockpile** – Level 2 (due to reported individual concentrations of As, Cr, Cu, Ni and BaP); and
- **Tower Stockpile** – Level 2 (due to reported concentrations of Ni, Zn, and BaP).

For comparison, **Pit Base (reuse area)** soils would also be classified as Level 2 (due to reported individual concentrations of Cr, Ni, and Zn).

When assessed against the ASC NEPM commercial / industrial site use criteria applicable to the Utilities zoning, all soils / materials sampled were within human health criteria and reported comparable concentrations to the soils sampled within the void / reuse area (Pit Base samples). Exceedances of conservative ecological criteria were reported both in the Pit Base samples as well as the proposed backfill stockpiled soils. Furthermore, the assessment made in Sections 4.3.4 and 4.4 suggest that these exceedances are more likely due to the adopted conservative ACLs, in lieu of EILs (in the absence of site-specific criteria / background), as they are similar to the void base samples, and are not considered to pose an ecological risk as backfill into the void, as the soils will be placed into a contained void within the effectively bunded WEJ track junction triangle.

Recommendations associated with the proposed reuse are outlined in Section 5.2.

5.2 Recommendations

5.2.1 Reuse approvals

As the volume of soils to be reused exceeds 100 tonnes per annum and the soils are predominantly classed as Level 2 (under IB105), a Regulation 21 approval from the Environment Protection Authority Tasmania (EPA) is necessary to permit the reuse of the materials within the WEJ void.

Exhibited

5.2.2 Suggested placement order for reuse

Based on the assessment of results, it is suggested that the existing stockpiled materials from WEJ be placed in the void in the following order:

1. Tower Stockpile materials – ideally within the base of the void
2. Roadside Stockpile materials – ideally within the base of the void; and
3. Void Stockpile materials – ideally as cover material over the Tower Stockpile and Roadside Stockpile materials.

The order is indicative. The final desired topography and geotechnical properties may dictate the order of use. From a CoPC perspective, the Void Stockpile materials are considered the most suitable to be placed as 'capping' materials within the void.

5.2.3 Stockpile management

All current stockpiles which may be temporarily stockpiled at WEJ:

- Must be effectively contained, and ideally covered, to prevent dust generation and sediment runoff; and
- Should not be placed anywhere near stormwater / drainage lines or ecologically sensitive areas.

Yours sincerely,



Kieran Richards
Experienced Environmental Consultant

Edited and reviewed by – Fiona Keserue-Ponte, Senior Principal Environmental Consultant, CEnvP SC 41034

List of Attachments

Important information about your report

Attachment A – Field sheets and photographs

Attachment B – Laboratory documentation

Attachment C – Summary results tables and comparison to adopted criteria

Attachment D – Prensa, *Asbestos Bulk Sample Analysis Report – Western Junction, Evandale Road, Western Junction TAS*, June 2026

Exhibited

Important Information About Your Report

In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints. The Report may only be used and relied on by the Client for the purpose set out in the Report. Any use which a third party makes of this document, or any reliance on or decisions to be made based on it, is the responsibility of the Client or such third parties.

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The opinions, conclusions and any recommendations in the Report are based on information obtained from TasRail, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.

Investigations undertaken in respect of the Report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in the Report. Site conditions (including the presence of hazardous substances and/or site contamination) may change after the date of the Report.

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pitt&sherry does not accept responsibility arising from, or in connection with, any change to the site conditions. pitt&sherry is also not responsible for updating the Report if the site conditions change.

Exhibited

Field Sheet and Photographs

Attachment A

pitt&sherry

Exhibited

Date: 03/06/2026

Location: Western Junction

Weather conditions: Showers

Sampler: Anthony Williams

Duplicate sample location: PB2 = Dup01, RS4 = Dup 02

Other Information: Stockpile samples were ‘VS denotes void stockpile, RS’ denotes road-side stockpile, TW’ denotes tower stockpile and ‘PB’ denotes pit base.

Sample ID	Sample depth (CM)	Moisture level	Clay / silt / sand / gravel	Colour, mottling	Clast description (size, angular / rounded, etc)	Evidence of contamination (odour, visual evidence)	Comments/interpretation
PB1	0-30	Moist	Clayey loam	Dark Brown	Minor angular clasts to 35mm. Peds present.	Nil	Natural ground
PB2	0-30	Moist	Clayey loam	Dark Brown	Minor angular clasts to 30mm. Peds present.	Nil	Natural ground. Dup 01.
PB3	0-25	Moist	Clayey loam	Dark Grey/Black	Minor angular clasts to 30mm. Peds present.	Nil	Natural ground. Broadly like PB1/PB2, but slightly stiffer.
PB4	0-25	Moist	Clayey loam	Dark grey/black	No clasts. Well-formed peds to 15mm.	Nil	Natural ground
PB5	0-30	Moist	Clayey loam	Dark Grey/Black	No clasts. Well-formed peds.	Nil	Natural ground
VSP1	0-30	Moist	Clayey silt	Brown	Some rounded clasts to 50mm	Nil	Primarily formation material. Piece of railway iron present.
VSP2	0-30	Moist	Clayey silt	Brown	Some sub-angular clasts to 50mm	Nil	As above, looks like formation material.
VSP3	0-30	Moist	Clayey silt	Grey	Lots of angular clasts up to about 60mm	Nil	Formation material and ballast, with piece of railway iron present.
VSP4	0-30	Moist	Gravelly clay-loam	Dark grey/brown	Minor angular clasts to 20 mm	Nil	Natural ground
VSP5	0-40	Moist	Loam	Dark grey	Minor angular clasts to 30mm	Nil	Natural ground
VSP6	0-40	Moist	Primarily a silty gravel.	Grey	Angular clasts to 40mm	Road material/bitumen present on surface.	Formation material with a small amount of bitumen draped over the top. Perhaps from crossing works.
VSP7	0-50	Moist	Clay/silt/gravel	Brown	Angular clasts to 50mm	Geo-fab present, likely from rail crossing works.	Sample VSP7 Geo-fab collected here to confirm no presence of asbestos.
VSP8	0-40	Moist	Silty loam	Dark Grey	Angular clasts to 50mm.	Nil	Looks like a combination of natural ground and some formation material.

Exhibited

Sample ID	Sample depth	Moisture level	Clay/silt/sand/gravel	Colour/mottling	Clast description (size, angular/rounded etc)	Evidence of contamination (odour, visual evidence)	Comments
VSP9	0-40	Moist	Silty clay	Dark brown	Minor angular clasts to 10mm, minor ped formation.	Nil	Natural ground.
VSP10	0-30	Moist	Clay/silt	Brown	Minor angular clasts to 10mm, minor peds to 5mm.	Nil	Natural ground
VSP11	0-50	Moist	Clay/silt	Brown	Some angular clasts to 40mm	Nil	Natural ground
VSP12	0-40	Moist	Clay/silt	Grey/Brown	Few large sub-angular clasts up to 150mm	Nil	Natural ground
RS1	0-40	Moist	Clay/silt	Grey	Angular clasts to 40mm	Nil	Formation material/ballast
RS2	0-30	Moist	Clay/silt	Grey	Angular clasts to 40mm	Nil	Formation material/ballast
RS3	0-30	Moist	Clay/silt	Brown/Grey	Angular clasts to 40mm	Nil	Formation material/ballast
RS4	0-40	Moist	Clay/silt	Brown/Grey	Lots of angular clasts to 50mm	Nil	Formation material/ballast
RS5	0-30	Moist	Clay/silt	Brown/Grey	Lots of angular clasts to 50mm	Nil	Formation material/ballast
RS6	0-40	Moist	Clay/silt	Brown/Grey	Lots of angular clasts to 50mm	Nil	Formation material/ballast
TSP1	0-50	Moist	Clay/silt	Grey	Sub-angular clasts to 25mm	Nil	Formation/ballast Approximately 65m3 in this stockpile.
TSP2	0-40	Moist	Clay/silt	Grey	Sub-angular clasts to 25mm	Nil	Formation/ballast Approximately 65m3 in this stockpile.

Wtj void sampling

Exhibited

Wednesday, June 3, 2026 12:45 PM

Pit base samples
PB1



Exhibited



Pb2

Exhibited



Exhibited



Exhibited



Pb3

Exhibited



Exhibited



Exhibited



Pb4

Exhibited



Exhibited



Exhibited



Pb5

Exhibited



Exhibited



Exhibited



Void stockpile samples
Vsp1

Exhibited



Exhibited



Exhibited



Piece of railway iron present, most likely formation material.

Exhibited



Vsp2
Collected on top bench which runs out from side of pit.
Looks like formation material.

Exhibited



Exhibited



Exhibited



Exhibited



Vsp3
At end of platform leading out from edge of Pit. Steel jewellery associated with railway line present. Small pile of boulders in the background.

Exhibited



Exhibited



Exhibited



Vsp4
This looks like natural ground about 1.5 to 2 m below the bench above.
Some of the formation derived material above has lapped over this location but only at the surface.

Exhibited



Exhibited



Exhibited



VSp5
This sample was collected about 4.5m below the top of the stockpile and about 1m above the drain below.
Natural ground.



Exhibited



Exhibited



Exhibited



Vsp6
This sample is collected around about 1 m from the base of the stockpile and 5 m from the top.
Natural ground with an overlay of formation material including bitumen.
Some minor geo-fab located to the right.
Likely derived from railway crossing works.

Exhibited



Exhibited



Exhibited



Vsp7
This looks like formation material piece of Geofab present took a sample.
Comprised of clay seal gravel angular class to about 50 mm.
Sample collected about 2.5 m up from base directly below small bench which runs around the perimeter of stockpile 2/3 the way up.

Exhibited



Exhibited



Vsp8

This sample looks like a combination of natural ground and formation material with some ballast present. Sample collected around about 3 m above base of stockpile directly below bench above, with a further 4 m to the top of the stockpile.

Exhibited



Exhibited



Exhibited



Vsp9
Sample collected approximately 1 m below top of bench that extends from edge of pit and 2 m above base level. Looks like natural ground. Some minor gravel gray/brown color.

Exhibited



Exhibited



Exhibited



Vsp10
Sample collected 1 m up from the base of stockpile and 2 meters below the top of the bench extending from the side of the pile. This is natural ground with no presence of formation of ballast material.

Exhibited



Exhibited



Exhibited



Vsp11
This sample was collected 1M above the bench which extends in from the edge of the pit that is it represents the highest part of the stockpile.
Could be natural ground with some minor formation.
Material included due to the presence of some large angular class to about 50 mm.

Exhibited



Exhibited

- 

Exhibited



Vsp12
This sample was collected a meter from the top of the stockpile and about 7 m up from the base. Looks to be natural ground with a few large angular cobbles to 150 mm.



Exhibited



Exhibited



Tank Stockpile samples
Tsp1
This stockpile is comprised of around about 65m3 of homogeneous formation/ballast material.

Exhibited



Exhibited



Tsp2
Second sample of tail stockpile collected. Description as per tsp1.

Exhibited



Exhibited



Roadside stockpile
Rs1
Comprised of formation material clay/silt with lots of angular class up to about 40 mm. Collected halfway up 1m high batter.

Exhibited



Rs2 - Sample collected from 30 cm deep hole dug into top of stockpile.

Exhibited



Exhibited



Rs3
Sample collected at West end of stockpile approximately halfway up. Excavated to 30 cm depth.
Once again this is formation material.

Exhibited



Exhibited



Rs4
Description as per other samples collected in their stockpile.
This sample was collected about halfway up the stockpile face.

Exhibited



Exhibited



Rs5
Sample collective halfway up price of stockpile.
Ballast and formation material.

Exhibited



Exhibited



Rs6
Ballast and formation material.
Sample collected from top of stockpile.

Exhibited



Exhibited



Exhibited

Laboratory Documentation

Attachment B

pitt&sherry

Exhibited

CHAIN OF CUSTODY

ALS Environmental

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com
BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com
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MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com
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WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

FREIGHT

CLIENT: TasRail	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: 11 Technio Park Drive, Kings Meadows, Tasmania, 7249		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: 20260603_WEJ_Stockpiles	ALS QUOTE NO.: EN/222/23	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: 154605			Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Bowen Wagenknecht	CONTACT PH: 0458 203 927		Other comment:
SAMPLER: Bowen Wagenknecht	SAMPLER MOBILE: 0458 203 927	RELINQUISHED BY: Bowen Wagenknecht	RECEIVED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default): ESdat_AU+TasRail@ESdatLabSync.net	DATE/TIME: 4/06/2026 17:30	DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed): Bowen.Wagenknecht@Tasrail.com.au; ESdat_AU+TasRail@ESdatLabSync.net			
Email Invoice to (will default to PM if no other addresses are listed): Bowen.Wagenknecht@Tasrail.com.au; invoices@tasrail.com.au			

RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 5/6/26 14:20

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).			Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	S26 TRH (C6-C40)/BTEXN/PAH plus 8 metals	Benzo(a)pyrene (EPA Tas LOR)	W-26T TRH (C6-C40)/BTEXN/PAH plus 8 metals)	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	VSP1 0-30cm	3/06/2026 13:20	Soil	Soil Jar	1	✓	✓		
2	VSP2 0-30cm	3/06/2026 13:42	Soil	Soil Jar	1	✓	✓		
3	VSP3 0-30cm	3/06/2026 13:48	Soil	Soil Jar	1	✓	✓		
4	VSP4 0-30cm	3/06/2026 13:55	Soil	Soil Jar	1	✓	✓		
5	VSP5 0-40cm	3/06/2026 14:05	Soil	Soil Jar	1	✓	✓		
6	VSP6 0-40cm	3/06/2026 14:16	Soil	Soil Jar	1	✓	✓		
7	VSP7 0-50cm	3/06/2026 14:21	Soil	Soil Jar	1	✓	✓		
8	VSP8 0-40cm	3/06/2026 14:35	Soil	Soil Jar	1	✓	✓		
9	VSP9 0-40cm	3/06/2026 14:55	Soil	Soil Jar	1	✓	✓		
10	VSP10 0-40cm	3/06/2026 15:04	Soil	Soil Jar	1	✓	✓		
11	VSP11 0-50cm	3/06/2026 15:10	Soil	Soil Jar	1	✓	✓		
12	VSP12 0-40cm	3/06/2026 15:15	Soil	Soil Jar	1	✓	✓		
13	TSP1 0-50cm	3/06/2026 15:40	Soil	Soil Jar	1	✓	✓		
14	TSP2 0-40cm	3/06/2026 15:45	Soil	Soil Jar	1	✓	✓		
				TOTAL	14				

Environmental Division Melbourne
Work Order Reference
EM2610454

Telephone : +61-3-8549 9600

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

Exhibited

CHAIN OF CUSTODY

ALS Environmental

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

☐BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5500 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

☑MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

☐MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee mail@alsglobal.com

☐NEWCASTLE 5/585 Maitland Rd Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 024423 2063 E: nowra@alsglobal.com

☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

☐SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: TasRail	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: 11 Technopark Drive, Kings Meadows, Tasmania, 7249		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: 20260603_WEJ_Stockpiles	ALS QUOTE NO.: EN/222/23	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: 154605			Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Bowen Wagenknecht	CONTACT PH: 0458 203 927		Other comment:
SAMPLER: Bowen Wagenknecht	SAMPLER MOBILE: 0458 203 927	RELINQUISHED BY: Bowen Wagenknecht	RECEIVED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default): ESdat_AU+TasRail@ESdatLabSync.net	DATE/TIME: 4/06/2026 17:30	DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed): Bowen.Wagenknecht@Tasrail.com.au; ESdat_AU+TasRail@ESdatLabSync.net			
Email Invoice to (will default to PM if no other addresses are listed): Bowen.Wagenknecht@Tasrail.com.au; invoices@tasrail.com.au			

RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).															Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	S26 TRH (C6-C40)/BTEXN/PAH plus 8 metals	Benzo(a)pyrene (EPA Tas LOR)	W-26T TRH (C6-C40)/BTEXN/PAH plus 8 metals													Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
15	PB1 0-30cm	3/06/2026 12:42	Soil	Soil Jar	1	✓	✓														
16	PB2 0-30cm	3/06/2026 12:48	Soil	Soil Jar	1	✓	✓														
17	PB3 0-25cm	3/06/2026 12:58	Soil	Soil Jar	1	✓	✓														
18	PB4 0-25cm	3/06/2026 13:03	Soil	Soil Jar	1	✓	✓														
19	PB5 0-30cm	3/06/2026 13:09	Soil	Soil Jar	1	✓	✓														
20	RS1 0-40cm	3/06/2026 14:15	Soil	Soil Jar	1	✓	✓														
21	RS2 0-30cm	3/06/2026 14:45	Soil	Soil Jar	1	✓	✓														
22	RS3 0-30cm	3/06/2026 14:55	Soil	Soil Jar	1	✓	✓														
23	RS4 0-40cm	3/06/2026 15:00	Soil	Soil Jar	1	✓	✓														
24	RS5 0-30cm	3/06/2026 15:10	Soil	Soil Jar	1	✓	✓														
25	RS6 0-40cm	3/06/2026 15:15	Soil	Soil Jar	1	✓	✓														
26	FD01	3/06/2026 0:00	Soil	Soil Jar	1	✓	✓														
27	FD02	3/06/2026 0:00	Soil	Soil Jar	1	✓	✓														
28	Rinsate_PP	3/06/2026 0:00	Water	Lab Supplied Receptacles	4			✓													
				TOTAL	17																

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag

Exhibited

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EM2610454**

Client	: **TASMANIAN RAILWAY PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: BOWEN WAGENKNECHT	Contact	: Customer Services EM
Address	: P.O.BOX 335 KINGS MEADOWS TASMANIA 7249	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: Bowen.Wagenknecht@tasrail.com.au	E-mail	: ALSEnviro.Melbourne@alsglobal.com
Telephone	: ----	Telephone	: +61-3-8549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: 20260603_WEJ_Stockpiles	Page	: 1 of 3
Order number	: 154605	Quote number	: EM2021TASRAI0002 (EN/222)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: BW		

Dates

Date Samples Received	: 05-Jun-2026 14:20	Issue Date	: 05-Jun-2026
Client Requested Due Date	: 12-Jun-2026	Scheduled Reporting Date	: **12-Jun-2026**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 2	Temperature	: 3.9, 4.4, 5.2°C - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 28 / 28

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please direct any queries related to sample condition / numbering / breakages to Client Services.**
- Sample Disposal - Aqueous (3 weeks), Solid (2 months) from receipt of samples.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Exhibited

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - EP075-TAS Benzo(a)pyrene and other PAHs - Waste	SOIL - S-26 8 metals/TRH/BTEXN/PAH
EM2610454-001	03-Jun-2026 13:20	VSP1 0-30cm	✓	✓	✓
EM2610454-002	03-Jun-2026 13:42	VSP2 0-30cm	✓	✓	✓
EM2610454-003	03-Jun-2026 13:48	VSP3 0-30cm	✓	✓	✓
EM2610454-004	03-Jun-2026 13:55	VSP4 0-30cm	✓	✓	✓
EM2610454-005	03-Jun-2026 14:05	VSP5 0-40cm	✓	✓	✓
EM2610454-006	03-Jun-2026 14:16	VSP6 0-40cm	✓	✓	✓
EM2610454-007	03-Jun-2026 14:21	VSP7 0-50cm	✓	✓	✓
EM2610454-008	03-Jun-2026 14:35	VSP8 0-40cm	✓	✓	✓
EM2610454-009	03-Jun-2026 14:55	VSP9 0-40cm	✓	✓	✓
EM2610454-010	03-Jun-2026 15:04	VSP10 0-40cm	✓	✓	✓
EM2610454-011	03-Jun-2026 15:10	VSP11 0-50cm	✓	✓	✓
EM2610454-012	03-Jun-2026 15:15	VSP12 0-40cm	✓	✓	✓
EM2610454-013	03-Jun-2026 15:40	TSP1 0-50cm	✓	✓	✓
EM2610454-014	03-Jun-2026 15:45	TSP2 0-40cm	✓	✓	✓
EM2610454-015	03-Jun-2026 12:42	PB1 0-30cm	✓	✓	✓
EM2610454-016	03-Jun-2026 12:48	PB2 0-30cm	✓	✓	✓
EM2610454-017	03-Jun-2026 12:58	PB3 0-25cm	✓	✓	✓
EM2610454-018	03-Jun-2026 13:03	PB4 0-25cm	✓	✓	✓
EM2610454-019	03-Jun-2026 13:09	PB5 0-30cm	✓	✓	✓
EM2610454-020	03-Jun-2026 14:15	RS1 0-40cm	✓	✓	✓
EM2610454-021	03-Jun-2026 14:45	RS2 0-30cm	✓	✓	✓
EM2610454-022	03-Jun-2026 14:55	RS3 0-30cm	✓	✓	✓
EM2610454-023	03-Jun-2026 15:00	RS4 0-40cm	✓	✓	✓
EM2610454-024	03-Jun-2026 15:10	RS5 0-30cm	✓	✓	✓
EM2610454-025	03-Jun-2026 15:15	RS6 0-40cm	✓	✓	✓
EM2610454-026	03-Jun-2026 00:00	FD01	✓	✓	✓
EM2610454-027	03-Jun-2026 00:00	FD02	✓	✓	✓

Exhibited

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - W-26T TRH/BTEXN/PAH/Total 8 Metals
EM2610454-028	03-Jun-2026 00:00	Rinsate_PP	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ALL INVOICES

- A4 - AU Tax Invoice (INV)	Email	invoices@tasrail.com.au

BOWEN WAGENKNECHT

- *AU Certificate of Analysis - NATA (COA)	Email	Bowen.Wagenknecht@tasrail.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Bowen.Wagenknecht@tasrail.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Bowen.Wagenknecht@tasrail.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	Bowen.Wagenknecht@tasrail.com.au
- A4 - AU Tax Invoice (INV)	Email	Bowen.Wagenknecht@tasrail.com.au
- Chain of Custody (CoC) (COC)	Email	Bowen.Wagenknecht@tasrail.com.au
- EDI Format - ESDAT (ESDAT)	Email	Bowen.Wagenknecht@tasrail.com.au
- EDI Format - XTab (XTAB)	Email	Bowen.Wagenknecht@tasrail.com.au

ESDAT TASRAIL

- EDI Format - ESDAT (ESDAT)	Email	ESdat_AU+TasRail@ESdatLabSync.net

Exhibited

CERTIFICATE OF ANALYSIS

Work Order	: **EM2610454**	Page	: 1 of 30
Client	: **TASMANIAN RAILWAY PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: BOWEN WAGENKNECHT	Contact	: Customer Services EM
Address	: P.O.BOX 335 KINGS MEADOWS TASMANIA 7249	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: 20260603_WEJ_Stockpiles	Date Samples Received	: 05-Jun-2026 14:20
Order number	: 154605	Date Analysis Commenced	: 09-Jun-2026
C-O-C number	: ----	Issue Date	: 12-Jun-2026 17:32
Sampler	: BW		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 28		
No. of samples analysed	: 28		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Tahlia Freeman	Instrument Operator	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

Exhibited

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005T: EM2610454 #6, Poor duplicate precision for chromium due to sample heterogeneity. Confirmed by re-extraction and re-analysis. The following results were observed: 52 mg/kg, 62 mg/kg, 78 mg/kg and 73 mg/kg.

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP1 0-30cm	VSP2 0-30cm	VSP3 0-30cm	VSP4 0-30cm	VSP5 0-40cm
			Sampling date / time	03-Jun-2026 13:20	03-Jun-2026 13:42	03-Jun-2026 13:48	03-Jun-2026 13:55	03-Jun-2026 14:05
Compound	CAS Number	LOR	Unit	EM2610454-001	EM2610454-002	EM2610454-003	EM2610454-004	EM2610454-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	9.5	12.1	13.4	17.3	17.6
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	16	16	9	19
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	1	1
Chromium	7440-47-3	2	mg/kg	19	30	30	43	50
Copper	7440-50-8	5	mg/kg	16	38	41	44	48
Lead	7439-92-1	5	mg/kg	8	12	15	26	31
Nickel	7440-02-0	2	mg/kg	22	75	91	83	43
Zinc	7440-66-6	5	mg/kg	41	139	149	201	220
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP1 0-30cm	VSP2 0-30cm	VSP3 0-30cm	VSP4 0-30cm	VSP5 0-40cm
				Sampling date / time	03-Jun-2026 13:20	03-Jun-2026 13:42	03-Jun-2026 13:48	03-Jun-2026 13:55	03-Jun-2026 14:05
Compound	CAS Number	LOR	Unit		EM2610454-001	EM2610454-002	EM2610454-003	EM2610454-004	EM2610454-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	**0.15**
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	**0.65**
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	**0.5**
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	**0.15**
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg		**0.76**	**0.76**	**0.77**	**0.76**	**0.86**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg		**0.38**	**0.38**	**0.42**	**0.38**	**0.50**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP1 0-30cm	VSP2 0-30cm	VSP3 0-30cm	VSP4 0-30cm	VSP5 0-40cm
				Sampling date / time	03-Jun-2026 13:20	03-Jun-2026 13:42	03-Jun-2026 13:48	03-Jun-2026 13:55	03-Jun-2026 14:05
Compound	CAS Number	LOR	Unit		EM2610454-001	EM2610454-002	EM2610454-003	EM2610454-004	EM2610454-005
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg		<100	<100	<100	<100	**170**
C29 - C36 Fraction	---	100	mg/kg		<100	<100	<100	<100	**150**
^ C10 - C36 Fraction (sum)	---	50	mg/kg		<50	<50	<50	<50	**320**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg		<100	<100	<100	<100	**270**
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		<50	<50	<50	<50	**270**
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**78.3**	**77.0**	**76.3**	**75.5**	**73.5**
2-Chlorophenol-D4	93951-73-6	0.5	%		**81.0**	**79.9**	**78.5**	**78.4**	**75.5**
2.4.6-Tribromophenol	118-79-6	0.5	%		**75.2**	**74.7**	**74.9**	**77.7**	**71.7**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP1 0-30cm	VSP2 0-30cm	VSP3 0-30cm	VSP4 0-30cm	VSP5 0-40cm
			Sampling date / time	03-Jun-2026 13:20	03-Jun-2026 13:42	03-Jun-2026 13:48	03-Jun-2026 13:55	03-Jun-2026 14:05
Compound	CAS Number	LOR	Unit	EM2610454-001	EM2610454-002	EM2610454-003	EM2610454-004	EM2610454-005
				Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	74.9	76.0	73.7	74.6	71.6
Anthracene-d10	1719-06-8	0.5	%	105	106	102	103	90.9
4-Terphenyl-d14	1718-51-0	0.5	%	87.2	87.0	87.8	87.4	85.7
EP075T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.025	%	94.7	98.2	95.4	87.9	84.5
Anthracene-d10	1719-06-8	0.025	%	90.2	92.8	89.9	86.7	86.9
4-Terphenyl-d14	1718-51-0	0.025	%	106	109	102	92.5	80.6
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	92.7	58.5	83.4	89.0	78.5
Toluene-D8	2037-26-5	0.2	%	97.4	57.0	89.9	94.6	82.9
4-Bromofluorobenzene	460-00-4	0.2	%	121	66.3	111	116	104

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP6 0-40cm	VSP7 0-50cm	VSP8 0-40cm	VSP9 0-40cm	VSP10 0-40cm
			Sampling date / time	03-Jun-2026 14:16	03-Jun-2026 14:21	03-Jun-2026 14:35	03-Jun-2026 14:55	03-Jun-2026 15:04
Compound	CAS Number	LOR	Unit	EM2610454-006	EM2610454-007	EM2610454-008	EM2610454-009	EM2610454-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	19.3	11.6	15.2	19.3	13.5
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	36	<5	14	7	<5
Cadmium	7440-43-9	1	mg/kg	2	<1	3	<1	<1
Chromium	7440-47-3	2	mg/kg	62	24	67	16	16
Copper	7440-50-8	5	mg/kg	70	29	75	20	27
Lead	7439-92-1	5	mg/kg	36	8	58	47	37
Nickel	7440-02-0	2	mg/kg	62	67	72	21	51
Zinc	7440-66-6	5	mg/kg	292	103	598	82	72
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.2	0.3	0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP6 0-40cm	VSP7 0-50cm	VSP8 0-40cm	VSP9 0-40cm	VSP10 0-40cm
				Sampling date / time	03-Jun-2026 14:16	03-Jun-2026 14:21	03-Jun-2026 14:35	03-Jun-2026 14:55	03-Jun-2026 15:04
Compound	CAS Number	LOR	Unit		EM2610454-006	EM2610454-007	EM2610454-008	EM2610454-009	EM2610454-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		**0.10**	<0.05	**0.12**	<0.05	<0.05
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg		**0.10**	<0.05	**0.12**	<0.05	<0.05
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg		**0.10**	<0.05	**0.12**	<0.05	<0.05
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg		**0.81**	**0.76**	**0.83**	**0.76**	**0.76**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg		**0.46**	**0.38**	**0.48**	**0.38**	**0.38**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP6 0-40cm	VSP7 0-50cm	VSP8 0-40cm	VSP9 0-40cm	VSP10 0-40cm
				Sampling date / time	03-Jun-2026 14:16	03-Jun-2026 14:21	03-Jun-2026 14:35	03-Jun-2026 14:55	03-Jun-2026 15:04
Compound	CAS Number	LOR	Unit		EM2610454-006	EM2610454-007	EM2610454-008	EM2610454-009	EM2610454-010
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg		**120**	<100	**150**	<100	<100
C29 - C36 Fraction	---	100	mg/kg		**110**	<100	**150**	<100	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg		**230**	<50	**300**	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg		**190**	<100	**250**	<100	<100
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		**190**	<50	**250**	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**68.1**	**77.0**	**75.1**	**76.7**	**76.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**71.9**	**79.4**	**77.8**	**79.2**	**79.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**72.9**	**76.9**	**73.4**	**78.3**	**75.9**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP6 0-40cm	VSP7 0-50cm	VSP8 0-40cm	VSP9 0-40cm	VSP10 0-40cm
				Sampling date / time	03-Jun-2026 14:16	03-Jun-2026 14:21	03-Jun-2026 14:35	03-Jun-2026 14:55	03-Jun-2026 15:04
Compound	CAS Number	LOR	Unit		EM2610454-006	EM2610454-007	EM2610454-008	EM2610454-009	EM2610454-010
					Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		72.1	72.3	74.3	71.9	73.3
Anthracene-d10	1719-06-8	0.5	%		99.2	95.7	97.3	105	102
4-Terphenyl-d14	1718-51-0	0.5	%		87.0	86.2	85.0	86.3	84.3
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		84.6	97.5	87.9	92.5	88.7
Anthracene-d10	1719-06-8	0.025	%		87.8	99.2	92.9	95.2	89.3
4-Terphenyl-d14	1718-51-0	0.025	%		82.2	102	83.5	98.0	96.6
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		82.2	73.1	83.6	76.3	92.1
Toluene-D8	2037-26-5	0.2	%		84.2	103	86.5	83.8	101
4-Bromofluorobenzene	460-00-4	0.2	%		99.6	123	102	103	124

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP11 0-50cm	VSP12 0-40cm	TSP1 0-50cm	TSP2 0-40cm	PB1 0-30cm
			Sampling date / time	03-Jun-2026 15:10	03-Jun-2026 15:15	03-Jun-2026 15:40	03-Jun-2026 15:45	03-Jun-2026 12:42
Compound	CAS Number	LOR	Unit	EM2610454-011	EM2610454-012	EM2610454-013	EM2610454-014	EM2610454-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	14.7	16.4	14.5	13.1	28.5
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	11	19	9	18	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	1	<1
Chromium	7440-47-3	2	mg/kg	55	65	43	44	70
Copper	7440-50-8	5	mg/kg	60	59	53	72	56
Lead	7439-92-1	5	mg/kg	5	11	38	156	42
Nickel	7440-02-0	2	mg/kg	172	157	109	73	91
Zinc	7440-66-6	5	mg/kg	112	173	208	423	101
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP11 0-50cm	VSP12 0-40cm	TSP1 0-50cm	TSP2 0-40cm	PB1 0-30cm
			Sampling date / time	03-Jun-2026 15:10	03-Jun-2026 15:15	03-Jun-2026 15:40	03-Jun-2026 15:45	03-Jun-2026 12:42
Compound	CAS Number	LOR	Unit	EM2610454-011	EM2610454-012	EM2610454-013	EM2610454-014	EM2610454-015
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	<0.05	<0.05	**0.21**	<0.05
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg	<0.05	<0.05	<0.05	**0.21**	<0.05
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg	<0.05	<0.05	<0.05	**0.21**	<0.05
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg	**0.76**	**0.76**	**0.76**	**0.92**	**0.76**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg	**0.38**	**0.38**	**0.38**	**0.56**	**0.38**
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons								

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP11 0-50cm	VSP12 0-40cm	TSP1 0-50cm	TSP2 0-40cm	PB1 0-30cm
			Sampling date / time	03-Jun-2026 15:10	03-Jun-2026 15:15	03-Jun-2026 15:40	03-Jun-2026 15:45	03-Jun-2026 12:42
Compound	CAS Number	LOR	Unit	EM2610454-011	EM2610454-012	EM2610454-013	EM2610454-014	EM2610454-015
				Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued								
C6 - C9 Fraction	---	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg	<100	<100	<100	**130**	<100
C29 - C36 Fraction	---	100	mg/kg	<100	<100	<100	**140**	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg	<50	<50	<50	**270**	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg	<100	<100	<100	**230**	<100
>C34 - C40 Fraction	---	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg	<50	<50	<50	**230**	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**74.5**	**76.5**	**75.0**	**77.3**	**76.1**
2-Chlorophenol-D4	93951-73-6	0.5	%	**76.3**	**78.2**	**77.6**	**78.6**	**79.7**
2.4.6-Tribromophenol	118-79-6	0.5	%	**76.1**	**76.0**	**73.9**	**77.1**	**78.8**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP11 0-50cm	VSP12 0-40cm	TSP1 0-50cm	TSP2 0-40cm	PB1 0-30cm
				Sampling date / time	03-Jun-2026 15:10	03-Jun-2026 15:15	03-Jun-2026 15:40	03-Jun-2026 15:45	03-Jun-2026 12:42
Compound	CAS Number	LOR	Unit		EM2610454-011	EM2610454-012	EM2610454-013	EM2610454-014	EM2610454-015
					Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		71.7	74.6	71.6	73.5	76.4
Anthracene-d10	1719-06-8	0.5	%		102	105	101	95.9	110
4-Terphenyl-d14	1718-51-0	0.5	%		85.4	88.1	86.1	87.9	86.4
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		106	93.8	92.2	84.9	97.0
Anthracene-d10	1719-06-8	0.025	%		105	91.9	92.2	87.1	98.6
4-Terphenyl-d14	1718-51-0	0.025	%		117	102	98.6	83.9	106
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		68.2	78.2	91.1	72.2	78.0
Toluene-D8	2037-26-5	0.2	%		74.3	82.0	94.4	74.2	81.4
4-Bromofluorobenzene	460-00-4	0.2	%		94.9	102	116	105	103

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	PB2 0-30cm	PB3 0-25cm	PB4 0-25cm	PB5 0-30cm	RS1 0-40cm
			Sampling date / time	03-Jun-2026 12:48	03-Jun-2026 12:58	03-Jun-2026 13:03	03-Jun-2026 13:09	03-Jun-2026 14:15
Compound	CAS Number	LOR	Unit	EM2610454-016	EM2610454-017	EM2610454-018	EM2610454-019	EM2610454-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	**20.0**	**27.8**	**24.1**	**30.1**	**15.4**
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**11**	<5	<5	<5	**25**
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	**59**	**75**	**79**	**85**	**35**
Copper	7440-50-8	5	mg/kg	**47**	**45**	**36**	**33**	**52**
Lead	7439-92-1	5	mg/kg	**78**	**13**	**13**	**9**	**20**
Nickel	7440-02-0	2	mg/kg	**54**	**79**	**76**	**65**	**98**
Zinc	7440-66-6	5	mg/kg	**161**	**213**	**86**	**74**	**156**
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	**0.1**	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	PB2 0-30cm	PB3 0-25cm	PB4 0-25cm	PB5 0-30cm	RS1 0-40cm
				Sampling date / time	03-Jun-2026 12:48	03-Jun-2026 12:58	03-Jun-2026 13:03	03-Jun-2026 13:09	03-Jun-2026 14:15
Compound	CAS Number	LOR	Unit		EM2610454-016	EM2610454-017	EM2610454-018	EM2610454-019	EM2610454-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		<0.05	<0.05	**0.05**	<0.05	**0.07**
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg		<0.05	<0.05	**0.05**	<0.05	**0.07**
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg		<0.05	<0.05	**0.05**	<0.05	**0.07**
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg		**0.76**	**0.76**	**0.76**	**0.76**	**0.78**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg		**0.38**	**0.38**	**0.40**	**0.38**	**0.42**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	PB2 0-30cm	PB3 0-25cm	PB4 0-25cm	PB5 0-30cm	RS1 0-40cm
				Sampling date / time	03-Jun-2026 12:48	03-Jun-2026 12:58	03-Jun-2026 13:03	03-Jun-2026 13:09	03-Jun-2026 14:15
Compound	CAS Number	LOR	Unit		EM2610454-016	EM2610454-017	EM2610454-018	EM2610454-019	EM2610454-020
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg		**100**	<100	<100	<100	<100
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		**100**	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**67.4**	**74.8**	**71.1**	**75.5**	**72.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**68.3**	**78.2**	**74.3**	**78.3**	**75.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**63.6**	**79.6**	**73.3**	**77.6**	**71.1**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	PB2 0-30cm	PB3 0-25cm	PB4 0-25cm	PB5 0-30cm	RS1 0-40cm
			Sampling date / time	03-Jun-2026 12:48	03-Jun-2026 12:58	03-Jun-2026 13:03	03-Jun-2026 13:09	03-Jun-2026 14:15
Compound	CAS Number	LOR	Unit	EM2610454-016	EM2610454-017	EM2610454-018	EM2610454-019	EM2610454-020
				Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	69.3	75.2	74.3	75.1	72.2
Anthracene-d10	1719-06-8	0.5	%	94.6	104	103	101	99.5
4-Terphenyl-d14	1718-51-0	0.5	%	80.9	88.0	87.1	88.5	86.0
EP075T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.025	%	94.1	102	95.4	98.0	96.8
Anthracene-d10	1719-06-8	0.025	%	85.6	100	94.2	96.2	95.0
4-Terphenyl-d14	1718-51-0	0.025	%	106	115	105	111	101
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	83.2	85.2	76.1	70.1	74.3
Toluene-D8	2037-26-5	0.2	%	87.0	92.1	79.3	85.3	79.9
4-Bromofluorobenzene	460-00-4	0.2	%	108	113	96.7	110	96.9

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	RS2 0-30cm	RS3 0-30cm	RS4 0-40cm	RS5 0-30cm	RS6 0-40cm
			Sampling date / time	03-Jun-2026 14:45	03-Jun-2026 14:55	03-Jun-2026 15:00	03-Jun-2026 15:10	03-Jun-2026 15:15
Compound	CAS Number	LOR	Unit	EM2610454-021	EM2610454-022	EM2610454-023	EM2610454-024	EM2610454-025
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	**15.6**	**14.4**	**12.1**	**20.5**	**14.5**
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**32**	**31**	**38**	**16**	**29**
Cadmium	7440-43-9	1	mg/kg	**1**	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	**30**	**26**	**35**	**60**	**30**
Copper	7440-50-8	5	mg/kg	**49**	**321**	**62**	**55**	**48**
Lead	7439-92-1	5	mg/kg	**37**	**63**	**41**	**79**	**24**
Nickel	7440-02-0	2	mg/kg	**64**	**54**	**77**	**138**	**77**
Zinc	7440-66-6	5	mg/kg	**126**	**178**	**160**	**161**	**131**
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	RS2 0-30cm	RS3 0-30cm	RS4 0-40cm	RS5 0-30cm	RS6 0-40cm
			Sampling date / time	03-Jun-2026 14:45	03-Jun-2026 14:55	03-Jun-2026 15:00	03-Jun-2026 15:10	03-Jun-2026 15:15
Compound	CAS Number	LOR	Unit	EM2610454-021	EM2610454-022	EM2610454-023	EM2610454-024	EM2610454-025
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.05	mg/kg	**0.06**	**0.09**	**0.07**	**0.05**	**0.07**
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg	**0.06**	**0.09**	**0.07**	**0.05**	**0.07**
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg	**0.06**	**0.09**	**0.07**	**0.05**	**0.07**
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg	**0.77**	**0.80**	**0.78**	**0.76**	**0.78**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg	**0.42**	**0.44**	**0.42**	**0.40**	**0.42**
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons								

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	RS2 0-30cm	RS3 0-30cm	RS4 0-40cm	RS5 0-30cm	RS6 0-40cm
			Sampling date / time	03-Jun-2026 14:45	03-Jun-2026 14:55	03-Jun-2026 15:00	03-Jun-2026 15:10	03-Jun-2026 15:15
Compound	CAS Number	LOR	Unit	EM2610454-021	EM2610454-022	EM2610454-023	EM2610454-024	EM2610454-025
				Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued								
C6 - C9 Fraction	---	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg	<100	**110**	<100	<100	<100
C29 - C36 Fraction	---	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg	<50	**110**	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg	**130**	**170**	**130**	<100	**150**
>C34 - C40 Fraction	---	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg	**130**	**170**	**130**	<50	**150**
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**67.3**	**74.6**	**71.1**	**72.2**	**73.4**
2-Chlorophenol-D4	93951-73-6	0.5	%	**72.3**	**69.3**	**69.7**	**69.4**	**69.9**
2.4.6-Tribromophenol	118-79-6	0.5	%	**57.5**	**57.9**	**61.4**	**60.6**	**59.2**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	RS2 0-30cm	RS3 0-30cm	RS4 0-40cm	RS5 0-30cm	RS6 0-40cm
			Sampling date / time	03-Jun-2026 14:45	03-Jun-2026 14:55	03-Jun-2026 15:00	03-Jun-2026 15:10	03-Jun-2026 15:15
Compound	CAS Number	LOR	Unit	EM2610454-021	EM2610454-022	EM2610454-023	EM2610454-024	EM2610454-025
				Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	80.2	78.5	78.9	79.0	82.4
Anthracene-d10	1719-06-8	0.5	%	104	102	102	109	106
4-Terphenyl-d14	1718-51-0	0.5	%	78.1	77.0	78.1	70.3	77.4
EP075T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.025	%	99.8	99.9	97.8	94.8	101
Anthracene-d10	1719-06-8	0.025	%	97.9	104	101	97.2	95.3
4-Terphenyl-d14	1718-51-0	0.025	%	98.5	94.1	95.8	99.8	99.5
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	80.4	62.3	72.0	72.1	83.1
Toluene-D8	2037-26-5	0.2	%	83.5	60.2	77.0	78.8	86.7
4-Bromofluorobenzene	460-00-4	0.2	%	105	72.9	93.7	97.7	106

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	FD01	FD02	----	----	----
				Sampling date / time	03-Jun-2026 00:00	03-Jun-2026 00:00	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-026	EM2610454-027	------	------	------
					Result	Result	---	---	---
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	---	1.0	%		**19.2**	**13.5**	---	---	---
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		**9**	**44**	---	---	---
Cadmium	7440-43-9	1	mg/kg		<1	<1	---	---	---
Chromium	7440-47-3	2	mg/kg		**46**	**39**	---	---	---
Copper	7440-50-8	5	mg/kg		**49**	**64**	---	---	---
Lead	7439-92-1	5	mg/kg		**84**	**48**	---	---	---
Nickel	7440-02-0	2	mg/kg		**72**	**92**	---	---	---
Zinc	7440-66-6	5	mg/kg		**147**	**177**	---	---	---
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		**0.2**	<0.1	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	---	---	---
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	---	---	---
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	---	---	---
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	---	---	---
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	---	---	---
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	---	---	---
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	---	---	---

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	FD01	FD02	----	----	----
				Sampling date / time	03-Jun-2026 00:00	03-Jun-2026 00:00	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-026	EM2610454-027	------	------	------
					Result	Result	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	---	---	---
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	---	---	---
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	---	---	---
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		**0.6**	**0.6**	---	---	---
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		**1.2**	**1.2**	---	---	---
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		**0.06**	**0.05**	---	---	---
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg		**0.06**	**0.05**	---	---	---
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	---	---	---
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	---	---	---
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	---	---	---
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	---	---	---
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	---	---	---
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg		**0.06**	**0.05**	---	---	---
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg		**0.77**	**0.76**	---	---	---
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg		**0.42**	**0.40**	---	---	---
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	---	---	---
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	---	---	---
EP080/071: Total Petroleum Hydrocarbons									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	FD01	FD02	----	----	----
				Sampling date / time	03-Jun-2026 00:00	03-Jun-2026 00:00	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-026	EM2610454-027	------	------	------
					Result	Result	---	---	---
EP080/071: Total Petroleum Hydrocarbons - Continued									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	---	---	---
C10 - C14 Fraction	---	50	mg/kg		<50	<50	---	---	---
C15 - C28 Fraction	---	100	mg/kg		<100	<100	---	---	---
C29 - C36 Fraction	---	100	mg/kg		<100	**100**	---	---	---
^ C10 - C36 Fraction (sum)	---	50	mg/kg		<50	**100**	---	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	---	---	---
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	---	---	---
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	---	---	---
>C16 - C34 Fraction	---	100	mg/kg		<100	**170**	---	---	---
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	---	---	---
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		<50	**170**	---	---	---
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg		<50	<50	---	---	---
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	---	---	---
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	---	---	---
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	---	---	---
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	---	---	---
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	---	---	---
^ Total Xylenes	---	0.5	mg/kg		<0.5	<0.5	---	---	---
Naphthalene	91-20-3	1	mg/kg		<1	<1	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**66.0**	**66.8**	---	---	---
2-Chlorophenol-D4	93951-73-6	0.5	%		**74.3**	**74.4**	---	---	---
2.4.6-Tribromophenol	118-79-6	0.5	%		**70.7**	**68.6**	---	---	---

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	FD01	FD02	----	----	----
				Sampling date / time	03-Jun-2026 00:00	03-Jun-2026 00:00	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-026	EM2610454-027	------	------	------
					Result	Result	---	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		84.5	82.6	---	---	---
Anthracene-d10	1719-06-8	0.5	%		100	98.6	---	---	---
4-Terphenyl-d14	1718-51-0	0.5	%		82.4	80.9	---	---	---
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		100	99.1	---	---	---
Anthracene-d10	1719-06-8	0.025	%		99.1	99.5	---	---	---
4-Terphenyl-d14	1718-51-0	0.025	%		101	94.4	---	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		74.7	79.3	---	---	---
Toluene-D8	2037-26-5	0.2	%		77.7	84.5	---	---	---
4-Bromofluorobenzene	460-00-4	0.2	%		94.2	103	---	---	---

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate_PP	----	----	----	----
				Sampling date / time	03-Jun-2026 00:00	---	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-028	------	------	------	------
					Result	---	---	---	---
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	---	---	---	---
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	---	---	---	---
Chromium	7440-47-3	0.001	mg/L		<0.001	---	---	---	---
Copper	7440-50-8	0.001	mg/L		<0.001	---	---	---	---
Lead	7439-92-1	0.001	mg/L		<0.001	---	---	---	---
Nickel	7440-02-0	0.001	mg/L		<0.001	---	---	---	---
Zinc	7440-66-6	0.005	mg/L		<0.005	---	---	---	---
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	---	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	---	---	---	---
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	---	---	---	---
Acenaphthene	83-32-9	1.0	µg/L		<1.0	---	---	---	---
Fluorene	86-73-7	1.0	µg/L		<1.0	---	---	---	---
Phenanthrene	85-01-8	1.0	µg/L		<1.0	---	---	---	---
Anthracene	120-12-7	1.0	µg/L		<1.0	---	---	---	---
Fluoranthene	206-44-0	1.0	µg/L		<1.0	---	---	---	---
Pyrene	129-00-0	1.0	µg/L		<1.0	---	---	---	---
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	---	---	---	---
Chrysene	218-01-9	1.0	µg/L		<1.0	---	---	---	---
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	---	---	---	---
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	---	---	---	---
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	---	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	---	---	---	---
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	---	---	---	---
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	---	---	---	---
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	µg/L		<0.5	---	---	---	---

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate_PP	---	----	----	----
				Sampling date / time	03-Jun-2026 00:00	---	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-028	------	------	------	------
					Result	---	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (zero)	---	0.5	µg/L		<0.5	---	---	---	---
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	20	µg/L		<20	---	---	---	---
C10 - C14 Fraction	---	50	µg/L		<50	---	---	---	---
C15 - C28 Fraction	---	100	µg/L		<100	---	---	---	---
C29 - C36 Fraction	---	50	µg/L		<50	---	---	---	---
^ C10 - C36 Fraction (sum)	---	50	µg/L		<50	---	---	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	---	---	---	---
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	---	---	---	---
>C10 - C16 Fraction	---	100	µg/L		<100	---	---	---	---
>C16 - C34 Fraction	---	100	µg/L		<100	---	---	---	---
>C34 - C40 Fraction	---	100	µg/L		<100	---	---	---	---
^ >C10 - C40 Fraction (sum)	---	100	µg/L		<100	---	---	---	---
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	100	µg/L		<100	---	---	---	---
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	---	---	---	---
Toluene	108-88-3	2	µg/L		<2	---	---	---	---
Ethylbenzene	100-41-4	2	µg/L		<2	---	---	---	---
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	---	---	---	---
ortho-Xylene	95-47-6	2	µg/L		<2	---	---	---	---
^ Total Xylenes	---	2	µg/L		<2	---	---	---	---
^ Sum of BTEX	---	1	µg/L		<1	---	---	---	---
Naphthalene	91-20-3	5	µg/L		<5	---	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		23.1	---	---	---	---

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate_PP	----	----	----	----
				Sampling date / time	03-Jun-2026 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		EM2610454-028	----	----	----	----
					Result	---	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
2-Chlorophenol-D4	93951-73-6	1.0	%		42.7	---	---	---	---
2.4.6-Tribromophenol	118-79-6	1.0	%		39.1	---	---	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		74.9	---	---	---	---
Anthracene-d10	1719-06-8	1.0	%		90.1	---	---	---	---
4-Terphenyl-d14	1718-51-0	1.0	%		91.0	---	---	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		99.9	---	---	---	---
Toluene-D8	2037-26-5	2	%		98.0	---	---	---	---
4-Bromofluorobenzene	460-00-4	2	%		99.7	---	---	---	---

Exhibited

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	54	125
2-Chlorophenol-D4	93951-73-6	65	123
2.4.6-Tribromophenol	118-79-6	34	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	61	125
Anthracene-d10	1719-06-8	62	130
4-Terphenyl-d14	1718-51-0	67	133
EP075T: Base/Neutral Extractable Surrogates			
2-Fluorobiphenyl	321-60-8	35	126
Anthracene-d10	1719-06-8	40	135
4-Terphenyl-d14	1718-51-0	42	133
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	51	125
Toluene-D8	2037-26-5	55	125
4-Bromofluorobenzene	460-00-4	56	124

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	51
2-Chlorophenol-D4	93951-73-6	30	114
2.4.6-Tribromophenol	118-79-6	26	133
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	35	127
Anthracene-d10	1719-06-8	44	122
4-Terphenyl-d14	1718-51-0	44	124
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	129
Toluene-D8	2037-26-5	70	125
4-Bromofluorobenzene	460-00-4	71	129

Exhibited

QUALITY CONTROL REPORT

Work Order	: **EM2610454**	Page	: 1 of 18
Client	: **TASMANIAN RAILWAY PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: BOWEN WAGENKNECHT	Contact	: Customer Services EM
Address	: P.O.BOX 335 KINGS MEADOWS TASMANIA 7249	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: 20260603_WEJ_Stockpiles	Date Samples Received	: 05-Jun-2026
Order number	: 154605	Date Analysis Commenced	: 09-Jun-2026
C-O-C number	: ----	Issue Date	: 12-Jun-2026
Sampler	: BW		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 28		
No. of samples analysed	: 28		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Tahlia Freeman	Instrument Operator	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

Exhibited

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
= Indicates failed QC
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7466349)									
EM2610319-012	Anonymous	EG005T: Chromium	7440-47-3	2	mg/kg	49	46	7.1	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	48	45	6.3	0% - 20%
EM2610319-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	21	21	0.0	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	31	34	10.8	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	31	26	19.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	68	69	2.4	0% - 50%
EM2610319-012	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	18	15	15.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	6	26.4	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	28	23	21.0	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7466351)									
EM2610454-006	VSP6 0-40cm	EG005T: Chromium	7440-47-3	2	mg/kg	62	# 78	22.9	0% - 20%
EM2610454-016	PB2 0-30cm	EG005T: Chromium	7440-47-3	2	mg/kg	59	52	12.3	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	161	156	3.4	0% - 20%
EM2610454-006	VSP6 0-40cm	EG005T: Cadmium	7440-43-9	1	mg/kg	2	2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	62	70	12.0	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	36	53	39.8	0% - 50%

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7466351) - continued									
EM2610454-006	VSP6 0-40cm	EG005T: Copper	7440-50-8	5	mg/kg	70	73	4.9	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	36	34	5.7	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	292	332	12.9	0% - 20%
EM2610454-016	PB2 0-30cm	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	54	46	16.5	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	11	7	44.2	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	47	44	8.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	78	55	33.7	0% - 50%
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7466367)									
EM2610411-008	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	14	15	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	5	6	19.2	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	14	10	29.4	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	9	20.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	11	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	15	20	25.9	No Limit
EM2610411-018	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	4	4	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	5	5	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	10	13	21.0	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 7467531)									
EM2610311-001	Anonymous	EA055: Moisture Content	----	0.1	%	19.1	19.2	0.8	0% - 20%
EM2610454-004	VSP4 0-30cm	EA055: Moisture Content	----	0.1 (1.0)*	%	17.3	13.3	26.0	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 7467532)									
EM2610454-014	TSP2 0-40cm	EA055: Moisture Content	----	0.1 (1.0)*	%	13.1	12.5	5.0	0% - 50%
EM2610454-024	RS5 0-30cm	EA055: Moisture Content	----	0.1 (1.0)*	%	20.5	16.9	19.5	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7466348)									
EM2610319-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2610319-012	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7466350)									
EM2610454-006	VSP6 0-40cm	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2610454-016	PB2 0-30cm	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7466368)									
EM2610411-008	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7466368) - continued									
EM2610411-018	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466281)									
EM2610454-001	VSP1 0-30cm	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466283)									
EM2610454-021	RS2 0-30cm	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466283) - continued									
EM2610454-021	RS2 0-30cm	EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466270)									
EM2610454-001	VSP1 0-30cm	EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466270) - continued									
EM2610454-011	VSP11 0-50cm	EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466271)									
EM2610454-021	RS2 0-30cm	EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	0.06	0.07	0.0	No Limit
		EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466244)									
EM2610454-001	VSP1 0-30cm	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466260)									
EM2610414-016	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM2610454-023	RS4 0-40cm	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466282)									
EM2610454-001	VSP1 0-30cm	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466282) - continued									
EM2610454-001	VSP1 0-30cm	EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466284)									
EM2610454-021	RS2 0-30cm	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	110	11.8	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7466244)									
EM2610454-001	VSP1 0-30cm	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7466260)									
EM2610414-016	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EM2610454-023	RS4 0-40cm	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7466282)									
EM2610454-001	VSP1 0-30cm	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7466284)									
EM2610454-021	RS2 0-30cm	EP071: >C16 - C34 Fraction	----	100	mg/kg	130	180	29.4	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080: BTEXN (QC Lot: 7466244)									
EM2610454-001	VSP1 0-30cm	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080: BTEXN (QC Lot: 7466244) - continued									
EM2610454-011	VSP11 0-50cm	EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 7466260)									
EM2610414-016	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2610454-023	RS4 0-40cm	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG020T: Total Metals by ICP-MS (QC Lot: 7470941)									
EM2610371-004	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001 (0.0010)*	mg/L	0.0011	0.0012	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001 (0.010) *	mg/L	0.152	0.151	0.0	0% - 50%
		EG020A-T: Chromium	7440-47-3	0.001 (0.010) *	mg/L	0.451	0.455	1.0	0% - 20%
		EG020A-T: Copper	7440-50-8	0.001 (0.010) *	mg/L	0.025	0.025	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001 (0.010) *	mg/L	0.061	0.063	3.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001 (0.010) *	mg/L	0.709	0.703	0.9	0% - 20%
		EG020A-T: Zinc	7440-66-6	0.005 (0.052) *	mg/L	0.357	0.355	0.6	No Limit
EM2610442-001	Anonymous	EG020A-T: Zinc	7440-66-6	0.005	mg/L	31.1	31.2	0.4	0% - 20%
EM2610442-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	0.0358	0.0351	1.8	0% - 20%
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit

Exhibited

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 7470941) - continued									
EM2610442-001	Anonymous	EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.032	0.032	0.0	0% - 20%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	0.003	0.003	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.078	0.084	7.8	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7469006)									
EM2610269-001	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EM2610424-006	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7462538)									
EM2610433-003	Anonymous	EP071: C15 - C28 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
		EP071: C29 - C36 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
EM2610433-001	Anonymous	EP071: C15 - C28 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
		EP071: C29 - C36 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7465290)									
EM2610452-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7462538)									
EM2610433-003	Anonymous	EP071: >C10 - C16 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C16 - C34 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
EM2610433-001	Anonymous	EP071: >C10 - C16 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C16 - C34 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7465290)									
EM2610452-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 7465290)									
EM2610452-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit

Exhibited

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466349)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	43 mg/kg	86.0	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	3 mg/kg	102	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	84 mg/kg	79.2	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	185 mg/kg	93.8	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	153 mg/kg	77.5	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.9 mg/kg	79.6	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	358 mg/kg	92.3	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466351)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	43 mg/kg	87.1	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	3 mg/kg	104	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	84 mg/kg	79.2	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	185 mg/kg	93.7	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	153 mg/kg	76.3	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.9 mg/kg	78.7	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	358 mg/kg	93.7	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466367)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	43 mg/kg	83.6	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	3 mg/kg	97.2	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	84 mg/kg	89.1	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	185 mg/kg	84.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	153 mg/kg	79.6	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.9 mg/kg	83.9	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	358 mg/kg	90.4	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466348)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	108	69.0	128
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466350)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	96.1	69.0	128
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466368)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	102	69.0	128
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466281)								

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466281) - continued								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	3 mg/kg	89.1	85.7	123
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	3 mg/kg	81.5	81.0	123
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	3 mg/kg	89.0	83.6	120
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	3 mg/kg	84.4	81.3	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	3 mg/kg	85.9	79.4	123
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	3 mg/kg	87.5	81.7	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	3 mg/kg	85.6	78.3	124
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	3 mg/kg	86.3	79.9	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	3 mg/kg	83.5	76.9	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	3 mg/kg	88.7	80.9	130
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	3 mg/kg	82.4	70.0	121
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	3 mg/kg	83.5	80.4	130
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	3 mg/kg	83.0	70.2	123
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	3 mg/kg	84.1	67.9	122
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	3 mg/kg	85.2	65.8	123
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	3 mg/kg	85.5	65.8	127
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466283)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	3 mg/kg	99.7	85.7	123
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	3 mg/kg	98.2	81.0	123
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	3 mg/kg	100	83.6	120
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	3 mg/kg	98.7	81.3	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	3 mg/kg	102	79.4	123
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	3 mg/kg	103	81.7	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	3 mg/kg	105	78.3	124
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	3 mg/kg	105	79.9	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	3 mg/kg	97.2	76.9	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	3 mg/kg	105	80.9	130
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	3 mg/kg	96.6	70.0	121
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	3 mg/kg	104	80.4	130
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	3 mg/kg	103	70.2	123
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	3 mg/kg	103	67.9	122
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	3 mg/kg	103	65.8	123
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	3 mg/kg	103	65.8	127

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466270)								
EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	91.5	75.4	130
EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	93.1	73.3	130
EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	92.3	73.0	131
EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	105	72.1	134
EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	94.7	74.4	131
EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	91.1	75.3	132
EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	104	72.9	135
EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	97.8	75.0	133
EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	106	71.3	134
EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	91.9	75.8	133
EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	92.0	69.6	133
EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	92.8	78.4	127
EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	91.7	72.0	135
EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	101	76.3	130
EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	2 mg/kg	92.3	77.5	134
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466271)								
EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	93.5	75.4	130
EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	93.7	73.3	130
EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	92.4	73.0	131
EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	101	72.1	134
EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	94.1	74.4	131
EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	93.9	75.3	132
EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	100.0	72.9	135
EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	98.6	75.0	133
EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	101	71.3	134
EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	94.3	75.8	133
EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	92.7	69.6	133
EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	93.1	78.4	127
EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	92.7	72.0	135
EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	92.1	76.3	130
EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	2 mg/kg	94.4	77.5	134
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466244)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	85.7	58.6	131

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466260)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	72.8	58.6	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466282)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	650 mg/kg	95.9	80.0	120
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	2910 mg/kg	93.3	80.0	120
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	89.6	80.0	120
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466284)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	650 mg/kg	87.8	80.0	120
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	2910 mg/kg	89.8	80.0	120
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	91.3	80.0	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466244)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	101	59.3	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466260)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	78.0	59.3	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466282)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	920 mg/kg	93.8	80.0	120
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3920 mg/kg	92.0	80.0	120
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	370 mg/kg	87.5	80.0	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466284)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	920 mg/kg	87.7	80.0	120
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3920 mg/kg	90.1	80.0	120
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	370 mg/kg	94.0	80.0	120
EP080: BTEXN (QCLot: 7466244)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	104	61.6	117
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	101	65.8	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	103	65.8	124
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	105	64.8	134
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	102	68.7	132
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	102	61.8	123
EP080: BTEXN (QCLot: 7466260)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	77.2	61.6	117
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	82.9	65.8	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	82.8	65.8	124
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	85.8	64.8	134

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080: BTEXN (QCLot: 7466260) - continued								
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	84.7	68.7	132
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	94.6	61.8	123

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 7470941)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	103	89.2	110
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	91.2	86.4	115
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	97.7	89.0	112
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	99.6	88.3	111
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	99.2	88.3	112
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	99.7	88.8	113
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	103	90.0	115
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7469006)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	87.1	73.4	119
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7462537)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	82.1	42.8	114
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	88.9	48.6	119
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	85.9	47.0	117
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	85.8	49.5	119
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	89.3	49.4	121
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	87.6	48.4	122
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	89.0	50.3	124
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	89.8	50.0	126
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	88.0	49.4	127
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	90.5	48.7	126
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	90.1	54.5	134
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	93.1	56.1	134
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	93.2	55.6	135
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	91.4	54.4	126
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	91.4	54.5	126
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	88.3	54.4	126
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7462538)								

Exhibited

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7462538) - continued								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	4360 µg/L	85.9	47.2	122
EP071: C15 - C28 Fraction	----	100	µg/L	<100	15200 µg/L	85.8	52.9	131
EP071: C29 - C36 Fraction	----	50	µg/L	<50	7370 µg/L	85.2	50.4	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7465290)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	360 µg/L	87.8	66.2	134
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7462538)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	5760 µg/L	84.9	49.1	125
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	20100 µg/L	85.7	51.6	128
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	1440 µg/L	86.1	47.2	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7465290)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	450 µg/L	85.5	66.2	132
EP080: BTEXN (QCLot: 7465290)								
EP080: Benzene	71-43-2	1	µg/L	<1	20 µg/L	88.4	68.8	127
EP080: Toluene	108-88-3	2	µg/L	<2	20 µg/L	95.5	72.9	129
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	93.6	71.7	130
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	40 µg/L	92.9	72.3	136
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	97.8	75.9	134
EP080: Naphthalene	91-20-3	5	µg/L	<5	5 µg/L	99.0	68.3	131

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466349)							
EM2610319-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	105	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	101	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	97.1	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	114	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	92.7	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	92.5	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	90.1	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466351)							

Exhibited

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466351) - continued							
EM2610454-007	VSP7 0-50cm	EG005T: Arsenic	7440-38-2	50 mg/kg	101	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.7	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	87.1	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	99.8	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	97.5	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	84.3	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	92.6	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466367)							
EM2610411-009	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	99.6	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	96.8	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	105	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	98.2	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	95.2	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	98.6	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	94.8	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466348)							
EM2610319-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	103	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466350)							
EM2610454-007	VSP7 0-50cm	EG035T: Mercury	7439-97-6	0.5 mg/kg	108	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466368)							
EM2610411-009	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	82.6	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466281)							
EM2610454-002	VSP2 0-30cm	EP075(SIM): Acenaphthene	83-32-9	3 mg/kg	86.8	77.2	116
		EP075(SIM): Pyrene	129-00-0	3 mg/kg	86.6	65.5	136
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466283)							
EM2610454-022	RS3 0-30cm	EP075(SIM): Acenaphthene	83-32-9	3 mg/kg	82.9	77.2	116
		EP075(SIM): Pyrene	129-00-0	3 mg/kg	84.3	65.5	136
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466270)							
EM2610454-002	VSP2 0-30cm	EP075-TAS: Pyrene	129-00-0	3 mg/kg	90.1	37.8	152
		EP075-TAS: Acenaphthene	83-32-9	3 mg/kg	90.6	42.6	138
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466271)							
EM2610454-022	RS3 0-30cm	EP075-TAS: Pyrene	129-00-0	3 mg/kg	115	37.8	152
		EP075-TAS: Acenaphthene	83-32-9	3 mg/kg	110	42.6	138
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466244)							
EM2610454-002	VSP2 0-30cm	EP080: C6 - C9 Fraction	----	28 mg/kg	78.2	33.4	124
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466260)							

Exhibited

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466260) - continued							
EM2610414-019	Anonymous	EP080: C6 - C9 Fraction	----	28 mg/kg	54.8	33.4	124
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466282)							
EM2610454-003	VSP3 0-30cm	EP071: C10 - C14 Fraction	----	650 mg/kg	93.6	70.0	130
		EP071: C15 - C28 Fraction	----	2910 mg/kg	91.3	70.0	130
		EP071: C29 - C36 Fraction	----	1550 mg/kg	87.9	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466284)							
EM2610454-023	RS4 0-40cm	EP071: C10 - C14 Fraction	----	650 mg/kg	86.3	70.0	130
		EP071: C15 - C28 Fraction	----	2910 mg/kg	87.7	70.0	130
		EP071: C29 - C36 Fraction	----	1550 mg/kg	88.0	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466244)							
EM2610454-002	VSP2 0-30cm	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	81.9	30.8	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466260)							
EM2610414-019	Anonymous	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	56.5	30.8	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466282)							
EM2610454-003	VSP3 0-30cm	EP071: >C10 - C16 Fraction	----	920 mg/kg	91.6	70.0	130
		EP071: >C16 - C34 Fraction	----	3920 mg/kg	90.1	70.0	130
		EP071: >C34 - C40 Fraction	----	370 mg/kg	85.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466284)							
EM2610454-023	RS4 0-40cm	EP071: >C10 - C16 Fraction	----	920 mg/kg	86.5	70.0	130
		EP071: >C16 - C34 Fraction	----	3920 mg/kg	87.5	70.0	130
		EP071: >C34 - C40 Fraction	----	370 mg/kg	87.6	70.0	130
EP080: BTEXN (QCLot: 7466244)							
EM2610454-002	VSP2 0-30cm	EP080: Benzene	71-43-2	2 mg/kg	109	54.4	127
		EP080: Toluene	108-88-3	2 mg/kg	112	57.1	131
EP080: BTEXN (QCLot: 7466260)							
EM2610414-019	Anonymous	EP080: Benzene	71-43-2	2 mg/kg	69.4	54.4	127
		EP080: Toluene	108-88-3	2 mg/kg	74.2	57.1	131

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 7470941)							
EM2610371-004	Anonymous	EG020A-T: Arsenic	7440-38-2	10 mg/L	103	82.0	123
		EG020A-T: Cadmium	7440-43-9	2.5 mg/L	92.2	81.8	123
		EG020A-T: Chromium	7440-47-3	10 mg/L	98.1	78.9	119
		EG020A-T: Copper	7440-50-8	10 mg/L	99.1	80.4	118

Exhibited

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Acceptable Limits (%) Low	Matrix Spike (MS) Report: Acceptable Limits (%) High
EG020T: Total Metals by ICP-MS (QCLot: 7470941) - continued							
EM2610371-004	Anonymous	EG020A-T: Lead	7439-92-1	10 mg/L	96.6	80.5	121
		EG020A-T: Nickel	7440-02-0	10 mg/L	100	80.0	118
		EG020A-T: Zinc	7440-66-6	10 mg/L	99.8	74.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7469006)							
EM2610319-011	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	78.9	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7462538)							
EM2610433-002	Anonymous	EP071: C10 - C14 Fraction	----	4360 µg/L	86.7	48.0	126
		EP071: C15 - C28 Fraction	----	15200 µg/L	87.9	51.7	132
		EP071: C29 - C36 Fraction	----	7370 µg/L	87.0	50.5	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7465290)							
EM2610452-002	Anonymous	EP080: C6 - C9 Fraction	----	280 µg/L	62.9	33.9	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7462538)							
EM2610433-002	Anonymous	EP071: >C10 - C16 Fraction	----	5760 µg/L	86.5	48.0	128
		EP071: >C16 - C34 Fraction	----	20100 µg/L	87.7	50.4	130
		EP071: >C34 - C40 Fraction	----	1440 µg/L	87.7	47.4	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7465290)							
EM2610452-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	330 µg/L	59.7	34.0	122
EP080: BTEXN (QCLot: 7465290)							
EM2610452-002	Anonymous	EP080: Benzene	71-43-2	20 µg/L	88.7	56.3	133
		EP080: Toluene	108-88-3	20 µg/L	93.2	60.4	132

Exhibited

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2610454**	Page	: 1 of 11
Client	: **TASMANIAN RAILWAY PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: BOWEN WAGENKNECHT	Telephone	: +61-3-8549 9600
Project	: 20260603_WEJ_Stockpiles	Date Samples Received	: 05-Jun-2026
Site	: ----	Issue Date	: 12-Jun-2026
Sampler	: BW	No. of samples received	: 28
Order number	: 154605	No. of samples analysed	: 28

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **For all regular sample matrices, where applicable to the methodology, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Exhibited

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	EM2610454--006	VSP6 0-40cm	**Chromium**	7440-47-3	22.9 %	0% - 20%	**RPD exceeds LOR based limits**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)						
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	11	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)						
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	11	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / *Container / Client Sample ID(s)*		*Sample Date*	*Extraction / Preparation*			*Analysis*		
			Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**----**	----	----	**09-Jun-2026**	17-Jun-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**10-Jun-2026**	30-Nov-2026	✓	**12-Jun-2026**	30-Nov-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**10-Jun-2026**	01-Jul-2026	✓	**12-Jun-2026**	01-Jul-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM))								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							
EP075B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075-TAS)								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm, TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**09-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP080)							
RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP071)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	20-Jul-2026	✓
Soil Glass Jar - Unpreserved (EP071)							
TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm, RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm, TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**09-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP080)							
RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP071)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	20-Jul-2026	✓
Soil Glass Jar - Unpreserved (EP071)							
TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm, RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm, TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**09-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP080)							
RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	17-Jun-2026	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG020A-T)							
Rinsate_PP	**03-Jun-2026**	**10-Jun-2026**	30-Nov-2026	✓	**11-Jun-2026**	30-Nov-2026	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG035T)							
Rinsate_PP	**03-Jun-2026**	**----**	----	----	**12-Jun-2026**	01-Jul-2026	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
Rinsate_PP	**03-Jun-2026**	**10-Jun-2026**	10-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
Rinsate_PP	**03-Jun-2026**	**10-Jun-2026**	10-Jun-2026	✓	**10-Jun-2026**	20-Jul-2026	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate_PP	**03-Jun-2026**	**11-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	17-Jun-2026	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
Rinsate_PP	**03-Jun-2026**	**10-Jun-2026**	10-Jun-2026	✓	**10-Jun-2026**	20-Jul-2026	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate_PP	**03-Jun-2026**	**11-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	17-Jun-2026	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate_PP	**03-Jun-2026**	**11-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	17-Jun-2026	✓

Exhibited

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	3	27	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	4	34	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	27	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	6	57	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	9	57	**15.79**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	27	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	

Exhibited

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	11	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	3	20	**15.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	11	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Exhibited

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)

Exhibited

Analytical Methods	Method	Matrix	Method Descriptions
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging.

Exhibited

Summary Results Tables and Comparison to Adopted Criteria

Attachment C

pitt&sherry

SUMMARY RESULTS - SOIL / FILL MATERIAL

Project No: P.26.0676
Project Name: TasRail - WEJ Waste Classification

Exhibited

	Analyte Grouping	Total Heavy Metals								Total Petroleum Hydrocarbons (TPH)					Total Recoverable Hydrocarbons (TRH)					BTEXN					Polycyclic Aromatic Hydrocarbons (PAH)		
	Analyte	Arsenic	Cadmium	Chromium (total)	Copper	Lead	Nickel	Zinc (total)	Mercury (total)	C6-C9	C10-C14	C15-C28	C29-C36	Sum(C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Benzo(a)pyrene	Carcinogenic PAHs (as BaP TEQ)[D]	Total PAHs
	ASC NEPM - HIL/HSL D (vapour intrusion)	3,000	900	3,600 Cr(VI)	240,000	1,500	6,000	400,000	730 (inorganic)						260-NL (sand) 250-NL (silt) 310-NL (clay)	NL (all soil types)				3 (sand) 4-10 (silt) 4-20 (clay)	NL (all soil types)	NL (all soil types)	NL (all soil types)	NL (all soil types)		40	4,000
	CRC CARE - HSL (vapour intrusion, intrusive maintenance worker - shallow trench)														(C6-C10) NL	(>C10-C16) NL				77-NL (sand) 250-NL (silt) 350-NL (clay)	NL (all soil types)	NL (all soil types)	NL (all soil types)	NL (all soil types)			
	CRC CARE - HSL D (vapour intrusion)														(C6-C10) 260-NL (sand) 250-590 (silt) 310-NL (clay)	(>C10-C16) NL (all soil types and depths)				3 (sand) 4-6 (silt) 4-9 (clay)	NL (all soil types)	NL (all soil types)	230-NL (sand) NL (silt) NL (clay)	NL (all soil types)			
	CRC CARE - HSL D (direct contact)														26,000 (C6-C10)	20,000 (>C10-C16)	27,000	38,000		430	99,000	27,000	81,000	11,000			
	CRC CARE - HSL (direct contact, intrusive maintenance worker - shallow trench)														82,000 (C6-C10)	62,000 (>C10-C16)	85,000	120,000		1,100	120,000	85,000	130,000	29,000			
	ASC NEPM - EIL/ESL (commercial / industrial)	160[A]		310-660[B]	85-1,200[B]	1,800[C]	55-960[B]	110-2,000[B]							215	170	1,700 (coarse) 2,500 (fine)	3,300 (coarse) 6,600 (fine)		75 (coarse) 95 (fine)	135 (coarse / fine)	165 (coarse) 185 (fine)	180 (coarse) 95 (fine)	370[A]	1.4		
	IB105 - Level 1 (fill material)	20	3	50	100	300	60	200	1	65				1,000	65 (C6-C9)				1,000 (C10-C36)	1	1	3	14		0.08		20
	IB105 - Level 2 (low level contaminated soil)	200	40	500	2,000	1,200	600	14,000	30	650				5,000	650 (C6-C9)				5,000 (C10-C36)	5	100	100	180		2		40
	IB105 - Level 3 (contaminated soil)	750	400	5,000	7,500	3,000	3,000	50,000	110	1,000				10,000	1,000 (C6-C9)				10,000 (C10-C36)	50	1,000	1,080	1,800		20		200

Sample ID	Field ID	Location	Date Sampled	Sample Depth (m bgl)	Lab	Soil Type / Units																							
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EM2610454015	PB1 0-30cm	Pit Base	03 Jun 2026 12:42	0.3	ALS	Fine	7	<1	70	56	42	91	101	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454016	PB2 0-30cm	Pit Base	03 Jun 2026 12:48	0.3	ALS	Fine	11	<1	59	47	78	54	161	0.1	<10	<50	<100	<100	<50	<10	<50	100	<100	100	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454017	PB3 0-25cm	Pit Base	03 Jun 2026 12:58	0.25	ALS	Fine	<5	<1	75	45	13	79	213	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454018	PB4 0-25cm	Pit Base	03 Jun 2026 13:03	0.25	ALS	Fine	<5	<1	79	36	13	76	86	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
EM2610454019	PB5 0-30cm	Pit Base	03 Jun 2026 13:09	0.3	ALS	Fine	<5	<1	85	33	9	65	74	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454020	RS1 0-40cm	Roadside Stockpile	03 Jun 2026 14:15	0.4	ALS	Fine	25	<1	35	52	20	98	156	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.07	0.07	0.07
EM2610454021	RS2 0-30cm	Roadside Stockpile	03 Jun 2026 14:45	0.3	ALS	Fine	32	1	30	49	37	64	126	<0.1	<10	<50	<100	<100	<50	<10	<50	130	<100	130	<0.2	<0.5	<0.5	<0.5	<1	0.06	0.06	0.06
EM2610454022	RS3 0-30cm	Roadside Stockpile	03 Jun 2026 14:55	0.3	ALS	Fine	31	<1	26	321	63	54	178	<0.1	<10	<50	110	<100	110	<10	<50	170	<100	170	<0.2	<0.5	<0.5	<0.5	<1	0.09	0.09	0.09
EM2610454023	RS4 0-40cm	Roadside Stockpile	03 Jun 2026 15:00	0.4	ALS	Fine	38	<1	35	62	41	77	160	<0.1	<10	<50	<100	<100	<50	<10	<50	130	<100	130	<0.2	<0.5	<0.5	<0.5	<1	0.07	0.07	0.07
EM2610454024	RS5 0-30cm	Roadside Stockpile	03 Jun 2026 15:10	0.3	ALS	Fine	16	<1	60	55	79	138	161	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
EM2610454025	RS6 0-40cm	Roadside Stockpile	03 Jun 2026 15:15	0.4	ALS	Fine	29	<1	30	48	24	77	131	<0.1	<10	<50	<100	<100	<50	<10	<50	150	<100	150	<0.2	<0.5	<0.5	<0.5	<1	0.07	0.07	0.07
EM2610454013	TSP1 0-50cm	Tower Stockpile	03 Jun 2026 15:40	0.5	ALS	Fine	9	<1	43	53	38	109	208	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454014	TSP2 0-40cm	Tower Stockpile	03 Jun 2026 15:45	0.4	ALS	Fine	18	1	44	72	156	73	423	0.2	<10	<50	130	140	270	<10	<50	230	<100	230	<0.2	<0.5	<0.5	<0.5	<1	0.21	0.21	0.21
EM2610454001	VSP1 0-30cm	Void Stockpile	03 Jun 2026 13:20	0.3	ALS	Fine	<5	<1	19	16	8	22	41	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454002	VSP2 0-30cm	Void Stockpile	03 Jun 2026 13:42	0.3	ALS	Fine	16	<1	30	38	12	75	139	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454003	VSP3 0-30cm	Void Stockpile	03 Jun 2026 13:48	0.3	ALS	Fine	16	<1	30	41	15	91	149	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.06	0.06	0.06
EM2610454004	VSP4 0-30cm	Void Stockpile	03 Jun 2026 13:55	0.3	ALS	Fine	9	1	43	44	26	83	201	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454005	VSP5 0-40cm	Void Stockpile	03 Jun 2026 14:05	0.4	ALS	Fine	19	1	50	48	31	43	220	0.2	<10	<50	170	150	320	<10	<50	270	<100	270	<0.2	<0.5	<0.5	<0.5	<1	0.15	0.15	0.65
EM2610454006	VSP6 0-40cm	Void Stockpile	03 Jun 2026 14:16	0.4	ALS	Fine	36	2	62	70	36	62	292	<0.1	<10	<50	120	110	230	<10	<50	190	<100	190	<0.2	<0.5	<0.5	<0.5	<1	0.1	0.1	0.1
EM2610454007	VSP7 0-50cm	Void Stockpile	03 Jun 2026 14:21	0.5	ALS	Fine	<5	<1	24	29	8	67	103	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454008	VSP8 0-40cm	Void Stockpile	03 Jun 2026 14:35	0.4	ALS	Fine	14	3	67	75	58	72	598	0.2	<10	<50	150	150	300	<10	<50	250	<100	250	<0.2	<0.5	<0.5	<0.5	<1	0.12	0.12	0.12
EM2610454009	VSP9 0-40cm	Void Stockpile	03 Jun 2026 14:55	0.4	ALS	Fine	7	<1	16	20	47	21	82	0.3	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454010	VSP10 0-40cm	Void Stockpile	03 Jun 2026 15:04	0.4	ALS	Fine	<5	<1	16	27	37	51	72	0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454011	VSP11 0-50cm	Void Stockpile	03 Jun 2026 15:10	0.5	ALS	Fine	11	<1	55	60	5	172	112	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454012	VSP12 0-40cm	Void Stockpile	03 Jun 2026 15:15	0.4	ALS	Fine	19	<1	65	59	11	157	173	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454026	FD01 [Dup01]	PB2	03 Jun 2026 13:20	0.3	ALS	Fine	9	<1	46	49	84	72	147	0.2	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.06	0.06	0.06
EM2610454027	FD02 [Dup02]	RS4	03 Jun 2026 13:20	0.4	ALS	Fine	44	<1	39	64	48	92	177	<0.1	<10	<50	<100	100	100	<10	<50	170	<100	170	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
Summary Statistics - Re-use Area - Pit base (PB01 - PB05)						**Number of Data Points**	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
						Number of Detects	2	0	5	5	5	5	5	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	1
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	<5	<1	59	33	9	54	74	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
						Maximum	11	<1	85	56	78	91	213	0.1	<10	<50	<100	<100	<50	<10	<50	100	<100	100	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
						Median	2.5		75	45	13	76	101	0.05								50		25						0.03	0.03	0.03
						Arithmetic Mean	5.1		73.6	43.4	31.0	73.0	127.0	0.06								60.0		40.0						0.03	0.03	0.03
						Standard Deviation	3.8		9.8	9.2	29.4	14.1	58.6	0.02								22.4		33.5						0.01	0.01	0.01
						95th Percentile	10.2		83.8	54.2	70.8	88.6	202.6	0.09								90.0		85.0						0.05	0.05	0.05
						95% Confidence Interval	3.4		8.6	8.0	25.8	12.3	51.3	0.02								19.6		29.4						0.01	0.01	0.01
						95% UCL (Mean + 95% Confidence Interval)	8.5		82.2	51.4	56.8	85.3	178.3	0.08								79.6		69.4						0.04	0.04	0.04
Summary Statistics - All Western Junction Stockpile samples						**Number of Data Points**	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
						Number of Detects	17	6	20	20	20	20	20	5	0	0	5	4	5	0	0	8	0	8	0	0	0	0	0	11	11	11
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	<5	<1	16	16	5	21	41	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
						Maximum	38	3	67	321	156	172	598	0.3	<10	<50	170	150	320	<10	<50	270	<100	270	<0.2	<0.5	<0.5	<0.5	<1	0.21	0.21	0.65
						Median	16	0.5	35	50.5	33.5	74	158	0.05			50	50	25			50		25						0.055	0.055	0.055
						Arithmetic Mean	17.63	0.80	39.00	61.95	37.60	80.30	186.25	0.09			71.50	67.50	80.25			106.00		91.00						0.06	0.06	0.09
						Standard Deviation	11.10	0.64	16.34	63.14	34.23	39.53	127.50	0.07			39.77	36.69	105.35			77.76		89.29						0.05	0.05	0.14
						95th Percentile	36.10	2.05	65.10	87.30	82.85	157.75	431.75	0.21			151.00	150.00	301.00			251.00		251.00						0.15	0.15	0.23
						95% Confidence Interval	4.86	0.28	7.16	27.67	15.00	17.32	55.88	0.03			17.43	16.08	46.17			34.08		39.13						0.02	0.02	0.06
						95% UCL (Mean + 95% Confidence Interval)	22.49	1.08	46.16	89.62	52.60	97.62	242.13	0.12			88.93	83.58	126.42			140.08		130.13						0.09	0.09	0.15
Summary Statistics - Roadside stockpile (RS01 - RS06)						**Number of Data Points**	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
						Number of Detects	6	1	6	6	6	6	6	0	0	0	1	0	1	0	0	4	0	4	0	0	0	0	0	6	6	6
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	16	<1	26	48	20	54	126	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
						Maximum	38	1	60	321	79	138	178	<0.1	<10	<50	110	<100	110	<10	<50	170	<100	170	<0.2	<0.5	<0.5	<0.5	<1	0.09	0.09	0.09
						Median	30	0.5	32.5	53.5	39	77	158				50		25			130		130						0.07	0.07	0.07
						Arithmetic Mean	28.5	0.6	36.0	97.8	44.0	84.7	152.0				60.00		39.17			113.33		105.00						0.07	0.07	0.07
						Standard Deviation	7.4	0.2	12.2	109.4	22.9	30.0	19.8				24.49		34.70			51.25		63.72						0.01	0.01	0.01
						95th Percentile	36.5	0.9	53.8	256.3	75.0	128.0	173.8				95.00		88.75			165.00		165.00						0.09	0.09	0.09
						95% Confidence Interval	6.0	0.2	9.8	87.6	18.3	24.0	15.8				19.60		27.77			41.01		50.98						0.01	0.01	0.01
						95% UCL (Mean + 95% Confidence Interval)	34.5	0.7	45.8	185.4	62.3	108.7	167.8				79.60		66.93			154.34		155.98						0.08	0.08	0.08
Summary Statistics - Tower stockpile (TSP01 - TSP02)						**Number of Data Points**	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
						Number of Detects	2	1	2	2	2	2	2	1	0	0	1	1	1	0	0	1	0	1	0	0	0	0	0	1	1	1
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	9	<1	43	53	38	73	208	<0.1	<10	<50	<100	<100	<50	<10	<50	230	<100	230	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
						Maximum	18	1	44	72	156	109	423	0.2	<10	<50	130	140	270	<10	<50	230	<100	230	<0.2	<0.5	<0.5	<0.5	<1	0.21	0.21	0.21
						Median	13.5	0.75	43.5	62.5	97	91	315.5	0.125			90	95	147.5			140		127.5						0.12	0.12	0.12
						Arithmetic Mean	13.50	0.75	43.50	62.50	97.00	91.00	315.50	0.13			90.00	95.00	147.50			140.00		127.50						0.12	0.12	0.12
						Standard Deviation	6.36	0.35	0.71	13.44	83.44	25.46	152.03	0.11			56.57	63.64	173.24			127.28		144.96						0.13	0.13	0.13
						95th Percentile	17.55	0.98	43.95	71.05	150.10	107.20	412.25	0.19			126.00	135.50	257.75			221.00		219.75						0.20	0.20	0.20
						95% Confidence Interval	8.82	0.49	0.98	18.62	115.64	35.28	210.70	0.15			78.40	88.20	240.10			176.40		200.90						0.18	0.18	0.18
						95% UCL (Mean + 95% Confidence Interval)	22.32	1.24	44.48	81.12	212.64	126.28	526.20	0.27			168.40	183.20	387.60			316.40		328.40						0.30	0.30	0.30
Summary Statistics - Void stockpile (VSP01 - VSP12)						**Number of Data Points**	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
						Number of Detects	9	4	12	12	12	12	12	4	0	0	3	3	3	0	0	3	0	3	0	0	0	0	0	4	4	4
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	<5	<1	16	16	5	21	41	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
						Maximum	36	3	67	75	58	172	598	0.3	<10	<50	170	150	320	<10	<50	270	<100	270	<0.2	<0.5	<0.5	<0.5	<1	0.15	0.15	0.65
						Median	12.5	0.5	36.5	42.5	20.5	69.5	144	0.05			50	50	25			50		25						0.025	0.025	0.025
						Arithmetic Mean	12.88	0.92	39.75	43.92	24.50	76.33	181.83	0.10			74.17	71.67	89.58			96.67		77.92						0.05	0.05	0.09
						Standard Deviation	9.57	0.79	19.59	19.19	17.36	46.71	148.66	0.09			45.02	40.41	118.56			86.27		97.36						0.05	0.05	0.18
						95th Percentile	26.65	2.45	65.90	72.25	51.95	163.75	429.70	0.25			159.00	150.00	309.00			259.00		259.00						0.13	0.13	0.36
						95% Confidence Interval	5.41	0.45	11.08	10.86	9.82	26.43	84.11	0.05			25.47	22.87	67.08			48.81		55.09						0.03	0.03	0.10
						95% UCL (Mean + 95% Confidence Interval)	18.29	1.37	50.83	54.78	34.32	102.76	265.94	0.15			99.64	94.53	156.66			145.48		133.00						0.078	0.08	0.19

Legend:

	Ecological criteria (National)
	Disposal criteria (Tasmania)
Bold	Reported concentration equals or exceeds at least one of the ecological criteria
Bold	Reported concentration equals or exceeds at least one of the human health criteria plus at least one of the ecological criteria
	Reported concentration equals or exceeds IB105 Level 1 - fill material and/or PFAS unlined landfill criterion
Bold	Reported concentration is greater than the LOR
Grey <	Reported concentration is below the LOR
A	Generic EIL
B	ACL range
C	Generic ACL
D	Carcinogenic PAHs (as BaP TEQ at zero)
HIL / HSL	Health Investigation Level / Health Screening Level
EIL / ESL	Ecological Investigation Level / Ecological Screening Level
LOR	Limit of reporting
NL	Not limiting
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene
ACL	Added contaminant limit

References:

ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure 1999, amended 2013
IB105	Information Bulletin No. 105 - Classification and Management of Contaminated Soil for Disposal, Version 3, 2018, Environment Protection Authority Tasmania

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SUMMARY RESULTS - DUPLICATE (SOIL)

Project No: P.26.0676
Project Name: TasRail - WEJ Waste Classification

			Analyte Group	Total Heavy Metals								Total Petroleum Hydrocarbons (TPH)					Total Recoverable Hydrocarbons (TRH)					BTEXN					Polycyclic Aromatic Hydrocarbons (PAH)		
			Analyte	Arsenic	Cadmium	Chromium (total)	Copper	Lead	Nickel	Zinc (total)	Mercury (total)	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Benzo(a)pyrene	Carcinogenic PAHs (as BaP TEQ)[A]	Total PAHs
			ALS LORs	5	1	2	5	5	2	5	0.1	10	50	100	100	50	10	50	100	100	50	0.2	0.5	0.5	0.5	1	0.05	0.05	0.05
Sample ID	**Date sampled**	**Laboratory**	**Units**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PB2 0-30cm	03 Jun 2026 12:48	ALS	Fine	**11**	<1.0	**59**	**47**	**78**	**54**	**161**	**0.1**	<10.0	<50.0	<100	<100	<50.0	<10.0	<50.0	**100**	<100	**100**	<0.200	<0.500	<0.500	<0.500	<1.0	<0.050	<0.050	<0.050
FD01	03 Jun 2026 13:20	ALS	Fine	**9**	<1.0	**46**	**49**	**84**	**72**	**147**	**0.2**	<10.0	<50.0	<100	<100	<50.0	<10.0	<50.0	<100	<100	<50.0	<0.200	<0.500	<0.500	<0.500	<1.0	**0.06**	**0.06**	**0.06**
RPD				20	ND	25	4	7	29	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RS4 0-40cm	03 Jun 2026 15:00	ALS	Fine	**38**	<1.0	**35**	**62**	**41**	**77**	**160**	<0.100	<10.0	<50.0	<100	<100	<50.0	<10.0	<50.0	**130**	<100	**130**	<0.200	<0.500	<0.500	<0.500	<1.0	**0.07**	**0.07**	**0.07**
FD02	03 Jun 2026 13:20	ALS	Fine	**44**	<1.0	**39**	**64**	**48**	**92**	**177**	<0.100	<10.0	<50.0	<100	**100**	**100**	<10.0	<50.0	**170**	<100	**170**	<0.200	<0.500	<0.500	<0.500	<1.0	**0.05**	**0.05**	**0.05**
RPD				15	ND	11	3	16	18	10	ND	ND	ND	ND	ND	ND	ND	ND	27	ND	27	ND	ND	ND	ND	ND	33	33	33

Legend:

	Passed criteria
	Could not be determined (e.g. not tested for that analyte)
LOR	Limit of reporting
Bold	Value is greater than the LOR
Grey <	Reported concentration is below the LOR
A	Carcinogenic PAHs (as BaP TEQ at zero)
RPD	Relative percentage difference
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene
TCLP	Toxicity Characteristic Leaching Procedure
ND	Not determined as one value is less than LOR

$$RPD = \frac{Result1 - Result2}{Mean\ Result} * 100$$

Where values reported by laboratory are less than 20 times the LOR, then the calculated RPD should be less than 50%
Where values reported by laboratory are 20 to 100 times the LOR, then the calculated RPD should be less than 30%; and
Where values reported by laboratory are greater than 100 times the LOR, then the calculated RPD should be less than 15%

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SUMMARY RESULTS -Rinsates

Project No: P.26.0676
Project Name: TasRail - WEJ Waste Classification

			Analyte Grouping	**Heavy Metals**								**Total Petroleum Hydrocarbons (TPH)**					**Total Recoverable Hydrocarbons (TRH)**					**BTEXN**					**Polycyclic Aromatic Hydrocarbons (PAH)**		
			Analyte	Arsenic	Cadmium	Chromium (total)	Copper	Lead	Nickel	Zinc (total)	Mercury (total)	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	Benzo(a)pyrene	Carcinogenic PAHs (as BaP TEQ)[A]	Total PAHs
			ALS LORs	0.001	0.0001	0.001	0.001	0.001	0.001	0.005	0.0001	20	50	100	50	50	20	100	100	100	100	1	2	2	2	5	0.5	0.5	0.5
Sample ID	**Date**	**Laboratory**	**Units**	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Rinsate_PP	03 Jun 2026 15:00	ALS	From shovel	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.0001	<20	<50	<100	<50	<50	<20	<100	<100	<100	<100	<1	<2	<2	<2	<5	<0.5	<0.5	<0.5
QA/QC Assessment				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Legend:

P	Passed
D	Detected
--	Not tested
Bold	Reported concentration is greater than the LOR
Grey <	Reported concentration is below the LOR
A	Carcinogenic PAHs (as BaP TEQ at zero)
LOR	Limit of reporting
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene

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Prensa, Asbestos Bulk Sample Analysis Report – Western Junction, Evandale Road, Western Junction TAS, June 2026

Attachment D

pitt&sherry

Exhibited

5 June 2026

Anthony Williams
Tasmanian Railway Pty Ltd
11 Techno Park Drive
Kings Meadows TAS 7249

Dear Anthony,

Asbestos Bulk Sample Analysis Report

Western Junction, Evandale Road, Western Junction TAS 7212

Please find attached the asbestos bulk sample analysis results of the 1 sample as received from Tasmanian Railway Pty Ltd for Western Junction, Evandale Road, Western Junction TAS 7212 on 3 June 2026 and received at the Prensa Pty Ltd laboratory (Level 1, 134-136 Main Road, Moonah TAS 7009) on 3 June 2026. The sample was analysed on 5 June 2026 and the results are presented on the following page(s).

Prensa qualitatively analyses bulk samples for asbestos using polarising light microscopy and dispersion staining techniques in accordance with Prensa Test Method PRLAB2002 Asbestos Identification, and in accordance with Australian Standard (AS) 4964 – 2004, *Method for the qualitative identification of asbestos in bulk samples.*

If you require further information please contact the Prensa office on (03) 6218 1793.

Regards,

Kate Hall
Approved Asbestos Identifier and Signatory

GF, 5 Burwood Rd, Hawthorn VIC 3122 ABN: 12 142 106 581

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Asbestos Bulk Sample Analysis Report

Western Junction, Evandale Road, Western Junction TAS 7212

Sample No	Sample Location / Description / Size	Result
	Sample as received - External, VSP7 - geofabric	No asbestos fibres detected
153812M - 001 - 001	Grey fibrous material	Organic fibres detected
	42 x 15 x 1 mm	

Please note that Prensa Pty Ltd does not accept responsibility for the representation of the sample submitted in relation to its source. Only the samples submitted for analysis have been considered in presenting these results.

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GRADCO

EROSION AND SEDIMENT CONTROL PLAN
TASRAIL
WEJ VOID DRAINAGE AND SPOIL PLACEMENT WORKS

Purpose

This Erosion and Sediment Control Plan (ESCP) outlines the measures to be implemented by Gradco during the WEJ void drainage and spoil placement works to minimise erosion, control sediment movement, protect existing and newly installed drainage infrastructure and prevent contaminated material or sediment-laden water from leaving the designated work area.

The controls outlined within this plan will be implemented prior to disturbance and progressively reviewed and modified as the works advance.

Scope of Works

The works covered by this ESCP generally include vegetation stripping, excavation and stockpiling of existing material, installation of drainage pipes, pits and manholes, removal of redundant drainage infrastructure, placement of quarry materials around the new drainage system, backfilling using suitable excavated material and the progressive placement and compaction of contaminated spoil within the void.

The completed void area will ultimately form a future laydown and working area within the rail yard.

Existing Site Conditions

The work area consists of an existing low-lying void containing vegetation and established drainage paths. Existing drainage infrastructure conveys surface water through and from the area.

Construction activities will temporarily expose soils and alter existing drainage paths. Particular consideration will therefore be given to maintaining drainage through the site and preventing sediment or contaminated material from entering existing or newly constructed drainage infrastructure.

Vegetation and Site Disturbance

Vegetation and the existing organic surface layer will be stripped only within the area required to complete the drainage and spoil placement works. Unnecessary disturbance outside the defined work area will be avoided.

Clearing and excavation will be undertaken progressively where practical to minimise the amount of exposed ground at any one time.

Clean Water Management

Where practical, clean surface water originating outside the disturbed work area will be diverted around the works using existing drainage paths, temporary diversion drains, bunding or other suitable controls.

Clean water will be kept separate from disturbed areas and stockpiles wherever practical to reduce the amount of sediment-laden water requiring management.

Existing drainage paths will be maintained throughout construction unless temporary diversion is required to facilitate the works.

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Sediment and Dirty Water Management

Runoff generated from disturbed areas will be managed to prevent sediment entering existing drainage infrastructure or leaving the designated work area.

Sediment controls may include silt fencing, sediment socks, temporary bunds, check dams, sediment traps or other suitable controls depending on the location and stage of construction.

Controls will generally be positioned downstream of excavations, stockpiles and disturbed areas and upstream of existing pits, pipes and discharge locations.

Sediment accumulated behind controls will be removed as required to maintain their effectiveness.

Excavation and Stockpile Management

Following vegetation stripping, material excavated for drainage trenches, pits and drainage paths will be stockpiled within the void area clear of active excavations, drainage paths and construction access routes.

Stockpiles will be positioned to minimise exposure to concentrated surface water flows. Where there is potential for sediment to migrate from a stockpile, appropriate sediment controls will be installed around or downstream of the stockpile.

Following installation of the drainage infrastructure, suitable quarry material will be placed and compacted around the new pipes and structures. Suitable previously excavated material will then be progressively reused as general backfill.

Contaminated Spoil Management

Contaminated spoil imported to the void will only be placed within the designated and approved placement area.

Placement will occur progressively, with material spread and compacted to minimise loose material and reduce the potential for erosion. Contaminated material will not be placed within active drainage paths or in a manner that obstructs the operation of the completed drainage system.

Runoff from the spoil placement area will be managed within the site using the erosion and sediment controls identified within this plan.

Any material suspected of being unsuitable for placement within the void will be segregated and managed in accordance with project environmental requirements.

Dewatering

Water accumulating within pipe trenches, pit excavations or other work areas will be assessed prior to removal.

Where water contains visible sediment, it will not be pumped directly into the existing drainage system or discharged from the site without appropriate treatment. Depending on site conditions, water may be directed through sediment controls, allowed to settle, filtered or managed using another suitable method prior to discharge.

Pumping locations will be selected to prevent erosion or scouring at the discharge point.

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Erosion Controls

Earthworks will be progressively completed and stabilised to minimise the period that soils remain exposed.

Completed drainage trenches and excavations will be backfilled and compacted as soon as practical following installation and inspection of the drainage infrastructure.

Surface water will be prevented from concentrating over exposed soils where practical, and temporary controls will be installed where concentrated flows have the potential to cause erosion or scour.

Site Accessing and Tracking

Construction access will be maintained in a suitable condition to minimise tracking of soil or contaminated material outside the work area.

Where material is tracked onto established roads or hardstand areas, it will be removed as soon as practical using appropriate methods. Sediment will not be washed into the stormwater or drainage system.

Fuel, Oils and Spill Management

Plant and equipment will be maintained in serviceable condition and routinely inspected for fuel, oil and hydraulic leaks.

Refueling and servicing will be undertaken away from drainage paths where practical. Spill kits will be readily available within the work area, and any spill will be immediately contained and cleaned up.

Contaminated material generated from a spill will be appropriately contained and disposed of in accordance with project environmental requirements.

Rainfall Management

Weather forecasts will be monitored during construction, particularly while excavation, drainage installation and spoil placement activities are occurring.

Prior to forecast significant rainfall, Gradco will inspect the work area to ensure stockpiles are secure, drainage paths remain operational and erosion & sediment controls are correctly installed.

Following significant rainfall, the work area and controls will be inspected for erosion, sediment movement, overtopping, damage or blockage. Any deficiencies will be rectified as soon as practical.

Inspection and Maintenance

Erosion and sediment controls will be inspected regularly throughout construction and following significant rainfall events.

Inspections will consider the condition of sediment controls, stockpiles, exposed surfaces, drainage paths, excavations and discharge locations.

Damaged or ineffective controls will be repaired, replaced or supplemented as required. Accumulated sediment will be removed where it affects the performance of the control.

Controls will be progressively relocated or modified as the drainage installation and filling of the void advances.

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Environmental Incident Response

Where an uncontrolled release of sediment, contaminated material, fuel, oil or sediment-laden water occurs, works within the affected area will cease where necessary and immediate action will be taken to contain the release.

The Gradco Supervisor / Project Manager will be notified and additional controls implemented to prevent further migration. TasRail will be notified where required in accordance with project environmental and incident reporting requirements.

The cause of the incident will be reviewed and corrective actions implemented prior to recommencing the affected activity.

Progressive Stabilisation and Completion

As drainage works are completed, excavations will be progressively backfilled and compacted and disturbed areas stabilised.

The placement of contaminated spoil within the void will progressively establish the required site levels and reduce the amount of exposed or disturbed ground.

On completion of the works, temporary erosion and sediment controls will remain in place until the relevant areas are considered sufficiently stable and there is no longer a reasonable risk of sediment migration.

The completed drainage system will be inspected to confirm drainage paths, pits and pipes remain clear and operational.

Key Environmental Controls

The following key requirements will apply throughout the works:
No contaminated spoil will be placed until the relevant drainage infrastructure is installed and capable of maintaining the required drainage path.

Sediment-laden or potentially contaminated water will not be discharged directly into the existing drainage system or surrounding environment without appropriate management or treatment.

Excavated material and contaminated spoil will not be stockpiled or placed within active drainage paths.

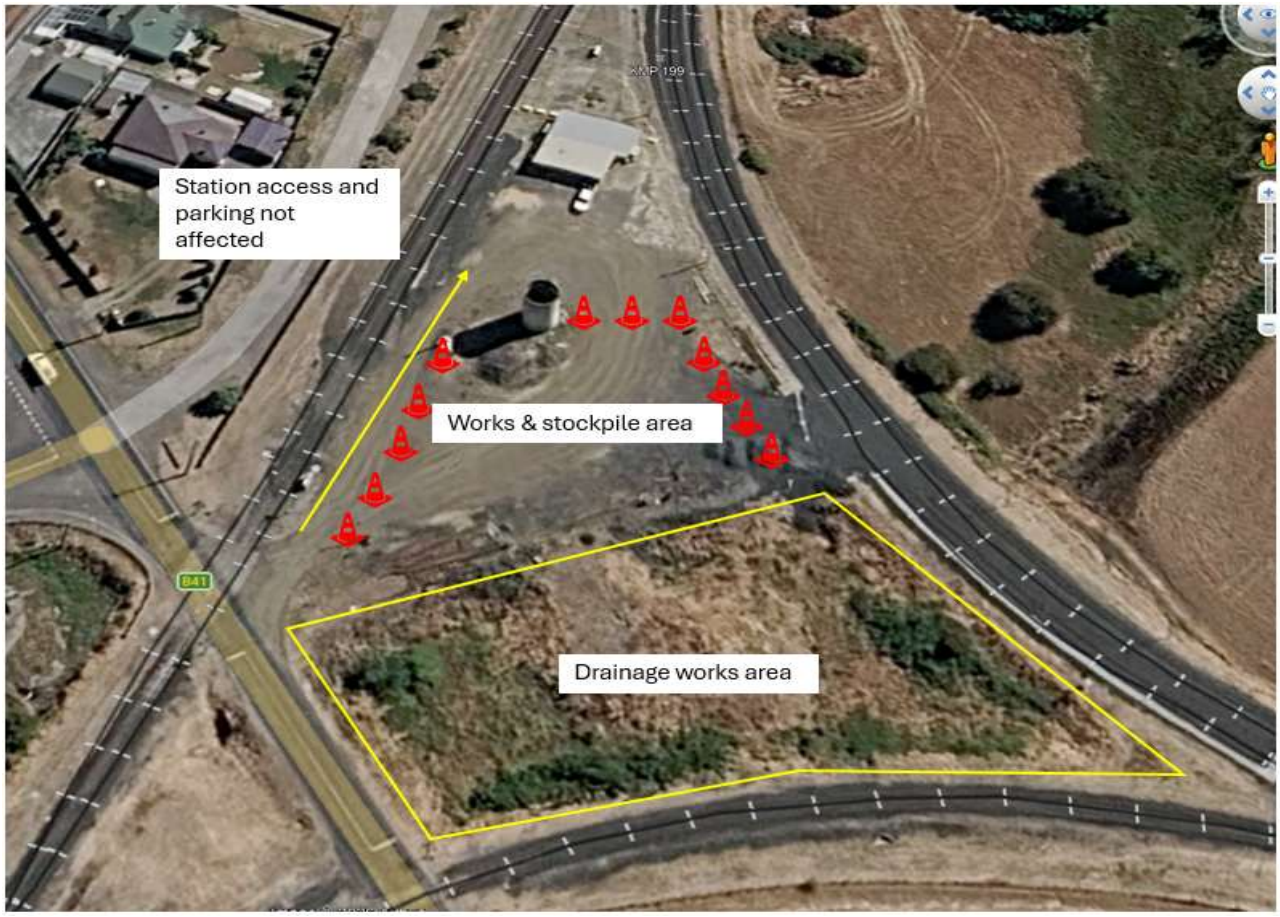
Erosion and sediment controls will be established prior to the associated ground disturbance and maintained until the area is stabilised.

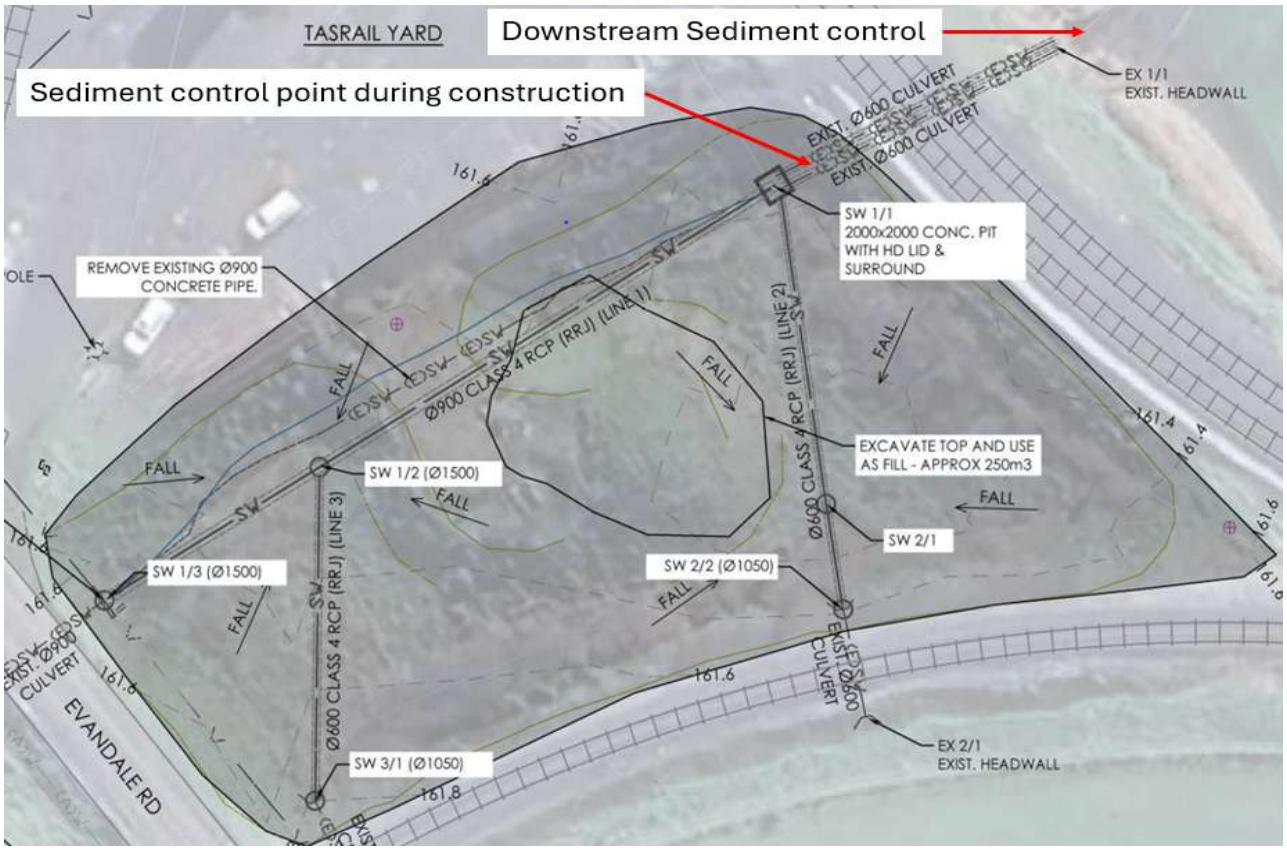
The extent of exposed and disturbed ground will be minimised wherever practical.

Erosion and Sediment Control Plan Site Drawing

A site-specific Erosion and Sediment Control Plan drawing should be maintained with this document showing, as applicable, the work boundary, existing and proposed drainage paths, pipe and pit locations, stockpile areas, contaminated spoil placement area, sediment controls, site access, dewatering locations and drainage discharge points.

The drawing will be updated where required to reflect changes in site conditions or the progression of the works.


Station access and parking not affected
Works & stockpile area
Drainage works area
B41


TASRAIL YARD
Downstream Sediment control
Sediment control point during construction
EX 1/1
EXIST. HEADWALL
EXIST. Ø600 CULVERT
SW 1/1
2000x2000 CONC. PIT WITH HD LID & SURROUND
REMOVE EXISTING Ø900 CONCRETE PIPE.
Ø900 CLASS 4 RCP (RRJ) (LINE 1)
Ø600 CLASS 4 RCP (RRJ) (LINE 2)
EXCAVATE TOP AND USE AS FILL - APPROX 250m3
SW 1/2 (Ø1500)
SW 2/1
SW 1/3 (Ø1500)
SW 2/2 (Ø1050)
Ø600 CLASS 4 RCP (RRJ) (LINE 3)
SW 3/1 (Ø1050)
EXIST. Ø900 CULVERT
EVANDALE RD
EX 2/1
EXIST. HEADWALL
FALL
161.6
161.4
161.8

Exhibited

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Located nationally —
Melbourne
Sydney
Brisbane
Hobart
Launceston
Newcastle
Devonport

18 August 2026

Mr Bowen Wagenknecht
Environmental Advisor
Tasmanian Railway Pty Ltd
11 Techno Park Drive
KINGS MEADOWS Tasmania 7249

Dear Bowen,

Re: P.25.1573 – East Tamar Junction – Waste Spoil Classification – Rev02

1. Background

The Tasmanian Railway Pty Ltd (TasRail) have scheduled rail infrastructure works at East Tamar Junction (ETJ), Hoblers Bridge Road, Newstead, Tasmania 7250[1] (the ETJ Site). Infrastructure works include rail replacement, sleeper replacement and ballast replacement, which will generate spoil from the following locations shown in Figure 1:

- Wye points replacement:
  - Road 1 – 65 m long x 3.7 m wide x 0.7 m deep, comprising 93 m^3 ballast and 96 m^3 formation material
  - Road 2 – 237 m long x 3.7 m wide x 0.7 m deep, comprising 282 m^3 ballast and 294 m^3 formation material
- ETJ yard crossover installation:
  - Road 3 – 325 m long x 3.7 m wide x 0.5 m deep, comprising 126 m^3 ballast and 35 m^3 formation material
  - Road 4 – 132 m long x 3.7 m wide x 0.5 m deep, comprising 107 m^3 ballast and 42 m^3 formation material; and
  - Link Road – 21 m long x 3.7 m wide x 0.5 m deep, comprising 28 m^3 ballast and 29 m^3 formation material.

Ahead of the scheduled rail infrastructure works, TasRail engaged Pitt & Sherry Pty Ltd (pitt&sherry) to sample and classify the spoil in-situ (636 m^3 (ballast) and 496 m^3 (formation materials, i.e. fines)) to assess its suitability for either offsite reuse (preferred) at the Western Junction (WEJ) site 14 km south-east of the ETJ site, or offsite disposal. In addition, pitt&sherry sampled the proposed offsite reuse location at WEJ, to provide an understanding of the contamination status (if any) of this area and its suitability for reuse of the waste spoil. This is documented in the WEJ Report[2] (Appendix E).

This letter report provides a summary of sampling works and findings. ETJ Site and sampling locations are shown in Figure 1 (note: BH12-BH15 were initially planned to investigate an onsite reuse area which is no longer considered). Details of the WEJ site and sampling locations are shown in Figure 2 and Figure 3, in addition to the WEJ Report.

[1] Certificates of Title 23170/3 and 1087451 (Land Information Systems of Tasmania interactive mapping tool (LISTmap)).
[2] pitt&sherry, *Re: P.26.0676 – TasRail Western Junction Waste Classification – Rev00*, August 2026.

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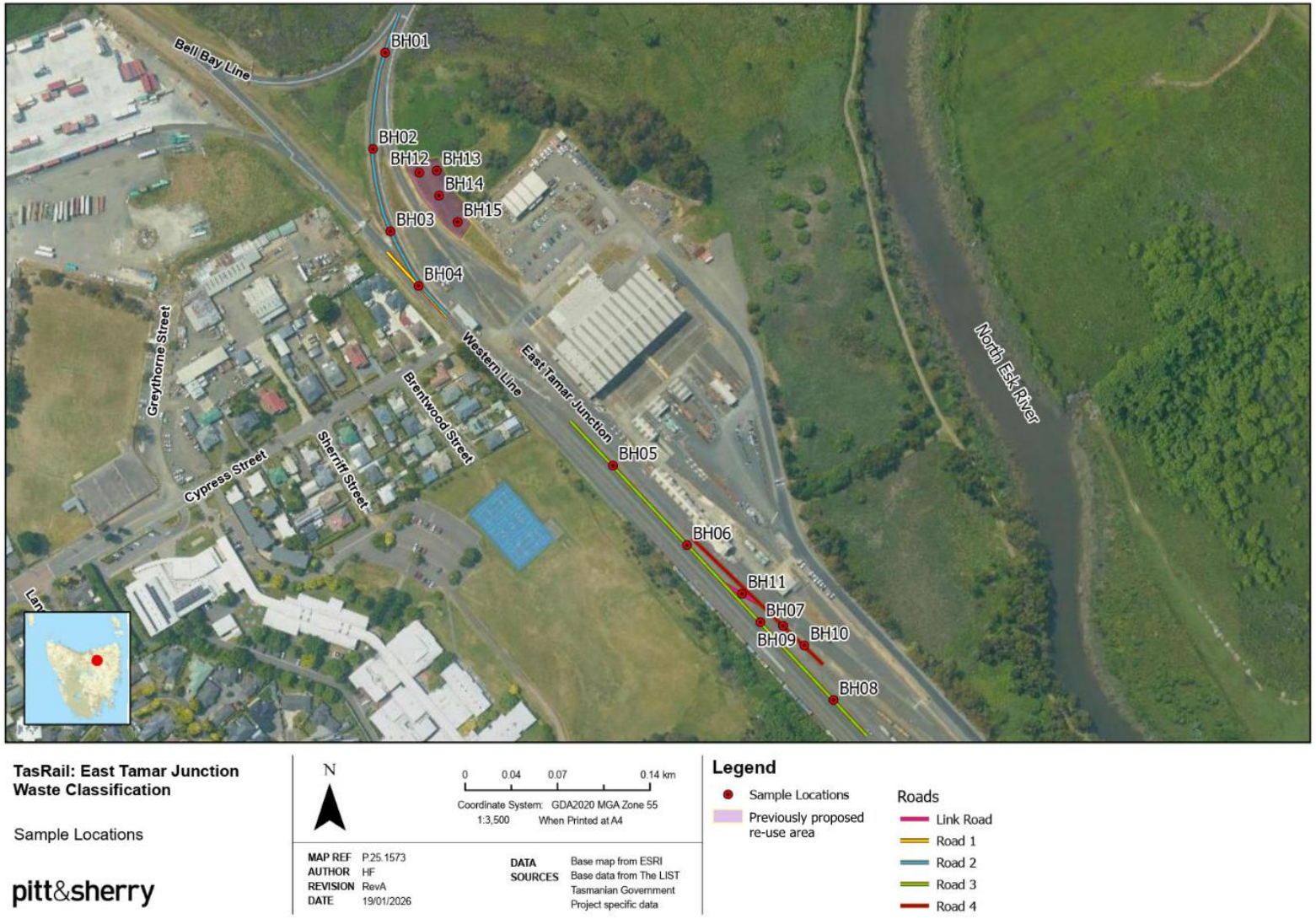


Figure 1: ETJ Site and sampling locations

Exhibited

2. Objectives

- The objectives of this waste classification and reuse area sampling and reporting were to:
- Obtain ballast and formation soils (fines) from the ETJ Site area for in-situ waste classification
- Review analytical results, tabulate and compare to ASC NEPM[3], IB105[4] and proposed reuse area concentrations
- Assess suitability of ballast and formation soils (fines) for reuse within the proposed offsite reuse area at WEJ, and classification for offsite disposal; and
- Document the findings in a brief letter-style report (this document).

3. Completed works

3.1 Sampling details

Details of the waste classification sampling are provided in Table 1. Details of the proposed reuse area sampling completed by TasRail are documented in the WEJ Report (Appendix E)

Table 1: ETJ Site sampling details

Activity	Details
Sampling date	• 8 December 2025.
Sample collection	• H. Fairweather (Environmental Consultant).
Sample locations	• Sample locations are shown in Figure 1 (Section 1).
Sampling rationale	Waste classification of 636 m^3 (ballast) and 496 m^3 (formation materials): • Collecting ballast and formation soils from 11 locations at 2 depths (i.e. 22 samples) to a maximum of 0.7 m bgl (maximum proposed depth of excavation); and • Sampling density was reduced to 1 sample per 50 m^3 (half the IB105 required density for waste classification) based on the homogeneous nature of the ballast and formation materials and the dispersed nature of the expected contamination
Contaminants of potential concern (CoPCs)	Tested CoPCs, based on expected CoPCs, related to TasRail operations comprised: • Asbestos fibres • Hydrocarbons – benzene, toluene, ethyl benzene and xylenes and naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAHs) and total petroleum hydrocarbons / total recoverable hydrocarbons (TPH / TRH); and • Metals – arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), zinc (Zn) and mercury (Hg).
Sample containers	• Samples were collected in laboratory-supplied receptacles, suitable for the CoPCs to be tested.

[3] *National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended 2013* (ASC NEPM).
[4] *Information Bulletin No. 105, Classification and Management of Contaminated Soil for Disposal*, EPA Tasmania, V.3, 2018 (IB105).

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Activity	Details
Sample collection	• The sampling locations were cleared of underground services • Within the proposed works area, in-situ samples were collected from eleven investigation locations (Figure 1) to a maximum depth of 0.7 m bgl using a hi-rail excavator. The depths and sampled material types comprised: ○ Eleven[5] ballast samples, less than 1 cm in size to allow for laboratory leachability testing, (ballast samples were collected from locations BH01 to BH11). Ballast was crushed onsite on a concrete pad out of the rain using a sledgehammer ○ Eleven[4] fines samples (fines samples were collected from locations BH01 to BH11) • The sample containers were filled with minimal headspace (where possible), sealed, labelled, and placed on ice in portable chiller boxes; and • Additional samples were collected in snap-lock bags at each location and screened in the field for volatile organic compounds (VOCs) using a calibrated photo-ionisation detector. The calibration certificate is provided in Attachment A.
Sample description	• Sample descriptions were noted on the field sheet (Attachment B); and • Representative images are also provided in Attachment B.
Decontamination	Sampling contamination and cross-contamination mitigation procedures included: • Equipment was clean upon arrival onsite • The auger on the excavator was scraped between excavation locations to remove as much material as possible • Both the pad and sledgehammer used to crush the ballast were brushed clean of dust and debris between samples • Excess spoil was removed from the mattock by hand between sample locations • Single-use disposable nitrile gloves were used and changed after the collection of each sample • New laboratory-supplied receptacles were used for each sample; and • Each sample container was sealed immediately upon filling.
Samples for analysis	• Primary samples – all works area ballast (11) and fines (11) samples were submitted to the laboratory for analysis of: ○ Total concentrations of identified CoPCs (all samples) ○ Toxicity characteristics leaching procedure (TCLP) leachable concentrations of identified CoPCs (half the samples from the works area) • Samples from BH10 (works area) were sent to the laboratory but were not tested given the close proximity to BH09; and • Quality assurance / quality control (QA/QC) samples – two duplicate samples, one rinsate sample (off the mattock) were collected and a trip blank sample was included in the single batch.
Sample transport	• A Chain of Custody (CoC) form was completed, dated, and submitted to the laboratory with the single batch of samples (Attachment C); and • The samples were delivered to Analytical Laboratory Services (ALS) Laboratory Cambridge the day after collection for overnight transport to the ALS Laboratory Springvale for analysis under CoC conditions.

[5] Some of the proposed locations were shifted slightly following identification of underground services and revision of the Road 4 length. Given the close proximity of BH09 and BH10 on Road 4 (Figure 1), only samples from BH09 were selected for analysis.

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Activity	Details
Laboratory analysis	• All samples were submitted to the National Association of Testing Authorities (NATA)-accredited ALS Laboratory in Melbourne (Accreditation No. 825) for testing of nominated CoPCs; and • The laboratory reports are provided in Attachment C.
Holding times	• All samples were received by the laboratory within the required holding times for the individual parameters tested • Samples were received chilled at between -0.2 and 0.3 degrees Celsius (°C) which is within the recommended maximum temperature of 6°C (important for preservation of analytes with short holding times such as VOCs); and • Samples were extracted for analysis by the laboratory within the required holding times for the individual parameters tested.
QA/QC	• Sampling was undertaken by a trained pitt&sherry environmental consultant, who was briefed by a Senior Principal Environmental Consultant and CEnvP SC[6] on the sampling requirements • Refer to 'decontamination' details above for sample handling • Field QA/QC sampling comprised (discussed in Section 4.4): ○ Collection of two duplicates – QA/QC1 (from BH01/0.7) and QA/QC2 (from BH08/0.2) ○ Collection of one rinsate sample from the mattock ○ One trip blank sample was submitted with the single sample batch • All samples were placed in portable chiller boxes and kept chilled on ice • Samples were dispatched directly to ALS Laboratory in Cambridge for overnight transport to ALS Laboratory in Springvale for testing; and • ALS is a NATA-accredited laboratory and runs internal QA/QC checks which are documented in its quality control and interpretive quality control reports (Attachment C) and discussed in Section 4.4.

4. Observations and analytical results

4.1 Observations

Description – refer to the field sheet (Attachment B) for profile and sample descriptions. Ballast consisted of blue metal gravels and underlying formation materials were a combination of gravelly clay and sandy silt.

Odour – no hydrocarbon odours were noted during sampling. This was supported by the low VOC readings which ranged from (0 to 0.3 ppm) (Attachment B) and the reported concentrations of volatile (BTEXN), volatile TPH (C_6-C_9) / TRH (F1 fractions) and semi-volatile TPH (C_{10}-C_{14}) / TRH (F2 fractions) which were all below the laboratory limits of reporting (LORs) (Attachment D).

Staining – no staining was observed within the sampled spoil (Attachment B).

Other observations – no building demolition rubble (BDR) or potential asbestos-containing material (ACM) was observed at any of the sample locations during sampling (Attachment B).

[6] Certified Environmental Practitioner Site Contamination specialist (CEnvP SC), certified under the Environment Institute of Australia and New Zealand.

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4.2 Analytical results and comparison to adopted assessment criteria

A copy of the ALS Laboratory Certificate of Analysis and related documentation including Chain of Custody documentation, Sample Receipt Notification and QA/QC reports are provided in Attachment C.

Summary tables of analytical results compared against adopted criteria are provided in Attachment D.

A copy of the study and analysis conducted on the preferred reuse area at WEJ is provided in the WEJ Report (Attachment E).

4.2.1 Waste spoil classification for offsite disposal

Asbestos fibres were not detected in any of the fines (10 samples) or proposed reuse area (5 samples). Reported concentrations of tested CoPCs demonstrate that the spoil within the works area is classified under IB105 for offsite disposal as a combination of:

- **Ballast – Level 2 – low-level contaminated material** (i.e. a 'controlled waste' under the Waste Regulations[7]) to the maximum sampled depth of 0.2 m bgl based on total Ni concentrations; and
- **Fines – Level 1 – fill material**[8] (i.e. a 'non-controlled waste' under the Waste Regulations) to the maximum sampled depth of 0.7 m bgl.

Justification for the classification is provided below:

- **Ballast** (BH01 and BH05) **–** as a result of total Ni concentrations:
  - Total Ni concentrations which ranged from 3 to 108 mg/kg (ten samples) with an average concentration of 44 mg/kg and a 95% upper confidence level (UCL) on the mean of 63 mg/kg compared to an IB105 Level 1 – fill material criterion of 60 mg/kg and a Level 2 – low-level contaminated material criterion of 600 mg/kg. All leachable Ni concentrations (six samples) were below the IB105 Level 2 criterion of 1 mg/L (there are no IB105 Level 1 leachable criteria).

Soils / fill materials for offsite disposal classified as Level 2 and above under IB105 must be transported to a licenced landfill by a waste transporter approved to transport the waste. Approval from the EPA and the landfill is also required. It is possible that the ballast could be classified as a 'non-controlled Level 2 waste' as the elevated metals are expected to be naturally occurring from the blue metal (i.e. basalt or dolerite) source rock, and not from 'contamination'. This is further supported by the low leachable metals' concentrations.

4.2.2 Proposed reuse area characterisation – Western Junction

The preferred location for reuse of the spoil materials is the WEJ area, approximately 14 km south-east of the ETJ Site (see Figure 2). A waste classification study is described in the WEJ Report (Attachment E).

[7] *Environmental Management and Pollution Control (Waste Management) Regulations 2020 (Waste Regulations).*

[8] It is noted that the total Cr concentration at two locations, total Cu at one location and total Ni at two locations exceeded the IB105 Level 1 criteria, however, average and 95% UCL concentrations were below the IB105 Level 1 criteria for all tested CoPCs.

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Site assessment criteria are typically selected based on the following rationale:

- Land zoning and the most sensitive use permissible under that zoning: the void area is within an area that is zoned 'Utilities' which is consistent with commercial / industrial land use described under the ASC NEPM
- Proposed land use or new zoning: no change in land use is proposed; and
- Onsite or adjacent sensitive receptors, including human and ecological: the closest residential receptor is approximately 100 m southeast of the void area. The void area is located in the upper reaches of the drainage line which feeds to Springvale Creek, however the void is effectively bunded within the triangular area formed by the junction of the South Line and Western Line. The catchment flows will bypass the void via the planned installation of concrete culverts and pipework.

On the basis of the above, commercial / industrial criteria were adopted for reuse assessment.

Reported concentrations of tested CoPCs within the proposed reuse area at WEJ (the void, denoted as 'pit base' in the results spreadsheet) were:

- **Human health** – within the ASC NEPM commercial / industrial health investigation levels (HILs) and health screening levels (HSLs) for all parameters
- **Ecological** – generally within the ASC NEPM commercial / industrial ecological investigation levels (EILs) / most conservative added contaminant limits (ACLs)[9] and ecological screening levels (ESLs) with the exception of the following:
  - Total Ni – concentrations ranged from 54 to 91 mg/kg with an average concentration of 73 mg/kg and a 95% upper confidence level (UCL) of 85 mg/kg, which exceeds the conservative EIL of 55 mg/kg[10]; and
  - Total Zn – concentrations ranged from 74 to 213 mg/kg with an average concentration of 127 mg/kg and a 95% UCL of 178 mg/kg, which exceeds the conservative EIL of 110 mg/kg[11].

[9] Adopted as conservative EILs for several metals (Cr, Cu, Ni and Zn).
[10] Most conservative ACL adopted as the conservative Ni EIL.
[11] Most conservative ACL adopted as the conservative Zn EIL.

Exhibited

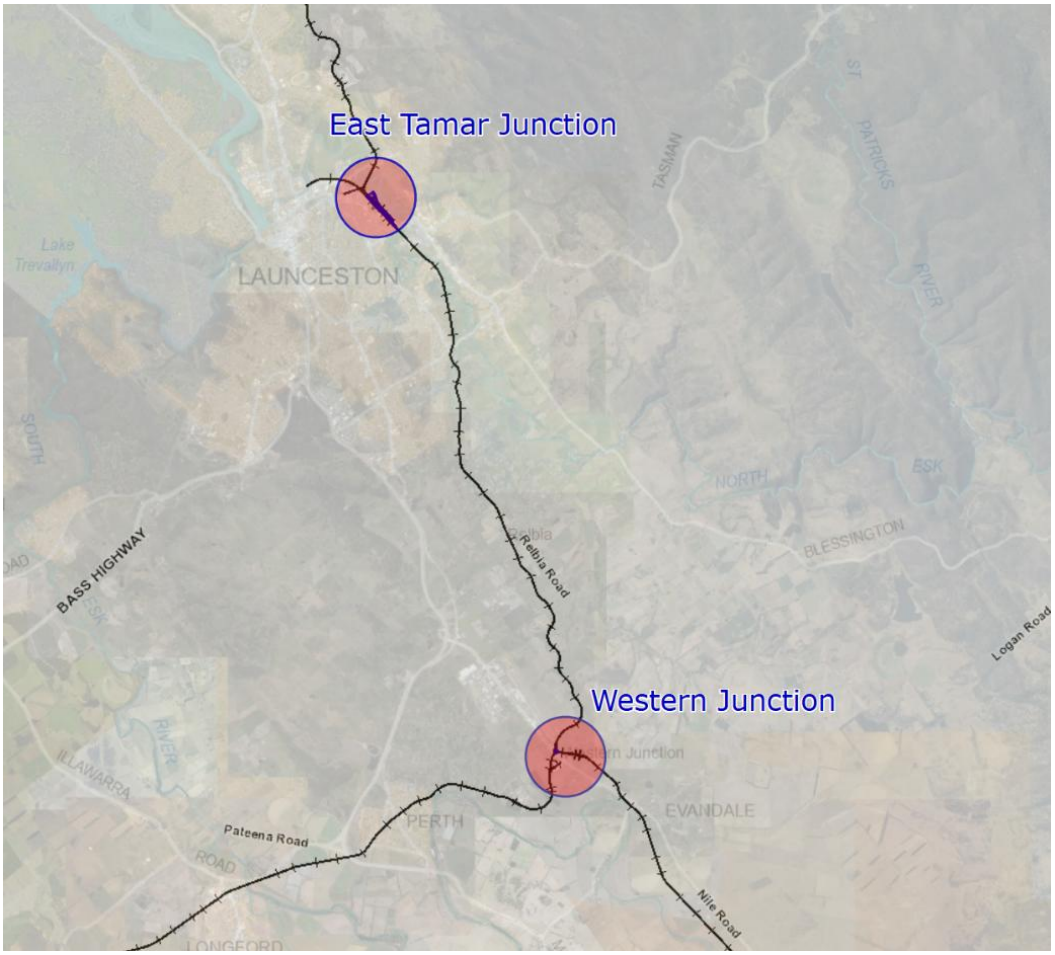


Figure 2. Overview of ETJ and WEJ study areas



Figure 3. Detail of preferred WEJ reuse area (note sampling locations detailed in Appendix E)

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4.2.3 Waste spoil suitability for reuse

Reported concentrations of tested CoPCs in all waste materials samples (ballast, fines) were within the ASC NEPM residential A[12] HILs / HSLs, irrespective of soil type and depth.

There were two **exceedances** of the ASC NEPM **commercial / industrial** EILs / ESLs (relevant to the 'Utilities' zoned area)[13] in **ballast** (BH01 and BH05) as a result of total Ni concentrations. Total Ni concentrations ranged from 3 to 108 mg/kg (ten samples) with an average concentration of 44 mg/kg and a 95% UCL on the mean of 63 mg/kg compared to an ASC NEPM commercial / industrial very conservative EIL of 55 mg/kg[14]. Leachable Ni concentrations (six samples) were all below the LOR (<0.1 mg/L).

There were several **exceedances** of the ASC NEPM **urban residential / open space** EILs (relevant to the 'Rural' zoned area), irrespective of soil texture (i.e. coarse, fine):

- **Ballast** (BH01 to BH06, BH08 and BH09) **–** as a result of total Ni concentrations:
  - Total Ni concentrations which ranged from 3 to 108 mg/kg (ten samples) with an average concentration of 44 mg/kg and a 95% UCL on the mean of 63 mg/kg compared to an ASC NEPM urban residential / public open space very conservative EIL of 30 mg/kg[15]. All leachable Ni concentrations (six samples) were below the LOR of 0.1 mg/L

- **Fines** (BH01, BH03, BH04, BH08 and BH09) **–** as a result of total Cu, Ni and/or Zn concentrations:
  - Total Cu concentrations which ranged from 23 to 110 mg/kg (ten samples) with an average concentration of 46 mg/kg and a 95% UCL on the mean of 63 mg/kg compared to an ASC NEPM urban residential / public open space very conservative EIL of 60 mg/kg[16]. All leachable Cu concentrations (six samples) were below the LOR of 0.1 mg/L
  - Total Ni concentrations which ranged from 11 to 110 mg/kg (ten samples) with an average concentration of 33 mg/kg and a 95% UCL on the mean of 53 mg/kg compared to an ASC NEPM urban residential / public open space very conservative EIL of 30 mg/kg[14]. All leachable Ni concentrations (six samples) were below the LOR of 0.1 mg/L; and
  - Total Zn concentrations which ranged from 11 to 121 mg/kg (ten samples) with an average concentration of 52 mg/kg and a 95% UCL on the mean of 78 mg/kg compared to an ASC NEPM urban residential / public open space very conservative EIL of 70 mg/kg[17]. Leachable Zn concentrations (six samples) ranged from below the LOR of 0.1 mg/L to 0.1 mg/L.

When comparing to ASC NEPM HILs, HSLs EILs and ESLs, the spoil has been assessed based on:

- Zoning
- Statistics (i.e. 95% UCL on the mean concentration)
- Noting that ballast consist of 'rock' and 'gravel' from which metals have very low bioavailability

[12] And are therefore also within the ASC NEPM commercial / industrial HILs / HSLs, irrespective of soil type and depth.

[13] It is noted that the total Cr concentration in fines at one location, total Ni at two locations and total Zn at two locations exceeded the ASC NEPM commercial / industrial EILs, however, average and 95% UCL concentrations were below the ASC NEPM commercial / industrial EILs for these parameters.

[14] Lowest ACL adopted as the conservative EIL for Ni. Commercial / industrial ACL for Ni ranges from 55 to 960 mg/kg with all reported concentrations below the upper ACL.

[15] Lowest ACL adopted as the conservative EIL for Ni. Urban residential / public open space ACL for Ni ranges from 30 to 560 mg/kg with all reported concentrations below the upper ACL.

[16] Lowest ACL adopted as the conservative EIL for Cu. Urban residential / public open space ACL for Cu ranges from 60 to 800 mg/kg with all reported concentrations below the upper ACL.

[17] Lowest ACL adopted as the conservative EIL for Zn. Urban residential / public open space ACL for Zn ranges from 70 to 1,300 mg/kg with all reported concentrations below the upper ACL.

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- Noting that the adopted EILs are the most stringent ACLs in ASC NEPM, they do not consider background concentrations and are not applicable to reuse beneath sealed areas; and
- With consideration of hotspots (i.e. reported concentrations greater than 2.5 times the adopted criteria).

Considering the above, waste materials (ballast and fines) are generally **suitable for reuse** from a Site use perspective (i.e. commercial / industrial use), noting the below in relation to implementation of management measures for ecological receptors.

The most conservative ACLs have been adopted as the EILs for select metals (i.e. Cr, Cu, Ni, Zn) and these do not consider background concentrations or soil type (i.e. they are conservative). EILs / ESLs are screening tools designed to protect ecological receptors in terrestrial environments and are applicable to the top 2 m bgl. Exceedances suggest potential harm to soil biota, plants, and animals, and elevated concentrations of metals can disrupt microbial activity, reduce biodiversity, and impair soil function. Exceedances of adopted ecological criteria in waste spoils are not likely to pose an unacceptable risk to ecological receptors as part of the proposed infrastructure works, as the Site is highly modified and sensitive ecological receptors are not expected to access Site soils. Earthworks to be carried out as part of the proposed infrastructure works will need to consider the presence of elevated metals (i.e. Cu, Ni, Zn). Appropriate erosion and sediment management measures would effectively minimise risks from elevated metals concentrations and ensure impacts to downstream ecological receptors (e.g. within Springvale Creek) are avoided.

4.2.4 Waste spoil suitability for reuse within the proposed reuse area

Table 2 provides the 95% UCL on the means for all analytes tested in both the ETJ waste materials (ballast and fines) and WEJ reuse area soils. It allows for a comparison of contaminant concentrations between the three data sets and suitability of reuse of waste materials in the proposed WEJ reuse area. Shading has been used in the assessment column as follows:

- Green shading – signifies that the waste spoils (ballast (B) and fines (F)) have 95% UCL concentrations **equal to or below** the proposed reuse area (R) 95% UCL value; this applies to the majority of analytes; and
- Blue shading – signifies that the waste spoils (ballast (B) and fines (F)) have 95% UCL concentration(s) **higher** than the proposed reuse area (R) 95% UCL value but are still considered safe (i.e. low ecological risk) for reuse in the proposed reuse area. Comments are provided against the analytes where this occurs, namely for As and Cu.

In conclusion, waste ETJ materials (ballast and fines) are **suitable for reuse within the proposed WEJ reuse location** from a contamination perspective.

Exhibited

Table 2: Comparison of 95% UCL on the mean values for ETJ waste spoil and proposed WEJ reuse area soils

Analytes	Waste Spoil Samples 95% UCLs on the Mean		Proposed Reuse Area 95% UCLs on the Mean (R)	Assessment	Comments
	Ballast (B)	Fines (F)			
Arsenic	<LOR	8.6	8.5	B < R F > R	F is marginally higher than R value. All concentrations are below the ASC NEPM urban residential / public open space As EIL. All *leachable* As concentrations were below the LOR of 0.1 mg/L. Ecological risk from As concentrations in waste spoil is therefore low for placement in the proposed reuse area.
Cadmium	<LOR	<LOR	<LOR	B & F = R	
Chromium (total)	13.8	3.7	82.2	B & F < R	
Copper	36.2	62.8	51.4	B < R F > R	F is only marginally above the ASC NEPM urban residential / public open space very conservative Cu EIL of 60 mg/kg. If we consider that the median value for ballast of 28.5 mg/kg Cu is background, the EIL for ballast becomes 28.5 + 60 (ACL) = 88.5 mg/kg Cu for ballast, and the median for fines is 36 mg/kg, the fines EIL becomes 36 + 60 = 96 mg/kg Cu. On this basis only one location BH08/0.5 exceeds the conservative site-specific EIL. Furthermore the 95% UCL on the mean for both ballast and fines meet the Site EIL (even the most conservative ACL of 60 mg/kg). In addition, both B and F are within the ASC NEPM commercial / industrial (more realistic criteria for proposed reuse location) very conservative Cu EIL (ACL) of 85 mg/kg. All *leachable* Cu concentrations were below the LOR of 0.1 mg/L. Ecological risk from Cu concentrations in waste spoil is therefore low for placement in the proposed reuse area.
Lead	<LOR	13.9	56.8	B & F < R	
Nickel	63.1	53.4	85.3	B & F < R	
Zinc	31.5	77.6	178.3	B & F < R	
Mercury	<LOR	<LOR	0.08	B & F < R	

Exhibited

Analytes	Waste Spoil Samples 95% UCLs on the Mean		Proposed Reuse Area 95% UCLs on the Mean (R)	Assessment	Comments
	Ballast (B)	Fines (F)			
TPH C_6-C_9	NT	<LOR	<LOR	F = R	
TPH C_{10}-C_{14}	NT	<LOR	<LOR	F = R	
TPH C_{15}-C_{28}	NT	<LOR	<LOR	F = R	
TPH C_{29}-C_{36}	NT	<LOR	<LOR	F = R	
TPH sum (C_{10}-C_{36})	NT	<LOR	<LOR	F = R	
TRH F1 fractions	NT	<LOR	<LOR	F = R	
TRH F2 fractions	NT	<LOR	<LOR	F = R	
TRH F3 fractions	NT	<LOR	79.6	F < R	
TRH F4 fractions	NT	<LOR	<LOR	F = R	
TRH sum (>C_{10}-C_{40})	NT	<LOR	69.4	F < R	
BTEXN	NT	<LOR	<LOR	F = R	
Benzo(a)pyrene	NT	<LOR	<LOR	F = R	
Total PAHs	NT	<LOR	<LOR	F = R	
Asbestos fines	NT	ND	ND	F = R	

Notes:

NT – not tested.

ND – not detected.

Green shading – signifies that the waste spoils have a 95% UCL concentration equal to or below the proposed reuse area (R) value.

Blue shading – signifies that the waste spoils have a 95% UCL concentration higher than the proposed reuse area (R) value but are still considered safe for reuse in the proposed WEJ reuse area.

Exhibited

4.3 IB105 requirements

IB105 notes that the EPA encourages effective waste management by promoting on-site reuse, where appropriate, as the preferred option for dealing with contaminated soil. The preferred reuse option is not strictly onsite, but it is geographically near enough and similar enough in profile to be considered as such. An assessment of the environmental and human health hazards associated with the disposal / reuse option must be conducted by a suitably qualified environmental consultant. IB105 also notes that fill material may contain contaminants above background levels and therefore may not be suitable for all uses, in particular in sensitive human or ecological settings.

The suitability for reuse conclusions and the associated recommendations made above are consistent with the intent of IB105 and the *Environment Management and Pollution Control Act 1994* (EMPCA) and are based on:

- The proposed reuse areas being within the operational pattern of TasRail's commercial / industrial operations, and in proximity to the existing rail corridor
- Both the source area(s) and the proposed reuse area are already disturbed and impacted by railway transport and other related activities
- Natural bunding within the WEJ void reuse area and a drainage network effectively separate catchment flows from the upper reaches of the Springvale Creek, which is the nearest sensitive receptor (modified not pristine)
- The 95% UCL on the mean of the in-situ waste spoil results have been compared to adopted ASC NEPM human health and ecological criteria for both residential and commercial / industrial use and the waste spoil concentrations are generally within those criteria (except where noted otherwise and justification has been provided); and
- Relevant recommendations have been made (Section 5.2.2) to manage the waste spoil within the proposed WEJ reuse area. Effective implementation of these recommendations should mitigate potential ecological impacts.

4.4 QA/QC assessment

The following provides a summary of the QA/QC assessment for this waste spoil classification. Detail of the QA/QC assessment are provided in the WEJ Report (Appendix E).

Preservation: Sample Receipt Notification (Attachment C) indicated the samples were received chilled at between -0.2 and 0.3 °C which is within the recommended temperature range of below 6°C; temperature is important for preservation of analytes with short holding times such as VOCs.

Duplicates: Two blind field duplicate samples were taken from locations BH01/0.7 (QA/QC1) and BH08/0.2 (QA/QC2). Analytical results are summarised in Attachment D, and laboratory reports are provided in Attachment C. The relative percentage differences (RPDs) are within acceptable ranges for most parameters, with the exception of some metals (Ni at BH01/0.7 and Cu and Ni at BH08/0.2). Given the purpose of the investigation for waste classification and the assessment of data using statistics, minor variations in reported metals concentrations are not expected to change the outcomes of this waste classification assessment.

Rinsates: One rinsate sample was collected from the mattock. Reported concentrations (Attachment D) were below LORs for all tested CoPCs indicating cross-contamination from the sampling equipment was unlikely.

Exhibited

Trip Blank: One trip blank sample was submitted to the laboratory with the single batch of samples for TPH (C_6-C_9) / TRH (F1 fractions) and BTEXN analysis. All reported concentrations (Attachment D) were below the LORs indicating that contamination of samples by VOCs during transport was unlikely.

Laboratory: The laboratory QA/QC compliance assessment summary reports are provided in Attachment C:

- Method blanks – no method blank outliers occurred
- Laboratory controls – no laboratory control outliers occurred
- Matrix spikes – no matrix spike outliers occurred
- Laboratory duplicates – no laboratory duplicate outliers occurred
- Surrogate recoveries – for all regular sample matrices, where applicable to the methodology, no surrogate recovery outliers occurred
- Holding times – no analysis holding time outliers occurred; and
- QC sample frequency – less than the expected frequency for matrix spikes (PAH, phenols[18] and TRH (semi-volatile fractions) and for laboratory duplicates TRH (semi-volatile fractions)). As this assessment is to provide general waste classification and reuse advice and since PAH and TRH concentrations were generally reported at concentrations below the LORs and lower than adopted reuse criteria, the quality of the data is still considered of sufficient reliability for the purposes of this assessment.

On the basis of the QA/QC procedures applied during sampling (Table 1, Section 3.1) and the QA/QC results outlined and discussed above, the analytical data are considered to be representative of the concentrations of tested CoPCs in the samples at the sampled locations and depths at the time of sampling and are suitable for the purposes of this assessment.

5. Conclusions and recommendations

5.1 Conclusions

In-situ waste classification sampling was undertaken by pitt&sherry at ETJ (refer to Figure 1) to assess the concentrations of CoPCs in waste spoil which will be generated as part of the proposed infrastructure works.

Additional consideration was also given to the classification of WEJ soils as a preferred location for reuse offsite.

The **waste classification** for offsite disposal assessment shows that:

- **Ballast** – is classified as **Level 2 – low-level contaminated material** (i.e. a ‘controlled waste’ under the Waste Regulations) to the maximum sampled depth of 0.2 m bgl based on total Ni concentrations. It is possible that the ballast could be classified as a Level 2 ‘non-controlled waste’ as the elevated metals naturally occurring from the parent basalt or dolerite rock. This is further supported by the low metals’ leachabilities, predominantly below laboratory LORs; and
- **Fines** – are classified as **Level 1 – fill material** (i.e. a ‘non-controlled waste’ under the Waste Regulations) to the maximum sampled depth of 0.7 m bgl.

[18] Not an identified CoPC and therefore not tested for as a component of this waste classification assessment.

Exhibited

The **spoil reuse** assessment shows that waste materials (ballast and fines) are **suitable for reuse within the preferred reuse location at WEJ**, noting the below (Section 5.2.2) in relation to implementation of management measures for protection of ecological receptors.

5.2 Recommendations

5.2.1 Offsite disposal to landfill

If spoils are to be disposed offsite, a request could be put to the EPA to classify the waste ballast as Level 2 'non-controlled' waste based on the parent rock and metals leachabilities being below the LORs. For offsite disposal of Level 2 'controlled' waste, approval will need to be sought from the EPA for disposal to a suitably licensed landfill. Confirmation that the landfill will accept the spoil should be obtained prior to transport. For controlled wastes, spoil must be transported by a controlled waste carrier approved to transport the waste.

Level 1 fill materials (i.e. fines) can be disposed of to a local landfill and EPA approval is not required.

5.2.2 Offsite reuse (WEJ)

If spoil materials (i.e. ballast, fines) are to be reused at WEJ void:

- Approval must be sought from the relevant landowner (if the reuse area is located on land owned by a different individual or corporation), and permission must also be obtained from the EPA under a Regulation 21 approval
- If temporary stockpiling of reuse materials is required (prior to the completion of drainage infrastructure works at WEJ), stockpile(s):
  - Must be placed in an area that has been lined with cleaner material prior to placement
  - Must be effectively contained, and ideally covered, to prevent dust generation and sediment runoff
  - Should not be placed anywhere near stormwater / drainage lines or ecologically sensitive areas
- Reused waste spoil:
  - If placed prior to the completion of infrastructure drainage works, must be placed away from any man-made or natural drainage lines or water bodies and must not be near any ecologically sensitive areas; and
  - Must be laid out, contoured and compacted to prevent erosion and runoff.

Exhibited

5.2.3 Further approvals

In addition to the approvals outlined in Sections 5.2.1 and 5.2.2, an additional approval may be required for the activity of generating the waste material itself. Although the material is intended for reuse on a similar site, it is still classified as a waste under the EMPCA. Under Section 27 of EMPCA and associated regulations, any activity that generates more than 100 tonnes of controlled waste may require approval from the EPA, regardless of whether the material is reused or disposed of.

Yours sincerely



Carly Clark
Senior Principal Environmental Consultant, CEnvP SC

List of Attachments

Important information about your report
Attachment A – PID calibration certificate
Attachment B – Field sheet and photographs
Attachment C – Laboratory documentation
Attachment D – Summary results tables and comparison to adopted criteria
Attachment E – pitt&sherry, Re: P.26.0676 – *TasRail Western Junction Waste Classification – Rev00*, August 2026.

Exhibited

Important information about your report

In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints. The Report may only be used and relied on by the Client for the purpose set out in the Report. Any use which a third party makes of this document, or any reliance on or decisions to be made based on it, is the responsibility of the Client or such third parties.

The services undertaken by pitt&sherry in connection with preparing the Report were limited to those specifically detailed in the report and are subject to the restrictions, limitations and exclusions set out in the Report. The Report's accuracy is limited to the time period and circumstances existing at the time the Report was prepared. The opinions, conclusions and any recommendations in the Report are based on conditions encountered and information reviewed at the date of preparation of the Report. pitt&sherry has no responsibility or obligation to update the Report to account for events or changes occurring after the date that the report was prepared. If such events or changes occurred after the date that the report was prepared render the Report inaccurate, in whole or in part, pitt&sherry accepts no responsibility, and disclaims any liability whatsoever for any injury, loss or damage suffered by anyone arising from or in connection with their use of, reliance upon, or decisions or actions based on the Report, in whole or in part, for whatever purpose.

In preparing the Report, pitt&sherry has relied upon data, surveys, analyses, designs, plans and other information provided by or on behalf of the Client and other individuals and organisations, most of which are referred to in the Report ("the Data"). Except as otherwise stated in the Report, pitt&sherry has not verified the accuracy, completeness, usefulness or relevance of the Data.

To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the Report ("Conclusions") are based in whole or part on the Data, those Conclusions are contingent upon the accuracy, completeness, usefulness or relevance of the Data. pitt&sherry does not warrant the accuracy and will not be liable in relation to Conclusions should any of the Data, be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to pitt&sherry.

The opinions, conclusions and any recommendations in the Report are based on information obtained from, TasRail and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.

Investigations undertaken in respect of the Report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in the Report. Site conditions (including the presence of hazardous substances and/or site contamination) may change after the date of the Report.

The opinions, conclusions and any recommendations in the Report are based on conditions encountered and information reviewed at the date of the site visit. pitt&sherry has no responsibility or obligation to update the Report to account for events or changes occurring subsequent to the date that the site visit was carries out.

pitt&sherry does not accept responsibility arising from, or in connection with, any change to the site conditions. pitt&sherry is also not responsible for updating the Report if the site conditions change.

Exhibited

PID calibration certificate

Attachment A

pitt&sherry

Exhibited

Air-Met Scientific Pty Ltd
PO Box 133
Nunawading VIC 3131
Australia
Phone: 1800 000 744

CERTIFICATE OF CALIBRATION

This document certifies that the instrument detailed has been calibrated to the parameters listed below

CertificateNumber : T-110619-R-7-20251203
Calibration Date: 3/12/2025
Next Calibration Due: 3/03/2026

Customer: Air-Met Scientific (National Rental)
Address: 65 Moray Street , , SOUTH MELBOURNE , 3205
Equipment No: EP019776
Unit Under Test: Tiger PhoCheck VOC Detector - Data Logging PPM
Serial No: T-110619
Service Order No: CAL11928

Test Results

Item	Test	Pass	Comments
BATTERY	Capacity checked	Pass	
BATTERY	Charging Confirmed	Pass	
CASE	Inspected & Cleaned	Pass	
DISPLAY	Display/Backlight checked	Pass	
DISPLAY	Display/Backlight checked	Pass	
FILTER	Inspected	Pass	
FLOWRATE	Flowrate checked	Pass	

Reference Equipment:

Equipment ID	Description	Expiry Date	Reference Certificate Number
SM0008	Isobutylene 100ppm mol, O2 20.9%mol, N2 Balance	30/09/2030	11861

Results:

Sensor	Units	Applied Value	Results		Pass/ Fail	Comments
			As Found	As Left		
PID	ppm	100	98	100	Pass	

Note:

Certified System
Quality
ISO 9001
SAI GLOBAL

Calibrated By: SHIRLY.SHEN

Exhibited

Signed: *SHIRLY.SHEN*

Certified System
Quality
ISO 9001
SAI GLOBAL

Exhibited

Field sheet and photographs

Attachment B

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Exhibited

SOIL SAMPLING FIELD DATA SHEET

Project number:	P.25.1573
Project name:	TasRail - East Tamar Junction

pitt&sherry

Site I.D	**East Tamar Junction**
Date	**8/12/2025**
Personnel	**HF**
Weather	**Overcast, light rain, windy.**

ID	Depth Start	Depth End	Date	Material Description	Moisture (D, M, W)	PID (ppm)	Colour	Odour	Sampled? (Y/N)	Comments
BH01	0	0.2	8/12/2025	Blue metal gravel ballast	D	0	Black	N	Y	Ballast material, BH01/0.2 taken
	0.2	0.5	8/12/2025	Black gravelly silts	M	0	Black	N	N	Black gravelly silts
	0.5	0.7	8/12/2025	Brown gravelly clays	M	0	Brown	N	Y	Plastic clays interspersed with gravel throughout, some parts hard and brittle others plastic, forming ribbons under manipulation, BH01/0.7 taken, QA/QC1 taken
BH02	0	0.2	8/12/2025	Blue metal gravel ballast	D	0	Black	N	Y	Ballast material, BH02/0.2 Taken
	0.2	0.5	8/12/2025	Black gravelly silts	W	0	Black	N	N	Black gravelly silts, extremely wet at approx. 0.3m/bgl, gravel throughout, non homogenous profile.
	0.5	0.7	8/12/2025	Brown gravelly clays	M	0	Brown	N	Y	Plastic clays interspersed with gritty brown material, similar to decomposing sandstone. BH02/0.7 taken.
BH03	0	0.2	8/12/2025	Blue metal gravel ballast	D	0	Black	N	Y	Ballast material, BH03/0.2 taken.
	0.2	0.5	8/12/2025	Black gravelly silts	W	0	Black	N	N	Black gravelly silts, very intermixed profile and wet.
	0.5	0.7	8/12/2025	Brown Sandy clays	M	0.1	Brown	N	Y	Brown gravelly sandy silts, finer than previous boreholes, BH03/0.7 Taken.
BH04	0	0.2	8/12/2025	Blue metal gravel ballast	D	0	Black	N	Y	Ballast material, BH04/0.2 taken.
	0.2	0.5	8/12/2025	Black gravelly silts	M	0	Black	N	N	Brown gravelly sandy silts.
	0.5	0.7	8/12/2025	Black silty sands	M	0.1	Black	Y	Y	Black gravelly silts, more homogenous with less gravel intrusion from ballast, drier, very faint metallic smell. BH04/0.7 taken.
BH05	0	0.2	8/12/2025	Blue metal gravel ballast/sandy gravel	M	0	Brown	N	Y	Ballast layer very thin, mixed through with lower layer almost immidietely. BH05/0.2 taken.
	0.2	0.4	8/12/2025	Brown gravelly sandy silt	D	0	Brown	N	N	Sandy gravelly soils.
	0.4	0.7	8/12/2025	Clays, gravels	M	0.1	Black	N	Y	Black, soft to very stiff plastic clays interspersed with some sandy gravels. BH05/0.7 taken.
BH06	0	0.2	8/12/2025	Ballast/gravels	D	0	Brown	N	Y	As above hole, ballast layer very thin, mixed through with lower sandy gravel layer BH06/0.2 taken.
	0.2	0.4	8/12/2025	Gravelly sandy silts	D	0.1	Brown	N	N	Loose gravels and sands, top of layer interspersed with weathered blue metal gravels.
	0.4	0.7	8/12/2025	Clays	M	0.3	Black	N	Y	Stiff to yielding black clays, small gravels and sands throughout, BH06/0.7 taken.
BH07	0	0.2	8/12/2025	Ballast and Sandy gravels	D	0	Black/brown	N	Y	As above hole, ballast blending with below sandy gravel layer. BH07/0.2 taken.
	0.2	0.3	8/12/2025	Sandy gravels	M	0	Brown	N	N	Loose sandy gravels.
	0.3	0.5	8/12/2025	Gravelly clays	M	0.2	Grey/brown/red	Y	y	Firm to yielding clays, slight muddy river smell, some gravels/chunks of rock throughout, similar to river clay profile. BH07/0.5 taken.
BH08	0	0.2	8/12/2025	Ballast, gravels	D	0	Black/brown	N	Y	Ballast material, some sandy soils throughout, BH08/0.2 taken, QA/Q2C taken.
	0.2	0.5	8/12/2025	Sandy gravelly silts	M	0.3	Black/green	N	Y	Loose material, very homogenous throughout profile, sticky fines which did not roll into ribbons, gravelly silts. BH08/0.5 taken.
BH09	0	0.2	8/12/2025	Ballast material	M	0	Black	N	Y	Blue metal gravel ballast material, BH09/0.2 taken.
	0.2	0.4	8/12/2025	Sandy gravelly silts	M	0	Brown	N	N	Loose unconsolidated gravelly material
	0.4	0.5	8/12/2025	Sandy gravelly silts	M	0.3	Black	Y	Y	Same texture as above but black in colour and very faint metallic smell, BH09/0.5 taken.
BH10	0	0.1	8/12/2025	Ballast material	D	0	Black	N	Y	Ballast layer very thin, approximately 100mm before homogenising with below layer. BH10/0.1 taken.
	0.1	0.5	8/12/2025	Gravelly sandy silts	M	0.2	Black/brown	N	Y	Loose gravelly silty layer, unconsolidated and homogenous throughout, mix of fine and larger gravels. BH10/0.5 taken.
BH11	0	0.2	8/12/2025	Ballast/sandy gravels	D	0.1	Brown	N	Y	As above hole, ballast has decomposed/weathered and is mixed in with below layer. BH11/0.2 taken.
	0.2	0.4	8/12/2025	Sandy gravelly silts	D	0	Brown	N	N	Loose unconsolidated Sandy gravelly layer.
	0.4	0.7	8/12/2025	Gravels, clays	D	0.3	Brown/hrey	N	Y	Gravelly sandy mixed clays, evidence of BDR, brick chunks. BH11/0.7 taken.
BH12	0	0.2	8/12/2025	Fine sandy topsoil silts	D	0	Brown	N	Y	Topsoil material, organic, dry, BH12/0.2 taken.
BH13	0	0.2	8/12/2025	Dry clayey silts	D	0	Brown	N	Y	Chunky clayey silty topsoils, homogenous material that is very dry and has cracked into hunks. Reworked natural material BH13/0.2 taken
BH14	0	0.2	8/12/2025	Dry clayey silts	D	0	Brown	N	Y	Chunky clayey silty topsoils, homogenous material that is very dry and has cracked into hunks. Reworked natural material BH14/0.2 taken.

Exhibited

ID	Depth Start	Depth End	Date	Material Description	Moisture (D, M, W)	PID (ppm)	Colour	Odour	Sampled? (Y/N)	Comments
BH15	0	0.2	8/12/2025	Sandy clayey silts	D	0	Brown	N	Y	Dry fine sandy silts and dry clay hunks BH15/0.2 taken.

Exhibited

PHOTO LOG

pitt&sherry

Project: P.25.1573 – East Tamar Junction – Waste Spoil Classification
Date: 8/12/2025
Sampler: H. Fairweather

Entry No.	Photo	Description	Date	Location
1		Overview of BH01 site, showing Hi-rail excavator auger, and bagged ballast material awaiting crushing.	08/12/25	BH01
2		Soil profile of BH01 showing progression from ballast material through to dark silts and eventually clay material at capping depth.	08/12/25	BH01
3		Overview of BH01 showing hole, soil profile and capping material sampled, as well as QA/QC samples taken.	08/12/25	BH01
4		Overview of BH02 site showing auger, and ballast material awaiting crushing and sampling.	08/12/25	BH02

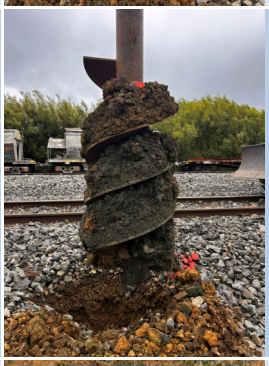
Exhibited

Entry No.	Photo	Description	Date	Location
5		Profile of BH02 showing progression from ballast to capping material, layer of very wet material at approx. 0.3m/bgl, no odour. Sample material from 0.7 m/bgl also displayed.	08/12/25	BH02
6		Profile of BH03 showing progression from ballast material through to gravelly silts and clay material at capping layer.	08/12/25	BH03
7		Overview of BH03 site.	08/12/25	BH03
8		Profile of BH04 showing homogenous soil profile, ballast material underlayed by black silty sands to 0.7 m/bgl.	08/12/25	BH04
9		Overview of BH04 showing borehole.	08/12/25	BH04

Exhibited

Entry No.	Photo	Description	Date	Location
10		Overview of track mounted plant conducting soil sampling duties, including TasRail Track Protection Officer scraping auger bit clean between locations.	08/12/25	BH04
11		BH05 Profile showing progression from thin layer of ballast material through brown gravelly silts and into clays at capping depth of 0.7 m/bgl.	08/12/25	BH05
12		BH11 Profile showing progression from thin upper ballast layer through mixed silts and gravels, into gravelly clays at 0.7m/bgl. BDR evident in spoil.	08/12/25	BH11
13		BDR from BH11, a chunk of brick appx. 75mm across.	08/12/25	BH11
14		Profile of BH07 showing progression from ballats material through to dense gravelly clays/silts at 0.5 m/bgl.	08/12/25	BH07

Exhibited

Entry No.	Photo	Description	Date	Location
15		Profile of BH09 showing progression from ballast material through to sandy gravelly silts at 0.5 m/bgl. Material very loose and homogenous throughout profile.	08/12/25	BH09
16		Profile of BH10 showing progression from ballast material through to sandy gravelly silts at 0.5 m/bgl. As above hole, material dry, loose and homogenous.	08/12/25	BH10
17		Profile of BH10 showing progression from ballast material through to sandy gravelly silts at 0.5 m/bgl. As above hole, material dry, loose and homogenous. faint metallic smell was evident from 0.2-0.5 m/bgl layer.	08/12/25	BH08
18		Overview of BH12 showing soil profile to 0.2 m/bgl. fine sandy topsoils, loose and unconsolidated.	08/12/25	BH12
19		Overview of BH13 showing soil profile to 0.2 m/bgl. Hard, compacted dry clayish silts, reworked natural material. soil above mattock is underside of turf square cut out to facillitate sampling, replaced following backfill of hole.	08/12/25	BH13

Exhibited

Entry No.	Photo	Description	Date	Location
20		Overview of BH14 showing soil profile to 0.2 m/bgl. Hard, compacted dry clayish silts, reworked natural material.	08/12/25	BH14
21		Overview of BH15 showing soil profile to 0.2 m/bgl. dry, fine sandy silts and clay hunks, less compacted than BH13, BH14. Reworked natural material.	08/12/25	BH15
22		Reconciled sampling material prior to dispatch 1/2.	08/12/25	Post-sampling
23		Reconciled sampling material prior to dispatch 2/2.	08/12/25	Post-sampling

Exhibited

Laboratory documentation

Attachment C

pitt&sherry

Exhibited

FREIGHT

#EM2523024

CHAIN OF CUSTODY

ALS Environmental

ALS Laboratory please tick →

CLIENT: pitt&sherry	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	✣ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: [redacted]		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: P25.1573	ALS QUOTE NO.: M23PITSHE0013 VIC Custom Pricing	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER:		OP: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: 1.1 °C
PROJECT MANAGER: Carly Clark	CONTACT PH: 0490 942 344		Other comments:
SAMPLER: Harry Fairweather	SAMPLER MOBILE: 0424370674	RELINQUISHED BY: HF	RECEIVED BY: RE
COC emailed to ALS? (YES)	EDD FORMAT (or default):	DATE/TIME:	DATE/TIME: 9/12 0930
Email Reports to: cclark@pittsherry.com.au, hfairweather@pittsh.com.au		1000, ALS Hobart, Cambridge	RELINQUISHED BY:
Email Invoice to: cclark@pittsh.com.au; accounts@pittsh.com.au			DATE/TIME:
			RECEIVED BY: CHADDY ALS
			DATE/TIME: 10/12/25 11:00

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: BH10/0.1, BH10/0.5 No longer required, please dispose of samples.

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required)												Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	S-2 Metals- As, Cd, Cr, Cu, Ni, Pb, Zn, Hg	S-5 TRH/BTEXN/8 metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg)	S-18 TRH (C6-C9)/BTEXN	EP075-TAS Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EA2005 - asbestos fibres (presence / absence)	EN33a TCLP leachate (non-volatile)	EN332a TCLP leachate (volatile)	W-26 TRH(C6-C40) /BTEXN/PAH/8 Metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg)	W-5 - TRH/BTEXN/PAH/8 metals (total)	W-7 - TRH/BTEXN/PAH	W-2 - 8 metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg)	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc
1	BH01/0.2	08/12 0915		2 x 250mL Soil Glass Jar - Unpreserved	2	X					X					X	
2	BH01/0.7	08/12 0915		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X	X	X		X			
3	BH02/0.2	08/12 1000		2 x 250mL Soil Glass Jar - Unpreserved	2	X											
4	BH02/0.7	08/12 1000		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X							
5	BH03/0.2	08/12 0950		2 x 250mL Soil Glass Jar - Unpreserved	2	X											
6	BH03/0.7	08/12 0950		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X							
7	BH04/0.2	8/12 1045		2 x 250mL Soil Glass Jar - Unpreserved	2	X					X					X	
8	BH04/0.7	8/12 1045		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X	X	X		X			
9	BH05/0.2	8/12 1115		2 x 250mL Soil Glass Jar - Unpreserved	2	X					X					X	
10	BH05/0.7	8/12 1115		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X	X	X		X			
11	BH06/0.2	8/12 1145		2 x 250mL Soil Glass Jar - Unpreserved	2	X											
12	BH06/0.7	8/12 1145		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X							
13	BH07/0.2	8/12 1230		2 x 250mL Soil Glass Jar - Unpreserved	2	X											
14	BH07/0.5	8/12 1230		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X							
15	BH08/0.2	8/12 1330		2 x 250mL Soil Glass Jar - Unpreserved	2	X					X					X	
16	BH08/0.5	8/12 1330		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X	X	X		X			
17	BH09/0.2	8/12 1250		2 x 250mL Soil Glass Jar - Unpreserved	2	X					X					X	
18	BH09/0.5	8/12 1250		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X	X	X		X			
19	BH10/0.1	8/12 1310		2 x 250mL Soil Glass Jar - Unpreserved	2												Surplus to requirements - please dispose
20	BH10/0.5	8/12 1310		2 x 250mL Soil Glass Jar - Unpreserved	2												Surplus to requirements - please dispose
21	BH11/0.2	8/12 1200		2 x 250mL Soil Glass Jar - Unpreserved	2	X					X					X	
22	BH11/0.7	8/12 1200		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X	X	X		X			
23	BH12/0.2	8/12 1615		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X							
24	BH13/0.2	8/12 1630		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X							
25	BH14/0.2	8/12 1645		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X							
26	BH15/0.2	8/12 1700		2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X							
27	QA/QC1			2 x 250mL Soil Glass Jar - Unpreserved	2		X		X	X	X	X		X			
28	QA/QC2			2 x 250mL Soil Glass Jar - Unpreserved	2	X					X					X	
29	RB01 (Rinsates)	8/12 1715		1 x 100mL Amber Glass Bottle - Unpreserved 2 x 40mL Amber VOC Vial - Sulfuric Acid 1 x 60mL Clear Plastic bottle - metals	4								X				
30	Trip Blank (Soil)	8/12 1730		1 x Sand Jar	1			X									
				TOTAL	61	11	16	1	15	15	14	7	1	7	0	1	

Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP = Airfreight Unpreserved Plastic; Hydrochloric Preserved VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Fluoride Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag

Environmental Division
Melbourne
Work Order Reference
EM2523024

Telephone : +61-3-8549 9600

Exhibited

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **EM2523024**		
Client	: **PITT & SHERRY (OPERATIONS) PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CARLY CLARK	Contact	: Hannah White
Address	: 199 MACQUARIE STREET HOBART 7001	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: cclark@pittsh.com.au	E-mail	: Hannah.White@alsglobal.com
Telephone	: 03 9674 4163	Telephone	: +61-3-8549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: P.25.1573	Page	: 1 of 4
Order number	: P.25.1573	Quote number	: EM2023PITSHE0013 (EM23PITSHE0013 VIC Custom Pricing)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: HF		

Dates

Date Samples Received	: 10-Dec-2025 11:00	Issue Date	: 11-Dec-2025
Client Requested Due Date	: 17-Dec-2025	Scheduled Reporting Date	: **17-Dec-2025**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Not Available
No. of coolers/boxes	: 2	Temperature	: -0.2, 0.1, 0.3°C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 30 / 28

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please direct any queries related to sample condition / numbering / breakages to Client Services.**
- Sample Disposal - Aqueous (3 weeks), Solid (2 months) from receipt of samples.
- Unless otherwise stated, analytical work for this work order will be conducted at ALS Melbourne, NATA accreditation no. 825, site no. 13778.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Exhibited

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - EA200G Asbestos Identification in Soils -	SOIL - EN33a-G TCLP Leachate - Glass Leaching Vessel	SOIL - EP075-TAS Benzo(a)pyrene and other PAHs - Waste	SOIL - S-02 8 Metals (incl. Digestion)	SOIL - S-05 TRH/BTEXN/8 Metals	SOIL - W-02L 8 metals (TCLP)
EM2523024-001	08-Dec-2025 09:15	BH01/0.2	✓		✓		✓		✓
EM2523024-002	08-Dec-2025 09:15	BH01/0.7	✓	✓	✓	✓		✓	✓
EM2523024-003	08-Dec-2025 10:00	BH02/0.2	✓				✓		
EM2523024-004	08-Dec-2025 10:00	BH02/0.7	✓	✓		✓		✓	
EM2523024-005	08-Dec-2025 09:50	BH03/0.2	✓				✓		
EM2523024-006	08-Dec-2025 09:50	BH03/0.7	✓	✓		✓		✓	
EM2523024-007	08-Dec-2025 10:45	BH04/0.2	✓		✓		✓		✓
EM2523024-008	08-Dec-2025 10:45	BH04/0.7	✓	✓	✓	✓		✓	✓
EM2523024-009	08-Dec-2025 11:15	BH05/0.2	✓		✓		✓		✓
EM2523024-010	08-Dec-2025 11:15	BH05/0.7	✓	✓	✓	✓		✓	✓
EM2523024-011	08-Dec-2025 11:45	BH06/0.2	✓				✓		
EM2523024-012	08-Dec-2025 11:45	BH06/0.7	✓	✓		✓		✓	
EM2523024-013	08-Dec-2025 12:30	BH07/0.2	✓				✓		
EM2523024-014	08-Dec-2025 12:30	BH07/0.5	✓	✓		✓		✓	
EM2523024-015	08-Dec-2025 13:30	BH08/0.2	✓		✓		✓		✓
EM2523024-016	08-Dec-2025 13:30	BH08/0.5	✓	✓	✓	✓		✓	✓
EM2523024-017	08-Dec-2025 12:50	BH09/0.2	✓		✓		✓		✓
EM2523024-018	08-Dec-2025 12:50	BH09/0.5	✓	✓	✓	✓		✓	✓
EM2523024-021	08-Dec-2025 12:00	BH11/0.2	✓		✓		✓		✓
EM2523024-022	08-Dec-2025 12:00	BH11/0.7	✓	✓	✓	✓		✓	✓
EM2523024-023	08-Dec-2025 16:15	BH12/0.2	✓	✓		✓		✓	
EM2523024-024	08-Dec-2025 16:30	BH13/0.2	✓	✓		✓		✓	
EM2523024-025	08-Dec-2025 16:45	BH14/0.2	✓	✓		✓		✓	
EM2523024-026	08-Dec-2025 17:00	BH15/0.2	✓	✓		✓		✓	
EM2523024-027	08-Dec-2025 17:00	QA/QC1	✓	✓	✓	✓		✓	✓
EM2523024-028	08-Dec-2025 17:00	QA/QC2	✓		✓		✓		✓
EM2523024-030	09-Dec-2025 17:30	Trip Blank (Soil)	✓						

Exhibited

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	(On Hold) SOIL No analysis requested	SOIL - EN33Za TCLP Leachate (ZHE)	SOIL - S-18 TRH(C6-C9)/BTEXN	SOIL - W-07 TRH/BTEXN/PAH
EM2523024-002	08-Dec-2025 09:15	BH01/0.7		✓		✓
EM2523024-008	08-Dec-2025 10:45	BH04/0.7		✓		✓
EM2523024-010	08-Dec-2025 11:15	BH05/0.7		✓		✓
EM2523024-016	08-Dec-2025 13:30	BH08/0.5		✓		✓
EM2523024-018	08-Dec-2025 12:50	BH09/0.5		✓		✓
EM2523024-019	08-Dec-2025 13:10	BH10/0.1	✓			
EM2523024-020	08-Dec-2025 13:10	BH10/0.5	✓			
EM2523024-022	08-Dec-2025 12:00	BH11/0.7		✓		✓
EM2523024-027	08-Dec-2025 17:00	QA/QC1		✓		✓
EM2523024-030	09-Dec-2025 17:30	Trip Blank (Soil)			✓	

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - W-26T TRH/BTEXN/PAH/Total 8 Metals
EM2523024-029	09-Dec-2025 17:15	RB01 (Rinsates)	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Exhibited

Requested Deliverables

ALL ACCOUNTS

- A4 - AU Tax Invoice (INV)	Email	accounts@pittsh.com.au

CARLY CLARK

- *AU Certificate of Analysis - NATA (COA)	Email	cclark@pittsh.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	cclark@pittsh.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	cclark@pittsh.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	cclark@pittsh.com.au
- A4 - AU Tax Invoice (INV)	Email	cclark@pittsh.com.au
- Chain of Custody (CoC) (COC)	Email	cclark@pittsh.com.au
- EDI Format - ENMRG (ENMRG)	Email	cclark@pittsh.com.au
- EDI Format - ESDAT (ESDAT)	Email	cclark@pittsh.com.au

HARRISON FAIRWEATHER

- *AU Certificate of Analysis - NATA (COA)	Email	hfairweather@pittsh.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	hfairweather@pittsh.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	hfairweather@pittsh.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	hfairweather@pittsh.com.au
- Chain of Custody (CoC) (COC)	Email	hfairweather@pittsh.com.au
- EDI Format - ENMRG (ENMRG)	Email	hfairweather@pittsh.com.au
- EDI Format - ESDAT (ESDAT)	Email	hfairweather@pittsh.com.au

Exhibited

CERTIFICATE OF ANALYSIS

Work Order	: **EM2523024**	Page	: 1 of 32
Client	: **PITT & SHERRY (OPERATIONS) PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CARLY CLARK	Contact	: Hannah White
Address	: 199 MACQUARIE STREET HOBART 7001	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: 03 9674 4163	Telephone	: +61-3-8549 9600
Project	: P.25.1573	Date Samples Received	: 10-Dec-2025 11:00
Order number	: P.25.1573	Date Analysis Commenced	: 11-Dec-2025
C-O-C number	: ----	Issue Date	: 17-Dec-2025 17:38
Sampler	: HF		
Site	: ----		
Quote number	: EM23PITSHE0013 VIC Custom Pricing		
No. of samples received	: 30		
No. of samples analysed	: 28		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Non-Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Tahlia Freeman	Instrument Operator	Melbourne Inorganics, Springvale, VIC
Tim Kuo	Approved Asbestos Identifier	Melbourne Asbestos, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

Exhibited

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01/0.2	BH01/0.7	BH02/0.2	BH02/0.7	BH03/0.2
				Sampling date / time	08-Dec-2025 09:15	08-Dec-2025 09:15	08-Dec-2025 10:00	08-Dec-2025 10:00	08-Dec-2025 09:50
Compound	CAS Number	LOR	Unit		EM2523024-001	EM2523024-002	EM2523024-003	EM2523024-004	EM2523024-005
					Result	Result	Result	Result	Result
EA055: Moisture Content									
Moisture Content	----	1.0	%		----	25.1	----	31.8	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		1.1	----	1.2	----	3.4
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		----	No	----	No	----
Asbestos (Trace)	1332-21-4	-	-		----	No	----	No	----
Asbestos Type	1332-21-4	-	--		----	-	----	-	----
Sample weight (dry)	----	0.01	g		----	59.9	----	38.7	----
APPROVED IDENTIFIER:	----	-	--		----	T. KUO	----	T. KUO	----
Synthetic Mineral Fibre	----	-	--		----	No	----	No	----
Organic Fibre	----	-	--		----	No	----	No	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	<5	9	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		13	11	21	51	8
Copper	7440-50-8	5	mg/kg		28	57	36	28	18
Lead	7439-92-1	5	mg/kg		<5	9	<5	8	<5
Nickel	7440-02-0	2	mg/kg		108	11	55	14	54
Zinc	7440-66-6	5	mg/kg		31	112	33	27	24
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)									
Initial pH	----	0.1	pH Unit		8.8	8.0	----	----	----
After HCl pH	----	0.1	pH Unit		1.6	1.6	----	----	----
Extraction Fluid Number	----	1	-		1	1	----	----	----
Final pH	----	0.1	pH Unit		4.9	4.9	----	----	----
EN33Z: ZHE TCLP Leach									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH01/0.2	BH01/0.7	BH02/0.2	BH02/0.7	BH03/0.2
			Sampling date / time	08-Dec-2025 09:15	08-Dec-2025 09:15	08-Dec-2025 10:00	08-Dec-2025 10:00	08-Dec-2025 09:50
Compound	CAS Number	LOR	Unit	EM2523024-001	EM2523024-002	EM2523024-003	EM2523024-004	EM2523024-005
				Result	Result	Result	Result	Result
EN33Z: ZHE TCLP Leach - Continued								
Extraction Fluid Number	----	0.1	pH Unit	----	**1.0**	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.05	mg/kg	----	<0.05	----	<0.05	----
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	----	<1.0	----	<1.0	----
^ Benzo(a)pyrene TEQ (zero)	----	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.05	mg/kg	----	**0.76**	----	**0.76**	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.05	mg/kg	----	**0.38**	----	**0.38**	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	<10	----
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	<50	----
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	<100	----
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	<100	----

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01/0.2	BH01/0.7	BH02/0.2	BH02/0.7	BH03/0.2
				Sampling date / time	08-Dec-2025 09:15	08-Dec-2025 09:15	08-Dec-2025 10:00	08-Dec-2025 10:00	08-Dec-2025 09:50
Compound	CAS Number	LOR	Unit		EM2523024-001	EM2523024-002	EM2523024-003	EM2523024-004	EM2523024-005
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	<50	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	<10	----	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	<10	----	<10	----
>C10 - C16 Fraction	----	50	mg/kg		----	<50	----	<50	----
>C16 - C34 Fraction	----	100	mg/kg		----	<100	----	<100	----
>C34 - C40 Fraction	----	100	mg/kg		----	<100	----	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		----	<50	----	<50	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		----	<50	----	<50	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	----	<0.5	----
^ Sum of BTEX	----	0.2	mg/kg		----	<0.2	----	<0.2	----
^ Total Xylenes	----	0.5	mg/kg		----	<0.5	----	<0.5	----
Naphthalene	91-20-3	1	mg/kg		----	<1	----	<1	----
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		----	**111**	----	**105**	----
Anthracene-d10	1719-06-8	0.025	%		----	**110**	----	**105**	----
4-Terphenyl-d14	1718-51-0	0.025	%		----	**123**	----	**114**	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	**64.0**	----	**86.6**	----
Toluene-D8	2037-26-5	0.2	%		----	**67.4**	----	**87.4**	----
4-Bromofluorobenzene	460-00-4	0.2	%		----	**81.2**	----	**94.0**	----

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03/0.7	BH04/0.2	BH04/0.7	BH05/0.2	BH05/0.7
				Sampling date / time	08-Dec-2025 09:50	08-Dec-2025 10:45	08-Dec-2025 10:45	08-Dec-2025 11:15	08-Dec-2025 11:15
Compound	CAS Number	LOR	Unit		EM2523024-006	EM2523024-007	EM2523024-008	EM2523024-009	EM2523024-010
					Result	Result	Result	Result	Result
EA055: Moisture Content									
Moisture Content	----	1.0	%		14.2	----	23.6	----	21.3
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		----	3.5	----	2.0	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	----	No	----	No
Asbestos (Trace)	1332-21-4	-	-		No	----	No	----	No
Asbestos Type	1332-21-4	-	--		-	----	-	----	-
Sample weight (dry)	----	0.01	g		44.9	----	47.2	----	44.0
APPROVED IDENTIFIER:	----	-	--		T. KUO	----	T. KUO	----	T. KUO
Synthetic Mineral Fibre	----	-	--		No	----	Yes	----	Yes
Organic Fibre	----	-	--		No	----	Yes	----	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	13	<5	5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		31	16	57	10	41
Copper	7440-50-8	5	mg/kg		23	40	67	29	32
Lead	7439-92-1	5	mg/kg		<5	<5	30	<5	8
Nickel	7440-02-0	2	mg/kg		48	48	65	63	23
Zinc	7440-66-6	5	mg/kg		32	36	93	33	29
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)									
Initial pH	----	0.1	pH Unit		----	8.6	8.5	9.3	8.2
After HCl pH	----	0.1	pH Unit		----	1.5	1.5	1.4	1.4
Extraction Fluid Number	----	1	-		----	1	1	1	1
Final pH	----	0.1	pH Unit		----	4.9	5.0	4.9	4.9
EN33Z: ZHE TCLP Leach									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03/0.7	BH04/0.2	BH04/0.7	BH05/0.2	BH05/0.7
				Sampling date / time	08-Dec-2025 09:50	08-Dec-2025 10:45	08-Dec-2025 10:45	08-Dec-2025 11:15	08-Dec-2025 11:15
Compound	CAS Number	LOR	Unit		EM2523024-006	EM2523024-007	EM2523024-008	EM2523024-009	EM2523024-010
					Result	Result	Result	Result	Result
EN33Z: ZHE TCLP Leach - Continued									
Extraction Fluid Number	----	0.1	pH Unit		----	----	**1.0**	----	**1.0**
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		<0.05	----	<0.05	----	<0.05
^ Sum of polycyclic aromatic hydrocarbons	----	0.05	mg/kg		<0.05	----	<0.05	----	<0.05
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	----	<1.0	----	<1.0
^ Benzo(a)pyrene TEQ (zero)	----	0.05	mg/kg		<0.05	----	<0.05	----	<0.05
^ Benzo(a)pyrene TEQ (LOR)	----	0.05	mg/kg		**0.76**	----	**0.76**	----	**0.76**
^ Benzo(a)pyrene TEQ (half LOR)	----	0.05	mg/kg		**0.38**	----	**0.38**	----	**0.38**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg		<50	----	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg		<100	----	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg		<100	----	<100	----	<100

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03/0.7	BH04/0.2	BH04/0.7	BH05/0.2	BH05/0.7
				Sampling date / time	08-Dec-2025 09:50	08-Dec-2025 10:45	08-Dec-2025 10:45	08-Dec-2025 11:15	08-Dec-2025 11:15
Compound	CAS Number	LOR	Unit		EM2523024-006	EM2523024-007	EM2523024-008	EM2523024-009	EM2523024-010
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	----	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	----	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	----	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	----	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	----	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	----	<50	----	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	----	<50	----	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	----	<0.2	----	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	----	<1	----	<1
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		**104**	----	**107**	----	**108**
Anthracene-d10	1719-06-8	0.025	%		**104**	----	**104**	----	**108**
4-Terphenyl-d14	1718-51-0	0.025	%		**115**	----	**115**	----	**120**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**73.9**	----	**75.6**	----	**75.8**
Toluene-D8	2037-26-5	0.2	%		**79.4**	----	**84.0**	----	**79.6**
4-Bromofluorobenzene	460-00-4	0.2	%		**98.0**	----	**91.5**	----	**95.0**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH06/0.2	BH06/0.7	BH07/0.2	BH07/0.5	BH08/0.2
			Sampling date / time	08-Dec-2025 11:45	08-Dec-2025 11:45	08-Dec-2025 12:30	08-Dec-2025 12:30	08-Dec-2025 13:30
Compound	CAS Number	LOR	Unit	EM2523024-011	EM2523024-012	EM2523024-013	EM2523024-014	EM2523024-015
				Result	Result	Result	Result	Result
EA055: Moisture Content								
Moisture Content	----	1.0	%	----	24.3	----	25.4	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.8	----	2.4	----	1.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	----	No	----	No	----
Asbestos (Trace)	1332-21-4	-	-	----	No	----	No	----
Asbestos Type	1332-21-4	-	--	----	-	----	-	----
Sample weight (dry)	----	0.01	g	----	50.8	----	45.1	----
APPROVED IDENTIFIER:	----	-	--	----	T. KUO	----	T. KUO	----
Synthetic Mineral Fibre	----	-	--	----	No	----	No	----
Organic Fibre	----	-	--	----	No	----	No	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	11	38	2	28	<2
Copper	7440-50-8	5	mg/kg	31	30	16	40	11
Lead	7439-92-1	5	mg/kg	<5	5	<5	7	<5
Nickel	7440-02-0	2	mg/kg	48	24	5	12	3
Zinc	7440-66-6	5	mg/kg	32	13	7	35	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)								
Initial pH	----	0.1	pH Unit	----	----	----	----	7.3
After HCl pH	----	0.1	pH Unit	----	----	----	----	1.3
Extraction Fluid Number	----	1	-	----	----	----	----	1
Final pH	----	0.1	pH Unit	----	----	----	----	4.9
EP075B: Polynuclear Aromatic Hydrocarbons								

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH06/0.2	BH06/0.7	BH07/0.2	BH07/0.5	BH08/0.2
				Sampling date / time	08-Dec-2025 11:45	08-Dec-2025 11:45	08-Dec-2025 12:30	08-Dec-2025 12:30	08-Dec-2025 13:30
Compound	CAS Number	LOR	Unit		EM2523024-011	EM2523024-012	EM2523024-013	EM2523024-014	EM2523024-015
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		----	<0.05	----	<0.05	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.05	mg/kg		----	<0.05	----	<0.05	----
Pyrene	129-00-0	0.5	mg/kg		----	<0.5	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg		----	<0.5	----	<0.5	----
Naphthalene	91-20-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		----	<0.5	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg		----	<0.5	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg		----	<0.5	----	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg		----	<0.5	----	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		----	<0.5	----	<0.5	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		----	<1.0	----	<1.0	----
^ Benzo(a)pyrene TEQ (zero)	----	0.05	mg/kg		----	<0.05	----	<0.05	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.05	mg/kg		----	**0.76**	----	**0.76**	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.05	mg/kg		----	**0.38**	----	**0.38**	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg		----	<0.5	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg		----	<0.5	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg		----	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	<10	----	<10	----
C10 - C14 Fraction	----	50	mg/kg		----	<50	----	<50	----
C15 - C28 Fraction	----	100	mg/kg		----	<100	----	<100	----
C29 - C36 Fraction	----	100	mg/kg		----	<100	----	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	<50	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH06/0.2	BH06/0.7	BH07/0.2	BH07/0.5	BH08/0.2
				Sampling date / time	08-Dec-2025 11:45	08-Dec-2025 11:45	08-Dec-2025 12:30	08-Dec-2025 12:30	08-Dec-2025 13:30
Compound	CAS Number	LOR	Unit		EM2523024-011	EM2523024-012	EM2523024-013	EM2523024-014	EM2523024-015
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	<10	----	<10	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		----	<10	----	<10	----
>C10 - C16 Fraction	----	50	mg/kg		----	<50	----	<50	----
>C16 - C34 Fraction	----	100	mg/kg		----	<100	----	<100	----
>C34 - C40 Fraction	----	100	mg/kg		----	<100	----	<100	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		----	<50	----	<50	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		----	<50	----	<50	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	----	<0.5	----
^ **Sum of BTEX**	----	0.2	mg/kg		----	<0.2	----	<0.2	----
^ **Total Xylenes**	----	0.5	mg/kg		----	<0.5	----	<0.5	----
Naphthalene	91-20-3	1	mg/kg		----	<1	----	<1	----
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		----	**106**	----	**105**	----
Anthracene-d10	1719-06-8	0.025	%		----	**104**	----	**103**	----
4-Terphenyl-d14	1718-51-0	0.025	%		----	**116**	----	**115**	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	**55.3**	----	**72.6**	----
Toluene-D8	2037-26-5	0.2	%		----	**59.5**	----	**76.4**	----
4-Bromofluorobenzene	460-00-4	0.2	%		----	**70.5**	----	**92.6**	----

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH08/0.5	BH09/0.2	BH09/0.5	BH11/0.2	BH11/0.7
				Sampling date / time	08-Dec-2025 13:30	08-Dec-2025 12:50	08-Dec-2025 12:50	08-Dec-2025 12:00	08-Dec-2025 12:00
Compound	CAS Number	LOR	Unit		EM2523024-016	EM2523024-017	EM2523024-018	EM2523024-021	EM2523024-022
					Result	Result	Result	Result	Result
EA055: Moisture Content									
Moisture Content	----	1.0	%		26.9	----	12.2	----	24.3
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		----	1.8	----	3.6	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	----	No	----	No
Asbestos (Trace)	1332-21-4	-	-		No	----	No	----	No
Asbestos Type	1332-21-4	-	--		-	----	-	----	-
Sample weight (dry)	----	0.01	g		56.1	----	74.8	----	60.4
APPROVED IDENTIFIER:	----	-	--		T. KUO	----	T. KUO	----	T. KUO
Synthetic Mineral Fibre	----	-	--		No	----	No	----	No
Organic Fibre	----	-	--		No	----	Yes	----	No
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		8	6	45	10	28
Copper	7440-50-8	5	mg/kg		111	11	44	55	32
Lead	7439-92-1	5	mg/kg		6	<5	<5	<5	6
Nickel	7440-02-0	2	mg/kg		12	39	110	13	15
Zinc	7440-66-6	5	mg/kg		121	16	49	24	11
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)									
Initial pH	----	0.1	pH Unit		7.7	8.8	9.2	8.8	7.5
After HCl pH	----	0.1	pH Unit		1.5	1.4	1.5	1.4	1.4
Extraction Fluid Number	----	1	-		1	1	1	1	1
Final pH	----	0.1	pH Unit		5.0	4.9	4.9	4.9	4.9
EN33Z: ZHE TCLP Leach									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH08/0.5	BH09/0.2	BH09/0.5	BH11/0.2	BH11/0.7
				Sampling date / time	08-Dec-2025 13:30	08-Dec-2025 12:50	08-Dec-2025 12:50	08-Dec-2025 12:00	08-Dec-2025 12:00
Compound	CAS Number	LOR	Unit		EM2523024-016	EM2523024-017	EM2523024-018	EM2523024-021	EM2523024-022
					Result	Result	Result	Result	Result
EN33Z: ZHE TCLP Leach - Continued									
Extraction Fluid Number	----	0.1	pH Unit		**1.0**	----	**1.0**	----	**1.0**
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		<0.05	----	<0.05	----	<0.05
^ Sum of polycyclic aromatic hydrocarbons	----	0.05	mg/kg		<0.05	----	<0.05	----	<0.05
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	----	<1.0	----	<1.0
^ Benzo(a)pyrene TEQ (zero)	----	0.05	mg/kg		<0.05	----	<0.05	----	<0.05
^ Benzo(a)pyrene TEQ (LOR)	----	0.05	mg/kg		**0.76**	----	**0.76**	----	**0.76**
^ Benzo(a)pyrene TEQ (half LOR)	----	0.05	mg/kg		**0.38**	----	**0.38**	----	**0.38**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg		<50	----	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg		<100	----	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg		<100	----	<100	----	<100

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH08/0.5	BH09/0.2	BH09/0.5	BH11/0.2	BH11/0.7
				Sampling date / time	08-Dec-2025 13:30	08-Dec-2025 12:50	08-Dec-2025 12:50	08-Dec-2025 12:00	08-Dec-2025 12:00
Compound	CAS Number	LOR	Unit		EM2523024-016	EM2523024-017	EM2523024-018	EM2523024-021	EM2523024-022
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	----	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	----	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	----	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	----	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	----	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	----	<50	----	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	----	<50	----	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	----	<0.2	----	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	----	<1	----	<1
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		**111**	----	**107**	----	**112**
Anthracene-d10	1719-06-8	0.025	%		**105**	----	**104**	----	**110**
4-Terphenyl-d14	1718-51-0	0.025	%		**123**	----	**114**	----	**121**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**69.6**	----	**82.5**	----	**78.9**
Toluene-D8	2037-26-5	0.2	%		**72.7**	----	**86.5**	----	**81.3**
4-Bromofluorobenzene	460-00-4	0.2	%		**87.5**	----	**100.0**	----	**94.8**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH12/0.2	BH13/0.2	BH14/0.2	BH15/0.2	QA/QC1
			Sampling date / time	08-Dec-2025 16:15	08-Dec-2025 16:30	08-Dec-2025 16:45	08-Dec-2025 17:00	08-Dec-2025 17:00
Compound	CAS Number	LOR	Unit	EM2523024-023	EM2523024-024	EM2523024-025	EM2523024-026	EM2523024-027
				Result	Result	Result	Result	Result
EA055: Moisture Content								
Moisture Content	----	1.0	%	17.0	17.6	20.1	14.6	24.7
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	----
Asbestos (Trace)	1332-21-4	-	-	No	No	No	No	----
Asbestos Type	1332-21-4	-	--	-	-	-	-	----
Sample weight (dry)	----	0.01	g	50.8	38.7	30.7	52.8	----
APPROVED IDENTIFIER:	----	-	--	T. KUO	T. KUO	T. KUO	T. KUO	----
Synthetic Mineral Fibre	----	-	--	Yes	Yes	Yes	Yes	----
Organic Fibre	----	-	--	Yes	Yes	Yes	Yes	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	14	8	11	8	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	38	54	57	53	14
Copper	7440-50-8	5	mg/kg	12	25	21	15	58
Lead	7439-92-1	5	mg/kg	33	13	17	24	6
Nickel	7440-02-0	2	mg/kg	9	15	15	10	32
Zinc	7440-66-6	5	mg/kg	36	21	28	22	93
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)								
Initial pH	----	0.1	pH Unit	----	----	----	----	7.5
After HCl pH	----	0.1	pH Unit	----	----	----	----	1.4
Extraction Fluid Number	----	1	-	----	----	----	----	1
Final pH	----	0.1	pH Unit	----	----	----	----	4.9
EN33Z: ZHE TCLP Leach								
Extraction Fluid Number	----	0.1	pH Unit	----	----	----	----	1.0
EP075B: Polynuclear Aromatic Hydrocarbons								

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH12/0.2	BH13/0.2	BH14/0.2	BH15/0.2	QA/QC1
				Sampling date / time	08-Dec-2025 16:15	08-Dec-2025 16:30	08-Dec-2025 16:45	08-Dec-2025 17:00	08-Dec-2025 17:00
Compound	CAS Number	LOR	Unit		EM2523024-023	EM2523024-024	EM2523024-025	EM2523024-026	EM2523024-027
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of polycyclic aromatic hydrocarbons	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Benzo(a)pyrene TEQ (LOR)	----	0.05	mg/kg		**0.76**	**0.76**	**0.76**	**0.76**	**0.76**
^ Benzo(a)pyrene TEQ (half LOR)	----	0.05	mg/kg		**0.38**	**0.38**	**0.38**	**0.38**	**0.38**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH12/0.2	BH13/0.2	BH14/0.2	BH15/0.2	QA/QC1
				Sampling date / time	08-Dec-2025 16:15	08-Dec-2025 16:30	08-Dec-2025 16:45	08-Dec-2025 17:00	08-Dec-2025 17:00
Compound	CAS Number	LOR	Unit		EM2523024-023	EM2523024-024	EM2523024-025	EM2523024-026	EM2523024-027
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	110	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	110	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		106	115	104	109	101
Anthracene-d10	1719-06-8	0.025	%		105	115	103	109	101
4-Terphenyl-d14	1718-51-0	0.025	%		116	126	114	119	109
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		75.6	75.0	65.8	82.3	73.4
Toluene-D8	2037-26-5	0.2	%		74.3	76.8	70.7	83.5	75.1
4-Bromofluorobenzene	460-00-4	0.2	%		89.8	92.1	89.5	104	90.8

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	QA/QC2	Trip Blank (Soil)	----	----	----
				Sampling date / time	08-Dec-2025 17:00	09-Dec-2025 17:30	----	----	----
Compound	CAS Number	LOR	Unit		EM2523024-028	EM2523024-030	--------	--------	--------
					Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		**1.4**	**4.7**	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	----	----	----	----
Cadmium	7440-43-9	1	mg/kg		<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg		**13**	----	----	----	----
Copper	7440-50-8	5	mg/kg		**35**	----	----	----	----
Lead	7439-92-1	5	mg/kg		<5	----	----	----	----
Nickel	7440-02-0	2	mg/kg		**59**	----	----	----	----
Zinc	7440-66-6	5	mg/kg		**35**	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	----	----	----	----
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)									
Initial pH	----	0.1	pH Unit		**8.3**	----	----	----	----
After HCl pH	----	0.1	pH Unit		**1.4**	----	----	----	----
Extraction Fluid Number	----	1	-		**1**	----	----	----	----
Final pH	----	0.1	pH Unit		**4.9**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	<10	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		----	<10	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		----	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	----	----	----

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	QA/QC2	Trip Blank (Soil)	----	----	----
				Sampling date / time	08-Dec-2025 17:00	09-Dec-2025 17:30	----	----	----
Compound	CAS Number	LOR	Unit		EM2523024-028	EM2523024-030	--------	--------	--------
					Result	Result	----	----	----
EP080: BTEXN - Continued									
^ **Sum of BTEX**	----	0.2	mg/kg		**----**	<0.2	**----**	**----**	**----**
^ **Total Xylenes**	----	0.5	mg/kg		**----**	<0.5	**----**	**----**	**----**
Naphthalene	91-20-3	1	mg/kg		**----**	<1	**----**	**----**	**----**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**----**	**81.8**	**----**	**----**	**----**
Toluene-D8	2037-26-5	0.2	%		**----**	**83.5**	**----**	**----**	**----**
4-Bromofluorobenzene	460-00-4	0.2	%		**----**	**98.4**	**----**	**----**	**----**

Exhibited

Analytical Results

Sub-Matrix: TCLP LEACHATE
(Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	BH01/0.2	BH01/0.7	BH04/0.2	BH04/0.7	BH05/0.2
				Sampling date / time	08-Dec-2025 09:15	08-Dec-2025 09:15	08-Dec-2025 10:45	08-Dec-2025 10:45	08-Dec-2025 11:15
					EM2523024-001	EM2523024-002	EM2523024-007	EM2523024-008	EM2523024-009
					Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES									
Arsenic	7440-38-2	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium	7440-43-9	0.05	mg/L		<0.05	<0.05	<0.05	<0.05	<0.05
Chromium	7440-47-3	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Copper	7440-50-8	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Lead	7439-92-1	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	7440-02-0	0.1	mg/L		<0.1	<0.1	<0.1	**0.1**	<0.1
Zinc	7440-66-6	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	**0.2**
EG035C: Leachable Mercury by FIMS									
Mercury	7439-97-6	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		----	<1.0	----	<1.0	----
Acenaphthylene	208-96-8	1.0	µg/L		----	<1.0	----	<1.0	----
Acenaphthene	83-32-9	1.0	µg/L		----	<1.0	----	<1.0	----
Fluorene	86-73-7	1.0	µg/L		----	<1.0	----	<1.0	----
Phenanthrene	85-01-8	1.0	µg/L		----	<1.0	----	<1.0	----
Anthracene	120-12-7	1.0	µg/L		----	<1.0	----	<1.0	----
Fluoranthene	206-44-0	1.0	µg/L		----	<1.0	----	<1.0	----
Pyrene	129-00-0	1.0	µg/L		----	<1.0	----	<1.0	----
Benz(a)anthracene	56-55-3	1.0	µg/L		----	<1.0	----	<1.0	----
Chrysene	218-01-9	1.0	µg/L		----	<1.0	----	<1.0	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		----	<1.0	----	<1.0	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		----	<1.0	----	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		----	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		----	<1.0	----	<1.0	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		----	<1.0	----	<1.0	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		----	<1.0	----	<1.0	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	µg/L		----	<0.5	----	<0.5	----

Exhibited

Analytical Results

Sub-Matrix: TCLP LEACHATE (Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	BH01/0.2	BH01/0.7	BH04/0.2	BH04/0.7	BH05/0.2
				Sampling date / time	08-Dec-2025 09:15	08-Dec-2025 09:15	08-Dec-2025 10:45	08-Dec-2025 10:45	08-Dec-2025 11:15
					EM2523024-001	EM2523024-002	EM2523024-007	EM2523024-008	EM2523024-009
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		----	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons									
C10 - C14 Fraction	----	50	µg/L		----	<50	----	<50	----
C15 - C28 Fraction	----	100	µg/L		----	<100	----	<100	----
C29 - C36 Fraction	----	50	µg/L		----	<50	----	<50	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		----	<50	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	100	µg/L		----	<100	----	<100	----
>C16 - C34 Fraction	----	100	µg/L		----	<100	----	<100	----
>C34 - C40 Fraction	----	100	µg/L		----	<100	----	<100	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		----	<100	----	<100	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		----	<100	----	<100	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		----	**40.0**	----	**36.5**	----
2-Chlorophenol-D4	93951-73-6	1.0	%		----	**54.6**	----	**49.6**	----
2.4.6-Tribromophenol	118-79-6	1.0	%		----	**83.3**	----	**78.8**	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		----	**85.5**	----	**81.7**	----
Anthracene-d10	1719-06-8	1.0	%		----	**88.8**	----	**80.7**	----
4-Terphenyl-d14	1718-51-0	1.0	%		----	**87.4**	----	**78.4**	----

Exhibited

Analytical Results

Sub-Matrix: TCLP LEACHATE (Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	BH05/0.7	BH08/0.2	BH08/0.5	BH09/0.2	BH09/0.5
				Sampling date / time	08-Dec-2025 11:15	08-Dec-2025 13:30	08-Dec-2025 13:30	08-Dec-2025 12:50	08-Dec-2025 12:50
					EM2523024-010	EM2523024-015	EM2523024-016	EM2523024-017	EM2523024-018
					Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES									
Arsenic	7440-38-2	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium	7440-43-9	0.05	mg/L		<0.05	<0.05	<0.05	<0.05	<0.05
Chromium	7440-47-3	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Copper	7440-50-8	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Lead	7439-92-1	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	7440-02-0	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	**0.1**
Zinc	7440-66-6	0.1	mg/L		<0.1	<0.1	**0.1**	<0.1	<0.1
EG035C: Leachable Mercury by FIMS									
Mercury	7439-97-6	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Acenaphthene	83-32-9	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Fluorene	86-73-7	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Phenanthrene	85-01-8	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Anthracene	120-12-7	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Fluoranthene	206-44-0	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Pyrene	129-00-0	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Chrysene	218-01-9	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	----	<1.0	----	<1.0
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	----	<1.0	----	<1.0
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	µg/L		<0.5	----	<0.5	----	<0.5

Exhibited

Analytical Results

Sub-Matrix: TCLP LEACHATE (Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	BH05/0.7	BH08/0.2	BH08/0.5	BH09/0.2	BH09/0.5
				Sampling date / time	08-Dec-2025 11:15	08-Dec-2025 13:30	08-Dec-2025 13:30	08-Dec-2025 12:50	08-Dec-2025 12:50
					EM2523024-010	EM2523024-015	EM2523024-016	EM2523024-017	EM2523024-018
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C10 - C14 Fraction	----	50	µg/L		<50	----	<50	----	<50
C15 - C28 Fraction	----	100	µg/L		<100	----	<100	----	<100
C29 - C36 Fraction	----	50	µg/L		<50	----	<50	----	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	----	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	100	µg/L		<100	----	<100	----	<100
>C16 - C34 Fraction	----	100	µg/L		**100**	----	<100	----	<100
>C34 - C40 Fraction	----	100	µg/L		<100	----	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	100	µg/L		**100**	----	<100	----	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	----	<100	----	<100
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		**37.4**	----	**38.6**	----	**38.7**
2-Chlorophenol-D4	93951-73-6	1.0	%		**47.4**	----	**49.3**	----	**52.2**
2.4.6-Tribromophenol	118-79-6	1.0	%		**84.8**	----	**85.6**	----	**90.1**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		**81.0**	----	**83.6**	----	**88.3**
Anthracene-d10	1719-06-8	1.0	%		**83.5**	----	**87.5**	----	**88.6**
4-Terphenyl-d14	1718-51-0	1.0	%		**80.7**	----	**86.4**	----	**85.6**

Exhibited

Analytical Results

Sub-Matrix: TCLP LEACHATE (Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	BH11/0.2	BH11/0.7	QA/QC1	QA/QC2	----
				Sampling date / time	08-Dec-2025 12:00	08-Dec-2025 12:00	08-Dec-2025 17:00	08-Dec-2025 17:00	----
					EM2523024-021	EM2523024-022	EM2523024-027	EM2523024-028	--------
					Result	Result	Result	Result	----
EG005(ED093)C: Leachable Metals by ICPAES									
Arsenic	7440-38-2	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	----
Cadmium	7440-43-9	0.05	mg/L		<0.05	<0.05	<0.05	<0.05	----
Chromium	7440-47-3	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	----
Copper	7440-50-8	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	----
Lead	7439-92-1	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	----
Nickel	7440-02-0	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	----
Zinc	7440-66-6	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	----
EG035C: Leachable Mercury by FIMS									
Mercury	7439-97-6	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		----	<1.0	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L		----	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L		----	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L		----	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L		----	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L		----	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L		----	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L		----	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		----	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L		----	<1.0	<1.0	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		----	<1.0	<1.0	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		----	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		----	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		----	<1.0	<1.0	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		----	<1.0	<1.0	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		----	<1.0	<1.0	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	µg/L		----	<0.5	<0.5	----	----

Exhibited

Analytical Results

Sub-Matrix: TCLP LEACHATE (Matrix: WATER)				Sample ID	BH11/0.2	BH11/0.7	QA/QC1	QA/QC2	----
				Sampling date / time	08-Dec-2025 12:00	08-Dec-2025 12:00	08-Dec-2025 17:00	08-Dec-2025 17:00	----
Compound	CAS Number	LOR	Unit		EM2523024-021	EM2523024-022	EM2523024-027	EM2523024-028	--------
					Result	Result	Result	Result	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		----	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons									
C10 - C14 Fraction	----	50	µg/L		----	<50	<50	----	----
C15 - C28 Fraction	----	100	µg/L		----	<100	<100	----	----
C29 - C36 Fraction	----	50	µg/L		----	<50	<50	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		----	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	100	µg/L		----	<100	<100	----	----
>C16 - C34 Fraction	----	100	µg/L		----	<100	<100	----	----
>C34 - C40 Fraction	----	100	µg/L		----	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		----	<100	<100	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		----	<100	<100	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		----	**33.0**	**35.5**	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		----	**46.2**	**49.5**	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		----	**77.3**	**85.1**	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		----	**78.6**	**86.4**	----	----
Anthracene-d10	1719-06-8	1.0	%		----	**78.4**	**86.8**	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		----	**78.5**	**86.8**	----	----

Exhibited

Analytical Results

Sub-Matrix: TCLP ZHE LEACHATE (Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	BH01/0.7	BH04/0.7	BH05/0.7	BH08/0.5	BH09/0.5
				Sampling date / time	08-Dec-2025 09:15	08-Dec-2025 10:45	08-Dec-2025 11:15	08-Dec-2025 13:30	08-Dec-2025 12:50
					EM2523024-002	EM2523024-008	EM2523024-010	EM2523024-016	EM2523024-018
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	<20
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	----	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**77.1**	**80.6**	**79.4**	**84.8**	**81.2**
Toluene-D8	2037-26-5	2	%		**106**	**106**	**106**	**109**	**105**
4-Bromofluorobenzene	460-00-4	2	%		**104**	**105**	**104**	**104**	**101**

Exhibited

Analytical Results

Sub-Matrix: TCLP ZHE LEACHATE (Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	BH11/0.7	QA/QC1	----	----	----
				Sampling date / time	08-Dec-2025 12:00	08-Dec-2025 17:00	----	----	----
					EM2523024-022	EM2523024-027	--------	--------	--------
					Result	Result	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	<20	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	----	----
Toluene	108-88-3	2	µg/L		<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	<2	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**86.7**	**92.2**	----	----	----
Toluene-D8	2037-26-5	2	%		**114**	**108**	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**108**	**106**	----	----	----

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RB01 (Rinsates)	----	----	----	----
				Sampling date / time	09-Dec-2025 17:15	----	----	----	----
Compound	CAS Number	LOR	Unit		EM2523024-029	--------	--------	--------	--------
					Result	----	----	----	----
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	----	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	----	----	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	----	----	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	----	----	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	----	----	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	----	----	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	----	----	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	----	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	----	----	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	----	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	----	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	µg/L		<0.5	----	----	----	----

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RB01 (Rinsates)	----	----	----	----
				Sampling date / time	09-Dec-2025 17:15	----	----	----	----
Compound	CAS Number	LOR	Unit		EM2523024-029	--------	--------	--------	--------
					Result	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ Total Xylenes	----	2	µg/L		<2	----	----	----	----
^ Sum of BTEX	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		**23.0**	----	----	----	----

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RB01 (Rinsates)	----	----	----	----
				Sampling date / time	09-Dec-2025 17:15	----	----	----	----
Compound	CAS Number	LOR	Unit		EM2523024-029	--------	--------	--------	--------
					Result	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
2-Chlorophenol-D4	93951-73-6	1.0	%		39.9	----	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		58.8	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		55.0	----	----	----	----
Anthracene-d10	1719-06-8	1.0	%		56.3	----	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		57.0	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		117	----	----	----	----
Toluene-D8	2037-26-5	2	%		120	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		123	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: SOIL

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH01/0.7 - 08-Dec-2025 09:15	Brown soil with rock matter.
EA200: Description	BH02/0.7 - 08-Dec-2025 10:00	Brown clay like soil.
EA200: Description	BH03/0.7 - 08-Dec-2025 09:50	Brown clay like soil with rock matter.
EA200: Description	BH04/0.7 - 08-Dec-2025 10:45	Grey soil with rock, organic matter and synthetic mineral fibres.
EA200: Description	BH05/0.7 - 08-Dec-2025 11:15	Brown soil with rock matter and synthetic mineral fibres.
EA200: Description	BH06/0.7 - 08-Dec-2025 11:45	Brown clay like soil with rock matter.
EA200: Description	BH07/0.5 - 08-Dec-2025 12:30	Brown clay like soil with rock matter.
EA200: Description	BH08/0.5 - 08-Dec-2025 13:30	Tan soil with rock matter.
EA200: Description	BH09/0.5 - 08-Dec-2025 12:50	Brown soil with rock and organic matter.
EA200: Description	BH11/0.7 - 08-Dec-2025 12:00	Brown soil with rock matter.
EA200: Description	BH12/0.2 - 08-Dec-2025 16:15	Brown soil with rock, organic matter and synthetic mineral fibres.
EA200: Description	BH13/0.2 - 08-Dec-2025 16:30	Brown soil with rock, organic matter and synthetic mineral fibres.
EA200: Description	BH14/0.2 - 08-Dec-2025 16:45	Brown soil with rock, organic matter and synthetic mineral fibres.
EA200: Description	BH15/0.2 - 08-Dec-2025 17:00	Brown soil with rock, organic matter and synthetic mineral fibres.

Exhibited

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075T: Base/Neutral Extractable Surrogates			
2-Fluorobiphenyl	321-60-8	35	126
Anthracene-d10	1719-06-8	40	135
4-Terphenyl-d14	1718-51-0	42	133
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	51	125
Toluene-D8	2037-26-5	55	125
4-Bromofluorobenzene	460-00-4	56	124

Sub-Matrix: TCLP LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	51
2-Chlorophenol-D4	93951-73-6	30	114
2.4.6-Tribromophenol	118-79-6	26	133
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	35	127
Anthracene-d10	1719-06-8	44	122
4-Terphenyl-d14	1718-51-0	44	124

Sub-Matrix: TCLP ZHE LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	129
Toluene-D8	2037-26-5	70	125
4-Bromofluorobenzene	460-00-4	71	129

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	51
2-Chlorophenol-D4	93951-73-6	30	114
2.4.6-Tribromophenol	118-79-6	26	133
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	35	127
Anthracene-d10	1719-06-8	44	122
4-Terphenyl-d14	1718-51-0	44	124
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	129
Toluene-D8	2037-26-5	70	125

Exhibited

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP080S: TPH(V)/BTEX Surrogates - Continued			
4-Bromofluorobenzene	460-00-4	71	129

Exhibited

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2523024**	Page	: 1 of 13
Client	: **PITT & SHERRY (OPERATIONS) PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CARLY CLARK	Telephone	: +61-3-8549 9600
Project	: P.25.1573	Date Samples Received	: 10-Dec-2025
Site	: ----	Issue Date	: 17-Dec-2025
Sampler	: HF	No. of samples received	: 30
Order number	: P.25.1573	No. of samples analysed	: 28

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, where applicable to the methodology, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Exhibited

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)						
TRH - Semivolatile Fraction	EP071	1	11	9.09	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)						
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	10	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	11	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content							
Soil Glass Jar - Unpreserved (EA055)							
BH01/0.7, BH02/0.7, BH03/0.7, BH04/0.7, BH05/0.7, BH06/0.7, BH07/0.5, BH08/0.5, BH09/0.5, BH11/0.7, BH12/0.2, BH13/0.2, BH14/0.2, BH15/0.2, QA/QC1	**08-Dec-2025**	**----**	----	----	**12-Dec-2025**	22-Dec-2025	✓
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
BH01/0.2, BH02/0.2, BH03/0.2, BH04/0.2, BH05/0.2, BH06/0.2, BH07/0.2, BH08/0.2, BH09/0.2, BH11/0.2, QA/QC2	**08-Dec-2025**	**----**	----	----	**12-Dec-2025**	22-Dec-2025	✓
Soil Glass Jar - Unpreserved (EA055)							
Trip Blank (Soil)	**09-Dec-2025**	**----**	----	----	**12-Dec-2025**	23-Dec-2025	✓

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag - ACM/Asbestos Grab Bag (EA200)								
BH01/0.7,	BH02/0.7,	**08-Dec-2025**	**----**	----	----	**12-Dec-2025**	06-Jun-2026	✓
BH03/0.7,	BH04/0.7,							
BH05/0.7,	BH06/0.7,							
BH07/0.5,	BH08/0.5,							
BH09/0.5,	BH11/0.7,							
BH12/0.2,	BH13/0.2,							
BH14/0.2,	BH15/0.2							
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
BH01/0.2,	BH01/0.7,	**08-Dec-2025**	**12-Dec-2025**	06-Jun-2026	✓	**15-Dec-2025**	06-Jun-2026	✓
BH02/0.2,	BH02/0.7,							
BH03/0.2,	BH03/0.7,							
BH04/0.2,	BH04/0.7,							
BH05/0.2,	BH05/0.7,							
BH06/0.2,	BH06/0.7,							
BH07/0.2,	BH07/0.5,							
BH08/0.2,	BH08/0.5,							
BH09/0.2,	BH09/0.5,							
BH11/0.2,	BH11/0.7,							
BH12/0.2,	BH13/0.2,							
BH14/0.2,	BH15/0.2,							
QA/QC1,	QA/QC2							
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
BH01/0.2,	BH01/0.7,	**08-Dec-2025**	**12-Dec-2025**	05-Jan-2026	✓	**16-Dec-2025**	05-Jan-2026	✓
BH02/0.2,	BH02/0.7,							
BH03/0.2,	BH03/0.7,							
BH04/0.2,	BH04/0.7,							
BH05/0.2,	BH05/0.7,							
BH06/0.2,	BH06/0.7,							
BH07/0.2,	BH07/0.5,							
BH08/0.2,	BH08/0.5,							
BH09/0.2,	BH09/0.5,							
BH11/0.2,	BH11/0.7,							
BH12/0.2,	BH13/0.2,							
BH14/0.2,	BH15/0.2,							
QA/QC1,	QA/QC2							

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)							
Non-Volatile Leach: 28 day HT(e.g. Hg, CrVI) (EN33a-G)							
BH01/0.2, BH01/0.7, BH04/0.2, BH04/0.7, BH05/0.2, BH05/0.7, BH08/0.2, BH08/0.5, BH09/0.2, BH09/0.5, BH11/0.2, BH11/0.7, QA/QC1, QA/QC2	**08-Dec-2025**	**11-Dec-2025**	05-Jan-2026	✓	**----**	----	----
EN33Z: ZHE TCLP Leach							
ZHE Leach: 14 day HT(e.g. CN, BTEX) (EN33Za)							
BH01/0.7, BH04/0.7, BH05/0.7, BH08/0.5, BH09/0.5, BH11/0.7, QA/QC1	**08-Dec-2025**	**11-Dec-2025**	22-Dec-2025	✓	**----**	----	----
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-TAS)							
BH01/0.7, BH02/0.7, BH03/0.7, BH04/0.7, BH05/0.7, BH06/0.7, BH07/0.5, BH08/0.5, BH09/0.5, BH11/0.7, BH12/0.2, BH13/0.2, BH14/0.2, BH15/0.2, QA/QC1	**08-Dec-2025**	**12-Dec-2025**	22-Dec-2025	✓	**13-Dec-2025**	21-Jan-2026	✓

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
BH11/0.7	**08-Dec-2025**	**11-Dec-2025**	22-Dec-2025	✓	**16-Dec-2025**	22-Dec-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
BH01/0.7, BH02/0.7, BH03/0.7, BH04/0.7, BH05/0.7, BH06/0.7, BH07/0.5, BH08/0.5, BH09/0.5, BH11/0.7, BH12/0.2, BH13/0.2, BH14/0.2, BH15/0.2, QA/QC1	**08-Dec-2025**	**12-Dec-2025**	22-Dec-2025	✓	**12-Dec-2025**	21-Jan-2026	✓
Soil Glass Jar - Unpreserved (EP080)							
BH01/0.7, BH02/0.7, BH03/0.7, BH04/0.7, BH05/0.7, BH06/0.7, BH07/0.5, BH08/0.5, BH09/0.5, BH12/0.2, BH13/0.2, BH14/0.2, BH15/0.2, QA/QC1	**08-Dec-2025**	**12-Dec-2025**	22-Dec-2025	✓	**16-Dec-2025**	22-Dec-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
Trip Blank (Soil)	**09-Dec-2025**	**12-Dec-2025**	23-Dec-2025	✓	**16-Dec-2025**	23-Dec-2025	✓

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
BH11/0.7	**08-Dec-2025**	**11-Dec-2025**	22-Dec-2025	✓	**16-Dec-2025**	22-Dec-2025	✓
Soil Glass Jar - Unpreserved (EP071)							
BH01/0.7, BH02/0.7, BH03/0.7, BH04/0.7, BH05/0.7, BH06/0.7, BH07/0.5, BH08/0.5, BH09/0.5, BH11/0.7, BH12/0.2, BH13/0.2, BH14/0.2, BH15/0.2, QA/QC1	**08-Dec-2025**	**12-Dec-2025**	22-Dec-2025	✓	**12-Dec-2025**	21-Jan-2026	✓
Soil Glass Jar - Unpreserved (EP080)							
BH01/0.7, BH02/0.7, BH03/0.7, BH04/0.7, BH05/0.7, BH06/0.7, BH07/0.5, BH08/0.5, BH09/0.5, BH12/0.2, BH13/0.2, BH14/0.2, BH15/0.2, QA/QC1	**08-Dec-2025**	**12-Dec-2025**	22-Dec-2025	✓	**16-Dec-2025**	22-Dec-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
Trip Blank (Soil)	**09-Dec-2025**	**12-Dec-2025**	23-Dec-2025	✓	**16-Dec-2025**	23-Dec-2025	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
BH11/0.7	**08-Dec-2025**	**11-Dec-2025**	22-Dec-2025	✓	**16-Dec-2025**	22-Dec-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
BH01/0.7, BH02/0.7, BH03/0.7, BH04/0.7, BH05/0.7, BH06/0.7, BH07/0.5, BH08/0.5, BH09/0.5, BH12/0.2, BH13/0.2, BH14/0.2, BH15/0.2, QA/QC1	**08-Dec-2025**	**12-Dec-2025**	22-Dec-2025	✓	**16-Dec-2025**	22-Dec-2025	✓
Soil Glass Jar - Unpreserved (EP080)							
Trip Blank (Soil)	**09-Dec-2025**	**12-Dec-2025**	23-Dec-2025	✓	**16-Dec-2025**	23-Dec-2025	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation

Exhibited

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)C: Leachable Metals by ICPAES							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG005C)							
BH01/0.2, BH01/0.7, BH04/0.2, BH04/0.7, BH05/0.2, BH05/0.7, BH08/0.2, BH08/0.5, BH09/0.2, BH09/0.5, BH11/0.2, BH11/0.7, QA/QC1, QA/QC2	**11-Dec-2025**	**15-Dec-2025**	09-Jun-2026	✓	**15-Dec-2025**	09-Jun-2026	✓
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
RB01 (Rinsates)	**09-Dec-2025**	**15-Dec-2025**	07-Jun-2026	✓	**16-Dec-2025**	07-Jun-2026	✓
EG035C: Leachable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035C)							
BH01/0.2, BH01/0.7, BH04/0.2, BH04/0.7, BH05/0.2, BH05/0.7, BH08/0.2, BH08/0.5, BH09/0.2, BH09/0.5, BH11/0.2, BH11/0.7, QA/QC1, QA/QC2	**11-Dec-2025**	**----**	----	----	**17-Dec-2025**	08-Jan-2026	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T)							
RB01 (Rinsates)	**09-Dec-2025**	**----**	----	----	**15-Dec-2025**	06-Jan-2026	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
RB01 (Rinsates)	**09-Dec-2025**	**12-Dec-2025**	16-Dec-2025	✓	**15-Dec-2025**	21-Jan-2026	✓
Amber Glass Bottle - Unpreserved (EP075(SIM))							
BH01/0.7, BH04/0.7, BH05/0.7, BH08/0.5, BH09/0.5, BH11/0.7, QA/QC1	**11-Dec-2025**	**12-Dec-2025**	18-Dec-2025	✓	**15-Dec-2025**	21-Jan-2026	✓

Exhibited

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RB01 (Rinsates)	**09-Dec-2025**	**12-Dec-2025**	16-Dec-2025	✓	**15-Dec-2025**	21-Jan-2026	✓
Amber Glass Bottle - Unpreserved (EP071)							
BH01/0.7, BH04/0.7, BH05/0.7, BH08/0.5, BH09/0.5, BH11/0.7, QA/QC1	**11-Dec-2025**	**12-Dec-2025**	18-Dec-2025	✓	**15-Dec-2025**	21-Jan-2026	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RB01 (Rinsates)	**09-Dec-2025**	**15-Dec-2025**	23-Dec-2025	✓	**15-Dec-2025**	23-Dec-2025	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
BH01/0.7, BH04/0.7, BH05/0.7, BH08/0.5, BH09/0.5, BH11/0.7, QA/QC1	**11-Dec-2025**	**15-Dec-2025**	25-Dec-2025	✓	**15-Dec-2025**	25-Dec-2025	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RB01 (Rinsates)	**09-Dec-2025**	**12-Dec-2025**	16-Dec-2025	✓	**15-Dec-2025**	21-Jan-2026	✓
Amber Glass Bottle - Unpreserved (EP071)							
BH01/0.7, BH04/0.7, BH05/0.7, BH08/0.5, BH09/0.5, BH11/0.7, QA/QC1	**11-Dec-2025**	**12-Dec-2025**	18-Dec-2025	✓	**15-Dec-2025**	21-Jan-2026	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RB01 (Rinsates)	**09-Dec-2025**	**15-Dec-2025**	23-Dec-2025	✓	**15-Dec-2025**	23-Dec-2025	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
BH01/0.7, BH04/0.7, BH05/0.7, BH08/0.5, BH09/0.5, BH11/0.7, QA/QC1	**11-Dec-2025**	**15-Dec-2025**	25-Dec-2025	✓	**15-Dec-2025**	25-Dec-2025	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RB01 (Rinsates)	**09-Dec-2025**	**15-Dec-2025**	23-Dec-2025	✓	**15-Dec-2025**	23-Dec-2025	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
BH01/0.7, BH04/0.7, BH05/0.7, BH08/0.5, BH09/0.5, BH11/0.7, QA/QC1	**11-Dec-2025**	**15-Dec-2025**	25-Dec-2025	✓	**15-Dec-2025**	25-Dec-2025	✓

Exhibited

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	4	37	**10.81**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	36	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	7	36	**19.44**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Leachable Mercury by FIMS	EG035C	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPAES	EG005C	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	10	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard

Exhibited

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP) - Continued							
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	12	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	27	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Leachable Mercury by FIMS	EG035C	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPAES	EG005C	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	2	10	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	11	**18.18**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Leachable Mercury by FIMS	EG035C	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPAES	EG005C	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	2	10	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	11	**18.18**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Leachable Mercury by FIMS	EG035C	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Leachable Metals by ICPAES	EG005C	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	10	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	11	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Exhibited

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Leachable Metals by ICPAES	EG005C	SOIL	In house: referenced to APHA 3120; USEPA SW 846 - 6010: The ICPAES technique ionises leachate sample atoms emitting a characteristic spectrum. This spectrum is then compared against matrix matched standards for quantification. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Leachable Mercury by FIMS	EG035C	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the TCLP solution. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Exhibited

Analytical Methods	Method	Matrix	Method Descriptions
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Digestion for Total Recoverable Metals in TCLP Leachate	EN25C	SOIL	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
TCLP for Non & Semivolatile Analytes - Glass Leaching Vessel	EN33a-G	SOIL	In house QWI-EN/33 referenced to USEPA SW846-1311: The TCLP procedure is designed to determine the mobility of both organic and inorganic analytes present in wastes. The standard TCLP leach is for non-volatile and Semivolatile test parameters.
TCLP for Volatile Analytes (Zero Headspace Extraction)	EN33Za	SOIL	In house QWI-EN/33 referenced to USEPA SW846-1311: ZHE (Toxicity Characteristic Leach Procedure - Zero Headspace Extraction) An extraction procedure to determine the mobility of volatile organic and inorganic analytes under specific conditions. This technique is compliant with NEPM Schedule B(3).
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Separatory Funnel Extraction of Liquids	ORG14	SOIL	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Volatiles Water Preparation	ORG16-W	SOIL	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

Exhibited

Preparation Methods	Method	Matrix	Method Descriptions
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging.

Exhibited

QUALITY CONTROL REPORT

Work Order	: **EM2523024**	Page	: 1 of 14
Client	: **PITT & SHERRY (OPERATIONS) PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CARLY CLARK	Contact	: Hannah White
Address	: 199 MACQUARIE STREET HOBART 7001	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: 03 9674 4163	Telephone	: +61-3-8549 9600
Project	: P.25.1573	Date Samples Received	: 10-Dec-2025
Order number	: P.25.1573	Date Analysis Commenced	: 11-Dec-2025
C-O-C number	: ----	Issue Date	: 17-Dec-2025
Sampler	: HF		
Site	: ----		
Quote number	: EM23PITSHE0013 VIC Custom Pricing		
No. of samples received	: 30		
No. of samples analysed	: 28		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Non-Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Tahlia Freeman	Instrument Operator	Melbourne Inorganics, Springvale, VIC
Tim Kuo	Approved Asbestos Identifier	Melbourne Asbestos, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

Exhibited

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
= Indicates failed QC
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7071423)									
EM2523024-001	BH01/0.2	EG005T: Nickel	7440-02-0	2	mg/kg	108	102	5.9	0% - 20%
EM2523024-011	BH06/0.2	EG005T: Nickel	7440-02-0	2	mg/kg	48	48	0.0	0% - 20%
EM2523024-001	BH01/0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	13	8	44.7	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	28	20	33.7	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	31	24	25.3	No Limit
EM2523024-011	BH06/0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	11	9	25.8	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	31	32	3.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	32	22	36.6	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7071432)									
EM2523024-023	BH12/0.2	EG005T: Chromium	7440-47-3	2	mg/kg	38	41	6.1	0% - 20%
EM2523024-023	BH12/0.2	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	9	8	13.3	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	14	9	47.3	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	12	11	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	33	21	45.8	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7071432) - continued									
EM2523024-023	BH12/0.2	EG005T: Zinc	7440-66-6	5	mg/kg	36	29	20.0	No Limit
EM2523092-081	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	23	18	25.2	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	10	8	23.7	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	15	11	32.7	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	19	18	10.4	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	57	42	29.0	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 7075236)									
EM2523024-001	BH01/0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	1.1	1.2	12.9	No Limit
EM2523024-011	BH06/0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	3.8	1.8	73.3	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 7075237)									
EM2523024-023	BH12/0.2	EA055: Moisture Content	----	0.1 (1.0)*	%	17.0	17.1	0.0	0% - 50%
EM2523092-078	Anonymous	EA055: Moisture Content	----	0.1 (1.0)*	%	8.7	8.0	8.5	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7071427)									
EM2523024-001	BH01/0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2523024-011	BH06/0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7071430)									
EM2523024-023	BH12/0.2	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2523092-081	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7071404)									
EM2523024-002	BH01/0.7	EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7071404) - continued									
EM2523024-023	BH12/0.2	EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7071392)									
EM2523024-002	BH01/0.7	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM2523024-023	BH12/0.2	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7071405)									
EM2523024-002	BH01/0.7	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EM2523024-023	BH12/0.2	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7071392)									
EM2523024-002	BH01/0.7	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EM2523024-023	BH12/0.2	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7071405)									
EM2523024-002	BH01/0.7	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EM2523024-023	BH12/0.2	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080: BTEXN (QC Lot: 7071392)									

Exhibited

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080: BTEXN (QC Lot: 7071392) - continued									
EM2523024-002	BH01/0.7	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2523024-023	BH12/0.2	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)C: Leachable Metals by ICPAES (QC Lot: 7079390)									
EM2521951-008	Anonymous	EG005C: Cadmium	7440-43-9	0.05	mg/L	<0.05	<0.05	0.0	No Limit
		EG005C: Arsenic	7440-38-2	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Chromium	7440-47-3	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Copper	7440-50-8	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Lead	7439-92-1	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Nickel	7440-02-0	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Zinc	7440-66-6	0.1	mg/L	<0.1	<0.1	0.0	No Limit
EM2523024-016	BH08/0.5	EG005C: Cadmium	7440-43-9	0.05	mg/L	<0.05	<0.05	0.0	No Limit
		EG005C: Arsenic	7440-38-2	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Chromium	7440-47-3	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Copper	7440-50-8	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Lead	7439-92-1	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Nickel	7440-02-0	0.1	mg/L	<0.1	<0.1	0.0	No Limit
		EG005C: Zinc	7440-66-6	0.1	mg/L	0.1	0.1	0.0	No Limit
EG020T: Total Metals by ICP-MS (QC Lot: 7079666)									
EM2522687-007	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit

Exhibited

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG020T: Total Metals by ICP-MS (QC Lot: 7079666) - continued									
EM2522687-007	Anonymous	EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
EM2523083-008	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.007	0.007	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.010	0.010	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.003	0.002	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.053	0.053	0.0	0% - 20%
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.013	0.011	17.1	No Limit
EG035C: Leachable Mercury by FIMS (QC Lot: 7084808)									
EM2523024-001	BH01/0.2	EG035C: Mercury	7439-97-6	0.0001 (0.0010)*	mg/L	<0.0010	<0.0010	0.0	No Limit
EM2523024-018	BH09/0.5	EG035C: Mercury	7439-97-6	0.0001 (0.0010)*	mg/L	<0.0010	<0.0010	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7073481)									
EM2522687-007	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EM2523110-042	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7074169)									
EM2523024-002	BH01/0.7	EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	<1.0	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	<1.0	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7074170)									
EM2523024-002	BH01/0.7	EP071: C15 - C28 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
		EP071: C29 - C36 Fraction	----	50	µg/L	<50	<50	0.0	No Limit

Exhibited

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7075787)									
EM2523307-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EM2523311-002	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7078225)									
EM2523024-002	BH01/0.7	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7074170)									
EM2523024-002	BH01/0.7	EP071: >C10 - C16 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C16 - C34 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7075787)									
EM2523307-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EM2523311-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7078225)									
EM2523024-002	BH01/0.7	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 7075787)									
EM2523307-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit
EM2523311-002	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	17	17	0.0	No Limit
EP080: BTEXN (QC Lot: 7078225)									
EM2523024-002	BH01/0.7	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit

Exhibited

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7071423)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	43 mg/kg	98.3	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	3 mg/kg	115	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	84 mg/kg	94.7	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	185 mg/kg	97.4	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	153 mg/kg	102	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.9 mg/kg	105	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	358 mg/kg	107	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7071432)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	43 mg/kg	81.1	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	3 mg/kg	93.5	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	84 mg/kg	82.3	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	185 mg/kg	83.6	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	153 mg/kg	84.7	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.9 mg/kg	92.6	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	358 mg/kg	90.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7071427)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	95.3	69.0	128
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7071430)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	96.1	69.0	128
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7071404)								
EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	90.1	75.4	130
EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	91.9	73.3	130
EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	90.3	73.0	131
EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	86.2	72.1	134
EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	91.2	74.4	131
EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	89.6	75.3	132
EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	86.4	72.9	135
EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	87.8	75.0	133
EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	87.3	71.3	134
EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	88.1	75.8	133

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7071404) - continued								
EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	84.8	69.6	133
EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	90.1	78.4	127
EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	88.6	72.0	135
EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	91.2	76.3	130
EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	2 mg/kg	86.8	77.5	134
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7071392)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	102	58.6	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7071405)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	810 mg/kg	103	80.0	120
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	2880 mg/kg	103	80.0	120
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1460 mg/kg	102	80.0	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7071392)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	97.2	59.3	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7071405)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	1120 mg/kg	101	80.0	120
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3800 mg/kg	104	80.0	120
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	260 mg/kg	104	80.0	120
EP080: BTEXN (QCLot: 7071392)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	91.0	61.6	117
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	100	65.8	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	97.3	65.8	124
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	105	64.8	134
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	108	68.7	132
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	89.1	61.8	123

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)C: Leachable Metals by ICPAES (QCLot: 7079390)								
EG005C: Arsenic	7440-38-2	0.1	mg/L	<0.1	1 mg/L	106	80.0	120
EG005C: Cadmium	7440-43-9	0.05	mg/L	<0.05	1 mg/L	86.2	80.0	120
EG005C: Chromium	7440-47-3	0.1	mg/L	<0.1	1 mg/L	91.9	80.0	120
EG005C: Copper	7440-50-8	0.1	mg/L	<0.1	1 mg/L	105	80.0	120
EG005C: Lead	7439-92-1	0.1	mg/L	<0.1	1 mg/L	91.4	80.0	120

Exhibited

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)C: Leachable Metals by ICPAES (QCLot: 7079390) - continued								
EG005C: Nickel	7440-02-0	0.1	mg/L	<0.1	1 mg/L	89.4	80.0	120
EG005C: Zinc	7440-66-6	0.1	mg/L	<0.1	1 mg/L	86.1	80.0	120
EG020T: Total Metals by ICP-MS (QCLot: 7079666)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	104	89.2	110
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	93.6	86.4	115
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	101	89.0	112
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	100	88.3	111
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	100	88.3	112
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	101	88.8	113
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	108	90.0	115
EG035C: Leachable Mercury by FIMS (QCLot: 7084808)								
EG035C: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	100	72.0	115
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7073481)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	97.6	73.4	119
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7073172)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	93.8	42.8	114
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	95.0	48.6	119
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	96.3	47.0	117
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	98.1	49.5	119
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	99.2	49.4	121
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	98.0	48.4	122
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	100	50.3	124
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	99.7	50.0	126
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	102	49.4	127
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	104	48.7	126
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	102	54.5	134
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	104	56.1	134
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	103	55.6	135
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	102	54.4	126
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	101	54.5	126
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	104	54.4	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7074169)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	94.9	42.8	114

Exhibited

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7074169) - continued								
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	98.0	48.6	119
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	99.8	47.0	117
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	104	49.5	119
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	105	49.4	121
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	103	48.4	122
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	109	50.3	124
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	109	50.0	126
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	109	49.4	127
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	108	48.7	126
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	109	54.5	134
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	110	56.1	134
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	108	55.6	135
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	106	54.4	126
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	106	54.5	126
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	107	54.4	126
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7073171)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	4421 µg/L	83.7	47.2	122
EP071: C15 - C28 Fraction	----	100	µg/L	<100	15219 µg/L	88.9	52.9	131
EP071: C29 - C36 Fraction	----	50	µg/L	<50	7904 µg/L	85.0	50.4	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7074170)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	4421 µg/L	96.2	47.2	122
EP071: C15 - C28 Fraction	----	100	µg/L	<100	15219 µg/L	103	52.9	131
EP071: C29 - C36 Fraction	----	50	µg/L	<50	7904 µg/L	96.7	50.4	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7075787)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	360 µg/L	131	66.2	134
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7078225)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	360 µg/L	98.4	66.2	134
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7073171)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	6085 µg/L	81.2	49.1	125
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	20300 µg/L	89.0	51.6	128
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	1456 µg/L	81.0	47.2	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7074170)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	6085 µg/L	93.2	49.1	125

Exhibited

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7074170) - continued								
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	20300 µg/L	103	51.6	128
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	1456 µg/L	95.6	47.2	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7075787)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	450 µg/L	129	66.2	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7078225)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	450 µg/L	99.5	66.2	132
EP080: BTEXN (QCLot: 7075787)								
EP080: Benzene	71-43-2	1	µg/L	<1	20 µg/L	121	68.8	127
EP080: Toluene	108-88-3	2	µg/L	<2	20 µg/L	119	72.9	129
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	125	71.7	130
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	40 µg/L	126	72.3	136
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	120	75.9	134
EP080: Naphthalene	91-20-3	5	µg/L	<5	5 µg/L	122	68.3	131
EP080: BTEXN (QCLot: 7078225)								
EP080: Benzene	71-43-2	1	µg/L	<1	20 µg/L	93.1	68.8	127
EP080: Toluene	108-88-3	2	µg/L	<2	20 µg/L	104	72.9	129
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	109	71.7	130
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	40 µg/L	116	72.3	136
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	113	75.9	134
EP080: Naphthalene	91-20-3	5	µg/L	<5	5 µg/L	103	68.3	131

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7071423)							
EM2523024-002	BH01/0.7	EG005T: Arsenic	7440-38-2	50 mg/kg	95.8	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	103	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	97.9	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	105	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	105	80.0	120

Exhibited

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7071423) - continued							
EM2523024-002	BH01/0.7	EG005T: Nickel	7440-02-0	50 mg/kg	104	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	95.3	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7071432)							
EM2523024-024	BH13/0.2	EG005T: Arsenic	7440-38-2	50 mg/kg	89.0	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	102	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	89.3	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	103	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	102	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	99.9	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	99.2	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7071427)							
EM2523024-002	BH01/0.7	EG035T: Mercury	7439-97-6	0.5 mg/kg	95.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7071430)							
EM2523024-024	BH13/0.2	EG035T: Mercury	7439-97-6	0.5 mg/kg	95.1	70.0	130
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7071404)							
EM2523024-004	BH02/0.7	EP075-TAS: Pyrene	129-00-0	3 mg/kg	109	37.8	152
		EP075-TAS: Acenaphthene	83-32-9	3 mg/kg	102	42.6	138
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7071392)							
EM2523024-004	BH02/0.7	EP080: C6 - C9 Fraction	----	28 mg/kg	70.0	33.4	124
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7071405)							
EM2523024-004	BH02/0.7	EP071: C10 - C14 Fraction	----	810 mg/kg	105	70.0	130
		EP071: C15 - C28 Fraction	----	2880 mg/kg	105	70.0	130
		EP071: C29 - C36 Fraction	----	1460 mg/kg	103	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7071392)							
EM2523024-004	BH02/0.7	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	64.5	30.8	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7071405)							
EM2523024-004	BH02/0.7	EP071: >C10 - C16 Fraction	----	1120 mg/kg	103	70.0	130
		EP071: >C16 - C34 Fraction	----	3800 mg/kg	105	70.0	130
		EP071: >C34 - C40 Fraction	----	260 mg/kg	105	70.0	130
EP080: BTEXN (QCLot: 7071392)							
EM2523024-004	BH02/0.7	EP080: Benzene	71-43-2	2 mg/kg	80.2	54.4	127
		EP080: Toluene	108-88-3	2 mg/kg	83.1	57.1	131

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High

Exhibited

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)C: Leachable Metals by ICPAES (QCLot: 7079390)							
EM2521951-009	Anonymous	EG005C: Arsenic	7440-38-2	1 mg/L	111	80.0	120
		EG005C: Cadmium	7440-43-9	0.25 mg/L	103	80.0	120
		EG005C: Chromium	7440-47-3	1 mg/L	101	80.0	120
		EG005C: Copper	7440-50-8	1 mg/L	101	80.0	120
		EG005C: Lead	7439-92-1	1 mg/L	107	80.0	120
		EG005C: Nickel	7440-02-0	1 mg/L	103	80.0	120
		EG005C: Zinc	7440-66-6	1 mg/L	104	80.0	120
EG020T: Total Metals by ICP-MS (QCLot: 7079666)							
EM2522687-007	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	99.9	82.0	123
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	90.6	81.8	123
		EG020A-T: Chromium	7440-47-3	1 mg/L	102	78.9	119
		EG020A-T: Copper	7440-50-8	1 mg/L	98.1	80.4	118
		EG020A-T: Lead	7439-92-1	1 mg/L	100	80.5	121
		EG020A-T: Nickel	7440-02-0	1 mg/L	99.6	80.0	118
		EG020A-T: Zinc	7440-66-6	1 mg/L	102	74.0	120
EG035C: Leachable Mercury by FIMS (QCLot: 7084808)							
EM2523024-002	BH01/0.7	EG035C: Mercury	7439-97-6	0.01 mg/L	90.0	84.0	118
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7073481)							
EM2522841-022	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	103	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7075787)							
EM2523307-002	Anonymous	EP080: C6 - C9 Fraction	----	280 µg/L	88.4	33.9	126
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7078225)							
EM2523024-008	BH04/0.7	EP080: C6 - C9 Fraction	----	280 µg/L	92.0	33.9	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7075787)							
EM2523307-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	330 µg/L	87.8	34.0	122
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7078225)							
EM2523024-008	BH04/0.7	EP080: C6 - C10 Fraction	C6_C10	330 µg/L	85.4	34.0	122
EP080: BTEXN (QCLot: 7075787)							
EM2523307-002	Anonymous	EP080: Benzene	71-43-2	20 µg/L	101	56.3	133
		EP080: Toluene	108-88-3	20 µg/L	101	60.4	132
EP080: BTEXN (QCLot: 7078225)							
EM2523024-008	BH04/0.7	EP080: Benzene	71-43-2	20 µg/L	90.9	56.3	133
		EP080: Toluene	108-88-3	20 µg/L	108	60.4	132

Exhibited

Summary Results Tables and Comparison to Adopted Criteria

Attachment D

pitt&sherry

Exhibited

SUMMARY RESULTS - SOIL / FILL MATERIAL (RESIDENTIAL)

Project No: P.25.1573
Project Name: ETJ Waste Soil Classification

Analyte Grouping	Total Heavy Metals															Total Petroleum Hydrocarbons (TPH)					Total Recoverable Hydrocarbons (TRH)					BTEXN									Polycyclic Aromatic Hydrocarbons (PAH)					Asbestos and Fibre		
Analyte	Arsenic	Arsenic (total) - TCLP	Cadmium	Cadmium - TCLP	Chromium (total)	Chromium (total) - TCLP	Copper	Copper - TCLP	Lead	Lead - TCLP	Nickel	Nickel - TCLP	Zinc	Zinc - TCLP	Mercury (total)	Mercury (total) - TCLP	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Benzene - TCLP	Toluene	Toluene - TCLP	Ethylbenzene	Ethylbenzene - TCLP	Total Xylenes	Total Xylenes - TCLP	Naphthalene	Benzo(a)pyrene	Benzo(a)pyrene - TCLP	Carcinogenic PAHs (as BaP TEQ)*	Carcinogenic PAHs (as BaP TEQ)* - TCLP	Total PAHs	Presence / Absence	Synthetic Mineral Fibre	Organic Fibre
ASC NEPM - HIL/HSL A (vapour intrusion)	100		20		100 CrVI)		6,000		300		400		7,400		40 (inorganic)							45-200 (sand) 40-190 (silt) 50-290 (clay)	110-NL (sand) 230-NL (silt) 280-NL (clay)				0.5 (sand) 0.6-2 (silt) 0.7-3 (clay)		160-540 (sand) 390-NL (silt) 480-NL (clay)		55-NL (sand) NL (silt) NL (clay)		40-170 (sand) 95-NL (silt) 110-NL (clay)		3-NL (sand) 4-NL (silt) 5-NL (clay)					3	300			
CRC CARE - HSL (vapour intrusion, intrusive maintenance worker - shallow trench)																						(C6-C10) NL (all soil types and depths)	(>C10-C16) NL (all soil types and depths)				77-NL (sand) 250-NL (silt) 350-NL (clay)		NL (all soil types)		NL (all soil types)		NL (all soil types)		NL (all soil types)									
CRC CARE - HSL A (vapour intrusion)																						(C6-C10)	(>C10-C16)				0.5 (sand) 0.6-2 (silt) 0.7-3 (clay)		160-540 (sand) 390-NL (silt) 480-NL (clay)		57-NL (sand) NL (silt) NL (clay)		40-170 (sand) 93-NL (silt) 110-NL (clay)		3-NL (sand) 4-NL (silt) 5-NL (clay)									
CRC CARE - HSL A (direct contact)																						4400 (C6-C10)	3300 (>C10-C16)	4,500	6,300		100		14,000		4,500		12,000		1,400									
CRC CARE - HSL (direct contact, intrusive maintenance worker - shallow trench)																						82,000 (C6-C10)	62,000 (>C10-C16)	85,000	120,000		1,100		120,000		85,000		130,000		29,000									
ASC NEPM - EIL/ESL (urban residential / public open space)	100[A]				190-400[C] Cr(III)		60-800[B]		1,100[C]		30-560[C]		70-1,300[B]									180 (coarse / fine)	120 (coarse / fine)	300 (coarse) 1,300 (fine)	2,800 (coarse) 5,600 (fine)		50 (coarse) 65 (fine)		85 (coarse) 105 (fine)		70 (coarse) 125 (fine)		105 (coarse) 45 (fine)		170[B]	0.7 (coarse/ fine)								
IB105 - Level 1 (fill material)	20		3		50		100		300		60		200		1		65				1,000	65 (C6-C9)				1,000 (C10-C36)	1		1		3		14			0.08				20			
IB105 - Level 2 (low level contaminated soil)	200	0.5	40	0.1	500	0.5	2,000	10	1,200	0.5	600	1	14,000	25	30	0.01	650				5,000	650 (C6-C9)				5,000 (C10-C36)	5	50	100	1,400	100	3,000	180	5,000		2	0.5		0.5	40			
IB105 - Level 3 (contaminated soil)	750	5	400	0.5	5,000	5	7,500	100	3,000	5	3,000	8	50,000	250	110	0.1	1,000				10,000	1,000 (C6-C9)				10,000 (C10-C36)	50	500	1,000	14,000	1,080	30,000	1,800	50,000		20	5			200			
Sample ID	**Location**	**Date Sampled**	**Sample Depth (m bgl)**	**Lab**	**Soil Type / Units**	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	g/kg	-	-
BH01/0.2	Road 2	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	13	<0.1	28	<0.1	108	<0.1	31	<0.1	<0.1	<0.001																									
BH01/0.7	Road 2	08-Dec-25	0.7	ALS	Gravelly clay	<5	<0.1	<1	<0.05	11	<0.1	57	<0.1	9	<0.1	11	<0.1	112	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	No
QA/QC1	Duplicate from BH01/0.7	08-Dec-25	0.7	ALS	Gravelly clay	<5	<0.1	<1	<0.05	14	<0.1	58	<0.1	6	<0.1	32	<0.1	93	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
BH02/0.2	Road 2	08-Dec-25	0.2	ALS	Ballast material	<5		<1		21		36		<5		55		33		<0.1																									
BH02/0.7	Road 2	08-Dec-25	0.7	ALS	Gravelly clay	9		<1		51		28		8		14		27		<0.1		<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05	No[1]	No	No
BH03/0.2	Road 2	08-Dec-25	0.2	ALS	Ballast material	<5		<1		8		18		<5		54		24		<0.1																									
BH03/0.7	Road 2	08-Dec-25	0.7	ALS	Sandy clay	<5		<1		31		23		<5		48		32		<0.1		<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05	No[1]	No	No
BH04/0.2	Road 1 and Road 2 overlap	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	16	<0.1	40	<0.1	<5	<0.1	48	<0.1	36	<0.1	<0.1	<0.001																									
BH04/0.7	Road 1 and Road 2 overlap	08-Dec-25	0.7	ALS	Silty sand	13	<0.1	<1	<0.05	57	<0.1	67	<0.1	30	<0.1	65	0.1	93	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	Yes	Yes
BH05/0.2	Road 3	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	10	<0.1	29	<0.1	<5	<0.1	63	<0.1	33	0.2	<0.1	<0.001																									
BH05/0.7	Road 3	08-Dec-25	0.7	ALS	Gravelly clay	5	<0.1	<1	<0.05	41	<0.1	32	<0.1	8	<0.1	23	<0.1	29	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	Yes	No
BH06/0.2	Road 3	08-Dec-25	0.2	ALS	Ballast material	<5		<1		11		31		<5		48		32		<0.1																									
BH06/0.7	Road 3	08-Dec-25	0.7	ALS	Clay	<5		<1		38		30		5		24		13		<0.1		<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05	No[1]	No	No
BH07/0.2	Road 3	08-Dec-25	0.2	ALS	Ballast material	<5		<1		2		16		<5		5		7		<0.1																									
BH07/0.5	Road 3	08-Dec-25	0.5	ALS	Gravelly clay	<5		<1		28		40		7		12		35		<0.1		<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05	No[1]	No	No
BH08/0.2	Road 3	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	<2	<0.1	11	<0.1	<5	<0.1	3	<0.1	<5	<0.1	<0.1	<0.001																									
QA/QC2	Duplicate from BH08/0.2	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	13	<0.1	35	<0.1	<5	<0.1	59	<0.1	35	<0.1	<0.1	<0.001																									
BH08/0.5	Road 3	08-Dec-25	0.5	ALS	Sandy, gravelly silt	<5	<0.1	<1	<0.05	8	<0.1	111	<0.1	6	<0.1	12	<0.1	121	0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	No
BH09/0.2	Road 4	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	6	<0.1	11	<0.1	<5	<0.1	39	<0.1	16	<0.1	<0.1	<0.001																									
BH09/0.5	Road 4	08-Dec-25	0.5	ALS	Sandy, gravelly silt	<5	<0.1	<1	<0.05	45	<0.1	44	<0.1	<5	<0.1	110	0.1	49	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	Yes
BH11/0.2	Link Road	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	10	<0.1	55	<0.1	<5	<0.1	13	<0.1	24	<0.1	<0.1	<0.001																									
BH11/0.7	Link Road	08-Dec-25	0.7	ALS	Gravelly clay	<5	<0.1	<1	<0.05	28	<0.1	32	<0.1	6	<0.1	15	<0.1	11	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	No
Summary Statistics - ALL (values <LOR have been assigned 1/2 LOR for statistical calculations and QA/QC samples have been excluded)					**Number of Data Points**	20	12	20	12	20	12	20	12	20	12	20	12	20	12	20	12	10	10	10	10	10	10	6	10	6	10	6	10	6	10	6	10	10	6	10	6	10	10	10	10
					Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
					Minimum	<5	<0.1	<1	<0.05	<2	<0.1	11.00	<0.1	<5	<0.1	3.00	<0.1	<5	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
					Maximum	13.00	<0.1	<1	<0.05	57.00	<0.1	111.00	<0.1	30.00	<0.1	110.00	0.10	121.00	0.20	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
					Median	2.50		14.50		31.50		50.00		2.50		31.50	0.05	31.50	0.05																											
					Arithmetic Mean	3.48		21.80		36.95		45.60		5.45		38.50	0.06	38.03	0.07																											
					Geometric Mean	3.00		14.83		31.66		36.14		4.03		26.15	0.06	27.18	0.06																											
					Standard Deviation	2.71		17.02		22.80		31.48		6.22		31.48	0.02	32.73	0.04																											
					90th Percentile	5.40		45.60		58.00		84.00		8.10		69.30	0.10	94.90	0.10																											
					95th Percentile	9.20		51.30		69.20		97.60		10.05		108.10	0.10	112.45	0.15																											
					95% Confidence Interval	1.19		7.46		9.99		13.80		2.73		13.80	0.01	14.34	0.03																											
					95% UCL (Mean + 95% Confidence Interval)	4.66		29.26		46.94		59.42		8.18		52.30	0.07	52.37	0.09																											
Summary Statistics - BALLAST (values <LOR have been assigned 1/2 LOR for statistical calculations and QA/QC samples have been excluded)					**Number of Data Points**	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
					Number of Detects	0	0	0	0	9	0	10	0	0	0	10	0	9	1	0	0																								
					Minimum	<5	<0.1	<1	<0.05	<2	<0.1	11.00	<0.1	<5	<0.1	3.00	<0.1	<5	<0.1	<0.1	<0.001																								
					Maximum	<5	<0.1	<1	<0.05	21.00	<0.1	55.00	<0.1	<5	<0.1	108.00	<0.1	36.00	0.20	<0.1	<0.001																								
					Median	<5	<0.1	<1	<0.05	10.00	<0.1	28.50	<0.1	<5	<0.1	48.00	<0.1	27.50	0.05	<0.1	<0.001																								
					Arithmetic Mean	<5	<0.1	<1	<0.05	9.80	<0.1	27.50	<0.1	<5	<0.1	43.60	<0.1	23.85	0.08	<0.1	<0.001																								
					Geometric Mean	<5	<0.1	<1	<0.05	7.35	<0.1	24.22	<0.1	<5	<0.1	28.50	<0.1	19.04	0.06	<0.1	<0.001																								
					Standard Deviation	n/a	n/a	n/a	n/a	6.07	n/a	14.01	n/a	n/a	n/a	31.44	n/a	11.71	0.06	n/a	n/a																								
					90th Percentile	n/a	n/a	n/a	n/a	16.50	n/a	41.50	n/a	n/a	n/a	67.50	n/a	33.30	0.13	n/a	n/a																								
					95th Percentile	n/a	n/a	n/a	n/a	18.75	n/a	48.25	n/a	n/a	n/a	87.75	n/a	34.65	0.16	n/a	n/a																								
					95% Confidence Interval	n/a	n/a	n/a	n/a	3.97	n/a	8.48	n/a	n/a	n/a	19.49	n/a	7.65	0.12	n/a	n/a																								
					95% UCL (Mean + 95% Confidence Interval)	n/a	n/a	n/a	n/a	13.77	n/a	36.18	n/a	n/a	n/a	63.09	n/a	31.50	0.20	n/a	n/a																								
Summary Statistics - FINES (values <LOR have been assigned 1/2 LOR for statistical calculations and QA/QC samples have been excluded)					**Number of Data Points**	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	10	10	10	10	10	6	10	6	10	6	10	6	10	6	10	10	6	10	6	10	10	10	10
					Number of Detects	2	0	0	0	0	0	8	0	10	2	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
					Minimum	<5	<0.1	<1	<0.05	8.00	<0.1	23.00	<0.1	<5	<0.1	11.00	<0.1	11.00	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
					Maximum	13.00	<0.1	<1	<0.05	57.00	<0.1	111.00	<0.1	30.00	<0.1	110.00	0.10	121.00	0.10	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
					Median	2.50	<0.1	<1	<0.05	34.50	<0.1	36.00	<0.1	6.50	<0.1	33.00	0.05	33.50	0.05	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
					Arithmetic Mean	4.45	<0.1	<1	<0.05	33.80	<0.1	46.40	<0.1	8.40	<0.1	33.40	0.07	52.20	0.06	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
					Geometric Mean	3.59	<0.1	<1	<0.05	29.10	<0.1	41.39	<0.1	6.51	<0.1	23.99	0.06	38.81	0.06	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
					Standard Deviation	3.66	n/a	n/a	n/a	15.95	n/a	26.51	n/a	7.90	n/a	32.33	0.03	40.95	0.02	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
					90th Percentile	9.40	n/a	n/a	n/a	51.60	n/a	71.40	n/a	11.10	n/a	69.50	0.10	112.90	0.08	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
					95th Percentile	11.20	n/a	n/a	n/a	54.30	n/a	91.20	n/a	20.55	n/a	89.75	0.10	116.95	0.09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
					95% Confidence Interval	4.14	n/a	n/a	n/a	9.89	n/a	16.43	n/a	5.48	n/a	20.04	0.04	25.38	0.04	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
					95% UCL (Mean + 95% Confidence Interval)	8.59	n/a	n/a	n/a	43.69	n/a	62.83	n/a	13.88	n/a	53.44	0.10	77.58	0.10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			

Legend:

	Human health criteria (National)
	Ecological criteria (National)
	Disposal criteria (Tasmania)
	Ballast
	Fines (formation material)
	Proposed reuse location
Bold	Reported concentration equals or exceeds at least one of the human health criteria
Bold	Reported concentration equals or exceeds at least one of the ecological criteria
Bold	Reported concentration equals or exceeds at least one of the human health criteria plus at least one of the ecological criteria
	Reported concentration equals or exceeds IB105 Level 1 - fill material and/or PFAS unlined landfill criterion
	Reported concentration equals or exceeds IB105 - Level 2 - low-level contaminated soil and/or PFAS single lined landfill criterion
	Reported concentration equals or exceeds IB105 - Level 3 - contaminated soil and/or PFAS double lined landfill criterion
Bold	Reported concentration is greater than the LOR
< Grey	Reported concentration is below the LOR
A	Generic EIL
B	ACL range from ASC NEPM classification samples with most conservative values adopted as conservative site-specific EILs
C	Generic ACL
D	Carcinogenic PAHs (as BaP TEQ at zero)
E	No - no asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining
HIL / HSL	Health Investigation Level / Health Screening Level
EIL / ESL	Ecological Investigation Level / Ecological Screening Level
LOR	Limit of reporting
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene
ACL	Added contaminant limit
IB105	Does not apply to material classified as potential acid sulfhate soil (PASS) or per - and poly – fluoroalkyl substances (PFAS)
TCLP	Toxicity Characteristic Leaching Procedure

References:

ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure 1999, amended 2013
CRC CARE	Technical Report No. 10 Health Screening Levels for Petroleum Hydrocarbons in Soil and Groundwater September 2011, including errata August 2012
IB105	Information Bulletin No. 105 - Classification and Management of Contaminated Soil for Disposal, Version 3, 2018, Environment Protection Authority Tasmania

Exhibited

SUMMARY RESULTS - SOIL / FILL MATERIAL (COMMERCIAL / INDUSTRIAL)

Project No: P.25.1573
Project Name: ETI Waste Soil Classification

Analyte Grouping	Total Heavy Metals													Total Petroleum Hydrocarbons (TPH)					Total Recoverable Hydrocarbons (TRH)					BTEXN							Polycyclic Aromatic Hydrocarbons (PAH)					Asbestos and Fibre		
Analyte	Arsenic	Arsenic (total) - TCLP	Cadmium	Cadmium - TCLP	Chromium (total)	Chromium (VI+) - TCLP	Copper	Copper - TCLP	Lead	Lead - TCLP	Nickel	Nickel - TCLP	Zinc	Zinc - TCLP	Mercury (total)	Mercury (total) - TCLP	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C6-C36)	C6-C10 (minus BTEX (F1)	>C10-C16 (minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Benzene - TCLP	Toluene	Toluene - TCLP	Ethylbenzene	Ethylbenzene - TCLP	Total Xylenes	Total Xylenes - TCLP	Naphthalene	Benzo(a)pyrene	Benzo(a)pyrene - TCLP	Carcinogenic PAHs (as BaP TEQ)*	Carcinogenic PAHs (as BaP TEQ)* - TCLP	Total PAHs	Presence / Absence	Synthetic/cheese fibre	Organic Fibre
ASC NEPM - HIL/HSL D (vapour intrusion)	3,000		900		3,600 Cr(VI)		240,000		1,500		6,000		400,000		730 (inorganic)							260 NL (sand) 250 NL (silt) 310 NL (clay)	NL (all soil types)				3 (sand) 4-10 (silt) 4-20 (clay)		NL (all soil types)		NL (all soil types)		NL (all soil types)		NL (all soil types)			40		4,000			
CRC CARE - HSL (vapour intrusion, intrusive maintenance worker - shallow trench)																						NL (C6-C10) 77 NL (sand) 250 NL (silt) 350 NL (clay)	NL (>C10-C16) NL (all soil types and >NY(S)) (>C10-C16)						NL (all soil types)		NL (all soil types)		NL (all soil types)		NL (all soil types)								
CRC CARE - HSL D (vapour intrusion)																						260 NL (sand) 250-590 (silt) 310 NL (clay)	NL (all soil types and >NY(S)) (>C10-C16)				3 (sand) 4-6 (silt) 4-9 (clay)		NL (all soil types)		NL (all soil types)		230 NL (sand) NL (silt) NL (clay)		NL (all soil types)								
CRC CARE - HSL D (direct contact)																						26000 (C6-C10)	20000 (>C10-C16)	27,000	38,000		430		99,000		27,000		81,000		11,000								
CRC CARE - HSL (direct contact, intrusive maintenance worker - shallow trench)																						82,000 (C6-C10)	62,000 (>C10-C16)	85,000	120,000		1,100		120,000		85,000		130,000		29,000								
ASC NEPM - EIL/ESL (commercial / industrial)	160[a]				310 total[a] Cr(III)		85-1,200[a]		1,800[a]		55-960[a]		110-2,000[a]									215 (coarse / fine)	170 (coarse / fine)	1,700 (coarse) 2,500 (fine)	3,300 (coarse) 6,600 (fine)		75 (coarse) 95 (fine)		135 (coarse / fine)		165 (coarse) 185 (fine)		180 (coarse) 95 (fine)		370[a]	1.4 (coarse / fine)							
IB105 - Level 1 (no asbestos)	20		3		50		100		300		60		200		1		65				1,000	65 EIL C9				1,000 EIL C36	1		1		3		14			0.08			20			
IB105 - Level 2 (low level contaminated soil)	200	0.5	40	0.1	500	0.5	2,000	10	1,200	0.5	600	1	14,000	25	30	0.01	650				5,000	650 EIL C9				5,000 EIL C36	5	50	100	1,400	100	3,000	180	5,000		2	0.5		0.5	40			
IB105 - Level 3 (contaminated soil)	750	5	400	0.5	5,000	5	7,500	100	3,000	5	3,000	8	50,000	250	110	0.1	1,000				10,000	1,000 EIL C9				10,000 EIL C36	50	500	1,000	14,000	1,080	30,000	1,800	50,000		20	5		200				

Sample ID	Location	Date Sampled	Sample Depth (m)	Lab	Soil Type / Units																																								
						mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	g/kg			
BH01/0.2	Road 2	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	**13**	<0.1	**28**	<0.1	<5	<0.1	**108**	<0.1	**31**	<0.1	<0.1	<0.001						<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	No	
BH01/0.7	Road 2	08-Dec-25	0.7	ALS	Gravelly clay	<5	<0.1	<1	<0.05	**11**	<0.1	**57**	<0.1	**9**	<0.1	**11**	<0.1	**112**	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
QA/QC1	Duplicate from BH01/0.7	08-Dec-25	0.2	ALS	Gravelly clay	<5	<0.1	<1	<0.05	**14**	<0.1	**58**	<0.1	**6**	<0.1	**32**	<0.1	**93**	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
BH02/0.2	Road 2	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1		**21**		**36**		<5	<0.1	**55**		**33**		<0.1							<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05						
BH02/0.7	Road 2	08-Dec-25	0.7	ALS	Gravelly clay	**9**	<0.1	<1		**11**		**28**		**8**	<0.1	**14**		**27**		<0.1		<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05	No[1]	No	No	
BH03/0.2	Road 2	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1		**8**		**18**		<5		**54**		**24**		<0.1							<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05						
BH03/0.7	Road 2	08-Dec-25	0.7	ALS	Sandy clay	<5	<0.1	<1		**31**		**23**		<5	<0.1	**48**		**32**		<0.1		<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05	No[1]	No	No	
BH04/0.2	Road 1 and Road 2 overlap	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	**16**	<0.1	**40**	<0.1	<5	<0.1	**48**	<0.1	**36**	<0.1	<0.1	<0.001																										
BH04/0.7	Road 1 and Road 2 overlap	08-Dec-25	0.7	ALS	Silty sand	**13**	<0.1	<1	<0.05	**57**	<0.1	**67**	<0.1	**30**	<0.1	**65**	**0.1**	**93**	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	**Yes**	**Yes**	
BH05/0.2	Road 3	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	**10**	<0.1	**29**	<0.1	<5	<0.1	**43**	<0.1	**33**	**0.2**	<0.1	<0.001																										
BH05/0.7	Road 3	08-Dec-25	0.7	ALS	Sandy clay	**5**	<0.1	<1	<0.05	**41**	<0.1	**32**	<0.1	**8**	<0.1	**23**	<0.1	**29**	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	**Yes**	No	
BH06/0.2	Road 3	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1		**11**		**31**		<5		**48**		**32**		<0.1							<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05						
BH06/0.7	Road 3	08-Dec-25	0.7	ALS	Clay	<5	<0.1	<1		**38**		**30**		**5**		**24**		**13**		<0.1		<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2		<0.5		<0.5		<0.5		<1	<0.05		<0.05		<0.05	No[1]	No	No	
BH07/0.2	Road 3	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1		**2**		**16**		<5		**5**		**7**		<0.1																										
BH07/0.5	Road 3	08-Dec-25	0.5	ALS	Gravelly clay	<5	<0.1	<1		**28**		**40**		**7**		**12**		**35**		<0.1		<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	No	
BH08/0.2	Road 3	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	<5	<0.1	**11**	<0.1	<5	<0.1	**3**	<0.1	<5	<0.1	<0.1	<0.001																										
QA/QC2	Duplicate from BH08/0.2	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	**13**	<0.1	**59**	<0.1	<5	<0.1	**59**	<0.1	**35**	<0.1	<0.1	<0.001																										
BH08/0.5	Road 3	08-Dec-25	0.5	ALS	Sandy, gravelly silt	<5	<0.1	<1	<0.05	**8**	<0.1	**111**	<0.1	**6**	<0.1	**12**	<0.1	**121**	**0.1**	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	No	
BH09/0.2	Road 4	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	**6**	<0.1	**11**	<0.1	<5	<0.1	**39**	<0.1	**16**	<0.1	<0.1	<0.001																										
BH09/0.5	Road 4	08-Dec-25	0.5	ALS	Sandy, gravelly silt	<5	<0.1	<1	<0.05	**45**	<0.1	**44**	<0.1	<5	<0.1	**110**	<0.1	**49**	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	**Yes**	
BH11/0.2	Link Road	08-Dec-25	0.2	ALS	Ballast material	<5	<0.1	<1	<0.05	**10**	<0.1	**55**	<0.1	<5	<0.1	**13**	<0.1	**24**	<0.1	<0.1	<0.001																										
BH11/0.7	Link Road	08-Dec-25	0.7	ALS	Gravelly clay	<5	<0.1	<1	<0.05	**28**	<0.1	**32**	<0.1	**6**	<0.1	**15**	<0.1	**11**	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No[1]	No	No	

Summary Statistics - ALL (values <LOR have been assigned 1/2 LOR for statistical calculations and QA/QC samples have been excluded)																																												
Number of Data Points	10	12	20	12	10	20	12	10	20	12	10	20	12	20	12	20	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Number of Detects	3	0	0	0	9	0	0	8	0	0	8	0	2	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum	2.50	<0.1	<1	<0.05	1.00	<0.1	11.00	<0.1	2.50	<0.1	3.00	0.05	2.50	0.05	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
Maximum	13.00	<0.1	<1	<0.05	**57.00**	<0.1	**111.00**	<0.1	30.00	<0.1	**110.00**	0.10	**121.00**	0.20	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
Median	2.50				14.50		31.50		2.50		31.50	0.05	31.50	0.05																															
Arithmetic Mean	3.48				21.80		36.95		5.45		38.50	0.06	38.03	0.07																															
Geometric Mean	3.00				14.63		31.66		4.03		26.15	0.06	27.18	0.06																															
Standard Deviation	2.7				17.02		22.80		6.22		31.48	0.02	32.73	0.04																															
95th Percentile	5.40				45.60		58.00		8.10		69.30	0.10	94.90	0.10																															
95th Percentile	9.20				51.30		69.20		10.05		108.10	0.10	112.45	0.15																															
95% Confidence Interval	3.07				7.65		9.99		4.31		11.80	0.03	14.71	0.06																															
95% UCL (Mean + 95% Confidence Interval)	6.54				29.45		46.94		9.76		52.30	0.09	52.74	0.13																															

Summary Statistics - BALLAST (values <LOR have been assigned 1/2 LOR for statistical calculations and QA/QC samples have been excluded)																																												
Number of Data Points	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Detects	0	0	0	0	9	0	10	0	0	0	10	0	9	1	0	0																													
Minimum	<5	<0.1	<0.1	<0.05	<2	0.05	11.00	<0.1	<5	<0.1	21.00	<0.1	<5	<0.1	<0.1	<0.001																													
Maximum	<5	<0.1	<0.1	<0.05	21.00	0.05	55.00	<0.1	<5	<0.1	**108.00**	<0.1	36.00	0.20	<0.1	<0.001																													
Median	<5	<0.1	<0.1	<0.05	10.00	0.05	28.50	<0.1	<5	<0.1	**42.00**	<0.1	27.50	0.05	<0.1	<0.001																													
Arithmetic Mean	<5	<0.1	<0.1	<0.05	9.80	0.05	27.50	<0.1	<5	<0.1	43.60	<0.1	23.85	0.08	<0.1	<0.001																													
Geometric Mean	<5	<0.1	<0.1	<0.05	7.35	0.05	24.22	<0.1	<5	<0.1	28.50	<0.1	19.04	0.06	<0.1	<0.001																													
Standard Deviation	n/a	n/a	n/a	n/a	6.07	n/a	14.01	n/a	n/a	n/a	31.44	n/a	11.71	0.06	n/a	n/a																													
95th Percentile	n/a	n/a	n/a	n/a	16.50	n/a	41.50	n/a	n/a	n/a	67.50	n/a	33.90	0.13	n/a	n/a																													
95th Percentile	n/a	n/a	n/a	n/a	18.75	n/a	48.25	n/a	n/a	n/a	87.75	n/a	34.65	0.16	n/a	n/a																													
95% Confidence Interval	n/a	n/a	n/a	n/a	3.97	n/a	8.68	n/a	n/a	n/a	19.40	n/a	7.65	0.12	n/a	n/a																													
95% UCL (Mean + 95% Confidence Interval)	n/a	n/a	n/a	n/a	13.77	n/a	36.18	n/a	n/a	n/a	**62.00**	n/a	31.50	0.20	n/a	n/a																													

Summary Statistics - FINES (values <LOR have been assigned 1/2 LOR for statistical calculations and QA/QC samples have been excluded)																																												
Number of Data Points	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Number of Detects	3	0	0	0	10	0	10	0	8	0	10	2	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum	<5	<0.1	<0.1	<0.05	8.00	0.05	21.00	<0.1	<5	<0.1	11.00	<0.1	11.00	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
Maximum	13.00	<0.1	<0.1	<0.05	**57.00**	0.05	**111.00**	<0.1	30.00	<0.1	**110.00**	0.10	**121.00**	0.10	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
Median	2.50	<0.1	<0.1	<0.05	34.50	0.05	56.00	<0.1	6.50	<0.1	19.00	0.05	33.50	0.05	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
Arithmetic Mean	4.45	<0.1	<0.1	<0.05	33.80	0.05	46.40	<0.1	8.40	<0.1	33.40	0.07	52.20	0.06	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
Geometric Mean	3.59	<0.1	<0.1	<0.05	29.10	0.05	41.39	<0.1	6.51	<0.1	23.99	0.06	38.81	0.06	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05			
Standard Deviation	3.66	n/a	n/a	n/a	15.95	n/a	26.51	n/a	7.90	n/a	32.33	0.03	40.95	0.02	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
95th Percentile	9.40	n/a	n/a	n/a	51.60	n/a	71.40	n/a	11.10	n/a	69.50	0.10	112.90	0.08	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
95th Percentile	11.20	n/a	n/a	n/a	54.30	n/a	91.20	n/a	20.55	n/a	89.75	0.10	116.95	0.09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
95% Confidence Interval	4.14	n/a	n/a	n/a	9.89	n/a	16.43	n/a	5.48	n/a	20.04	0.04	25.38	0.04	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
95% UCL (Mean + 95% Confidence Interval)	8.59	n/a	n/a	n/a	43.69	n/a	62.83	n/a	13.88	n/a	53.44	0.10	77.58	0.10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Legend:

	Human health criteria (National)
	Ecological criteria (National)
	Disposal criteria (Tasmania)
	Ballast
	Fines (formation material)
	Proposed reuse location
Bold	Reported concentration equals or exceeds at least one of the human health criteria
Bold	Reported concentration equals or exceeds at least one of the ecological criteria
Bold	Reported concentration equals or exceeds at least one of the human health criteria plus at least one of the ecological criteria
	Reported concentration equals or exceeds IB105 Level 1 - fill material and/or PFAS unlined landfill criterion
	Reported concentration equals or exceeds IB105 - Level 2 - low-level contaminated soil and/or PFAS single lined landfill criterion
	Reported concentration equals or exceeds IB105 - Level 3 - contaminated soil and/or PFAS double lined landfill criterion
Bold	Reported concentration is greater than the LOR
1 - Grey	Reported concentration is below the LOR
A	Generic EIL
a	ACL range from ASC NEPM classification samples with most conservative values adopted as conservative site-specific EILs
C	Generic ACL
D	Carcinogenic PAHs (as BaP TEQ at zero)
E	No - no asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining
HIL / HSL	Health Investigation Level / Health Screening Level
EIL / ESL	Ecological Investigation Level / Ecological Screening Level
LOR	Limit of reporting
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene
ACL	Added contaminant limit
IB105	Does not apply to material classified as potential acid sulfhate soil (PASS) or per - and poly – fluoroalkyl substances (PFAS)
TCLP	Toxicity Characteristic Leaching Procedure

References:

ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure 1999, amended 2013
CRC CARE	Technical Report No. 10 Health Screening Levels for Petroleum Hydrocarbons in Soil and Groundwater September 2011, including errata August 2012
IB105	Information Bulletin No. 105 - Classification and Management of Contaminated Soil for Disposal, Version 3, 2018, Environment Protection Authority Tasmania

Exhibited

SUMMARY RESULTS - DUPLICATES (SOIL)

Project No: P.25.1573
Project Name: ETJ Waste Soil Classification

			Analyte Group	Heavy Metals																TPH					TRH					BTEXN										PAH					Asbestos and Fibre		
			Analyte	Arsenic	Arsenic - TCLP	Cadmium	Cadmium - TCLP	Chromium (total)	Chromium (total) - TCLP	Copper	Copper - TCLP	Lead	Lead - TCLP	Nickel	Nickel - TCLP	Zinc	Zinc - TCLP	Mercury (total)	Mercury (total) - TCLP	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Benzene - TCLP	Toluene	Toluene - TCLP	Ethyl-benzene	Ethyl-benzene - TCLP	Total Xylenes	Total Xylenes - TCLP	Naphthalene	Benzo(a)pyrene	Benzo(a)pyrene - TCLP	Carcinogenic PAHs (as BaP TEQ)	Carcinogenic PAHs (as BaP TEQ - TCLP	Total PAHs	Asbestos (presence / absence)	Synthetic Mineral Fibre (presence / absence)	Organic Fibre (presence / absence)
			ALS LORs	5		1		2		5		5		2		5		0.1		10	50	100	100	50	10	50	100	100	50	0.2		0.5		0.5		0.5		1	0.05		0.05		0.05	0.1	-	-
Sample ID	**Date sampled**	**Laboratory**	**Units**	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	µg/L	mg/kg	mg/kg	µg/L	mg/kg	µg/L	mg/kg	g/kg	-	-
BH01/0.7	8/12/2025	ALS		<5	<0.1	<1	<0.05	**11**	<0.1	**57**	<0.1	**9**	<0.1	**11**	<0.1	**112**	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	No	No	No
QA/QC1	8/12/2025	ALS		<5	<0.1	<1	<0.05	**14**	<0.1	**58**	<0.1	**6**	<0.1	**32**	<0.1	**93**	<0.1	<0.1	<0.001	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<1	<0.5	<2	<0.5	<2	<0.5	<2	<1	<0.05	<0.5	<0.05	<0.5	<0.05	--	--	--
RPD				ND	ND	ND	ND	24	ND	2	ND	NA	ND	98	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
BH08/0.2	8/12/2025	ALS		<5	<0.1	<1	<0.05	<2	<0.1	**11**	<0.1	<5	<0.1	**3**	<0.1	<5	<0.1	<0.1	<0.001	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
QA/QC2	8/12/2025	ALS		<5	<0.1	<1	<0.05	**13**	<0.1	**35**	<0.1	<5	<0.1	**59**	<0.1	**35**	<0.1	<0.1	<0.001	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RPD				ND	ND	ND	ND	NA	ND	**104**	ND	ND	ND	**181**	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Legend:

	Passed criteria
	Could not be determined (e.g. not tested for that analyte or no RPD limit applies)
	Failed criteria
LOR	Limit of reporting
Bold	Value is greater than the LOR
< Grey	Reported concentration is below the LOR
--	Not tested
RPD	Relative percentage difference
ND	Not determined as one value is less than LOR
NA	No RPD limit applies
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene
LOR	Limit of reporting
TCLP	Toxicity Characteristic Leaching Procedure

$$RPD = \frac{Result1 - Result2}{Mean\ Result} * 100$$

No RPD limit applies where values reported by laboratory are less than two times the LOR

Where values reported by laboratory are less than 20 times the LOR, then the calculated RPD should be less than 50%

Where values reported by laboratory are 20 to 100 times the LOR, then the calculated RPD should be less than 30%

Where values reported by laboratory are greater than 100 times the LOR, then the calculated RPD should be less than 15%

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SUMMARY RESULTS - TRIP BLANK (SOIL)

Project No: P.25.1573
Project Name: ETJ Waste Soil Classification

			Analyte Grouping	**Total Petroleum Hydrocarbons (TPH)**					**Total Recoverable Hydrocarbons (TRH)**					**BTEXN**				
			Analyte	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene
			ALS LORs	10	50	100	100	50	10	50	100	100	50	0.2	0.5	0.5	0.5	1
Sample ID	**Date sampled**	**Laboratory**	**Units**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trip Blank	08-Dec-25	ALS		<10	--	--	--	--	<10	--	--	--	--	<0.2	<0.5	<0.5	<0.5	<1
QA/QC Assessment				P	--	--	--	--	P	--	--	--	--	P	P	P	P	P

Legend:

P	Passed
D	Detected
--	Not tested
Bold	Reported concentration is greater than the laboratory LOR
Grey	Reported concentration is below the LOR
LOR	Limit of reporting

Exhibited

SUMMARY RESULTS - RINSATES

Project No: P.25.1573
Project Name: ETJ Waste Soil Classification

			Analyte Grouping	Total Heavy Metals								Total Petroleum Hydrocarbons (TPH)					Total Recoverable Hydrocarbons (TRH)					BTEXN					Polycyclic Aromatic Hydrocarbons (PAH)		
			Analyte	Arsenic	Cadmium	Chromium (total)	Copper	Lead	Nickel	Zinc	Mercury (total)	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	Benzo(a)pyrene	Carcinogenic PAHs (as BaP TEQ (zero))	Total PAHs
			ALS LORs	0.001	0.0001	0.001	0.001	0.001	0.001	0.005	0.0001	20	50	100	50	50	20	100	100	100	100	1	2	2	2	5	0.5	0.5	0.5
Sample ID	**Date sampled**	**Laboratory**	**Units**	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
RB01	08-Dec-25	ALS		<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.0001	<20	<50	<100	<50	<50	<20	<100	<100	<100	<100	<1	<2	<2	<2	<5	<0.5	<0.5	<0.5
QA/QC Assessment				P	P	P	P	P	P	D	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Legend:

P	Passed
D	Detected
–	Not tested
Bold	Reported concentration is greater than the LOR
< Grey	Reported concentration is below the LOR
LOR	Limit of reporting

Exhibited

P&S, Re: P26.0676 – TasRail Western Junction Waste Classification-Rev00, August 2026

Attachment E

pitt&sherry

Exhibited

Pitt & Sherry
(Operations) Pty Ltd
ABN 67 140 184 309

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pittsh.com.au

Located nationally —
Melbourne
Sydney
Brisbane
Hobart
Launceston
Newcastle
Devonport

10 August 2026

Mr Bowen Wagenknecht
Environmental Advisor
Tasmanian Railway Pty Ltd
11 Techno Park Drive
KINGS MEADOWS Tasmania 7249

Dear Bowen,

Re: P.26.0676 – TasRail Western Junction Waste Classification – Rev00

1. Background

Tasmanian Railway Pty Ltd (TasRail) is exploring an opportunity to reuse spoil material within an approximate 2,140 square metre (m^2) void area at Western Junction (WEJ) (refer to Figure 1 and Figure 2). The volume of the void has been estimated by TasRail at approximately 5,200 cubic metres (m^3). TasRail is proposing to backfill the void with existing stockpiled and in-situ soils from the following:

- Historical stockpiled soils within the void (referred to as the Void Stockpile) which consist of approximately 1,785 m^3
- Stockpiled material which is located across the road (referred to as the Roadside Stockpile) which consists of approximately 285 m^3; and
- Stockpiled material adjacent to a tower (referred to as the Tower Stockpile) which consists of approximately 65 m^3.

Sampling of the stockpiles and base of the void earmarked for backfilling at WEJ was completed by TasRail at locations shown in Figure 3 (overview) with detailed locations shown in Figure 4 to Figure 6.

Reporting has been completed by Pitt & Sherry (Operations) Pty Ltd (pitt&sherry) via this letter report, which provides a summary of sampling works and findings.

Exhibited



Figure 1: Overview of the Western Junction Void area (supplied by TasRail)



Figure 2: Overview of the void location within Western Junction (supplied by TasRail)

Exhibited

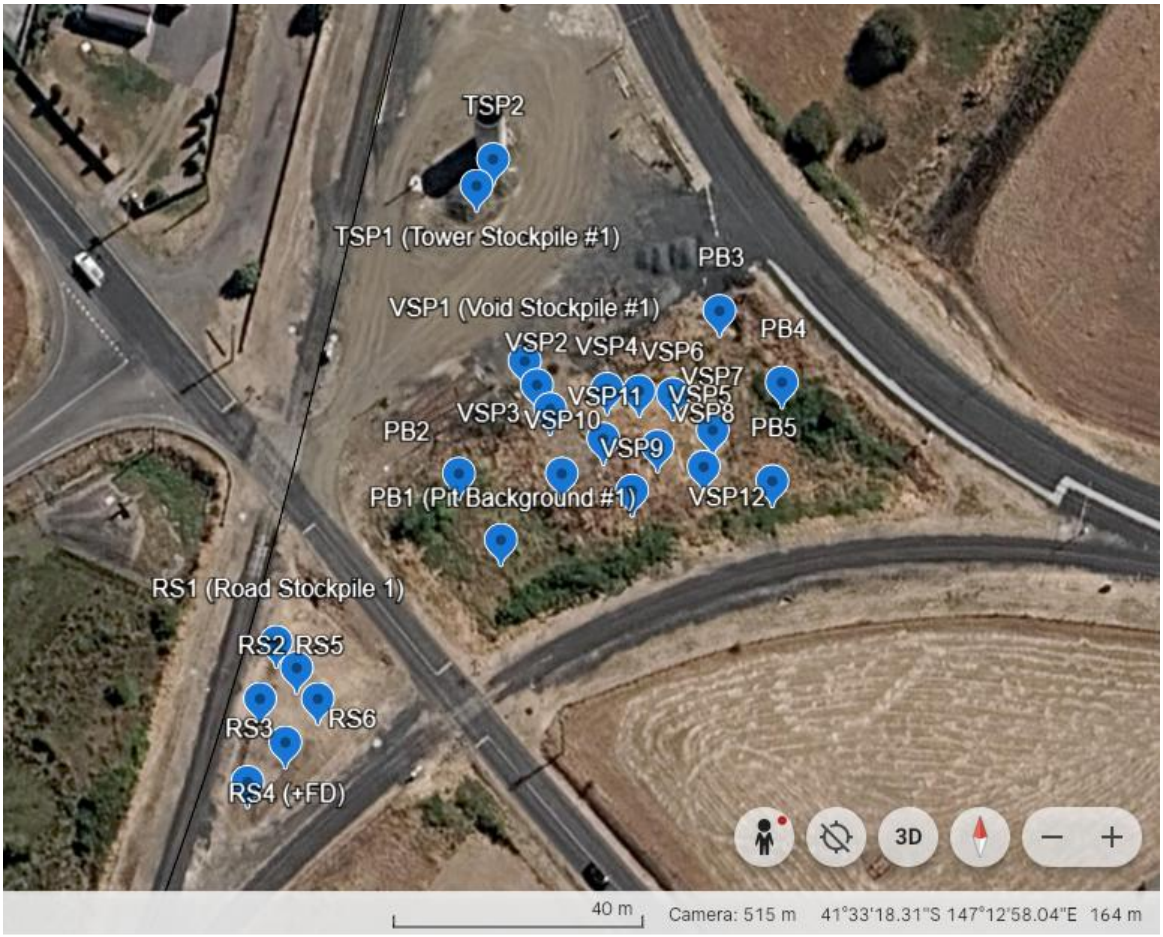


Figure 3: Overview of sampling locations within Western Junction (supplied by TasRail)



Figure 4: Detailed view of void base and Void Stockpile sampling locations (supplied by TasRail)

Exhibited

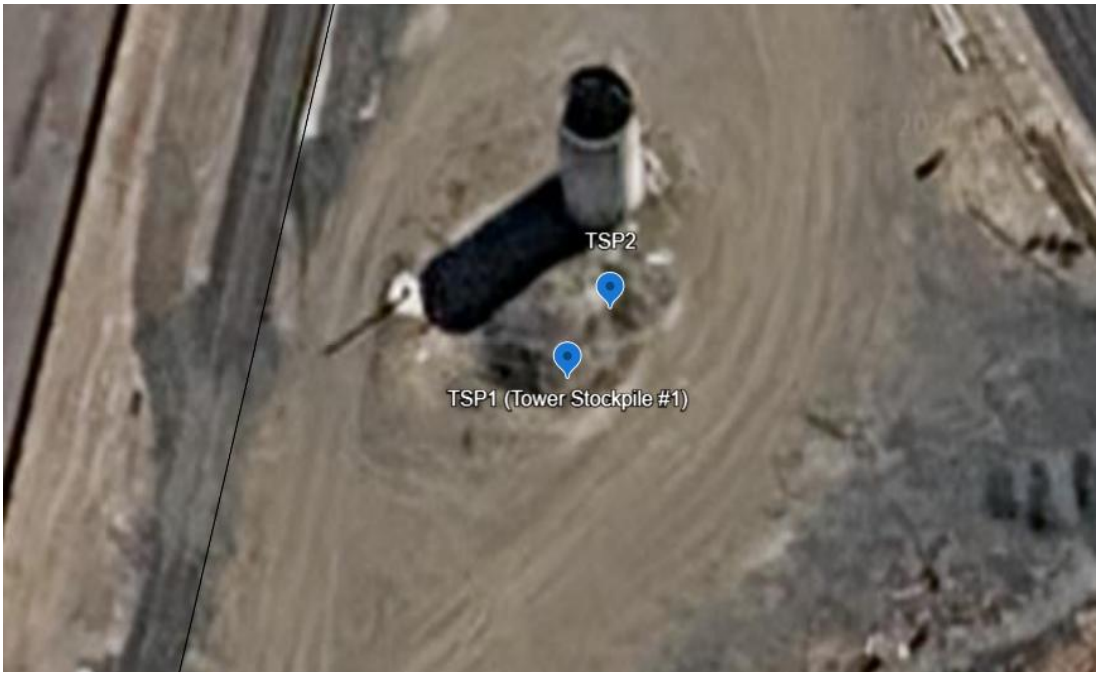


Figure 5: Detail of Tower Stockpile sampling locations (supplied by TasRail)



Figure 6: Detail of Road Stockpile sampling locations (supplied by TasRail)

Exhibited

2. Objectives

The objectives of this waste classification and reuse area sampling and reporting were:

- To collect soil samples from the base of the proposed reuse area, i.e. the void (also referred to as the pit, e.g. samples prefixed PB for pit base), and from the existing stockpiles located at WEJ (samples prefixed RS for Roadside Stockpile, TS for Tower Stockpile and VS for Void Stockpile) and, to assess the suitability of the stockpiled soils for reuse within the void
- To compile and compare analytical results to ASC NEPM[1], IB105[2] and to the proposed reuse area's (i.e. void) concentrations; and
- To compile a brief letter report (this document), including supporting documentation, findings and reuse recommendations.

3. Completed Works

3.1 Sampling Details

Details of the waste classification and reuse area sampling are provided in Table 1.

Table 1: Sampling details

Activity	Details
Sampling date	• 3 June 2026
Sample collection	• Anthony Williams (Environmental Specialist, TasRail) and Bowen Wagenknecht (Environmental Advisor, TasRail)
Sample locations	• Sample locations are shown in Figure 3 to Figure 6
Sampling rationale	• TasRail conducted sampling at WEJ in general accordance with ASC NEPM and EPA Victoria Publication 702.2 (Soil sampling for waste soils) ○ **1,785 m^3 Void Stockpile**: based on a homogenous composition, and in accordance with EPA Vic Publication 702.2 for volumes greater than 250 m^3, a total of **12 samples** were taken across the stockpile at different depths to generally classify the material. ○ **285 m^3 Roadside Stockpile**: Based on a homogenous composition (confidently assumed given this material was placed as part of historical project work), **6 samples** were taken across the stockpile at different depths to generally classify the material. ○ **65 m^3 Tower Stockpile**: Based on a homogenous composition (confidently assumed given this material was placed as part of historical project work), **2 samples** were taken across the stockpile at different depths to generally classify the material. ○ **2,150 m^2 Pit Base (reuse area): 5 samples** were taken to characterise background levels in accordance with AS 4482.1 – 2005 Sample Density Table. • Field data including descriptions and locations were captured for each collected sample (refer to Attachment A). • Field quality assurance and quality control (QA/QC) ○ 2 duplicate samples were taken

[1] *National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended 2013* (ASC NEPM).
[2] *Information Bulletin No. 105 - Classification and Management of Contaminated Soil for Disposal*, Version 3, 2018, Environment Protection Authority Tasmania

Exhibited

Activity	Details
	○ A rinsate sample was taken from the reused digging tool (pick) ○ Experienced environmental staff completed the sampling • A sample of geofabric encountered at one sample location was tested for presence of asbestos fibres • Samples were placed in a chilled esky prior to dispatch
Contaminants of potential concern (CoPCs)	Samples were tested for the expected CoPCs related to TasRail operations and tested CoPCs comprised: • Hydrocarbons – benzene, toluene, ethyl benzene and xylenes and naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAHs) and total petroleum hydrocarbons / total recoverable hydrocarbons (TPH / TRH) (due to rolling stock oils, and potential cargo) • Metals – arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), zinc (Zn) and mercury (Hg).
Sample containers	• Samples were collected in laboratory-supplied receptacles, suitable for the CoPCs to be tested.
Sample collection	• Soil samples collected from stockpile and reuse area locations using a pick and gloved hand; and • The sample containers were filled with minimal headspace (where possible), sealed, labelled, and placed on ice in two eskies.
Sample description	• Sample descriptions were noted on the field sheet (Attachment A); and • Representative images are also provided on the field sheet (Attachment A).
Decontamination	Sampling contamination and cross-contamination mitigation procedures included: • The pick was wiped clean between sampling locations • Single-use disposable nitrile gloves were used and changed after the collection of each sample • New laboratory-supplied receptacles were used for each sample; and • Each sample container was sealed immediately upon filling.
Samples for analysis	• Primary samples: ○ Waste classification – all stockpile soil samples were submitted to the laboratory for analysis of total concentrations of identified CoPCs ○ Reuse area – all pit base soil samples were submitted to the laboratory for analysis of total concentrations of identified CoPCs • QA/QC samples: ○ Two duplicate samples, FD01 and FD02, were collected from sampling locations PB2 and RS4 respectively; and ○ One rinsate sample (Rinsate_PP) was collected from the pick.
Sample transport	• A Chain of Custody (CoC) form was completed, dated, and submitted to the laboratory with the single batch of samples (Attachment B); and • The samples were sent by courier on the day after collection for overnight transport to the ALS Laboratory Springvale, Victoria, for analysis under CoC conditions.
Laboratory analysis	• All samples were submitted to the National Association of Testing Authorities (NATA)-accredited ALS Laboratory in Springvale (Accreditation No. 825) for testing of nominated CoPCs; and • The laboratory documents are provided in Attachment B.
Holding times	• All samples were received by the laboratory within the required holding times for the individual parameters tested • Samples were received chilled at between 3.9 and 5.2 degrees Celsius (°C) which is within the recommended maximum temperature of 6°C (important for preservation of analytes with short holding times such as volatile organic compounds (VOCs)); and

Exhibited

Activity	Details
	• Samples were extracted for analysis by the laboratory within the required holding times for the individual parameters tested.
Quality assurance and quality control (QA/QC)	• Sampling was undertaken by TasRail environmental staff experienced with soil and contaminant sampling. The sampling methodology was agreed prior to sampling with a Senior Principal Environmental Consultant (Fiona Keserue-Ponte of pitt&sherry) and CEnvP SC[3] • Refer to 'decontamination' details above for sample handling • Refer to 'samples for analysis' details above for QA/QC samples • All samples were placed in portable chiller boxes and kept chilled on ice • The samples were sent by courier on the day after collection for overnight transport to the ALS Laboratory Springvale, Victoria, for analysis under CoC conditions; and • ALS is a NATA-accredited laboratory and runs internal QA/QC checks which are documented in its quality control and interpretive quality control reports (Attachment B) and discussed in Section 4.6.

4. Observations and Analytical Results

4.1 Observations

Soil descriptions – refer to the field sheet (Attachment A) for detailed sample descriptions. In summary:

- Pit Base – profile consisted of dark brown clayey loam
- Void Stockpile – profile consisted primarily of clayey silts, with some gravels and loam
- Roadside Stockpile – profile consisted of clayey silts; and
- Tower Stockpile – profile consisted of clayey silts.

Odour – no hydrocarbon odours were noted during sampling. This is further confirmed by the laboratory results for volatile (BTEXN), volatile TPH (C_6-C_9) / TRH (F1 fractions) and semi-volatile TPH (C_{10}-C_{14}) / TRH (F2 fractions) which were all below the laboratory limits of reporting (LORs) (refer to Attachment B & Attachment C).

Staining – no staining was observed (refer to Attachment A).

Other observations – no building demolition rubble (BDR) or potential asbestos-containing materials (ACM) were observed at any of the investigation locations during sampling. Some bitumen was apparent on the surface of the Void Stockpile at location VSP6. Geofabric was also present at Void Stockpile location VSP7 (Attachment A). Geofabric was sampled to confirm presence or absence of asbestos containing materials. The result is discussed in Section 4.3.

[3] Certified Environmental Practitioner Site Contamination specialist (CEnvP SC), certified under the Environment Institute of Australia and New Zealand.

Exhibited

4.2 Analytical Results and Comparison to Adopted Assessment Criteria

The summary table of analytical results compared to ASC NEPM and IB105 criteria is provided in Attachment C.

Assessment of geofabric found at VSP7 for the presence / absence of asbestos containing materials was completed by Prensa and documented in: *Asbestos Bulk Sample Analysis Report – Western Junction, Evandale Road, Western Junction TAS*, June 2026 (refer to Attachment D).

Copies of the ALS Laboratory Certificate of Analysis and related documentation including Chain of Custody documentation, Sample Receipt Notification and QA/QC reports are provided in Attachment B.

4.3 Findings

4.3.1 Indicative IB105 classification of material from sampled locations

Reported concentrations of tested CoPCs for the stockpiles demonstrate that materials from all WEJ stockpiles are classified under IB105 as **Level 2 – low level contaminated soil** based on the following:

- **Void Stockpile** – 95% upper confidence limit on the mean (UCL) of reported concentrations of Cr, Ni, and Zn.
- **Roadside Stockpile** – 95% UCL of reported concentrations of As, Cu, and Ni. One individual exceedance of Level 1 criteria for benzo(a)pyrene (B(a)P) also occurred in one sample; and
- **Tower Stockpile –** individual reported concentrations of Ni, Zn, and one B(a)P concentration exceeded Level 1 criteria; 95% UCL were also calculated although only two samples are included in the Tower Stockpile dataset.

Furthermore, for comparison purposes, Pit Base (PB) samples would also be classified as Level 2 low level contaminated soil based on 95% UCL of reported concentrations of Cr, Ni, if they were to be excavated and disposed offsite, which they are not. In addition, one location reported a Level 2 Zn concentration.

4.3.2 Proposed Reuse Area Characterisation

Site assessment criteria are typically selected based on the following rationale:

- Land zoning and the most sensitive use permissible under that zoning: the void area is within an area that is zoned ‘Utilities’ which is consistent with commercial / industrial land use described under the ASC NEPM
- Proposed land use or new zoning: no change in land use is proposed; and
- Onsite or adjacent sensitive receptors, including human and ecological: the closest residential receptor is approximately 100 m southeast of the void area. The void area is located in the upper reaches of the drainage line which feeds to Springvale Creek, however the void is effectively bunded within the triangular area formed by the junction of the South Line and Western Line. Furthermore, the surrounding catchment surface water flows will bypass the void via the planned installation of concrete culverts and pipework.

On the basis of the above, commercial / industrial criteria have been adopted for this stockpile soils reuse assessment.

Reported concentrations of tested CoPCs within the proposed reuse area (the void / Pit Base samples) are:

- **Human health** – within the ASC NEPM commercial / industrial health investigation levels (HILs) and health screening levels (HSLs) for all parameters

Exhibited

- **Ecological** – generally within than the ASC NEPM commercial / industrial ecological investigation levels (EILs) / **most conservative** added contaminant limits (ACLs)[4] and ecological screening levels (ESLs) with the exception of the following:
    - Total Ni – concentrations ranged from 54 to 91 mg/kg with an average concentration of 73 mg/kg and a 95% UCL of 85 mg/kg, which exceeds the most conservative EIL of 55 mg/kg[5]; and
    - Total Zn – concentrations ranged from 74 to 213 mg/kg with an average concentration of 127 mg/kg and a 95% UCL of 178 mg/kg, which exceeds the most conservative EIL of 110 mg/kg[6].

4.3.3 Waste spoil suitability for reuse

WEJ stockpile material samples were compared to ASC NEPM commercial / industrial HILs / HSLs and EILs / ESLs (as applicable) to assess their suitability for reuse within the void area from a human health and ecological risk perspective. Based on the similarity of reported results within individual stockpile locations (roadside stockpile, tower stockpile, and void stockpile) these are discussed as an aggregate unless otherwise noted.

Reported concentrations of tested CoPCs within the stockpiled materials are:

- **Human health** – within the ASC NEPM commercial / industrial HILs and HSLs for all parameters
- **Ecological** – generally within than the ASC NEPM commercial / industrial EILs / **most conservative** added ACLs[7] and ESLs with the exception of the following:
    - Total Cu – RS03 reported a total concentration of 321 mg/kg, which exceeds the conservative site-specific EIL of 85 mg/kg[8], and the calculated 95% UCL (185 mg/kg) for the Roadside Stockpile was also above the EIL. Total Cu concentrations at all other sampled locations / stockpiles were within the conservative Cu EIL
    - Total Ni – concentrations ranged from 21 to 172 mg/kg with the majority exceeding the conservative EIL of 55 mg/kg. The 95% UCL of each of the stockpiles are also above the conservative Ni EIL; and
    - Total Zn – concentrations ranged from 41 to 598 mg/kg with the majority exceeding the conservative EIL of 110 mg/kg. The 95% UCL of each of the stockpiles are also above the conservative Zn EIL.

Observations made during the sampling (and shown in photographs in Attachment A) report the presence of ballast / blue metal gravel throughout the stockpiles. These materials are generally naturally elevated in metals concentrations such as Cr, Ni, manganese and occasionally As.

The geofabric sample tested by Prensa returned a negative result for asbestos. Refer to Attachment D.

Considering the above, i.e. background concentrations in the void (pit base) and the reported concentrations in the WEJ stockpiles, the stockpile soils within the WEJ area are considered **suitable for reuse** in the void from a site use perspective (i.e. commercial / industrial use) given:

- Their concentrations are similar to the concentrations within the void (pit base). Comparison of 95% UCLs of the Pit Base samples against the combined stockpile samples shows that the stockpile samples have CoPC concentrations within the same order of magnitude as the Pit Base samples
- There are no exceedances of human health criteria
- The exceedances of ecological criteria are exceedances of very conservative adopted ACLs in the absence of site-specific background values

[4] Adopted as conservative EILs for several metals (Cr, Cu, Ni and Zn).
[5] Most conservative ACL adopted as the conservative Ni EIL.
[6] Most conservative ACL adopted as the conservative Zn EIL.
[7] Adopted as very conservative EILs for several metals: Cr, Cu, Ni and Zn.
[8] Most conservative ACL adopted as the conservative Cu EIL. Commercial / industrial ACLs for Cu range from 85 to 1,200 mg/kg with all reported total Cu concentrations below the upper ACL.

Exhibited

- Some metal exceedances are likely due to naturally occurring metals concentrations in the blue-metal gravels in the stockpiles, which would have very low bioavailability due to the solid nature of the gravels
- The void is located within a triangle formed by joining railway lines which does not have any significant ecological values; and
- The void is a hole in the ground into which the soils can be backfilled and will therefore be effectively contained and have very limited ecological exposure.

4.3.4 Assessment of suitability of spoil material for reuse within void area

As outlined above, the stockpiled WEJ soils are considered suitable for reuse within the void area. Based on the reported CoPC concentrations, the WEJ void area would optimally be backfilled in the following indicative order:

1. Tower Stockpile materials – ideally into the base of the void or not at surface
2. Roadside Stockpile materials – ideally into the base of the void or not at surface; and
3. Void Stockpile materials – ideally into the base of the void and covering the Tower and Roadside stockpile materials.

The order is indicative. The final desired topography and geotechnical properties may dictate the order of use. From a CoPC perspective, the Void Stockpile are considered the most suitable to be placed as 'capping' materials within the void.

4.4 IB105 Requirements

IB105 notes that the Environment Protection Authority Tasmania (EPA) encourages effective waste management by promoting on-site reuse, where appropriate, as the preferred option for dealing with surplus soil. An assessment of the environmental and human health hazards associated with the disposal / reuse option must be conducted by a suitably qualified environmental consultant. IB105 also notes that fill material may contain contaminants above background levels and therefore may not be suitable for all uses, in particular in sensitive human or ecological settings.

The suitability for reuse conclusions and the associated recommendations made above are consistent with the intent of IB105 and the *Environment Management and Pollution Control Act 1994* (EMPCA) and are based on:

- The reuse areas being within an operational commercial / industrial facility, in within the rail corridor
- The source areas of the WEJ stockpiles and the proposed reuse area (WEJ void) are all used for railway transport purposes
- The 95% UCL on the mean of the WEJ stockpiles have been compared to the 95% UCL of the void (reuse area) and the adopted ASC NEPM human health and ecological criteria for commercial / industrial use, and the concentrations in the reuse area are similar to those in the stockpiles, none of the concentrations exceed human health criteria and ecological exceedances are predominantly due to the presence of blue-metal gravel / ballast which is naturally high in some heavy metals (e.g. Ni) and those metals will not be readily bioavailable as they are bound into the gravel/rock matrix
- The Tower Stockpile reported 95% UCL BaP of 0.3 mg/kg and one individual concentration of 0.21 mg/kg BaP, both of which exceed IB105 Level 1 criterion, however they are within the ASC NEPM ESL of 1.4 mg/kg BaP in the commercial / industrial setting, and the recommendation is to bury this stockpile at the base of the void
- There are no sensitive human receptors on or within 100 m of the reuse area
- There are no sensitive ecological receptors within the reuse area as it is a triangle modified and effectively bunded by intersecting railway lines

Exhibited

- The soils will essentially be buried within the existing void and will have little to no ecological exposure. No groundwater is present in the void; and
- Relevant recommendations have been made (Section 5.2) to manage the existing WEJ stockpiles the nominated reuse area. Effective implementation of these recommendations should mitigate impacts.

4.5 Temporary Stockpiling

All efforts should be made to ensure that existing WEJ stockpiled materials are effectively contained, and ideally covered, to prevent dust generation and sediment runoff. The stockpiles should **not** be located near existing stormwater / drainage lines.

4.6 QA/QC assessment

The following provides a summary of the QA/QC assessment for the waste classification and reuse area sampling undertaken at WEJ.

Preservation: Sample Receipt Notification (Attachment B) indicated the samples were received chilled at between 3.9 and 5.2 °C which is within the recommended temperature range of below 6°C; temperature is important for preservation of analytes with short holding times such as VOCs.

Duplicates: Two blind field duplicate samples were taken from primary sample locations PB2 (duplicate FD01) and RS4 (duplicate FD02). Analytical results are tabulated in Attachment C, and laboratory reports are provided in Attachment B. Where these could be calculated, the relative percentage differences (RPDs) are within acceptable ranges for all tested parameters.

Rinsate: One rinsate sample was taken from the sampling tool (pick) and submitted to the laboratory for analysis as per the primary samples. Analytical results are tabulated in Attachment C, and laboratory reports are provided in Attachment B. All reported concentrations were below the LORs indicating that cross-contamination between samples from the sampling equipment was unlikely to have occurred and field sampling decontamination procedures between locations were adequate.

Trip Blank: No trip blank sample was taken as part of the sampling program. No odours or staining were observed whilst onsite, however, and reported volatile hydrocarbons concentrations were generally <LOR, hence cross-contamination of samples by VOCs is not likely.

Laboratory: The ALS laboratory QA/QC compliance assessment summary report is provided in Attachment B:

- Method blanks – no method blank outliers occurred
- Laboratory controls – no laboratory control outliers occurred
- Matrix spikes – no matrix spike outliers occurred
- Laboratory duplicates – one laboratory duplicate analysis returned a relative percentage difference (%RPD) for Cr based on sample VSP06 of 22.9% when the required limit is 0-20%. The reported Cr concentration at VSP06 was within the range of other reported values within Void Stockpile samples. This outlier demonstrates the heterogeneity of the soils, however given the number of samples in the dataset, the overall waste classification and soil characterisation for reuse is considered robust and fit for purpose for this assessment
- Surrogate recoveries – for all regular sample matrices, where applicable to the methodology, no surrogate recovery outliers occurred
- Holding times – no analysis holding time outliers occurred; and

Exhibited

- QC sample frequency – less than expected number of QC samples for PAH/Phenols for laboratory duplicates and matrix spikes in *water*. The reduced laboratory duplicates and matrix spike frequency does not change the conclusions of this assessment, since only one water sample was submitted as a rinsate, phenols were note a CoPC and PAHs were generally reported a very low or below LOR concentrations in soil samples, hence the risk of cross contamination from PAHs and phenols is considered very low.

On the basis of the QA/QC procedures applied during sampling (Table 1, Section 3.1) and the QA/QC results outlined and discussed above, the analytical data are considered to be representative of the concentrations of tested CoPCs in the sampled soils at the time of sampling and are suitable for the purposes of this waste classification and reuse area sampling assessment.

The Prensa report for the one geofabric sample is provided in Attachment D and includes NATA accreditation and asbestos testing in accordance with relevant standards.

5. Conclusions and Recommendations

5.1 Conclusions

In-situ and stockpile sampling was undertaken by TasRail within and adjacent to the WEJ void area. Analysis of submitted samples and waste classification reporting based on the sampling program has been conducted by pitt&sherry and documented within this letter report.

The **waste classification of onsite stockpiles (based on 95% UCL and individual concentrations)** shows the following:

- **Void Stockpile** – Level 2 (due to reported individual concentrations of As, Cr, Ni, Zn, and BaP)
- **Roadside Stockpile** – Level 2 (due to reported individual concentrations of As, Cr, Cu, Ni and BaP); and
- **Tower Stockpile** – Level 2 (due to reported concentrations of Ni, Zn, and BaP).

For comparison, **Pit Base (reuse area)** soils would also be classified as Level 2 (due to reported individual concentrations of Cr, Ni, and Zn).

When assessed against the ASC NEPM commercial / industrial site use criteria applicable to the Utilities zoning, all soils / materials sampled were within human health criteria and reported comparable concentrations to the soils sampled within the void / reuse area (Pit Base samples). Exceedances of conservative ecological criteria were reported both in the Pit Base samples as well as the proposed backfill stockpiled soils. Furthermore, the assessment made in Sections 4.3.4 and 4.4 suggest that these exceedances are more likely due to the adopted conservative ACLs, in lieu of EILs (in the absence of site-specific criteria / background), as they are similar to the void base samples, and are not considered to pose an ecological risk as backfill into the void, as the soils will be placed into a contained void within the effectively bunded WEJ track junction triangle.

Recommendations associated with the proposed reuse are outlined in Section 5.2.

5.2 Recommendations

5.2.1 Reuse approvals

As the volume of soils to be reused exceeds 100 tonnes per annum and the soils are predominantly classed as Level 2 (under IB105), a Regulation 21 approval from the Environment Protection Authority Tasmania (EPA) is necessary to permit the reuse of the materials within the WEJ void.

Exhibited

5.2.2 Suggested placement order for reuse

Based on the assessment of results, it is suggested that the existing stockpiled materials from WEJ be placed in the void in the following order:

1. Tower Stockpile materials – ideally within the base of the void
2. Roadside Stockpile materials – ideally within the base of the void; and
3. Void Stockpile materials – ideally as cover material over the Tower Stockpile and Roadside Stockpile materials.

The order is indicative. The final desired topography and geotechnical properties may dictate the order of use. From a CoPC perspective, the Void Stockpile materials are considered the most suitable to be placed as 'capping' materials within the void.

5.2.3 Stockpile management

All current stockpiles which may be temporarily stockpiled at WEJ:

- Must be effectively contained, and ideally covered, to prevent dust generation and sediment runoff; and
- Should not be placed anywhere near stormwater / drainage lines or ecologically sensitive areas.

Yours sincerely,



Kieran Richards
Experienced Environmental Consultant

Edited and reviewed by – Fiona Keserue-Ponte, Senior Principal Environmental Consultant, CEnvP SC 41034

List of Attachments

Important information about your report

Attachment A – Field sheets and photographs

Attachment B – Laboratory documentation

Attachment C – Summary results tables and comparison to adopted criteria

Attachment D – Prensa, *Asbestos Bulk Sample Analysis Report – Western Junction, Evandale Road, Western Junction TAS*, June 2026

Exhibited

Important Information About Your Report

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The opinions, conclusions and any recommendations in the Report are based on information obtained from TasRail, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.

Investigations undertaken in respect of the Report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in the Report. Site conditions (including the presence of hazardous substances and/or site contamination) may change after the date of the Report.

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pitt&sherry does not accept responsibility arising from, or in connection with, any change to the site conditions. pitt&sherry is also not responsible for updating the Report if the site conditions change.

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Field Sheet and Photographs

Attachment A

pitt&sherry

Exhibited

Date: 03/06/2026

Location: Western Junction

Weather conditions: Showers

Sampler: Anthony Williams

Duplicate sample location: PB2 = Dup01, RS4 = Dup 02

Other Information: Stockpile samples were ‘VS denotes void stockpile, RS’ denotes road-side stockpile, TW’ denotes tower stockpile and ‘PB’ denotes pit base.

Sample ID	Sample depth (CM)	Moisture level	Clay / silt / sand / gravel	Colour, mottling	Clast description (size, angular / rounded, etc)	Evidence of contamination (odour, visual evidence)	Comments/interpretation
PB1	0-30	Moist	Clayey loam	Dark Brown	Minor angular clasts to 35mm. Peds present.	Nil	Natural ground
PB2	0-30	Moist	Clayey loam	Dark Brown	Minor angular clasts to 30mm. Peds present.	Nil	Natural ground. Dup 01.
PB3	0-25	Moist	Clayey loam	Dark Grey/Black	Minor angular clasts to 30mm. Peds present.	Nil	Natural ground. Broadly like PB1/PB2, but slightly stiffer.
PB4	0-25	Moist	Clayey loam	Dark grey/black	No clasts. Well-formed peds to 15mm.	Nil	Natural ground
PB5	0-30	Moist	Clayey loam	Dark Grey/Black	No clasts. Well-formed peds.	Nil	Natural ground
VSP1	0-30	Moist	Clayey silt	Brown	Some rounded clasts to 50mm	Nil	Primarily formation material. Piece of railway iron present.
VSP2	0-30	Moist	Clayey silt	Brown	Some sub-angular clasts to 50mm	Nil	As above, looks like formation material.
VSP3	0-30	Moist	Clayey silt	Grey	Lots of angular clasts up to about 60mm	Nil	Formation material and ballast, with piece of railway iron present.
VSP4	0-30	Moist	Gravelly clay-loam	Dark grey/brown	Minor angular clasts to 20 mm	Nil	Natural ground
VSP5	0-40	Moist	Loam	Dark grey	Minor angular clasts to 30mm	Nil	Natural ground
VSP6	0-40	Moist	Primarily a silty gravel.	Grey	Angular clasts to 40mm	Road material/bitumen present on surface.	Formation material with a small amount of bitumen draped over the top. Perhaps from crossing works.
VSP7	0-50	Moist	Clay/silt/gravel	Brown	Angular clasts to 50mm	Geo-fab present, likely from rail crossing works.	Sample VSP7 Geo-fab collected here to confirm no presence of asbestos.
VSP8	0-40	Moist	Silty loam	Dark Grey	Angular clasts to 50mm.	Nil	Looks like a combination of natural ground and some formation material.

Exhibited

Sample ID	Sample depth	Moisture level	Clay/silt/sand/gravel	Colour/mottling	Clast description (size, angular/rounded etc)	Evidence of contamination (odour, visual evidence)	Comments
VSP9	0-40	Moist	Silty clay	Dark brown	Minor angular clasts to 10mm, minor ped formation.	Nil	Natural ground.
VSP10	0-30	Moist	Clay/silt	Brown	Minor angular clasts to 10mm, minor peds to 5mm.	Nil	Natural ground
VSP11	0-50	Moist	Clay/silt	Brown	Some angular clasts to 40mm	Nil	Natural ground
VSP12	0-40	Moist	Clay/silt	Grey/Brown	Few large sub-angular clasts up to 150mm	Nil	Natural ground
RS1	0-40	Moist	Clay/silt	Grey	Angular clasts to 40mm	Nil	Formation material/ballast
RS2	0-30	Moist	Clay/silt	Grey	Angular clasts to 40mm	Nil	Formation material/ballast
RS3	0-30	Moist	Clay/silt	Brown/Grey	Angular clasts to 40mm	Nil	Formation material/ballast
RS4	0-40	Moist	Clay/silt	Brown/Grey	Lots of angular clasts to 50mm	Nil	Formation material/ballast
RS5	0-30	Moist	Clay/silt	Brown/Grey	Lots of angular clasts to 50mm	Nil	Formation material/ballast
RS6	0-40	Moist	Clay/silt	Brown/Grey	Lots of angular clasts to 50mm	Nil	Formation material/ballast
TSP1	0-50	Moist	Clay/silt	Grey	Sub-angular clasts to 25mm	Nil	Formation/ballast Approximately 65m3 in this stockpile.
TSP2	0-40	Moist	Clay/silt	Grey	Sub-angular clasts to 25mm	Nil	Formation/ballast Approximately 65m3 in this stockpile.

Wtj void sampling

Exhibited

Wednesday, June 3, 2026 12:45 PM

Pit base samples
PB1



Exhibited



Pb2

Exhibited



Exhibited



Exhibited



Pb3

Exhibited



Exhibited



Exhibited



Pb4

Exhibited



Exhibited



Exhibited



Pb5

Exhibited



Exhibited



Exhibited



Void stockpile samples
Vsp1

Exhibited



Exhibited



Exhibited



Piece of railway iron present, most likely formation material.

Exhibited



Vsp2
Collected on top bench which runs out from side of pit.
Looks like formation material.

Exhibited



Exhibited



Exhibited



Exhibited



Vsp3
At end of platform leading out from edge of Pit. Steel jewellery associated with railway line present. Small pile of boulders in the background.

Exhibited



Exhibited



Exhibited



Vsp4
This looks like natural ground about 1.5 to 2 m below the bench above.
Some of the formation derived material above has lapped over this location but only at the surface.

Exhibited



Exhibited



Exhibited



VSp5
This sample was collected about 4.5m below the top of the stockpile and about 1m above the drain below.
Natural ground.



Exhibited



Exhibited



Exhibited



Vsp6
This sample is collected around about 1 m from the base of the stockpile and 5 m from the top.
Natural ground with an overlay of formation material including bitumen.
Some minor geo-fab located to the right.
Likely derived from railway crossing works.

Exhibited



Exhibited



Exhibited



Vsp7
This looks like formation material piece of Geofab present took a sample.
Comprised of clay seal gravel angular class to about 50 mm.
Sample collected about 2.5 m up from base directly below small bench which runs around the perimeter of stockpile 2/3 the way up.

Exhibited



Exhibited



Vsp8

This sample looks like a combination of natural ground and formation material with some ballast present. Sample collected around about 3 m above base of stockpile directly below bench above, with a further 4 m to the top of the stockpile.

Exhibited



Exhibited



Exhibited



Vsp9
Sample collected approximately 1 m below top of bench that extends from edge of pit and 2 m above base level. Looks like natural ground. Some minor gravel gray/brown color.

Exhibited



Exhibited



Exhibited



Vsp10
Sample collected 1 m up from the base of stockpile and 2 meters below the top of the bench extending from the side of the pile. This is natural ground with no presence of formation of ballast material.

Exhibited



Exhibited



Exhibited



Vsp11
This sample was collected 1M above the bench which extends in from the edge of the pit that is it represents the highest part of the stockpile.
Could be natural ground with some minor formation.
Material included due to the presence of some large angular class to about 50 mm.

Exhibited



Exhibited

- 

Exhibited



Vsp12
This sample was collected a meter from the top of the stockpile and about 7 m up from the base. Looks to be natural ground with a few large angular cobbles to 150 mm.



Exhibited



Exhibited



Tank Stockpile samples
Tsp1
This stockpile is comprised of around about 65m3 of homogeneous formation/ballast material.

Exhibited



Exhibited



Tsp2
Second sample of tail stockpile collected. Description as per tsp1.

Exhibited



Exhibited



Roadside stockpile
Rs1
Comprised of formation material clay/silt with lots of angular class up to about 40 mm. Collected halfway up 1m high batter.

Exhibited



Rs2 - Sample collected from 30 cm deep hole dug into top of stockpile.

Exhibited



Exhibited



Rs3
Sample collected at West end of stockpile approximately halfway up. Excavated to 30 cm depth.
Once again this is formation material.

Exhibited



Exhibited



Rs4
Description as per other samples collected in their stockpile.
This sample was collected about halfway up the stockpile face.

Exhibited



Exhibited



Rs5
Sample collective halfway up price of stockpile.
Ballast and formation material.

Exhibited



Exhibited



Rs6
Ballast and formation material.
Sample collected from top of stockpile.

Exhibited



Exhibited



Exhibited

Laboratory Documentation

Attachment B

pitt&sherry

Exhibited

CHAIN OF CUSTODY

ALS Environmental

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

NEWCASTLE 5/585 Maitland Rd Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 024423 2063 E: nowra@alsglobal.com

PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

FREIGHT

CLIENT: TasRail	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☑ Standard TAT (List due date): ☐ Non Standard or urgent TAT (List due date):
OFFICE: 11 Techno Park Drive, Kings Meadows, Tasmania, 7249		
PROJECT: 20260603_WEJ_Stockpiles	ALS QUOTE NO.: EN/222/23	
ORDER NUMBER: 154605		
PROJECT MANAGER: Bowen Wagenknecht	CONTACT PH: 0458 203 927	
SAMPLER: Bowen Wagenknecht	SAMPLER MOBILE: 0458 203 927	
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default): ESdat_AU+TasRail@ESdatLabSync.net	
Email Reports to (will default to PM if no other addresses are listed): Bowen.Wagenknecht@Tasrail.com.au; ESdat_AU+TasRail@ESdatLabSync.net		
Email Invoice to (will default to PM if no other addresses are listed): Bowen.Wagenknecht@Tasrail.com.au; invoices@tasrail.com.au		

COC SEQUENCE NUMBER (Circle)

COC:	1	2	3	4	5	6	7
OF:	1	2	3	4	5	6	7

FOR LABORATORY USE ONLY (Circle)

Custody Seal Intact?	Yes	No	N/A
Free ice / frozen ice bricks present upon receipt?	Yes	No	N/A
Random Sample Temperature on Receipt:		°C	
Other comment:			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Bowen Wagenknecht			Chelsea DIS
DATE/TIME: 4/06/2026 17:30	DATE/TIME:	DATE/TIME:	DATE/TIME: 5/6/26 14:20

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS (MATRIX: SOLID (S) WATER (W))			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).			Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	S26 TRH (C6-C40)/BTEXN/PAH plus 8 metals	Benzo(a)pyrene (EPA Tas LOR)	W-26T TRH (C6-C40)/BTEXN/PAH plus 8 metals)	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	VSP1 0-30cm	3/06/2026 13:20	Soil	Soil Jar	1	✓	✓		
2	VSP2 0-30cm	3/06/2026 13:42	Soil	Soil Jar	1	✓	✓		
3	VSP3 0-30cm	3/06/2026 13:48	Soil	Soil Jar	1	✓	✓		
4	VSP4 0-30cm	3/06/2026 13:55	Soil	Soil Jar	1	✓	✓		
5	VSP5 0-40cm	3/06/2026 14:05	Soil	Soil Jar	1	✓	✓		
6	VSP6 0-40cm	3/06/2026 14:16	Soil	Soil Jar	1	✓	✓		
7	VSP7 0-50cm	3/06/2026 14:21	Soil	Soil Jar	1	✓	✓		
8	VSP8 0-40cm	3/06/2026 14:35	Soil	Soil Jar	1	✓	✓		
9	VSP9 0-40cm	3/06/2026 14:55	Soil	Soil Jar	1	✓	✓		
10	VSP10 0-40cm	3/06/2026 15:04	Soil	Soil Jar	1	✓	✓		
11	VSP11 0-50cm	3/06/2026 15:10	Soil	Soil Jar	1	✓	✓		
12	VSP12 0-40cm	3/06/2026 15:15	Soil	Soil Jar	1	✓	✓		
13	TSP1 0-50cm	3/06/2026 15:40	Soil	Soil Jar	1	✓	✓		
14	TSP2 0-40cm	3/06/2026 15:45	Soil	Soil Jar	1	✓	✓		
				TOTAL	14				

Environmental Division Melbourne
Work Order Reference
EM2610454

Telephone : +61-3-8549 9600

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

Exhibited

CHAIN OF CUSTODY

ALS Environmental

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com
☐BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com
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☑MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com
☐MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee mail@alsglobal.com
☐NEWCASTLE 5/585 Maitland Rd Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com
☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com
☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com
☐SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com
☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville environmental@alsglobal.com
☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: TasRail	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☑ Standard TAT (List due date): ☐ Non Standard or urgent TAT (List due date):
OFFICE: 11 Technopark Drive, Kings Meadows, Tasmania, 7249		
PROJECT: 20260603_WEJ_Stockpiles	ALS QUOTE NO.: EN/222/23	
ORDER NUMBER: 154605		
PROJECT MANAGER: Bowen Wagenknecht	CONTACT PH: 0458 203 927	
SAMPLER: Bowen Wagenknecht	SAMPLER MOBILE: 0458 203 927	
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default): ESdat_AU+TasRail@ESdatLabSync.net	
Email Reports to (will default to PM if no other addresses are listed): Bowen.Wagenknecht@Tasrail.com.au; ESdat_AU+TasRail@ESdatLabSync.net		
Email Invoice to (will default to PM if no other addresses are listed): Bowen.Wagenknecht@Tasrail.com.au; invoices@tasrail.com.au		

COC SEQUENCE NUMBER (Circle)

COC:	1	2	3	4	5	6	7
OF:	1	2	3	4	5	6	7

FOR LABORATORY USE ONLY (Circle)

Custody Seal Intact?	Yes	No	N/A
Free ice / frozen ice bricks present upon receipt?	Yes	No	N/A
Random Sample Temperature on Receipt:		°C	
Other comment:			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Bowen Wagenknecht			
DATE/TIME: 4/06/2026 17:30	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).															Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	S26 TRH (C6-C40)/BTEXN/PAH plus 8 metals	Benzo(a)pyrene (EPA Tas LOR)	W-26T TRH (C6-C40)/BTEXN/PAH plus 8 metals)													Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
15	PB1 0-30cm	3/06/2026 12:42	Soil	Soil Jar	1	✓	✓														
16	PB2 0-30cm	3/06/2026 12:48	Soil	Soil Jar	1	✓	✓														
17	PB3 0-25cm	3/06/2026 12:58	Soil	Soil Jar	1	✓	✓														
18	PB4 0-25cm	3/06/2026 13:03	Soil	Soil Jar	1	✓	✓														
19	PB5 0-30cm	3/06/2026 13:09	Soil	Soil Jar	1	✓	✓														
20	RS1 0-40cm	3/06/2026 14:15	Soil	Soil Jar	1	✓	✓														
21	RS2 0-30cm	3/06/2026 14:45	Soil	Soil Jar	1	✓	✓														
22	RS3 0-30cm	3/06/2026 14:55	Soil	Soil Jar	1	✓	✓														
23	RS4 0-40cm	3/06/2026 15:00	Soil	Soil Jar	1	✓	✓														
24	RS5 0-30cm	3/06/2026 15:10	Soil	Soil Jar	1	✓	✓														
25	RS6 0-40cm	3/06/2026 15:15	Soil	Soil Jar	1	✓	✓														
26	FD01	3/06/2026 0:00	Soil	Soil Jar	1	✓	✓														
27	FD02	3/06/2026 0:00	Soil	Soil Jar	1	✓	✓														
28	Rinsate_PP	3/06/2026 0:00	Water	Lab Supplied Receptacles	4			✓													
				TOTAL	17																

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag

Exhibited

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **EM2610454**

Client	: **TASMANIAN RAILWAY PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: BOWEN WAGENKNECHT	Contact	: Customer Services EM
Address	: P.O.BOX 335 KINGS MEADOWS TASMANIA 7249	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: Bowen.Wagenknecht@tasrail.com.au	E-mail	: ALSEnviro.Melbourne@alsglobal.com
Telephone	: ----	Telephone	: +61-3-8549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: 20260603_WEJ_Stockpiles	Page	: 1 of 3
Order number	: 154605	Quote number	: EM2021TASRAI0002 (EN/222)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: BW		

Dates

Date Samples Received	: 05-Jun-2026 14:20	Issue Date	: 05-Jun-2026
Client Requested Due Date	: 12-Jun-2026	Scheduled Reporting Date	: **12-Jun-2026**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 2	Temperature	: 3.9, 4.4, 5.2°C - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 28 / 28

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please direct any queries related to sample condition / numbering / breakages to Client Services.**
- Sample Disposal - Aqueous (3 weeks), Solid (2 months) from receipt of samples.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Exhibited

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - EP075-TAS Benzo(a)pyrene and other PAHs - Waste	SOIL - S-26 8 metals/TRH/BTEXN/PAH
EM2610454-001	03-Jun-2026 13:20	VSP1 0-30cm	✓	✓	✓
EM2610454-002	03-Jun-2026 13:42	VSP2 0-30cm	✓	✓	✓
EM2610454-003	03-Jun-2026 13:48	VSP3 0-30cm	✓	✓	✓
EM2610454-004	03-Jun-2026 13:55	VSP4 0-30cm	✓	✓	✓
EM2610454-005	03-Jun-2026 14:05	VSP5 0-40cm	✓	✓	✓
EM2610454-006	03-Jun-2026 14:16	VSP6 0-40cm	✓	✓	✓
EM2610454-007	03-Jun-2026 14:21	VSP7 0-50cm	✓	✓	✓
EM2610454-008	03-Jun-2026 14:35	VSP8 0-40cm	✓	✓	✓
EM2610454-009	03-Jun-2026 14:55	VSP9 0-40cm	✓	✓	✓
EM2610454-010	03-Jun-2026 15:04	VSP10 0-40cm	✓	✓	✓
EM2610454-011	03-Jun-2026 15:10	VSP11 0-50cm	✓	✓	✓
EM2610454-012	03-Jun-2026 15:15	VSP12 0-40cm	✓	✓	✓
EM2610454-013	03-Jun-2026 15:40	TSP1 0-50cm	✓	✓	✓
EM2610454-014	03-Jun-2026 15:45	TSP2 0-40cm	✓	✓	✓
EM2610454-015	03-Jun-2026 12:42	PB1 0-30cm	✓	✓	✓
EM2610454-016	03-Jun-2026 12:48	PB2 0-30cm	✓	✓	✓
EM2610454-017	03-Jun-2026 12:58	PB3 0-25cm	✓	✓	✓
EM2610454-018	03-Jun-2026 13:03	PB4 0-25cm	✓	✓	✓
EM2610454-019	03-Jun-2026 13:09	PB5 0-30cm	✓	✓	✓
EM2610454-020	03-Jun-2026 14:15	RS1 0-40cm	✓	✓	✓
EM2610454-021	03-Jun-2026 14:45	RS2 0-30cm	✓	✓	✓
EM2610454-022	03-Jun-2026 14:55	RS3 0-30cm	✓	✓	✓
EM2610454-023	03-Jun-2026 15:00	RS4 0-40cm	✓	✓	✓
EM2610454-024	03-Jun-2026 15:10	RS5 0-30cm	✓	✓	✓
EM2610454-025	03-Jun-2026 15:15	RS6 0-40cm	✓	✓	✓
EM2610454-026	03-Jun-2026 00:00	FD01	✓	✓	✓
EM2610454-027	03-Jun-2026 00:00	FD02	✓	✓	✓

Exhibited

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - W-26T TRH/BTEXN/PAH/Total 8 Metals
EM2610454-028	03-Jun-2026 00:00	Rinsate_PP	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ALL INVOICES

- A4 - AU Tax Invoice (INV)	Email	invoices@tasrail.com.au

BOWEN WAGENKNECHT

- *AU Certificate of Analysis - NATA (COA)	Email	Bowen.Wagenknecht@tasrail.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Bowen.Wagenknecht@tasrail.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Bowen.Wagenknecht@tasrail.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	Bowen.Wagenknecht@tasrail.com.au
- A4 - AU Tax Invoice (INV)	Email	Bowen.Wagenknecht@tasrail.com.au
- Chain of Custody (CoC) (COC)	Email	Bowen.Wagenknecht@tasrail.com.au
- EDI Format - ESDAT (ESDAT)	Email	Bowen.Wagenknecht@tasrail.com.au
- EDI Format - XTab (XTAB)	Email	Bowen.Wagenknecht@tasrail.com.au

ESDAT TASRAIL

- EDI Format - ESDAT (ESDAT)	Email	ESdat_AU+TasRail@ESdatLabSync.net

Exhibited

CERTIFICATE OF ANALYSIS

Work Order	: **EM2610454**	Page	: 1 of 30
Client	: **TASMANIAN RAILWAY PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: BOWEN WAGENKNECHT	Contact	: Customer Services EM
Address	: P.O.BOX 335 KINGS MEADOWS TASMANIA 7249	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: 20260603_WEJ_Stockpiles	Date Samples Received	: 05-Jun-2026 14:20
Order number	: 154605	Date Analysis Commenced	: 09-Jun-2026
C-O-C number	: ----	Issue Date	: 12-Jun-2026 17:32
Sampler	: BW		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 28		
No. of samples analysed	: 28		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Tahlia Freeman	Instrument Operator	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

Exhibited

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005T: EM2610454 #6, Poor duplicate precision for chromium due to sample heterogeneity. Confirmed by re-extraction and re-analysis. The following results were observed: 52 mg/kg, 62 mg/kg, 78 mg/kg and 73 mg/kg.

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP1 0-30cm	VSP2 0-30cm	VSP3 0-30cm	VSP4 0-30cm	VSP5 0-40cm
			Sampling date / time	03-Jun-2026 13:20	03-Jun-2026 13:42	03-Jun-2026 13:48	03-Jun-2026 13:55	03-Jun-2026 14:05
Compound	CAS Number	LOR	Unit	EM2610454-001	EM2610454-002	EM2610454-003	EM2610454-004	EM2610454-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	9.5	12.1	13.4	17.3	17.6
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	16	16	9	19
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	1	1
Chromium	7440-47-3	2	mg/kg	19	30	30	43	50
Copper	7440-50-8	5	mg/kg	16	38	41	44	48
Lead	7439-92-1	5	mg/kg	8	12	15	26	31
Nickel	7440-02-0	2	mg/kg	22	75	91	83	43
Zinc	7440-66-6	5	mg/kg	41	139	149	201	220
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP1 0-30cm	VSP2 0-30cm	VSP3 0-30cm	VSP4 0-30cm	VSP5 0-40cm
				Sampling date / time	03-Jun-2026 13:20	03-Jun-2026 13:42	03-Jun-2026 13:48	03-Jun-2026 13:55	03-Jun-2026 14:05
Compound	CAS Number	LOR	Unit		EM2610454-001	EM2610454-002	EM2610454-003	EM2610454-004	EM2610454-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	**0.15**
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	**0.65**
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	**0.5**
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg		<0.05	<0.05	**0.06**	<0.05	**0.15**
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg		**0.76**	**0.76**	**0.77**	**0.76**	**0.86**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg		**0.38**	**0.38**	**0.42**	**0.38**	**0.50**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP1 0-30cm	VSP2 0-30cm	VSP3 0-30cm	VSP4 0-30cm	VSP5 0-40cm
				Sampling date / time	03-Jun-2026 13:20	03-Jun-2026 13:42	03-Jun-2026 13:48	03-Jun-2026 13:55	03-Jun-2026 14:05
Compound	CAS Number	LOR	Unit		EM2610454-001	EM2610454-002	EM2610454-003	EM2610454-004	EM2610454-005
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg		<100	<100	<100	<100	**170**
C29 - C36 Fraction	---	100	mg/kg		<100	<100	<100	<100	**150**
^ C10 - C36 Fraction (sum)	---	50	mg/kg		<50	<50	<50	<50	**320**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg		<100	<100	<100	<100	**270**
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		<50	<50	<50	<50	**270**
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**78.3**	**77.0**	**76.3**	**75.5**	**73.5**
2-Chlorophenol-D4	93951-73-6	0.5	%		**81.0**	**79.9**	**78.5**	**78.4**	**75.5**
2.4.6-Tribromophenol	118-79-6	0.5	%		**75.2**	**74.7**	**74.9**	**77.7**	**71.7**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP1 0-30cm	VSP2 0-30cm	VSP3 0-30cm	VSP4 0-30cm	VSP5 0-40cm
			Sampling date / time	03-Jun-2026 13:20	03-Jun-2026 13:42	03-Jun-2026 13:48	03-Jun-2026 13:55	03-Jun-2026 14:05
Compound	CAS Number	LOR	Unit	EM2610454-001	EM2610454-002	EM2610454-003	EM2610454-004	EM2610454-005
				Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	74.9	76.0	73.7	74.6	71.6
Anthracene-d10	1719-06-8	0.5	%	105	106	102	103	90.9
4-Terphenyl-d14	1718-51-0	0.5	%	87.2	87.0	87.8	87.4	85.7
EP075T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.025	%	94.7	98.2	95.4	87.9	84.5
Anthracene-d10	1719-06-8	0.025	%	90.2	92.8	89.9	86.7	86.9
4-Terphenyl-d14	1718-51-0	0.025	%	106	109	102	92.5	80.6
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	92.7	58.5	83.4	89.0	78.5
Toluene-D8	2037-26-5	0.2	%	97.4	57.0	89.9	94.6	82.9
4-Bromofluorobenzene	460-00-4	0.2	%	121	66.3	111	116	104

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP6 0-40cm	VSP7 0-50cm	VSP8 0-40cm	VSP9 0-40cm	VSP10 0-40cm
			Sampling date / time	03-Jun-2026 14:16	03-Jun-2026 14:21	03-Jun-2026 14:35	03-Jun-2026 14:55	03-Jun-2026 15:04
Compound	CAS Number	LOR	Unit	EM2610454-006	EM2610454-007	EM2610454-008	EM2610454-009	EM2610454-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	19.3	11.6	15.2	19.3	13.5
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	36	<5	14	7	<5
Cadmium	7440-43-9	1	mg/kg	2	<1	3	<1	<1
Chromium	7440-47-3	2	mg/kg	62	24	67	16	16
Copper	7440-50-8	5	mg/kg	70	29	75	20	27
Lead	7439-92-1	5	mg/kg	36	8	58	47	37
Nickel	7440-02-0	2	mg/kg	62	67	72	21	51
Zinc	7440-66-6	5	mg/kg	292	103	598	82	72
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.2	0.3	0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP6 0-40cm	VSP7 0-50cm	VSP8 0-40cm	VSP9 0-40cm	VSP10 0-40cm
				Sampling date / time	03-Jun-2026 14:16	03-Jun-2026 14:21	03-Jun-2026 14:35	03-Jun-2026 14:55	03-Jun-2026 15:04
Compound	CAS Number	LOR	Unit		EM2610454-006	EM2610454-007	EM2610454-008	EM2610454-009	EM2610454-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		**0.10**	<0.05	**0.12**	<0.05	<0.05
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg		**0.10**	<0.05	**0.12**	<0.05	<0.05
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg		**0.10**	<0.05	**0.12**	<0.05	<0.05
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg		**0.81**	**0.76**	**0.83**	**0.76**	**0.76**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg		**0.46**	**0.38**	**0.48**	**0.38**	**0.38**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP6 0-40cm	VSP7 0-50cm	VSP8 0-40cm	VSP9 0-40cm	VSP10 0-40cm
				Sampling date / time	03-Jun-2026 14:16	03-Jun-2026 14:21	03-Jun-2026 14:35	03-Jun-2026 14:55	03-Jun-2026 15:04
Compound	CAS Number	LOR	Unit		EM2610454-006	EM2610454-007	EM2610454-008	EM2610454-009	EM2610454-010
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg		**120**	<100	**150**	<100	<100
C29 - C36 Fraction	---	100	mg/kg		**110**	<100	**150**	<100	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg		**230**	<50	**300**	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg		**190**	<100	**250**	<100	<100
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		**190**	<50	**250**	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**68.1**	**77.0**	**75.1**	**76.7**	**76.7**
2-Chlorophenol-D4	93951-73-6	0.5	%		**71.9**	**79.4**	**77.8**	**79.2**	**79.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**72.9**	**76.9**	**73.4**	**78.3**	**75.9**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP6 0-40cm	VSP7 0-50cm	VSP8 0-40cm	VSP9 0-40cm	VSP10 0-40cm
				Sampling date / time	03-Jun-2026 14:16	03-Jun-2026 14:21	03-Jun-2026 14:35	03-Jun-2026 14:55	03-Jun-2026 15:04
Compound	CAS Number	LOR	Unit		EM2610454-006	EM2610454-007	EM2610454-008	EM2610454-009	EM2610454-010
					Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		72.1	72.3	74.3	71.9	73.3
Anthracene-d10	1719-06-8	0.5	%		99.2	95.7	97.3	105	102
4-Terphenyl-d14	1718-51-0	0.5	%		87.0	86.2	85.0	86.3	84.3
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		84.6	97.5	87.9	92.5	88.7
Anthracene-d10	1719-06-8	0.025	%		87.8	99.2	92.9	95.2	89.3
4-Terphenyl-d14	1718-51-0	0.025	%		82.2	102	83.5	98.0	96.6
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		82.2	73.1	83.6	76.3	92.1
Toluene-D8	2037-26-5	0.2	%		84.2	103	86.5	83.8	101
4-Bromofluorobenzene	460-00-4	0.2	%		99.6	123	102	103	124

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP11 0-50cm	VSP12 0-40cm	TSP1 0-50cm	TSP2 0-40cm	PB1 0-30cm
			Sampling date / time	03-Jun-2026 15:10	03-Jun-2026 15:15	03-Jun-2026 15:40	03-Jun-2026 15:45	03-Jun-2026 12:42
Compound	CAS Number	LOR	Unit	EM2610454-011	EM2610454-012	EM2610454-013	EM2610454-014	EM2610454-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	14.7	16.4	14.5	13.1	28.5
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	11	19	9	18	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	1	<1
Chromium	7440-47-3	2	mg/kg	55	65	43	44	70
Copper	7440-50-8	5	mg/kg	60	59	53	72	56
Lead	7439-92-1	5	mg/kg	5	11	38	156	42
Nickel	7440-02-0	2	mg/kg	172	157	109	73	91
Zinc	7440-66-6	5	mg/kg	112	173	208	423	101
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP11 0-50cm	VSP12 0-40cm	TSP1 0-50cm	TSP2 0-40cm	PB1 0-30cm
			Sampling date / time	03-Jun-2026 15:10	03-Jun-2026 15:15	03-Jun-2026 15:40	03-Jun-2026 15:45	03-Jun-2026 12:42
Compound	CAS Number	LOR	Unit	EM2610454-011	EM2610454-012	EM2610454-013	EM2610454-014	EM2610454-015
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	<0.05	<0.05	**0.21**	<0.05
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg	<0.05	<0.05	<0.05	**0.21**	<0.05
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg	<0.05	<0.05	<0.05	**0.21**	<0.05
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg	**0.76**	**0.76**	**0.76**	**0.92**	**0.76**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg	**0.38**	**0.38**	**0.38**	**0.56**	**0.38**
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons								

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	VSP11 0-50cm	VSP12 0-40cm	TSP1 0-50cm	TSP2 0-40cm	PB1 0-30cm
			Sampling date / time	03-Jun-2026 15:10	03-Jun-2026 15:15	03-Jun-2026 15:40	03-Jun-2026 15:45	03-Jun-2026 12:42
Compound	CAS Number	LOR	Unit	EM2610454-011	EM2610454-012	EM2610454-013	EM2610454-014	EM2610454-015
				Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued								
C6 - C9 Fraction	---	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg	<100	<100	<100	**130**	<100
C29 - C36 Fraction	---	100	mg/kg	<100	<100	<100	**140**	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg	<50	<50	<50	**270**	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg	<100	<100	<100	**230**	<100
>C34 - C40 Fraction	---	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg	<50	<50	<50	**230**	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**74.5**	**76.5**	**75.0**	**77.3**	**76.1**
2-Chlorophenol-D4	93951-73-6	0.5	%	**76.3**	**78.2**	**77.6**	**78.6**	**79.7**
2.4.6-Tribromophenol	118-79-6	0.5	%	**76.1**	**76.0**	**73.9**	**77.1**	**78.8**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	VSP11 0-50cm	VSP12 0-40cm	TSP1 0-50cm	TSP2 0-40cm	PB1 0-30cm
				Sampling date / time	03-Jun-2026 15:10	03-Jun-2026 15:15	03-Jun-2026 15:40	03-Jun-2026 15:45	03-Jun-2026 12:42
Compound	CAS Number	LOR	Unit		EM2610454-011	EM2610454-012	EM2610454-013	EM2610454-014	EM2610454-015
					Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		71.7	74.6	71.6	73.5	76.4
Anthracene-d10	1719-06-8	0.5	%		102	105	101	95.9	110
4-Terphenyl-d14	1718-51-0	0.5	%		85.4	88.1	86.1	87.9	86.4
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		106	93.8	92.2	84.9	97.0
Anthracene-d10	1719-06-8	0.025	%		105	91.9	92.2	87.1	98.6
4-Terphenyl-d14	1718-51-0	0.025	%		117	102	98.6	83.9	106
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		68.2	78.2	91.1	72.2	78.0
Toluene-D8	2037-26-5	0.2	%		74.3	82.0	94.4	74.2	81.4
4-Bromofluorobenzene	460-00-4	0.2	%		94.9	102	116	105	103

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	PB2 0-30cm	PB3 0-25cm	PB4 0-25cm	PB5 0-30cm	RS1 0-40cm
			Sampling date / time	03-Jun-2026 12:48	03-Jun-2026 12:58	03-Jun-2026 13:03	03-Jun-2026 13:09	03-Jun-2026 14:15
Compound	CAS Number	LOR	Unit	EM2610454-016	EM2610454-017	EM2610454-018	EM2610454-019	EM2610454-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	**20.0**	**27.8**	**24.1**	**30.1**	**15.4**
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**11**	<5	<5	<5	**25**
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	**59**	**75**	**79**	**85**	**35**
Copper	7440-50-8	5	mg/kg	**47**	**45**	**36**	**33**	**52**
Lead	7439-92-1	5	mg/kg	**78**	**13**	**13**	**9**	**20**
Nickel	7440-02-0	2	mg/kg	**54**	**79**	**76**	**65**	**98**
Zinc	7440-66-6	5	mg/kg	**161**	**213**	**86**	**74**	**156**
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	**0.1**	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	PB2 0-30cm	PB3 0-25cm	PB4 0-25cm	PB5 0-30cm	RS1 0-40cm
				Sampling date / time	03-Jun-2026 12:48	03-Jun-2026 12:58	03-Jun-2026 13:03	03-Jun-2026 13:09	03-Jun-2026 14:15
Compound	CAS Number	LOR	Unit		EM2610454-016	EM2610454-017	EM2610454-018	EM2610454-019	EM2610454-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		<0.05	<0.05	**0.05**	<0.05	**0.07**
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg		<0.05	<0.05	**0.05**	<0.05	**0.07**
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg		<0.05	<0.05	**0.05**	<0.05	**0.07**
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg		**0.76**	**0.76**	**0.76**	**0.76**	**0.78**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg		**0.38**	**0.38**	**0.40**	**0.38**	**0.42**
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	PB2 0-30cm	PB3 0-25cm	PB4 0-25cm	PB5 0-30cm	RS1 0-40cm
				Sampling date / time	03-Jun-2026 12:48	03-Jun-2026 12:58	03-Jun-2026 13:03	03-Jun-2026 13:09	03-Jun-2026 14:15
Compound	CAS Number	LOR	Unit		EM2610454-016	EM2610454-017	EM2610454-018	EM2610454-019	EM2610454-020
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg		**100**	<100	<100	<100	<100
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		**100**	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**67.4**	**74.8**	**71.1**	**75.5**	**72.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**68.3**	**78.2**	**74.3**	**78.3**	**75.4**
2.4.6-Tribromophenol	118-79-6	0.5	%		**63.6**	**79.6**	**73.3**	**77.6**	**71.1**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	PB2 0-30cm	PB3 0-25cm	PB4 0-25cm	PB5 0-30cm	RS1 0-40cm
			Sampling date / time	03-Jun-2026 12:48	03-Jun-2026 12:58	03-Jun-2026 13:03	03-Jun-2026 13:09	03-Jun-2026 14:15
Compound	CAS Number	LOR	Unit	EM2610454-016	EM2610454-017	EM2610454-018	EM2610454-019	EM2610454-020
				Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	69.3	75.2	74.3	75.1	72.2
Anthracene-d10	1719-06-8	0.5	%	94.6	104	103	101	99.5
4-Terphenyl-d14	1718-51-0	0.5	%	80.9	88.0	87.1	88.5	86.0
EP075T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.025	%	94.1	102	95.4	98.0	96.8
Anthracene-d10	1719-06-8	0.025	%	85.6	100	94.2	96.2	95.0
4-Terphenyl-d14	1718-51-0	0.025	%	106	115	105	111	101
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	83.2	85.2	76.1	70.1	74.3
Toluene-D8	2037-26-5	0.2	%	87.0	92.1	79.3	85.3	79.9
4-Bromofluorobenzene	460-00-4	0.2	%	108	113	96.7	110	96.9

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	RS2 0-30cm	RS3 0-30cm	RS4 0-40cm	RS5 0-30cm	RS6 0-40cm
			Sampling date / time	03-Jun-2026 14:45	03-Jun-2026 14:55	03-Jun-2026 15:00	03-Jun-2026 15:10	03-Jun-2026 15:15
Compound	CAS Number	LOR	Unit	EM2610454-021	EM2610454-022	EM2610454-023	EM2610454-024	EM2610454-025
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	---	1.0	%	**15.6**	**14.4**	**12.1**	**20.5**	**14.5**
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**32**	**31**	**38**	**16**	**29**
Cadmium	7440-43-9	1	mg/kg	**1**	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	**30**	**26**	**35**	**60**	**30**
Copper	7440-50-8	5	mg/kg	**49**	**321**	**62**	**55**	**48**
Lead	7439-92-1	5	mg/kg	**37**	**63**	**41**	**79**	**24**
Nickel	7440-02-0	2	mg/kg	**64**	**54**	**77**	**138**	**77**
Zinc	7440-66-6	5	mg/kg	**126**	**178**	**160**	**161**	**131**
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	RS2 0-30cm	RS3 0-30cm	RS4 0-40cm	RS5 0-30cm	RS6 0-40cm
			Sampling date / time	03-Jun-2026 14:45	03-Jun-2026 14:55	03-Jun-2026 15:00	03-Jun-2026 15:10	03-Jun-2026 15:15
Compound	CAS Number	LOR	Unit	EM2610454-021	EM2610454-022	EM2610454-023	EM2610454-024	EM2610454-025
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.05	mg/kg	**0.06**	**0.09**	**0.07**	**0.05**	**0.07**
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg	**0.06**	**0.09**	**0.07**	**0.05**	**0.07**
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg	**0.06**	**0.09**	**0.07**	**0.05**	**0.07**
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg	**0.77**	**0.80**	**0.78**	**0.76**	**0.78**
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg	**0.42**	**0.44**	**0.42**	**0.40**	**0.42**
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons								

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	RS2 0-30cm	RS3 0-30cm	RS4 0-40cm	RS5 0-30cm	RS6 0-40cm
			Sampling date / time	03-Jun-2026 14:45	03-Jun-2026 14:55	03-Jun-2026 15:00	03-Jun-2026 15:10	03-Jun-2026 15:15
Compound	CAS Number	LOR	Unit	EM2610454-021	EM2610454-022	EM2610454-023	EM2610454-024	EM2610454-025
				Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued								
C6 - C9 Fraction	---	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	mg/kg	<100	**110**	<100	<100	<100
C29 - C36 Fraction	---	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg	<50	**110**	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	---	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	---	100	mg/kg	**130**	**170**	**130**	<100	**150**
>C34 - C40 Fraction	---	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg	**130**	**170**	**130**	<50	**150**
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg	<50	<50	<50	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	---	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**67.3**	**74.6**	**71.1**	**72.2**	**73.4**
2-Chlorophenol-D4	93951-73-6	0.5	%	**72.3**	**69.3**	**69.7**	**69.4**	**69.9**
2.4.6-Tribromophenol	118-79-6	0.5	%	**57.5**	**57.9**	**61.4**	**60.6**	**59.2**

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	RS2 0-30cm	RS3 0-30cm	RS4 0-40cm	RS5 0-30cm	RS6 0-40cm
			Sampling date / time	03-Jun-2026 14:45	03-Jun-2026 14:55	03-Jun-2026 15:00	03-Jun-2026 15:10	03-Jun-2026 15:15
Compound	CAS Number	LOR	Unit	EM2610454-021	EM2610454-022	EM2610454-023	EM2610454-024	EM2610454-025
				Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	80.2	78.5	78.9	79.0	82.4
Anthracene-d10	1719-06-8	0.5	%	104	102	102	109	106
4-Terphenyl-d14	1718-51-0	0.5	%	78.1	77.0	78.1	70.3	77.4
EP075T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.025	%	99.8	99.9	97.8	94.8	101
Anthracene-d10	1719-06-8	0.025	%	97.9	104	101	97.2	95.3
4-Terphenyl-d14	1718-51-0	0.025	%	98.5	94.1	95.8	99.8	99.5
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	80.4	62.3	72.0	72.1	83.1
Toluene-D8	2037-26-5	0.2	%	83.5	60.2	77.0	78.8	86.7
4-Bromofluorobenzene	460-00-4	0.2	%	105	72.9	93.7	97.7	106

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	FD01	FD02	----	----	----
				Sampling date / time	03-Jun-2026 00:00	03-Jun-2026 00:00	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-026	EM2610454-027	------	------	------
					Result	Result	---	---	---
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	---	1.0	%		**19.2**	**13.5**	---	---	---
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		**9**	**44**	---	---	---
Cadmium	7440-43-9	1	mg/kg		<1	<1	---	---	---
Chromium	7440-47-3	2	mg/kg		**46**	**39**	---	---	---
Copper	7440-50-8	5	mg/kg		**49**	**64**	---	---	---
Lead	7439-92-1	5	mg/kg		**84**	**48**	---	---	---
Nickel	7440-02-0	2	mg/kg		**72**	**92**	---	---	---
Zinc	7440-66-6	5	mg/kg		**147**	**177**	---	---	---
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		**0.2**	<0.1	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	---	---	---
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	---	---	---
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	---	---	---
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	---	---	---
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	---	---	---
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	---	---	---
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	---	---	---

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	FD01	FD02	----	----	----
				Sampling date / time	03-Jun-2026 00:00	03-Jun-2026 00:00	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-026	EM2610454-027	------	------	------
					Result	Result	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	---	---	---
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	---	---	---
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	---	---	---
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		**0.6**	**0.6**	---	---	---
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		**1.2**	**1.2**	---	---	---
EP075B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.05	mg/kg		**0.06**	**0.05**	---	---	---
^ Sum of polycyclic aromatic hydrocarbons	---	0.05	mg/kg		**0.06**	**0.05**	---	---	---
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	---	---	---
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	---	---	---
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	---	---	---
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	---	---	---
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	---	---	---
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	---	---	---
^ Benzo(a)pyrene TEQ (zero)	---	0.05	mg/kg		**0.06**	**0.05**	---	---	---
^ Benzo(a)pyrene TEQ (LOR)	---	0.05	mg/kg		**0.77**	**0.76**	---	---	---
^ Benzo(a)pyrene TEQ (half LOR)	---	0.05	mg/kg		**0.42**	**0.40**	---	---	---
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	---	---	---
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	---	---	---
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	---	---	---
EP080/071: Total Petroleum Hydrocarbons									

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	FD01	FD02	----	----	----
				Sampling date / time	03-Jun-2026 00:00	03-Jun-2026 00:00	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-026	EM2610454-027	------	------	------
					Result	Result	---	---	---
EP080/071: Total Petroleum Hydrocarbons - Continued									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	---	---	---
C10 - C14 Fraction	---	50	mg/kg		<50	<50	---	---	---
C15 - C28 Fraction	---	100	mg/kg		<100	<100	---	---	---
C29 - C36 Fraction	---	100	mg/kg		<100	**100**	---	---	---
^ C10 - C36 Fraction (sum)	---	50	mg/kg		<50	**100**	---	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	---	---	---
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	---	---	---
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	---	---	---
>C16 - C34 Fraction	---	100	mg/kg		<100	**170**	---	---	---
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	---	---	---
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		<50	**170**	---	---	---
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	50	mg/kg		<50	<50	---	---	---
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	---	---	---
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	---	---	---
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	---	---	---
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	---	---	---
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	---	---	---
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	---	---	---
^ Total Xylenes	---	0.5	mg/kg		<0.5	<0.5	---	---	---
Naphthalene	91-20-3	1	mg/kg		<1	<1	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**66.0**	**66.8**	---	---	---
2-Chlorophenol-D4	93951-73-6	0.5	%		**74.3**	**74.4**	---	---	---
2.4.6-Tribromophenol	118-79-6	0.5	%		**70.7**	**68.6**	---	---	---

Exhibited

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	FD01	FD02	----	----	----
				Sampling date / time	03-Jun-2026 00:00	03-Jun-2026 00:00	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-026	EM2610454-027	------	------	------
					Result	Result	---	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		84.5	82.6	---	---	---
Anthracene-d10	1719-06-8	0.5	%		100	98.6	---	---	---
4-Terphenyl-d14	1718-51-0	0.5	%		82.4	80.9	---	---	---
EP075T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.025	%		100	99.1	---	---	---
Anthracene-d10	1719-06-8	0.025	%		99.1	99.5	---	---	---
4-Terphenyl-d14	1718-51-0	0.025	%		101	94.4	---	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		74.7	79.3	---	---	---
Toluene-D8	2037-26-5	0.2	%		77.7	84.5	---	---	---
4-Bromofluorobenzene	460-00-4	0.2	%		94.2	103	---	---	---

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate_PP	----	----	----	----
				Sampling date / time	03-Jun-2026 00:00	---	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-028	------	------	------	------
					Result	---	---	---	---
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	---	---	---	---
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	---	---	---	---
Chromium	7440-47-3	0.001	mg/L		<0.001	---	---	---	---
Copper	7440-50-8	0.001	mg/L		<0.001	---	---	---	---
Lead	7439-92-1	0.001	mg/L		<0.001	---	---	---	---
Nickel	7440-02-0	0.001	mg/L		<0.001	---	---	---	---
Zinc	7440-66-6	0.005	mg/L		<0.005	---	---	---	---
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	---	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	---	---	---	---
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	---	---	---	---
Acenaphthene	83-32-9	1.0	µg/L		<1.0	---	---	---	---
Fluorene	86-73-7	1.0	µg/L		<1.0	---	---	---	---
Phenanthrene	85-01-8	1.0	µg/L		<1.0	---	---	---	---
Anthracene	120-12-7	1.0	µg/L		<1.0	---	---	---	---
Fluoranthene	206-44-0	1.0	µg/L		<1.0	---	---	---	---
Pyrene	129-00-0	1.0	µg/L		<1.0	---	---	---	---
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	---	---	---	---
Chrysene	218-01-9	1.0	µg/L		<1.0	---	---	---	---
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	---	---	---	---
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	---	---	---	---
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	---	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	---	---	---	---
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	---	---	---	---
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	---	---	---	---
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	µg/L		<0.5	---	---	---	---

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate_PP	---	----	----	----
				Sampling date / time	03-Jun-2026 00:00	---	---	---	---
Compound	CAS Number	LOR	Unit		EM2610454-028	------	------	------	------
					Result	---	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (zero)	---	0.5	µg/L		<0.5	---	---	---	---
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	20	µg/L		<20	---	---	---	---
C10 - C14 Fraction	---	50	µg/L		<50	---	---	---	---
C15 - C28 Fraction	---	100	µg/L		<100	---	---	---	---
C29 - C36 Fraction	---	50	µg/L		<50	---	---	---	---
^ C10 - C36 Fraction (sum)	---	50	µg/L		<50	---	---	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	---	---	---	---
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	---	---	---	---
>C10 - C16 Fraction	---	100	µg/L		<100	---	---	---	---
>C16 - C34 Fraction	---	100	µg/L		<100	---	---	---	---
>C34 - C40 Fraction	---	100	µg/L		<100	---	---	---	---
^ >C10 - C40 Fraction (sum)	---	100	µg/L		<100	---	---	---	---
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	100	µg/L		<100	---	---	---	---
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	---	---	---	---
Toluene	108-88-3	2	µg/L		<2	---	---	---	---
Ethylbenzene	100-41-4	2	µg/L		<2	---	---	---	---
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	---	---	---	---
ortho-Xylene	95-47-6	2	µg/L		<2	---	---	---	---
^ Total Xylenes	---	2	µg/L		<2	---	---	---	---
^ Sum of BTEX	---	1	µg/L		<1	---	---	---	---
Naphthalene	91-20-3	5	µg/L		<5	---	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		23.1	---	---	---	---

Exhibited

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate_PP	----	----	----	----
				Sampling date / time	03-Jun-2026 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		EM2610454-028	----	----	----	----
					Result	---	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
2-Chlorophenol-D4	93951-73-6	1.0	%		42.7	---	---	---	---
2.4.6-Tribromophenol	118-79-6	1.0	%		39.1	---	---	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		74.9	---	---	---	---
Anthracene-d10	1719-06-8	1.0	%		90.1	---	---	---	---
4-Terphenyl-d14	1718-51-0	1.0	%		91.0	---	---	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		99.9	---	---	---	---
Toluene-D8	2037-26-5	2	%		98.0	---	---	---	---
4-Bromofluorobenzene	460-00-4	2	%		99.7	---	---	---	---

Exhibited

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	54	125
2-Chlorophenol-D4	93951-73-6	65	123
2.4.6-Tribromophenol	118-79-6	34	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	61	125
Anthracene-d10	1719-06-8	62	130
4-Terphenyl-d14	1718-51-0	67	133
EP075T: Base/Neutral Extractable Surrogates			
2-Fluorobiphenyl	321-60-8	35	126
Anthracene-d10	1719-06-8	40	135
4-Terphenyl-d14	1718-51-0	42	133
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	51	125
Toluene-D8	2037-26-5	55	125
4-Bromofluorobenzene	460-00-4	56	124

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	51
2-Chlorophenol-D4	93951-73-6	30	114
2.4.6-Tribromophenol	118-79-6	26	133
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	35	127
Anthracene-d10	1719-06-8	44	122
4-Terphenyl-d14	1718-51-0	44	124
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	129
Toluene-D8	2037-26-5	70	125
4-Bromofluorobenzene	460-00-4	71	129

Exhibited

QUALITY CONTROL REPORT

Work Order	: **EM2610454**	Page	: 1 of 18
Client	: **TASMANIAN RAILWAY PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: BOWEN WAGENKNECHT	Contact	: Customer Services EM
Address	: P.O.BOX 335 KINGS MEADOWS TASMANIA 7249	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: 20260603_WEJ_Stockpiles	Date Samples Received	: 05-Jun-2026
Order number	: 154605	Date Analysis Commenced	: 09-Jun-2026
C-O-C number	: ----	Issue Date	: 12-Jun-2026
Sampler	: BW		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 28		
No. of samples analysed	: 28		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Tahlia Freeman	Instrument Operator	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

Exhibited

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
= Indicates failed QC
* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7466349)									
EM2610319-012	Anonymous	EG005T: Chromium	7440-47-3	2	mg/kg	49	46	7.1	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	48	45	6.3	0% - 20%
EM2610319-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	21	21	0.0	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	31	34	10.8	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	31	26	19.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	68	69	2.4	0% - 50%
EM2610319-012	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	18	15	15.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	6	26.4	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	28	23	21.0	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7466351)									
EM2610454-006	VSP6 0-40cm	EG005T: Chromium	7440-47-3	2	mg/kg	62	# 78	22.9	0% - 20%
EM2610454-016	PB2 0-30cm	EG005T: Chromium	7440-47-3	2	mg/kg	59	52	12.3	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	161	156	3.4	0% - 20%
EM2610454-006	VSP6 0-40cm	EG005T: Cadmium	7440-43-9	1	mg/kg	2	2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	62	70	12.0	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	36	53	39.8	0% - 50%

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7466351) - continued									
EM2610454-006	VSP6 0-40cm	EG005T: Copper	7440-50-8	5	mg/kg	70	73	4.9	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	36	34	5.7	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	292	332	12.9	0% - 20%
EM2610454-016	PB2 0-30cm	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	54	46	16.5	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	11	7	44.2	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	47	44	8.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	78	55	33.7	0% - 50%
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 7466367)									
EM2610411-008	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	14	15	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	5	6	19.2	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	14	10	29.4	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	9	20.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	11	11	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	15	20	25.9	No Limit
EM2610411-018	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	4	4	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	5	5	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	10	13	21.0	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 7467531)									
EM2610311-001	Anonymous	EA055: Moisture Content	----	0.1	%	19.1	19.2	0.8	0% - 20%
EM2610454-004	VSP4 0-30cm	EA055: Moisture Content	----	0.1 (1.0)*	%	17.3	13.3	26.0	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 7467532)									
EM2610454-014	TSP2 0-40cm	EA055: Moisture Content	----	0.1 (1.0)*	%	13.1	12.5	5.0	0% - 50%
EM2610454-024	RS5 0-30cm	EA055: Moisture Content	----	0.1 (1.0)*	%	20.5	16.9	19.5	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7466348)									
EM2610319-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2610319-012	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7466350)									
EM2610454-006	VSP6 0-40cm	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2610454-016	PB2 0-30cm	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7466368)									
EM2610411-008	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7466368) - continued									
EM2610411-018	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466281)									
EM2610454-001	VSP1 0-30cm	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466283)									
EM2610454-021	RS2 0-30cm	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466283) - continued									
EM2610454-021	RS2 0-30cm	EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466270)									
EM2610454-001	VSP1 0-30cm	EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466270) - continued									
EM2610454-011	VSP11 0-50cm	EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 7466271)									
EM2610454-021	RS2 0-30cm	EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	0.06	0.07	0.0	No Limit
		EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466244)									
EM2610454-001	VSP1 0-30cm	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466260)									
EM2610414-016	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM2610454-023	RS4 0-40cm	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466282)									
EM2610454-001	VSP1 0-30cm	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466282) - continued									
EM2610454-001	VSP1 0-30cm	EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7466284)									
EM2610454-021	RS2 0-30cm	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	110	11.8	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7466244)									
EM2610454-001	VSP1 0-30cm	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7466260)									
EM2610414-016	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EM2610454-023	RS4 0-40cm	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7466282)									
EM2610454-001	VSP1 0-30cm	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7466284)									
EM2610454-021	RS2 0-30cm	EP071: >C16 - C34 Fraction	----	100	mg/kg	130	180	29.4	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080: BTEXN (QC Lot: 7466244)									
EM2610454-001	VSP1 0-30cm	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2610454-011	VSP11 0-50cm	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Exhibited

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080: BTEXN (QC Lot: 7466244) - continued									
EM2610454-011	VSP11 0-50cm	EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 7466260)									
EM2610414-016	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2610454-023	RS4 0-40cm	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG020T: Total Metals by ICP-MS (QC Lot: 7470941)									
EM2610371-004	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001 (0.0010)*	mg/L	0.0011	0.0012	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001 (0.010) *	mg/L	0.152	0.151	0.0	0% - 50%
		EG020A-T: Chromium	7440-47-3	0.001 (0.010) *	mg/L	0.451	0.455	1.0	0% - 20%
		EG020A-T: Copper	7440-50-8	0.001 (0.010) *	mg/L	0.025	0.025	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001 (0.010) *	mg/L	0.061	0.063	3.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001 (0.010) *	mg/L	0.709	0.703	0.9	0% - 20%
		EG020A-T: Zinc	7440-66-6	0.005 (0.052) *	mg/L	0.357	0.355	0.6	No Limit
EM2610442-001	Anonymous	EG020A-T: Zinc	7440-66-6	0.005	mg/L	31.1	31.2	0.4	0% - 20%
EM2610442-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	0.0358	0.0351	1.8	0% - 20%
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit

Exhibited

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 7470941) - continued									
EM2610442-001	Anonymous	EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.032	0.032	0.0	0% - 20%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	0.003	0.003	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.078	0.084	7.8	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 7469006)									
EM2610269-001	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EM2610424-006	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7462538)									
EM2610433-003	Anonymous	EP071: C15 - C28 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
		EP071: C29 - C36 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
EM2610433-001	Anonymous	EP071: C15 - C28 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
		EP071: C29 - C36 Fraction	----	50	µg/L	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 7465290)									
EM2610452-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7462538)									
EM2610433-003	Anonymous	EP071: >C10 - C16 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C16 - C34 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
EM2610433-001	Anonymous	EP071: >C10 - C16 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C16 - C34 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	µg/L	<100	<100	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 7465290)									
EM2610452-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 7465290)									
EM2610452-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit

Exhibited

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466349)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	43 mg/kg	86.0	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	3 mg/kg	102	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	84 mg/kg	79.2	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	185 mg/kg	93.8	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	153 mg/kg	77.5	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.9 mg/kg	79.6	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	358 mg/kg	92.3	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466351)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	43 mg/kg	87.1	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	3 mg/kg	104	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	84 mg/kg	79.2	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	185 mg/kg	93.7	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	153 mg/kg	76.3	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.9 mg/kg	78.7	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	358 mg/kg	93.7	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466367)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	43 mg/kg	83.6	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	3 mg/kg	97.2	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	84 mg/kg	89.1	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	185 mg/kg	84.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	153 mg/kg	79.6	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.9 mg/kg	83.9	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	358 mg/kg	90.4	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466348)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	108	69.0	128
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466350)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	96.1	69.0	128
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466368)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	102	69.0	128
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466281)								

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466281) - continued								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	3 mg/kg	89.1	85.7	123
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	3 mg/kg	81.5	81.0	123
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	3 mg/kg	89.0	83.6	120
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	3 mg/kg	84.4	81.3	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	3 mg/kg	85.9	79.4	123
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	3 mg/kg	87.5	81.7	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	3 mg/kg	85.6	78.3	124
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	3 mg/kg	86.3	79.9	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	3 mg/kg	83.5	76.9	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	3 mg/kg	88.7	80.9	130
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	3 mg/kg	82.4	70.0	121
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	3 mg/kg	83.5	80.4	130
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	3 mg/kg	83.0	70.2	123
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	3 mg/kg	84.1	67.9	122
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	3 mg/kg	85.2	65.8	123
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	3 mg/kg	85.5	65.8	127
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466283)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	3 mg/kg	99.7	85.7	123
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	3 mg/kg	98.2	81.0	123
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	3 mg/kg	100	83.6	120
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	3 mg/kg	98.7	81.3	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	3 mg/kg	102	79.4	123
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	3 mg/kg	103	81.7	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	3 mg/kg	105	78.3	124
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	3 mg/kg	105	79.9	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	3 mg/kg	97.2	76.9	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	3 mg/kg	105	80.9	130
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	3 mg/kg	96.6	70.0	121
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	3 mg/kg	104	80.4	130
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	3 mg/kg	103	70.2	123
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	3 mg/kg	103	67.9	122
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	3 mg/kg	103	65.8	123
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	3 mg/kg	103	65.8	127

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466270)								
EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	91.5	75.4	130
EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	93.1	73.3	130
EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	92.3	73.0	131
EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	105	72.1	134
EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	94.7	74.4	131
EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	91.1	75.3	132
EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	104	72.9	135
EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	97.8	75.0	133
EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	106	71.3	134
EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	91.9	75.8	133
EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	92.0	69.6	133
EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	92.8	78.4	127
EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	91.7	72.0	135
EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	101	76.3	130
EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	2 mg/kg	92.3	77.5	134
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466271)								
EP075-TAS: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	93.5	75.4	130
EP075-TAS: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	93.7	73.3	130
EP075-TAS: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	92.4	73.0	131
EP075-TAS: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	101	72.1	134
EP075-TAS: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	94.1	74.4	131
EP075-TAS: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	93.9	75.3	132
EP075-TAS: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	100.0	72.9	135
EP075-TAS: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	98.6	75.0	133
EP075-TAS: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	101	71.3	134
EP075-TAS: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	94.3	75.8	133
EP075-TAS: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	92.7	69.6	133
EP075-TAS: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	93.1	78.4	127
EP075-TAS: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	92.7	72.0	135
EP075-TAS: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	92.1	76.3	130
EP075-TAS: Benzo(a)pyrene	50-32-8	0.05	mg/kg	<0.05	2 mg/kg	94.4	77.5	134
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466244)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	85.7	58.6	131

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466260)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	72.8	58.6	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466282)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	650 mg/kg	95.9	80.0	120
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	2910 mg/kg	93.3	80.0	120
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	89.6	80.0	120
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466284)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	650 mg/kg	87.8	80.0	120
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	2910 mg/kg	89.8	80.0	120
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	91.3	80.0	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466244)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	101	59.3	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466260)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	78.0	59.3	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466282)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	920 mg/kg	93.8	80.0	120
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3920 mg/kg	92.0	80.0	120
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	370 mg/kg	87.5	80.0	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466284)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	920 mg/kg	87.7	80.0	120
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3920 mg/kg	90.1	80.0	120
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	370 mg/kg	94.0	80.0	120
EP080: BTEXN (QCLot: 7466244)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	104	61.6	117
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	101	65.8	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	103	65.8	124
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	105	64.8	134
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	102	68.7	132
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	102	61.8	123
EP080: BTEXN (QCLot: 7466260)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	77.2	61.6	117
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	82.9	65.8	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	82.8	65.8	124
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	85.8	64.8	134

Exhibited

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080: BTEXN (QCLot: 7466260) - continued								
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	84.7	68.7	132
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	94.6	61.8	123

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 7470941)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	103	89.2	110
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	91.2	86.4	115
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	97.7	89.0	112
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	99.6	88.3	111
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	99.2	88.3	112
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	99.7	88.8	113
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	103	90.0	115
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7469006)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	87.1	73.4	119
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7462537)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	82.1	42.8	114
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	88.9	48.6	119
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	85.9	47.0	117
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	85.8	49.5	119
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	89.3	49.4	121
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	87.6	48.4	122
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	89.0	50.3	124
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	89.8	50.0	126
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	88.0	49.4	127
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	90.5	48.7	126
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	90.1	54.5	134
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	93.1	56.1	134
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	93.2	55.6	135
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	91.4	54.4	126
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	91.4	54.5	126
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	88.3	54.4	126
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7462538)								

Exhibited

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7462538) - continued								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	4360 µg/L	85.9	47.2	122
EP071: C15 - C28 Fraction	----	100	µg/L	<100	15200 µg/L	85.8	52.9	131
EP071: C29 - C36 Fraction	----	50	µg/L	<50	7370 µg/L	85.2	50.4	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7465290)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	360 µg/L	87.8	66.2	134
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7462538)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	5760 µg/L	84.9	49.1	125
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	20100 µg/L	85.7	51.6	128
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	1440 µg/L	86.1	47.2	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7465290)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	450 µg/L	85.5	66.2	132
EP080: BTEXN (QCLot: 7465290)								
EP080: Benzene	71-43-2	1	µg/L	<1	20 µg/L	88.4	68.8	127
EP080: Toluene	108-88-3	2	µg/L	<2	20 µg/L	95.5	72.9	129
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	93.6	71.7	130
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	40 µg/L	92.9	72.3	136
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	97.8	75.9	134
EP080: Naphthalene	91-20-3	5	µg/L	<5	5 µg/L	99.0	68.3	131

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466349)							
EM2610319-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	105	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	101	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	97.1	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	114	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	92.7	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	92.5	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	90.1	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466351)							

Exhibited

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466351) - continued							
EM2610454-007	VSP7 0-50cm	EG005T: Arsenic	7440-38-2	50 mg/kg	101	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.7	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	87.1	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	99.8	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	97.5	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	84.3	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	92.6	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 7466367)							
EM2610411-009	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	99.6	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	96.8	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	105	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	98.2	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	95.2	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	98.6	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	94.8	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466348)							
EM2610319-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	103	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466350)							
EM2610454-007	VSP7 0-50cm	EG035T: Mercury	7439-97-6	0.5 mg/kg	108	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7466368)							
EM2610411-009	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	82.6	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466281)							
EM2610454-002	VSP2 0-30cm	EP075(SIM): Acenaphthene	83-32-9	3 mg/kg	86.8	77.2	116
		EP075(SIM): Pyrene	129-00-0	3 mg/kg	86.6	65.5	136
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466283)							
EM2610454-022	RS3 0-30cm	EP075(SIM): Acenaphthene	83-32-9	3 mg/kg	82.9	77.2	116
		EP075(SIM): Pyrene	129-00-0	3 mg/kg	84.3	65.5	136
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466270)							
EM2610454-002	VSP2 0-30cm	EP075-TAS: Pyrene	129-00-0	3 mg/kg	90.1	37.8	152
		EP075-TAS: Acenaphthene	83-32-9	3 mg/kg	90.6	42.6	138
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 7466271)							
EM2610454-022	RS3 0-30cm	EP075-TAS: Pyrene	129-00-0	3 mg/kg	115	37.8	152
		EP075-TAS: Acenaphthene	83-32-9	3 mg/kg	110	42.6	138
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466244)							
EM2610454-002	VSP2 0-30cm	EP080: C6 - C9 Fraction	----	28 mg/kg	78.2	33.4	124
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466260)							

Exhibited

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466260) - continued							
EM2610414-019	Anonymous	EP080: C6 - C9 Fraction	----	28 mg/kg	54.8	33.4	124
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466282)							
EM2610454-003	VSP3 0-30cm	EP071: C10 - C14 Fraction	----	650 mg/kg	93.6	70.0	130
		EP071: C15 - C28 Fraction	----	2910 mg/kg	91.3	70.0	130
		EP071: C29 - C36 Fraction	----	1550 mg/kg	87.9	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7466284)							
EM2610454-023	RS4 0-40cm	EP071: C10 - C14 Fraction	----	650 mg/kg	86.3	70.0	130
		EP071: C15 - C28 Fraction	----	2910 mg/kg	87.7	70.0	130
		EP071: C29 - C36 Fraction	----	1550 mg/kg	88.0	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466244)							
EM2610454-002	VSP2 0-30cm	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	81.9	30.8	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466260)							
EM2610414-019	Anonymous	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	56.5	30.8	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466282)							
EM2610454-003	VSP3 0-30cm	EP071: >C10 - C16 Fraction	----	920 mg/kg	91.6	70.0	130
		EP071: >C16 - C34 Fraction	----	3920 mg/kg	90.1	70.0	130
		EP071: >C34 - C40 Fraction	----	370 mg/kg	85.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7466284)							
EM2610454-023	RS4 0-40cm	EP071: >C10 - C16 Fraction	----	920 mg/kg	86.5	70.0	130
		EP071: >C16 - C34 Fraction	----	3920 mg/kg	87.5	70.0	130
		EP071: >C34 - C40 Fraction	----	370 mg/kg	87.6	70.0	130
EP080: BTEXN (QCLot: 7466244)							
EM2610454-002	VSP2 0-30cm	EP080: Benzene	71-43-2	2 mg/kg	109	54.4	127
		EP080: Toluene	108-88-3	2 mg/kg	112	57.1	131
EP080: BTEXN (QCLot: 7466260)							
EM2610414-019	Anonymous	EP080: Benzene	71-43-2	2 mg/kg	69.4	54.4	127
		EP080: Toluene	108-88-3	2 mg/kg	74.2	57.1	131

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 7470941)							
EM2610371-004	Anonymous	EG020A-T: Arsenic	7440-38-2	10 mg/L	103	82.0	123
		EG020A-T: Cadmium	7440-43-9	2.5 mg/L	92.2	81.8	123
		EG020A-T: Chromium	7440-47-3	10 mg/L	98.1	78.9	119
		EG020A-T: Copper	7440-50-8	10 mg/L	99.1	80.4	118

Exhibited

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Acceptable Limits (%) Low	Matrix Spike (MS) Report: Acceptable Limits (%) High
EG020T: Total Metals by ICP-MS (QCLot: 7470941) - continued							
EM2610371-004	Anonymous	EG020A-T: Lead	7439-92-1	10 mg/L	96.6	80.5	121
		EG020A-T: Nickel	7440-02-0	10 mg/L	100	80.0	118
		EG020A-T: Zinc	7440-66-6	10 mg/L	99.8	74.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 7469006)							
EM2610319-011	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	78.9	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7462538)							
EM2610433-002	Anonymous	EP071: C10 - C14 Fraction	----	4360 µg/L	86.7	48.0	126
		EP071: C15 - C28 Fraction	----	15200 µg/L	87.9	51.7	132
		EP071: C29 - C36 Fraction	----	7370 µg/L	87.0	50.5	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 7465290)							
EM2610452-002	Anonymous	EP080: C6 - C9 Fraction	----	280 µg/L	62.9	33.9	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7462538)							
EM2610433-002	Anonymous	EP071: >C10 - C16 Fraction	----	5760 µg/L	86.5	48.0	128
		EP071: >C16 - C34 Fraction	----	20100 µg/L	87.7	50.4	130
		EP071: >C34 - C40 Fraction	----	1440 µg/L	87.7	47.4	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 7465290)							
EM2610452-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	330 µg/L	59.7	34.0	122
EP080: BTEXN (QCLot: 7465290)							
EM2610452-002	Anonymous	EP080: Benzene	71-43-2	20 µg/L	88.7	56.3	133
		EP080: Toluene	108-88-3	20 µg/L	93.2	60.4	132

Exhibited

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2610454**	Page	: 1 of 11
Client	: **TASMANIAN RAILWAY PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: BOWEN WAGENKNECHT	Telephone	: +61-3-8549 9600
Project	: 20260603_WEJ_Stockpiles	Date Samples Received	: 05-Jun-2026
Site	: ----	Issue Date	: 12-Jun-2026
Sampler	: BW	No. of samples received	: 28
Order number	: 154605	No. of samples analysed	: 28

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **For all regular sample matrices, where applicable to the methodology, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Exhibited

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	EM2610454--006	VSP6 0-40cm	**Chromium**	7440-47-3	22.9 %	0% - 20%	**RPD exceeds LOR based limits**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)						
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	11	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)						
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	11	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / *Container / Client Sample ID(s)*		*Sample Date*	*Extraction / Preparation*			*Analysis*		
			Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**----**	----	----	**09-Jun-2026**	17-Jun-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**10-Jun-2026**	30-Nov-2026	✓	**12-Jun-2026**	30-Nov-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**10-Jun-2026**	01-Jul-2026	✓	**12-Jun-2026**	01-Jul-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM))								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							
EP075B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075-TAS)								
VSP1 0-30cm,	VSP2 0-30cm,	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓
VSP3 0-30cm,	VSP4 0-30cm,							
VSP5 0-40cm,	VSP6 0-40cm,							
VSP7 0-50cm,	VSP8 0-40cm,							
VSP9 0-40cm,	VSP10 0-40cm,							
VSP11 0-50cm,	VSP12 0-40cm,							
TSP1 0-50cm,	TSP2 0-40cm,							
PB1 0-30cm,	PB2 0-30cm,							
PB3 0-25cm,	PB4 0-25cm,							
PB5 0-30cm,	FD01,							
RS1 0-40cm,								
RS2 0-30cm,	RS3 0-30cm,							
RS4 0-40cm,	RS5 0-30cm,							
RS6 0-40cm,	FD02							

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm, TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**09-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP080)							
RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP071)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	20-Jul-2026	✓
Soil Glass Jar - Unpreserved (EP071)							
TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm, RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm, TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**09-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP080)							
RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP071)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	20-Jul-2026	✓
Soil Glass Jar - Unpreserved (EP071)							
TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm, RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**10-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓

Exhibited

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
VSP1 0-30cm, VSP2 0-30cm, VSP3 0-30cm, VSP4 0-30cm, VSP5 0-40cm, VSP6 0-40cm, VSP7 0-50cm, VSP8 0-40cm, VSP9 0-40cm, VSP10 0-40cm, VSP11 0-50cm, VSP12 0-40cm, TSP1 0-50cm, TSP2 0-40cm, PB1 0-30cm, PB2 0-30cm, PB3 0-25cm, PB4 0-25cm, PB5 0-30cm, RS1 0-40cm	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**09-Jun-2026**	17-Jun-2026	✓
Soil Glass Jar - Unpreserved (EP080)							
RS2 0-30cm, RS3 0-30cm, RS4 0-40cm, RS5 0-30cm, RS6 0-40cm, FD01, FD02	**03-Jun-2026**	**09-Jun-2026**	17-Jun-2026	✓	**10-Jun-2026**	17-Jun-2026	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG020A-T)							
Rinsate_PP	**03-Jun-2026**	**10-Jun-2026**	30-Nov-2026	✓	**11-Jun-2026**	30-Nov-2026	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Unfiltered; Lab-acidified (EG035T)							
Rinsate_PP	**03-Jun-2026**	**----**	----	----	**12-Jun-2026**	01-Jul-2026	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
Rinsate_PP	**03-Jun-2026**	**10-Jun-2026**	10-Jun-2026	✓	**11-Jun-2026**	20-Jul-2026	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
Rinsate_PP	**03-Jun-2026**	**10-Jun-2026**	10-Jun-2026	✓	**10-Jun-2026**	20-Jul-2026	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate_PP	**03-Jun-2026**	**11-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	17-Jun-2026	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
Rinsate_PP	**03-Jun-2026**	**10-Jun-2026**	10-Jun-2026	✓	**10-Jun-2026**	20-Jul-2026	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate_PP	**03-Jun-2026**	**11-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	17-Jun-2026	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
Rinsate_PP	**03-Jun-2026**	**11-Jun-2026**	17-Jun-2026	✓	**11-Jun-2026**	17-Jun-2026	✓

Exhibited

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	3	27	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	4	34	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	27	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	6	57	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	9	57	**15.79**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	27	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	

Exhibited

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	11	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	3	20	**15.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	11	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Exhibited

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
Benzo(a)pyrene and other PAHs - Waste Classification (TAS requirements)	EP075-TAS	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)

Exhibited

Analytical Methods	Method	Matrix	Method Descriptions
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging.

Exhibited

Summary Results Tables and Comparison to Adopted Criteria

Attachment C

pitt&sherry

Exhibited

SUMMARY RESULTS - SOIL / FILL MATERIAL

Project No: P.26.0676
Project Name: TasRail - WEJ Waste Classification

Analyte Grouping					Total Heavy Metals							Total Petroleum Hydrocarbons (TPH)					Total Recoverable Hydrocarbons (TRH)					BTEXN					Polycyclic Aromatic Hydrocarbons (PAH)		
Analyte					Arsenic	Cadmium	Chromium (total)	Copper	Lead	Nickel	Zinc (total)	Mercury (total)	C6-C9	C10-C14	C15-C28	C29-C36	Sum(C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Benzo(a)pyrene	Carcinogenic PAHs (as BaP TEQ)[D]	Total PAHs
ASC NEPM - HIL/HSL D (vapour intrusion)					3,000	900	3,600 Cr(VI)	240,000	1,500	6,000	400,000	730 (inorganic)						260-NL (sand) 250-NL (silt) 310-NL (clay)	NL (all soil types)				3 (sand) 4-10 (silt) 4-20 (clay)	NL (all soil types)	NL (all soil types)	NL (all soil types)	NL (all soil types)		40	4,000
CRC CARE - HSL (vapour intrusion, intrusive maintenance worker - shallow trench)																		(C6-C10) NL	(>C10-C16) NL				77-NL (sand) 250-NL (silt) 350-NL (clay)	NL (all soil types)	NL (all soil types)	NL (all soil types)	NL (all soil types)			
CRC CARE - HSL D (vapour intrusion)																		(C6-C10) 260-NL (sand) 250-590 (silt) 310-NL (clay)	(>C10-C16) NL (all soil types and depths)				3 (sand) 4-6 (silt) 4-9 (clay)	NL (all soil types)	NL (all soil types)	230-NL (sand) NL (silt) NL (clay)	NL (all soil types)			
CRC CARE - HSL D (direct contact)																		26,000 (C6-C10)	20,000 (>C10-C16)	27,000	38,000		430	99,000	27,000	81,000	11,000			
CRC CARE - HSL (direct contact, intrusive maintenance worker - shallow trench)																		82,000 (C6-C10)	62,000 (>C10-C16)	85,000	120,000		1,100	120,000	85,000	130,000	29,000			
ASC NEPM - EIL/ESL (commercial / industrial)					160[A]		310-660[B]	85-1,200[B]	1,800[C]	55-960[B]	110-2,000[B]							215	170	1,700 (coarse) 2,500 (fine)	3,300 (coarse) 6,600 (fine)		75 (coarse) 95 (fine)	135 (coarse / fine)	165 (coarse) 185 (fine)	180 (coarse) 95 (fine)	370[A]	1.4		
IB105 - Level 1 (fill material)					20	3	50	100	300	60	200	1	65				1,000	65 (C6-C9)				1,000 (C10-C36)	1	1	3	14		0.08		20
IB105 - Level 2 (low level contaminated soil)					200	40	500	2,000	1,200	600	14,000	30	650				5,000	650 (C6-C9)				5,000 (C10-C36)	5	100	100	180		2		40
IB105 - Level 3 (contaminated soil)					750	400	5,000	7,500	3,000	3,000	50,000	110	1,000				10,000	1,000 (C6-C9)				10,000 (C10-C36)	50	1,000	1,080	1,800		20		200
Sample ID	**Field ID**	**Location**	**Date Sampled**	**Sample Depth (m bgl)**	**Lab**	**Soil Type / Units**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EM2610454015	PB1 0-30cm	Pit Base	03 Jun 2026 12:42	0.3	ALS	Fine	7	<1	70	56	42	91	101	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454016	PB2 0-30cm	Pit Base	03 Jun 2026 12:48	0.3	ALS	Fine	11	<1	59	47	78	54	161	0.1	<10	<50	<100	<100	<50	<10	<50	100	<100	100	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454017	PB3 0-25cm	Pit Base	03 Jun 2026 12:58	0.25	ALS	Fine	<5	<1	75	45	13	79	213	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454018	PB4 0-25cm	Pit Base	03 Jun 2026 13:03	0.25	ALS	Fine	<5	<1	79	36	13	76	86	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
EM2610454019	PB5 0-30cm	Pit Base	03 Jun 2026 13:09	0.3	ALS	Fine	<5	<1	85	33	9	65	74	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454020	RS1 0-40cm	Roadside Stockpile	03 Jun 2026 14:15	0.4	ALS	Fine	25	<1	35	52	20	98	156	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.07	0.07	0.07
EM2610454021	RS2 0-30cm	Roadside Stockpile	03 Jun 2026 14:45	0.3	ALS	Fine	32	1	30	49	37	64	126	<0.1	<10	<50	<100	<100	<50	<10	<50	130	<100	130	<0.2	<0.5	<0.5	<0.5	<1	0.06	0.06	0.06
EM2610454022	RS3 0-30cm	Roadside Stockpile	03 Jun 2026 14:55	0.3	ALS	Fine	31	<1	26	321	63	54	178	<0.1	<10	<50	110	<100	110	<10	<50	170	<100	170	<0.2	<0.5	<0.5	<0.5	<1	0.09	0.09	0.09
EM2610454023	RS4 0-40cm	Roadside Stockpile	03 Jun 2026 15:00	0.4	ALS	Fine	38	<1	35	62	41	77	160	<0.1	<10	<50	<100	<100	<50	<10	<50	130	<100	130	<0.2	<0.5	<0.5	<0.5	<1	0.07	0.07	0.07
EM2610454024	RS5 0-30cm	Roadside Stockpile	03 Jun 2026 15:10	0.3	ALS	Fine	16	<1	60	55	79	138	161	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
EM2610454025	RS6 0-40cm	Roadside Stockpile	03 Jun 2026 15:15	0.4	ALS	Fine	29	<1	30	48	24	77	131	<0.1	<10	<50	<100	<100	<50	<10	<50	150	<100	150	<0.2	<0.5	<0.5	<0.5	<1	0.07	0.07	0.07
EM2610454013	TSP1 0-50cm	Tower Stockpile	03 Jun 2026 15:40	0.5	ALS	Fine	9	<1	43	53	38	109	208	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454014	TSP2 0-40cm	Tower Stockpile	03 Jun 2026 15:45	0.4	ALS	Fine	18	1	44	72	156	73	423	0.2	<10	<50	130	140	270	<10	<50	230	<100	230	<0.2	<0.5	<0.5	<0.5	<1	0.21	0.21	0.21
EM2610454001	VSP1 0-30cm	Void Stockpile	03 Jun 2026 13:20	0.3	ALS	Fine	<5	<1	19	16	8	22	41	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454002	VSP2 0-30cm	Void Stockpile	03 Jun 2026 13:42	0.3	ALS	Fine	16	<1	30	38	12	75	139	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454003	VSP3 0-30cm	Void Stockpile	03 Jun 2026 13:48	0.3	ALS	Fine	16	<1	30	41	15	91	149	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.06	0.06	0.06
EM2610454004	VSP4 0-30cm	Void Stockpile	03 Jun 2026 13:55	0.3	ALS	Fine	9	1	43	44	26	83	201	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454005	VSP5 0-40cm	Void Stockpile	03 Jun 2026 14:05	0.4	ALS	Fine	19	1	50	48	31	43	220	0.2	<10	<50	170	150	320	<10	<50	270	<100	270	<0.2	<0.5	<0.5	<0.5	<1	0.15	0.15	0.65
EM2610454006	VSP6 0-40cm	Void Stockpile	03 Jun 2026 14:16	0.4	ALS	Fine	36	2	62	70	36	62	292	<0.1	<10	<50	120	110	230	<10	<50	190	<100	190	<0.2	<0.5	<0.5	<0.5	<1	0.1	0.1	0.1
EM2610454007	VSP7 0-50cm	Void Stockpile	03 Jun 2026 14:21	0.5	ALS	Fine	<5	<1	24	29	8	67	103	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454008	VSP8 0-40cm	Void Stockpile	03 Jun 2026 14:35	0.4	ALS	Fine	14	3	67	75	58	72	598	0.2	<10	<50	150	150	300	<10	<50	250	<100	250	<0.2	<0.5	<0.5	<0.5	<1	0.12	0.12	0.12
EM2610454009	VSP9 0-40cm	Void Stockpile	03 Jun 2026 14:55	0.4	ALS	Fine	7	<1	16	20	47	21	82	0.3	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454010	VSP10 0-40cm	Void Stockpile	03 Jun 2026 15:04	0.4	ALS	Fine	<5	<1	16	27	37	51	72	0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454011	VSP11 0-50cm	Void Stockpile	03 Jun 2026 15:10	0.5	ALS	Fine	11	<1	55	60	5	172	112	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454012	VSP12 0-40cm	Void Stockpile	03 Jun 2026 15:15	0.4	ALS	Fine	19	<1	65	59	11	157	173	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
EM2610454026	FD01 [Dup01]	PB2	03 Jun 2026 13:20	0.3	ALS	Fine	9	<1	46	49	84	72	147	0.2	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.06	0.06	0.06
EM2610454027	FD02 [Dup02]	RS4	03 Jun 2026 13:20	0.4	ALS	Fine	44	<1	39	64	48	92	177	<0.1	<10	<50	<100	100	100	<10	<50	170	<100	170	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
Summary Statistics - Re-use Area - Pit base (PB01 - PB05)						**Number of Data Points**	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
						Number of Detects	2	0	5	5	5	5	5	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	<5	<1	59	33	9	54	74	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
						Maximum	11	<1	85	56	78	91	213	0.1	<10	<50	<100	<100	<50	<10	<50	100	<100	100	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
						Median	2.5		75	45	13	76	101	0.05								50		25						0.03	0.03	0.03
						Arithmetic Mean	5.1		73.6	43.4	31.0	73.0	127.0	0.06								60.0		40.0						0.03	0.03	0.03
						Standard Deviation	3.8		9.8	9.2	29.4	14.1	58.6	0.02								22.4		33.5						0.01	0.01	0.01
						95th Percentile	10.2		83.8	54.2	70.8	88.6	202.6	0.09								90.0		85.0						0.05	0.05	0.05
						95% Confidence Interval	3.4		8.6	8.0	25.8	12.3	51.3	0.02								19.6		29.4						0.01	0.01	0.01
						95% UCL (Mean + 95% Confidence Interval)	8.5		82.2	51.4	56.8	85.3	178.3	0.08								79.6		69.4						0.04	0.04	0.04
Summary Statistics - All Western Junction Stockpile samples						**Number of Data Points**	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
						Number of Detects	17	6	20	20	20	20	20	5	0	0	5	4	5	0	0	8	0	8	0	0	0	0	0	11	11	11
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	<5	<1	16	16	5	21	41	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
						Maximum	38	3	67	321	156	172	598	0.3	<10	<50	170	150	320	<10	<50	270	<100	270	<0.2	<0.5	<0.5	<0.5	<1	0.21	0.21	0.65
						Median	16	0.5	35	50.5	33.5	74	158	0.05			50	50	25			50		25						0.055	0.055	0.055
						Arithmetic Mean	17.63	0.80	39.00	61.95	37.60	80.30	186.25	0.09			71.50	67.50	80.25			106.00		91.00						0.06	0.06	0.09
						Standard Deviation	11.10	0.64	16.34	63.14	34.23	39.53	127.50	0.07			39.77	36.69	105.35			77.76		89.29						0.05	0.05	0.14
						95th Percentile	36.10	2.05	65.10	87.30	82.85	157.75	431.75	0.21			151.00	150.00	301.00			251.00		251.00						0.15	0.15	0.23
						95% Confidence Interval	4.86	0.28	7.16	27.67	15.00	17.32	55.88	0.03			17.43	16.08	46.17			34.08		39.13						0.02	0.02	0.06
						95% UCL (Mean + 95% Confidence Interval)	22.49	1.08	46.16	89.62	52.60	97.62	242.13	0.12			88.93	83.58	126.42			140.08		130.13						0.09	0.09	0.15
Summary Statistics - Roadside stockpile (RS01 - RS06)						**Number of Data Points**	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
						Number of Detects	6	1	6	6	6	6	6	0	0	0	1	0	1	0	0	4	0	4	0	0	0	0	0	6	6	6
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	16	<1	26	48	20	54	126	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	0.05	0.05	0.05
						Maximum	38	1	60	321	79	138	178	<0.1	<10	<50	110	<100	110	<10	<50	170	<100	170	<0.2	<0.5	<0.5	<0.5	<1	0.09	0.09	0.09
						Median	30	0.5	32.5	53.5	39	77	158				50		25			130		130						0.07	0.07	0.07
						Arithmetic Mean	28.5	0.6	36.0	97.8	44.0	84.7	152.0				60.00		39.17			113.33		105.00						0.07	0.07	0.07
						Standard Deviation	7.4	0.2	12.2	109.4	22.9	30.0	19.8				24.49		34.70			51.25		63.72						0.01	0.01	0.01
						95th Percentile	36.5	0.9	53.8	256.3	75.0	128.0	173.8				95.00		88.75			165.00		165.00						0.09	0.09	0.09
						95% Confidence Interval	6.0	0.2	9.8	87.6	18.3	24.0	15.8				19.60		27.77			41.01		50.98						0.01	0.01	0.01
						95% UCL (Mean + 95% Confidence Interval)	34.5	0.7	45.8	185.4	62.3	108.7	167.8				79.60		66.93			154.34		155.98						0.08	0.08	0.08
Summary Statistics - Tower stockpile (TSP01 - TSP02)						**Number of Data Points**	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
						Number of Detects	2	1	2	2	2	2	2	1	0	0	1	1	1	0	0	1	0	1	0	0	0	0	0	1	1	1
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	9	<1	43	53	38	73	208	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
						Maximum	18	1	44	72	156	109	423	0.2	<10	<50	130	140	270	<10	<50	230	<100	230	<0.2	<0.5	<0.5	<0.5	<1	0.21	0.21	0.21
						Median	13.5	0.75	43.5	62.5	97	91	315.5	0.125			90	95	147.5			140		127.5						0.12	0.12	0.12
						Arithmetic Mean	13.50	0.75	43.50	62.50	97.00	91.00	315.50	0.13			90.00	95.00	147.50			140.00		127.50						0.12	0.12	0.12
						Standard Deviation	6.36	0.35	0.71	13.44	83.44	25.46	152.03	0.11			56.57	63.64	173.24			127.28		144.96						0.13	0.13	0.13
						95th Percentile	17.55	0.98	43.95	71.05	150.10	107.20	412.25	0.19			126.00	135.50	257.75			221.00		219.75						0.20	0.20	0.20
						95% Confidence Interval	8.82	0.49	0.98	18.62	115.64	35.28	210.70	0.15			78.40	88.20	240.10			176.40		200.90						0.18	0.18	0.18
						95% UCL (Mean + 95% Confidence Interval)	22.32	1.24	44.48	81.12	212.64	126.28	526.20	0.27			168.40	183.20	387.60			316.40		328.40						0.30	0.30	0.30
Summary Statistics - Void stockpile (VSP01 - VSP12)						**Number of Data Points**	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
						Number of Detects	9	4	12	12	12	12	12	4	0	0	3	3	3	0	0	3	0	3	0	0	0	0	0	4	4	4
(QA/QC samples have been removed and values <LOR have been assigned a value of half the LOR for statistics calculations)						**Minimum**	<5	<1	16	16	5	21	41	<0.1	<10	<50	<100	<100	<50	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<1	<0.05	<0.05	<0.05
						Maximum	36	3	67	75	58	172	598	0.3	<10	<50	170	150	320	<10	<50	270	<100	270	<0.2	<0.5	<0.5	<0.5	<1	0.15	0.15	0.65
						Median	12.5	0.5	36.5	42.5	20.5	69.5	144	0.05			50	50	25			50		25						0.025	0.025	0.025
						Arithmetic Mean	12.88	0.92	39.75	43.92	24.50	76.33	181.83	0.10			74.17	71.67	89.58			96.67		77.92						0.05	0.05	0.09
						Standard Deviation	9.57	0.79	19.59	19.19	17.36	46.71	148.66	0.09			45.02	40.41	118.56			86.27		97.36						0.05	0.05	0.18
						95th Percentile	26.65	2.45	65.90	72.25	51.95	163.75	429.70	0.25			159.00	150.00	309.00			259.00		259.00						0.13	0.13	0.36
						95% Confidence Interval	5.41	0.45	11.08	10.86	9.82	26.43	84.11	0.05			25.47	22.87	67.08			48.81		55.09						0.03	0.03	0.10
						95% UCL (Mean + 95% Confidence Interval)	18.29	1.37	50.83	54.78	34.32	102.76	265.94	0.15			99.64	94.53	156.66			145.48		133.00						0.078	0.08	0.19

Legend:

	Ecological criteria (National)
	Disposal criteria (Tasmania)
Bold	Reported concentration equals or exceeds at least one of the ecological criteria
Bold	Reported concentration equals or exceeds at least one of the human health criteria plus at least one of the ecological criteria
	Reported concentration equals or exceeds IB105 Level 1 - fill material and/or PFAS unlined landfill criterion
Bold	Reported concentration is greater than the LOR
Grey <	Reported concentration is below the LOR
A	Generic EIL
B	ACL range
C	Generic ACL
D	Carcinogenic PAHs (as BaP TEQ at zero)
HIL / HSL	Health Investigation Level / Health Screening Level
EIL / ESL	Ecological Investigation Level / Ecological Screening Level
LOR	Limit of reporting
NL	Not limiting
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene
ACL	Added contaminant limit

References:

ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure 1999, amended 2013
IB105	Information Bulletin No. 105 - Classification and Management of Contaminated Soil for Disposal, Version 3, 2018, Environment Protection Authority Tasmania

Exhibited

SUMMARY RESULTS - DUPLICATE (SOIL)

Project No: P.26.0676
Project Name: TasRail - WEJ Waste Classification

			Analyte Group	Total Heavy Metals								Total Petroleum Hydrocarbons (TPH)					Total Recoverable Hydrocarbons (TRH)					BTEXN					Polycyclic Aromatic Hydrocarbons (PAH)		
			Analyte	Arsenic	Cadmium	Chromium (total)	Copper	Lead	Nickel	Zinc (total)	Mercury (total)	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Benzo(a)pyrene	Carcinogenic PAHs (as BaP TEQ)[A]	Total PAHs
			ALS LORs	5	1	2	5	5	2	5	0.1	10	50	100	100	50	10	50	100	100	50	0.2	0.5	0.5	0.5	1	0.05	0.05	0.05
Sample ID	**Date sampled**	**Laboratory**	**Units**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PB2 0-30cm	03 Jun 2026 12:48	ALS	Fine	**11**	<1.0	**59**	**47**	**78**	**54**	**161**	**0.1**	<10.0	<50.0	<100	<100	<50.0	<10.0	<50.0	**100**	<100	**100**	<0.200	<0.500	<0.500	<0.500	<1.0	<0.050	<0.050	<0.050
FD01	03 Jun 2026 13:20	ALS	Fine	**9**	<1.0	**46**	**49**	**84**	**72**	**147**	**0.2**	<10.0	<50.0	<100	<100	<50.0	<10.0	<50.0	<100	<100	<50.0	<0.200	<0.500	<0.500	<0.500	<1.0	**0.06**	**0.06**	**0.06**
RPD				20	ND	25	4	7	29	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RS4 0-40cm	03 Jun 2026 15:00	ALS	Fine	**38**	<1.0	**35**	**62**	**41**	**77**	**160**	<0.100	<10.0	<50.0	<100	<100	<50.0	<10.0	<50.0	**130**	<100	**130**	<0.200	<0.500	<0.500	<0.500	<1.0	**0.07**	**0.07**	**0.07**
FD02	03 Jun 2026 13:20	ALS	Fine	**44**	<1.0	**39**	**64**	**48**	**92**	**177**	<0.100	<10.0	<50.0	<100	**100**	**100**	<10.0	<50.0	**170**	<100	**170**	<0.200	<0.500	<0.500	<0.500	<1.0	**0.05**	**0.05**	**0.05**
RPD				15	ND	11	3	16	18	10	ND	ND	ND	ND	ND	ND	ND	ND	27	ND	27	ND	ND	ND	ND	ND	33	33	33

Legend:

	Passed criteria
	Could not be determined (e.g. not tested for that analyte)
LOR	Limit of reporting
Bold	Value is greater than the LOR
Grey <	Reported concentration is below the LOR
A	Carcinogenic PAHs (as BaP TEQ at zero)
RPD	Relative percentage difference
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene
TCLP	Toxicity Characteristic Leaching Procedure
ND	Not determined as one value is less than LOR

$$RPD = \frac{Result1 - Result2}{Mean\ Result} * 100$$

Where values reported by laboratory are less than 20 times the LOR, then the calculated RPD should be less than 50%
Where values reported by laboratory are 20 to 100 times the LOR, then the calculated RPD should be less than 30%; and
Where values reported by laboratory are greater than 100 times the LOR, then the calculated RPD should be less than 15%

Exhibited

SUMMARY RESULTS -Rinsates

Project No: P.26.0676
Project Name: TasRail - WEJ Waste Classification

			Analyte Grouping	**Heavy Metals**								**Total Petroleum Hydrocarbons (TPH)**					**Total Recoverable Hydrocarbons (TRH)**					**BTEXN**					**Polycyclic Aromatic Hydrocarbons (PAH)**		
			Analyte	Arsenic	Cadmium	Chromium (total)	Copper	Lead	Nickel	Zinc (total)	Mercury (total)	C6-C9	C10-C14	C15-C28	C29-C36	Sum (C10-C36)	C6-C10 minus BTEX (F1)	>C10-C16 minus Naphthalene (F2)	>C16-C34 (F3)	>C34-C40 (F4)	Sum (>C10-C40)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	Benzo(a)pyrene	Carcinogenic PAHs (as BaP TEQ)[A]	Total PAHs
			ALS LORs	0.001	0.0001	0.001	0.001	0.001	0.001	0.005	0.0001	20	50	100	50	50	20	100	100	100	100	1	2	2	2	5	0.5	0.5	0.5
Sample ID	**Date**	**Laboratory**	**Units**	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Rinsate_PP	03 Jun 2026 15:00	ALS	From shovel	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.0001	<20	<50	<100	<50	<50	<20	<100	<100	<100	<100	<1	<2	<2	<2	<5	<0.5	<0.5	<0.5
QA/QC Assessment				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Legend:

P	Passed
D	Detected
--	Not tested
Bold	Reported concentration is greater than the LOR
Grey <	Reported concentration is below the LOR
A	Carcinogenic PAHs (as BaP TEQ at zero)
LOR	Limit of reporting
TEQ	Toxicity equivalent quotient
BaP	Benzo(a)pyrene

Exhibited

Prensa, Asbestos Bulk Sample Analysis Report – Western Junction, Evandale Road, Western Junction TAS, June 2026

Attachment D

pitt&sherry

Exhibited

5 June 2026

Anthony Williams
Tasmanian Railway Pty Ltd
11 Techno Park Drive
Kings Meadows TAS 7249

Dear Anthony,

Asbestos Bulk Sample Analysis Report

Western Junction, Evandale Road, Western Junction TAS 7212

Please find attached the asbestos bulk sample analysis results of the 1 sample as received from Tasmanian Railway Pty Ltd for Western Junction, Evandale Road, Western Junction TAS 7212 on 3 June 2026 and received at the Prensa Pty Ltd laboratory (Level 1, 134-136 Main Road, Moonah TAS 7009) on 3 June 2026. The sample was analysed on 5 June 2026 and the results are presented on the following page(s).

Prensa qualitatively analyses bulk samples for asbestos using polarising light microscopy and dispersion staining techniques in accordance with Prensa Test Method PRLAB2002 Asbestos Identification, and in accordance with Australian Standard (AS) 4964 – 2004, *Method for the qualitative identification of asbestos in bulk samples.*

If you require further information please contact the Prensa office on (03) 6218 1793.

Regards,

Kate Hall
Approved Asbestos Identifier and Signatory

GF, 5 Burwood Rd, Hawthorn VIC 3122 ABN: 12 142 106 581

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Exhibited

Asbestos Bulk Sample Analysis Report

Western Junction, Evandale Road, Western Junction TAS 7212

Sample No	Sample Location / Description / Size	Result
	Sample as received - External, VSP7 - geofabric	No asbestos fibres detected
153812M - 001 - 001	Grey fibrous material	Organic fibres detected
	42 x 15 x 1 mm	

Please note that Prensa Pty Ltd does not accept responsibility for the representation of the sample submitted in relation to its source. Only the samples submitted for analysis have been considered in presenting these results.

Exhibited

From: Bowen Wagenknecht
Sent: Monday, 24 August 2026 10:08 AM
To: NMC Planning
Cc: Mel Axford; Taha Ejaz; Anthony Williams
Subject: TasRail - Western Junction - Culvert Works & Material Infilling - Discretionary Planning Application Submission
Attachments: 20260820_TasRail WEJ_NMC Development Application.pdf; 20260122_LUPAA Instrument of Delegation.pdf; 20260813_TasRail WEJ Void_Building Tasmania Letter of Endorsement & No Objection.pdf; 20260305_TasRail WEJ Void_Hydrodynamica Stormwater Assessment.pdf; 20260617_TasRail WEJ Void_Civilvision Consulting Detailed Design.pdf; 20260821_TasRail WEJ Void_ECOtas Natural Values Assessment.pdf; WEJ Void Land Title (FolioPlan-34014-1).pdf; FW: Western Junction - 235733/1

Importance: High

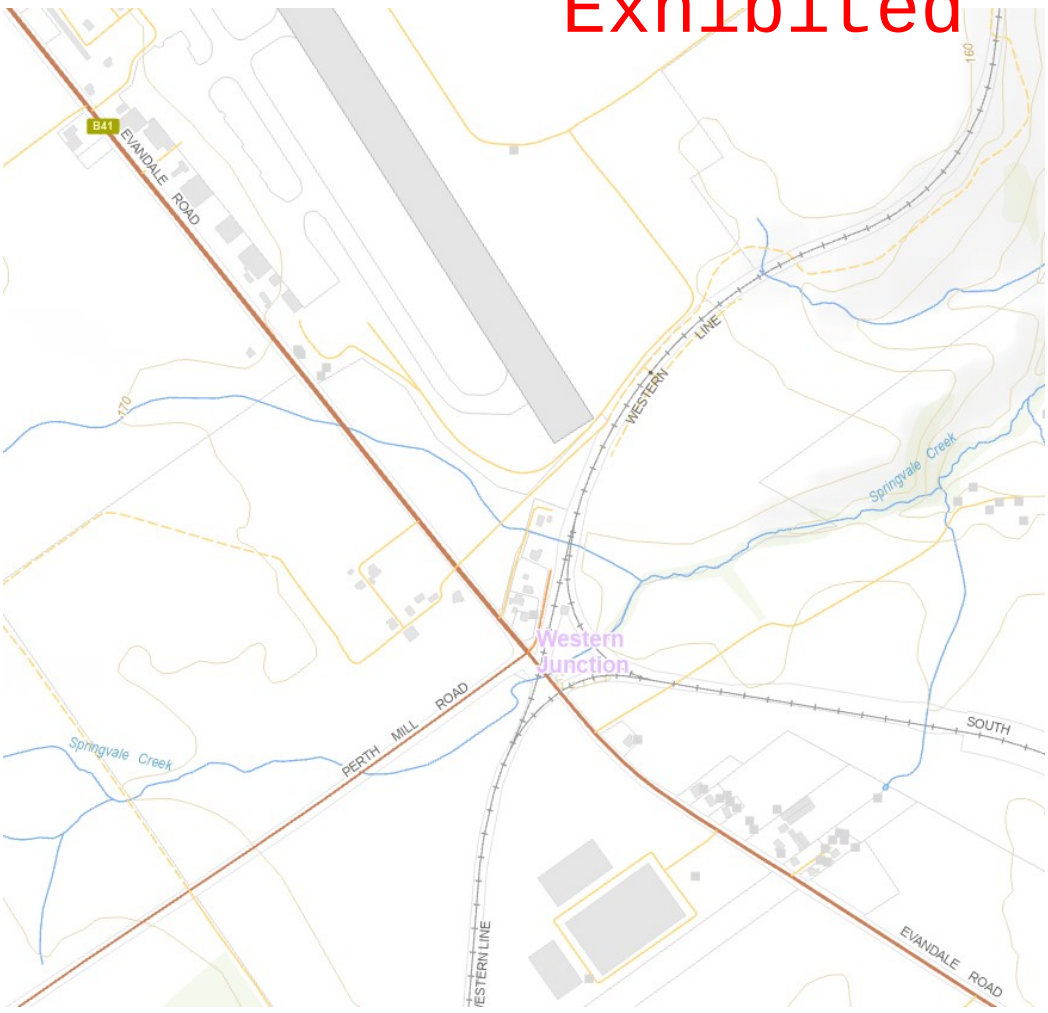
Categories:

Hi Northern Midlands Council (NMC) Planning Division,

TasRail are intending to undertake drainage installation works and material infilling within the void at Western Junction (WEJ, Title Reference 34014/1, currently under Building Tasmania ownership).

This reuse is part of broader agreed plans between TasRail and Building Tasmania to redevelop the void to restore visual amenity and improve site use.

Exhibited


B41
EVANDALE ROAD
WESTERN LINE
Springvale Creek
Western Junction
PERTH MILL ROAD
SOUTH
Springvale Creek
ESTERN LINE
EVANDALE ROAD


Identify Results
Disclaimer
One feature found in one layer
Cadastral Parcels (one feature)
Warning - Property boundaries are indicative only. See explanation here.
Property
Property ID 0 View Details
Title Reference 34014/1 View Details
Authority Building Tasmania (Transport)

Exhibited





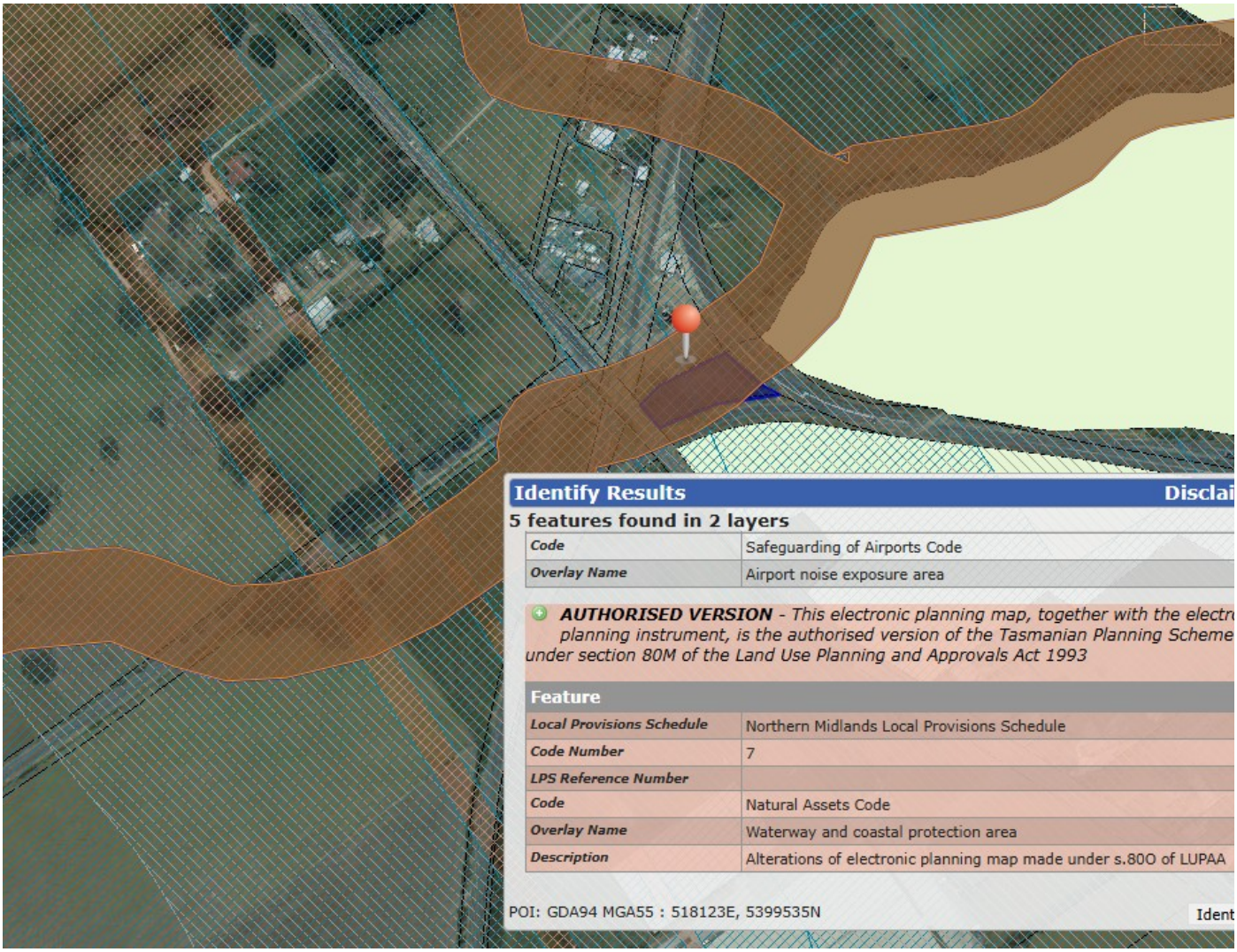
Scope of Work

Exhibited

The current scope involves:

1. Installation of new drainage pipework (which will join all existing infrastructure) to support long term excavated material reuse. Title Reference 34014/1
2. Reuse of 1100 m^3 of excavated material from the East Tamar Junction (ETJ) rail corridor (Title references 23170/3 & 108745/1, zoned within Launceston Local Provisions Schedule) to commence infilling of the WEJ Void (Title Reference 34014/1).
3. Material Infill of the WEJ Void using 350 m^3 of spoil derived from nearby stockpiles at WEJ. The material already residing in the void (1785 m^3) will be retained.

As TasRail don't own the land (currently owned by Building Tasmania until the transfer is completed), the Land Use and Planning Approvals Act 1993 (LUPAA) exemption as per the Rail Infrastructure Act 2007 Part 3 Division 3 19 (1) (b)) does not apply. Due to the overlying Natural Assets Code (Waterway and Coastal Protection Area, see below), TasRail will not meet exemptions. A discretionary planning application is required to be submitted to be assessed against the Natural Assets code. EPA Tasmania have been notified, acknowledging that they are not the assessment agency for proposed works.



Mel Axford (ccd) confirmed the requirement for a discretionary planning application with the NMC planning division.

<u>Discretionary Planning Application (Submission)</u>

- Please treat this email as a submission for a discretionary planning application for the proposed drainage works and material infill (inclusive of 1100 m^3 (derived from the TasRail corridor at ETJ) and auxiliary 350 m^3 infill from local TasRail material stockpiles) within Building Tasmania's Western Junction void (Title Reference: 34014/1).
- To support this application, please find attached or linked the following:

Exhibited

a) A signed Planning Application – Buildings, Works and Change of Use for the proposed works (20260820_TasRail WEJ Void_NMC Development Application)
b) The LUPAA Instrument of delegation for Building Tasmania (20260122_LUPAA Instrument of Delegation)
c) A Building Tasmania letter of endorsement & no objection to the proposed works (20260813_TasRail WEJ Void_Building Tasmania Letter of Endorsement & No Objection)
d) A Hydrodynamica stormwater assessment measuring the impact of the proposed drainage infrastructure and modelled impact on the receiving environment. The assessment determines that the proposed works will have a negligible impact and not lead to a discernible change in the flood regime or hazard levels in the area (20260305_TasRail WEJ Void_Hydrodynamica Stormwater Assessment)
e) A Civilvision Consulting detailed design for the proposed drainage works. The design demonstrates that all existing culverts will be connected with future inflows and outflows to bypass the void entirely (20260617_TasRail WEJ Void_Civilvision Consulting Detailed Design)
f) An ECOtas **Natural Values Statement** (20260821_TasRail WEJ Void_ECOtas Natural Values Assessment) of the void footprint including commentary against the relevant provisions of the Natural Assets code, specifically as they relate to the presence of the Waterway and Coastal Protection Area overlay. Below are key findings of the report:
    - Native Vegetation absence*: No vegetation types classified as threatened under Schedule 3A of the Tasmanian Nature Conservation Act 2002 will be disturbed by the current proposal. No vegetation types listed as threatened under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 were detected from the proposed works area, such that a referral under the Act is not warranted in relation to this value.*
    - Threatened flora absence*: Database information indicates that the part of the site proposed for spoil management does not support known populations of flora listed as threatened on either the Tasmanian Threatened Species Protection Act 1995 or the Commonwealth Environment Protection and Biodiversity Protection Act 1999. The site assessment did not detect any such species or likely potential habitat of several species.*
    - Threatened fauna absence: *Database information indicates that the part of the site proposed for culvert works and spoil management does not support known populations of fauna listed as threatened on either the Tasmanian Threatened Species Protection Act 1995 or the Commonwealth Environment Protection and Biodiversity Protection Act 1999 (Figure 10). Site assessment did not detect any such species, nor significant potential habitat of such species.*
    - Natural Assets Code satisfied*: Based on the above review, and setting aside the interpreted possibility of the non-applicability of the Natural Assets Code because of the absence of any "natural" watercourse, examination of P1.1 of C7.6.1 indicates that the proposal should fully satisfy all relevant provisions without the need for specific mitigation conditions.*
g) Two (2) Pitt & Sherry waste classification and reuse assessments to determine the suitability of all proposed material infill sources for reuse in the void. **Due to file size, these files will be shared via a SharePoint link.**
    1. East Tamar Junction report (20260818_TasRail WEJ Void_Pitt&Sherry ETJ Waste Classification & Reuse Report) determines suitability of 1100 m^3 of ballast and formation material derived from TasRail ETJ Wye and Crossover project (TasRail land, Title references 23170/3 & 108745/1) at Western Junction void. Per the report → *The spoil reuse assessment shows that waste materials (ballast and fines) are suitable for reuse within the preferred reuse location at WEJ*.
    2. Western Junction report (20260810_TasRail WEJ Void_Pitt&Sherry WEJ Waste Classification & Reuse Report) determines suitability of various minor stockpiles in and around the void to either be used for infill or remain inside the void. This includes 1785 m^3 already residing in the void (Title Reference: 34014/1), 285 m^3 at the stockpile adjacent to the road (TasRail land, Title references 235355/1 & 154121/1) and a smaller 65 m^3 stockpile next to a redundant water tower (TasRail land per Building Tasmania email (20250211_WEJ Title 235733_1_TasRail Ownership), title reference 235733/1). Per the report → *Considering the… background concentrations in the void (pit base) and the reported concentrations in the WEJ stockpiles, the stockpile soils within the WEJ area are considered suitable for reuse in the void from a site use perspective (i.e. commercial / industrial use)*
h) The Land Title of the proposed work and material infill location (WEJ Void Land Title (FolioPlan-34014-1).

Exhibited

I look forward to working collaboratively with you to divert waste from landfill in an environmentally responsible manner whilst improving the visual amenity and use of the Western Junction area.

Any support to be invoiced to ensure prompt payment and commence the advertising period would be much appreciated.

If there are any queries in relation to this proposal, please don't hesitate to reach me on email or mobile.

Please note: I have pending leave between 31/08/2026 and 14/09/2026. In my absence, please liaise with Mel Axford (0419 618 515) and Taha Eiaz (0403 786 427).

I look forward to your response.

Kind regards,

Bowen Wagenknecht

TASRAIL

Environmental Advisor | Safety, Health and Environment
Mobile:
11 Techno Park Drive, Kings Meadows, Tasmania, 7249
Bowen.Wagenknecht@tasrail.com.au



Tasmania's trusted provider of safe and dependable rail logistics solutions

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