



Water Supplies Department  
New Works Branch  
Construction Division  
11 Tai Yip Lane  
Kowloon Bay  
Kowloon  
Hong Kong

Your reference:

Our reference: HKWSD201/50/106566

Date: 5 June 2020

Attention: Mr Hivan Cheng

**BY POST**

Quotation No.: WQ/17/A071  
Independent Environmental Checker for Water Supplies Department  
-Proposed Desalination Plant in TKO Area 137 for Contract No. 13/WSD/16  
Verification of 7th Quarterly EM&A Report for February 2020 to April 2020

We refer to email of 3 June 2020 attaching 7th Quarterly EM&A Report for February 2020 to April 2020 for the captioned project prepared by the ET.

We have no comment and hereby verify the 7th Quarterly EM&A Report for February 2020 to April 2020 in accordance with Clause 3.5 of the Environmental Permit no. EP-503/2015/A.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned or our Mr Francis Lau on 2618 2831.

Yours faithfully  
ANEWR CONSULTING LIMITED

James Choi  
Independent Environmental Checker

CPSJ/LHYF/lhnh



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SUSTAINABILITY  
CONSULTING LIMITED



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水務署

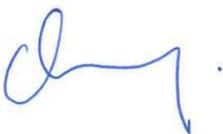
Water Supplies Department

## Contract No. 13/WSD/16

Mainlaying in Tseung Kwan O

# 7<sup>th</sup> Quarterly EM&A Report For February 2020 to April 2020

May 2020  
(Rev. 0)

	Prepared by:	Certified by:
<b>Name</b>	Karen Cheung	Jacky Leung
<b>Position</b>	Environmental Team	Environmental Team Leader
<b>Signature</b>		
<b>Date:</b>	03 June 2020	03 June 2020

### Revision History

<b>0</b>	1 <sup>st</sup> Submission	03 June 2020
<b>Rev.</b>	<b>DESCRIPTION OF MODIFICATION</b>	<b>DATE</b>

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## **EXECUTIVE SUMMARY**

- A1. Penta-Ocean - Concentric Joint Venture (POCJV) is contracted to carry out the Mainlaying in Tseung Kwan O under Contract No. 13/WSD/16 (hereinafter known as “the Project”).
- A2. In accordance with the Environmental Monitoring and Audit (EM&A) Manual for the Project, EM&A works should be carried out by Environmental Team (ET), Acuity Sustainability Consulting Limited (ASCL), during the construction phase of the Project.
- A3. The construction works of Mainlaying in Tseung Kwan O were commenced on 30 August 2018. This is the 7<sup>th</sup> quarterly Environmental Monitoring and Audit (EM&A) summary Report prepared by ASCL. This report presents the EM&A works carried out during the period of 1 February 2020 to 30 April 2020.
- A4. A summary of the monitoring activities undertaken in this reporting period is listed below:

<b>Monitoring Activities</b>	<b>Frequency</b>
Daytime Noise monitoring	0 times
Landfill Gas Monitoring	1273 times
Environmental Site Inspection	13 times

- A5. No project-related exceedance of the Action/Limit Level was recorded during the reporting quarter.
- A6. No impact monitoring was conducted from 1 February 2019 to 30 April 2020 since there were no projected-related construction activities undertaken within a radius of 300m from the monitoring locations.
- A7. No exceedance of landfill gas monitoring was recorded during the reporting quarter.
- A8. No summons/ prosecutions were received in the reporting quarter.
- A9. There were no changes to be reported that may affect the on-going EM&A programme.

## **1 Basic Project Information**

### 1.1.1 Background

1.1.2 The proposed Desalination Plant at Tseung Kwan O (DPTKO) will produce potable water with an initial capacity of 135 million liters per day (MLD), expandable to an ultimate capacity of 270 MLD in the future to provide a secure and alternative fresh water resource complying with the World Health Organization (WHO) standards. The plant will adopt the Seawater Reverse Osmosis (SWRO) technology, which dominates the market due to its reliability and progressive reduction in cost as the technology advances.

1.1.3 Pursuant to the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection granted the Variation of Environmental Permit (No. EP-503/2015/A) to Water Supplies Department (WSD) for the Project on 26 January 2018.

1.1.4 The scope of the Contract may be considered in brief, to consist of the laying of about 10km long 1200mm diameter fresh water mains and the associated works along the alignment of the Project as shown with the overall view in **Appendix A**.

### 1.1.5 The Reporting Scope

1.1.6 This is the 7<sup>th</sup> Quarterly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 February 2019 to 30 April 2020.

1.1.7 The Project Organization structure for the Construction Phase is presented in **Appendix B**.

1.1.8 Contact details of the key personnel are presented in **Table 1.1** below:

**Table 1.1 Contact Details of Key Personnel**

<b>Party</b>	<b>Position</b>	<b>Name</b>	<b>Telephone no.</b>
Penta-Ocean - Concentric Joint Venture	Environmental Officer	Calvin Chik	9863-5630
Acuity Sustainability Consulting Limited	Environmental Team Leader	Jacky Leung	2698-6833
ANewR Consulting Limited	Independent Environmental Checker	James Choi	2618-2831

1.1.9 Summary of Construction Works

1.1.10 Details of the major construction works undertaken in this reporting quarter are shown in **Table 1.2** and **Appendix D**. The construction programme is presented in **Appendix C**.

**Table 1.2 Summary of the Construction Works Undertaken during the Reporting quarter**

Location	Works Conducted in the reporting quarter
Portion H	<ul style="list-style-type: none"> <li>• Pipes had been laid from CH.CA 04+24 to CH.CA 0+01 &amp; CH.CT 0+07 to CH.CT 2+49.</li> <li>• Backfilling of trench to the required level from CH.C 11+56 (CH.CA 04+16) to CH.C 7+40 (CH.CA 0+00) was completed.</li> <li>• Underground utilities diversion at working pit 137A near entrance gate of landfill area 137 was completed.</li> <li>• Working pit's excavation for DN900 HSV chamber at CH.CA4+30.</li> </ul>
Portion J	<ul style="list-style-type: none"> <li>• Ground investigation work at pit F in Landfill Stage 1 was completed.</li> <li>• Inspection pit at downhill lane of Po Lam South Road was completed.</li> <li>• Trial pit was carried out at CH.A6+30 to expose two existing watermain crossing. Trench excavation to expose the pipe end of the cross-lane watermain.</li> <li>• The precast concrete unit on top of the chamber at CH.A12+45 was completed and the installation of DN150 by-pass pipe.</li> <li>• Pre-boring machine was deployed to drill 8 pre-boring holes for each working pit, including Wan Po Road Pit A &amp; Pit C and TKO Area Pit 137A, 137B &amp; 137C</li> <li>• Working pit excavation to 6m below ground and installation of the 3<sup>rd</sup> layer of waling and strut were completed at working Pit B.</li> <li>• Drilling work for grouting in Pit B has been carried out since 3 April 2020.</li> <li>• Sheet pile driving at working Pit C.</li> <li>• Two inspection pits at Area B in Landfill Stage 1 was completed (B01 and B02).</li> <li>• Inspection pit at Area A in Landfill Stage 1.</li> <li>• Mainlaying work at Landfill Stage 1's cycle track</li> <li>• GI under MTR tunnel</li> </ul>

1.1.11 Summary of Environmental Status

1.1.12 A summary of the valid permits, licences, and /or notifications on environmental protection for this Project is presented in **Table 1.3**.

**Table 1.3 Summary of the Status of Valid Environmental Licence, Notification, Permit and Documentations**

Permit/ Licences/ Notification	Reference	Validity Period	Remarks
Variation of Environmental Permit	EP no.: EP-503/2015/A	Throughout the Contract	-
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation (Form NA)	Ref no.: 423775	Throughout the Contract	-
Chemical Waste Producer Registration	WPN: 5213-839-P3287-01	Throughout the Contract	-
Billing Account for Disposal of Construction Waste	A/C no.: 7029491	Throughout the Contract	-
Water Discharge License	WT00032336-2018	Until 31 Dec 2023	-
Construction Noise Permit	GW-RE1016-19	Until 29 June 2020	-

1.1.13 The status for all environmental aspects is presented **Table 1.4**.

**Table 1.4 Summary of Status for Key Environmental Aspects under the EM&A Manual**

Parameters	Status
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under VEP Condition 3.4
Impact Monitoring	No impact monitoring from February 2020 to April 2020 due to the overly distant monitoring stations from the works locations, where they were farther than 1 km from the closest monitoring station to the works location.
Waste Management	
Mitigation Measures in Waste Monitoring Plan	On-going
Landfill Gas Monitoring	
Mitigation Measures	On-going
Monitoring	On-going
Environmental Audit	
Site Inspection	On-going

1.1.14 Other than the EM&A works by ET, regular environmental management meetings were conducted in order to enhance environmental awareness and closely monitor the environmental performance of the contractors.

1.1.15 The EM&A programme has been implemented in accordance with the recommendations presented in the approved EIA Report and the EM&A Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix F**.

## **2 Noise Monitoring**

- 2.1.1 Referring to EM&A manual Section 4.1.2, the impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.
- 2.1.2 No noise impact monitoring was conducted from February 2020 to April 2020 due to the overly distant monitoring stations from the works location.
- 2.1.3 Detailed monitoring results are presented in **Appendix G**. **Appendix G** is intentionally left blank since there is no impact monitoring for noise impact in the reporting month.
- 2.1.4 No notification of summons and prosecution related to noise was received in the reporting quarter.

## **3 Waste Management**

- 3.1.1 Total of 0.955 m<sup>3</sup> of inert C&D materials was collected to the Fill Bank, 0.004 m<sup>3</sup> C&D waste and general refuse were disposed of at Landfill, 0.145 tonnes of paper/ cardboard packaging was recycled and 0 tonnes chemical waste collected by licensed contractor for disposal in the reporting quarter. Waste Flow Table is shown in **Appendix E**.

## **4 Summary of Monitoring Exceedance, Complaints, Notification of Summons and Prosecutions**

- 4.1.1 No monitoring exceedance, notification of summons and prosecution was received in the reporting quarter.

## **5 EM&A Site Inspection**

- 5.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting quarter, site inspections were carried out on 7, 13, 20, 27 February 2020, 5, 12, 19, 24 March 2020, and 2, 9, 16, 23, 28 April 2020 at the site portions list in **Table 5.1** below.

**Table 5.1 Site Inspection Record**

<b>Date</b>	<b>Inspected Site Portion</b>	<b>Time</b>
7, 13, 20, 27 February 2020, 5, 12, 19, 24 March 2020, and 2, 9, 16, 23, 28 April 2020	Portion F, H and J	9:20 am – 16:00 pm

- 5.1.2 Three joint site inspections with IEC was carried out on 27 February 2020, 24 March 2020 and 28 April 2020.
- 5.1.3 Minor deficiencies were observed during weekly site inspection. Key observations during the site inspections are summarized in **Table 5.2**.

Table 5.2 Site Observations

Date	Environmental Observations	Follow-up Status
07 February 2020	<ol style="list-style-type: none"> <li>1. Proper NRMM Label was not observed on the NRMM at Pit C.</li> <li>2. Dusty materials were found in the drip tray at CHA.12+50.</li> </ol>	<ol style="list-style-type: none"> <li>1. NRMM label was changed on the plant.</li> <li>2. The drip tray was cleaned.</li> </ol>
13 February 2020	<ol style="list-style-type: none"> <li>1. NRMM Label (Exemption Label) was not observed on the NRMM at Pit C.</li> <li>2. Construction materials had not been stored properly at CHA12+50 and CHA6+64.</li> </ol>	<ol style="list-style-type: none"> <li>1. NRMM was observed with a NRMM label at Pit C.</li> <li>2. Construction materials were cleaned.</li> </ol>
20 February 2020	<ol style="list-style-type: none"> <li>1. Dusty materials were found near the construction exit at CHA6+64.</li> <li>2. Construction materials had not been stored properly at CHA12+50, Pit B and CHA6+64.</li> <li>3. Construction boundaries had not been protected fully via sandbags at CHA12+50.</li> <li>4. Drainage system had not been protected fully at CHA12+50.</li> </ol>	<ol style="list-style-type: none"> <li>1. Construction exit was cleaned at CHA6+64.</li> <li>2. Construction materials were stored properly.</li> <li>3. Construction boundaries had been protected fully via sandbags at CHA12+50.</li> <li>4. Drainage system was protected fully at CHA12+50.</li> </ol>
27 February 2020	<ol style="list-style-type: none"> <li>1. NRMM Label (Exemption Label) was not observed on the NRMM at Pit C.</li> </ol>	<ol style="list-style-type: none"> <li>1. NRMM Label was added on the NRMM at Pit C.</li> </ol>
05 March 2020	<ol style="list-style-type: none"> <li>1. NRMM Label (Exemption Label) was not observed on the NRMM at Pit C.</li> </ol>	<ol style="list-style-type: none"> <li>1. NRMM label was observed on the NRMM at Pit C.</li> </ol>
12 March 2020	<ol style="list-style-type: none"> <li>1. Construction boundaries were not fully protected by sandbags at 137 Pit A.</li> <li>2. Chemicals were not stored in the drip tray at Pit B and CHA12+50.</li> <li>3. Drainage system was not fully protected and sandbags were damaged at CHA12+50.</li> <li>4. Accumulated dusty materials were observed directly next to the water-barriers. The stockpile should be treated to prevent it to escape from the construction site at CHA12+50.</li> </ol>	<ol style="list-style-type: none"> <li>1. Construction boundaries were fully protected by sandbags.</li> <li>2. Chemicals were removed or stored in the drip tray.</li> <li>3. Drainage system was fully protected and sandbags were replaced.</li> <li>4. Dusty materials were cleaned.</li> <li>5. Dusty materials were cleaned.</li> </ol>

Date	Environmental Observations	Follow-up Status
	5. Dust suppression mitigations were not implemented at CHA12+50.	
19 March 2020	1. Chemical was not stored in the drip tray at CH12+50. 2. Dusty materials were found next to the water barriers at CHA12+50. These materials should be cleaned to prevent it from escaping from the construction site.	1. Chemical was removed. 2. These materials were cleaned to prevent it from escaping from the construction site.
24 March 2020	1. Dusty materials were found near the construction exit at CHA12+50. 2. Dusty materials were found next to the water barriers at CHA12+50. These materials should be cleaned to prevent it from escaping from the construction site.	1. Dusty materials were cleaned. 2. These materials were cleaned to prevent it from escaping from the construction site
02 April 2020	1. Sandbags were observed damaged at CHA12+50. They should be replaced to protect the drainage systems fully. 2. Drainage system was observed with construction materials. These materials should be cleaned to prevent the contamination or damage to the drainage system at CH.FC4+65.	1. Sandbags were changed and the leak-out sand was cleaned. 2. These materials were cleaned to prevent the contamination or damage to the drainage system.
09 April 2020	1. Construction materials were observed being placed directly next to the water barriers at CHA6+64 and CHA12+50. These materials should be treated to prevent the escape from the construction site. 2. Sandbags were observed damaged at CHA12+50. 3. Gully was not protected by textile sheet. It should be added to protect the gully fully at Pit B. 4. Chemicals were not placed inside a drip tray at FC0+50 to FC0+92.	1. Construction materials were cleaned 2. Sandbags were changed. 3. Gully was fully protected. 4. Chemicals were placed inside a drip tray.

Date	Environmental Observations	Follow-up Status
16 April 2020	<ol style="list-style-type: none"> <li>1. Drainage systems were not protected fully at CHA12+50. Sandbags were observed damaged and geotextile was not added on top of the gullies.</li> <li>2. Construction exit was not free from debris and dusty materials at CHA12+50.</li> <li>3. Chemicals were not placed inside the drip tray at Pit B, FC0+64 and FC4+65-5+00.</li> <li>4. Chemical stain was observed on the asphalt ground at FC4+65-5+00.</li> </ol>	<ol style="list-style-type: none"> <li>1. Drainage systems were protected fully by sandbags at CHA12+50.</li> <li>2. Construction exit was cleaned.</li> <li>3. Chemicals were moved.</li> <li>4. Chemical stain was cleaned.</li> </ol>
23 April 2020	<ol style="list-style-type: none"> <li>1. Environmental permits were not displayed at the vehicle site entrance/exit at 137 Pit A and CHA6+64.</li> <li>2. Sandbags were observed damaged at CHA12+50.</li> <li>3. Chemicals were not placed inside the drip tray at FC0+62.</li> </ol>	<ol style="list-style-type: none"> <li>1. Environmental permits were displayed at the vehicle site entrance/exit.</li> <li>2. Sandbags were changed.</li> <li>3. Chemicals were placed in the drip tray.</li> </ol>
28 April 2020	<ol style="list-style-type: none"> <li>1. Environmental permit was not displayed at the vehicle site entrance/exit at CHA6+64.</li> <li>2. Chemical stain was observed at CHA6+64 (New Side).</li> <li>3. Gully was not protected fully at Pit B. A geotextile should be added to protect the gully and prevent the escape of untreated water and construction materials from the construction site.</li> <li>4. Chemical seepage was observed at Pit B.</li> <li>5. Chemicals were not placed in the drip tray at Pit B.</li> </ol>	<ol style="list-style-type: none"> <li>1. Environmental permit was displayed at the vehicle site entrance/exit.</li> <li>2. Chemical stain was cleaned.</li> <li>3. Gully was protected fully at Pit B.</li> <li>4. Chemical seepage was cleaned.</li> <li>5. Chemicals were placed in the drip tray.</li> </ol>

5.1.4 According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents are implemented as much as practical during the reporting quarter. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix F**.

## 6 Landfill gas monitoring

- 6.1.1 In accordance with Section 11 of the EM&A Manual, monitoring of landfill gas is required for construction works within the 250m Consultation Zone. Part of the desalination plant and the indicative area of natural slope mitigation works fall within the SENT Landfill Extension Consultation Zone; and part of the 1,200 mm diameter fresh water mains along Wan Po Road falls within the SENT Landfill and SENT Landfill Extension Consultation Zones, TKO Stage II/III Restored Landfill and TKO Stage I Restored Landfill Consultation Zones. Monitoring were conducted from February 2019 to April 2020.
- 6.1.2 Monitoring of oxygen, methane and carbon dioxide was performed for excavations at 1m depth or more within the consultation Zone. In this reporting quarter, 1273 times of monitoring was recorded. Action and Limit Level is provided in **Appendix G**
- 6.1.3 Monitoring Equipment used in the reporting quarter are summarised in **Table 6.1**.
- 6.1.4 In the reporting quarter, landfill gas monitoring was carried out by the Registered Safety Officer by the Contractor at the excavation locations for 1273 times. The monitoring results and Action Level are provided in **Appendix H** and **Appendix G** respectively.

**Table 6.1 Landfill Gas Monitoring Equipment**

Equipment	Model and Make	Calibration Expiry Date
Gas Detector	QRAE II	28 August 2020

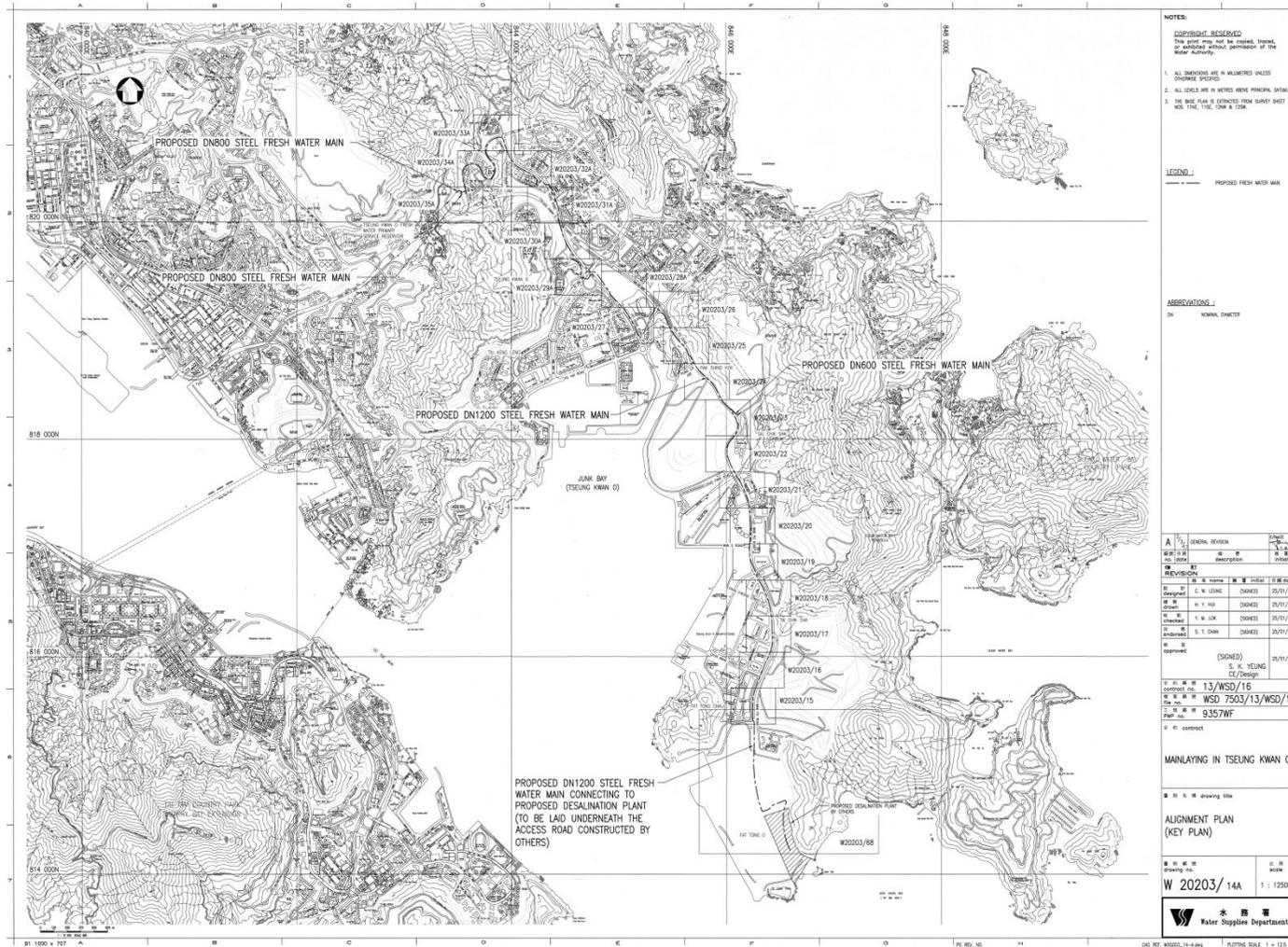
## **7 Conclusion and Recommendations**

- 7.1.1 This is the 7<sup>th</sup> quarterly Environmental Monitoring and Audit (EM&A) summary Report prepared by ASCL. This report presenting the EM&A works carried out during the period of 1 February 2019 to 30 April 2020 in accordance with the EM&A Manual and the requirement under EP-503/2015/A.
- 7.1.2 No impact monitoring from February 2019 to April 2020 due to the overly distant monitoring station from the works location, where they were farther than 1 km from the closest monitoring station to the works location.
- 7.1.3 No landfill gas exceedance was recorded in the reporting quarter.
- 7.1.4 No project-related exceedance of the Action Level was recorded during the reporting period.
- 7.1.5 Weekly environmental site inspection was conducted during the reporting quarter. Minor deficiencies were observed during site inspection and were rectified. The environmental performance of the Project was therefore considered satisfactory.
- 7.1.6 According to the environmental site inspections performed in the reporting quarter, the Contractor is reminded to pay attention on maintaining site tidiness and proper materials storage.
- 7.1.7 No environmental complaint was received in the reporting quarter.
- 7.1.8 No notification of summons or prosecution was received since commencement of the Contract.
- 7.1.9 The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.
- 7.1.10 Statistics on complaints and regulatory compliance are summarized in **Appendix I**.

# Appendix A

## Overview of Mainlaying in TKO

**Contract No. 13/WSD/16**  
**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



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2. ALL LINES ARE IN METRES UNLESS OTHERWISE SPECIFIED.
3. THE BASE PLAN IS EXTRACTED FROM SURVEY SHEET NOS. TSK, TSK, TSK & TSK.

**LEGEND:**  
 --- PROPOSED FRESH WATER MAIN

**ABBREVIATIONS:**  
 DN NOMINAL DIAMETER

A	GENERAL REVISION	Checked	By
1	1.1	1.1	1.1
2	2.1	2.1	2.1
3	3.1	3.1	3.1
4	4.1	4.1	4.1
5	5.1	5.1	5.1
6	6.1	6.1	6.1
7	7.1	7.1	7.1
8	8.1	8.1	8.1
9	9.1	9.1	9.1
10	10.1	10.1	10.1
11	11.1	11.1	11.1
12	12.1	12.1	12.1
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91	91.1	91.1	91.1
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100	100.1	100.1	100.1

**REVISION:**

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3	3.1	3.1
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100	100.1	100.1

**DESIGNED BY:** S. K. YEUNG  
**DATE:** 20/01/17

**PROJECT NO.:** 13/WSD/16  
**CONTRACT NO.:** WSD 7503/13/WSD/16  
**PLAN NO.:** 9.157WF  
**DATE:** 20/01/17

**MANLAYING IN TSELUNG KWAN O**

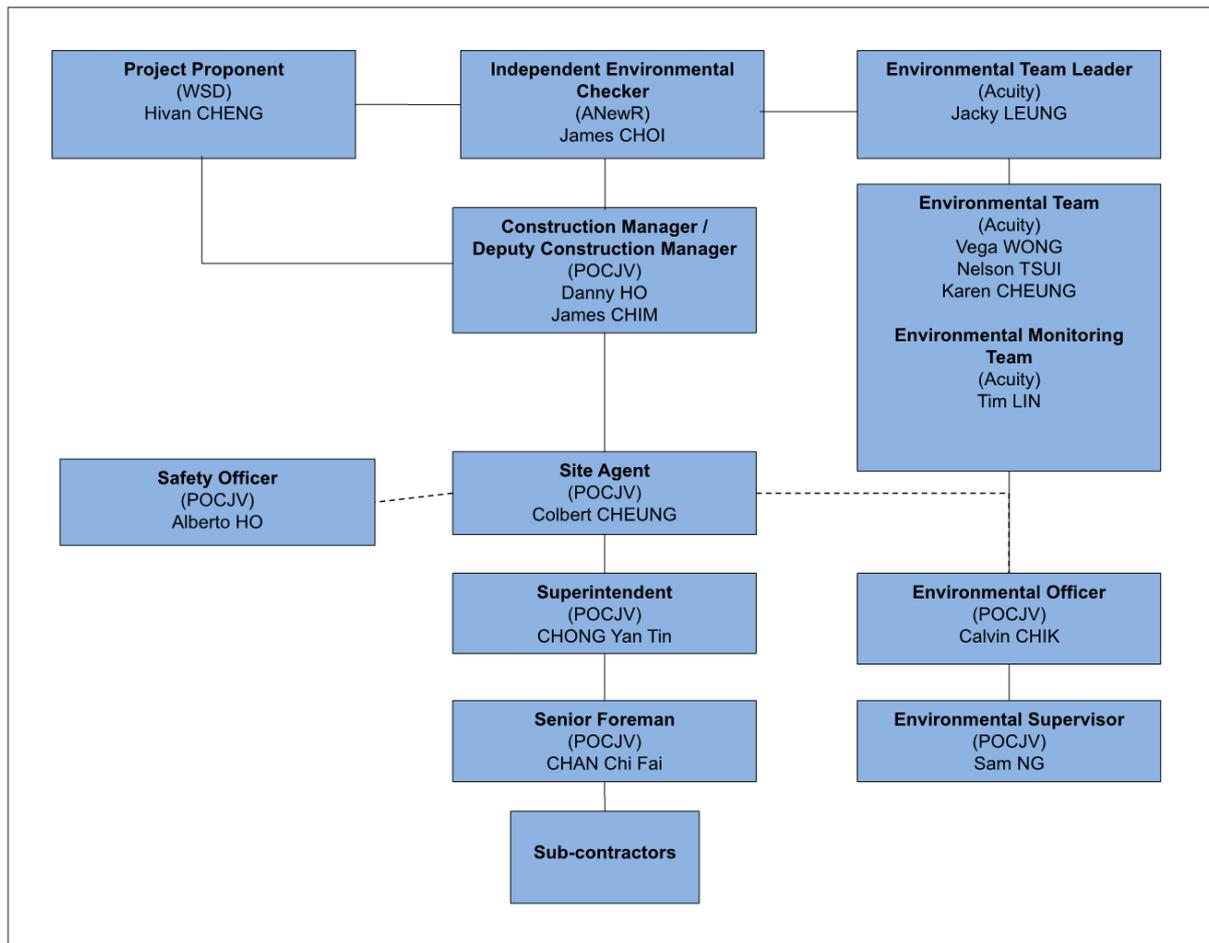
**SCALE:** 1:12500

**WATER SUPPLIES DEPARTMENT**

**Overview of Mainlaying in TKO**

# Appendix B

## Project Organization Chart



# Appendix C

## Construction Programme

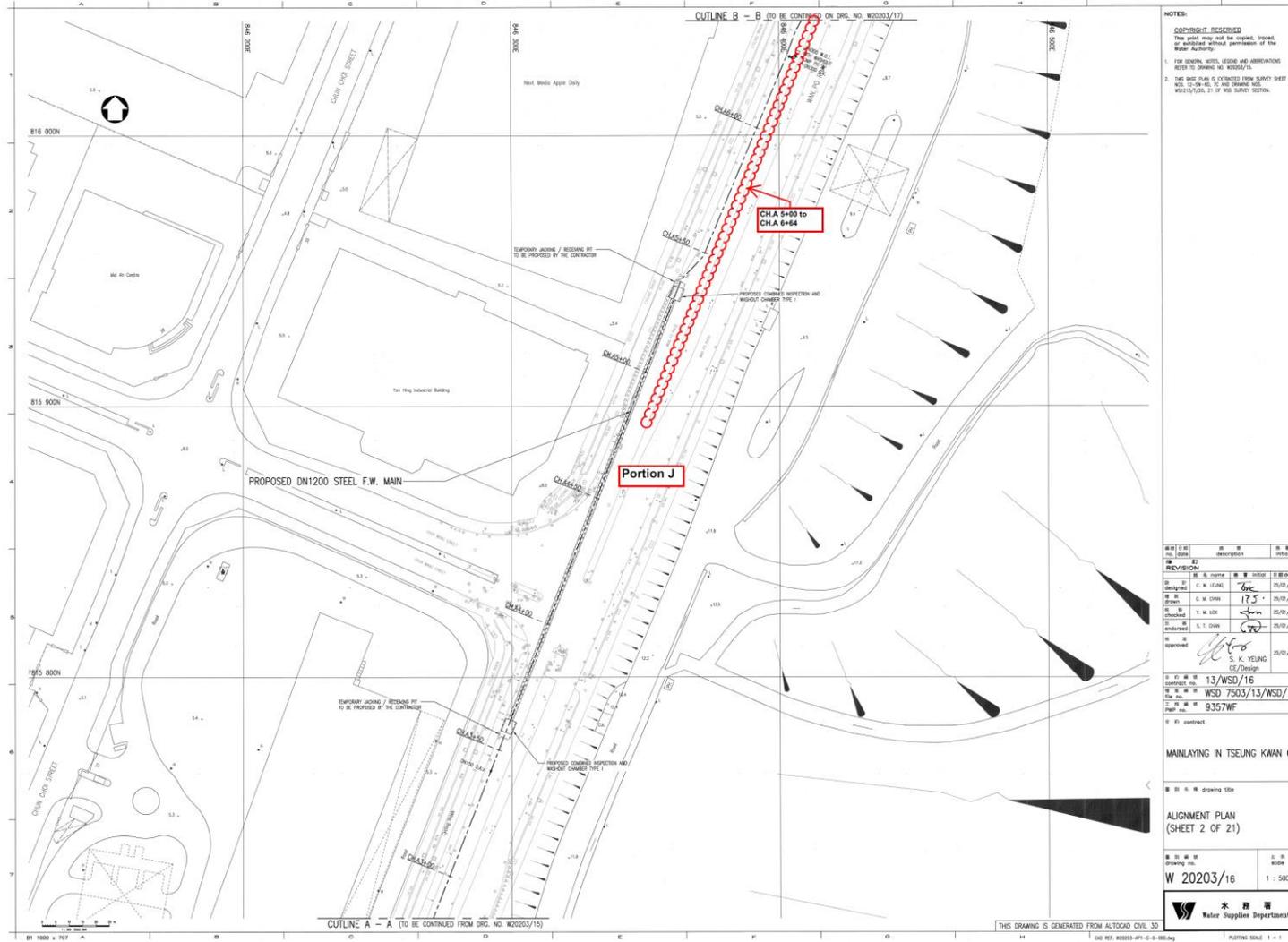


## Appendix D

# Layout of Major Construction Works Undertaken during the Reporting Quarter

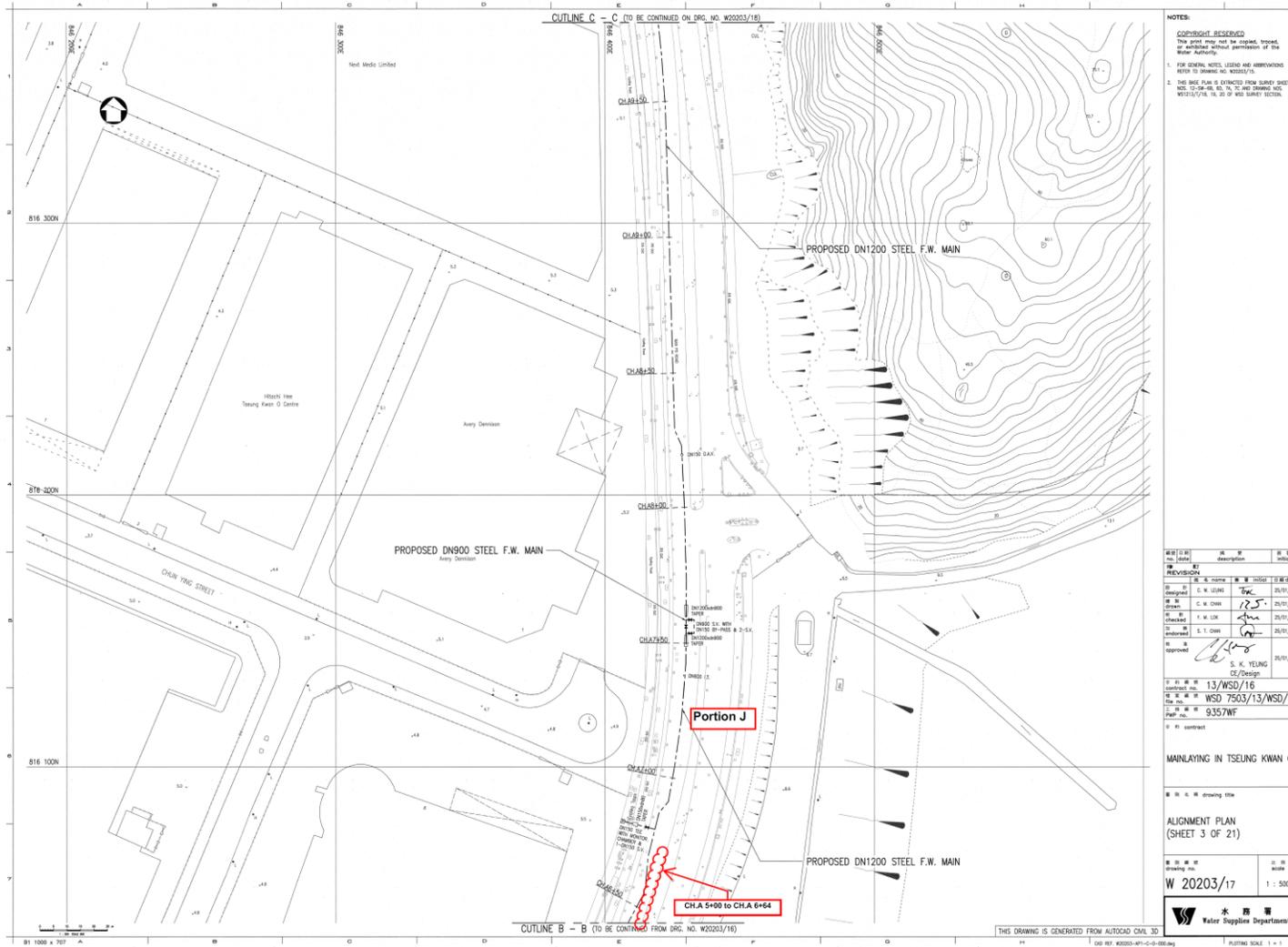


**Contract No. 13/WSD/16**  
**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



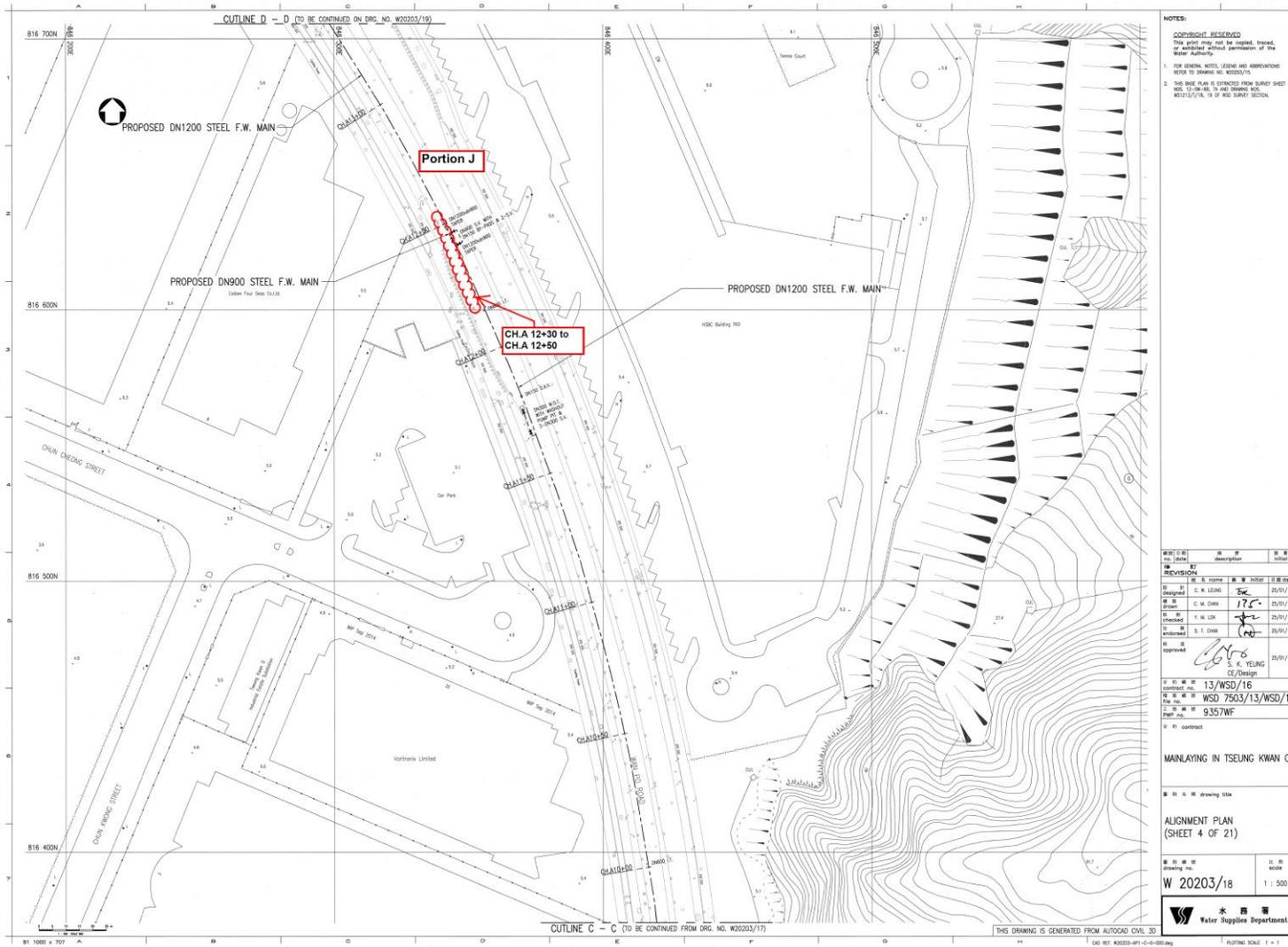
**Figure D2a. Location Plan for Portion J - CH.A 5+00 to CH.A 6+64**

**Contract No. 13/WSD/16**  
**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



**Figure D2b. Location Plan for Portion J - CH.A 5+00 to CH.A 6+64**

Contract No. 13/WSD/16  
 Mainlaying in Tseung Kwan O  
 7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020



**NOTES:**

1. FOR REMOVAL, REVISION AND ABBREVIATIONS REFER TO DRAWING NO. WSD203/16.

2. THIS BLUE PLAN IS EXTRACTED FROM SURVEY SHEET NO. 13-30-46, TO THE SURVEY NO. WSD13/16, TO SP. AND SURVEY SECTION.

REV. NO.	DATE	DESCRIPTION	INITIAL
1	25/01/17	DESIGNED	C. K. LEUNG
2	25/01/17	CHECKED	T. M. LOK
3	25/01/17	APPROVED	S. T. CHAN
4	25/01/17	DESIGNED	S. K. YELING

CONTRACT NO. 13/WSD/16  
 DRAWING NO. WSD 7503/13/WSD/16  
 PWP NO. 9357WF  
 DRAWING TITLE: MAINLAYING IN TSEUNG KWAN O  
 SHEET TITLE: ALIGNMENT PLAN (SHEET 4 OF 21)  
 DRAWING NO. W 20203/18  
 SCALE: 1:500  
 DEPARTMENT: Water Supplies Department

Figure D3. Location Plan for Portion J - CH.A 12+30 to CH.A 12+50

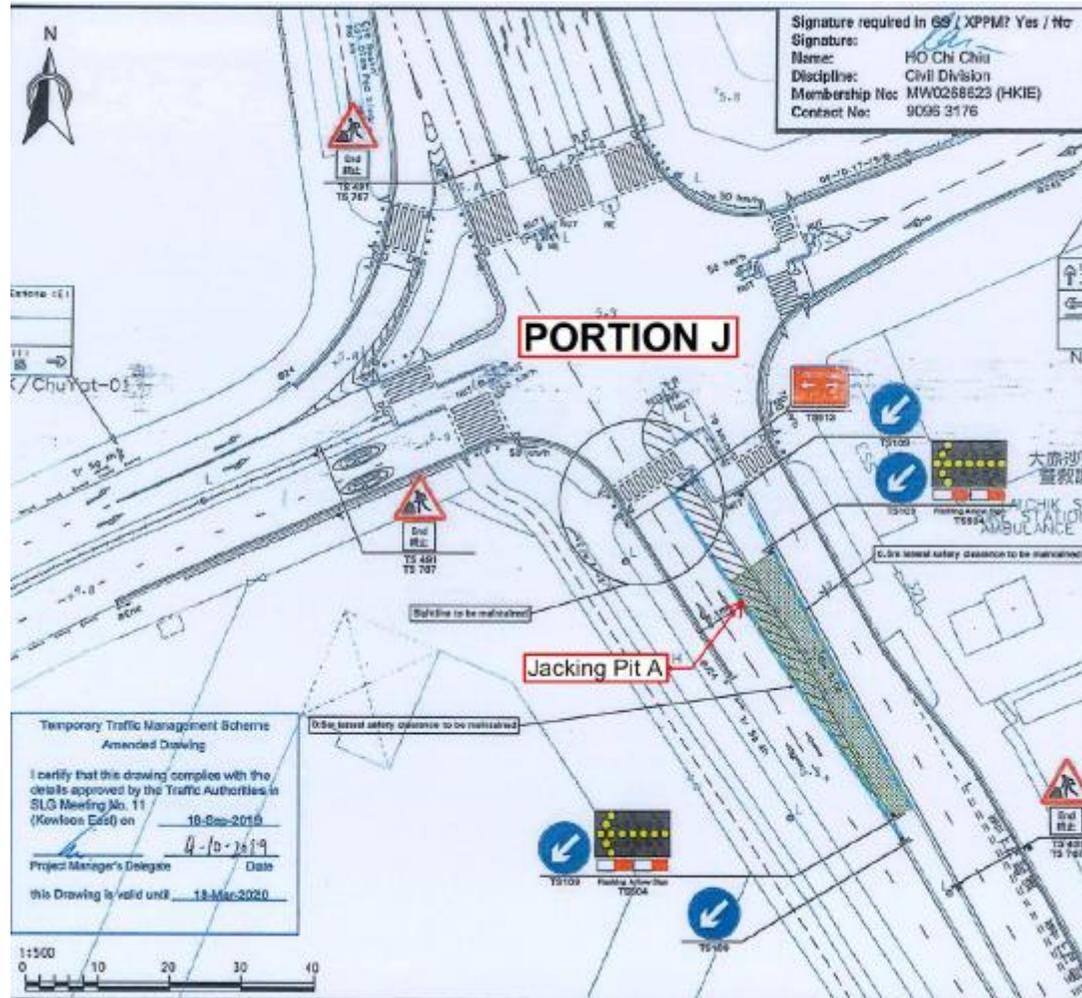


Figure D4. Location Plan for Portion J – (Pit A)

Contract No. 13/WSD/16  
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 7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020

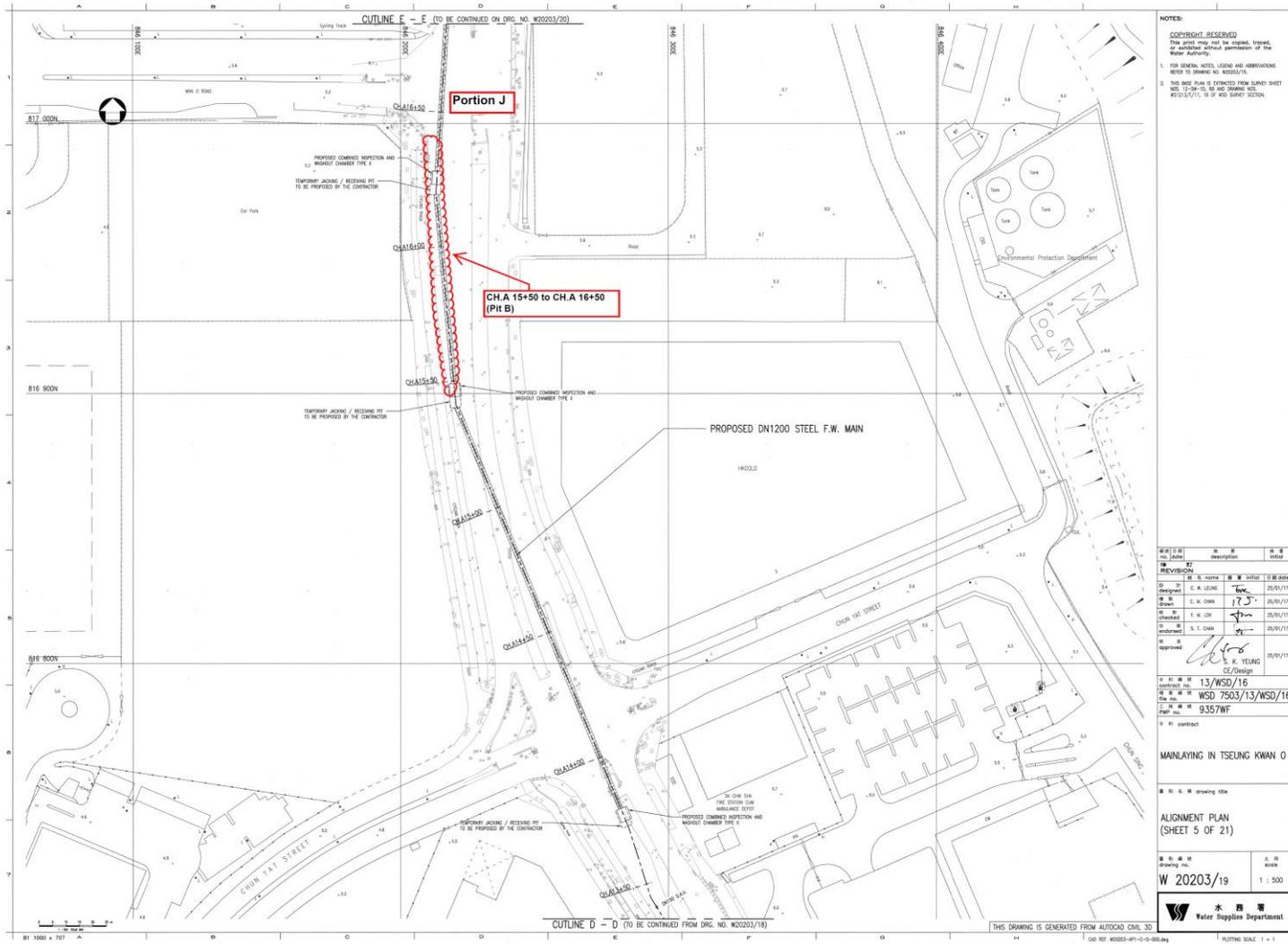


Figure D5. Location Plan for Portion J – CH. A15+50 to CH.A 16+50 (Pit B)

**Contract No. 13/WSD/16**  
**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



**Figure D6. Location Plan for Portion J – (Pit C)**

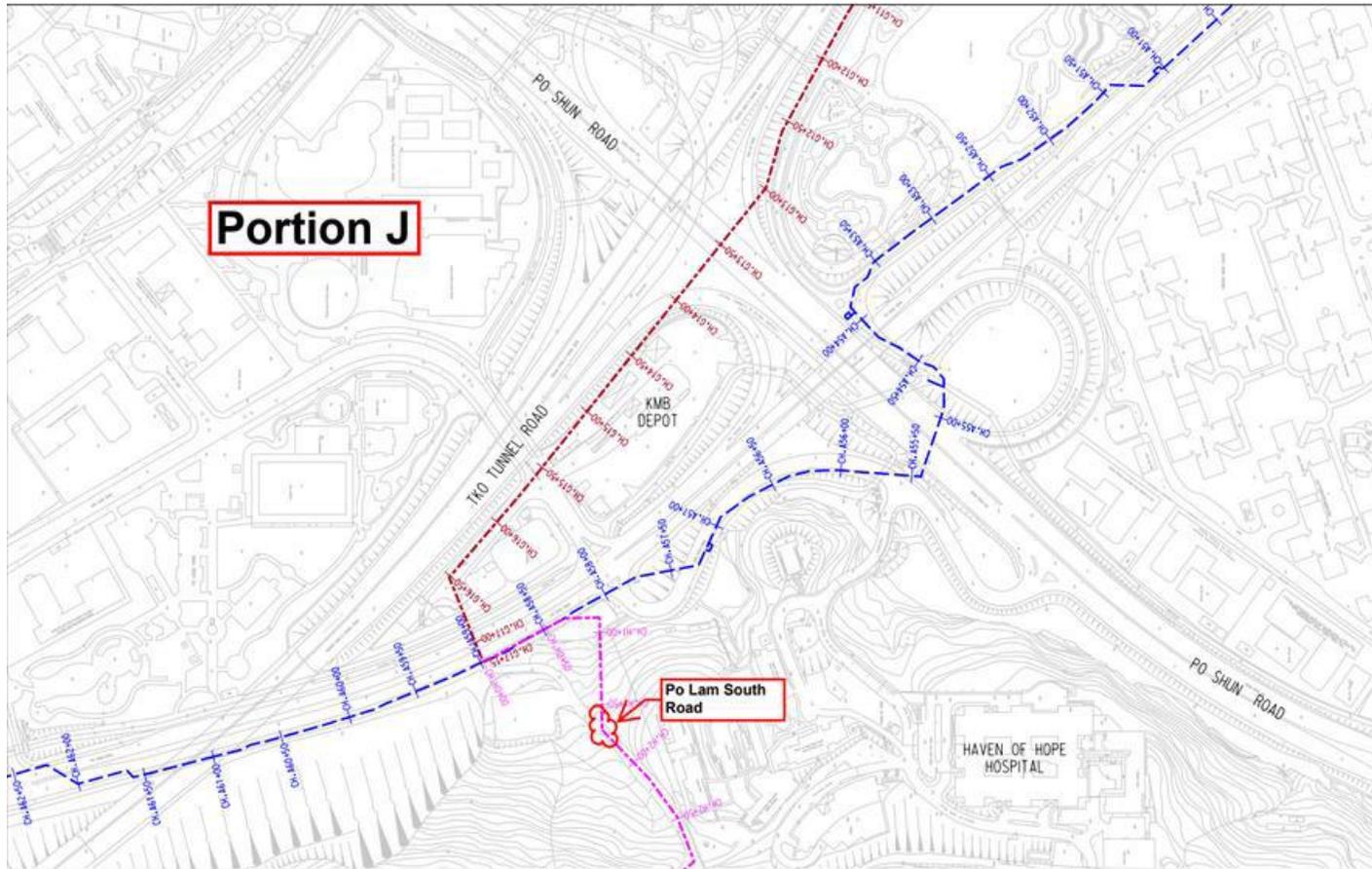


Figure D7a. Location Plan for Portion J - Mau Wu Tsai 1 (Po Lam South Road 1)



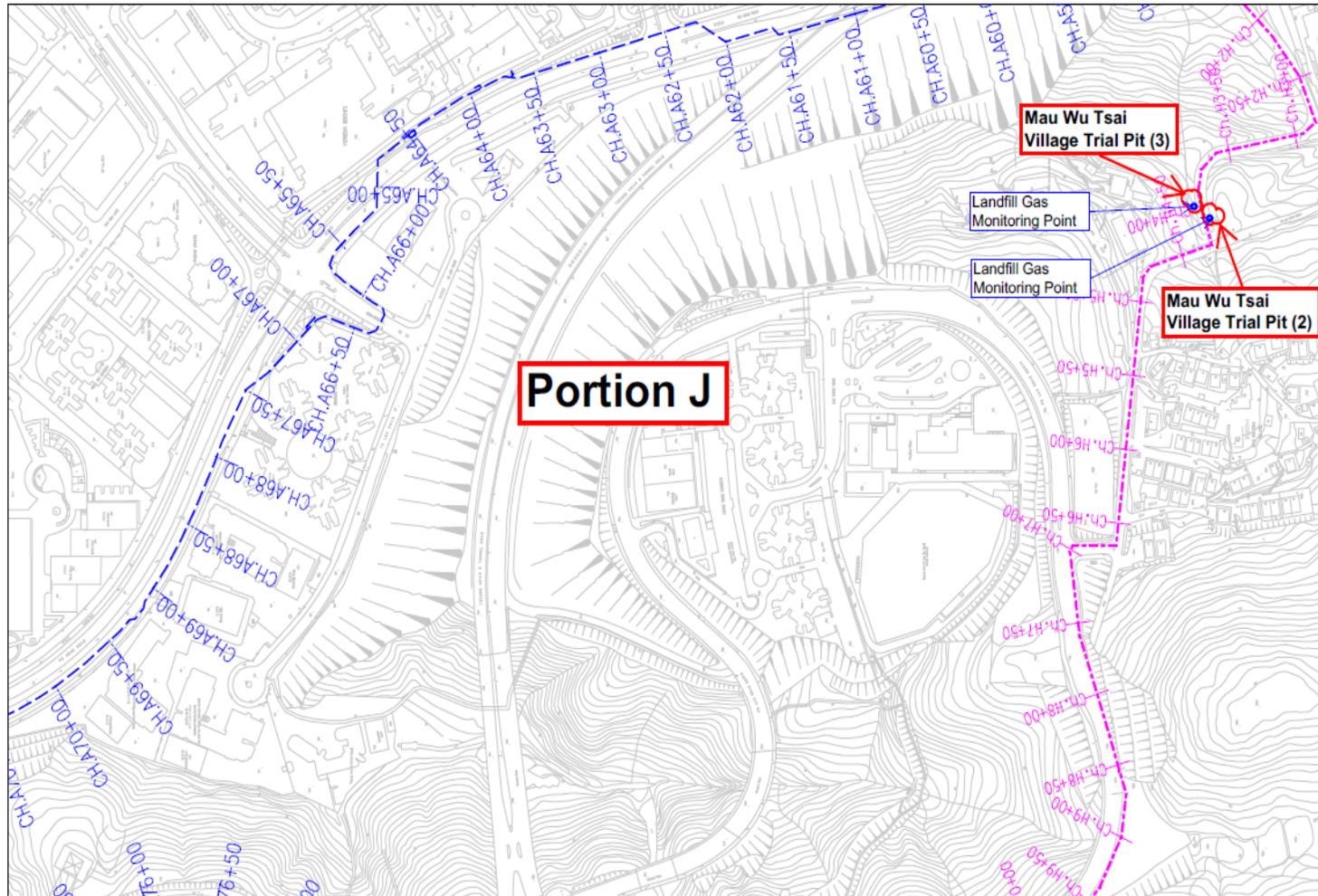


Figure D7c. Location Plan for Portion J - Mau Wu Tsai 2 (Po Lam South Road 3)



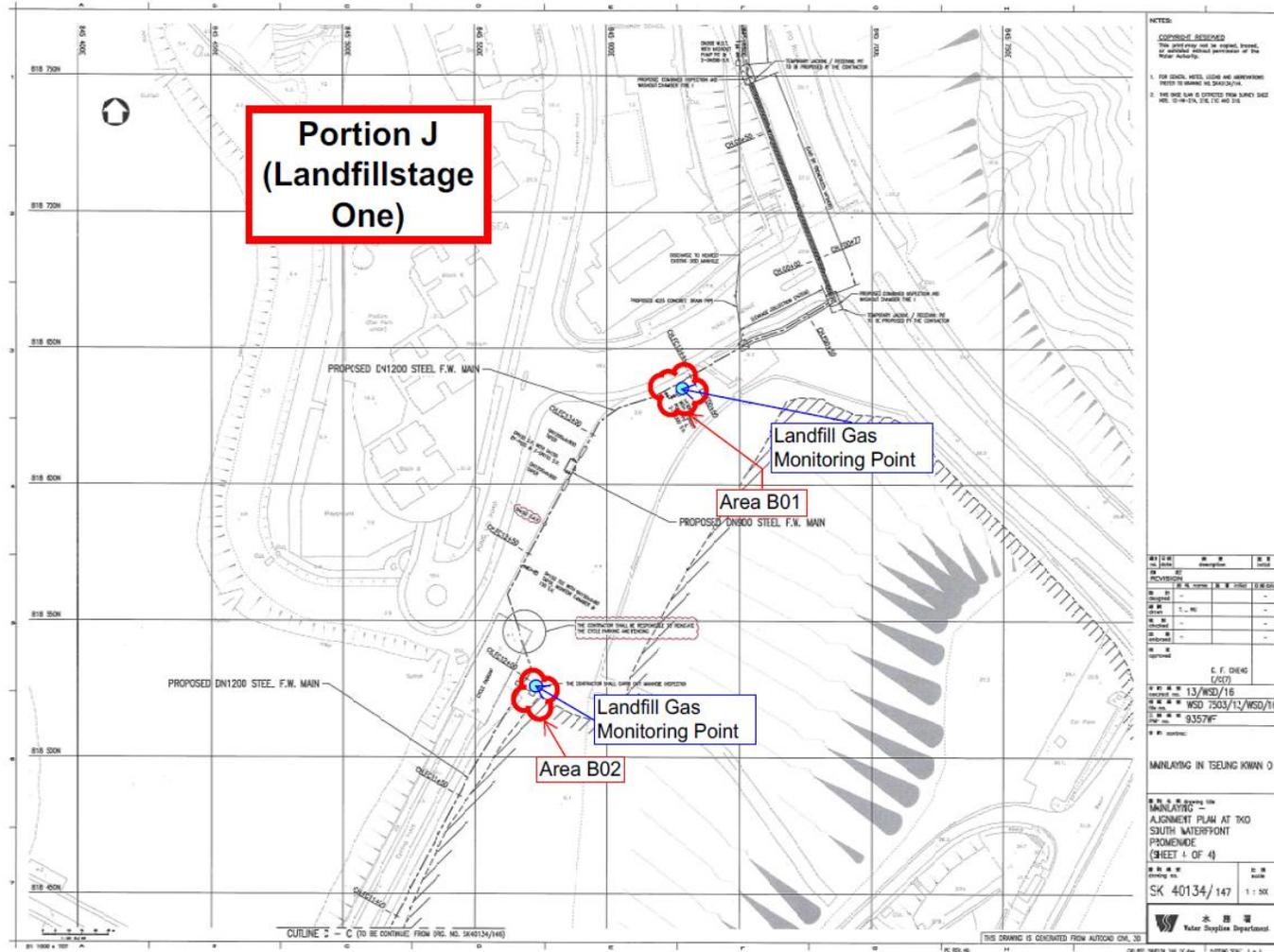


Figure D9a: Location Plan for Portion J – Landfill Stage 1



Contract No. 13/WSD/16  
 Mainlaying in Tseung Kwan O  
 7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020

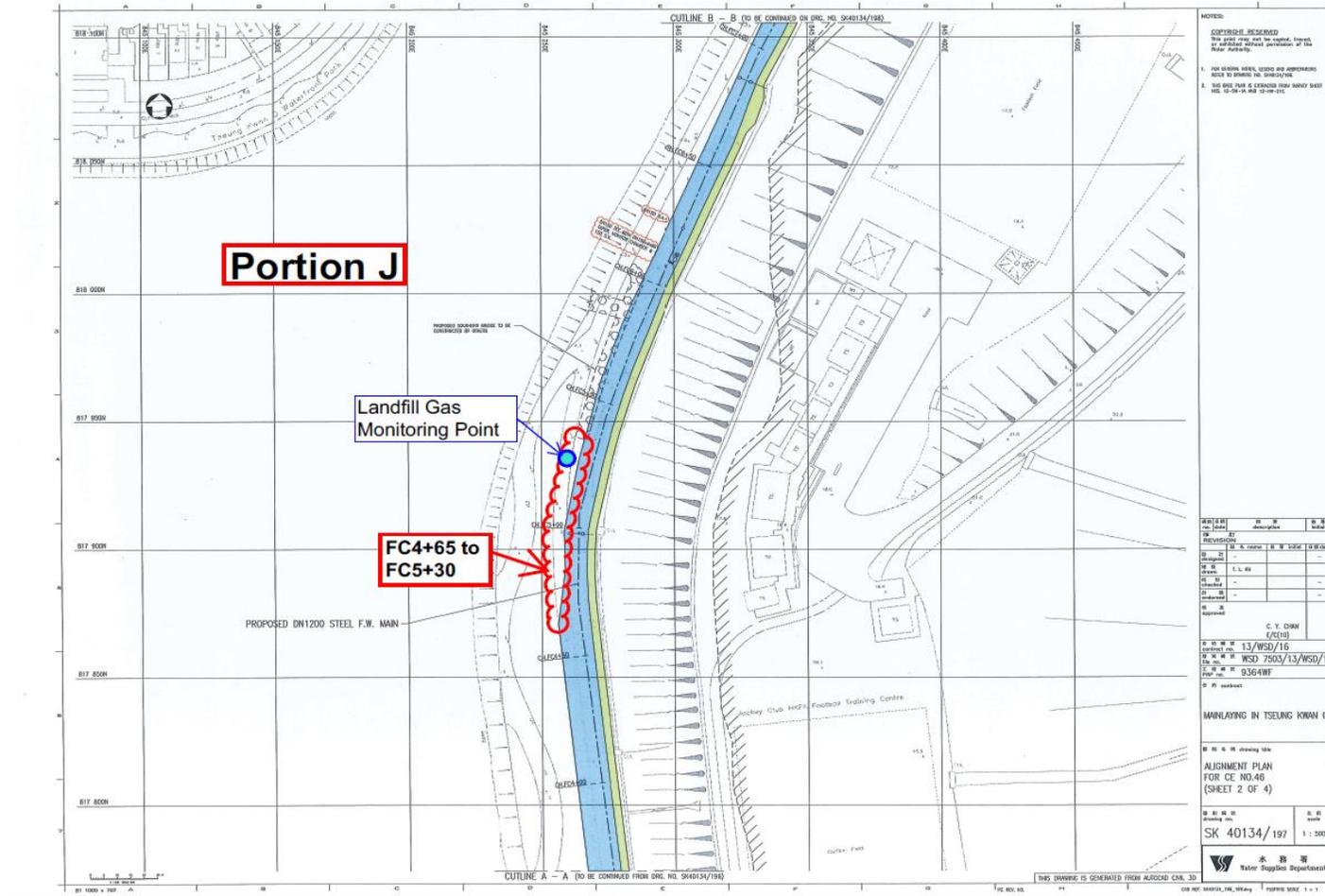


Figure D9c: Location Plan for Portion J – Landfill Stage 1 (FC4+65-FC5+30)



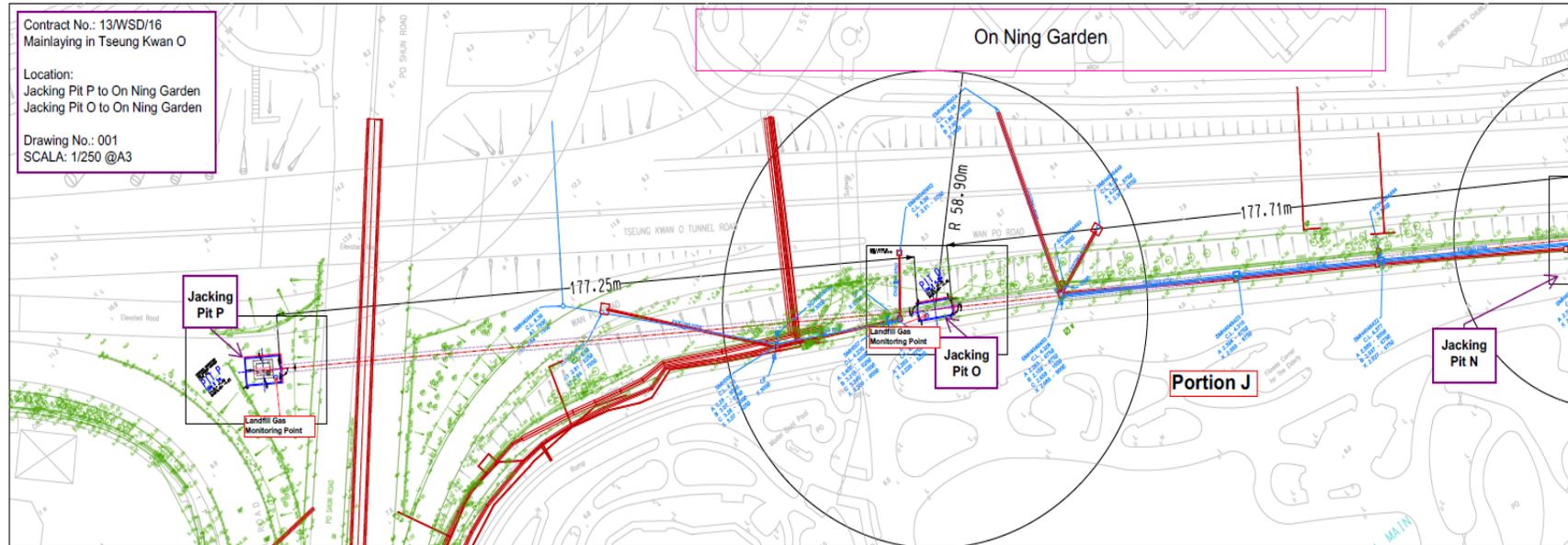


Figure D10b: Location Plan for Portion J – Pit N-O-P

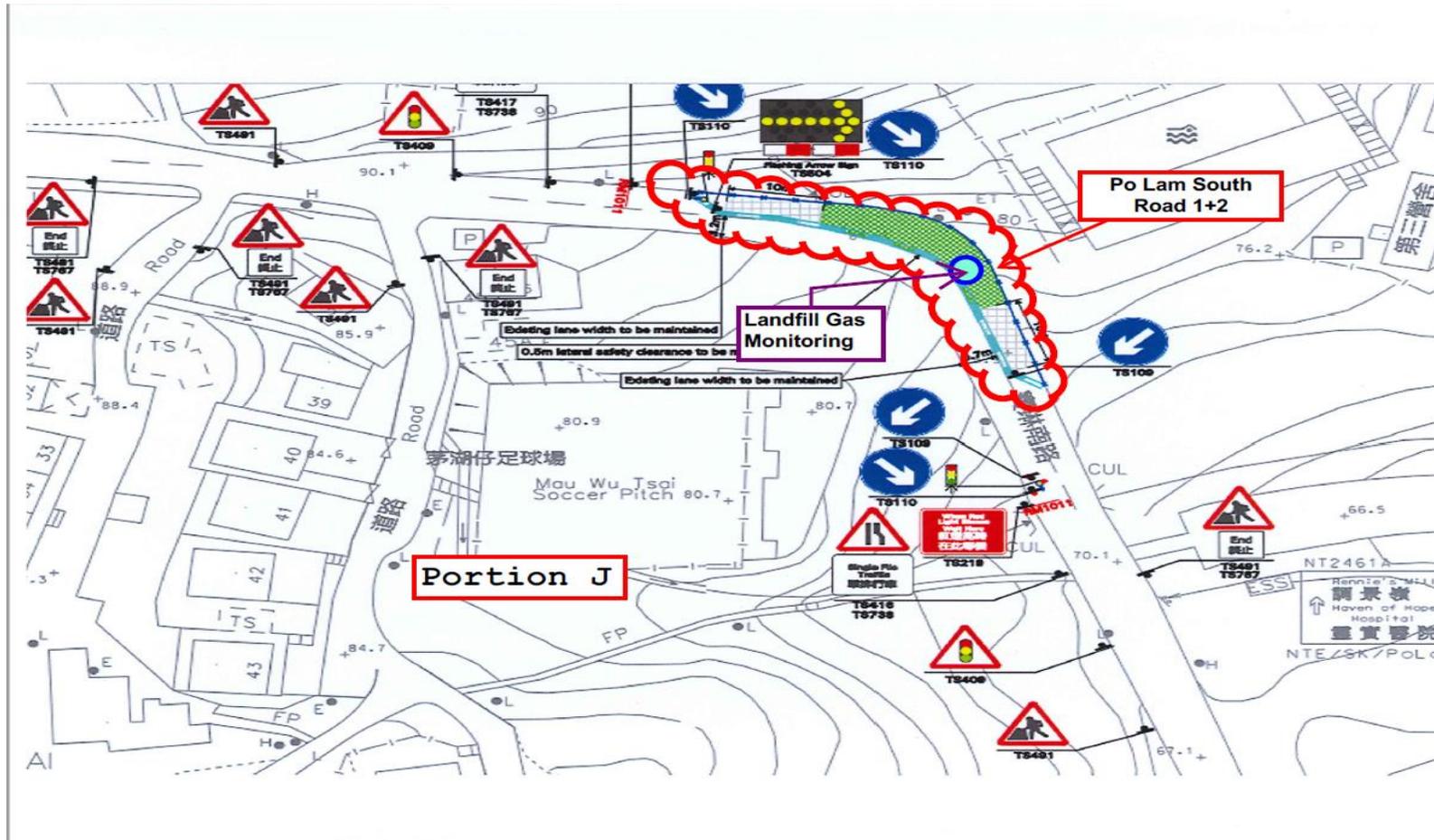


Figure D11: Location Plan for Portion J – Po Lam South Road

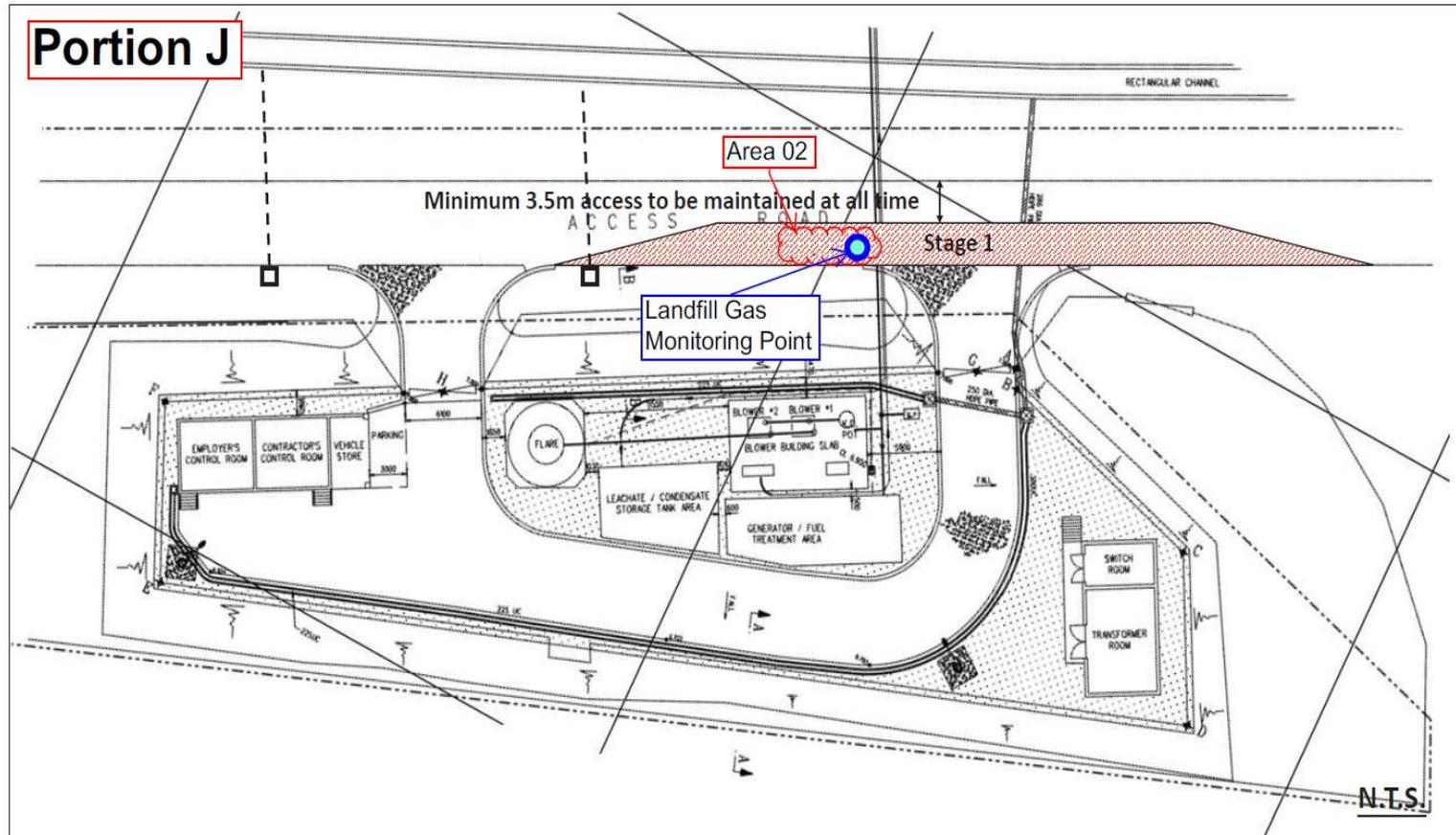


Figure D12: Location Plan for Portion J – Area A02

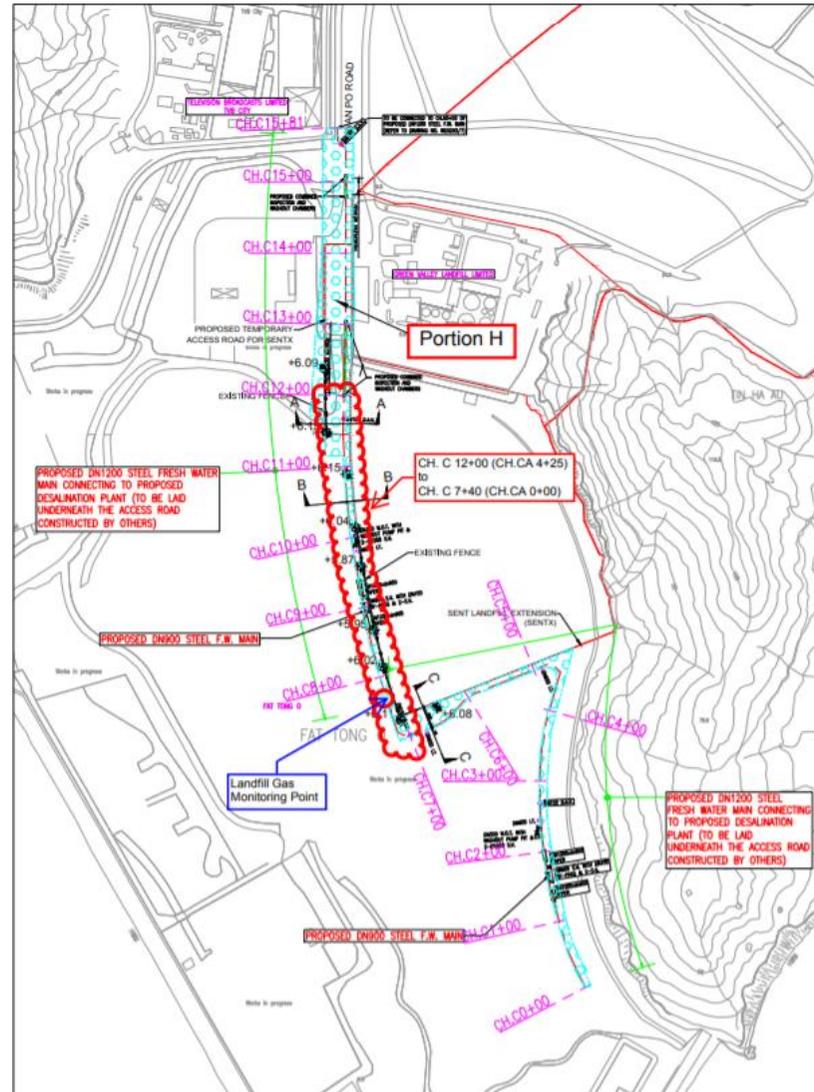


Figure D13. Location Plan for Portion H– CH.C 7+40 (CH.CA 0+00) to CH.C 12+00 (CH.CA 04+25)

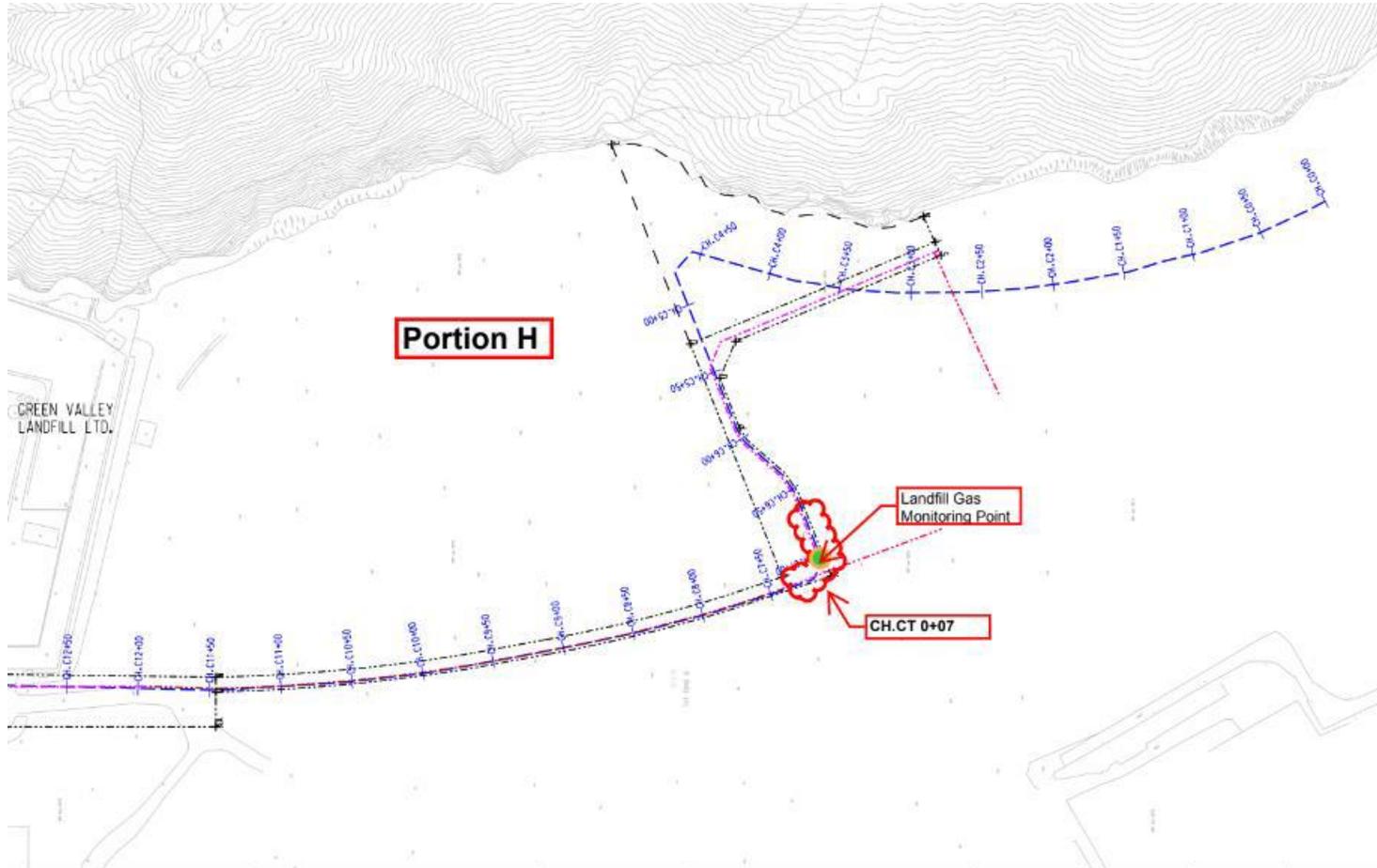


Figure D14a. Location Plan for Portion H: CH.CT 0+07 - 0+57



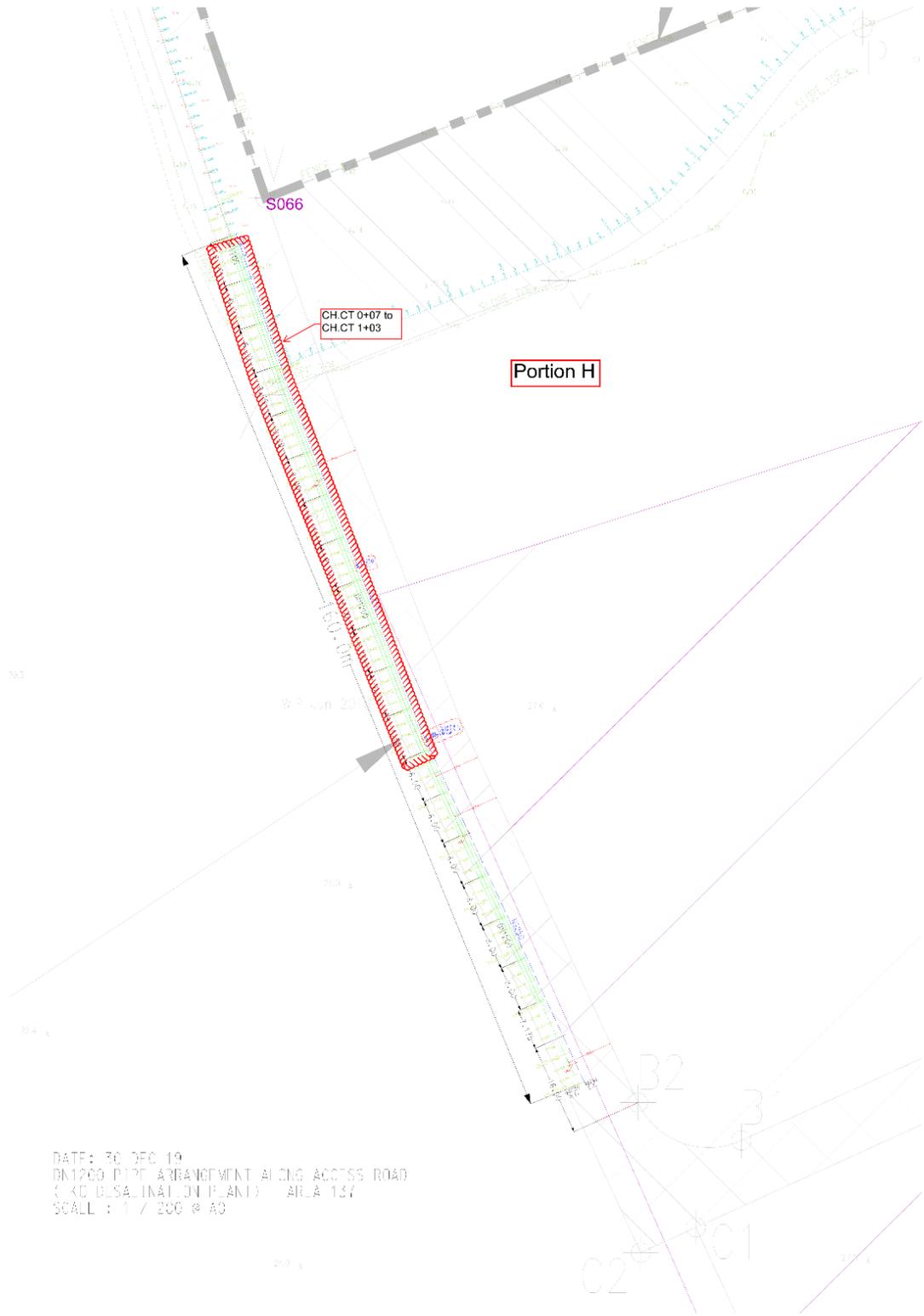


Figure D14c. Location Plan for Portion H: CH.CT 0+07 – 1+03

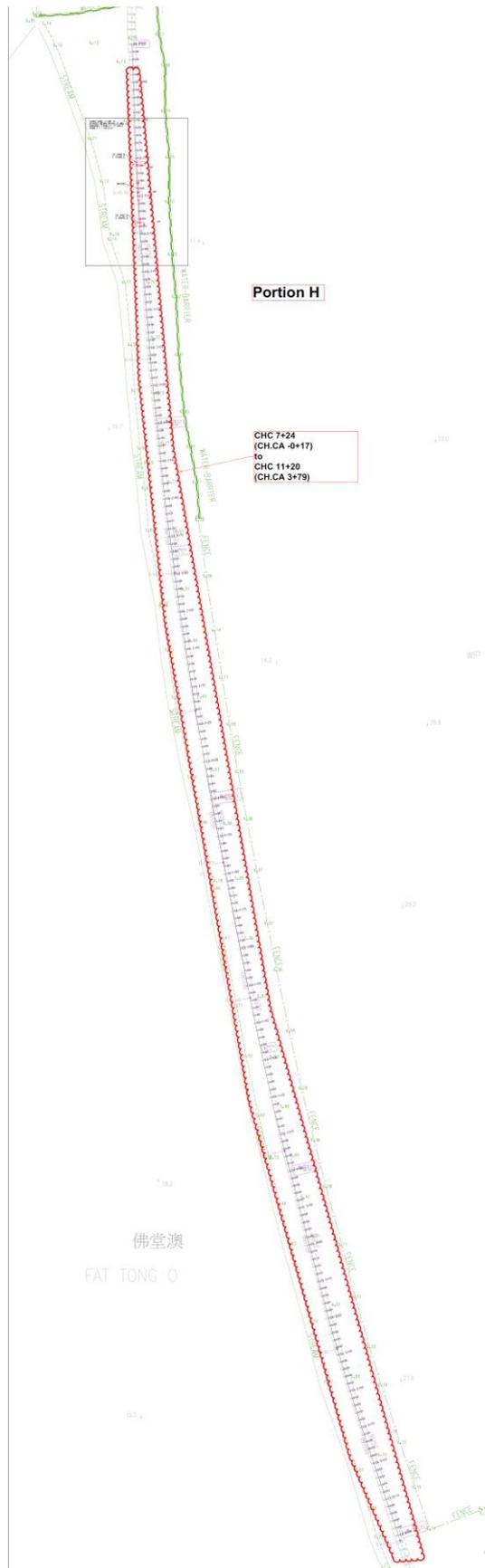


Figure D15a. Location Plan for Portion H– CH.C 07+24 (CH.CA -0+17)  
to CH.C 11+20 (CH.CA 3+79)

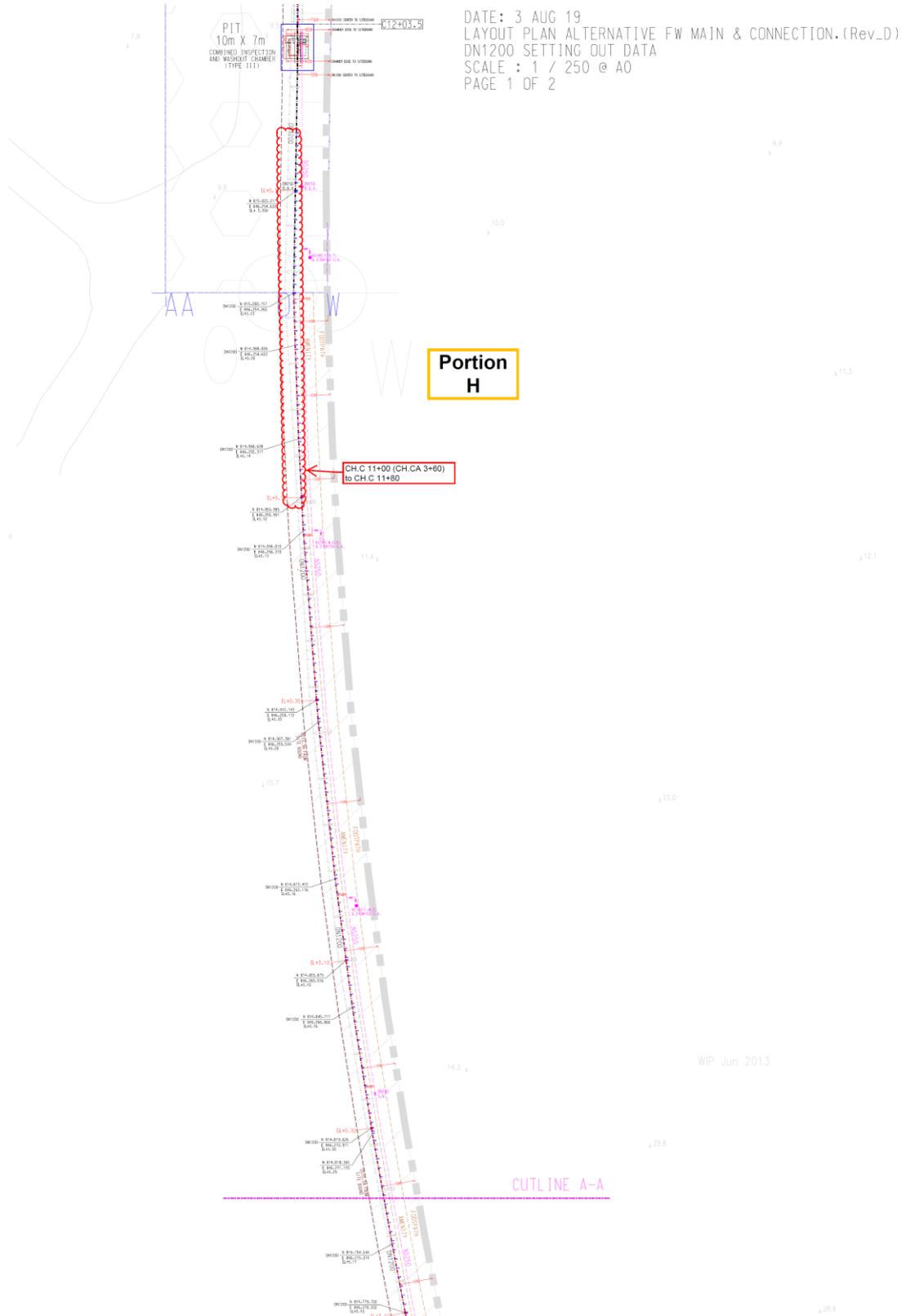


Figure D15b. Location Plan for Portion H – CH.C 11+00 to CH.C 11+80 (TKO Area 137)

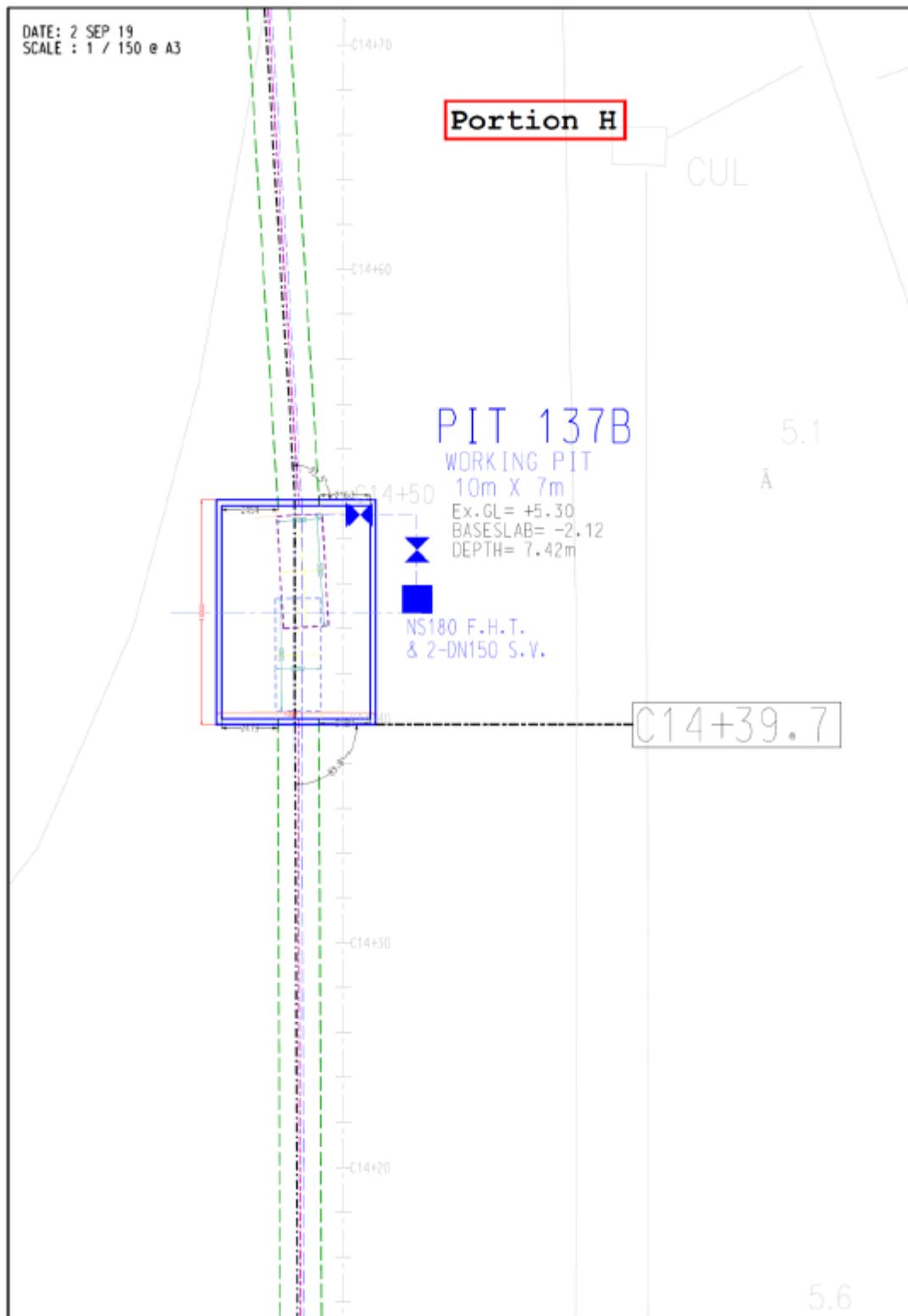


Figure D16. Location Plan for Portion H – Pit 137 B

# Appendix E

## Waste Flow Table

**Monthly Summary Waste Flow Table**

Name of Department: WSD Contract No. / Works Order No.: 13/WSD/16

Monthly Summary Waste Flow Table for 2018-2019

Month	Actual Quantities of <u>Inert</u> Construction Waste Generated Monthly					
	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed of as Public Fill	Imported Fill (see Note 1)
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )
2018	1.157	0.063	0.000	0.000	1.157	0.518
Jan 2019	2.758	0.021	2.118	0.000	0.457	0.331
Feb 2019	0.731	0.004	0.093	0.000	0.372	0.407
Mar 2019	0.575	0.004	0.000	0.000	0.575	0.140
Apr 2019	0.101	0.000	0.000	0.000	0.101	0.086
May 2019	0.035	0.000	0.000	0.000	0.035	0.019
Jun 2019	0.252	0.000	0.000	0.000	0.252	0.039
Sub-total	4.452	0.029	2.211	0.000	1.792	1.022
Jul 2019	0.176	0.000	0.000	0.000	0.176	0.074
Aug 2019	0.359	0.005	0.000	0.000	0.359	0.133
Sep 2019	0.030	0.000	0.000	0.000	0.030	0.421
Oct 2019	0.078	0.009	0.000	0.000	0.078	0.542
Nov 2019	0.033	0.000	0.000	0.000	0.033	0.504
Dec 2019	0.052	0.000	0.000	0.000	0.052	0.504
Total	5.180	0.043	2.211	0.000	2.520	3.200

Month	Actual Quantities of <u>Non-inert</u> Construction Waste Generated Monthly				
	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. General Refuse disposed at Landfill
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2018	0.000	0.417	0.000	0.000	0.139
Jan 2019	0.000	0.000	0.000	0.000	0.016
Feb 2019	0.000	0.000	0.000	0.000	0.001
Mar 2019	0.000	0.000	0.000	0.000	0.009
Apr 2019	0.000	0.000	0.000	0.000	0.018
May 2019	0.000	0.000	0.000	0.000	0.028
Jun 2019	0.000	0.000	0.000	0.000	0.013
<b>Sub-total</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.085</b>
Jul 2019	0.000	0.000	0.000	0.000	0.012
Aug 2019	0.000	0.000	0.000	0.000	0.001
Sep 2019	0.000	0.000	0.000	0.000	0.000
Oct 2019	0.000	0.000	0.000	0.000	0.001
Nov 2019	0.000	0.000	0.000	0.000	0.001
Dec 2019	0.000	0.062	0.000	0.000	0.002
Jan 2020					
<b>Total</b>	<b>0.000</b>	<b>0.479</b>	<b>0.000</b>	<b>0.000</b>	<b>0.241</b>

Notes:

1. The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
2. Plastic refer to plastic bottles/containers, plastic sheets/foam from packaging materials.
3. Broken concrete for recycling into aggregate.

**Monthly Summary Waste Flow Table**

Name of Department: WSD Contract No. / Works Order No.: 13/WSD/16

Monthly Summary Waste Flow Table for January to April 2020



Month	Actual Quantities of <b>Inert</b> Construction Waste Generated Monthly					
	Total Quantity Generated (see Note 4)	Hard Rock and Large Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed of as Public Fill	Imported Fill (see Note 1)
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )
2018	1.157	0.063	0.000	0.000	1.157	0.518
2019	5.178	0.043	2.211	0.000	2.520	3.200
Jan 2020	0.151	0.003	0.000	0.000	0.151	0.077
Feb 2020	0.185	0.000	0.000	0.000	0.185	0.170
Mar 2020	0.278	0.000	0.000	0.000	0.278	0.201
Apr 2020	0.492	0.000	0.000	0.000	0.492	0.044
Sub-total	1.106	0.003	0.000	0.000	1.106	0.492
Total for 2020	1.106	0.003	0.000	0.000	1.106	0.492

Month	Actual Quantities of <u>Non-inert</u> Construction Waste Generated Monthly				
	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. General Refuse disposed at Landfill
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2018	0.000	0.417	0.000	0.000	0.139
2019	0.000	0.062	0.000	0.000	0.102
Jan 2020	0.000	0.055	0.000	0.000	0.002
Feb 2020	0.000	0.050	0.000	0.000	0.001
Mar 2020	0.000	0.052	0.000	0.000	0.001
April 2020	0.000	0.043	0.000	0.000	0.002
Sub-total	0.000	0.200	0.000	0.000	0.006
Total for 2020	0.000	0.200	0.000	0.000	0.006

Notes:

1. The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
2. Plastic refer to plastic bottles/containers, plastic sheets/foam from packaging materials.
3. Broken concrete for recycling into aggregate.

## Appendix F

# Summary of Implementation Status of Environmental Mitigation

**Contract No. 13/WSD/16**  
**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
<b>Air Quality</b>								
S4.8.1	Impervious dust screen or sheeting will be provided to enclose scaffolding from the ground floor level of building for construction of superstructure of the new buildings.	Land site/ During Construction	Contractor(s)		✓		N/A	Air Pollution Control (Construction Dust)
S4.8.1	Impervious sheet will be provided for skip hoist for material transport.	Land site/ During Construction, particularly dry season	Contractor(s)		✓		Implemented	
S4.8.1	The area where dusty work takes place should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after dusty activities as far as practicable.	Land site/ During Construction	Contractor(s)		✓		Implemented, rectified after observation	
S4.8.1	All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation.	Land site/ During Construction	Contractor(s)		✓		Implemented, rectified after observation	
S4.8.1	Dropping heights for excavated materials should be controlled to a practical height to minimise the fugitive dust arising from unloading.	Land site/ During Construction	Contractor(s)		✓		Implemented	
S4.8.1	During transportation by truck, materials should not be loaded to a level higher than the side and tail boards, and should be dampened or covered before transport.	Land site/ During Construction	Contractor(s)		✓		Implemented	
S4.8.1	Wheel washing device should be provided at the exits of the work sites. Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty material from its body and wheels as far as practicable.	Land site/ During Construction	Contractor(s)		✓		N/A	

**Contract No. 13/WSD/16**  
**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
S4.8.1	Road sections between vehicle-wash areas and vehicular entrance will be paved.	Land site/ During Construction	Contractor(s)		✓		Implemented	
S4.8.1	Hoarding of not less than 2.4m high from ground level will be provided along the length of the Project Site boundary.	Land site/ During construction	Contractor(s)	✓	✓		N/A	
S4.8.1	Haul roads will be kept clear of dusty materials and will be sprayed with water so as to maintain the entire road surface wet at all times.	Land site/ During construction	Contractor(s)		✓		Implemented, rectified after observation	
S4.8.1	Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets or sprayed with water to maintain the entire surface wet all the time.	Land site/ During construction	Contractor(s)		✓		Implemented, rectified after observation	
S4.8.1	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Land site/ During construction	Contractor(s)		✓		N/A	
S4.8.1	All exposed areas will be kept wet always to minimise dust emission.	Land site/ During construction	Contractor(s)		✓		Implemented, rectified after observation	
S4.8.1	Ultra-low-sulphur diesel (ULSD) will be used for all construction plant on-site, as defined as diesel fuel containing not more than 0.005% sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No 19/2005 on Environmental Management on Construction Sites.	Land site/ During construction/ During Operation	Contractor(s)		✓	✓	Implemented	Environment, Transport and Works Bureau Technical Circular (ETWB- TC(W)) No 19/2005 on Environmental Management on Construction Sites
S4.8.1	The engine of the construction equipment during idling will be switched off.	Land site/ During construction	Contractor(s)		✓		Implemented	

**Contract No. 13/WSD/16**  
**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
S4.8.1	Concrete batching plant will be required on site. control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented. The control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented.	Land site/ During construction	Contractor(s)		✓		N/A	Guidance Note on a Best
S4.8.1	Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.	Land site/ During construction	Contractor(s)		✓		Implemented	
S4.10	To ensure proper implementation of the recommended dust mitigation measures and good construction site practices during the construction phase, environmental site audits on weekly basis is recommended throughout the construction period.	Land site/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		✓		Implemented	

Note: D – Design stage C – Construction O – Operation

**Contract No. 13/WSD/16**  
**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation status	Relevant Legislation & Guidelines
				D	C	O		
<b>Noise</b>								
S5.7	Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase.	All area/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase.	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Mobile plant, if any, will be sited as far away from NSRs as possible.	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum.	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Plants known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,

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S5.7	Use of Quite Powered Mechanical Equipment (QPME).	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Movable noise barriers of 3m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m <sup>-2</sup> and have no openings or gaps.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Noise control/ During construction	Contractor(s)		✓		N/A	A Practical Guide for the Reduction of Noise from Construction Works,
S5.7	Construction activities (e.g. excavation/shoring, reinstatement (asphalt), and pipe jacking) will be planned and carried out in sequence, such that items of PME proposed for these activities will not be operated simultaneously.	Noise control/ During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	PMEs will not be used at the works areas near educational institutions with residual impact (ie the "influence area" within a radius of 40m) during school hours in order to reduce impact to the educational institutions.	Noise control / During construction	Contractor(s)		✓		Implemented	A Practical Guide for the Reduction of Noise from Construction Works

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S5.7	Noise enclosures or acoustic sheds would be used to cover stationary PME such as generators. Portable/Movable noise enclosure made of material with superficial surface density of at least 7 kg m <sup>-2</sup> may be used for screening the noise from operation of the saw/groover, concrete.	Noise control/ Pre-construction/ During construction	Contractor(s)	✓	✓		N/A	
S5.9	Sawcutting pavement, breaking up of pavement, excavation /shoring, pipe laying, backfilling, reinstatement (concrete) and pipe jacking shall be scheduled outside the examination period.	Noise control/ Pre-construction/ During construction	Contractor(s)	✓	✓		N/A	
S5.9	In view the duration of noise exceedance at Creative Secondary School, PLK Laws Foundation College, TKO Kei Tak Primary School and School of Continuing and Professional Studies-CUHK is limited to 8 weeks, the construction work in the influence areas near the four schools shall be scheduled during long school holidays (eg summer holiday, Easter holiday or Christmas holiday, etc) as far as practicable. Scheduling the construction work for the four schools.	Noise control/ Pre-construction/ During construction	Contractor(s)	✓	✓		N/A	
S5.10	A noise monitoring programme shall be implemented for the construction phase.	Designated monitoring stations as defined in EM&A Manual/During construction phase	Environmental Team (ET)		✓		Implemented	
S5.10	The effectiveness of on-site control measures could also be evaluated through the regular site audits.	All facilities/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		✓		Implemented	-

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<b>Water Quality</b>								
S6.9	Dredged marine sediment will be disposed of in a gazetted marine disposal area in accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO).	Marine Dredging/ During construction	Contractor(s)		✓		N/A	Dumping at Sea Ordinance (DASO)
S6.9	Disposal vessels will be fitted with tight bottom seals in order to prevent leakage of material during transport.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	Barges will be filled to a level, which ensures that material does not spill over during transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	After dredging, any excess materials will be cleaned from decks and exposed fittings before the vessel is moved from the dredging area.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	All vessels should be well maintained and inspected before use to limit any potential discharges to the marine environment.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	All vessels must have a clean ballast system.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	No discharge of sewage/grey wastewater should be allowed. Waste water from potentially contaminated area on working vessels should be minimized and collected. These kinds of wastewater should be brought back to port and discharged at appropriate collection and treatment system.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-
S6.9	No soil waste is allowed to be disposed overboard.	Marine Dredging/ During construction	Contractor(s)		✓		N/A	-

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S6.9	Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Land site & drainage/ During construction	Contractor(s)		✓		Implemented	ProPECC PN 1/94 TM Standard under the WPCO
S6.9	Earthworks to form the final surfaces will be followed up with surface protection and drainage works to prevent erosion caused by rainstorms.	Land site & drainage/ During construction	Contractor(s)		✓		Implemented	-
S6.9	Appropriate surface drainage will be designed and provided where necessary.	Land site & drainage/ During construction	Contractor(s)		✓		N/A	-
S6.9	The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94.	Land site & drainage/ During construction	Contractor(s)		✓		Implemented	ProPECC PN 1/94
S6.9	Oil interceptors will be provided in the drainage system where necessary and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages.	Land site & drainage/ During construction	Contractor(s)		✓		Implemented, rectified after observation	-
S6.9	Temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge, if any, will be adequately designed for the controlled release of storm flows.	Land site & drainage/ During construction	Contractor(s)		✓		N/A	-

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S6.9	The temporary diverted drainage, if any, will be reinstated to the original condition when the construction work has finished or when the temporary diversion is no longer required.	Land site & drainage/ During construction	Contractor(s)		✓		N/A	-
S6.9	Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the construction workers over the construction site to prevent direct disposal of sewage into the water environment.	Land site & drainage/ During construction	Contractor(s)		✓		Implemented	-
S6.9 and S6.12	The sterilization water should be dechlorinated with total residual chlorine (TRC) level below 1 mg/L before discharge to public sewer. In situ testing of TRC should also be conducted for the discharge of chlorinated water for pipeline disinfection to ensure sufficient dechlorination before discharge to public sewer.	Sterilization of water mains prior to commissioning	Contractor(s)		✓	✓	N/A	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems Inland and Coastal Waters
S6.9	The cleaning and flushing water should also be treated and desilted to the relevant discharge requirement stipulated in TM-DSS before discharging.	Sterilization of water mains prior to commissioning	Contractor(s)		✓	✓	N/A	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems Inland and Coastal Waters
S6.9	Site drainage should be well maintained and good construction practices should be observed to ensure that oil, fuels, solvents and other chemicals are managed, stored and handled properly and do not enter the nearby water streams.	Land site & drainage/ During construction/ During operation	Contractor(s)		✓	✓	Implemented, rectified after observation	-

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S6.12	Regular site inspections will be carried out in order to confirm that regulatory requirements are being met and that contractors are implementing the standard site practice and mitigation measures as proposed to reduce potential impacts to water quality.	During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		✓		Implemented	-

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<b>Waste Management</b>								
S8.5	Nomination of approved personnel to be responsible for standard site practices, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	-
S8.5	Training of site personnel in proper waste management and chemical handling procedures. Training will be provided to workers on the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling at the beginning of the construction works.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	-
S8.5	Provision of sufficient waste disposal points and regular collection for disposal.	All area/ During construction/ During operation	Contractor(s)		✓	✓	Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	Appropriate measures to reduce windblown litter and dust transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	All area/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	A waste management plan (WMP) as stated in the "ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites" for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established and implemented during the construction phase as part of the Environmental Management Plan (EMP). The Contractor will be required to prepare the EMP and submits it to the Architect/ Engineer under the Contract for approval prior to implementation.	All area/ During construction	Contractor(s)		✓		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
S8.5	Separation of chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Centre at Tsing Yi.	All area/ During construction	Contractor(s)		✓		Implemented	Chapters 2 & 3 Code of Practice on the Packaging, Labelling, Storage of Chemical Wastes published and

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								the Waste Disposal Ordinance (Cap 354), Section 35
S8.5	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	Land site/ During construction	Contractor(s)		✓		Implemented	Waste Disposal Ordinance (Cap 354)
S8.5	A recording system for the amount of wastes generated/ recycled and disposal sites. The trip- ticket system will be included as one of the contractual requirements and implemented by the contractor(s).	Land site/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal.	Land site/ During construction/ During operation	Contractor(s)		✓		Implemented	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Encourage collection of aluminium cans and waste paper by individual collectors during construction with separate labelled bins provided to segregate these wastes from other general refuse by the workforce.	Land site/ During construction	Contractor(s)		✓		Implemented	ETWB TCW No. 33/2002, Management of Construction and Demolition Material Including Rock
S8.5	Any unused chemicals and those with remaining functional capacity will be recycled as far as possible.	Land site/ During construction	Contractor(s)		✓		N/A	-
S8.5	Use of reusable non-timber formwork to reduce the amount of C&D materials.	All areas/ During construction	Contractor(s)		✓		N/A	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Prior to disposal of construction waste, wood, steel and other metals will be separated to the extent practical, for re-use and/or recycling to reduce the quantity of waste to be disposed of to landfill.	All areas/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Proper storage and site practices to reduce the potential for damage or contamination of construction materials.	All areas/ During construction	Contractor(s)		✓		Implemented, rectified after observation	-

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S8.5	Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste.	All areas/ During construction	Contractor(s)		✓		Implemented	-
S8.5	A Sediment Quality Report (SQR) for sampling and chemical testing of the sediment will be prepared and submitted to the EPD for approval. The approved detailed sampling and chemical testing will be carried out prior to the commencement of the dredging activities to confirm the sediment disposal method.	Marine works/ During construction	Contractor(s)		✓		N/A	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)
S8.5	The management of dredged/ excavated sediment management requirement from <i>ETWB TC(W) No. 34/2002</i> will be incorporated in the Specification of the Contract Documents.	Marine works/ During construction	WSD/ Contractor(s)		✓		Implemented	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)
S8.5	The contractor will open a billing account with EPD in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation for the payment of disposal charges.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	Cap 354N Waste Disposal (Charges for Disposal of Construction Waste) Regulation
S8.5	A trip-ticket system will be established in accordance with DEVB TC(W) No. 6/2010 to monitor the reuse of surplus excavated materials off-site and disposal of construction waste and general refuse at transfer facilities/ landfills, and to control fly-tipping.	Contract mobilisation/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	The project proponent will also conduct regular inspection of the waste management measures implemented on site as described in the Waste Management Plan.	All area/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		✓		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites

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S8.5	A recording system (similar to summary table as shown in Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005) for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established during the construction phase.	All area/ During construction	Contractor(s)		✓		Implemented	Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005
S8.5	Inert C&D materials (public fill) will be reused within the Project as far as practicable.	All area/ During construction	Contractor(s)		✓		N/A	-
S8.5	Public fill and construction waste shall be segregated and stored in different containers or skips to facilitate reuse or recycling of materials and their proper disposal.	All area/ During construction	Contractor(s)		✓		N/A	-
S8.5	Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	All area/ During construction	Contractor(s)		✓		N/A	-
S8.5	To reduce the potential dust and water quality impacts of site formation works, C&D materials will be wetted as quickly as possible to the extent practice after filling.	All area/ During construction	Contractor(s)		✓		Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R); WPCO (Cap 358)
S8.5	Open stockpiles of excavated/ fill materials or construction wastes on-site should be covered with tarpaulin or similar fabric.	Land site/ During Construction, particularly dry season	Contractor(s)		✓		Implemented, rectified after observation	Air Pollution Control (Construction Dust) Regulation (Cap 311R)
S8.5	Chemical waste container shall be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Chemical waste container shall have a capacity of less	All area/ During construction/	Contractor(s)/		✓	✓	Implemented	Waste Disposal

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	than 450 L unless the specifications have been approved by the EPD.	During operation	WSD					(Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	A label in English and Chinese shall be displayed on the chemical container in accordance with instructions prescribed in Schedule 2 of the Regulations.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall be enclosed on at least 3 sides.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall have adequate ventilation.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste)

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								(General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary).	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall be arranged so that incompatible materials are appropriately separated.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	General refuse will be stored in enclosed bins or compaction units separately from construction and chemical wastes.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	Waste Disposal (Chemical Waste) (General) Regulation; Code of Practice on the Packaging, Handling and Storage of Chemical Wastes
S8.5	Adequate number of waste containers will be provided to avoid over-spillage of waste.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	DEVB TC(W) No. 8/2010 Enhanced

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								Specification for Site Cleanliness and Tidiness.
S8.5	A reputable waste collector will be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimise odour, pest and litter impacts.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	N/A	-
S8.5	Recycling bins will be provided at strategic locations within the Site to facilitate recovery of recyclable materials (including aluminium can, waste paper, glass bottles and plastic bottles) from the Site. Materials recovered will be sold for recycling.	All area/ During construction/ During operation	Contractor(s)/ WSD		✓	✓	Implemented	-
S8.5	To avoid any odour and litter impact, accurate number of portable toilets will be provided for workers on-site.	All area/ During construction	Contractor(s)		✓		Implemented	-
S8.5	The burning of refuse on construction sites is prohibited by law.	All area/ During construction	Contractor(s)		✓		Implemented	Air Pollution Control Ordinance (Cap 311)
S8.7	To facilitate monitoring and control over the contractors' performance on waste management, a waste inspection and audit programme will be implemented throughout the construction phase.	All facilities/ During construction	ET/ IEC		✓		Implemented	-

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<b>Ecology</b>								
S9.7	For slope mitigation works within the Clear Water Bay Country Park, to avoid tree felling and damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and rock dowels can be adjusted during detailed design, and a setback distance from existing trees is recommended to be maintained as far as practical. A detailed specification describing the exact locations of the flexible barrier foundation plates, soil nails and rock dowels will be prepared to illustrate how the setback distance from existing trees would be implemented for tree avoidance.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	✓	✓		Implemented	-
S9.7	Pruning of tree canopies along the alignment of the flexible barriers shall be limited to a minimum.	Slope mitigation works area/ During construction	Contractor(s)		✓		Implemented	
S9.7	The alignment of flexible barriers shall be optimized to preserve all species of conservation interest and minimize the impact to the existing vegetation as far as practicable. All individuals of <i>Marsdenia lachnostoma</i> within the slope mitigation areas shall be retained <i>in-situ</i> , by positioning the alignment of flexible barrier at a minimum 1.5m in a radius away from these individuals.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	✓	✓		Implemented	-
S9.7 and 9.10	At the detailed design stage prior to the commencement of the slope mitigation works, a vegetation survey shall be carried out at the slope mitigation areas within the Clear Water Bay Country Park to assess the condition and identify the location of each individual of <i>Marsdenia lachnostoma</i> and other flora species of conservation interest that may be directly affected by the construction works.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	✓	✓		N/A	-
S9.7	Temporary fencing will be installed to fence off the concerned species either in groups of individually within the works area and in the close proximity to prevent from being damaged and disturbed during construction. A sign identifying the site shall be attached to the fence and flagging tape shall be attached to the individuals to visualize their locations.	Slope mitigation works area/ During construction	Contractor(s)		✓		N/A	-
S9.7 and S9.10	A specification for fencing and demarcating individuals	Slope mitigation works area/	Contractor(s)		✓		N/A	-

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EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
				D	C	O		
	of <i>Marsdenai lachnostoma</i> (or other flora species of conservation interest, if found) adjacent to the proposed alignment of the flexible barriers will be prepared to protect the species.	During construction						
S9.7	Induction training shall also be provided to all site personnel in order to brief them on this flora of conservation interest including the locations and their importance.	Slope mitigation works area/ During construction	Contractor(s)		✓		N/A	-
S9.7	The resident site supervisory staff will closely monitor the conditions of concerned individuals during construction of flexible barriers in the close proximity.	Slope mitigation works area/ During construction	Contractor(s)		✓		Implemented	-
S9.7	Erect fences along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas.	All area/ During construction	Contractor(s)		✓		Implemented	-
S9.7	Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding areas.	All area/ During construction	Contractor(s)/ Environmental Team (ET)		✓		Implemented	-
S9.7	Avoid any damage and disturbance, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal.	All area/ During construction	Contractor(s)		✓		Implemented	-
S9.7	Reinstate temporarily affected areas, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting. The tree/shrub species will be chosen with reference to those in the surrounding area.	All area/ During construction	Contractor(s)		✓		N/A	-
S9.7	Affected habitats within the Clear Water Bay Country Bay shall be reinstated by hydro-seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works.	All area/ During construction	Contractor(s)		✓		N/A	-

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				D	C	O		
<b>Landscape &amp; Visual</b>								
S11.10 & 11.11	The construction area and area allowed for temporary structures, such as the contractor's office, will be minimized to a practical minimum. (MM1)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	Implemented	-
S11.10 & 11.11	At the detailed design stage, the design team will seek to minimize the landscape footprint of the Project and above ground facilities, while satisfying all other requirements. (MM2)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	Implemented	-
S11.10 & 11.11	Design principles will be adopted to take into account the surrounding area, particularly Clear Water Bay Country Park behind and the nearby waterfront, with due consideration given to: - green roofs where practical (ie without equipment on the roof); - roadside planting; - aesthetic treatment of all structures; - vertical greening; screen planting along application site; and - landscape enhancement with amenity planting where practical including planting along the edge (site boundary) fence with native shrubs where feasible, - to reduce their visual impact and blend them into the surrounding landscape. (MM3)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	Implemented	-
S11.10 & 11.11	All trees within the Project Site or the potential slope mitigation works area will be carefully protected during construction according to DEVB TCW No. 10/2013 – Tree Preservation (MM4)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	Implemented	ETWB TCW No. 3/2006 - Tree Preservation.
S11.10 & 11.11	No tree within the Country Park will be felled. Trees within the Site unavoidably affected by the works will be transplanted where necessary and practical. For trees that need to be felled, compensatory planting will be provided to the satisfaction of relevant Government departments. A compensatory tree planting proposal including locations of tree compensation will be submitted to seek relevant government department's approval, in accordance with DEVB TC(W) No. 10/2013.	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	Implemented	DEVB TC(W) No. 10/2013

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S11.10 & 11.11	(MM5) Any slope mitigation works necessary to address natural terrain hazards, will be minimized to minimize any potential environmental impact to the Country Park e.g. soil nailing and rock stabilization will aim to avoid existing trees e.g. should any restoration of vegetation be necessary, the best planting matrix with native species will be established, with the aim of resembling the existing vegetation. (MM6)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	N/A	
S11.10 & 11.11	Dredging works for the installation of intake structures and outfall diffusers should be minimized to avoid or reduce any potential environmental impacts to as low as reasonably practicable (ALARP). The intake and outfall structures (e.g. intake openings and diffuser heads) will be prefabricated and transferred to site for installation. (MM7)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	N/A	
S11.10 & 11.11	All night-time lighting will be reduced to a practical minimum both in terms of number of level and will be hooded and directional. (MM8) units and lux level and will be hooded and directional. (MM8)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	✓	✓	Implemented	-

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<b>Landfill Gas Hazard</b>								
S12.7	During all works, safety procedures should be implemented to minimise the risks of fires and explosions, asphyxiation of workers and toxicity effects resulting from contact with contaminated soil and groundwater.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	-
S12.7	During trenching and excavation as well as creation of confined spaces at near to or below ground level, precautions should be clearly laid down and rigidly Gas detection equipment and appropriate breathing apparatus should be available and used when entering confined spaces or trenches deeper than 1 metre.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	
S12.7	The Contractor should make the workers are aware of potential hazards of working in confined spaces (any chamber, manhole or culvert which is large enough to permit access to personnel). Such work in confined spaces is controlled by the Factories and Industrial Undertakings (Confined Spaces) Regulations of the Factories and Industrial Undertakings Ordinance. Following the Safety Guide to Working in Confined Spaces ensures compliance with the above regulations.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	
S12.7	Safety officers, specifically trained with regard to landfill gas and leachate related hazards and the appropriate actions to take in adverse circumstances, should be present on the site throughout the works, in particular, when works are undertaken below grade.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	
S12.7	All personnel who work on site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of the works, the possible presence of contaminated water and the need to avoid physical contact with it.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	
S12.7	Monitoring for landfill gas should be undertaken in all excavations, manholes, chambers (particularly during pipe jacking) and any confined spaces through the use of an intrinsically safe portable instrument, appropriately calibrated and capable of measuring the concentrations of methane, carbon dioxide and oxygen.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	

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				D	C	O		
S12.7	Monitoring frequency and areas to be monitored should be specified prior to commencement of groundwork, either by the Safety Officer, or by an appropriately qualified person. All measurements should be recorded and documented.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	
S12.7	Proceed drilling with adequate care and precautions against the potential hazards which may be encountered.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	
S12.7	Prior to the commencement of the site works, the drilling contractor should devise a 'method-of- working' statement covering all normal and emergency procedures (including but not limited to number of operatives, experience and special skills of operatives, normal method of operations, emergency procedures, supervisors responsibilities, storage and use of safety equipment, safety procedures and signs, barriers and guarding). The site supervisor and all operatives must be familiar with this statement.	All area/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	
S12.7	Where below ground service entries are necessary to the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II), the entry point should be sealed to prevent gas entry. In addition, any below grade cable trenches entering the Incoming Switchgear Room and 132 kV Substation can become the pathway for landfill gas and hence grilled metal covers should be used.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	N/A	
S12.7	It is recommended regular landfill gas monitoring should be carried out at the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II). The monitoring frequency will be monthly for the first year of operation. If the monitoring results show no sign of landfill gas migration, reduce the monitoring frequency to once every six months.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	N/A	
S12.7	The manholes and utility pits within the Project Site and along the fresh water mains. Each manhole/ utility pit should be monitored with two measurements (at mid depth and base). Each measurement should be	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	N/A	

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	monitored for a minimum of 10 minutes. A steady reading and peak reading should be recorded at each manhole/ utility pit and for each measurement. The need for venting the manhole/ utility pit and further monitoring will be reviewed after the initial monitoring.							
S12.7	All construction, operation and maintenance personnel working on-site as well as visitors should be made aware of the hazards of landfill gas and its possible presence on-site. This should be achieved through a combination of posting warning signs in prominent places and also by access to detailed information on landfill gas hazards and the designs and procedural means by which these hazards are being minimised on-site.	All area/ Detailed design/ During construction/ During operation	Contractor(s)	✓	✓	✓	Implemented	

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## Appendix G

# Action and Limit Level for Noise and Landfill Gas

**Action/ Limit Level for Noise Monitoring**

<b>Time Period</b>	<b>Action</b>	<b>Limit (dB(A))</b>
0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the noise sensitive receivers	<ul style="list-style-type: none"><li>• 70 dB(A) for school and</li><li>• 65 dB(A) during examination period</li></ul>
Notes: (a) Limits specified in the GW-TM and IND-TM for construction and operation noise, respectively.		

**Action Level for Landfill Gas Monitoring Equipment**

<b>Parameters</b>	<b>Level</b>
Oxygen (O <sub>2</sub> )	Action Level < 19% O <sub>2</sub>  Limit Level < 19% O <sub>2</sub>
Methane (CH <sub>4</sub> )	Action Level >10% LEL  Limit Level >20% LEL
Carbon Dioxide (CO <sub>2</sub> )	Action Level >0.5% CO <sub>2</sub> Limit Level >1.5% CO <sub>2</sub>

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# Appendix H

## Landfill Gas Monitoring Results

**Contract No. 13/WSD/16**  
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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
3/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	17	1021	PGM-2400P (QRAE II)
3/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
3/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
3/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
3/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	19	1022	PGM-2400P (QRAE II)
3/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	19	1022	PGM-2400P (QRAE II)
3/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/2/2020	Jacking Pit B	4.0	11:15	Fine	0	0	0	20.9	19	1021	PGM-2400P (QRAE II)
3/2/2020	Jacking Pit B	4.0	16:15	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	20	1021	PGM-2400P (QRAE II)
3/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
4/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	15	1022	PGM-2400P (QRAE II)
4/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
4/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	16	1022	PGM-2400P (QRAE II)
4/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
4/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
4/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
4/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
4/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
4/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
4/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
4/2/2020	Jacking Pit B	4.0	11:15	Fine	0	0	0	20.9	17	1021	PGM-2400P (QRAE II)
4/2/2020	Jacking Pit B	4.0	16:15	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
4/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	19	1021	PGM-2400P (QRAE II)
4/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
5/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
5/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
5/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)

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5/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
5/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
5/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
5/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
5/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	17	1019	PGM-2400P (QRAE II)
5/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
5/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	17	1019	PGM-2400P (QRAE II)
5/2/2020	Jacking Pit B	4.0	11:15	Fine	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
5/2/2020	Jacking Pit B	4.0	16:15	Fine	0	0	0	20.9	17	1019	PGM-2400P (QRAE II)
5/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	18	1021	PGM-2400P (QRAE II)
5/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	17	1019	PGM-2400P (QRAE II)
6/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	16	1021	PGM-2400P (QRAE II)
6/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
6/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	16	1022	PGM-2400P (QRAE II)
6/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
6/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	16	1022	PGM-2400P (QRAE II)
6/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
6/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	16	1021	PGM-2400P (QRAE II)
6/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
6/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	16	1021	PGM-2400P (QRAE II)
6/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
6/2/2020	Jacking Pit B	4.0	11:15	Fine	0	0	0	20.9	16	1021	PGM-2400P (QRAE II)
6/2/2020	Jacking Pit B	4.0	16:15	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
6/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	17	1021	PGM-2400P (QRAE II)
6/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
7/2/2020	Jacking Pit C	0.8	9:25	Rain	0	0	0	20.9	19	1023	PGM-2400P (QRAE II)
7/2/2020	Jacking Pit C	0.8	14:25	Rain	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
7/2/2020	CH.CT 0+07~1+57	3.1	9:55	Rain	0	0	0	20.9	20	1023	PGM-2400P (QRAE II)
7/2/2020	CH.CT 0+07~1+57	3.1	14:55	Rain	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
7/2/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	19	1023	PGM-2400P (QRAE II)
7/2/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)

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7/2/2020	137 Pit B	1.0	10:25	Rain	0	0	0	20.9	20	1023	PGM-2400P (QRAE II)
7/2/2020	137 Pit B	1.0	15:25	Rain	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
7/2/2020	CH.CA12+40	5.3	11:00	Rain	0	0	0	20.9	20	1023	PGM-2400P (QRAE II)
7/2/2020	CH.CA12+40	5.3	16:00	Rain	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
7/2/2020	Jacking Pit B	5.0	11:15	Rain	0	0	0	20.9	21	1022	PGM-2400P (QRAE II)
7/2/2020	Jacking Pit B	5.0	16:15	Rain	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
7/2/2020	MVT2	0.6	11:50	Rain	0	0	0	20.9	20	1022	PGM-2400P (QRAE II)
7/2/2020	MVT2	0.6	16:50	Rain	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
8/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	17	1024	PGM-2400P (QRAE II)
8/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	19	1023	PGM-2400P (QRAE II)
8/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)
8/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
8/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)
8/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
8/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)
8/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
8/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)
8/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
8/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)
8/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
8/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)
8/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
10/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
10/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
10/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
10/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
10/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
10/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
10/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	16	1025	PGM-2400P (QRAE II)
10/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
10/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
10/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
10/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	17	1024	PGM-2400P (QRAE II)
10/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
10/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	17	1024	PGM-2400P (QRAE II)
10/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
11/2/2020	Jacking Pit C	0.8	9:25	Rain	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
11/2/2020	Jacking Pit C	0.8	14:25	Rain	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
11/2/2020	CH.CT 0+07~1+57	3.1	9:55	Rain	0	0	0	20.9	16	1023	PGM-2400P (QRAE II)
11/2/2020	CH.CT 0+07~1+57	3.1	14:55	Rain	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
11/2/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
11/2/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
11/2/2020	137 Pit B	1.0	10:25	Rain	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
11/2/2020	137 Pit B	1.0	15:25	Rain	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
11/2/2020	CH.CA12+40	5.3	11:00	Rain	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
11/2/2020	CH.CA12+40	5.3	16:00	Rain	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
11/2/2020	Jacking Pit B	6.0	11:15	Rain	0	0	0	20.9	17	1022	PGM-2400P (QRAE II)
11/2/2020	Jacking Pit B	6.0	16:15	Rain	0	0	0	20.9	17	1019	PGM-2400P (QRAE II)
11/2/2020	MVT2	0.6	11:50	Rain	0	0	0	20.9	18	1022	PGM-2400P (QRAE II)
11/2/2020	MVT2	0.6	16:50	Rain	0	0	0	20.9	16	1019	PGM-2400P (QRAE II)
12/2/2020	Jacking Pit C	0.8	9:25	Rain	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
12/2/2020	Jacking Pit C	0.8	14:25	Rain	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
12/2/2020	CH.CT 0+07~1+57	3.1	9:55	Rain	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
12/2/2020	CH.CT 0+07~1+57	3.1	14:55	Rain	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
12/2/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
12/2/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
12/2/2020	137 Pit B	1.0	10:25	Rain	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
12/2/2020	137 Pit B	1.0	15:25	Rain	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
12/2/2020	CH.CA12+40	5.3	11:00	Rain	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
12/2/2020	CH.CA12+40	5.3	16:00	Rain	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
12/2/2020	Jacking Pit B	6.0	11:15	Rain	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
12/2/2020	Jacking Pit B	6.0	16:15	Rain	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
12/2/2020	MVT2	0.6	11:50	Rain	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
12/2/2020	MVT2	0.6	16:50	Rain	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
12/2/2020	MVT3	0.3	12:00	Rain	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
12/2/2020	MVT3	0.3	17:00	Rain	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
13/2/2020	Jacking Pit C	0.8	9:25	Rain	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
13/2/2020	Jacking Pit C	0.8	14:25	Rain	0	0	0	20.9	18	1014	PGM-2400P (QRAE II)
13/2/2020	CH.CT 0+07~1+57	3.1	9:55	Rain	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
13/2/2020	CH.CT 0+07~1+57	3.1	14:55	Rain	0	0	0	20.9	18	1014	PGM-2400P (QRAE II)
13/2/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
13/2/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	18	1014	PGM-2400P (QRAE II)
13/2/2020	137 Pit B	1.0	10:25	Rain	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
13/2/2020	137 Pit B	1.0	15:25	Rain	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
13/2/2020	CH.CA12+40	5.3	11:00	Rain	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
13/2/2020	CH.CA12+40	5.3	16:00	Rain	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
13/2/2020	Jacking Pit B	6.0	11:15	Rain	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
13/2/2020	Jacking Pit B	6.0	16:15	Rain	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
13/2/2020	MVT2	0.6	11:50	Rain	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
13/2/2020	MVT2	0.6	16:50	Rain	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
13/2/2020	MVT3	0.3	12:00	Rain	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
13/2/2020	MVT3	0.3	17:00	Rain	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
14/2/2020	Jacking Pit C	0.8	9:25	Rain	0	0	0	20.9	19	1015	PGM-2400P (QRAE II)
14/2/2020	Jacking Pit C	0.8	14:25	Rain	0	0	0	20.9	22	1012	PGM-2400P (QRAE II)
14/2/2020	CH.CT 0+07~1+57	3.1	9:55	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
14/2/2020	CH.CT 0+07~1+57	3.1	14:55	Rain	0	0	0	20.9	22	1012	PGM-2400P (QRAE II)
14/2/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
14/2/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
14/2/2020	137 Pit B	1.0	10:25	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
14/2/2020	137 Pit B	1.0	15:25	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
14/2/2020	CH.CA12+40	5.3	11:00	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
14/2/2020	CH.CA12+40	5.3	16:00	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
14/2/2020	Jacking Pit B	6.0	11:15	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
14/2/2020	Jacking Pit B	6.0	16:15	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
14/2/2020	MVT2	0.6	11:50	Rain	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
14/2/2020	MVT2	0.6	16:50	Rain	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
14/2/2020	MVT3	0.3	12:00	Rain	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
14/2/2020	MVT3	0.3	17:00	Rain	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
15/2/2020	Jacking Pit C	0.8	9:25	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
15/2/2020	Jacking Pit C	0.8	14:25	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
15/2/2020	CH.CT 0+07~1+57	3.1	9:55	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
15/2/2020	CH.CT 0+07~1+57	3.1	14:55	Rain	0	0	0	20.9	21	1011	PGM-2400P (QRAE II)
15/2/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
15/2/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	21	1011	PGM-2400P (QRAE II)
15/2/2020	137 Pit B	1.0	10:25	Rain	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
15/2/2020	137 Pit B	1.0	15:25	Rain	0	0	0	20.9	21	1011	PGM-2400P (QRAE II)
15/2/2020	CH.CA12+40	5.3	11:00	Rain	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
15/2/2020	CH.CA12+40	5.3	16:00	Rain	0	0	0	20.9	22	1011	PGM-2400P (QRAE II)
15/2/2020	Jacking Pit B	6.0	11:15	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
15/2/2020	Jacking Pit B	6.0	16:15	Rain	0	0	0	20.9	22	1011	PGM-2400P (QRAE II)
15/2/2020	MVT2	0.6	11:50	Rain	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
15/2/2020	MVT2	0.6	16:50	Rain	0	0	0	20.9	22	1011	PGM-2400P (QRAE II)
15/2/2020	MVT3	0.3	12:00	Rain	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
15/2/2020	MVT3	0.3	17:00	Rain	0	0	0	20.9	22	1012	PGM-2400P (QRAE II)
17/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	11	1028	PGM-2400P (QRAE II)
17/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
17/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	12	1028	PGM-2400P (QRAE II)
17/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
17/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	12	1028	PGM-2400P (QRAE II)
17/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
17/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	12	10128	PGM-2400P (QRAE II)
17/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
17/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	13	1028	PGM-2400P (QRAE II)
17/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	16	1025	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
17/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	13	1028	PGM-2400P (QRAE II)
17/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
17/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	14	1027	PGM-2400P (QRAE II)
17/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
17/2/2020	MVT3	0.5	12:00	Fine	0	0	0	20.9	14	1029	PGM-2400P (QRAE II)
17/2/2020	MVT3	0.5	17:00	Fine	0	0	0	20.9	15	1025	PGM-2400P (QRAE II)
18/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	14	1029	PGM-2400P (QRAE II)
18/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)
18/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	14	1029	PGM-2400P (QRAE II)
18/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	17	1025	PGM-2400P (QRAE II)
18/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	14	1028	PGM-2400P (QRAE II)
18/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	17	1024	PGM-2400P (QRAE II)
18/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	15	1028	PGM-2400P (QRAE II)
18/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	17	1024	PGM-2400P (QRAE II)
18/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	16	1028	PGM-2400P (QRAE II)
18/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	17	1024	PGM-2400P (QRAE II)
18/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	16	1028	PGM-2400P (QRAE II)
18/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	17	1024	PGM-2400P (QRAE II)
18/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	16	1028	PGM-2400P (QRAE II)
18/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	17	1024	PGM-2400P (QRAE II)
18/2/2020	MVT3	0.5	12:00	Fine	0	0	0	20.9	16	1028	PGM-2400P (QRAE II)
18/2/2020	MVT3	0.5	17:00	Fine	0	0	0	20.9	16	1024	PGM-2400P (QRAE II)
19/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	15	1026	PGM-2400P (QRAE II)
19/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
19/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	15	1026	PGM-2400P (QRAE II)
19/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
19/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	16	1026	PGM-2400P (QRAE II)
19/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
19/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	16	1027	PGM-2400P (QRAE II)
19/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
19/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	16	1027	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
19/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
19/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	16	1026	PGM-2400P (QRAE II)
19/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
19/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	17	1026	PGM-2400P (QRAE II)
19/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
19/2/2020	MVT3	0.9	12:00	Fine	0	0	0	20.9	17	1026	PGM-2400P (QRAE II)
19/2/2020	MVT3	0.9	17:00	Fine	0	0	0	20.9	18	1023	PGM-2400P (QRAE II)
20/2/2020	Jacking Pit C	0.8	9:25	Rain	0	0	0	20.9	17	1026	PGM-2400P (QRAE II)
20/2/2020	Jacking Pit C	0.8	14:25	Rain	0	0	0	20.9	20	1024	PGM-2400P (QRAE II)
20/2/2020	CH.CT 0+07~1+57	3.1	9:55	Rain	0	0	0	20.9	18	1027	PGM-2400P (QRAE II)
20/2/2020	CH.CT 0+07~1+57	3.1	14:55	Rain	0	0	0	20.9	20	1024	PGM-2400P (QRAE II)
20/2/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	18	1027	PGM-2400P (QRAE II)
20/2/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	20	1024	PGM-2400P (QRAE II)
20/2/2020	137 Pit B	1.0	10:25	Rain	0	0	0	20.9	18	1027	PGM-2400P (QRAE II)
20/2/2020	137 Pit B	1.0	15:25	Rain	0	0	0	20.9	20	1024	PGM-2400P (QRAE II)
20/2/2020	CH.CA12+40	5.3	11:00	Rain	0	0	0	20.9	18	1027	PGM-2400P (QRAE II)
20/2/2020	CH.CA12+40	5.3	16:00	Rain	0	0	0	20.9	20	1024	PGM-2400P (QRAE II)
20/2/2020	Jacking Pit B	6.0	11:15	Rain	0	0	0	20.9	19	1027	PGM-2400P (QRAE II)
20/2/2020	Jacking Pit B	6.0	16:15	Rain	0	0	0	20.9	19	1024	PGM-2400P (QRAE II)
20/2/2020	MVT2	0.6	11:50	Rain	0	0	0	20.9	20	1027	PGM-2400P (QRAE II)
20/2/2020	MVT2	0.6	16:50	Rain	0	0	0	20.9	19	1024	PGM-2400P (QRAE II)
20/2/2020	MVT3	0.9	12:00	Rain	0	0	0	20.9	20	1026	PGM-2400P (QRAE II)
20/2/2020	MVT3	0.9	17:00	Rain	0	0	0	20.9	19	1024	PGM-2400P (QRAE II)
21/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	19	1029	PGM-2400P (QRAE II)
21/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	21	1027	PGM-2400P (QRAE II)
21/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	19	1029	PGM-2400P (QRAE II)
21/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	21	1026	PGM-2400P (QRAE II)
21/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	19	1029	PGM-2400P (QRAE II)
21/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	21	1026	PGM-2400P (QRAE II)
21/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	19	1029	PGM-2400P (QRAE II)
21/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	21	1026	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
21/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	20	1029	PGM-2400P (QRAE II)
21/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	21	1026	PGM-2400P (QRAE II)
21/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	20	1029	PGM-2400P (QRAE II)
21/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	21	1026	PGM-2400P (QRAE II)
21/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	20	1029	PGM-2400P (QRAE II)
21/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	21	1026	PGM-2400P (QRAE II)
21/2/2020	MVT3	0.9	12:00	Fine	0	0	0	20.9	20	1029	PGM-2400P (QRAE II)
21/2/2020	MVT3	0.9	17:00	Fine	0	0	0	20.9	21	1026	PGM-2400P (QRAE II)
22/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	20	1027	PGM-2400P (QRAE II)
22/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	24	1024	PGM-2400P (QRAE II)
22/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	21	1027	PGM-2400P (QRAE II)
22/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	24	1024	PGM-2400P (QRAE II)
22/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	21	1027	PGM-2400P (QRAE II)
22/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	24	1024	PGM-2400P (QRAE II)
22/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	22	1027	PGM-2400P (QRAE II)
22/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	23	1024	PGM-2400P (QRAE II)
22/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	22	1027	PGM-2400P (QRAE II)
22/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	23	1024	PGM-2400P (QRAE II)
22/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	23	1026	PGM-2400P (QRAE II)
22/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	22	1024	PGM-2400P (QRAE II)
22/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	24	1026	PGM-2400P (QRAE II)
22/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	21	1024	PGM-2400P (QRAE II)
22/2/2020	MVT3	0.9	12:00	Fine	0	0	0	20.9	25	1026	PGM-2400P (QRAE II)
22/2/2020	MVT3	0.9	17:00	Fine	0	0	0	20.9	21	1024	PGM-2400P (QRAE II)
24/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	19	1022	PGM-2400P (QRAE II)
24/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
24/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	20	1022	PGM-2400P (QRAE II)
24/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
24/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	20	1022	PGM-2400P (QRAE II)
24/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
24/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	20	1023	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
24/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
24/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	20	1022	PGM-2400P (QRAE II)
24/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
24/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	21	1022	PGM-2400P (QRAE II)
24/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
24/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	21	1022	PGM-2400P (QRAE II)
24/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
25/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	21	1020	PGM-2400P (QRAE II)
25/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
25/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	21	1020	PGM-2400P (QRAE II)
25/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
25/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	21	1020	PGM-2400P (QRAE II)
25/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
25/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	22	1020	PGM-2400P (QRAE II)
25/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
25/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	24	1019	PGM-2400P (QRAE II)
25/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
25/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	24	1019	PGM-2400P (QRAE II)
25/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
25/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
25/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
26/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	24	1020	PGM-2400P (QRAE II)
26/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
26/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	24	1020	PGM-2400P (QRAE II)
26/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
26/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	25	1020	PGM-2400P (QRAE II)
26/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
26/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	26	1020	PGM-2400P (QRAE II)
26/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
26/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	27	1019	PGM-2400P (QRAE II)
26/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
26/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	26	1019	PGM-2400P (QRAE II)
26/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
26/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	26	1019	PGM-2400P (QRAE II)
26/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	25	1017	PGM-2400P (QRAE II)
26/2/2020	Area B02	0.8	8:40	Fine	0	0	0	20.9	24	1020	PGM-2400P (QRAE II)
26/2/2020	Area B02	0.8	13:40	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
27/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	19	1021	PGM-2400P (QRAE II)
27/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
27/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	19	1021	PGM-2400P (QRAE II)
27/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
27/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	19	1022	PGM-2400P (QRAE II)
27/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	22	1018	PGM-2400P (QRAE II)
27/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	19	1022	PGM-2400P (QRAE II)
27/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
27/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	19	1022	PGM-2400P (QRAE II)
27/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
27/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	19	1021	PGM-2400P (QRAE II)
27/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
27/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	19	1021	PGM-2400P (QRAE II)
27/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
27/2/2020	Area B01	1.5	8:30	Fine	0	0	0	20.9	19	1021	PGM-2400P (QRAE II)
27/2/2020	Area B01	1.5	13:30	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
27/2/2020	Area B02	0.8	8:40	Fine	0	0	0	20.9	19	1021	PGM-2400P (QRAE II)
27/2/2020	Area B02	0.8	13:40	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
28/2/2020	FC0+50	1.2	9:00	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
28/2/2020	FC0+50	1.2	14:00	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
28/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
28/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
28/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
28/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
28/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
28/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
28/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
28/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
28/2/2020	CH.CA12+40	5.3	11:00	Fine	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
28/2/2020	CH.CA12+40	5.3	16:00	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
28/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
28/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
28/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
28/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
28/2/2020	Area B01	1.5	8:30	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
28/2/2020	Area B01	1.5	13:30	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
28/2/2020	Area B02	0.8	8:40	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
28/2/2020	Area B02	0.8	13:40	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
29/2/2020	FC0+50	1.2	9:00	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
29/2/2020	FC0+50	1.2	14:00	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
29/2/2020	Jacking Pit C	0.8	9:25	Fine	0	0	0	20.9	22	1017	PGM-2400P (QRAE II)
29/2/2020	Jacking Pit C	0.8	14:25	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
29/2/2020	CH.CT 0+07~1+57	3.1	9:55	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
29/2/2020	CH.CT 0+07~1+57	3.1	14:55	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
29/2/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
29/2/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
29/2/2020	137 Pit B	1.0	10:25	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
29/2/2020	137 Pit B	1.0	15:25	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
29/2/2020	137 Pit A	1.0	10:40	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
29/2/2020	137 Pit A	1.0	15:40	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
29/2/2020	CH.A 12+40	5.3	11:00	Fine	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
29/2/2020	CH.A 12+40	5.3	16:00	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
29/2/2020	Jacking Pit B	6.0	11:15	Fine	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
29/2/2020	Jacking Pit B	6.0	16:15	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
29/2/2020	MVT2	0.6	11:50	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
29/2/2020	MVT2	0.6	16:50	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
29/2/2020	Area B01	1.5	8:30	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
29/2/2020	Area B01	1.5	13:30	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
29/2/2020	Area B02	0.8	8:40	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
29/2/2020	Area B02	0.8	13:40	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
2/3/2020	Area B01	1.5	8:30	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
2/3/2020	Area B01	1.5	13:30	Fine	0	0	0	20.9	26	1011	PGM-2400P (QRAE II)
2/3/2020	Area B02	1.5	8:40	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
2/3/2020	Area B02	1.5	13:40	Fine	0	0	0	20.9	25	1011	PGM-2400P (QRAE II)
2/3/2020	FC0+64	1.2	8:55	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
2/3/2020	FC0+64	1.2	13:55	Fine	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
2/3/2020	Pit C	0.8	9:20	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
2/3/2020	Pit C	0.8	14:20	Fine	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
2/3/2020	CHCT 1+57	3.1	9:50	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
2/3/2020	CHCT 1+57	3.1	14:50	Fine	0	0	0	20.9	24	1012	PGM-2400P (QRAE II)
2/3/2020	CHCA4+25	3.5	10:15	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
2/3/2020	CHCA4+25	3.5	15:15	Fine	0	0	0	20.9	24	1015	PGM-2400P (QRAE II)
2/3/2020	137 Pit B	1.0	10:40	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
2/3/2020	137 Pit B	1.0	15:40	Fine	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
2/3/2020	137 Pit A	1.0	10:50	Fine	0	0	0	20.9	24	1013	PGM-2400P (QRAE II)
2/3/2020	137 Pit A	1.0	15:50	Fine	0	0	0	20.9	22	1011	PGM-2400P (QRAE II)
2/3/2020	CHA12+50	5.3	11:15	Fine	0	0	0	20.9	24	1012	PGM-2400P (QRAE II)
2/3/2020	CHA12+50	5.3	16:15	Fine	0	0	0	20.9	22	1010	PGM-2400P (QRAE II)
2/3/2020	Pit B	6.0	11:25	Fine	0	0	0	20.9	24	1013	PGM-2400P (QRAE II)
2/3/2020	Pt B	6.0	16:25	Fine	0	0	0	20.9	23	1011	PGM-2400P (QRAE II)
2/3/2020	MVT 2	0.6	11:50	Fine	0	0	0	20.9	25	1024	PGM-2400P (QRAE II)
2/3/2020	MVT 2	0.6	16:50	Fine	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
3/3/2020	Area B01	1.5	8:30	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
3/3/2020	Area B01	1.5	13:30	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/3/2020	Area B02	1.5	8:40	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
3/3/2020	Area B02	1.5	13:40	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/3/2020	FC0+64	1.2	8:55	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
3/3/2020	FC0+64	1.2	13:55	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
3/3/2020	Pit C	0.8	9:20	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
3/3/2020	Pit C	0.8	14:20	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/3/2020	CHCT 1+57	3.1	9:50	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/3/2020	CHCT 1+57	3.1	14:50	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
3/3/2020	CHCA4+25	3.5	10:15	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
3/3/2020	CHCA4+25	3.5	15:15	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
3/3/2020	137 Pit B	1.0	10:40	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
3/3/2020	137 Pit B	1.0	15:40	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
3/3/2020	137 Pit A	1.0	10:50	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
3/3/2020	137 Pit A	1.0	15:50	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
3/3/2020	CHA12+50	5.3	11:15	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/3/2020	CHA12+50	5.3	16:15	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
3/3/2020	Pit B	6.0	11:25	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
3/3/2020	Pt B	6.0	16:25	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
3/3/2020	MVT 2	0.6	11:50	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
3/3/2020	MVT 2	0.6	16:50	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
4/3/2020	Area B01	1.5	8:30	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
4/3/2020	Area B01	1.5	13:30	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
4/3/2020	Area B02	1.5	8:40	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
4/3/2020	Area B02	1.5	13:40	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
4/3/2020	FC0+64	1.2	8:55	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
4/3/2020	FC0+64	1.2	13:55	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
4/3/2020	Pit C	0.8	9:20	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
4/3/2020	Pit C	0.8	14:20	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
4/3/2020	CHCT 1+57	3.1	9:50	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
4/3/2020	CHCT 1+57	3.1	14:50	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
4/3/2020	CHCA4+25	3.5	10:15	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
4/3/2020	CHCA4+25	3.5	15:15	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
4/3/2020	137 Pit B	1.0	10:40	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
4/3/2020	137 Pit B	1.0	15:40	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
4/3/2020	137 Pit A	1.0	10:50	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
4/3/2020	137 Pit A	1.0	15:50	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
4/3/2020	CHA12+50	5.3	11:15	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
4/3/2020	CHA12+50	5.3	16:15	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
4/3/2020	Pit B	6.0	11:25	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
4/3/2020	Pt B	6.0	16:25	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
4/3/2020	MVT 2	0.6	11:50	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
4/3/2020	MVT 2	0.6	16:50	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
5/3/2020	Area B01	0	8:30	Fine	0	0	0	20.9	17	1019	PGM-2400P (QRAE II)
5/3/2020	Area B01	0	13:30	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
5/3/2020	Area B02	0	8:40	Fine	0	0	0	20.9	17	1019	PGM-2400P (QRAE II)
5/3/2020	Area B02	0	13:40	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
5/3/2020	FC0+64	1.8	8:55	Fine	0	0	0	20.9	17	1020	PGM-2400P (QRAE II)
5/3/2020	FC0+64	1.8	13:55	Fine	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
5/3/2020	Pit C	0.8	9:20	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
5/3/2020	Pit C	0.8	14:20	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
5/3/2020	CHCT 1+57	3.1	9:50	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
5/3/2020	CHCT 1+57	3.1	14:50	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
5/3/2020	CHCA4+25	3.5	10:15	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
5/3/2020	CHCA4+25	3.5	15:15	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
5/3/2020	137 Pit B	1.0	10:40	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
5/3/2020	137 Pit B	1.0	15:40	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
5/3/2020	137 Pit A	1.0	10:50	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
5/3/2020	137 Pit A	1.0	15:50	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
5/3/2020	CHA12+50	5.3	11:15	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
5/3/2020	CHA12+50	5.3	16:15	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
5/3/2020	Pit B	6.0	11:25	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
5/3/2020	Pt B	6.0	16:25	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
5/3/2020	MVT 2	0.6	11:50	Fine	0	0	0	20.9	21	1020	PGM-2400P (QRAE II)
5/3/2020	MVT 2	0.6	16:50	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
6/3/2020	Pit K	2.0	8:30	Fine	0	0	0	20.9	17	1017	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
6/3/2020	Pit K	2.0	13:30	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
6/3/2020	Pit C	0.8	8:40	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/3/2020	Pit C	0.8	13:40	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
6/3/2020	CHCT 1+57	3.1	8:55	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
6/3/2020	CHCT 1+57	3.1	13:55	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
6/3/2020	CHCA4+25	3.5	9:20	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
6/3/2020	CHCA4+25	3.5	14:20	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
6/3/2020	137 Pit B	1.0	9:45	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
6/3/2020	137 Pit B	1.0	14:45	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
6/3/2020	137 Pit A	1.0	10:00	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/3/2020	137 Pit A	1.0	15:00	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
6/3/2020	CHA12+50	5.3	10:15	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
6/3/2020	CHA12+50	5.3	15:15	Fine	0	0	0	20.9	17	1017	PGM-2400P (QRAE II)
6/3/2020	Pit B	6.0	10:30	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
6/3/2020	Pt B	6.0	15:30	Fine	0	0	0	20.9	17	1017	PGM-2400P (QRAE II)
6/3/2020	MVT 2	0.6	10:55	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
6/3/2020	MVT 2	0.6	15:55	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
7/3/2020	Pit K	2.0	8:30	Fine	0	0	0	20.9	18	1014	PGM-2400P (QRAE II)
7/3/2020	Pit K	2.0	13:30	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
7/3/2020	Pit C	0.8	8:40	Fine	0	0	0	20.9	18	1015	PGM-2400P (QRAE II)
7/3/2020	Pit C	0.8	13:40	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
7/3/2020	CHCT 1+57	3.1	9:00	Fine	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
7/3/2020	CHCT 1+57	3.1	14:00	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
7/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
7/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
7/3/2020	137 Pit B	1.0	9:30	Fine	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
7/3/2020	137 Pit B	1.0	14:30	Fine	0	0	0	20.9	23	1013	PGM-2400P (QRAE II)
7/3/2020	137 Pit A	1.0	9:45	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
7/3/2020	137 Pit A	1.0	14:45	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
7/3/2020	CHA12+50	5.3	10:05	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
7/3/2020	CHA12+50	5.3	15:05	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
7/3/2020	Pit B	6.0	10:20	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
7/3/2020	Pt B	6.0	15:20	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
7/3/2020	MVT 2	0.6	10:50	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
7/3/2020	MVT 2	0.6	15:50	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
9/3/2020	Pit K	2.0	8:30	Fine	0	0	0	20.9	20.8	1008	PGM-2400P (QRAE II)
9/3/2020	Pit K	2.0	13:30	Fine	0	0	0	20.9	26	1008	PGM-2400P (QRAE II)
9/3/2020	Pit J1A	2.0	8:40	Fine	0	0	0	20.9	20	1010	PGM-2400P (QRAE II)
9/3/2020	Pit J1A	2.0	13:40	Fine	0	0	0	20.9	25	1010	PGM-2400P (QRAE II)
9/3/2020	Pit C	0.8	9:00	Fine	0	0	0	20.9	21	1007	PGM-2400P (QRAE II)
9/3/2020	Pit C	0.8	14:00	Fine	0	0	0	20.9	25	1007	PGM-2400P (QRAE II)
9/3/2020	CHCT1+57	3.1	9:20	Fine	0	0	0	20.9	22	1008	PGM-2400P (QRAE II)
9/3/2020	CHCT1+57	3.1	14:20	Fine	0	0	0	20.9	22	1008	PGM-2400P (QRAE II)
9/3/2020	CHCA4+25	3.5	9:30	Fine	0	0	0	20.9	22	1009	PGM-2400P (QRAE II)
9/3/2020	CHCA4+25	3.5	14:30	Fine	0	0	0	20.9	24	1009	PGM-2400P (QRAE II)
9/3/2020	137 B	1.0	9:45	Fine	0	0	0	20.9	23	1008	PGM-2400P (QRAE II)
9/3/2020	137 B	1.0	14:45	Fine	0	0	0	20.9	24	1008	PGM-2400P (QRAE II)
9/3/2020	137 A	1.0	9:55	Fine	0	0	0	20.9	23	1008	PGM-2400P (QRAE II)
9/3/2020	137 A	1.0	14:55	Fine	0	0	0	20.9	23	1008	PGM-2400P (QRAE II)
9/3/2020	CHA12+50	5.3	10:15	Fine	0	0	0	20.9	24	1009	PGM-2400P (QRAE II)
9/3/2020	CHA12+50	5.3	15:15	Fine	0	0	0	20.9	24	1009	PGM-2400P (QRAE II)
9/3/2020	Pit B	6	10:30	Fine	0	0	0	20.9	25	1008	PGM-2400P (QRAE II)
9/3/2020	Pt B	6	15:30	Fine	0	0	0	20.9	24	1008	PGM-2400P (QRAE II)
9/3/2020	MVT 2	0.6	11:00	Fine	0	0	0	20.9	26	1008	PGM-2400P (QRAE II)
9/3/2020	MVT 2	0.6	16:00	Fine	0	0	0	20.9	22	1008	PGM-2400P (QRAE II)
10/3/2020	Pit K	0.0	8:30	Fine	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
10/3/2020	Pit K	0.0	13:30	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
10/3/2020	Pit J1A	0.0	8:40	Fine	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
10/3/2020	Pit J1A	0.0	13:40	Fine	0	0	0	20.9	25	1012	PGM-2400P (QRAE II)
10/3/2020	Pit C	0.8	9:00	Fine	0	0	0	20.9	21	1013	PGM-2400P (QRAE II)
10/3/2020	Pit C	0.8	14:00	Fine	0	0	0	20.9	24	1013	PGM-2400P (QRAE II)
10/3/2020	CHCT1+57	3.1	9:30	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)

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**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
10/3/2020	CHCT1+57	3.1	14:30	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
10/3/2020	CHCA4+25	3.5	9:40	Fine	0	0	0	20.9	22	1011	PGM-2400P (QRAE II)
10/3/2020	CHCA4+25	3.5	14:40	Fine	0	0	0	20.9	23	1011	PGM-2400P (QRAE II)
10/3/2020	137 B	1.0	9:50	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
10/3/2020	137 B	1.0	14:50	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
10/3/2020	137 A	1.0	10:00	Fine	0	0	0	20.9	23	1013	PGM-2400P (QRAE II)
10/3/2020	137 A	1.0	15:00	Fine	0	0	0	20.9	23	1013	PGM-2400P (QRAE II)
10/3/2020	CHA12+50	5.3	10:15	Fine	0	0	0	20.9	24	1013	PGM-2400P (QRAE II)
10/3/2020	CHA12+50	5.3	15:15	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
10/3/2020	Pit B	6.0	10:30	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
10/3/2020	Pt B	6.0	15:30	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
10/3/2020	MVT 2	0.6	11:00	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
10/3/2020	MVT 2	0.6	16:00	Fine	0	0	0	20.9	23	1013	PGM-2400P (QRAE II)
11/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
11/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
11/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
11/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
11/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
11/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
11/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
11/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
11/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
11/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
11/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
11/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
11/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
11/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	18	1018	PGM-2400P (QRAE II)
11/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
11/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
12/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	18	1015	PGM-2400P (QRAE II)
12/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
12/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
12/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
12/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
12/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
12/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	19	1015	PGM-2400P (QRAE II)
12/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	19	1015	PGM-2400P (QRAE II)
12/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
12/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	18	1017	PGM-2400P (QRAE II)
12/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	18	1015	PGM-2400P (QRAE II)
12/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
12/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
12/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	19	1015	PGM-2400P (QRAE II)
12/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
12/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
13/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	19	1015	PGM-2400P (QRAE II)
13/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
13/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
13/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
13/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
13/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
13/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
13/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
13/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
13/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
13/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
13/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
13/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	24	1015	PGM-2400P (QRAE II)
13/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
13/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
13/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
14/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
14/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
14/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
14/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	26	1016	PGM-2400P (QRAE II)
14/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
14/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	25	1017	PGM-2400P (QRAE II)
14/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
14/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	24	1018	PGM-2400P (QRAE II)
14/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	22	1018	PGM-2400P (QRAE II)
14/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	23	1018	PGM-2400P (QRAE II)
14/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
14/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
14/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	24	1018	PGM-2400P (QRAE II)
14/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	22	1018	PGM-2400P (QRAE II)
14/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	25	1017	PGM-2400P (QRAE II)
14/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
16/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	18	1019	PGM-2400P (QRAE II)
16/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	22	1019	PGM-2400P (QRAE II)
16/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
16/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	21	1020	PGM-2400P (QRAE II)
16/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
16/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
16/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
16/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
16/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
16/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	21	1020	PGM-2400P (QRAE II)
16/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
16/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
16/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	22	1019	PGM-2400P (QRAE II)
16/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
16/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	22	1020	PGM-2400P (QRAE II)
16/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	21	1020	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
16/3/2020	Pit M	1.5	11:05	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
16/3/2020	Pit M	1.5	16:05	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
17/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
17/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
17/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
17/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
17/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
17/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
17/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
17/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
17/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	20	1020	PGM-2400P (QRAE II)
17/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
17/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
17/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
17/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
17/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
17/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
17/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
17/3/2020	Pit M	1.5	11:05	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
17/3/2020	Pit M	1.5	16:05	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
18/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	19	1015	PGM-2400P (QRAE II)
18/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
18/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	19	1015	PGM-2400P (QRAE II)
18/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
18/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
18/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
18/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
18/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
18/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
18/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
18/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)

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**Mainlaying in Tseung Kwan O**  
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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
18/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	19	1015	PGM-2400P (QRAE II)
18/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
18/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
18/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
18/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
18/3/2020	Pit M	1	11:05	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
18/3/2020	Pit M	1	16:05	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
19/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
19/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
19/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
19/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
19/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
19/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
19/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
19/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
19/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
19/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
19/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
19/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
19/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
19/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
19/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
19/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
19/3/2020	Pit N	1.5	11:05	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
19/3/2020	Pit N	1.5	16:05	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
19/3/2020	Po Lam S Road 1+2	0.4	11:25	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
19/3/2020	Po Lam S Road 1+2	0.4	16:25	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
20/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
20/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
20/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
20/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)

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**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
20/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
20/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
20/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
20/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
20/3/2020	137 A	1.0	9:45	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
20/3/2020	137 A	1.0	14:45	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
20/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
20/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
20/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
20/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
20/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
20/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
20/3/2020	Pit N	1.5	11:05	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
20/3/2020	Pit N	1.5	16:05	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
20/3/2020	Po Lam S Road 1+2	0.4	11:25	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
20/3/2020	Po Lam S Road 1+2	0.4	16:25	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
21/3/2020	Pit C	0.8	8:30	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
21/3/2020	Pit C	0.8	13:30	Rain	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
21/3/2020	CHCT1+57	3.1	9:00	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
21/3/2020	CHCT1+57	3.1	14:00	Rain	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
21/3/2020	CHCA4+25	3.5	9:15	Rain	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
21/3/2020	CHCA4+25	3.5	14:15	Rain	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
21/3/2020	137 B	1.0	9:30	Rain	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
21/3/2020	137 B	1.0	14:30	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
21/3/2020	137 A	1.0	9:45	Rain	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
21/3/2020	137 A	1.0	14:45	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
21/3/2020	CHA12+50	5.3	10:00	Rain	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
21/3/2020	CHA12+50	5.3	15:00	Rain	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
21/3/2020	Pit B	6.0	10:15	Rain	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
21/3/2020	Pt B	6.0	15:15	Rain	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
21/3/2020	MVT 2	0.6	10:45	Rain	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
21/3/2020	MVT 2	0.6	15:45	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
21/3/2020	Pit O	1.5	11:05	Rain	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
21/3/2020	Pit O	1.5	16:05	Rain	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
21/3/2020	Po Lam S Road 1+2	0.4	11:25	Rain	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
21/3/2020	Po Lam S Road 1+2	0.4	16:25	Rain	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
23/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
23/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	28	1014	PGM-2400P (QRAE II)
23/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
23/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	28	1015	PGM-2400P (QRAE II)
23/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
23/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
23/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	24	1013	PGM-2400P (QRAE II)
23/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
23/3/2020	137 A	0.0	9:45	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
23/3/2020	137 A	0.0	14:45	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
23/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
23/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
23/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
23/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
23/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
23/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
23/3/2020	Po Lam S Road 1+2	0.8	11:00	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
23/3/2020	Po Lam S Road 1+2	0.8	16:00	Fine	0	0	0	20.9	23	1013	PGM-2400P (QRAE II)
24/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
24/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
24/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
24/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
24/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
24/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
24/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
24/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
24/3/2020	CHA12+50	5.3	9:45	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
24/3/2020	CHA12+50	5.3	14:45	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
24/3/2020	Pit B	6.0	10:00	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
24/3/2020	Pt B	6.0	15:00	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
24/3/2020	MVT 2	0.6	10:30	Fine	0	0	0	20.9	24	1015	PGM-2400P (QRAE II)
24/3/2020	MVT 2	0.6	15:30	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
24/3/2020	Po Lam S Road 1+2	0.8	10:45	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
24/3/2020	Po Lam S Road 1+2	0.8	15:45	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
25/3/2020	FC4+83	1.8	8:30	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
25/3/2020	FC4+83	1.8	13:30	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
25/3/2020	Pit C	0.8	8:50	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
25/3/2020	Pit C	0.8	13:50	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
25/3/2020	CHCT1+57	3.1	9:15	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
25/3/2020	CHCT1+57	3.1	14:15	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
25/3/2020	CHCA4+25	3.5	9:25	Fine	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
25/3/2020	CHCA4+25	3.5	14:25	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
25/3/2020	137 B	1.0	9:45	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
25/3/2020	137 B	1.0	14:45	Fine	0	0	0	20.9	24	1015	PGM-2400P (QRAE II)
25/3/2020	CHA12+50	5.3	10:00	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
25/3/2020	CHA12+50	5.3	15:00	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
25/3/2020	Pit B	6.0	10:15	Fine	0	0	0	20.9	24	1015	PGM-2400P (QRAE II)
25/3/2020	Pt B	6.0	15:15	Fine	0	0	0	20.9	24	1015	PGM-2400P (QRAE II)
25/3/2020	MVT 2	0.6	10:45	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
25/3/2020	MVT 2	0.6	15:45	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
25/3/2020	Po Lam S Road 1+2	0.8	11:00	Fine	0	0	0	20.9	26	1016	PGM-2400P (QRAE II)
25/3/2020	Po Lam S Road 1+2	0.8	16:00	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
26/3/2020	FC4+83	2.5	8:30	Rain	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
26/3/2020	FC4+83	2.5	13:30	Rain	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
26/3/2020	Pit C	0.8	8:50	Rain	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
26/3/2020	Pit C	0.8	13:50	Rain	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
26/3/2020	CHCT1+57	3.1	9:15	Rain	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
26/3/2020	CHCT1+57	3.1	14:15	Rain	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
26/3/2020	CHCA4+25	3.5	9:25	Rain	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
26/3/2020	CHCA4+25	3.5	14:25	Rain	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
26/3/2020	137 B	1.0	9:45	Rain	0	0	0	20.9	24	1012	PGM-2400P (QRAE II)
26/3/2020	137 B	1.0	14:45	Rain	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
26/3/2020	CHA12+50	5.3	10:00	Rain	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
26/3/2020	CHA12+50	5.3	15:00	Rain	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
26/3/2020	Pit B	6.0	10:15	Rain	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
26/3/2020	Pt B	6.0	15:15	Rain	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
26/3/2020	MVT 2	0.6	10:45	Rain	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
26/3/2020	MVT 2	0.6	15:45	Rain	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
26/3/2020	Po Lam S Road 1+2	0.8	11:00	Rain	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
26/3/2020	Po Lam S Road 1+2	0.8	16:00	Rain	0	0	0	20.9	23	1013	PGM-2400P (QRAE II)
27/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
27/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	22.5	1013	PGM-2400P (QRAE II)
27/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
27/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
27/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	23	1014	PGM-2400P (QRAE II)
27/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
27/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
27/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	24	1012	PGM-2400P (QRAE II)
27/3/2020	CHA12+50	5.3	9:45	Fine	0	0	0	20.9	24	1013	PGM-2400P (QRAE II)
27/3/2020	CHA12+50	5.3	14:45	Fine	0	0	0	20.9	23	1013	PGM-2400P (QRAE II)
27/3/2020	Pit B	6.0	10:00	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
27/3/2020	Pt B	6.0	15:00	Fine	0	0	0	20.9	23	1013	PGM-2400P (QRAE II)
27/3/2020	MVT 2	0.6	10:20	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
27/3/2020	MVT 2	0.6	15:20	Fine	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
27/3/2020	Po Lam S Road 1+2	0.8	10:30	Fine	0	0	0	20.9	26	1012	PGM-2400P (QRAE II)
27/3/2020	Po Lam S Road 1+2	0.8	15:30	Fine	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
28/3/2020	Pit C	0.8	8:30	Fine	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
28/3/2020	Pit C	0.8	13:30	Fine	0	0	0	20.9	24	1013	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
28/3/2020	CHCT1+57	3.1	9:00	Fine	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
28/3/2020	CHCT1+57	3.1	14:00	Fine	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
28/3/2020	CHCA4+25	3.5	9:15	Fine	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
28/3/2020	CHCA4+25	3.5	14:15	Fine	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
28/3/2020	137 B	1.0	9:30	Fine	0	0	0	20.9	21	1013	PGM-2400P (QRAE II)
28/3/2020	137 B	1.0	14:30	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
28/3/2020	CHA12+50	5.3	9:45	Fine	0	0	0	20.9	22	1013	PGM-2400P (QRAE II)
28/3/2020	CHA12+50	5.3	14:45	Fine	0	0	0	20.9	21	1013	PGM-2400P (QRAE II)
28/3/2020	Pit B	6.0	10:00	Fine	0	0	0	20.9	22	1014	PGM-2400P (QRAE II)
28/3/2020	Pt B	6.0	15:00	Fine	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
28/3/2020	MVT 2	0.6	10:20	Fine	0	0	0	20.9	23	1012	PGM-2400P (QRAE II)
28/3/2020	MVT 2	0.6	15:20	Fine	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
28/3/2020	Po Lam S Road 1+2	0.8	10:30	Fine	0	0	0	20.9	24	1013	PGM-2400P (QRAE II)
28/3/2020	Po Lam S Road 1+2	0.8	15:30	Fine	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
30/3/2020	Pit C	0.8	8:30	Rain	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
30/3/2020	Pit C	0.8	13:30	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
30/3/2020	CHCT1+57	3.1	9:00	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
30/3/2020	CHCT1+57	3.1	14:00	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
30/3/2020	CHCA4+25	3.5	9:15	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
30/3/2020	CHCA4+25	3.5	14:15	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
30/3/2020	137 B	1.0	9:30	Rain	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
30/3/2020	137 B	1.0	14:30	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
30/3/2020	CHA12+50	5.3	9:45	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
30/3/2020	CHA12+50	5.3	14:45	Rain	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
30/3/2020	Pit B	6.0	10:00	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
30/3/2020	Pt B	6.0	15:00	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
30/3/2020	MVT 2	0.6	10:20	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
30/3/2020	MVT 2	0.6	15:20	Rain	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
30/3/2020	Po Lam S Road 1+2	0.8	10:30	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
30/3/2020	Po Lam S Road 1+2	0.8	15:30	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
31/3/2020	Pit C	0.8	8:30	Rain	0	0	0	20.9	19	1013	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
31/3/2020	Pit C	0.8	13:30	Rain	0	0	0	20.9	21	1013	PGM-2400P (QRAE II)
31/3/2020	CHCT1+57	3.1	9:00	Rain	0	0	0	20.9	19	1012	PGM-2400P (QRAE II)
31/3/2020	CHCT1+57	3.1	14:00	Rain	0	0	0	20.9	21	1012	PGM-2400P (QRAE II)
31/3/2020	CHCA4+25	3.5	9:15	Rain	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
31/3/2020	CHCA4+25	3.5	14:15	Rain	0	0	0	20.9	20	1012	PGM-2400P (QRAE II)
31/3/2020	137 B	1.0	9:30	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
31/3/2020	137 B	1.0	14:30	Rain	0	0	0	20.9	19	1014	PGM-2400P (QRAE II)
31/3/2020	CHA12+50	1.8	9:45	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
31/3/2020	CHA12+50	1.8	14:45	Rain	0	0	0	20.9	19	1013	PGM-2400P (QRAE II)
31/3/2020	Pit B	6.0	10:00	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
31/3/2020	Pt B	6.0	15:00	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
31/3/2020	MVT 2	0.6	10:20	Rain	0	0	0	20.9	21	1014	PGM-2400P (QRAE II)
31/3/2020	MVT 2	0.6	15:20	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
31/3/2020	Po Lam S Road 1+2	0.8	10:30	Rain	0	0	0	20.9	21	1013	PGM-2400P (QRAE II)
31/3/2020	Po Lam S Road 1+2	0.8	15:30	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
1/4/2020	Pit B	6.0	10:45	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
1/4/2020	Pit B	6.0	15:45	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
1/4/2020	MWT2	0.6	11:10	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
1/4/2020	MWT2	0.6	16:10	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
1/4/2020	CH.FC4+83~5+30	2.5	9:00	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
1/4/2020	CH.FC4+83~5+30	2.5	14:00	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
1/4/2020	CH.FC0+64~0+90	1.8	9:15	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
1/4/2020	CH.FC0+64~0+90	1.8	14:15	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
1/4/2020	Pit C	0.8	9:40	Rain	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
1/4/2020	Pit C	0.8	14:40	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
1/4/2020	CH.CT 1+57~2+58	3.1	10:05	Rain	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
1/4/2020	CH.CT 1+57~2+58	3.1	15:05	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
1/4/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
1/4/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
1/4/2020	137 Pit B	1.0	10:20	Rain	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
1/4/2020	137 Pit B	1.0	15:20	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
1/4/2020	CH.A12+30	1.8	10:35	Rain	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
1/4/2020	CH.A12+30	1.8	15:35	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
2/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
2/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
2/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
2/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
2/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
2/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
2/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
2/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
2/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
2/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	20	107	PGM-2400P (QRAE II)
2/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
2/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
2/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
2/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
2/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
2/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
2/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
2/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
3/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
3/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
3/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
3/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
3/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
3/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
3/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
3/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
3/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
3/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
3/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	21	1016	PGM-2400P (QRAE II)
6/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	18	1015	PGM-2400P (QRAE II)
6/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	18	1015	PGM-2400P (QRAE II)
6/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
6/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
6/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
6/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
6/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
6/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
6/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	17	1018	PGM-2400P (QRAE II)
6/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	18	1016	PGM-2400P (QRAE II)
7/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
7/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
7/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
7/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
7/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
7/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
7/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
7/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
7/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
7/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
7/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
7/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
7/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
7/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
7/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
7/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
7/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
7/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
8/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	22	1017	PGM-2400P (QRAE II)
8/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
8/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	22	1017	PGM-2400P (QRAE II)
8/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	21	1015	PGM-2400P (QRAE II)
8/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
8/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
8/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
8/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
8/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
8/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
8/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
8/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	23	1015	PGM-2400P (QRAE II)
8/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	22	1018	PGM-2400P (QRAE II)
8/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
8/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	22	1018	PGM-2400P (QRAE II)
8/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
8/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	22	1018	PGM-2400P (QRAE II)
8/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
9/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	22	1019	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
9/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
9/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	24	1019	PGM-2400P (QRAE II)
9/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
9/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	22	1019	PGM-2400P (QRAE II)
9/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
9/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	22	1019	PGM-2400P (QRAE II)
9/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
9/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	22	1019	PGM-2400P (QRAE II)
9/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
9/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	23	1019	PGM-2400P (QRAE II)
9/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
9/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	23	1019	PGM-2400P (QRAE II)
9/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
9/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	23	1019	PGM-2400P (QRAE II)
9/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
9/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	23	1019	PGM-2400P (QRAE II)
9/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	24	1016	PGM-2400P (QRAE II)
14/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
14/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	23	15016	PGM-2400P (QRAE II)
14/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	21	1019	PGM-2400P (QRAE II)
14/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	22	1016	PGM-2400P (QRAE II)
14/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
14/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
14/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
14/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
14/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
14/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
14/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
14/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
14/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
14/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
14/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
14/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
14/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
14/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	23	1016	PGM-2400P (QRAE II)
15/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
15/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
15/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
15/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
15/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	22	1018	PGM-2400P (QRAE II)
15/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
15/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	22	1017	PGM-2400P (QRAE II)
15/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
15/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	22	1017	PGM-2400P (QRAE II)
15/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
15/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
15/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
15/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
15/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
15/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
15/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
15/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
15/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
16/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
16/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
16/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
16/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
16/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
16/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
16/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
16/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
16/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
16/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
16/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
16/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
16/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
16/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
16/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	23	1017	PGM-2400P (QRAE II)
16/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
16/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	24	1017	PGM-2400P (QRAE II)
16/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
17/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
17/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
17/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
17/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
17/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
17/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
17/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
17/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	27	1015	PGM-2400P (QRAE II)
17/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
17/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	27	1014	PGM-2400P (QRAE II)
17/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
17/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	27	1014	PGM-2400P (QRAE II)
17/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
17/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	27	1014	PGM-2400P (QRAE II)
17/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
17/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
17/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
17/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
17/4/2020	Area A01	1.9	8:30	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
17/4/2020	Area A01	1.9	13:30	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
17/4/2020	Area B	2.0	8:45	Fine	0	0	0	20.9	24	1014	PGM-2400P (QRAE II)
17/4/2020	Area B	2.0	13:45	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
18/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
18/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	25	1012	PGM-2400P (QRAE II)
18/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
18/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	25	1012	PGM-2400P (QRAE II)
18/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
18/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
18/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	25	105	PGM-2400P (QRAE II)
18/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
18/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
18/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
18/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	25	1015	PGM-2400P (QRAE II)
18/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
18/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
18/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	25	1012	PGM-2400P (QRAE II)
18/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
18/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	25	1012	PGM-2400P (QRAE II)
18/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
18/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	25	1012	PGM-2400P (QRAE II)
18/4/2020	Area A01	1.9	8:30	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
18/4/2020	Area A01	1.9	13:30	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
18/4/2020	Area B	2.0	8:45	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
18/4/2020	Area B	2.0	13:45	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)
20/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	27	1014	PGM-2400P (QRAE II)
20/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	27	1011	PGM-2400P (QRAE II)
20/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	27	1014	PGM-2400P (QRAE II)
20/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	27	1011	PGM-2400P (QRAE II)
20/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
20/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	28	1012	PGM-2400P (QRAE II)
20/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	25	1014	PGM-2400P (QRAE II)
20/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	27	1012	PGM-2400P (QRAE II)
20/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
20/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	27	1012	PGM-2400P (QRAE II)
20/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
20/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	27	1011	PGM-2400P (QRAE II)
20/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
20/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	27	1011	PGM-2400P (QRAE II)
20/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
20/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	27	1011	PGM-2400P (QRAE II)
20/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	27	1014	PGM-2400P (QRAE II)
20/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	27	1011	PGM-2400P (QRAE II)
20/4/2020	Area A02	1.9	8:30	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
20/4/2020	Area A02	1.9	13:30	Fine	0	0	0	20.9	28	1013	PGM-2400P (QRAE II)
20/4/2020	Area B	2.0	8:45	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
20/4/2020	Area B	2.0	13:45	Fine	0	0	0	20.9	28	1013	PGM-2400P (QRAE II)
21/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	28	1013	PGM-2400P (QRAE II)
21/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	28	1011	PGM-2400P (QRAE II)
21/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	28	1013	PGM-2400P (QRAE II)
21/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	28	1011	PGM-2400P (QRAE II)
21/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
21/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	29	1012	PGM-2400P (QRAE II)
21/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	26	1014	PGM-2400P (QRAE II)
21/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	29	1011	PGM-2400P (QRAE II)
21/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	26	1013	PGM-2400P (QRAE II)
21/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	29	1011	PGM-2400P (QRAE II)
21/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
21/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	29	1011	PGM-2400P (QRAE II)
21/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
21/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	29	1011	PGM-2400P (QRAE II)
21/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	27	1013	PGM-2400P (QRAE II)
21/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	29	1011	PGM-2400P (QRAE II)
21/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	28	1013	PGM-2400P (QRAE II)
21/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	29	1011	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
21/4/2020	Area A02	1.9	8:30	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
21/4/2020	Area A02	1.9	13:30	Fine	0	0	0	20.9	28	1013	PGM-2400P (QRAE II)
21/4/2020	Area A02	2.0	8:45	Fine	0	0	0	20.9	25	1013	PGM-2400P (QRAE II)
21/4/2020	Area A02	2.0	13:45	Fine	0	0	0	20.9	28	1013	PGM-2400P (QRAE II)
22/4/2020	Pit B	6.0	10:45	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
22/4/2020	Pit B	6.0	15:45	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
22/4/2020	MWT2	0.6	11:10	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
22/4/2020	MWT2	0.6	16:10	Rain	0	0	0	20.9	20	1013	PGM-2400P (QRAE II)
22/4/2020	CH.FC4+83~5+30	2.5	9:00	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
22/4/2020	CH.FC4+83~5+30	2.5	14:00	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
22/4/2020	CH.FC0+64~0+90	1.8	9:15	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
22/4/2020	CH.FC0+64~0+90	1.8	14:15	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
22/4/2020	Pit C	0.8	9:40	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
22/4/2020	Pit C	0.8	14:40	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
22/4/2020	CH.CT 1+57~2+58	3.1	10:05	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
22/4/2020	CH.CT 1+57~2+58	3.1	15:05	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
22/4/2020	CH.CA4+25	3.5	10:10	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
22/4/2020	CH.CA4+25	3.5	15:10	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
22/4/2020	137 Pit B	1.0	10:20	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
22/4/2020	137 Pit B	1.0	15:20	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
22/4/2020	CH.A12+30	1.8	10:35	Rain	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
22/4/2020	CH.A12+30	1.8	15:35	Rain	0	0	0	20.9	20	1014	PGM-2400P (QRAE II)
22/4/2020	Area A02	2.5	8:30	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
22/4/2020	Area A02	2.5	13:30	Rain	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
22/4/2020	Area B	2.0	8:45	Rain	0	0	0	20.9	20	1015	PGM-2400P (QRAE II)
22/4/2020	Area B	2.0	13:45	Rain	0	0	0	20.9	22	1015	PGM-2400P (QRAE II)
23/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
23/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
23/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
23/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
23/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
23/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
23/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
23/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
23/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
23/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
23/4/2020	Area A02	2.5	8:30	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
23/4/2020	Area A02	2.5	13:30	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
23/4/2020	Area B	2.2	8:45	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
23/4/2020	Area B	2.2	13:45	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
24/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
24/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
24/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
24/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
24/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
24/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
24/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
24/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
24/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	19	1019	PGM-2400P (QRAE II)
24/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
24/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	19	10120	PGM-2400P (QRAE II)
24/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
24/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
24/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
24/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
24/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
24/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	19	1020	PGM-2400P (QRAE II)
24/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
24/4/2020	Area A02	0.2	8:30	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
24/4/2020	Area A02	0.2	13:30	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
24/4/2020	Area B	2.2	8:45	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
24/4/2020	Area B	2.2	13:45	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
24/4/2020	Area B	2.2	16:45	Fine	0	0	0	20.9	19	1018	PGM-2400P (QRAE II)
25/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
25/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)
25/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
25/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
25/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	20	1016	PGM-2400P (QRAE II)
25/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	20	1017	PGM-2400P (QRAE II)
25/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	21	1017	PGM-2400P (QRAE II)
25/4/2020	Area A02	0.2	8:30	Fine	0	0	0	20.9	20	1018	PGM-2400P (QRAE II)
25/4/2020	Area A02	0.2	13:30	Fine	0	0	0	20.9	20	1019	PGM-2400P (QRAE II)
25/4/2020	Area B	2.2	8:45	Fine	0	0	0	20.9	19	1016	PGM-2400P (QRAE II)
25/4/2020	Area B	2.2	13:45	Fine	0	0	0	20.9	21	1018	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
25/4/2020	Area B	2.2	16:45	Fine	0	0	0	20.9	19	1017	PGM-2400P (QRAE II)
27/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
27/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
27/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
27/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
27/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	24	1018	PGM-2400P (QRAE II)
27/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	27	1017	PGM-2400P (QRAE II)
27/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	24	1018	PGM-2400P (QRAE II)
27/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	27	1017	PGM-2400P (QRAE II)
27/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	24	1018	PGM-2400P (QRAE II)
27/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
27/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	24	1018	PGM-2400P (QRAE II)
27/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
27/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	24	1018	PGM-2400P (QRAE II)
27/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
27/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	24	1018	PGM-2400P (QRAE II)
27/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
27/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
27/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
27/4/2020	Area B	2.2	8:45	Fine	0	0	0	20.9	23	1018	PGM-2400P (QRAE II)
27/4/2020	Area B	2.2	13:45	Fine	0	0	0	20.9	27	1017	PGM-2400P (QRAE II)
27/4/2020	Area B	2.2	16:45	Fine	0	0	0	20.9	26	1016	PGM-2400P (QRAE II)
28/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	26	1018	PGM-2400P (QRAE II)
28/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
28/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	26	1018	PGM-2400P (QRAE II)
28/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
28/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
28/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
28/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
28/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
28/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	26	1019	PGM-2400P (QRAE II)

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Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
28/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	26	1016	PGM-2400P (QRAE II)
28/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	26	1019	PGM-2400P (QRAE II)
28/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	26	1016	PGM-2400P (QRAE II)
28/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	26	1019	PGM-2400P (QRAE II)
28/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	26	1016	PGM-2400P (QRAE II)
28/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	26	1018	PGM-2400P (QRAE II)
28/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	26	1016	PGM-2400P (QRAE II)
28/4/2020	CH.A12+30	1.8	10:35	Fine	0	0	0	20.9	26	1018	PGM-2400P (QRAE II)
28/4/2020	CH.A12+30	1.8	15:35	Fine	0	0	0	20.9	26	1016	PGM-2400P (QRAE II)
28/4/2020	Area B	2.2	8:45	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
28/4/2020	Area B	2.2	13:45	Fine	0	0	0	20.9	26	1017	PGM-2400P (QRAE II)
28/4/2020	Area B	2.2	16:45	Fine	0	0	0	20.9	25	1016	PGM-2400P (QRAE II)
29/4/2020	Pit B	6.0	10:45	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
29/4/2020	Pit B	6.0	15:45	Fine	0	0	0	20.9	27	1015	PGM-2400P (QRAE II)
29/4/2020	MWT2	0.6	11:10	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
29/4/2020	MWT2	0.6	16:10	Fine	0	0	0	20.9	27	1015	PGM-2400P (QRAE II)
29/4/2020	CH.FC4+83~5+30	2.5	9:00	Fine	0	0	0	20.9	23	1018	PGM-2400P (QRAE II)
29/4/2020	CH.FC4+83~5+30	2.5	14:00	Fine	0	0	0	20.9	27	1017	PGM-2400P (QRAE II)
29/4/2020	CH.FC0+64~0+90	1.8	9:15	Fine	0	0	0	20.9	23	1018	PGM-2400P (QRAE II)
29/4/2020	CH.FC0+64~0+90	1.8	14:15	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
29/4/2020	Pit C	0.8	9:40	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
29/4/2020	Pit C	0.8	14:40	Fine	0	0	0	20.9	27	1016	PGM-2400P (QRAE II)
29/4/2020	CH.CT 1+57~2+58	3.1	10:05	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
29/4/2020	CH.CT 1+57~2+58	3.1	15:05	Fine	0	0	0	20.9	27	1015	PGM-2400P (QRAE II)
29/4/2020	CH.CA4+25	3.5	10:10	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
29/4/2020	CH.CA4+25	3.5	15:10	Fine	0	0	0	20.9	27	1015	PGM-2400P (QRAE II)
29/4/2020	137 Pit B	1.0	10:20	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
29/4/2020	137 Pit B	1.0	15:20	Fine	0	0	0	20.9	27	1015	PGM-2400P (QRAE II)
29/4/2020	CH.A12+30	1.2	10:35	Fine	0	0	0	20.9	25	1018	PGM-2400P (QRAE II)
29/4/2020	CH.A12+30	1.2	15:35	Fine	0	0	0	20.9	27	1015	PGM-2400P (QRAE II)
29/4/2020	Area B	2.2	8:45	Fine	0	0	0	20.9	23	1018	PGM-2400P (QRAE II)

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**Mainlaying in Tseung Kwan O**  
**7<sup>th</sup> Quarterly EM&A Report for February 2020 to April 2020**



Date of Measurement	Sampling Location	Depth (m)	Sampling time	Weather Condition	Balance Gas(%)	Flammable gas (methane%)	Carbon Dioxide (%)	Oxygen (%)	Temp (C)	Pressure (m bar)	Measurement Equipment
29/4/2020	Area B	2.2	13:45	Fine	0	0	0	20.9	27	1017	PGM-2400P (QRAE II)
29/4/2020	Area B	2.2	16:45	Fine	0	0	0	20.9	26	1015	PGM-2400P (QRAE II)

# Appendix I

## Complaint Log and Regulatory Compliance Proforma

**Statistical Summary of Environmental Complaints**

Reporting Period	Environmental Complaint Statistics		
	Frequency	Cumulative	Complaint Nature
1 Feb 2020-30 Apr 2020	0	0	N/A

**Statistical Summary of Environmental Summons**

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Details
1 Feb 2020-30 Apr 2020	0	0	N/A

**Statistical Summary of Environmental Prosecution**

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Details
1 Feb 2020-30 Apr 2020	0	0	N/A

## Appendix J

# Noise Impact Monitoring Result

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