Appendix I Waste Disposal & Consignment Notes

Form HWCN01v112

The Hazardous Waste Regulations 2005: Consignment Note

Environment Agency

PRODUCER'S/HOLDER'S/CONSIGNOR'S COPY (Delete as appropriate)

PART A Notification details

1 Consignment note code: SANCTU / EG001

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):

Sanctus Limited
Ardrossan North Shore, 7 N Cres Rd, KA22 8LY
01453 828 222
info@sanctusltd.co.uk

3 The waste will be taken to (name, address and postcode):

Sanctus Soil Treatment Centre,
Leafbridge Way, Lincoln, LN6 9WG
soiltreatmentcentre@sanctusltd.co.uk

4 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

Sanctus Limited
1 Olympus Pk. Business Centre, Quedgeley - 01453 828 222

PART B Description of the waste

If continuation sheet used, tick here ☐

1 The process giving rise to the waste(s) was: Remediation

2 SIC (2007) for the process giving rise to the waste: 39.00/

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components in the waste and their concentrations are: Component	Concentration (% or mg/kg)	Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
Soil and stone containing hazardous substances	170503*	18,000	Asbestos	>0.1 %	Solid	H7, H14	8wtv

The information given below is to be completed for each EWC identified

EWC code	UN identification number(s)	Proper shipping name(s)	UN class(es)	Packing group(s)	Special handling requirements
170503*	UN2590	Chrysotile	9	III	Manual / PPE / RPE
170605	UN2590	CHRYSOTILE	9	III	MANUAL

PART C Carrier's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If schedule of carriers is attached tick here. ☐)

I certify that I today collected the consignment and that the details in A2, A3 and B3 are correct and I have been advised of any specific handling requirements.

Where this note comprises part of a multiple collection the round number and collection number are:

1

1 Carrier name:

On behalf of (name, address, postcode, telephone, e-mail, facsimile):
FLOOD TRANSPORT, UNIT 15 WARREN WAY, ENDERBY. LE19 4SG. 01162 865 211

2 Carrier registration no./reason for exemption: CBDU48472

3 Vehicle registration no. (or mode of transport, if not road): M40 FTL

Signature [redacted]

Date 11 03 2025 Time 09 30

PART D Consignor's certificate

I certify that the information in A, B and C has been completed and is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.

1 Consignor name:

On behalf of (name, address, postcode, telephone, e-mail, facsimile): [redacted]

Sanctus Limited
1 Olympus Pk. Business Centre
Quedgeley, GL2 4DH 01453 828 222

Signature [redacted]

Date 11 03 2025 Time 09 30

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
170503*		A	R13
170605		A	R13

1 I received this waste at the address given in A3 on: Date 12 03 2025 Time 08 10

2 Vehicle registration no. (or mode of transport if not road):

3 Where waste is rejected please provide details: M40 FTL

[redacted]

I certify that waste permit/exempt waste operation number:

TP3098CL/W0023

authorises the management of the waste described in B at the address given in A3.

Where the consignment forms part of a multiple collection, as identified in Part C, I certify that the total number of consignments forming the collection are:

Name:

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

Sanctus Limited
1 Olympus Pk. Business Centre
Quedgeley, GL2 4DH
01453 828 222
info@sanctusltd.co.uk

Signature

Date 12 03 2025 Time 08 10

Form HWCN01v112

The Hazardous Waste Regulations 2005: Consignment Note

Environment Agency

PRODUCER'S/HOLDER'S/CONSIGNOR'S COPY (Delete as appropriate)

PART A Notification details

1 Consignment note code: SANCTU / ~~BB~~ EGOOR

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):

Sanctus Limited
Ardrossan North Shore, 7 N Cres Rd, KA22 8LY
01453 828 222
info@sanctusltd.co.uk

3 The waste will be taken to (name, address and postcode):
Sanctus Soil Treatment Centre,
Leafbridge Way, Lincoln, LN6 9WG
soiltreatmentcentre@sanctusltd.co.uk

4 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):
Sanctus Limited
1 Olympus Pk. Business Centre, Quedgeley - 01453 828 222

PART B Description of the waste

If continuation sheet used, tick here ☐

1 The process giving rise to the waste(s) was: Remediation

2 SIC (2007) for the process giving rise to the waste: 3 9 . 0 0 /

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components in the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
Soil and stone containing	1 7 0 5 0 3*	18,000	Asbestos	>0.1 %	Solid	~~HL~~ H7	8wtv
hazardous substances							

The information given below is to be completed for each EWC identified

EWC code	UN identification number(s)	Proper shipping name(s)	UN class(es)	Packing group(s)	Special handling requirements
1 7 0 5 0 3*	UN2590	Chrysotile	9	III	Manual / PPE / RPE
17 06 05	UN2590	Chrysotile	9	II	MANUAL

PART C Carrier's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If schedule of carriers is attached tick here. ☐)

I certify that I today collected the consignment and that the details in A2, A3 and B3 are correct and I have been advised of any specific handling requirements.

Where this note comprises part of a multiple collection the round number and collection number are:

/

1 Carrier name:

On behalf of (name, address, postcode, telephone, e-mail, facsimile):
FLOOD TRANSPORT, UNIT 15 WARREN WAY, ENDERBY. LE19 4SG 01162 865 211

2 Carrier registration no./reason for exemption: CBDU4.8472

3 Vehicle registration no. (or mode of transport, if not road): MU60 FTL

Signature [redacted]

Date 12 03 2025 Time 16 00

PART D Consignor's certificate

I certify that the information in A, B and C has been completed and is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.

1 Consignor name: [redacted]

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

Sanctus Limited
1 Olympus Pk. Business Centre
Quedgeley, GL2 4DH - 01453 828 222

Signature [redacted] 16 00

Date 12 03 2025 Time

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
17 05 03	18,000kg	A	R13
17 06 05	〃	A	R13

1 I received this waste at the address given in A3 on: Date 13/03/2025 Time 11:10

2 Vehicle registration no. (or mode of transport if not road): MU60 FTL

3 Where waste is rejected please provide details: N/A

I certify that waste permit/exempt waste operation number:

TP3098CL/W0023

authorises the management of the waste described in B at the address given in A3.

Where the consignment forms part of a multiple collection, as identified in Part C, I certify that the total number of consignments forming the collection are:

Name: [redacted]

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

Sanctus Limited
1 Olympus Pk. Business Centre
Quedgeley, GL2 4DH
01453 828 222
info@sanctusltd.co.uk

Signature [redacted]

Date 13/03/2025 Time 11:10

Job Ticket/Duty of Care
Controlled Waste Transfer Note

Augean

Waste Consignment Details

Enq No.	7978	Account No	C001251	Order No	S3240PMCA/265
Date	30/01/2025	Advice No Waste Transfer Note No	249100	Consignment Note No (If applicable)	SA7217430

The waste described below is to be collected from		The waste will be taken to	
SANCTUS LTD OFF NORTH CRESCENT ROAD ARDROSSAN KA22 8LY SIC Code. 39000		AUGEAN TREATMENT PAISLEY IS, 36 CLARK STREET, PAISLEY, PA3 1RB	
Site Contact	INVOICING	Waste Management Licence/Permit No	PPC/A/1004470
Tel No		Number of Pages	Page 1 of 1

Waste Description	EWC Code	Container	Quantity

Waste Carrier Details

The waste consignment was collected by

Company Name	AUGEAN TREATMENT (PAISLEY) LTD	Tel No	
Waste Carrier Licence No/ Reason for Exemption	CBDU65821	Vehicle Reg	SV19 LZC
On (date)	31/1/25	Signature	[redacted]

Required PPE & Instructions

Additional Comments

UPLIFT OF IBCS OF DIESEL WATER

Waste Producers Confirmation

I certify that the waste consignment as specified was collected by the carrier mentioned above, and where relevant, I can confirm that it complies with the Carriage of Dangerous Goods and Use of Transport Pressure Equipment Regulations as applicable . I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Name	[redacted]	Date	31/1/25	
Signature	[redacted]	Time on Site	0800	Time off Site

Waste Disposal Site Confirmation

I certify that the waste consignment as described above was received and accepted from the above carrier.

On (date)	31/1/25	Signature	[redacted]
Time on Site	1140	Time off Site	Print Name [redacted]

SEPA SPECIAL WASTE CONSIGNMENT NOTE

SPECIAL WASTE REGULATIONS 1996

Part A **Notification Details**

Consignment Note Number SA7217430
Ticket Number 7978/249100 **Date** 30/01/2025

Producer Details: SANCTUS LTD, OFF NORTH CRESCENT ROAD, ARDROSSAN, KA22 8LY
E:INVOICES@SANCTUSLTD.CO.UK

Consignee Details: AUGEAN TREATMENT PAISLEY IS, 36 CLARK STREET, PAISLEY, PA3 1RB, T:0141 8875689, E:PCS@AUGEAN.CO.UK

The consignment(s) will be: One Single ☑ a succession ☐ Carrier's round ☐ Other ☐ please specify

Name [redacted]
Signature
Date 30/01/2025

On behalf of (Company,Address) SANCTUS LTD, SANCTUS HOUSE, 1 OLYMPUS PARK, QUEDGELEY, GLOUCESTERSHIRE, GL2 4DH

Tel

The waste producer was
(If different from 1.) (name,address)

Part B **Description of the waste**

SIC* for the proces 39000

Container Type, no & Size	Quantity		The chemical / biological components of the waste and their concentrations	Physical Form	Hazard Property Code(s)	EWC Code
7 x IBC	7000	KG	Diesel <50%, Water Balance,	Liquid	HP3,HP4,HP5,HP6,HP7,HP14,	13 07 03*

Waste Description DIESEL WATER
Colour
Process Giving Rise to the Waste SITE MAINTENANCE
Dangerous Goods Description UN 1202 WASTE DIESEL FUEL, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS
Special Handling Requirements **EAC** 3Y

Part C **Carrier's Certificate**

I certify that I today collected the consignment and that the details in A1, A2 and B2 are correct and I have been advised of any specific handling requirements.

Driver's Name [redacted] The Qty Collected is: 7 IBC

On behalf of AUGEAN TREATMENT (PAISLEY) LTD, 36 CLARK STREET, PAISLEY

Carriers Registration Number CBDU65821 Vehicle Registration SV19 LZC

Signature [redacted] Date 31/1/25 at 10:5 Hours.

Part D **Consignor's Certificate**

I certify that the information in A, B and C above is correct, that the carrier is registered or expemt and was advised of the appropriate precautionary measures

Name [redacted]
On behalf of SANCTUS LTD, OFF NORTH CRESCENT ROAD, ARDROSSAN, KA22 8LY
E:INVOICES@SANCTUSLTD.CO.UK

Signature [redacted] Date 31/1/25 at 1015 Hours.

Part E **Consignee's Details**

Individual EWC Code(s) received	Quantity of each EWC code	EWC Code Accepted/ Rejected	Waste Management Operation
130703	7000kg	A	R13

I received this waste at the consignee address given above on 31/1/25 at 1140

Vehicle registration SV19 LZC

Where waste was rejected please provide details

I certify that waste management licence / permit / authorised exemption no(s) PPC/A/1004470

authorise(s) the management of the waste described in B at the consignee address given above.

Name [redacted]
On behalf of (Consignee Details)

Signature [redacted] Date 31/1/25 at 1140 Hours.

Job Ticket/Duty of Care
Controlled Waste Transfer Note

Augean

Waste Consignment Details

Enq No.	7978	Account No	C001251	Order No	S3240PMCA/266
Date	30/01/2025	Advice No Waste Transfer Note No	249101	Consignment Note No (If applicable)	SA7217431

The waste described below is to be collected from	The waste will be taken to
SANCTUS LTD OFF NORTH CRESCENT ROAD ARDROSSAN KA22 8LY SIC Code. 39000	AUGEAN TREATMENT PAISLEY IS, 36 CLARK STREET, PAISLEY, PA3 1RB

Site Contact	INVOICING	Waste Management Licence/Permit No	PPC/A/1004470
Tel No		Number of Pages	Page 1 of 1

Waste Description	EWC Code	Container	Quantity

Waste Carrier Details

The waste consignment was collected by

Company Name	AUGEAN TREATMENT (PAISLEY) LTD	Tel No	
Waste Carrier Licence No/ Reason for Exemption	CBDU65821	Vehicle Reg	SV19 LZC
On (date)	31/1/25	Signature	[redacted]

Required PPE & Instructions

Additional Comments
UPLIFT IBCS OF HFO

Waste Producers Confirmation

I certify that the waste consignment as specified was collected by the carrier mentioned above, and where relevant, I can confirm that it complies with the Carriage of Dangerous Goods and Use of Transport Pressure Equipment Regulations as applicable . I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Name	[redacted]	Date 31/1/25	
Signature	[redacted]	Time on Site 0900	Time off Site

Waste Disposal Site Confirmation

I certify that the waste consignment as described above was received and accepted from the above carrier

On (date) 31/1/25		Signature	[redacted]
Time on Site 1140	Time off Site	Print Name	[redacted]

SEPA SPECIAL WASTE CONSIGNMENT NOTE

SPECIAL WASTE REGULATIONS 1996

Part A **Notification Details**

Consignment Note Number SA7217431
Ticket Number 7978/249101 **Date** 30/01/2025

Producer Details: SANCTUS LTD, OFF NORTH CRESCENT ROAD, ARDROSSAN, KA22 8LY E:INVOICES@SANCTUSLTD.CO.UK

Consignee Details: AUGEAN TREATMENT PAISLEY IS, 36 CLARK STREET, PAISLEY, PA3 1RB, T:0141 8875689, E:PCS@AUGEAN.CO.UK

The consignment(s) will be: One Single ☑ a succession ☐ Carrier's round ☐ Other ☐ please specify

Name [redacted] On behalf of (Company,Address) SANCTUS LTD, SANCTUS HOUSE, 1 OLYMPUS PARK, QUEDGELEY, GLOUCESTERSHIRE, GL2 4DH

Signature [redacted]

Date 30/01/2025 Tel

The waste producer was
(If different from 1.) (name,address)

Part B **Description of the waste** **SIC* for the proces** 39000

Container Type, no & Size	Quantity	The chemical / biological components of the waste and their concentrations	Physical Form	Hazard Property Code(s)	EWC Code
11 x IBC	11000 KG	HFO 100%,	Liquid	HP5,HP6,HP7,HP10,HP11,HP14,	13 07 01*

Waste Description HFO
Colour
Process Giving Rise to the Waste SITE ACTITIVIES
Dangerous Goods Description UN 3082 WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (HEAVY FUEL OIL), 9, III, (E), ENVIRONMENTALLY HAZARDOUS
Special Handling Requirements **EAC** 3Z

Part C **Carrier's Certificate**

I certify that I today collected the consignment and that the details in A1, A2 and B2 are correct and I have been advised of any specific handling requirements.

Driver's Name [redacted] The Qty Collected is: 9 11.3C

On behalf of AUGEAN TREATMENT (PAISLEY) LTD, 36 CLARK STREET, PAISLEY

Carriers Registration Number CBDU65821 Vehicle Registration SV19 UZL

Signature [redacted] Date 31/1/25 at 101 Hours.

Part D **Consignor's Certificate**

I certify that the information in A, B and C above is correct, that the carrier is registered or expemt and was advised of the appropriate precautionary measures

Name [redacted]

On behalf of SANCTUS LTD, OFF NORTH CRESCENT ROAD, ARDROSSAN, KA22 8LY E:INVOICES@SANCTUSLTD.CO.UK

Signature [redacted] Date 31/1/25 at 1015 Hours.

Part E **Consignee's Details**

Individual EWC Code(s) received	Quantity of each EWC code	EWC Code Accepted/ Rejected	Waste Management Operation
13 07 01	6710 kg	A	R13

I received this waste at the consignee address given above on 31/1/25 at 1140

Vehicle registration SV19 UZL

Where waste was rejected please provide details

I certify that waste management licence / permit / authorised exemption no(s) PPC/A/1004470

authorise(s) the management of the waste described in B at the consignee address given above.

Name [redacted]

On behalf of (Consignee Details)

Signature [redacted] Date 31/1/25 at 1140 Hours.

HM Revenue & Customs

HMRC
Cotton House
7 Cochrane Street
Glasgow
G1 1HY

Northburn Oils Ltd
70 Northburn Rd
Coatbridge
Lanarkshire
ML5 2HY

Tel [redacted]

E-mail [redacted]

www.gov.uk

Date 1 June 2016
Our Ref 235 1235 40 0004
Your Ref

Dear Sirs,

Motor and Heating Fuels Warehouse Approval Number: GB00004331527

The Commissioners for Her Majesty's Revenue and Customs, under section 92 of the Customs and Excise Management Act 1979, have approved as a Motor and Heating Fuels Warehouse, the premises at:

70 Northburn Rd
Coatbridge
Lanarkshire
ML5 2HY

The approved place of security is outlined on the attached plans and dated **07/12/11** and Schedule shown at Annexe A. The approval is effective from **26/05/16.** This approval is subject to revocation or variation.

This approval enables you to warehouse the following goods without payment of excise duty:

Mineral oils
Gas oil,unmarked
Gas oil,marked
Kerosene unmarked
Kerosene marked

The approved hours of operation of the warehouse are Monday to Sunday 24 hours.

Any additional conditions of approval are shown at Annexe B.

Failure to comply with a condition of approval could result in revocation of the approval and action being taken under civil or criminal law.

This approval supersedes any previous approval of the premises as a warehouse.

If you do not agree with my decision, you have three options. Within 30 days you can:

- send any further information you want me to consider;
- have your case reviewed by a different officer; or
- have your case heard by an independent tribunal.

If you require a review you must write to me at the above address within 30 days of the date of this letter, giving the reasons why you do not agree with my decision.

If you prefer to have an independent tribunal hear your case, you must write directly to the Tribunals Service within 30 days of the date of this letter. However, if you request a review and do not agree with the review decision you will still be able to appeal to the tribunal.

You can find further information about appeals and reviews in fact sheet HMRC1 '*HMRC Decisions – What to do if you disagree*'. You can get this fact sheet by:

- downloading it from our website at: www.hmrc.gov.uk/factsheets/hmrc1.pdf
- phoning the Revenue and Customs Orderline on 0300 200 3700

You can find more information about how to appeal on the Tribunals Service website at: www.justice.gov.uk or by phoning 0845 223 8080.

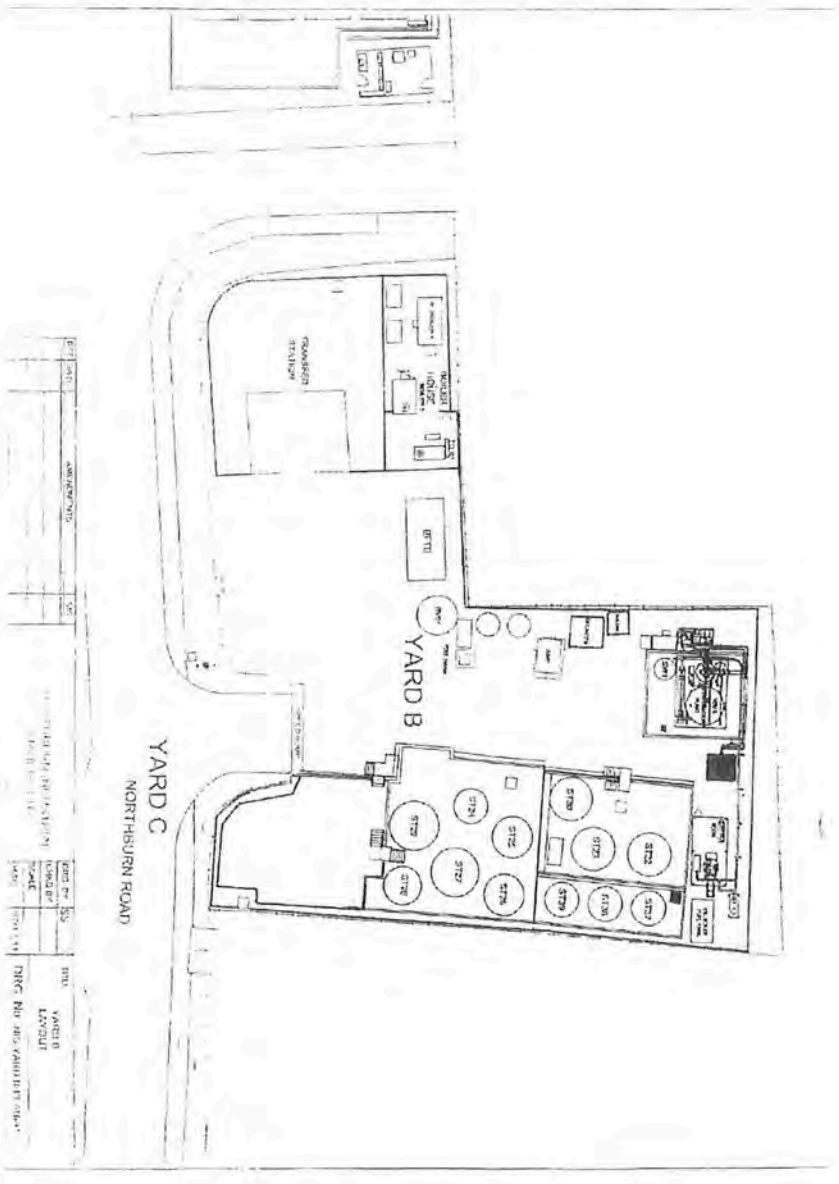
If you wish us to vary the terms of your warehouse approval you must notify the National Registration Unit at the above address on form EX70: Excise Warehousing, Motor and Heating Fuels Warehouse Application and Amendment Form, available from the National Advice Service, telephone number 0300 200 3700. You must state what you require and why.

Yours faithfully

Officer
[redacted]

Annexe A

1. Plan of premises
2. EX71 Schedule of tanks



SCHEDULE

Reference number .... Page

Item number	Identifying number of vessel, plant or equipment	Description	Capacity in M^3	Item number	Identifying number of vessel, plant or equipment	Description	Capacity in
1	V04	Shower Pasteur unit	25 m^3				
2	ST 22	Storage Tank	70 45				
3	ST 23	Storage Tank	70 45				
4	ST 25	Storage Tank	95 21				
5	ST 26	Storage Tank	95 21				
6	ST 27	Storage Tank	79 96				
7	ST 28	Storage Tank	99 62				
8	ST 29	Storage Tank	72.00				
9	ST 37	Storage Tank	33 50				
10	ST 38	Storage Tank	33 50				
11	ST 39	Storage Tank	33 50				

Initials authenticating ....

Annex BANNEXE B

The warehouse is approved as a mineral oils producers warehouse in respect of the storage of the following mineral oil produced from the recovery of waste oil:

a) marked and unmarked gas oil
b) marked and unmarked kerosene
c) any other oil which does not need further refining before being put to a dutiable use
d) requirement to comply with N179,Section 1E Approval of Mineral Oils Warehouse-Standard Conditions

Reference Number: PPC/A/1004470-VN01

SCOTTISH ENVIRONMENT PROTECTION AGENCY

POLLUTION PREVENTION AND CONTROL ACT 1999

POLLUTION PREVENTION AND CONTROL (SCOTLAND) REGULATIONS 2000 ("THE REGULATIONS")

NOTICE OF VARIATION TO PERMIT

PERMIT No: PPC/A/1004470

To: **Hitech Equipment Limited**

Address: **36 Clark Street**
Paisley
PA3 1RB

The Scottish Environment Protection Agency ("SEPA"), in exercise of its powers under Regulation 13(5) of the Regulations, hereby gives you notice that it has decided, following application by you, to vary permit PPC/A/1004470 granted under Regulation 7 of the Regulations in respect of the operation of installation on a site at 36 Clark Street, Paisley, PA3 1RB.

The variations are specified in the Schedule to this notice and take effect on 28 May 2009

[redacted]

Date: 28 May 2009

Authorised to sign on behalf of the
Scottish Environment Protection Agency

Right of Appeal
Under Regulation 22 of the Regulations you are entitled to appeal to the Scottish Ministers against the conditions attached to this Notice within six months of the date of this Notice, except where SEPA has served this Notice to implement a direction to SEPA of the Scottish Ministers. The bringing of an appeal will not have the effect of suspending the operation of the conditions attached to this Notice. The procedures for the making of an appeal are set out in Schedule 8 of the Regulations.

SCOTTISH ENVIRONMENT PROTECTION AGENCY

POLLUTION PREVENTION AND CONTROL ACT 1999

POLLUTION PREVENTION AND CONTROL (SCOTLAND) REGULATIONS 2000 ("THE REGULATIONS")

SCHEDULE TO NOTICE OF VARIATION UNDER REGULATION 13(5)

Operator: **HITECH EQUIPMENT LIMITED**
Permit Number: **PPC/A/1004470**
Date of Permit: **31 MAY 2007**
Variation No: **1**

Permit number PPC/A/1004470 has been varied as follows

1. Condition 1.1.1.1 has been deleted and inserted as follows:

   1.1.1.1 The stationary technical unit specified in paragraph 1.1.4 (the Stationary Technical Unit), where the activities specifies in paragraph 1.1.3 are carried out ("the Activities"), together with the directly associated activities specified in paragraph 1.1.6 ("the Directly Associated Activities").

2. Condition 1.1.4 has been deleted and replaced as follows:

   1.1.4 The Stationary Technical Unit comprises the following units:

   1.1.4.1 Facilities for the treatment of waste mineral oil

   1.1.4.2 Facilities for the treatment of waste mineral oil sludge

   1.1.4.3 Facilities for the treatment and storage of empty drums and IBCs

   1.1.4.4 Facilities for the storage of drummed and IBC waste

   1.1.4.5 Facilities for the disposal of sewage waste

   1.1.4.6 Facilities for the treatment of bilge waters

   1.1.4.7 Facilities for the treatment of water based inks and paints

   1.1.4.8 Facilities for the treatment of on-site generated waste effluent streams

   1.1.4.9 Facilities for the treatment of hydrocarbon contaminated solids

   1.1.4.10 Facilities for the treatment of non-hazardous high Chemical Oxygen Demand (COD) liquids

   1.1.4.11 Facilities for the storage of automotive industry waste

   1.1.4.12 Facilities for the treatment of hazardous and non-hazardous contaminated liquids

1.1.4.13 Facilities for the storage of hydrocarbon contaminated solids

1.1.4.14 Facilities for the treatment of wastes arising from interceptor cleaning

1.1.4.15 Facilities for the storage of flammable solid waste

1.1.4.16 Facilities for the storage of corrosive solid waste

1.1.4.17 Facilities for the storage of toxic solid waste

1.1.4.18 Facilities for the storage of oxidising solid waste

1.1.4.19 Facilities for the storage of flammable liquid waste

1.1.4.20 Facilities for the storage of corrosive liquid waste

1.1.4.21 Facilities for the storage of toxic liquid waste

1.1.4.22 Facilities for the storage or oxidising liquid waste

1.1.4.23 Facilities for the storage of asbestos waste

1.1.4.24 Facilities for the storage of Waste Electrical and Electronic Equipment (WEEE)

1.1.4.25 Facilities for the storage of fluorescent tubes

1.1.4.26 Facilities for the storage of non-infectious clinical waste

1.1.4.27 One unit for the thermal desorption of hydrocarbon contaminated solids, incorporating a condenser, wet scrubber and carbon filter.

3. Condition 1.1.5 has been deleted and replaced as follows:

1.1.5 The following Directly Associated Activities are carried out on the Site:-

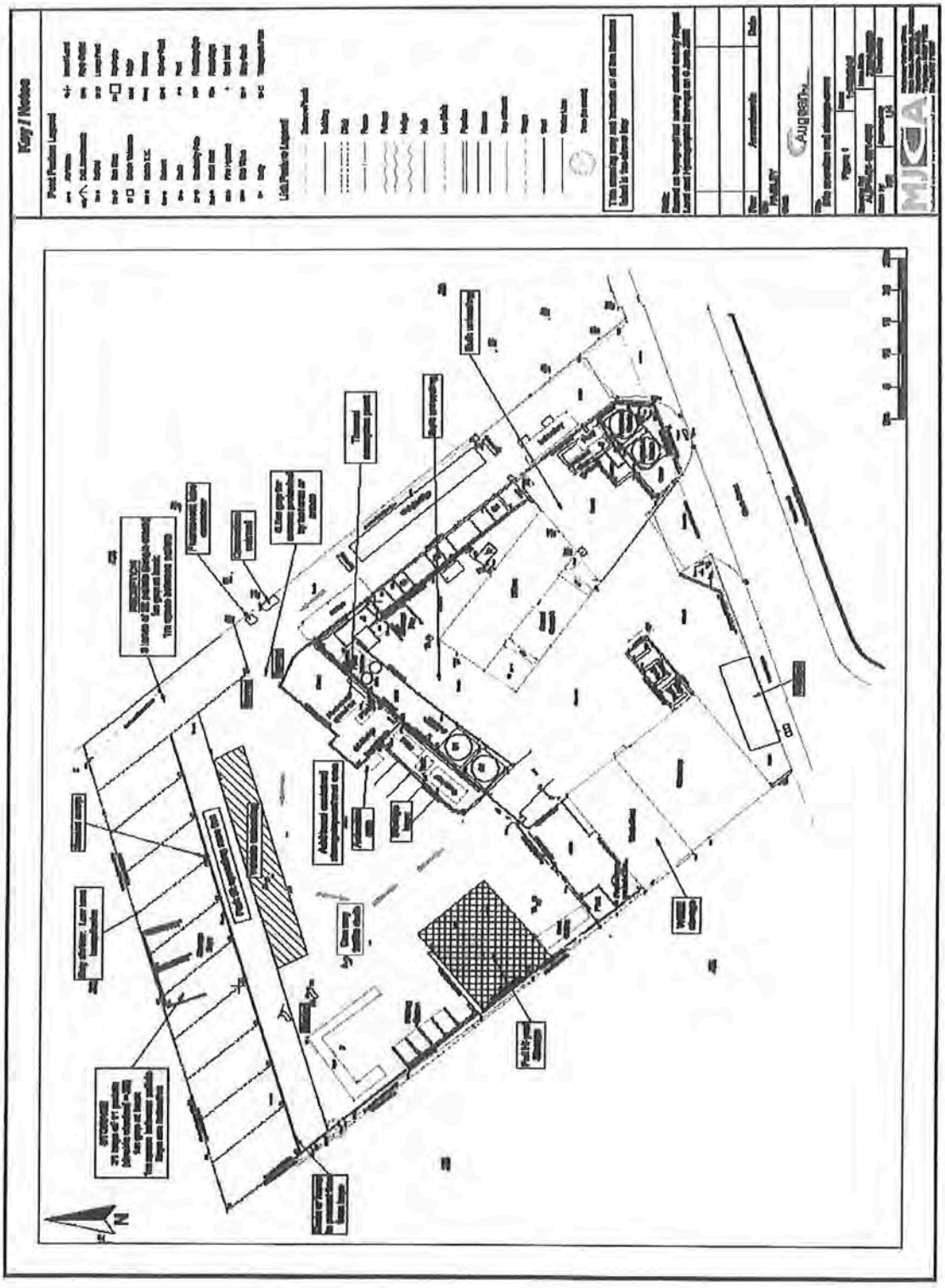
1.1.5.1 Facilities for the storage of non-hazardous solid waste

4. Condition 1.1.6 has been inserted:

1.1.6 For the purposes of this Permit, the Activities and Directly Associated Activities shall be known together as "the Permitted Activities".

5. Condition 1.2 has been deleted and replaced as follows:

1.2 Site Plan



6. Condition 3.2 has been deleted and replaced as follows:

3.2 Waste Types and Quantities

3.2.1 Only waste types detailed in column 1 of Table 3.1 shall be accepted at the site.

3.2.2 The following waste types shall not be accepted at the site:-

(a) Clinical waste as defined in the Controlled Waste Regulations 1992, as amended, with the exception of waste listed in Table 3.1 of this Permit.

(b) Special waste as defined in the Special Waste Regulation 1996, as amended, with the exception of waste listed in Table 3.1 of this Permit.

(c) Putrescible waste

(d) PCB or PCT bearing waste shall not be accepted without the prior notification and written agreement of SEPA.

3.2.3 Notwithstanding the generality of Condition 3.2.2 the following waste types listed in Table 3.2 shall not be accepted at the site.

3.2.4 The quantities of waste accepted at the site on any day shall not exceed those detailed in Column 2 of Table 3.3. The quantities of waste accepted at the site in any year shall not exceed those detailed in Column 3 of Table 3.3. The maximum quantity of waste permitted on site at any one time shall not exceed those detailed in Column 4 of Table 3.3.

7. Table 3.1 has been deleted and replaced as follows:

Table 3.1 - Accepted Wastes

Column 1	Column 2
European Waste Catalogue Code	**Description (including physical form)**
01	Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
04	Wastes from the leather, fur and textile industries
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
06	Wastes from inorganic chemical processes
07	Wastes from organic chemical processes
08	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
09	Wastes from the photographic industry
10	Wastes from thermal processes
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
13	Oil wastes and wastes of liquid fuels (except edible oils, 05 and 12)
14	Waste organic solvents, refrigerants and propellants (except 07 and 08)
15	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
16	Wastes not otherwise specified in the list
17	Construction and demolition wastes (including excavated soil from contaminated sites)
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions

8. Table 3.2 has been deleted and replaced as follows:

Table 3.2 - Prohibited Wastes

Column 1	Column 2
European Waste Catalogue Code	**Description (including physical form)**
02	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing**
02 01 02	animal-tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off site
02 02 02	animal-tissue waste
16	**Wastes not otherwise specified in the list**
16 04 01	waste ammunition
16 04 02*	fireworks wastes
16 04 03*	other waste explosives
18	**Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)**
18 01 02	body parts and organs including blood bags and blood preserves (except 18 07 13
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 02	garden and park wastes (including cemetery waste)
20 03	other municipal wastes

9. Table 3.3 has been inserted:

Table 3.3 - Accepted Quantities

Column 1 Waste type	Column 2 Daily Tonnage	Column 3 Yearly Tonnage	Column 4 Max Tonnage on site at any time
Oil & Water operations			
Hazardous solid	240	60,000	200
Hazardous liquid	400	100,000	300
Non Hazardous liquid	350	90,000	270
Total oil & water operations	**700**	**175,000**	**630**
Waste Transfer operation			
Hazardous solid	400	100,000	750
Hazardous liquid	400	100,000	750
Non-Hazardous solid	400	100,000	750
Non-Hazardous liquid	400	100,000	750
Total waste transfer operations	**400**	**100,000**	**750**

10. Table 3.4 has been inserted:

Table 3.4 - Luminance

Area	Average Luminance Lx	Minimum Measured Luminance Lx
1. Movement of people, vehicles, plant, machines	50 (measured at ground level)	20 (measured at ground level)
2. Waste Inspection	200 (measured at waste level)	100 (measured at waste level)

11. Condition 3.3.3 has been inserted as follows:

3.3.3 Not withstanding the generality of condition 3.3.2, operation of the Infra red thermal desorption unit, with the exception of loading and unloading of waste, shall take place within the following hours:

Monday to Sunday 24 hour operations

12. Condition 5.5.2 has been deleted and inserted as follows:

5.5.2 Bulk Tanker Waste and Waste to be treated using the Infra Red Thermal Desorption unit

13 Condition 5.6.2 has been deleted and inserted as follows:

5.6.2 Hazardous waste shall not remain on site for a period exceeding two months. Non-hazardous waste shall not remain on site for a period exceeding three months. Non infectious clinical waste, specifically EWC 18 01 04 and 18 02 03, shall not remain on site for a period exceeding twenty four hours, except with the prior approval of SEPA.

14 Conditions 5.6.11- 5.6.14 have been inserted as follows

5.6.11 Asbestos waste shall be stored in a secure lockable container. The container shall be kept locked at all times other than when asbestos is being deposited in the container.

5.6.12 Fluorescent tubes shall be stored in a sealed container provided specifically for that purpose.

5.6.13 WEEE shall be stored on an impermeable surface within a secure building

5.6.14 Non infectious clinical wastes shall be stored as follows:-

(a) Sharps waste shall be stored in sealed containers. The sealed containers shall be stored in a secure lockable container that shall be kept locked at all times other than when sharps are being deposited in the container.

(b) Medicine waste shall be stored in a secure lockable container. The container shall be kept locked at all times other than when medicine waste is being deposited in the container.

(c) Hygiene waste will be stored in sealed, vermin proof containers on an impermeable surface.

15 Condition 5.7.3 shall be deleted and inserted as follows:-

5.7.3 The area for storing drummed and IBC waste shall be clearly signposted. Waste stored in any area shall be assessed, and categorised and stored in such a manner that incompatible wastes are kept separate and that spillages of said incompatible wastes do not mix.

16 Condition 5.10 shall be inserted as follows:-

5.10 Commissioning of Infra Red Thermal Desorption Unit

5.10.1 Until Conditions 5.10.2 to 5.10.5 inclusive have been complied with, the Operator shall not carry out Infra red thermal desorption Permitted Activities, except as part of the commissioning process notified to SEPA in compliance with Condition 5.10.3

5.10.2 Prior to carrying out any Permitted Activity as part of the commissioning process, the following shall be tested and demonstrated to be effective during appropriate functional tests:-

(a) The design features necessary to ensure compliance with any Condition of this Permit.

5.10.3 At least 7 days, or such period as otherwise agreed in writing with SEPA, prior to carrying out of any test required by Condition 5.10.2 the Operator shall notify SEPA of the following in writing:-

(a) Details of the work to be carried out in respect of each test.

(b) The purpose of said work.

(c) Details of how said work will be carried out.

(d) An assessment of any environmental impact which the said work may have.

(e) The proposed dates on which the said work will be started and completed.

5.10.4 When carrying out any Permitted Activity as part of the commissioning process, tests shall be carried out to demonstrate that the Permitted Installation can be operated after the commissioning process is complete so as to comply with any Condition of this Permit.

5.10.5 The Operator shall prepare and submit to SEPA a written report on commissioning including the following:

(a) Details of all tests and sampling carried out under Condition 5.10.2, 5.10.7, 5.10.8, 5.10.9 and 5.10.10.

(b) Details of and explanations for any deficiencies identified during said tests.

© Details of any remedial action taken, or to be taken, to overcome any said deficiencies.

(d) Where remedial action is to be taken, the date by which each action will be taken.

5.10.6 Should any test required by Condition 5.10.2 fail to demonstrate that the Conditions of the Permit can be complied with, the Operator shall cease carrying on the part of the Permitted Activities which is the subject of the test, until a report has been prepared and submitted to SEPA stating the measures proposed by the Operator to comply with the Conditions of this Permit and SEPA has agreed those proposals in writing.

5.10.7 During commissioning the Operator shall carry out spot sampling (**SS**) monitoring of emissions of the parameters specified in Table 7.2, at the sampling location specified in Table 7.1, and subject to the requirements for monitoring specified in Table 7.2 as a minimum.

5.10.8 For any parameter specified in Table 7.2, all results of monitoring carried out under Condition 5.10.7 shall be corrected to the reference conditions specified in Table 7.3. The results of all tests and data used to correct the monitoring results to the reference condition specified in Table 7.3 shall be recorded.

5.10.9 During commissioning waste to be treated using the infra red thermal desorption unit shall be sampled and analysed for the parameters listed in Table 5.1 prior to any waste treatment taking place.

Table 5.1 –Testing requirements for waste to be treated using Infra red thermal desorption unit

Parameter	Method
Loss on ignition	To be agreed in writing with SEPA
Total organic carbon	To be agreed in writing with SEPA
Moisture content	To be agreed in writing with SEPA
Polychlorinated biphenols	To be agreed in writing with SEPA
Total Petroleum Hydrocarbons (Speciated)	To be agreed in writing with SEPA
Polyaromatic Hydrocarbons	To be agreed in writing with SEPA
Benzene	To be agreed in writing with SEPA
Toluene	To be agreed in writing with SEPA
Ethyl benzene	To be agreed in writing with SEPA
Xylene	To be agreed in writing with SEPA
Total phenols	To be agreed in writing with SEPA
Mineral oil	To be agreed in writing with SEPA

5.10.10 During commissioning all wastes which have been treated using the infra red thermal desorption unit shall be sampled and analysed for the parameters listed in table 5.1.

5.10.11 Results from analysis carried out in respect of conditions 5.10.9 and 5.10.10 shall be reported to SEPA under the requirements of condition 5.10.5.

16. Condition 7 shall be inserted as follows:-

7 Conditions Applying to Pollution Abatement at the Infra Red Thermal Desorption Unit

7.1 Air Emissions

7.1.1 The emissions to air specified in Table 7.1, as annexed in appendix 2 shall only be permitted from the emission locations specified in that Table and shall not exceed the limits for the parameters specified in said Table.

7.1.2 The Operator shall carry out spot sampling (SS) monitoring of emissions of the parameters specified in Table 7.2, as annexed in appendix 2, at the sampling location specified in Table 7.1 and subject to the requirements for monitoring specified in Table 7.2.

7.1.3 For any parameter specified in Table 7.1, all results of monitoring carried out under Condition 7.1.2 shall be corrected to the reference conditions as specified in Table 7.3. The results of all tests and data used to correct the monitoring results to the reference condition specified in Table 7.3 shall be recorded.

7.1.4 The Operator shall record the date, time, duration and results of all monitoring carried out under Condition 7.1.2 and report said results. For each result, the report shall include the operational mode of the Permitted Installation at the time of monitoring, the name of the person carrying out the monitoring, any deviations from the methods specified in Table7.2 and the associated confidence interval.

17. Appendix 2 shall be inserted as follows:-

APPENDIX 2 – EMISSIONS TO AIR

Table 7.1 – Emissions to Air ELVs

Source of Emission	**Emission point number**	1	1
	Emission source	Stack	Stack
	Stack height/ diameter (m)	8 / 0.07	8 / 0.07
	Location on Site Plan	Y	Y
	NGR	NS 47308 64932	NS 47308 64932
Monitoring Details	**Type of Monitoring**	Spot sampling	continuous
	Sampling Location		
Limits for Parameters from Emission Source	**Particulate matter**	-(No ELV set)	
	PM 10	-(No ELV set)	
	VOC	-	-(No ELV set)
	SPECIATED VOC	-(No ELV set)	

Table 7.2 – Emissions to Air Monitoring Requirements

Parameter	Emission point number	Spot Sampling (SS)			Continuous © |		
		Standard	Frequency	Operational Mode	Type	Sample Time	Averaging Period and Time Span for Percentage Limits
PM 10	1	US EPA method 201A	1 sample per batch of waste, or otherwise agreed in writing with SEPA ,	During normal operation	-	-	-
VOC	1	-	-	-	PID	1 second	-
SPECIATED VOC	1	BS EN 13649	1 sample per batch of waste, or otherwise agreed in writing with SEPA	During normal operation	-	-	-
SMOKE	1	BS 2742:1969	During each batch of waste processed, or otherwise agreed in writing with SEPA	During normal operation	-	-	-

Table 7.3. - Reference Conditions

Emission Point Number	Reference Condition
1	273K, 101.3kPa

Reference Number: PPC/A/1004470-VN02

SCOTTISH ENVIRONMENT PROTECTION AGENCY

POLLUTION PREVENTION AND CONTROL ACT 1999

POLLUTION PREVENTION AND CONTROL (SCOTLAND) REGULATIONS 2000 ("THE REGULATIONS")

NOTICE OF VARIATION TO PERMIT

PERMIT No: **PPC/A/1004470 (As Varied)**

To: **Augean Treatment Limited**

Address: **4 Rudgate Court**
Walton
Wetherby
West Yorkshire
LS23 7BF

The Scottish Environment Protection Agency ("SEPA"), in exercise of its powers under Regulation 13(5) of the Regulations, hereby gives you notice that it has decided, following application by you, to vary permit PPC/A/1004470 (As Varied) granted under Regulation 7 of the Regulations in respect of the operation of an installation on a site at 36 Clark Street, Paisley, PA3 1RB.

The variations are specified in the Schedule to this notice and take effect on 12 May 2010.

[redacted]

Authorised to sign on behalf of the
Scottish Environment Protection Agency

Date: 12 May 2010

Right of Appeal
Under Regulation 22 of the Regulations you are entitled to appeal to the Scottish Ministers against the conditions attached to this Notice within six months of the date of this Notice, except where SEPA has served this Notice to implement a direction to SEPA of the Scottish Ministers. The bringing of an appeal will not have the effect of suspending the operation of the conditions attached to this Notice. The procedures for the making of an appeal are set out in Schedule 8 of the Regulations.

SCOTTISH ENVIRONMENT PROTECTION AGENCY

POLLUTION PREVENTION AND CONTROL ACT 1999

POLLUTION PREVENTION AND CONTROL (SCOTLAND) REGULATIONS 2000 ("THE REGULATIONS")

SCHEDULE TO NOTICE OF VARIATION UNDER REGULATION 13(2)

Operator: **AUGEAN PLC**
Permit Number: **PPC/A/1004470**
Date of Permit: **31 MAY 2007**
Variation No: **02**

Permit number PPC/A/1004470 has been varied as follows:

1. Condition 3.3.4 has been inserted as follows:

   3.3.4 Not withstanding the generality of condition 3.3.2, the activities listed below shall take place within the following hours:

   Monday to Sunday 24 hour operations

   a) Facilities for the treatment of waste mineral oil

   b) Facilities for the treatment of waste mineral oil sludge

   c) Facilities for the disposal of sewage waste

   d) Facilities for the treatment of on-site generated waste effluent streams

   e) Facilities for the treatment of hydrocarbon contaminated solids

   f) Facilities for the treatment of hazardous and non-hazardous contaminated liquids

2. Condition 3.3.5 has been inserted as follows:

   3.3.5 Prior to commencement of 24 hour operations for any activities described in condition 3.3.4 which require the use of the sludge treatment plant and in any event within 6 months of the date of this variation, whichever is the earlier, remedial works shall be undertaken and completed to the site sludge treatment plant such that the release of fugitive gaseous emissions are minimised and the requirements of condition 6.4.1 are complied with.

3. Condition 3.3.6. has been inserted as follows:

   3.3.6. The remedial works to the sludge treatment plant referred to in condition 3.3.5 shall comprise as a minimum

a) The enclosure of all open topped tanks, vessels, pits and channels.

b) The repair of any damaged or perforated pipework.

c) Work required to ensure the sludge plant is served by equipment such that gases and vapours generated are collected and discharged via a suitable abatement system.

4. Condition 6.3.7 has been inserted as follows:

6.3.7 Within 3 months of the commencement of 24 hour operations as described in condition 3.3.4 the operator shall provide an environmental noise report, to a recognised British Standard, to establish representative night time residual background noise levels at noise sensitive receptors and quantify the impact of specific installation noise at those receptors. The report should detail any intermittency or tonal factors that make the specific noise subjectively more annoying.

SCOTTISH ENVIRONMENT PROTECTION AGENCY

POLLUTION PREVENTION CONTROL (SCOTLAND) REGULATIONS 2000

REGULATION 14

NOTICE OF TRANSFER OF PPC PERMIT

PERMIT NUMBER: PPC/A/1004470

TO: **Augean Treatment Limited**
ADDRESS: **4 Rudgate Court**
Walton
Wetherby
West Yorkshire
LS23 7BF

Notice is hereby given that the Scottish Environment Protection Agency has, on the basis of the joint application dated 13 February 2008 made by you and Hitech Equipment Limited (the Transferor), effected a transfer of PPC Permit PPC/A/1004470 dated 31 May 2007 from the Transferor to you in terms of Regulation 14 of the Regulations, by endorsing a certified true copy of the public register copy of the said permit with your particulars. The transfer shall take effect from 10 June 2009.

[redacted]
Authorised to sign on behalf of the
Scottish Environment Protection Agency

Date: 10 June 2009

SCOTTISH ENVIRONMENT PROTECTION AGENCY

Pollution Prevention and Control Act 1999

Pollution Prevention and Control (Scotland) Regulations 2000 ("the Regulations")

PERMIT TO OPERATE A 'PART A' INSTALLATION

Permit Number: PPC/A/1004470

Operator: HITECH EQUIPMENT LIMITED
36 CLARK STREET
PAISLEY
PA3 1RB

The Scottish Environment Protection Agency ("SEPA"), in accordance with Regulation 7 of the Regulations, hereby grants a permit to Hitech Equipment Limited, company registration number SC110422, having its registered office at 36 Clark Street, Paisley, PA3 1RB ("the Operator") to operate an installation, more particularly described in Schedule 1 of this permit, on a site at 36 Clark Street, Paisley, PA3 1RB more particularly described in said Schedule 1, subject to the requirements of the Regulations and to the conditions contained in the Schedules to this Permit.

Signed [redacted]..... Date: 31 May 2007
Authorised to sign on behalf of the
Scottish Environment Protection Agency

Right of Appeal
Under Regulation 22 of the Regulations you are entitled to appeal to the Scottish Ministers against any condition or conditions of this Permit within six months of the date of this Permit, except where SEPA has granted this Permit in implementation of a direction to SEPA of the Scottish Ministers. The bringing of an appeal will not have the effect of suspending the operation of the said condition or conditions. The procedures for the making of an appeal are set out in Schedule 8 of the Regulations.

This Permit, PPC/A/1004470 was transferred from Hitech Equipment Limited to Augean Treatment Limited on 10 June 2009.

[redacted]..Date: 10 June 2009
Authorised to sign on behalf of the
Scottish Environment Protection Agency

CONTENTS

INTERPRETATION OF TERMS

For the purposes of this Permit, and unless the context requires otherwise, the following definitions shall apply:

"the Regulations" means The Pollution Prevention and Control (Scotland) Regulations 2000;

"Authorised Person" means a person who is authorised in writing under Section 108 of the Environment Act 1995 to carry out duties on behalf of SEPA;

"Another Relevant Person" has the same meaning as in Section 74(7) of the Environmental Protection Act 1990

"Controlled Waters" has the same meaning as in Section 30A of the Control of Pollution Act 1974 (as amended);

"emission" has the same meaning as in the Regulations;

"incident" means any of the following situations:

- Where an accident occurs which has caused or may have the potential to cause pollution;
- Where any malfunction, breakdown or failure of plant or techniques is detected which has caused or may have the potential to cause pollution;
- Where any substance, vibration, heat or noise specified in any Condition of this Permit is detected in an emission from a source not authorised by a Condition of this Permit and in a quantity which may cause pollution;
- Where an emission of any pollutant not authorised to be released under any Condition of this Permit is detected;
- Where an emission of any substance, vibration, heat or noise is detected that has exceeded, or is likely to exceed, or has caused, or is likely to cause to be exceeded any limit on emissions specified in a Condition of this Permit.

"Location Plan" means the plan numbered 1.2 and attached at Schedule 1;

"the Permitted Activities" are defined in Schedule 1 of this Permit;

"the Permitted Installation" is defined in Schedule 1 of this Permit and includes references to parts of the Permitted Installation;

"pollutant" and "pollution" have the same meaning as in the Regulations;

"waste" has the same meaning as in the Regulations;

"hazardous waste" has the same meaning as in the Regulations;

"non-hazardous waste" means waste which is not hazardous waste;

"waste oil" has the same meaning as in the Regulations;

"Ringleman Shade 1" has the same meaning as in British standard BS 2742:1969;

"the Application" means the application made by Hitech Equipment Limited for the site at 36 Clark Street, Paisley, PA3 1RB on the 04/01/2006 and given the reference number PPC/A/1004470;

"substantial change" has the same meaning as in the Regulations;

"PCBs or PCTs" means polychlorinated biphenyls, polychlorinated terphenyls and mixtures containing one or both of such substances ;

"Sealed drainage system" has the same meaning as in paragraph 45(7) of Schedule 3 of the Waste Management Licensing Regulations 1994

"SEPA" means the Scottish Environment Protection Agency;

"the Site Boundary" is defined in Schedule 1 of this Permit;

"Site Plan" means the plan numbered 1.2 and attached at Schedule 1;

"Toxic and dangerous waste" has the meaning given by Article1(b) of Council Directive 78/319/EEC

Any reference to a group of Conditions, numbered Condition, Schedule, Table, Appendix, Figure or Paragraph is a reference to a group of Conditions, numbered Condition, Schedule, Table, Appendix, Figure or Paragraph bearing that number in this Permit;

Except where specified otherwise in this Permit:

- "day" means any period of 24 consecutive hours,
- "week" means a period of 7 consecutive days,
- "month" means a calendar month,
- "year" means any period of 12 consecutive months;

and any derived words (e.g. "monthly", "quarterly") shall be interpreted accordingly;

Except where specified otherwise in this Permit, any reference to an enactment or statutory instrument includes a reference to it as amended (whether before or after the date of this Permit) and to any other enactment, which may, after the date of this Permit, directly or indirectly replace it, with or without amendment.

1 THE PERMITTED INSTALLATION

1.1 Description of Permitted Installation

1.1.1 The Permitted Installation to which this Permit applies ("the Permitted Installation") is:

1.1.1.1 The stationary technical unit specified in paragraph 1.1.4 (the Stationary Technical Unit), where the activities specified in paragraph 1.1.3 are carried out ("the Activities"), together with the directly associated activities specified in paragraph 1.1.5 ("the Directly Associated Activities").

1.1.1.2 The site of the Permitted Installation is delineated in red on the Site Plan ("the Site Boundary").

1.1.2 The general location of the Permitted Installation is as shown on the Location Plan.

1.1.3 The Activities carried out at the Stationary Technical Unit are: -

1.1.3.1 The disposal of hazardous waste (other than by incineration or landfill) in plant with a capacity exceeding 10 tonnes per day for hazardous waste being an activity falling within paragraph (a) of Part A of Section 5.3 of Schedule 1 of the Regulations, and;

The disposal of non-hazardous waste in plant with a capacity exceeding 50 tonnes per day by physico-chemical treatment, specified in paragraph D9 of Annex IIA to Council Directive 75/442/EEC, which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 in that Annex being an activity falling within paragraph (c) (ii) of Part A of Section 5.3 of Schedule 1 of the Regulations.

1.1.4 The Stationary Technical Unit comprises the following units:

1.1.4.1 Facilities for the treatment of waste mineral oil

1.1.4.2 Facilities for the treatment of waste mineral oil sludge

1.1.4.3 Facilities for the treatment and storage of empty drums and IBCs

1.1.4.4 Facilities for the storage of drummed and IBC waste

1.1.4.5 Facilities for the disposal of sewage waste

1.1.4.6 Facilities for the treatment of bilge waters

1.1.4.7 Facilities for the treatment of water based inks and paints

1.1.4.8 Facilities for the treatment of on-site generated waste effluent streams

1.1.4.9 Facilities for the treatment of hydrocarbon contaminated solids

1.1.4.10 Facilities for the treatment of non hazardous high Chemical Oxygen Demand (COD) liquids

1.1.4.11 Facilities for the storage of automotive industry waste

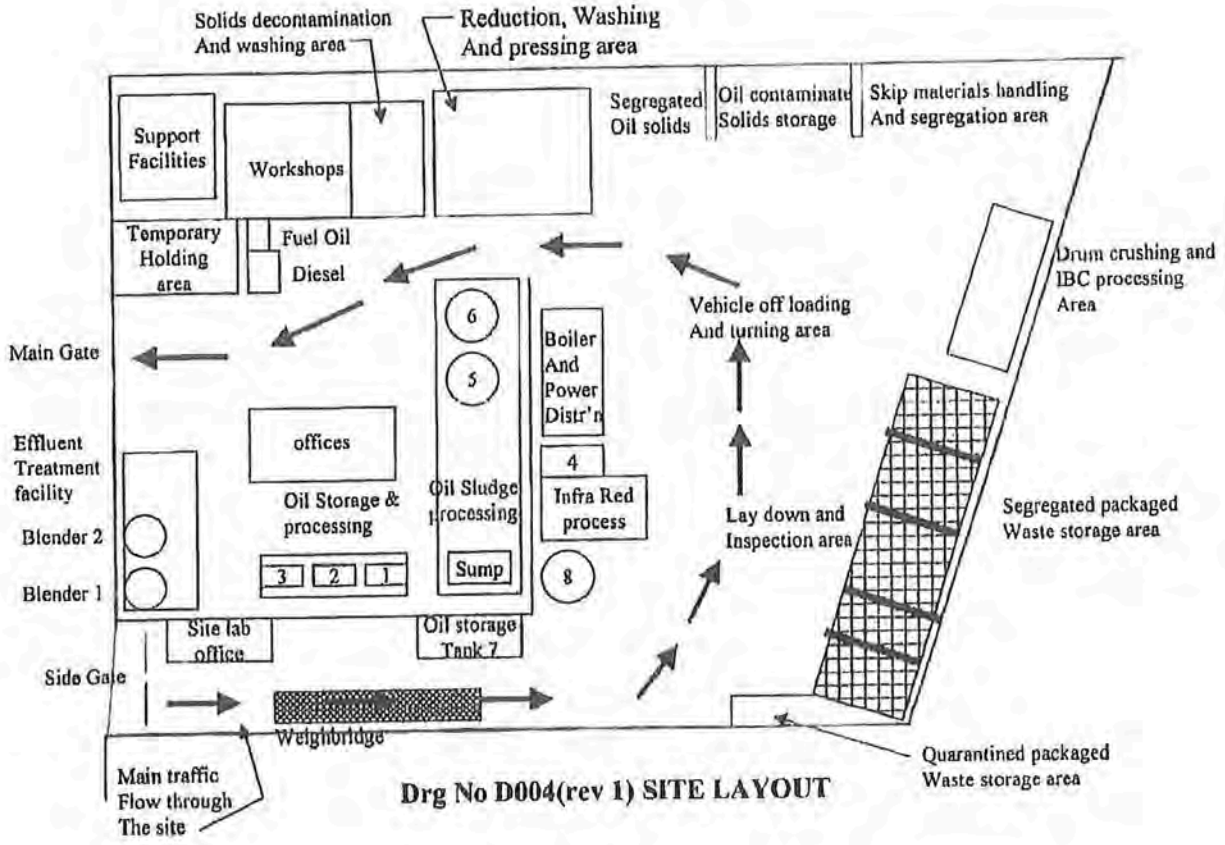
1.1.4.12 Facilities for the treatment of hazardous and non-hazardous contaminated liquids

1.1.4.13 Facilities for the storage of hydrocarbon contaminated soil

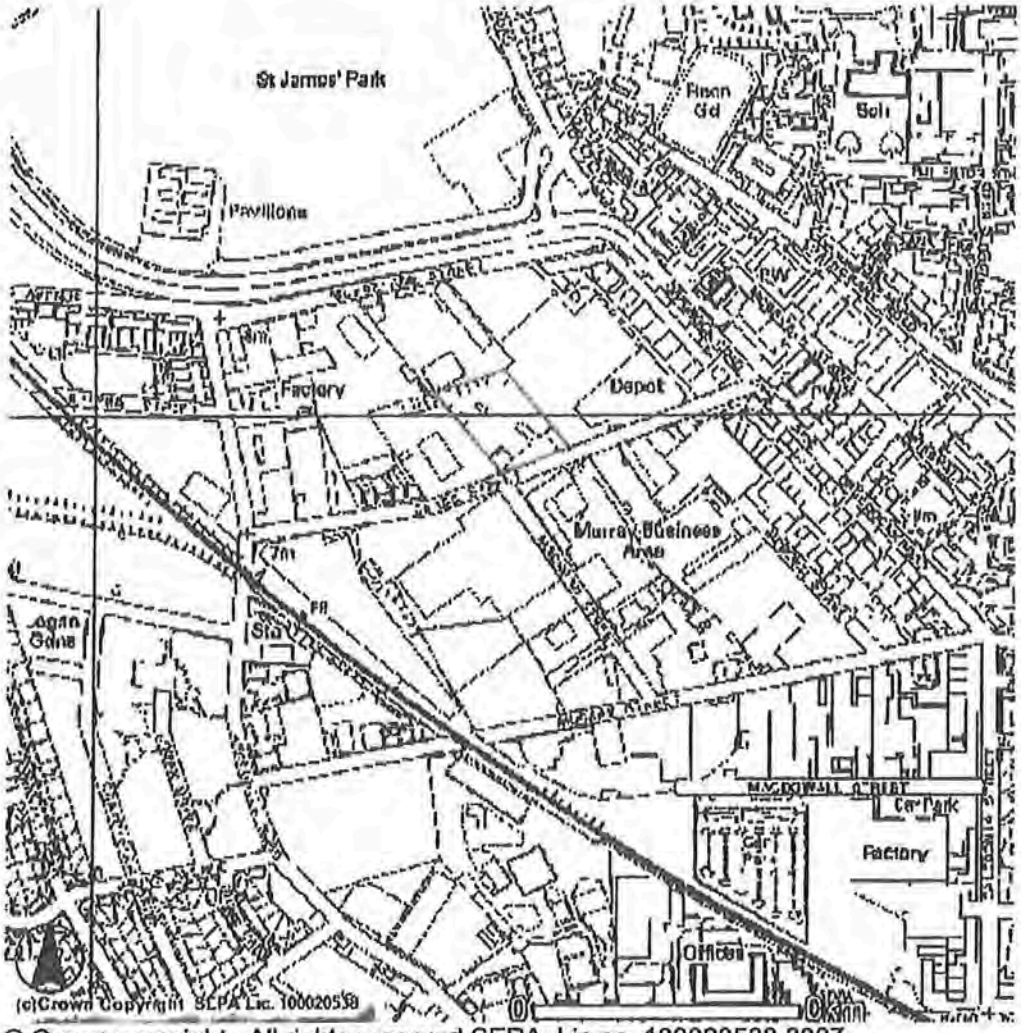
1.1.4.14 Facilities for the treatment of wastes arising from interceptor cleaning

1.1.5 For the purposes of this Permit, the Activities shall be known as "the Permitted Activities.

1.2 Site Plan


Solids decontamination
And washing area
Reduction, Washing
And pressing area
Segregated
Oil solids
Oil contaminate
Solids storage
Skip materials handling
And segregation area
Support
Facilities
Workshops
Temporary
Holding
area
Fuel Oil
Diesel
Drum crushing and
IBC processing
Area
Vehicle off loading
And turning area
Main Gate
6
5
Boiler
And
Power
Distr'n
Effluent
Treatment
facility
offices
4
Oil Storage &
processing
Oil Sludge
processing
Infra Red
process
Lay down and
Inspection area
Segregated packaged
Waste storage area
Blender 2
Blender 1
3
2
1
Sump
8
Site lab
office
Oil storage
Tank 7
Side Gate
Weighbridge
Quarantined packaged
Waste storage area
Main traffic
Flow through
The site
Drg No D004(rev 1) SITE LAYOUT

1.3 Location Plan



2 GENERAL CONDITIONS

2.1 Administration

2.1.1 The Operator shall have an appropriate person (and deputy) as the primary point of contact with SEPA and shall notify SEPA in writing of the name of the appointed person (and deputy) within 4 weeks of the date of this Permit.

2.1.2 In the event of a different person being appointed to act as primary point of contact (or deputy) the Operator shall notify SEPA in writing of the name of the appointed person or deputy without delay and no later than 4 weeks from the date of the appointment.

2.1.3 A copy of this Permit shall be kept at the Permitted Installation and shall be made readily accessible for examination by all staff.

2.1.4 Any systems or procedures used by the Operator to demonstrate compliance with a Condition of this Permit shall be recorded.

2.2 Records

2.2.1 The Operator shall keep on the Permitted Installation a diary to record significant events including as a minimum:

- Visits by a designated technically competent person
- Plant maintenance
- Incidents and details of remedial action taken
- Problems with waste received including actions taken
- Pest control inspections
- Environmental problems specific to the Permitted Installation

The diary shall be kept in a form which can be audited and shall be made available for inspection at any reasonable time.

2.2.2 All records made in compliance with this Permit shall be kept in a systematic manner.

2.2.3 Unless otherwise specified in a Condition of this Permit, every record made in compliance with a Condition of this Permit shall be preserved for not less than five years from the date of its being made. Every such record shall be kept at the Permitted Installation for not less than one year from the date of its being made and thereafter preserved at a location, previously notified to SEPA in writing, if that location is not the Permitted Installation.

2.2.4 All records shall be legible, and any amendment made to any record made in compliance with a Condition of this Permit shall be made in such a way as to leave the original entry clear and legible. The reason for each amendment shall be explained in the said record.

2.3 Reporting

2.3.1 Where any Condition of this Permit requires information to be reported, a report shall be forwarded in writing in duplicate to SEPA at the address specified in the explanatory notes attached to this Permit, by the date(s) or within the period or at the frequency specified in Table 2.1 and, where appropriate, the first report shall be due on the date specified in that Table. All such reports shall include the Permit number and the name of the Operator.

2.3.2 Where the Permitted Installation has not operated for the duration of any reporting period specified in Table 2.1 the Operator shall provide written notification to SEPA. This shall confirm that no reports have been made in terms of Condition 2.3.1 because the Permitted Installation has not operated during the said period. Notifications shall be submitted within one month of the end of the reporting period concerned.

2.3.3 All notifications required by any Condition of this Permit shall be made to SEPA in the manner specified in that Condition to the address specified in the explanatory notes attached to this Permit by the date(s) or within the period or at the frequency specified in Table 2.1 and, where appropriate, the first notification shall be due on the date specified in that Table. All such notifications shall include the Permit number and name of the Operator.

2.4 Waste Data Reporting

2.4.1 The Operator shall compile the data required to complete the "Licensed/Permitted Site Returns Form" detailed in Appendix 1. A copy of the completed form shall be returned to SEPA within 28 days of the last day of March, June, September and December each year.

2.5 Incidents

2.5.1 In the event of an incident, the Operator shall take all necessary measures to prevent, or where that is not practicable to reduce, emissions from the Permitted Installation. All necessary measures to limit the consequences for the environment of any emissions from the Permitted Installation shall be taken, so far as reasonably practicable.

2.5.2 In the event of an incident, the Operator shall notify SEPA by telephone without delay. This notification shall include as far as practicable the information specified in Condition 2.5.3.

2.5.3 The Operator shall confirm any incident to SEPA in writing by first class post or fax by the next working day after identification of the incident. This confirmation shall include: the time and duration of the incident, the receiving environmental medium or media where there has been any emission as a result of the incident, an initial estimate of the quantity and composition of any emission, the measures taken to prevent or minimise any emission or further emission and a preliminary assessment of the cause of the incident.

2.5.4 Any incident notified to SEPA shall be investigated by the Operator, and a report of the investigation sent to SEPA within 14 days of the date of the incident unless otherwise agreed in writing with SEPA. The report shall detail, as a minimum, the circumstances of the incident, an assessment of any harm to the environment and the steps taken by the Operator to bring the incident to an end. The report shall also set out proposals for remediation, where necessary, and for preventing a repetition of the incident.

2.5.5 The Operator shall implement and maintain the "Incident Prevention and Mitigation Plan" as provided in the Application.

2.5.6 At least every 2 years, the Operator shall review the Incident Prevention and Mitigation Plan required under Condition 2.5.5. Each review of the said Incident Prevention and Mitigation Plan shall be recorded and where the Operator makes any revisions to the said plan, said revisions shall be recorded.

2.6 Resource Utilisation

2.6.1 At least every 2 years, the Operator shall carry out a systematic assessment and review of the raw material, energy and fuel consumption, emissions and waste production associated with the Permitted Activities. The purpose of the assessment shall be to identify methods of reducing raw material, energy and fuel consumption, emissions and waste production. Each assessment shall be recorded.

2.7 Waste Arisings Management

2.7.1 At least every 2 years, the Operator shall carry out a systematic assessment and review of the management of all wastes generated by the Permitted Activities. The purpose of the assessment shall be to identify methods of avoiding or reducing the impact on the environment of the disposal of waste. Each assessment shall be recorded.

2.7.2 The Operator shall maintain a record of the location, estimated quantities and types of all wastes generated by the Permitted Activities and stored within the Permitted Installation. The said record shall be updated quarterly.

2.8 Sampling and Monitoring Facilities

2.8.1 Sampling, measurement and monitoring facilities at the Permitted Installation shall conform to the requirements of the relevant test methods specified in any Condition of the Permit or as otherwise agreed in writing by SEPA.

2.8.2 Unrestricted access to all sampling points required by any Condition of this Permit shall be provided at all times.

Table 2.1 - Reporting and Notification Requirements

Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Primary point of contact with SEPA	2.1.1 & 2.1.2	Within 4 weeks of the date of any new appointment	Within 4 weeks of the date of this Permit
Waste Data Returns	2.4.1	Within 28 days of the last days of: March, June, September and December each year	Within 28 days of the last day of June 2007
Incident investigation notification	2.5.2 & 2.5.3	Without delay by telephone Next working day written confirmation	Not applicable
Incident investigation report	2.5.4	Within 14 days of the date of the Incident unless otherwise agreed in writing with SEPA	Not applicable
Commencement of Operations	3.4.1	Within 7 days of commencement of operations	Within 7 days of commencement of operations
Decommissioning	3.7.2	At least 1 month prior to the proposed date of cessation	Not applicable
Rejected Loads	4.2.1	Details of refusal to be passed to SEPA forthwith	Not applicable
Assessment of the condition of site bunding and tanks/containers	5.9.2.1	One off report	14 December 2007
Assessment of fugitive and/or point source emissions to air from sludge plant	5.9.3.1	No later than 14 days from completion of the assessment	Not Applicable
Assessment of significant point source emissions to air from site activities	5.9.3.3	One off report	14 December 2007
Assessment of significant fugitive emissions to air from site activities	5.9.3.5	One off report	14 December 2007
Noise and Vibration systematic assessment report	6.3.2	Following each 2 yearly assessment	Not applicable

Noise and Vibration Management Plan changes	6.3.4	Notified to SEPA at least 14 days prior to changes being implemented	Not applicable
Odour emissions systematic assessment report	6.4.5	Following each 2 yearly assessment	Not applicable
Odour Management Plan changes	6.4.7	Notified to SEPA at least 14 days prior to changes being implemented	Not applicable

Table 2.2 – Review and Systematic Assessment Requirements

Summary of Information to be reviewed or assessed	Condition	Frequency of review	Date First Review due
Incident Prevention and Mitigation Plan review	2.5.6	At least every 2 years from date of Permit	31 May 2009
Resource utilisation systematic assessment and review	2.6.1	At least every 2 years from date of Permit	31 May 2009
Waste arisings systematic assessment and review	2.7.1	At least every 2 years from date of Permit	31 May 2009
Start Up Plan review	3.5.2	At least every 4 years from date of Permit	31 May 2011
Decommissioning Plan review	3.7.4.1 & 3.7.4.2	at least every 4 years from date of Permit (and where substantial change proposed)	31 May 2011
Assessment of the condition of site bunding and tanks/containers	5.9.2.1	One off assessment	30 November 2007
Assessment of fugitive and/or point source emissions to air from sludge plant	5.9.3.1	Within 6 months from the date the plant is fully operational	Not Applicable
Assessment of significant point source emissions to air from site activities	5.9.3.3	One off assessment	30 November 2007
Assessment of significant fugitive emissions to air from site activities	5.9.3.5	One off assessment	30 November 2007
Noise and Vibration systematic assessment and review	6.3.2	At least every 2 years from date of Permit	31 May 2009
Odour emissions systematic assessment and review	6.4.5	At least every 2 years from date of Permit	31 May 2009

3 CONDITIONS APPLYING TO THE PERMITTED INSTALLATION AS A WHOLE

3.1 Registers

3.1.1 Each record made in any register required by a Condition in this Schedule shall be annotated with the date of its entry and the name and job title of the person making the entry.

3.1.2 Whenever any record in any register required by a Condition in this Schedule is amended or extended as a result of any change in operation of the Permitted Installation, the Operator shall record the date of, and include a summary of, any notification made under Regulation 12 of the Regulations or any application made or a justification of why the Operator believes that neither was required in respect of the said change in operation.

3.1.3 If any change in operation of the Permitted Installation results in the need to amend or extend two or more records in any register required by a Condition of this Schedule, a single record may be made under Condition 3.1.2 in respect of the said change in operation if it addresses all the amendments and/or extensions necessitated by the said change in operation.

3.2 Waste Types and Quantities

3.2.1 Only waste types detailed in Column 1 of Table 3.1 shall be accepted at the site.

3.2.2 The following waste types shall not be accepted at the site:-

(a) Clinical waste as defined in the Controlled Waste Regulations 1992, as amended.

(b) Special waste as defined in the Special Waste Regulations 1996, as amended, with the exception of waste listed in Table 3.1 of this licence.

(c) Putrescible waste.

(d) PCB or PCT bearing waste shall not be accepted without the prior notification and written agreement of SEPA.

3.2.3 The quantities of waste accepted at the site on any day shall not exceed those detailed in Column 2 of Table 3.1. The quantities of waste accepted at the site in any year shall not exceed those detailed in Column 3 of Table 3.1.

3.3 Hours of Operation

3.3.1 The site shall only receive waste within the following hours -

Monday to Friday	07:00 hours – 19:00 hours
Saturday	07:00 hours – 17:00 hours
Sunday	08:00 hours – 17:00 hours

3.3.2 Waste specific activities shall only take place within the following hours -

Monday to Friday	07:00 hours – 19:00 hours
Saturday	07:00 hours - 17:00 hours
Sunday	08:00 hours – 17:00 hours

3.4 Commencement of Operations

3.4.1 SEPA shall be advised in writing of the date the Permitted Installation is to become operational and receive waste at least 7 days before the Permitted Installation becomes operational and receives waste.

3.5 Start Up

3.5.1 The Operator shall implement and maintain "the Start Up Plan" as provided in the Application.

3.5.2 At least every 4 years, the Operator shall review the Start Up Plan. Each review of the said Start Up Plan shall be recorded and where the Operator makes any revisions to the said plan, said revisions shall be recorded.

3.6 Temporary Cessation of Operations

3.6.1 Any temporary cessation of operations in excess of two weeks shall be notified to SEPA in writing. SEPA shall be given at least one day's prior notice of the Permit Holder's intention to recommence operations after such a temporary cessation.

3.7 De-commissioning

3.7.1 The Operator shall maintain "the De-commissioning Plan" as provided in the Application. The De-commissioning Plan shall set out the steps to be taken by the Operator after the final cessation of the Permitted Activities.

3.7.2 The Operator shall notify SEPA in writing of its intention to cease the Permitted Activities, or any part thereof, for any period exceeding 12 months, no later than 1 month prior to the proposed date of cessation.

3.7.3 The Operator shall implement the De-commissioning Plan on final cessation of the Permitted Activities or any part thereof.

3.7.4 The Operator shall review, record, and where necessary, update the De-commissioning Plan as follows: -

3.7.4.1 at least every 4 years; and

3.7.4.2 where the Operator plans to make a substantial change in the extent or nature of the Permitted Installation.

3.8 Staffing and Management

3.8.1 All staff engaged in carrying on the Permitted Activities shall be provided with adequate professional and technical development and training and written operating instructions to enable them to carry on their duties.

3.8.2 The Operator shall ensure that all staff engaged in carrying on the Permitted Activities are fully conversant with those aspects of the Permit Conditions which are relevant to their duties.

3.8.3 The Operator shall maintain a record of the skills and training requirements for each job and shall keep records of all relevant training.

3.8.4 The Permitted Installation shall be managed and supervised by a designated technically competent person to ensure that the conditions of the Permit are being complied with.

3.8.5 The Operator shall inform SEPA in writing of all persons, and their qualifications, engaged in the operation or management of the Permitted Installation who are designated as technically competent.

3.8.6 Where the Operator or Another Relevant Person is convicted of an offence prescribed under section 74(6) of the Environmental Protection Act 1990 for the purposes of section 74(3)(a) of the Environmental Protection Act 1990 the Operator shall notify SEPA in writing within 7 days of the conviction, whether or not the conviction is subsequently appealed.

3.8.7 When the Permitted Installation is open to receive waste the Permitted Installation shall be staffed by at least 2 members of staff.

3.9 Infrastructure

3.9.1 All roads and surfaces shall be constructed and maintained in a condition such that their use is not compromised by debris, ruts, potholes or ponded surface water.

3.9.2 Wheel cleaning facilities shall be installed and maintained at the site.

3.9.3 The site shall be maintained in a secure condition to prevent unauthorised access.

3.9.4 A site notice board of durable material and finish shall be displayed at the site entrance. The noticeboard shall contain the under noted information, which information shall be legible from outwith the site boundary:-

- Permitted Installation name, address and permit number
- Permit Holder's name
- site opening times
- emergency contact telephone number for the Permit Holder
- telephone number of the SEPA area office and the SEPA emergency telephone number

3.9.5 Legible signs of a durable material and finish shall be prominently displayed throughout the site to ensure that users of the installation are aware of:-

- traffic routing and access restrictions
- the location of the various facilities
- all areas of high risk

3.10 Storage of Liquids

3.10.1 All containers used to store any liquids shall be located in a bund. The minimum capacity of any bund shall be either 110% of the capacity of the largest container, or 25% of the total capacity of all the containers within the bund, which-ever is the greater. In the event of any containers being connected to one another, they shall be treated as one container.

3.10.2 The bunded area(s) and containers shall conform to the following standards:-

- the walls and base of the bund shall be impermeable
- the base shall drain to a sump
- when not in use all taps, valves, pipes and every part of each container shall be located within the area served by the bund.
- vent pipes shall be directed downwards into the bund
- no part of the bund shall be within 10 metres of a watercourse
- all containers with a design capacity above 1250 litres shall be fitted with a device for continuously monitoring the level of the contents

3.10.3 The accumulation of rainwater, spillages or leaks shall be managed to ensure that at least 95% of the capacity of the bund is free of liquid.

3.11 Weighbridge

3.11.1 A weighbridge shall be provided at the Permitted Installation.

3.12 Secure Compound

3.12.1 An area within the Site Boundary shall be provided for isolating non-conforming wastes. This area shall have an impermeable surface designed to ensure that no liquid fraction can escape beyond this area.

3.12.2 Secure chemical storage units shall be provided for holding wastes that have been received but do not conform with the Permit conditions. Each secure chemical storage unit shall be clearly and permanently identified as to show the waste category which it is designed to store.

3.13 Lighting

3.13.1 At all times the Permitted Installation is open to the public or operations are being carried out on site average and minimum luminance detailed in Table 3.2 below must be achieved.

3.13.2 If lighting systems are used to comply with the standards they must be maintained in working order.

3.14 Impermeable Pavement and Drainage

3.14.1 All working surfaces shall be impermeable to water and laid to falls that direct surface run-off to a purpose designed drainage system.

3.14.2 The impermeable pavement(s) shall be constructed of concrete or similar material and be laid to a fall so as to direct pavement water run-off to a sealed drainage system and oil interceptor. The impermeable pavement shall be of such a design that any spillage on it or run-off from it is fully contained and cannot escape onto adjacent ground.

3.14.3 Site drainage shall be provided and maintained to ensure that:-

- rainfall run-off from surrounding areas does not drain into the waste
- contaminated surface water run-off does not enter watercourses
- the site does not become subject to ponding or waterlogging

3.15 Site Office

3.15.1 A site office facility equipped with an effective communication system shall be provided and maintained.

Table 3.1 – Accepted Waste and Quantities

Column 1	Column 2	Column 3
Waste Accepted	**Daily Tonnage**	**Yearly Tonnage**
Hazardous solid wastes		
Hydrocarbon contaminated solids, including paper/ plastic filters, metal based filters, spillage booms, spillage mats, spillage absorbent granules, metal parts, plastic, wood, plastic bags, paper wipes, rubber hoses and plastic hoses and rags	100	43000
Hydrocarbon contaminated soils	100	5000
Water based paints and inks	20	2000

Batteries	5	300
Aerosols	2	100
Total	**227**	**50400**
Hazardous liquid wastes		
Oily sludge	60	6000
Waste mineral oil	40	3750
Bilge waters	60	15000
Contaminated liquids (H4, H5)	30	5000
Wastes arising from interceptor cleaning	40	2000
Brake/cleaning fluids and mixed fuels	3	100
Total	**233**	**31850**
Non-hazardous solid waste		
Tyres	8	200
Total	**8**	**200**
Non-hazardous liquid waste		
Sewage	60	15000
Water based inks and paints	70	2000
High COD liquids	40	2000
Contaminated liquids	30	5000
Total	**200**	**24000**

Table 3.2 – Luminance

Area	Average Luminance Lx	Minimum Measured Luminance Lx
1. Movement of people, vehicles, plant, machines	50 (measured at ground level)	20 (measured at ground level)
2. Waste Inspection	200 (measured at waste level)	100 (measured at waste level)

4 CONDITIONS APPLYING TO THE RECEPTION OF WASTE AT THE PERMITTED INSTALLATION AS A WHOLE

4.1 Waste Acceptance

4.1.1 The Operator shall monitor all wastes entering the site (including weight recording of waste loads) to ensure that they are within the types/quantities permitted under the conditions of this Permit. Vehicles shall not be permitted to proceed to the storage/treatment area unless the source of waste has been ascertained and where practicable, the load visually inspected by a suitably trained member of staff and found to comply with the requirements of this permit.

4.1.2 All waste received shall be further inspected by a suitably trained member of staff when it is stored/treated, to check that the waste is permitted for acceptance under the conditions of this Permit. Any waste found not to conform to the conditions of this permit detected during this inspection shall be immediately removed to the secure compound.

4.2 Procedure for Rejected Loads

4.2.1 Where the Operator refuses any person permission to deposit waste at the site the Operator shall take all reasonable steps to obtain the following details: name and address of person, registration number of vehicle, quantity and type of waste, date and time of refusal. Details of the occurrence shall be passed to SEPA forthwith.

4.3 Labelling of Storage Areas.

4.3.1 All waste storage areas shall be clearly labelled. The label shall identify the material stored in the area and any hazardous properties. This information shall be legible from outwith the storage area.

5 CONDITIONS APPLYING TO THE OPERATION OF THE PERMITTED INSTALLATION AS A WHOLE

5.1 Plant, Machinery, Equipment and Instrumentation

5.1.1 All plant, machinery, equipment and instrumentation used at the Permitted Installation shall be operated, maintained and inspected in accordance with the manufacturer's instructions. Should the plant, machinery, equipment or instrumentation for any reason become unserviceable or inoperable, its replacement, repair or arrangements for its repair shall be put in hand forthwith.

5.2 Disposal of Compatible Wastes

5.2.1 Different categories of hazardous wastes, or hazardous wastes and non hazardous wastes shall not be mixed at the installation other than using processes and methods which shall ensure that such mixing does not endanger human health or harm the environment.

5.2.2 Waste oil shall not be mixed with toxic or dangerous waste or PCBs or PCTs.

5.2.3 Any regeneration of waste oils shall be carried out using such methods and processes as are necessary to ensure that the base oils derived from such regeneration do not constitute a toxic and dangerous waste and do not contain PCBs or PCTs in concentrations exceeding 50 parts per million.

5.3 Leakages/Spills

5.3.1 Any spillages of waste, fuel or other liquids shall be cleaned up forthwith. A supply of a suitable absorbent material shall be kept on site to deal with any such spillages.

5.4 Site Management

5.4.1 At the end of the working day the storage area shall be free of debris and litter.

5.4.2 At the end of each working day, all skips/containers containing waste which are to remain on site shall be covered.

5.4.3 All storage areas shall be cleared of all wastes at least once every 3 months and the area thoroughly cleaned. Details of such cleaning shall be recorded in the Site Diary.

5.5 Waste Reception

5.5.1 Drummed/IBC Waste

5.5.1.1 A representative sample shall be taken of each consignment of waste and assessed in accordance with the Permit for conformity with the waste description provided. The results of each waste sample shall be recorded.

5.5.1.2 Any records made as a result of condition 5.5.1.1 above shall be kept on site for inspection by SEPA. Historical records shall be kept for three years.

5.5.1.3 Waste samples shall be clearly labelled to detail the waste producer, batch number and the date of receipt. Samples shall be retained for a period of 60 days.

5.5.1.4 The physical condition and integrity of all drums/IBCs shall be inspected immediately upon receipt and the results recorded in the site diary. Any drum/IBC showing evidence of physical damage, corrosion, badly fitting closures or leaks shall be isolated in a contained area pending transfer to a suitable container and the details recorded in the site diary.

5.5.1.5 Drummed/IBC waste shall be unloaded from vehicles within 24 hours of receipt of the waste. Drums/IBCs shall be transferred to a bunded area immediately upon the unloading of the waste.

5.5.1.6 All drummed/IBC waste containers shall be suitably marked to detail the contents, consignment note reference number and the date of receipt.

5.5.2 Bulk Tanker Waste

5.5.2.1 A parking area shall be designed where vehicles carrying incoming loads may be stored, until their contents have been sampled and analysed.

5.5.2.2 No consignment of bulk waste shall be unloaded until an assessment has verified that the contents conform to the description.

5.5.2.3 A representative core sample shall be taken from each consignment of waste delivered in bulk tanker and assessed for conformity with the waste description provided. The results of each bulk waste sample shall be recorded.

5.5.2.4 Any records made as a result of condition 5.5.2.3 above shall be kept on site for inspection by SEPA. Historical records shall be kept for three years.

5.5.2.5 Bulk waste samples shall be clearly labelled to detail the waste producer, batch number and the date of receipt. Samples shall be retained for a period of 60 days.

5.5.2.6 All bulk wastes accepted at the site shall be transferred to a storage/treatment tank within 24 hours of receipt of the waste. An enclosed system for discharging from tanker to storage/treatment tank shall be utilised.

5.6 Waste Storage

5.6.1 Wastes shall not be accepted onto the site unless there is sufficient capacity for their safe and secure storage.

5.6.2 Hazardous waste shall not remain on site for a period exceeding two months. Non-hazardous waste shall not remain on site for a period exceeding three months, except with the prior approval of SEPA.

5.6.3 All storage and treatment tanks shall be clearly labelled with identification numbers.

5.6.4 All storage and treatment tanks shall be examined on an annual basis for evidence of any damage, corrosion and unseen leakage and the findings recorded in the site diary.

5.6.5 The contents and quantity of waste held in each tank shall be recorded on a stock control record board and the tank clearly labelled to identify the waste.

5.6.6 The storage of solid waste arisings shall be confined to sealed skips/containers.

5.6.7 Batteries shall be stored in an impermeable bunded storage area whilst awaiting removal from the site. The bunded storage areas shall either be roofed or be kept free of any accumulation of rainwater. Any accumulation of contaminated liquid shall be removed to a suitably licensed facility.

5.6.8 Tyres shall be stored within a dedicated storage bay. This area shall be clearly sign posted.

5.6.9 Hydrocarbon contaminated soil and hydrocarbon contaminated solids shall be stored withinin separate bunded storage bays. These bays shall be clearly signposted.

5.6.10 Hydrocarbon contaminated soil and hydrocarbon contaminated solids shall not be stored above the height of the storage bay wall, and the front face of the waste shall be laid at such an angle that there is no likelihood of waste falling outwith the bay.

5.7 Waste Transfer Operations

5.7.1 All waste stored in drums/IBCs shall be stored within bunded storage bays. Drums/IBCs shall not be stacked greater than two high.

5.7.2 The bunded storage areas shall either be roofed or be kept free of any accumulation of rainwater. Any accumulation of contaminated liquid shall be removed to a suitably licensed facility.

5.7.3 The area for storing drummed and IBC waste shall be clearly signposted. Waste stored in this area shall be assessed, and categorised and stored in such a manner that incompatible wastes are kept separate.

5.7.4 Any leaking containers delivered to the site shall be placed in larger, secure containers, before transfer to the appropriate storage area.

5.7.5 All containers containing waste shall be clearly labelled to identify their contents. Any misleading labels shall be obliterated or removed.

5.7.6 Waste containers shall be kept closed at all times other than when they are being inspected and sampled.

5.7.7 There shall be no treatment of transfer station waste materials, only bulking of these wastes shall take place.

5.7.8 An area shall be provided for the storage of nominally empty drums/IBCs. Drums/IBCs stored in this area shall be kept in an upright position and shall not be stacked more than three high.

5.8 Waste Treatment Operations

5.8.1 Waste treatment at the site shall be undertaken in accordance with the conditions of this Permit.

5.8.2 Should there be a requirement to evaluate or operate a new waste treatment process or plant, or to amend any existing waste procedure, then a written request shall be submitted to SEPA and written approval obtained prior to it's operation.

5.8.3 No waste shall be transferred into any storage/treatment tank except where an assessment has been carried out sufficient to demonstrate that the receiving vessel has been suitably prepared to receive the waste.

5.8.4 The contents of any storage/treatment tank, drum, IBC or other container shall not be mixed with any other waste until representative samples of each waste have been tested to verify their compatibility.

5.8.5 No liquid effluent from waste treatment shall be discharged to the effluent holding tanks until an assessment has been carried out, sufficient to demonstrate that the waste has been fully processed.

5.8.6 Only empty or nominally empty drums and IBCs may be crushed at the site.

5.9 Upgrade Requirements

5.9.1 Impermeable Pavement and Drainage

5.9.1.1 Any remedial action or upgrading identified by the assessment of site surfaces and drainage carried out shall be agreed in writing with SEPA and shall be completed within 6 months of the date of Permit issue or as otherwise agreed in writing with SEPA.

5.9.2 Storage of Liquids

5.9.2.1 Within 6 months from the date of Permit issue the operator shall undertake and complete an assessment of the condition of site bunding and tanks/containers, sufficient to demonstrate that all bunding and tanks/containers are complying with conditions 3.10.1 – 3.10.2 of the Permit. Written details of the assessment shall be provided to SEPA no later than 14 days from completion of the assessment.

5.9.2.2 Any remedial action or upgrading identified by the assessment required by condition 5.9.2.1 above shall be agreed in writing with SEPA and shall be completed within 6 months of the date the assessment was carried out or as otherwise agreed in writing with SEPA.

5.9.3 Emissions to Air

5.9.3.1 Within 6 months from the date the oil sludge treatment plant is fully operational the Operator shall carry out and complete an assessment of fugitive and/or point source emissions to air from this plant. Written details of this assessment shall be provided to SEPA no later than 14 days from completion of the assessment.

5.9.3.2 Any remedial action or upgrading identified by the assessment required by condition 5.9.3.1 above shall be agreed in writing with SEPA and shall be completed within 6 months of the date the assessment was carried out or as otherwise agreed in writing with SEPA.

5.9.3.3 Within 6 months from the date of Permit issue the Operator shall carry out and complete an assessment of significant point source emissions to air from site activities. Written details of this assessment shall be provided to SEPA no later than 14 days from completion of the assessment.

5.9.3.4 Any remedial action or upgrading identified by the assessment required by condition 5.9.3.3 above shall be agreed in writing with SEPA and shall be completed within 6 months of the date the assessment was carried out or as otherwise agreed in writing with SEPA.

5.9.3.5 Within 6 months from the date of Permit issue the Operator shall carry out and complete an assessment of significant fugitive emissions to air from site activities. Written details of this assessment shall be provided to SEPA no later than 14 days from completion of the assessment.

5.9.3.6 Any remedial action or upgrading identified by the assessment required by condition 5.9.3.5 above shall be agreed in writing with SEPA and shall be completed within 6 months of the date the assessment was carried out or as otherwise agreed in writing with SEPA.

5.9.3.7 A stock management and control system for ensuring appropriate and systematic storage and processing of hydrocarbon contaminated solids shall be developed and implemented within 6 months from the date of Permit issue. This shall include a stock rotation management system based on the first in first out principle for any materials stored under cover.

6 CONDITIONS APPLYING TO POLLUTION ABATEMENT AT THE PERMITTED INSTALLATION AS A WHOLE

6.1 Protection of Soil and Groundwater

6.1.1 Unless specified elsewhere in this Permit there shall be no emission of any Pollutants to groundwater or soil from the Permitted Installation.

6.1.2 The Operator shall maintain a record of any incident that has, or might have, impacted on the condition of any soil or groundwater under the Permitted Installation, either as a result of that incident or as a result of an accumulation of incidents, together with a record of any further investigation or remediation work carried out. (See Conditions 2.5.1- 2.5.4)

6.1.3 Notwithstanding the requirements of Condition 2.2.3, the record required by Condition 6.1.2 shall be preserved until this Permit is surrendered.

6.1.4 The Operator shall maintain plan(s) that identify the configuration and specification of all drains and subsurface pipe-work and the position and purpose of all sub-surface sumps and storage vessels that are used or have been used within the Permitted Installation from the date of this Permit until the Permit is surrendered.

6.2 Controlled Waters and Sewer Discharge Conditions

6.2.1 No emissions arising from the Permitted Activity shall be discharged directly to controlled waters from the Permitted Installation.

6.2.2 The Emissions to sewer shall be as specified in Scottish Water Consent to a discharge of a trade effluent Direction Registrations Number R/94/335, Premises Reference Number 10052A as varied from time to time.

6.2.3 The date, time and results of all samples and measurements carried out by the Operator or another authority shall be recorded by the Operator and reported in writing to SEPA.

6.3 Noise and Vibration

6.3.1 The Operator shall implement and maintain the noise and vibration management plan ("the Noise and Vibration Management Plan") as provided in the Application.

6.3.2 At least every 2 years, the Operator shall carry out a systematic assessment and review of noise and vibration emissions associated with the Permitted Activities, the purpose of which shall be to identify methods of reducing noise and vibration emissions. Each assessment shall be recorded and reported to SEPA in writing no later than 14 days from completion of the assessment.

6.3.3 The Noise and Vibration Management Plan shall be updated following each systematic assessment and review as required by condition 6.3.2, the purpose of which shall be to implement the findings of the assessment in a systematic manner.

6.3.4 The Operator shall notify SEPA in writing of any proposed changes to the Noise and Vibration Management Plan at least 14 days prior to the change being made.

6.3.5 All actions taken in accordance with the Noise and Vibration Management Plan shall be recorded.

6.3.6 All necessary measures shall be taken to minimise pollution arising from the Permitted Installation in respect of noise and vibration, as far as reasonably practicable. These measures shall include, but not be restricted to, those described in the Noise and Vibration Management Plan.

6.4 Odour Conditions

6.4.1 All emissions to air from the Permitted Installation shall be free from offensive odour, as perceived by an Authorised Person, outside the Site Boundary.

6.4.2 Monitoring shall be carried out to assess odour emissions down-wind of the Site, at the Site Boundary, at least daily and during any storage/handling or treatment of waste oil sludge as described at paragraph 1.1.4.2.

6.4.3 The Operator shall record the result of each assessment referred to at Condition 6.4.2. The records shall include the date, time, location, duration and result of the assessment as well as the name of the person making the assessment, the wind direction and strength and the general weather conditions at the time. The record shall further include the operational status of the Installation.

6.4.4 The Operator shall implement and maintain the odour management plan ("the Odour Management Plan") as provided in the Application.

6.4.5 At least every 2 years, the Operator shall carry out a systematic assessment and review of odour emissions associated with the Permitted Activities, the purpose of which shall be to identify methods of reducing odour emissions and their impact. Each assessment shall be recorded and reported to SEPA in writing no later than 14 days from completion of the assessment.

6.4.6 The Odour Management Plan shall be updated following each systematic assessment and review as required by condition 6.4.5, the purpose of which shall be to implement the findings of the assessment in a systematic manner.

6.4.7 The Operator shall notify SEPA in writing on any proposed changes to the Odour Management Plan at least 14 days prior to the change being made.

6.4.8 The revised Odour Management Plan and all actions taken in accordance with the revised Odour Management Plan shall be recorded.

6.5 Dust

6.5.1 All emissions to atmosphere from the Permitted Installation shall be free from visible emissions of particulate matter and fallout of particulate matter beyond the Site Boundary.

6.6 Litter

6.6.1 All operations on the Permitted Installation shall be carried out such that no litter escapes beyond the Site Boundary. On a daily basis any litter lying within the Permitted Installation shall be removed and contained.

6.7 Birds, Vermin & Insects

6.7.1 All operations on the Permitted Installation shall be carried out so as to minimise the nuisance and hazards arising from the Permitted Installation in respect of the presence of birds, vermin and insects. The Permitted Installation shall be inspected at least once every three months by a person suitably qualified and experienced in pest control and a treatment programme shall be undertaken to deal with any identified infestation forthwith.

6.8 Mud on Roads

6.8.1 Vehicles shall not be permitted to leave the site in a condition that would cause mud, oil or debris to be deposited onto the public road.

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7 APPENDIX 1 – LICENSED/PERMITTED SITE RETURNS FORM

Form inserted:

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EXPLANATORY NOTES

(These Explanatory Notes do not form part of the Permit)

1. BAT

It should be noted that Regulation 9(11) & (12) of the Regulations specify that there is an implied Condition in every Permit that, in operating the installation or mobile plant, the Operator shall use the best available techniques (BAT) for preventing or, where that is not practicable, reducing Emissions from the installation or mobile plant.

This implied Condition does not apply in relation to any aspect of the operation of the installation or mobile plant, which is regulated by a specific Condition of the Permit. Examples of aspects of the operation that have not been regulated by specific Conditions are management and supervision systems, training and qualification and maintenance in general.

BAT is defined in Regulation 3 of the Regulations as follows:

"Best available techniques" means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for Emission limit values designed to prevent and, where that is not practicable, generally to reduce Emissions and the impact on the environment as a whole.

"available techniques" means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable Conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the UK, as long as they are reasonably accessible to the operator.

"best" means in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole.

"techniques" includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Schedule 2 of the Regulations specifies the matters to be taken into account in determining BAT.

In considering BAT, SEPA would expect the Operator to have regard to all relevant PPC sectoral or other technical guidance, including BAT Reference Documents published by the European Commission and UK technical guidance published by the Environment Agency.

2. GENERAL STATUTORY REQUIREMENTS

The Permit does not detract from any other statutory requirements applicable to you in respect of the Permitted Installation, such as any need to obtain planning permission or building regulations approval or any responsibilities under legislation for health, safety and welfare in the workplace.

3. APPEALS

If you are aggrieved by any of the Conditions of the Permit, you should initially contact the local SEPA Office at the address or telephone number below. Further information on your right of appeal and the appeals procedure is contained Regulation 22 and Schedule 8 of the Regulations.

4. SUBSISTENCE CHARGES

An annual subsistence charge will be payable in respect of the Permit in terms of the Pollution Prevention and Control (Scotland) Charging Scheme 2002 or any relevant charging scheme made under Section 41 of the Environment Act 1995, copies of which are available from SEPA.

5. ADDRESS AND TELEPHONE NUMBERS

The contact address and telephone number for all information to be reported in terms of the Permit, is as follows: -

Scottish Environment Protection Agency
East Kilbride Office
Redwood Crescent
Peel Park
East Kilbride
G74 5PP

Tel No: 0800 80 70 60 and/or 01355 574 200
Fax No: 01355 574 688

6. REVIEW OF CONDITIONS

The Conditions of the Permit will be periodically reviewed by SEPA.

7. PROPOSED CHANGE IN OPERATION OF INSTALLATION

It is a requirement of Regulation 12 of the Regulations that if you propose to make a change in the operation of the installation, you must notify SEPA at least 14 days before making the change. The requirement under Regulation 12 does not apply if you have already made an application to SEPA for the variation of the Conditions of the Permit containing a description of the proposed change.

N.B. the requirements of Regulation 12 are in addition to any obligations you may have under the Permit itself to only operate the Permitted Installation in the manner set out in the Permit and to notify SEPA of proposed changes to the Permitted Installation.

Regulation 13 and Schedule 7 of the Regulations provide details on applications for variation of the Permit in respect of proposed changes and substantial changes in operation.

"Change in operation" and "substantial change in operation" are defined in Regulation 2 of the Regulations.

8. ENFORCEMENT & OFFENCES

If SEPA is of the opinion that you have contravened, or are contravening or are likely to contravene a Condition of the Permit it may serve an Enforcement Notice. Further details on Enforcement Notices are provided in Regulation 19 of the Regulations.

If SEPA is of the opinion that the operation of an installation or mobile plant involves a risk of serious pollution it must, in certain circumstances, serve a Suspension Notice on you. Further details on Suspension Notices are provided in Regulation 20 of the Regulations.

It is an offence to operate an installation or mobile plant covered by the Regulations without a Permit or in breach of the Conditions of the Permit. It is an offence to fail to comply with the requirements of an Enforcement or Suspension Notice. It is an offence to intentionally make a false entry in any record required to be kept under a Condition of a Permit. Further details on offences and on penalties liable to be imposed upon conviction of an offence are provided in Regulation 30 of the Regulations.

Directors, managers and other individuals within a company may be held personally liable for offences under the Regulations.

All personnel who are responsible for fulfilling any Condition of the Permit should be made aware of these facts.

9. RECORDED SYSTEMS, PROCEDURES OR INFORMATION RECORDING/RETURN REQUIREMENTS

Where a Condition requires any system, procedure or information record/return, the Operator may demonstrate compliance by making use of any relevant existing written system used for any other purpose and which meets the requirements of the relevant Condition.

10. SYSTEMATIC ASSESSMENT (AND REVIEW)

Where a Condition of the Permit requires a "systematic assessment (and review)" the assessment should be undertaken in a methodical and arranged manner. If you require guidance on the scope or extent of any assessment (and review) required to be undertaken, you should contact your local SEPA office at the address or telephone number given above.

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Appendix J Sanctus Remediation Technical Note and Declaration Forms.

Treated Stockpile Reuse Validation Form 001 – TSP09 South

Stockpile ID

Stockpile ID: TSP09 South	Material Volume: Validation Samples Included	800 m^3 8 No.
Tested Location: Treatment Area 01	Stockpile Creation Date: 15/04/2024	Release Date: TBC

Sampling Data (3No. full rounds for validation to release)

Passing Round 1 (Overall Sample Round 3 of 5)	Sample Date: 24/04/2024	Report Number & Date: 24-016293 - 02/05/2024	Lab: Eurofins
Passing Round 2 (Overall Sample Round 4 of 5)	Sample Date: 01/05/2024	Report Number & Date: 24-017477 - 10/05/2024	Lab: Eurofins
Passing Round 3 (Overall Sample Round 5 of 5)	Sample Date: 08/05/2024	Report Number & Date: 24-018602 - 16/05/2024	Lab: Eurofins

Sampling Data

Passing Round 1

Report Number: 24-016293

Report Date: 02/05/2024

Sample ID (Sample Names): TSP09-01B, TSP09-14B, TSP09-15B, TSP09-16B, TSP09-17B, TSP09-18B, TSP09-19B, TSP09-20B

Report ID (Lab): Eurofins

Comments:

Test Results: PASS / ~~FAIL~~

Overall, 3rd round of sampling undertaken from the treated Stockpile. No exceedances seen throughout. Average Total TPH = 196 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Passing Round 2

Report Number: 24-017477

Report Date: 10/05/2024

Sample ID (Sample Names): TSP09-01C, TSP09-14C, TSP09-15C, TSP09-16C, TSP09-17C, TSP09-18C, TSP09-19C, TSP09-20C

Report ID (Lab): Eurofins

Comments:

Test Results: PASS / ~~FAIL~~

Overall, 4th round of sampling undertaken from the treated Stockpile. No exceedances seen throughout. Average Total TPH = 730 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Passing Round 3

Report Number: 24-018602

Report Date: 16/05/2024

Sample ID (Sample Names): TSP09-01D, TSP09-14D, TSP09-15D, TSP09-16D, TSP09-17D, TSP09-18D, TSP09-19D, TSP09-20D

Report ID (Lab): Eurofins

Comments:

Test Results: PASS / ~~FAIL~~

Overall, 5th round of sampling undertaken from the treated Stockpile. No exceedances seen throughout. Average Total TPH = 284 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Data Review

Material split of treated Stockpile 09 and current testing

Following the sampling rounds which began at the end of April 2024, a significant portion of the treated Stockpile 09 was seen to have 3no.consecutive sampling rounds which passed all of the reuse criteria. 40% of the material (sample locations 01, 14 – 20 as seen in Figure 1 below), grouped together in the south of the stockpile achieved the consecutive rounds. The remaining material was interspersed with material which achieved the majority of the reuse criteria, but not all (failures seen within the Total TPH analytes), in such a fashion that the remaining sample locations which were seen as compliant, could not be easily/accurately separated and reused (samples from location 04, 07, 10, 11 and 12).

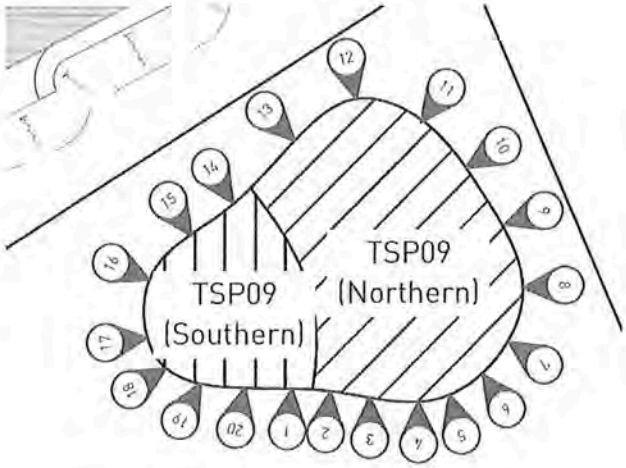
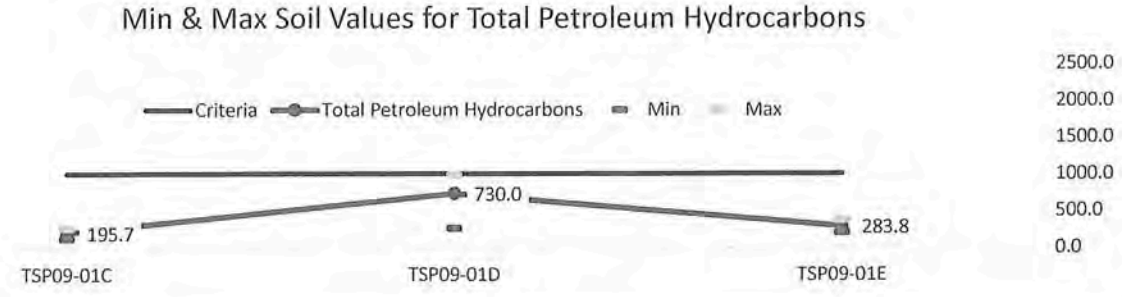


Figure 1 - Sampling locations of treated Stockpile 09

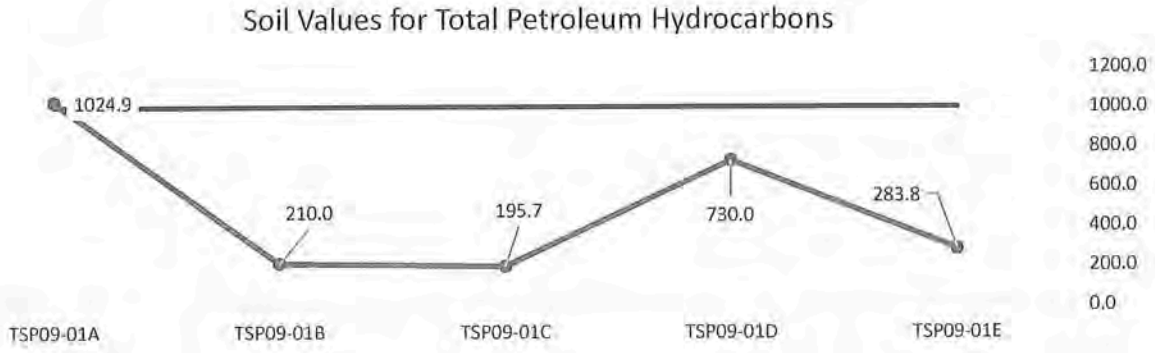
Subsequently, treated Stockpile 09 was split into a northern portion (1,200m³) where treatment and testing will continue and a southern portion (800m³) was deemed as chemically suitable for reuse by Sanctus.

Data Trend for Total TPH levels:



Additional Trendline Data – long term review:

Further to the above spread of data for the final 3 No. rounds, the total TPH levels from April 2024, for the treated stockpile, are shown below. The chart shows a significant decrease in the averaged total TPH levels, and the final result presents a reduction of total TPH level of 72% when compared to the initial material's contents (1,024.9 mg/kg (17th April 2024), compared to 284 mg/kg (29th May 2024)):



Sampling Strategy:

All samples have been taken in compliance with ISO BS 18400, including the following notes:

- Stainless steel/washable sampling devices (trowels, buckets, etc) will be employed for the gathering of the soils samples and cleaned between each sample location so that consecutive samples are not cross-contaminated.
- The sample positions shown above indicate the position relative to the base boundary of the stockpile. All samples are taken from a within the body of the Stockpile, retrieved by an excavator. This is done as a safe sample retrieval option as well as to target an internal representative sample location mid-way from the edge to the centre of the Stockpile, as discussed under BS ISO 18400-104:2018 (Sampling Strategies), subsection 9.
- The subsequent sample depths were between 1-2 m below the Stockpile's surface and a minimum of 4No. characteristic subsamples were taken from an area of approximately 1m^2 of the newly exposed material. The 4No. or more sub-locations were chosen in a X-pattern and the combined testing soil material is described as a composite sample, following a systematic stratified random sub-sampling location of a 3-dimensional source.
- The mechanically retrieved material is then sub-sampled into the required sampling jars/pots by the Sanctus Engineer as a representative sample from the numbered location.

Sanctus Declaration:

We confirm that:

1. The material that this form relates to, has been sampled representatively, as discussed above and in accordance with the client's requirements (Ardrossan Remediation Specification Rev E).
2. The material has been proven to be suitable for REUSE on site as there are 3 No. consecutive rounds, with a statistical insignificant number of exceedances of the accepted reuse criteria. No exceedances are seen within the all three monitoring rounds and each round's average for the total TPH levels have been significantly below the 1,000 mg/kg threshold level.
3. The laboratory analysis results are representative of the materials investigated.
4. The material released will also be recorded spatially at its reuse location

NAME: [redacted]
POSITION: Senior Environmental Engineer
DATE: 07/10/2024
SIGNED:

X [redacted]

[redacted]
Senior Environmental Engineer
Signed by: [redacted]

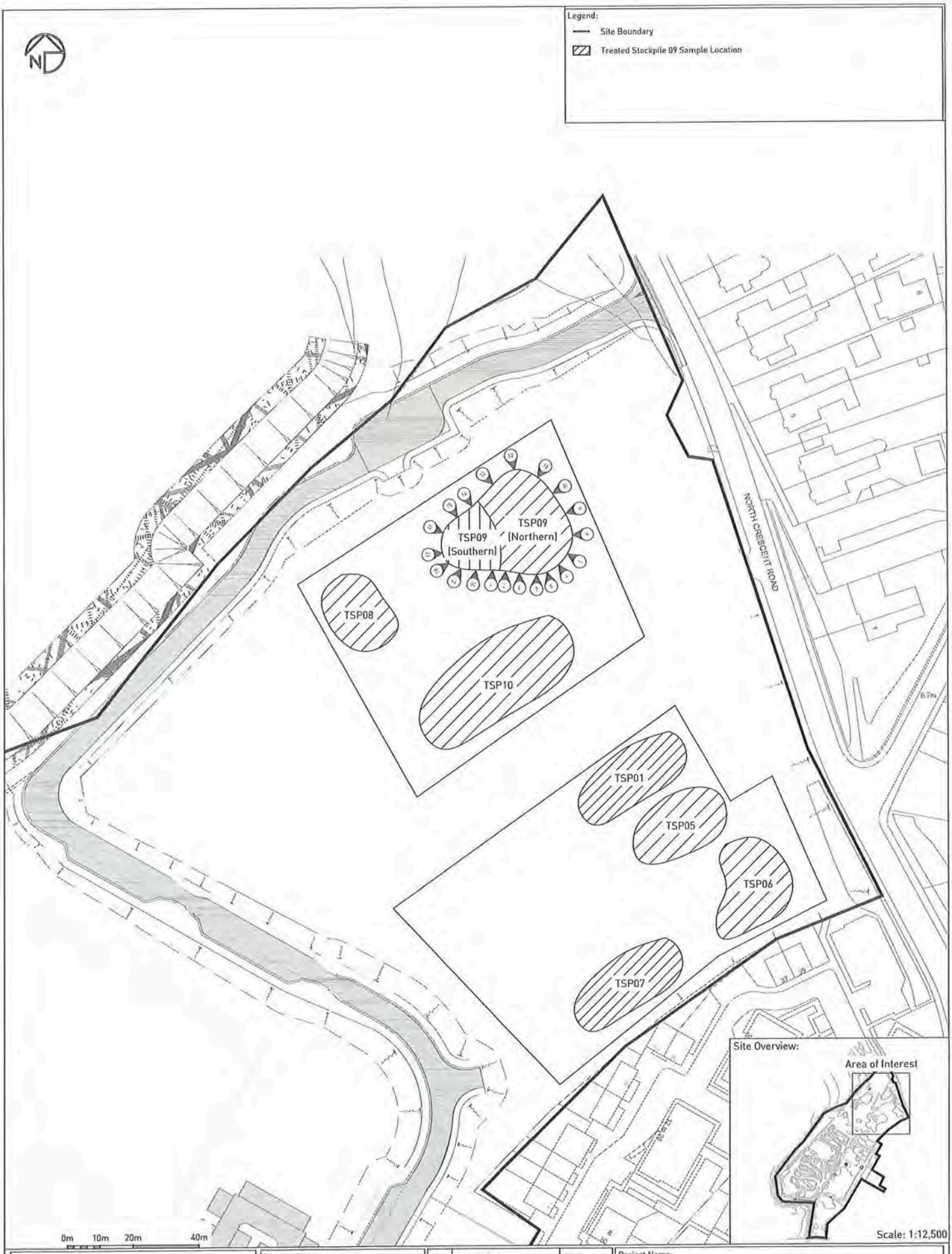
Record of reuse

For Sanctus Use Only:

Approved for reuse:

Beginning of Movement from stockpile:

End of Movement into site:



sanctus
Sanctus House, 1 Olympus Park Business Centre,
Quedgeley, Glos, GL2 4DH
T: 01453 828222
E: info@sanctusltd.co.uk www.sanctusltd.com

Drawing Notes:
Based on client supplied DWG - ARDROSSAN 2D produced by Aird Group 23/03/2020. All locations are approximate. Must be printed in colour.

Site Address:
Raylight Place
Ardrossan
North Ayrshire
Scotland

Rev.	Description	Date
A	First Issue	13/06/2024

APPROVED

Project Name: North Shore, Ardrossan
Client: North Ayrshire Council
Drawing Title: Treated Stockpile 09 Sample Locations

Contract No:	Drawing No:	Scale @ A3:
S3240	D3240/061	1:1000
Drawn By: [redacted]	QC Check By: [redacted]	Approved By: [redacted]

Sample ID	Test Reference	Stockpile Reference	Date Sampled	Total Petroleum Hydrocarbons	Aliphatic TPH >C5-C6	Aliphatic TPH >C6-C8	Aliphatic TPH >C8-C10	Aliphatic TPH >C10-C12	Aliphatic TPH >C12-C16	Aliphatic TPH >C16-C21	Aliphatic TPH >C21-C35	Aromatic TPH >C5-C7	Aromatic TPH >C7-C8	Aromatic TPH >C8-C10	Aromatic TPH >C10-C12	Aromatic TPH >C12-C16	Aromatic TPH >C16-C21	Aromatic TPH >C21-C35
Units				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOD				10	0.02	0.02	0.05	1	2	8	6	0.01	0.01	0.05	1	2	10	10
Screening Criteria				1000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1000	1000	110	250	[illegible]	[illegible]	172,47	[illegible]	1000
[illegible] Value				2000	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	24	160	[illegible]
TSP09-01B	24-016293	TSP09 South	24/04/2024	280	< 0.020	< 0.020	< 0.050	3.1	39	52	59	< 0.010	< 0.010	< 0.050	< 1.0	15	37	57
TSP09-02B	24-016293	TSP09 North	24/04/2024	< 10	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	< 8.0	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	< 10
TSP09-03B	24-016293	TSP09 North	24/04/2024	100	< 0.020	< 0.020	< 0.050	< 1.0	12	18	15	< 0.010	< 0.010	< 0.050	< 1.0	6.4	18	26
TSP09-04B	24-016293	TSP09 North	24/04/2024	< 10	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	< 8.0	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	< 10
TSP09-05B	24-016293	TSP09 North	24/04/2024	100	< 0.020	< 0.020	< 0.050	1.4	17	24	23	< 0.010	< 0.010	< 0.050	< 1.0	4.4	14	16
TSP09-06B	24-016293	TSP09 North	24/04/2024	< 10	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	< 8.0	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	< 10
TSP09-07B	24-016293	TSP09 North	24/04/2024	160	< 0.020	< 0.020	< 0.050	1.6	17	28	37	< 0.010	< 0.010	< 0.050	< 1.0	8	23	37
TSP09-08B	24-016293	TSP09 North	24/04/2024	240	< 0.020	< 0.020	< 0.050	2	13	38	81	< 0.010	< 0.010	< 0.050	< 1.0	2.5	15	52
TSP09-09B	24-016293	TSP09 North	24/04/2024	200	< 0.020	< 0.020	< 0.050	< 1.0	9.1	28	62	< 0.010	< 0.010	< 0.050	< 1.0	4.6	14	51
TSP09-10B	24-016293	TSP09 North	24/04/2024	200	< 0.020	< 0.020	< 0.050	< 1.0	5.1	26	71	< 0.010	< 0.010	< 0.050	< 1.0	4.3	13	47
TSP09-11B	24-016293	TSP09 North	24/04/2024	48	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	< 8.0	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	30
TSP09-12B	24-016293	TSP09 North	24/04/2024	150	< 0.020	< 0.020	< 0.050	< 1.0	8	17	58	< 0.010	< 0.010	< 0.050	< 1.0	2.1	< 10	36
TSP09-13B	24-016293	TSP09 North	24/04/2024	190	< 0.020	< 0.020	< 0.050	1.1	7.5	25	70	< 0.010	< 0.010	< 0.050	< 1.0	4.2	13	42
TSP09-14B	24-016293	TSP09 South	24/04/2024	150	< 0.020	< 0.020	< 0.050	< 1.0	4.5	18	45	< 0.010	< 0.010	< 0.050	< 1.0	2.9	11	45
TSP09-15B	24-016293	TSP09 South	24/04/2024	220	< 0.020	< 0.020	< 0.050	1	9	26	69	< 0.010	< 0.010	< 0.050	< 1.0	4.1	22	62
TSP09-16B	24-016293	TSP09 South	24/04/2024	200	< 0.020	< 0.020	< 0.050	< 1.0	10	30	79	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	11	44
TSP09-17B	24-016293	TSP09 South	24/04/2024	230	< 0.020	< 0.020	< 0.050	1.1	8.1	28	73	< 0.010	< 0.010	< 0.050	1.6	3.9	14	66
TSP09-18B	24-016293	TSP09 South	24/04/2024	210	< 0.020	< 0.020	< 0.050	< 1.0	10	28	73	< 0.010	< 0.010	< 0.050	< 1.0	2.6	13	49
TSP09-19B	24-016293	TSP09 South	24/04/2024	140	< 0.020	< 0.020	< 0.050	< 1.0	5.5	19	47	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	41
TSP09-20B	24-016293	TSP09 South	24/04/2024	250	< 0.020	< 0.020	< 0.050	1.4	11	29	86	< 0.010	< 0.010	< 0.050	< 1.0	2.6	15	60
TSP09-01C	24-017477	TSP09 South	01/05/2024	200	< 0.020	< 0.020	< 0.050	< 1.0	8	19	52	< 0.010	< 0.010	< 0.050	< 1.0	2	12	50
TSP09-02C	24-017477	TSP09 North	01/05/2024	390	< 0.020	< 0.020	< 0.050	< 1.0	15	40	96	< 0.010	< 0.010	< 0.050	< 1.0	5.5	32	110
TSP09-03C	24-017477	TSP09 North	01/05/2024	160	< 0.020	< 0.020	< 0.050	< 1.0	8.8	18	43	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	13	44
TSP09-04C	24-017477	TSP09 North	01/05/2024	330	< 0.020	< 0.020	< 0.050	< 1.0	11	30	89	< 0.010	< 0.010	< 0.050	< 1.0	3.2	26	95
TSP09-05C	24-017477	TSP09 North	01/05/2024	160	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	17	< 0.010	< 0.010	< 0.050	< 1.0	3.2	20	75
TSP09-06C	24-017477	TSP09 North	01/05/2024	270	< 0.020	< 0.020	< 0.050	< 1.0	3.3	15	53	< 0.010	< 0.010	< 0.050	< 1.0	5.5	30	100
TSP09-07C	24-017477	TSP09 North	01/05/2024	770	< 0.020	< 0.020	< 0.050	< 1.0	25	77	220	< 0.010	< 0.010	< 0.050	< 1.0	6.1	52	220
TSP09-08C	24-017477	TSP09 North	01/05/2024	450	< 0.020	< 0.020	< 0.050	< 1.0	17	46	130	< 0.010	< 0.010	< 0.050	< 1.0	4.8	31	120
TSP09-09C	24-017477	TSP09 North	01/05/2024	650	< 0.020	< 0.020	< 0.050	< 1.0	26	68	180	< 0.010	< 0.010	< 0.050	< 1.0	7.5	49	180
TSP09-10C	24-017477	TSP09 North	01/05/2024	900	< 0.020	< 0.020	< 0.050	< 1.0	31	89	250	< 0.010	< 0.010	< 0.050	< 1.0	8.4	62	260
TSP09-11C	24-017477	TSP09 North	01/05/2024	68	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	< 8.0	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	32
TSP09-12C	24-017477	TSP09 North	01/05/2024	510	< 0.020	< 0.020	< 0.050	< 1.0	26	59	140	< 0.010	< 0.010	< 0.050	< 1.0	8.1	40	140
TSP09-13C	24-017477	TSP09 North	01/05/2024	180	< 0.020	< 0.020	< 0.050	< 1.0	8	18	35	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	16	60
TSP09-14C	24-017477	TSP09 South	01/05/2024	120	< 0.020	< 0.020	< 0.050	< 1.0	6.1	14	25	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	11	40
TSP09-15C	24-017477	TSP09 South	01/05/2024	260	< 0.020	< 0.020	< 0.050	2.2	17	30	67	< 0.010	< 0.010	< 0.050	< 1.0	3.3	20	72
TSP09-16C	24-017477	TSP09 South	01/05/2024	< 10	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	< 8.0	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	< 10
TSP09-17C	24-017477	TSP09 South	01/05/2024	170	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	9.1	38	< 0.010	< 0.010	< 0.050	< 1.0	3.9	18	67
TSP09-18C	24-017477	TSP09 South	01/05/2024	210	< 0.020	< 0.020	< 0.050	< 1.0	2.8	18	60	< 0.010	< 0.010	< 0.050	< 1.0	3.7	18	63
TSP09-19C	24-017477	TSP09 South	01/05/2024	180	< 0.020	< 0.020	< 0.050	< 1.0	4.8	16	44	< 0.010	< 0.010	< 0.050	< 1.0	4.2	19	56
TSP09-20C	24-017477	TSP09 South	01/05/2024	230	< 0.020	< 0.020	< 0.050	< 1.0	8.1	26	60	< 0.010	< 0.010	< 0.050	< 1.0	2.6	20	72
TSP09-01D	24-018602	TSP09 South	08/05/2024	980	< 0.020	< 0.020	< 0.050	3.1	41	120	280	< 0.010	< 0.010	< 0.050	1.1	7.5	80	290
TSP09-02D	24-018602	TSP09 North	08/05/2024	1400	< 0.020	< 0.020	< 0.050	1.3	62	160	350	< 0.010	< 0.010	< 0.050	< 1.0	13	120	440
TSP09-03D	24-018602	TSP09 North	08/05/2024	2000	< 0.020	< 0.020	< 0.050	4.2	120	270	550	< 0.010	< 0.010	< 0.050	1.3	13	160	580
TSP09-04D	24-018602	TSP09 North	08/05/2024	490	< 0.020	< 0.020	< 0.050	< 1.0	9.6	31	110	< 0.010	< 0.010	< 0.050	< 1.0	10	43	190
TSP09-05D	24-018602	TSP09 North	08/05/2024	1000	< 0.020	< 0.020	< 0.050	< 1.0	40	110	250	< 0.010	< 0.010	< 0.050	1.8	19	100	330
TSP09-06D	24-018602	TSP09 North	08/05/2024	1300	< 0.020	< 0.020	< 0.050	2	57	160	360	< 0.010	< 0.010	< 0.050	< 1.0	18	120	390
TSP09-07D	24-018602	TSP09 North	08/05/2024	840	< 0.020	< 0.020	< 0.050	< 1.0	37	100	230	< 0.010	< 0.010	< 0.050	< 1.0	12	75	250
TSP09-08D	24-018602	TSP09 North	08/05/2024	1600	< 0.020	< 0.020	< 0.050	4.6	87	210	440	< 0.010	< 0.010	< 0.050	1.5	20	140	480
TSP09-09D	24-018602	TSP09 North	08/05/2024	1700	< 0.020	< 0.020	< 0.050	3.8	90	190	380	< 0.010	< 0.010	< 0.050	1.6	24	160	570
TSP09-10D	24-018602	TSP09 North	08/05/2024	730	< 0.020	< 0.020	< 0.050	3	44	81	160	< 0.010	< 0.010	< 0.050	< 1.0	14	73	260
TSP09-11D	24-018602	TSP09 North	08/05/2024	720	< 0.020	< 0.020	< 0.050	< 1.0	22	66	170	< 0.010	< 0.010	< 0.050	< 1.0	5.7	60	270
TSP09-12D	24-018602	TSP09 North	08/05/2024	940	< 0.020	< 0.020	< 0.050	2.3	45	99	220	< 0.010	< 0.010	< 0.050	< 1.0	17	90	310
TSP09-13D	24-018602	TSP09 North	08/05/2024	1200	< 0.020	< 0.020	< 0.050	2	68	140	310	< 0.010	< 0.010	< 0.050	< 1.0	16	110	360
TSP09-14D	24-018602	TSP09 South	08/05/2024	700	< 0.020	< 0.020	< 0.050	< 1.0	31	79	170	< 0.010	< 0.010	< 0.050	< 1.0	11	66	220
TSP09-15D	24-018602	TSP09 South	08/05/2024	670	< 0.020	< 0.020	< 0.050	1.1	22	68	170	< 0.010	< 0.010	< 0.050	< 1.0	9.1	55	220
TSP09-16D	24-018602	TSP09 South	08/05/2024	790	< 0.020	< 0.020	< 0.050	3.2	45	100	190	< 0.010	< 0.010	< 0.050	< 1.0	5.7	72	250
TSP09-17D	24-018602	TSP09 South	08/05/2024	660	< 0.020	< 0.020	< 0.050	2.7	37	75	170	< 0.010	< 0.010	< 0.050	< 1.0	5.2	49	190
TSP09-18D	24-018602	TSP09 South	08/05/2024	810	< 0.020	< 0.020	< 0.050	2.4	47	100	230	< 0.010	< 0.010	< 0.050	< 1.0	4.9	55	220
TSP09-19D	24-018602	TSP09 South	08/05/2024	260	< 0.020	< 0.020	< 0.050	< 1.0	7.3	24	73	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	13	76
TSP09-20D	24-018602	TSP09 South	08/05/2024	970	< 0.020	< 0.020	< 0.050	2	56	120	260	< 0.010	< 0.010	< 0.050	< 1.0	9.1	74	280

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Analytical Report Number : 24-016293-2A

Replaces Analytical Report Number: 24-016293, issue no. 1
Report format change.
Report split as per clients request

Project / Site name:	Ardrossan North Shore	**Samples received on:**	25/04/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	25/04/2024
Your order number:	S3240	**Analysis completed by:**	02/05/2024
Report Issue Number:	2A	**Report issued on:**	13/06/2024
Samples Analysed:	8 soil samples		

[redacted]

Signed:

[redacted]
Senior Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-016293-2A
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				181358	181371	181372	181373	181374
Sample Reference				TSP09-01B	TSP09-14B	TSP09-15B	TSP09-16B	TSP09-17B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				24/04/2024	24/04/2024	24/04/2024	24/04/2024	24/04/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	10.2	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.9	11	10	11	9.3
Total mass of sample received	kg	0.1	NONE	0.5	0.5	0.6	0.5	0.6
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	3.1	< 1.0	1	< 1.0	1.1
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	39	4.5	9	10	8.1
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	52	18	26	30	28
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	59	45	69	79	73
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	150	67	100	120	110
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	1.6
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	15	2.9	4.1	< 2.0	3.9
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	37	11	22	11	14
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	57	45	62	44	66
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	110	59	88	55	86
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	280	150	220	200	230
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-016293-2A
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				181375	181376	181377
Sample Reference				TSP09-18B	TSP09-19B	TSP09-20B
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				24/04/2024	24/04/2024	24/04/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	10	11
Total mass of sample received	kg	0.1	NONE	0.5	0.6	0.2
Petroleum Hydrocarbons						
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	10	5.5	11
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	28	19	29
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	73	47	86
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	110	71	130
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	2.6	< 2.0	2.6
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	13	< 10	15
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	49	41	60
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	65	41	78
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	210	140	250
VOCs						
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-016293-2A
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
181358	TSP09-01B	None Supplied	None Supplied	Brown sandy loam with vegetation and stones
181371	TSP09-14B	None Supplied	None Supplied	Brown loam and clay with gravel
181372	TSP09-15B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation
181373	TSP09-16B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation
181374	TSP09-17B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation
181375	TSP09-18B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation
181376	TSP09-19B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation
181377	TSP09-20B	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation

Analytical Report Number : 24-016293-2A
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 24-017477-2A

Replaces Analytical Report Number: 24-017477, issue no. 1
Report format change.
Report split as per clients request

Project / Site name:	Ardrossan North Shore	**Samples received on:**	02/05/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	02/05/2024
Your order number:	S3240	**Analysis completed by:**	10/05/2024
Report Issue Number:	2A	**Report issued on:**	13/06/2024
Samples Analysed:	8 soil samples		

[redacted]

Signed:

[redacted]
Senior Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

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soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-017477-2A
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187499	187512	187513	187514	187515
Sample Reference				TSP09-01C	TSP09-14C	TSP09-15C	TSP09-16C	TSP09-17C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024	01/05/2024	01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	11	11	9.8	11
Total mass of sample received	kg	0.1	NONE	0.4	0.3	0.3	0.4	0.4
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	2.2	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	8	6.1	17	< 2.0	< 2.0
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	19	14	30	< 8.0	9.1
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	52	25	67	< 8.0	38
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	79	45	120	< 10	47
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	2	< 2.0	3.3	< 2.0	3.9
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	12	11	20	< 10	18
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	50	40	72	< 10	67
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	64	51	96	< 10	88
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	200	120	260	< 10	170
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-017477-2A
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187516	187517	187518
Sample Reference				TSP09-18C	TSP09-19C	TSP09-20C
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	11	10
Total mass of sample received	kg	0.1	NONE	0.4	0.3	0.3
Petroleum Hydrocarbons						
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	2.8	4.8	8.1
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	18	16	26
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	60	44	60
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	80	65	93
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	3.7	4.2	2.6
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	18	19	20
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	63	56	72
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	85	79	94
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	210	180	230
VOCs						
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number : 24-017477-2A
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
187499	TSP09-01C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187512	TSP09-14C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187513	TSP09-15C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187514	TSP09-16C	None Supplied	None Supplied	Brown sand with gravel
187515	TSP09-17C	None Supplied	None Supplied	Brown sand with gravel
187516	TSP09-18C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187517	TSP09-19C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187518	TSP09-20C	None Supplied	None Supplied	Brown sand with gravel and vegetation

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number : 24-017477-2A
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 24-018602-2A

Replaces Analytical Report Number: 24-018602, issue no. 1
Report format change.
Report split as per clients request

Project / Site name:	Ardrossan North Shore	**Samples received on:**	09/05/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	09/05/2024
Your order number:	S3240	**Analysis completed by:**	16/05/2024
Report Issue Number:	2A	**Report issued on:**	13/06/2024
Samples Analysed:	8 soil samples		

Signed: [redacted]

[redacted]
Senior Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-018602-2A
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193699	193712	193713	193714	193715
Sample Reference				TSP09-01D	TSP09-14D	TSP09-15D	TSP09-16D	TSP09-17D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.4	8.6	8	8.1	7.4
Total mass of sample received	kg	0.1	NONE	0.3	0.2	0.3	0.2	0.3
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	3.1	< 1.0	1.1	3.2	2.7
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	41	31	22	45	37
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	120	75	68	100	75
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	280	170	170	190	170
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	450	280	260	340	280
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	1.1	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	7.5	11	9.1	5.7	5.2
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	80	66	55	72	49
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	290	220	220	250	190
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	380	300	280	330	240
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	980	700	670	790	660
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-018602-2A
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193716	193717	193718
Sample Reference				TSP09-18D	TSP09-19D	TSP09-20D
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.7	9.3	9.3
Total mass of sample received	kg	0.1	NONE	0.2	0.3	0.3
Petroleum Hydrocarbons						
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	2.4	< 1.0	2
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	47	7.3	56
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	100	24	120
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	230	73	260
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	380	100	430
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	4.9	< 2.0	9.1
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	55	13	74
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	220	76	280
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	280	88	360
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	810	260	970
VOCs						
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-018602-2A
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
193699	TSP09-01D	None Supplied	None Supplied	Brown loam with gravel
193712	TSP09-14D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193713	TSP09-15D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193714	TSP09-16D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193715	TSP09-17D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193716	TSP09-18D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193717	TSP09-19D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193718	TSP09-20D	None Supplied	None Supplied	Brown loam with gravel and vegetation

Analytical Report Number : 24-018602-2A
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Treated Stockpile Reuse Validation Form 002 – TSP11

Stockpile ID

Stockpile ID: TSP11 | Material Volume: 1,174 m³ | Validation Samples Included 12 No.

Tested Location: Treatment Area 01 | Stockpile Creation Date: 13/05/2024 | Release Date: TBC

Sampling Data (3No. full rounds for validation to release)

Passing Round 1 (Overall Sample Round 2 of 4)	Sample Date: 18/06/2024	Report Number & Date: 24-026519 - 27/062024	Lab: Eurofins
Passing Round 2 (Overall Sample Round 3 of 4)	Sample Date: 25/06/2024	Report Number & Date: 24-027476 - 03/07/2024	Lab: Eurofins
Passing Round 3 (Overall Sample Round 4 of 4)	Sample Date: 01/07/2024	Report Number & Date: 24-028801 - 10/07/2024	Lab: Eurofins

Sampling Data

Passing Round 1

Report Number: 24-026519 | Report Date: 27/06/2024

Sample ID (Sample Names): TSP11-01B – TSP11-13B | Report ID (Lab): Eurofins

Comments: | Test Results: PASS / ~~FAIL~~

Extra sample taken (Sample TSP11-13B for internal QS), Average Total TPH = 864 mg/kg. For total TPH 12 out of 13 <1,000 mg/kg, with only one exceedance TSP11-07B, 1,100 mg/kg. Following a statistical review, a >95% confidence level is seen with the distribution of total TPH, using the critical value of 1,000mg/kg a normal-normal distribution. With the average total TPH level, with no banded failures. Sanctus deem this round of sampling as chemically suitable for reuse.

Passing Round 2

Report Number: 24-027476 | Report Date: 03/07/2024

Sample ID (Sample Names): TSP11-01C – TSP11-12C | Report ID (Lab): Eurofins

Comments: | Test Results: PASS / ~~FAIL~~

Average Total TPH = 701 mg/kg. For total TPH 11 out of 12 <1,000 mg/kg, with only one exceedance TSP11-08C, 1,200 mg/kg. Following a statistical review, a >95% confidence level is seen with the distribution of total TPH, using the critical value of 1,000mg/kg a normal-normal distribution. With the average total TPH level having decreased to 81% compared to the previous round, only 1 No. banded failures from 192 analyte results, Sanctus deem this round of sampling as chemically suitable for reuse.

Passing Round 3

Report Number: 24-028801 | Report Date:10/07/2024

Sample ID (Sample Names): TSP11-01D – TSP11-12D | Report ID (Lab):

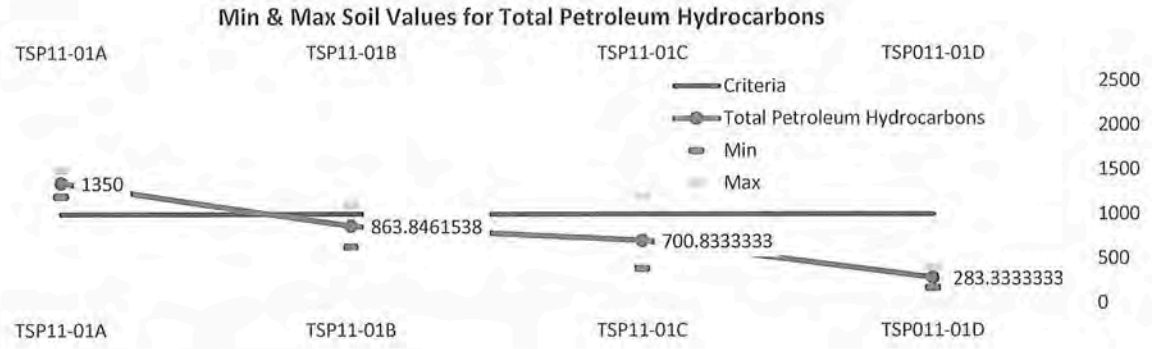
Eurofins

Comments: | Test Results: PASS / ~~FAIL~~

Average Total TPH = 283 mg/kg. No exceedances in the banded or Total TPH analytes. The decreasing trend for total TPH continues and Round 3 results are now at 32% for the average total TPH when compared to Round 1.

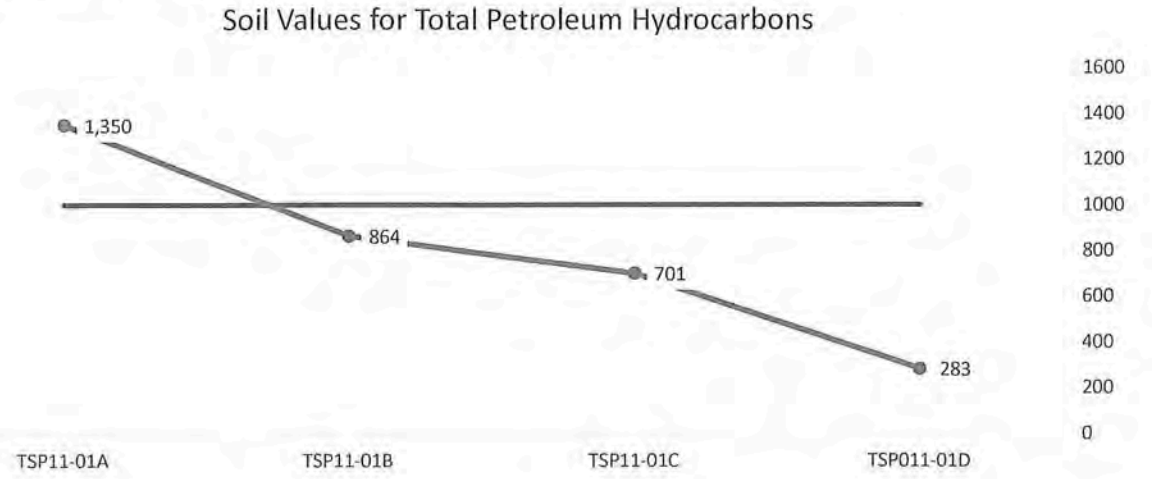
Data Review

Data Trend for Total TPH levels:

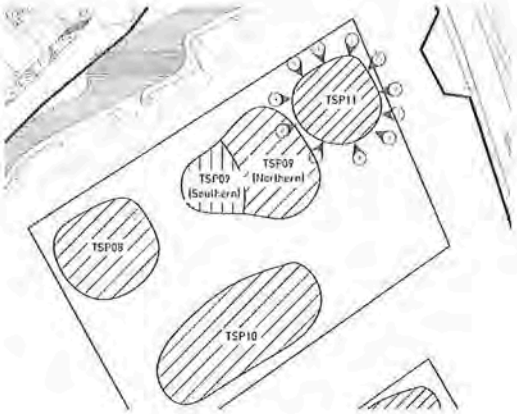


Additional Trendline Data – long term review:

Further to the above spread of data for the final 3 No. rounds, the total TPH levels from June 2024, for the treated stockpile, are shown below. The chart shows a significant decrease in the averaged total TPH levels, and the final result presents a reduction of total TPH level of 89% when compared to the highest material's contents (1,350 mg/kg (12th June 2024), compared to 283 mg/kg (2nd July 2024)):



Treated Stockpile Sample Plan:



Sampling Strategy:

All samples have been taken in compliance with ISO BS 18400, including the following notes:

- Stainless steel/washable sampling devices (trowels, buckets, etc) will be employed for the gathering of the soils samples and cleaned between each sample location so that consecutive samples are not cross-contaminated.
- The sample positions shown above indicate the position relative to the base boundary of the stockpile. All samples are taken from a within the body of the Stockpile, retrieved by an excavator. This is done as a safe sample retrieval option as well as to target an internal representative sample location mid-way from the edge to the centre of the Stockpile, as discussed under BS ISO 18400-104:2018 (Sampling Strategies), subsection 9.
- The subsequent sample depths were between 1-2 m below the Stockpile's surface and a minimum of 4No. characteristic subsamples were taken from an area of approximately $1m^2$ of the newly exposed material. The 4No. or more sub-locations were chosen in a X-pattern and the combined testing soil material is described as a composite sample, following a systematic stratified random sub-sampling location of a 3-dimensional source.
- The mechanically retrieved material is then sub-sampled into the required sampling jars/pots by the Sanctus Engineer as a representative sample from the numbered location.

Sanctus Declaration:

We confirm that:

1. The material that this form relates to, has been sampled representatively, as discussed above and in accordance with the client's requirements (Ardrossan Remediation Specification Rev E).
2. The material has been proven to be suitable for REUSE on site as there are 3 No. consecutive rounds, with a statistical insignificant number of exceedances of the accepted reuse criteria. No exceedances are seen within the final monitoring round and all total TPH levels have decreased notably from round 1 to round 3. Round 2 returns a confidence level of >95% confidence when compared to the statistical confidence critical level of 1,000mg/kg for total TPH .
3. The laboratory analysis results are representative of the materials investigated.
4. The material released will also be recorded spatially at its reuse location

NAME: [redacted]
POSITION: Senior Environmental Engineer
DATE: 07/10/2024
SIGNED:

X [redacted]

[redacted]
Senior Environmental Engineer
Signed by: 7ee90afd-5b10-4b4f-a839-775383c68d48

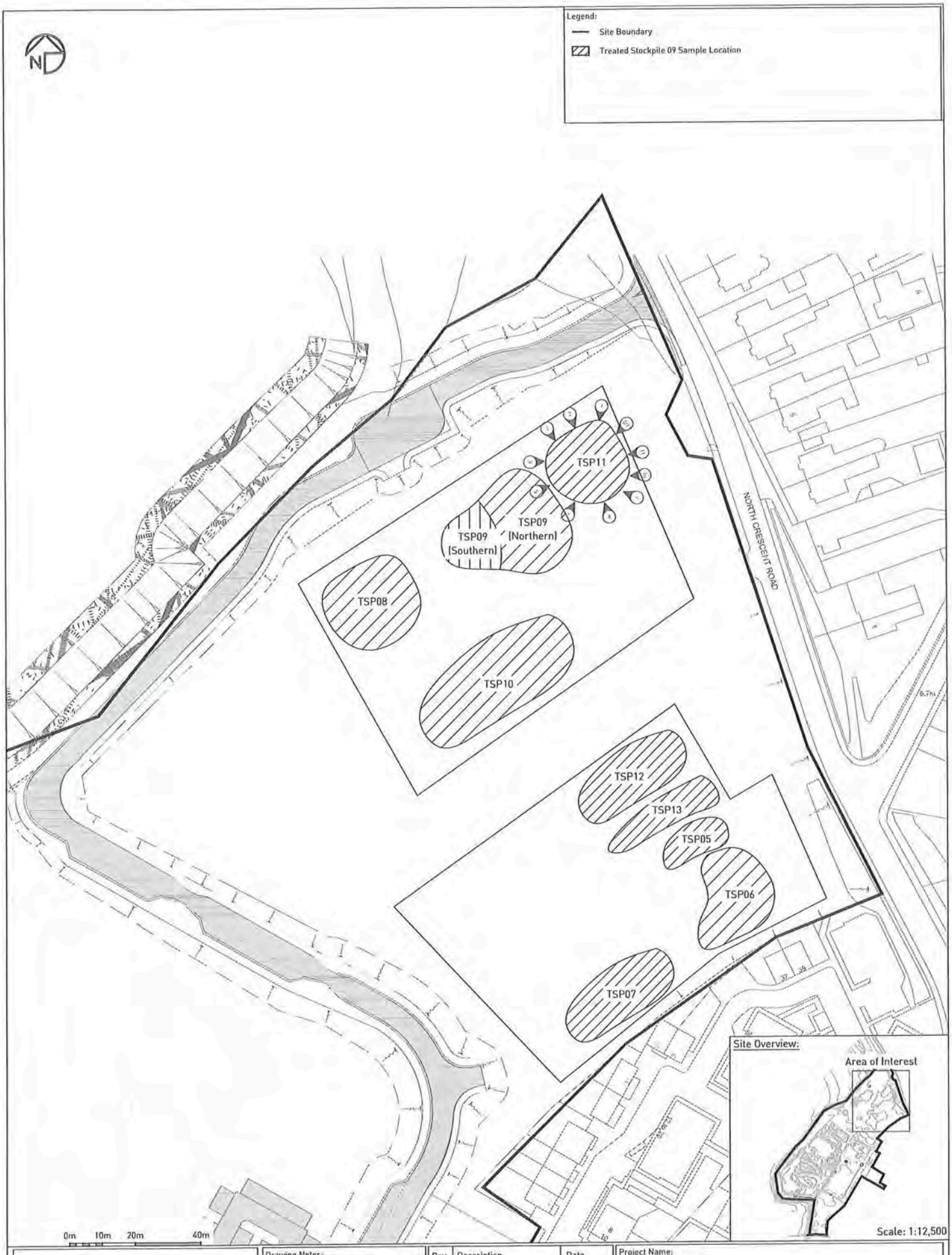
Record of reuse

For Sanctus Use Only:

Approved for reuse:

Beginning of Movement from stockpile:

End of Movement into site:



sanctus
Sanctus House, 1 Olympus Park Business Centre,
Quedgeley, Glos, GL2 4DH
T: 01453 828222
E: info@sanctusltd.co.uk www.sanctusltd.com

Drawing Notes:
Based on client supplied DWG - ARDROSSAN 2D produced by Aird Group 23/03/2020. All locations are approximate. Must be printed in colour.

Site Address:
Raylight Place
Ardrossan
North Ayrshire
Scotland

Rev.	Description	Date
A	First Issue	12/07/2024

APPROVED

Project Name: North Shore, Ardrossan		
Client: North Ayrshire Council		
Drawing Title: Treated Stockpile 11 Sample Locations		
Contract No: S3240	Drawing No: D3240/072	Scale @ A3: 1:1000
Drawn By: [redacted]	QC Check By: [redacted]	Approved By: [redacted]

Sample ID	Date Sampled	Total Petroleum Hydrocarbons	Aliphatic TPH >C5-C6	Aliphatic TPH >C6-C8	Aliphatic TPH >C8-C10	Aliphatic TPH >C10-C12	Aliphatic TPH >C12-C16	Aliphatic TPH >C16-C21	Aliphatic TPH >C21-C35	Aliphatic TPH >C5-C35	Aromatic TPH >C5-C7	Aromatic TPH >C7-C8	Aromatic TPH >C8-C10	Aromatic TPH >C10-C12	Aromatic TPH >C12-C16	Aromatic TPH >C16-C21	Aromatic TPH >C21-C35	Aromatic TPH >C5-C35
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOD		10	0.02	0.02	0.05	1	2	8	8		0.01	0.01	0.05	1	2	10	10	
Screening Criteria		1000	[illegible]	230	[illegible]	330	1000	1000	1000	1000	140	[illegible]	[illegible]	49.3	[illegible]	[illegible]	1000	1000
TSP11-01B	18/06/2024	1000	< 0.020	< 0.020	< 0.050	4.9	95	220	300	620	< 0.010	< 0.010	< 0.050	< 1.0	8.2	75	180	260
TSP11-02B	18/06/2024	750	< 0.020	< 0.020	< 0.050	2.3	70	130	180	390	< 0.010	< 0.010	< 0.050	< 1.0	13	76	160	250
TSP11-03B	18/06/2024	650	< 0.020	< 0.020	< 0.050	2	63	120	170	360	< 0.010	< 0.010	< 0.050	< 1.0	10	62	130	200
TSP11-04B	18/06/2024	830	< 0.020	< 0.020	< 0.050	3.2	71	130	160	360	< 0.010	< 0.010	< 0.050	< 1.0	20	93	200	320
TSP11-05B	18/06/2024	800	< 0.020	< 0.020	< 0.050	6.5	82	150	190	420	< 0.010	< 0.010	< 0.050	< 1.0	17	82	170	270
TSP11-06B	18/06/2024	990	< 0.020	< 0.020	< 0.050	2.8	87	180	260	540	< 0.010	< 0.010	< 0.050	1.2	17	92	200	310
TSP11-07B	18/06/2024	1100	< 0.020	< 0.020	< 0.050	4.5	100	190	280	570	< 0.010	< 0.010	< 0.050	< 1.0	18	100	220	340
TSP11-08B	18/06/2024	920	< 0.020	< 0.020	< 0.050	2.1	73	170	250	490	< 0.010	< 0.010	< 0.050	< 1.0	16	97	180	300
TSP11-09B	18/06/2024	740	< 0.020	< 0.020	< 0.050	1.5	54	120	170	340	< 0.010	< 0.010	< 0.050	1.5	19	77	170	270
TSP11-10B	18/06/2024	840	< 0.020	< 0.020	< 0.050	2.6	72	140	190	410	< 0.010	< 0.010	< 0.050	< 1.0	22	93	190	310
TSP11-11B	18/06/2024	990	< 0.020	< 0.020	< 0.050	3.9	89	200	270	560	< 0.010	< 0.010	< 0.050	< 1.0	16	94	190	300
TSP11-12B	18/06/2024	630	< 0.020	< 0.020	< 0.050	2.2	53	120	160	330	< 0.010	< 0.010	< 0.050	< 1.0	9.1	59	130	200
TSP11-13B	18/06/2024	990	< 0.020	< 0.020	< 0.050	3.8	100	190	280	580	< 0.010	< 0.010	< 0.050	< 1.0	18	84	200	300
TSP011-01C	25/06/2024	460	< 0.020	< 0.020	< 0.050	< 1.0	20	66	130	220	< 0.010	< 0.010	< 0.050	< 1.0	7.5	44	130	180
TSP011-02C	25/06/2024	940	< 0.020	< 0.020	< 0.050	< 1.0	37	99	180	310	< 0.010	< 0.010	< 0.050	< 1.0	25	130	350	500
TSP011-03C	25/06/2024	1000	< 0.020	< 0.020	< 0.050	< 1.0	41	110	180	320	< 0.010	< 0.010	< 0.050	17	36	100	410	570
TSP011-04C	25/06/2024	390	< 0.020	< 0.020	< 0.050	< 1.0	26	75	120	230	< 0.010	< 0.010	< 0.050	< 1.0	9.9	57	88	150
TSP011-05C	25/06/2024	560	< 0.020	< 0.020	< 0.050	< 1.0	33	90	150	270	< 0.010	< 0.010	< 0.050	< 1.0	17	76	170	260
TSP011-06C	25/06/2024	780	< 0.020	< 0.020	< 0.050	7.9	62	130	220	430	< 0.010	< 0.010	< 0.050	< 1.0	25	96	190	320
TSP011-07C	25/06/2024	600	< 0.020	< 0.020	< 0.050	5.6	43	100	170	320	< 0.010	< 0.010	< 0.050	< 1.0	14	73	150	240
TSP011-08C	25/06/2024	1200	< 0.020	< 0.020	< 0.050	12	120	210	380	730	< 0.010	< 0.010	< 0.050	< 1.0	24	130	290	440
TSP011-09C	25/06/2024	670	< 0.020	< 0.020	< 0.050	< 1.0	38	100	190	330	< 0.010	< 0.010	< 0.050	< 1.0	17	82	190	290
TSP011-10C	25/06/2024	670	< 0.020	< 0.020	< 0.050	< 1.0	47	110	170	330	< 0.010	< 0.010	< 0.050	< 1.0	29	92	190	310
TSP011-11C	25/06/2024	500	< 0.020	< 0.020	< 0.050	< 1.0	23	70	130	220	< 0.010	< 0.010	< 0.050	< 1.0	8.2	67	170	240
TSP011-12C	25/06/2024	640	< 0.020	< 0.020	< 0.050	< 1.0	45	98	180	320	< 0.010	< 0.010	< 0.050	< 1.0	19	80	180	280
TSP011-01D	02/07/2024	400	< 0.020	< 0.020	< 0.050	< 1.0	22	84	120	230	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	26	82	110
TSP011-02D	02/07/2024	310	< 0.020	< 0.020	< 0.050	1	19	57	85	160	< 0.010	< 0.010	< 0.050	< 1.0	4.1	22	64	90
TSP011-03D	02/07/2024	250	< 0.020	< 0.020	< 0.050	1.1	12	42	62	120	< 0.010	< 0.010	< 0.050	< 1.0	3.3	20	64	87
TSP011-04D	02/07/2024	310	< 0.020	< 0.020	< 0.050	1.4	21	69	92	180	< 0.010	< 0.010	< 0.050	< 1.0	2.7	21	55	79
TSP011-05D	02/07/2024	330	< 0.020	< 0.020	< 0.050	3	21	63	89	180	< 0.010	< 0.010	< 0.050	< 1.0	3.1	25	68	96
TSP011-06D	02/07/2024	250	< 0.020	< 0.020	< 0.050	< 1.0	16	60	78	150	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	13	44	57
TSP011-07D	02/07/2024	290	< 0.020	< 0.020	< 0.050	< 1.0	17	62	72	150	< 0.010	< 0.010	< 0.050	< 1.0	2.8	31	71	100
TSP011-08D	02/07/2024	170	< 0.020	< 0.020	< 0.050	2.9	12	37	50	100	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	11	30	41
TSP011-09D	02/07/2024	310	< 0.020	< 0.020	< 0.050	6.6	21	58	91	180	< 0.010	< 0.010	< 0.050	< 1.0	4.5	23	58	85
TSP011-10D	02/07/2024	200	< 0.020	< 0.020	< 0.050	2.7	17	46	72	140	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	25	25
TSP011-11D	02/07/2024	300	< 0.020	< 0.020	< 0.050	1.2	18	63	100	180	< 0.010	< 0.010	< 0.050	< 1.0	2.3	21	56	81
TSP011-12D	02/07/2024	280	< 0.020	< 0.020	< 0.050	1.6	19	66	94	180	< 0.010	< 0.010	< 0.050	< 1.0	3.2	18	47	68

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Analytical Report Number : 24-026519

Project / Site name:	Ardrossan North Shore	**Samples received on:**	19/06/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	21/06/2024
Your order number:	S3240	**Analysis completed by:**	27/06/2024
Report Issue Number:	1	**Report issued on:**	27/06/2024
Samples Analysed:	13 soil samples		

Signed: [redacted]

[redacted]
Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-026519
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				235170	235171	235172	235173	235174
Sample Reference				TSP11-01B	TSP11-02B	TSP11-03B	TSP11-04B	TSP11-05B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/06/2024	18/06/2024	18/06/2024	18/06/2024	18/06/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	47.4
Moisture Content	%	0.01	NONE	7.9	8.3	8.3	8.1	9.4
Total mass of sample received	kg	0.1	NONE	0.4	0.4	0.4	0.4	0.4
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.39	0.32	0.41	0.47	0.33
Acenaphthylene	mg/kg	0.05	MCERTS	0.1	< 0.05	< 0.05	0.12	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.15	0.09	0.1	0.11	0.12
Fluorene	mg/kg	0.05	MCERTS	0.16	0.09	0.1	0.11	0.13
Phenanthrene	mg/kg	0.05	MCERTS	1.4	0.4	0.34	0.39	0.42
Anthracene	mg/kg	0.05	MCERTS	0.99	0.24	0.38	0.26	0.58
Fluoranthene	mg/kg	0.05	MCERTS	5.5	1.4	1.3	1.2	1.3
Pyrene	mg/kg	0.05	MCERTS	5.1	1.6	1.5	1.6	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.8	0.75	0.79	1.2	0.63
Chrysene	mg/kg	0.05	MCERTS	2.8	0.88	0.95	1.3	0.99
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.9	1	1.3	1.5	0.86
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.4	0.47	0.44	0.67	0.34
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3	0.99	1.2	1.6	0.85
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.5	0.49	0.67	0.69	0.41
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.36	0.12	0.14	0.14	0.12
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.7	0.59	0.78	0.83	0.49
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	30	9.38	10.4	12.3	8.91
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	4.9	2.3	2	3.2	6.5
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	95	70	63	71	82
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	220	130	120	130	150
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	300	180	170	160	190
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	620	390	360	360	420
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	8.2	13	10	20	17
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	75	76	62	93	82
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	180	160	130	200	170
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	260	250	200	320	270
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1000	750	650	830	800
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 24-026519
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				235170	235171	235172	235173	235174
Sample Reference				TSP11-01B	TSP11-02B	TSP11-03B	TSP11-04B	TSP11-05B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/06/2024	18/06/2024	18/06/2024	18/06/2024	18/06/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-026519
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				235175	235176	235177	235178	235179
Sample Reference				TSP11-06B	TSP11-07B	TSP11-08B	TSP11-09B	TSP11-10B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/06/2024	18/06/2024	18/06/2024	18/06/2024	18/06/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	24.8	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.1	9	7.5	8	8.4
Total mass of sample received	kg	0.1	NONE	0.4	0.4	0.4	0.4	0.4
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.43	0.94	0.5	0.27	0.39
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.1	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.15	0.1	0.45	0.09	0.19
Fluorene	mg/kg	0.05	MCERTS	0.12	0.1	0.48	< 0.05	0.16
Phenanthrene	mg/kg	0.05	MCERTS	0.62	0.36	7.3	0.36	0.46
Anthracene	mg/kg	0.05	MCERTS	0.35	0.27	2.8	0.26	0.27
Fluoranthene	mg/kg	0.05	MCERTS	1.5	1.1	16	1.3	1.3
Pyrene	mg/kg	0.05	MCERTS	1.7	1.3	13	1.4	1.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.79	0.63	7	0.66	0.64
Chrysene	mg/kg	0.05	MCERTS	0.91	0.76	7.3	0.76	0.83
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.97	0.78	6.8	0.96	0.89
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.41	0.35	2.6	0.37	0.26
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.94	0.79	6.2	0.87	0.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.51	0.39	2.7	0.47	0.38
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.09	0.08	0.82	0.1	0.1
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.54	0.51	3	0.54	0.46
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	10	8.51	76.7	8.35	8.67
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	2.8	4.5	2.1	1.5	2.6
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	87	100	73	54	72
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	180	190	170	120	140
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	260	280	250	170	190
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	540	570	490	340	410
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	1.2	< 1.0	< 1.0	1.5	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	17	18	16	19	22
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	92	100	97	77	93
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	200	220	180	170	190
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	310	340	300	270	310
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	990	1100	920	740	840
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 24-026519
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				235175	235176	235177	235178	235179
Sample Reference				TSP11-06B	TSP11-07B	TSP11-08B	TSP11-09B	TSP11-10B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				18/06/2024	18/06/2024	18/06/2024	18/06/2024	18/06/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-026519
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				235180	235181	235182
Sample Reference				TSP11-11B	TSP11-12B	TSP11-13B
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				18/06/2024	18/06/2024	18/06/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.8	7.6	8
Total mass of sample received	kg	0.1	NONE	0.4	0.4	0.4
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	0.32	0.32	0.29
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.2	0.09	0.13
Fluorene	mg/kg	0.05	MCERTS	0.17	< 0.05	0.12
Phenanthrene	mg/kg	0.05	MCERTS	0.44	0.25	0.42
Anthracene	mg/kg	0.05	MCERTS	0.36	0.15	0.25
Fluoranthene	mg/kg	0.05	MCERTS	1.2	0.88	1.5
Pyrene	mg/kg	0.05	MCERTS	1.4	1.1	1.7
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.55	0.45	0.75
Chrysene	mg/kg	0.05	MCERTS	0.66	0.51	0.81
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.8	0.57	0.88
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.3	0.31	0.38
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.69	0.59	0.86
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.39	0.32	0.43
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.12
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.4	0.36	0.51
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	7.82	5.88	9.17
Petroleum Hydrocarbons						
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	3.9	2.2	3.8
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	89	53	100
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	200	120	190
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	270	160	280
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	560	330	580
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	16	9.1	18
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	94	59	84
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	190	130	200
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	300	200	300
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	990	630	990
VOCs						
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0

Analytical Report Number: 24-026519
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				235180	235181	235182
Sample Reference				TSP11-11B	TSP11-12B	TSP11-13B
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				18/06/2024	18/06/2024	18/06/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-026519
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
235170	TSP11-01B	None Supplied	None Supplied	Brown loam with gravel and vegetation
235171	TSP11-02B	None Supplied	None Supplied	Brown loam with gravel and vegetation
235172	TSP11-03B	None Supplied	None Supplied	Brown loam with gravel and vegetation
235173	TSP11-04B	None Supplied	None Supplied	Brown loam with gravel and vegetation
235174	TSP11-05B	None Supplied	None Supplied	Brown loam with vegetation and stones
235175	TSP11-06B	None Supplied	None Supplied	Brown loam with vegetation and stones
235176	TSP11-07B	None Supplied	None Supplied	Brown loam with gravel and vegetation
235177	TSP11-08B	None Supplied	None Supplied	Brown loam with gravel and vegetation
235178	TSP11-09B	None Supplied	None Supplied	Brown loam with gravel and vegetation
235179	TSP11-10B	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
235180	TSP11-11B	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
235181	TSP11-12B	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
235182	TSP11-13B	None Supplied	None Supplied	Brown sand with gravel

Analytical Report Number : 24-026519
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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Analytical Report Number : 24-027476

Project / Site name:	Ardrossan North Shore	**Samples received on:**	26/06/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	27/06/2024
Your order number:	S3240	**Analysis completed by:**	03/07/2024
Report Issue Number:	1	**Report issued on:**	03/07/2024
Samples Analysed:	12 soil samples		

Signed: [redacted]

[redacted]
Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-027476
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				239958	239959	239960	239961	239962
Sample Reference				TSP011-01C	TSP011-02C	TSP011-03C	TSP011-04C	TSP011-05C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	17.9	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.3	6.3	7	6.6	6.8
Total mass of sample received	kg	0.1	NONE	1.2	1.2	1.2	1.3	1.3
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN	MJN	MJN
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.15	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.14	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.3	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.36	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.18	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.23	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.22	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.21	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.1	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.09	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.13	< 0.80	< 0.80	< 0.80	< 0.80
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	20	37	41	26	33
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	66	99	110	75	90
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	130	180	180	120	150
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	220	310	320	230	270
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	17	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	7.5	25	36	9.9	17
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	44	130	100	57	76
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	130	350	410	88	170
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	180	500	570	150	260
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	460	940	1000	390	560
VOCs								

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-027476
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				239958	239959	239960	239961	239962
Sample Reference				TSP011-01C	TSP011-02C	TSP011-03C	TSP011-04C	TSP011-05C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-027476
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				239963	239964	239965	239966	239967
Sample Reference				TSP011-06C	TSP011-07C	TSP011-08C	TSP011-09C	TSP011-10C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.5	8.2	7.2	6.5	7.5
Total mass of sample received	kg	0.1	NONE	1.3	1.2	1	1.2	1.2
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN	MJN	MJN
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	0.16	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.1	0.16	0.23	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.14	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	7.9	5.6	12	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	62	43	120	38	47
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	130	100	210	100	110
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	220	170	380	190	170
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	430	320	730	330	330
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	25	14	24	17	29
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	96	73	130	82	92
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	190	150	290	190	190
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	320	240	440	290	310
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	780	600	1200	670	670
VOCs								

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-027476
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				239963	239964	239965	239966	239967
Sample Reference				TSP011-06C	TSP011-07C	TSP011-08C	TSP011-09C	TSP011-10C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-027476
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				239968	239969
Sample Reference				TSP011-11C	TSP011-12C
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				25/06/2024	25/06/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.2	7.2
Total mass of sample received	kg	0.1	NONE	1.2	1.2
Asbestos					
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.11	0.17
Pyrene	mg/kg	0.05	MCERTS	0.18	0.24
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.32
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.33
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.53
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.15
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.38
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.28
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	2.41
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	23	45
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	70	98
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	130	180
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	220	320
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	8.2	19
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	67	80
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	170	180
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	240	280
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	500	640
VOCs					

Analytical Report Number: 24-027476
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				239968	239969
Sample Reference				TSP011-11C	TSP011-12C
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				25/06/2024	25/06/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-027476
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
239958	TSP011-01C	None Supplied	None Supplied	Brown sandy loam with vegetation
239959	TSP011-02C	None Supplied	None Supplied	Brown sand with vegetation
239960	TSP011-03C	None Supplied	None Supplied	Brown sand with vegetation and stones
239961	TSP011-04C	None Supplied	None Supplied	Brown sand with vegetation
239962	TSP011-05C	None Supplied	None Supplied	Brown sand with vegetation
239963	TSP011-06C	None Supplied	None Supplied	Brown sand with vegetation
239964	TSP011-07C	None Supplied	None Supplied	Brown sand with vegetation
239965	TSP011-08C	None Supplied	None Supplied	Brown sand with vegetation
239966	TSP011-09C	None Supplied	None Supplied	Brown sand with vegetation
239967	TSP011-10C	None Supplied	None Supplied	Brown sand with vegetation
239968	TSP011-11C	None Supplied	None Supplied	Brown sand with vegetation
239969	TSP011-12C	None Supplied	None Supplied	Brown sand with vegetation

Analytical Report Number : 24-027476
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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Analytical Report Number : 24-028801

Project / Site name:	Ardrossan North Shore	**Samples received on:**	03/07/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	04/07/2024
Your order number:	S3240	**Analysis completed by:**	10/07/2024
Report Issue Number:	1	**Report issued on:**	10/07/2024
Samples Analysed:	12 soil samples		

Signed: [redacted]

[redacted]
Customer Service Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-028801
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				247084	247085	247086	247087	247088
Sample Reference				TSP011-01D	TSP011-02D	TSP011-03D	TSP011-04D	TSP011-05D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				02/07/2024	02/07/2024	02/07/2024	02/07/2024	02/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.4	4.2	4.1	4.3	4.3
Total mass of sample received	kg	0.1	NONE	0.6	0.6	0.6	0.6	0.6
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.17	0.1	0.1	0.11	0.08
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.06	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.44	0.34	0.21	0.23	0.14
Anthracene	mg/kg	0.05	MCERTS	0.25	0.39	0.09	0.1	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.66	0.57	0.39	0.34	0.28
Pyrene	mg/kg	0.05	MCERTS	0.65	0.51	0.4	0.32	0.28
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.31	0.22	0.18	0.17	0.14
Chrysene	mg/kg	0.05	MCERTS	0.34	0.21	0.22	0.2	0.15
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.38	0.23	0.27	0.25	0.21
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.15	0.11	0.09	0.11	0.06
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.34	0.2	0.24	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.2	0.12	0.15	0.14	0.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.21	0.13	0.17	0.16	0.11
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.15	3.13	2.51	2.14	1.56
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	1	1.1	1.4	3
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	22	19	12	21	21
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	84	57	42	69	63
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	120	85	62	92	89
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	230	160	120	180	180
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	4.1	3.3	2.7	3.1
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	26	22	20	21	25
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	82	64	64	55	68
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	110	90	87	79	96
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	400	310	250	310	330
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 24-028801
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				247084	247085	247086	247087	247088
Sample Reference				TSP011-01D	TSP011-02D	TSP011-03D	TSP011-04D	TSP011-05D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				02/07/2024	02/07/2024	02/07/2024	02/07/2024	02/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical i2 Environmental Science

Analytical Report Number: 24-028801
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				247089	247090	247091	247092	247093
Sample Reference				TSP011-06D	TSP011-07D	TSP011-08D	TSP011-09D	TSP011-10D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				02/07/2024	02/07/2024	02/07/2024	02/07/2024	02/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.3	4.4	4.1	4	4
Total mass of sample received	kg	0.1	NONE	0.6	0.6	0.6	0.6	0.6
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.06	0.12	0.16	0.1	0.08
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.07	0.25	0.09	0.12	0.06
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.11	0.5	0.11	0.19	0.06
Pyrene	mg/kg	0.05	MCERTS	0.13	0.45	0.11	0.2	0.06
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.08	0.23	0.06	0.11	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.08	0.25	0.07	0.11	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.11	0.28	0.1	0.16	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06	0.15	< 0.05	0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.11	0.27	< 0.05	0.11	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.07	0.15	< 0.05	0.09	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.07	0.16	< 0.05	0.08	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	0.94	2.87	< 0.80	1.32	< 0.80
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	2.9	6.6	2.7
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	16	17	12	21	17
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	60	62	37	58	46
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	78	72	50	91	72
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	150	150	100	180	140
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	2.8	< 2.0	4.5	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	13	31	11	23	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	44	71	30	58	25
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	57	100	41	85	25
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	250	290	170	310	200
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 24-028801
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				247089	247090	247091	247092	247093
Sample Reference				TSP011-06D	TSP011-07D	TSP011-08D	TSP011-09D	TSP011-10D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				02/07/2024	02/07/2024	02/07/2024	02/07/2024	02/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-028801
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				247094	247095
Sample Reference				TSP011-11D	TSP011-12D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				02/07/2024	02/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4	3.7
Total mass of sample received	kg	0.1	NONE	0.6	0.6
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	0.17	0.06
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.08	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.35	0.1
Anthracene	mg/kg	0.05	MCERTS	0.1	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.48	0.1
Pyrene	mg/kg	0.05	MCERTS	0.43	0.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.24	0.06
Chrysene	mg/kg	0.05	MCERTS	0.24	0.06
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.36	0.09
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.25	0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.15	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.15	< 0.05
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.1	< 0.80
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	1.2	1.6
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	18	19
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	63	66
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	100	94
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	180	180
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	2.3	3.2
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	21	18
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	58	47
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	81	68
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	300	280
VOCs					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0

Analytical Report Number: 24-028801
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				247094	247095
Sample Reference				TSP011-11D	TSP011-12D
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				02/07/2024	02/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number : 24-028801
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
247084	TSP011-01D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247085	TSP011-02D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247086	TSP011-03D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247087	TSP011-04D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247088	TSP011-05D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247089	TSP011-06D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247090	TSP011-07D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247091	TSP011-08D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247092	TSP011-09D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247093	TSP011-10D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247094	TSP011-11D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation
247095	TSP011-12D	None Supplied	None Supplied	Brown sandy loam with gravel and vegetation

Analytical Report Number : 24-028801
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Test Results

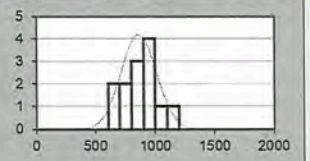
Client/client ref: Sanctus
Project ref: S3240

Site ref: Ardrossan
Data description: Total TPH level TSP11 Round 1

Date: 01-Aug-2024
User details: JRA

Dataset: Total TPH	
Sample mean, $\bar{x}$	863.85
Sample standard deviation, s	147.11
Sample size, n	13
Critical concentration, Cc	1000

Use Normal distribution to test



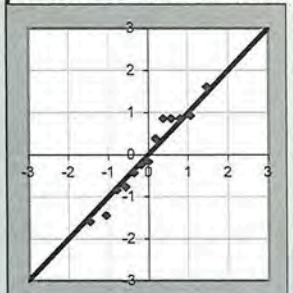
Outliers & non-detects	
Outliers present?	NO
Significance level	5%
Outliers removed?	0
Non-detects	0

Normality test

Significance level: 5%

Normal distribution

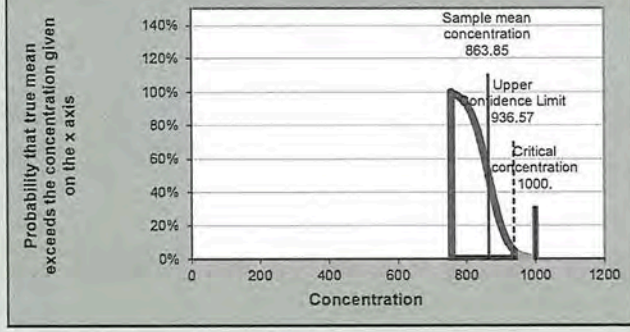
Use: Auto: One-sample t



Test scenario:

Planning: is true mean lower than critical concentration (μ < Cc)?

Null hypothesis:	The true mean concentration is equal to or greater than the critical concentration: μ≥ Cc
Alternative hypothesis	The true mean concentration is less than the critical concentration: μ < Cc



Evidence against Null hypothesis:	**100%**
Base decision on:	evidence level
Evidence level required:	95%
Balance of probability?	N/A
Reject Null Hypothesis?	Yes

μ < Cc (re this dataset)

Test Results

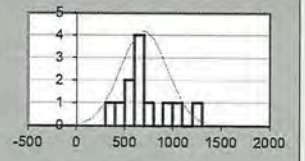
Client/client ref: Sanctus
Project ref: S3240

Site ref: Ardrossan
Data description: Total TPH levels TSP11 Round 2

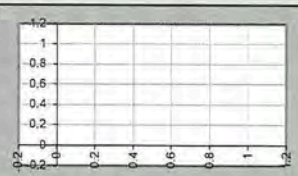
Date: 01-Aug-2024
User details: JRA

Dataset: Total TPH	
Sample mean, $\bar{x}$	700.83
Sample standard deviation, s	239.83
Sample size, n	12
Critical concentration, Cc	1000

Use Normal distribution to test



Outliers & non-detects	
Outliers present?	NO
Significance level	5%
Outliers removed?	0
Non-detects	0

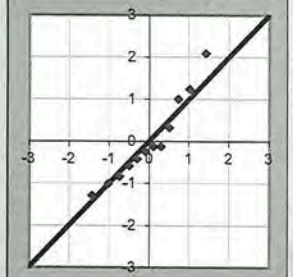


Normality test

Significance le 5%

Normal distribution

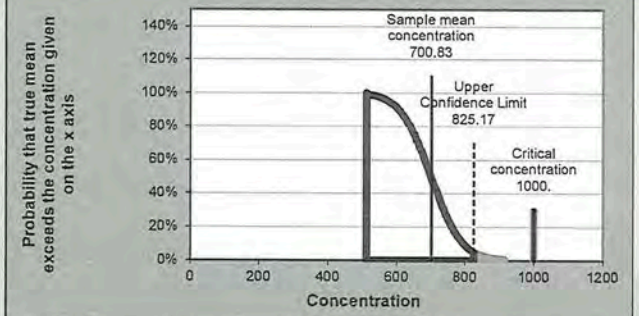
Use: Auto: One-sample t



Test scenario:

Planning: is true mean lower than critical concentration (μ < Cc)?

Null hypothesis:	The true mean concentration is equal to or greater than the critical concentration: μ≥ Cc
Alternative hypothesis	The true mean concentration is less than the critical concentration: μ < Cc



Evidence against Null hypothesis:	**100%**
Base decision on:	evidence level
Evidence level required:	**95%**
Balance of probability?	N/A
Reject Null Hypothesis?	Yes

μ < Cc (re this dataset)

Treated Stockpile Reuse Validation Form 003 – TSP05

Stockpile ID

Stockpile ID: TSP05	Material Volume: Validation Samples Included	1,200 m^3 12 No.
Tested Location: Treatment Area 02	Stockpile Creation Date: 11/01/2024	Release Date: TBC

Sampling Data (3No. full rounds for validation to release)

Passing Round 1 (Overall Sample Round 15 of 17)	Sample Date: 09/07/2024	Report Number & Date: 24-029772 – 17/07/2024	Lab: i2
Passing Round 2 (Overall Sample Round 16 of 17)	Sample Date: 17/07/2024	Report Number & Date: 24-23192 – 24/07/2024	Lab: Eurofins
Passing Round 3 (Overall Sample Round 17 of 17)	Sample Date: 23/07/2024	Report Number & Date: 24-23866 – 30/07/2024	Lab: Eurofins

Sampling Data

Passing Round 1

Report Number: 24-029772

Report Date: 17/07/2024

Sample ID (Sample Names): TSP05-01G – TSP05-12G

Report ID (Lab): i2

Comments:

Test Results: PASS / ~~FAIL~~

No exceedances seen throughout Average Total TPH = 168 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Passing Round 2

Report Number: 24-23192

Report Date: 24/07/2024

Sample ID (Sample Names): TSP05-01H – TSP05-12H

Report ID (Lab): Eurofins

Comments:

Test Results: PASS / ~~FAIL~~

No exceedances seen throughout Average Total TPH = 254 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Passing Round 3

Report Number: 24-23866

Report Date: 30/072024

Sample ID (Sample Names): TSP05-01I – TSP05-12I

Report ID (Lab): Eurofins

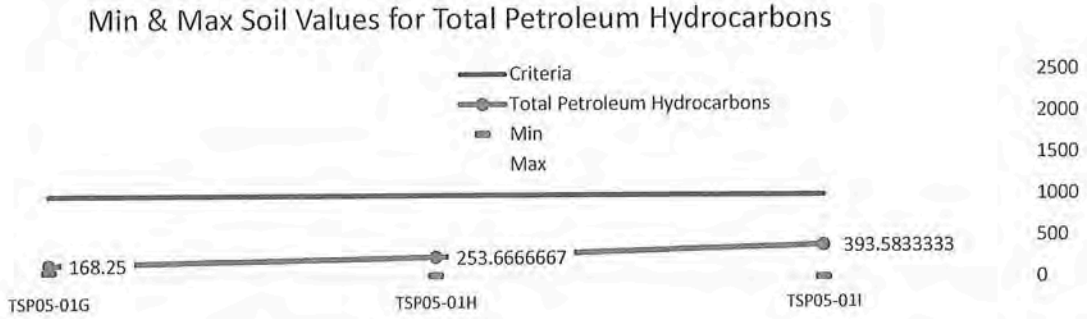
Comments:

Test Results: PASS / ~~FAIL~~

No exceedances seen throughout Average Total TPH = 394 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

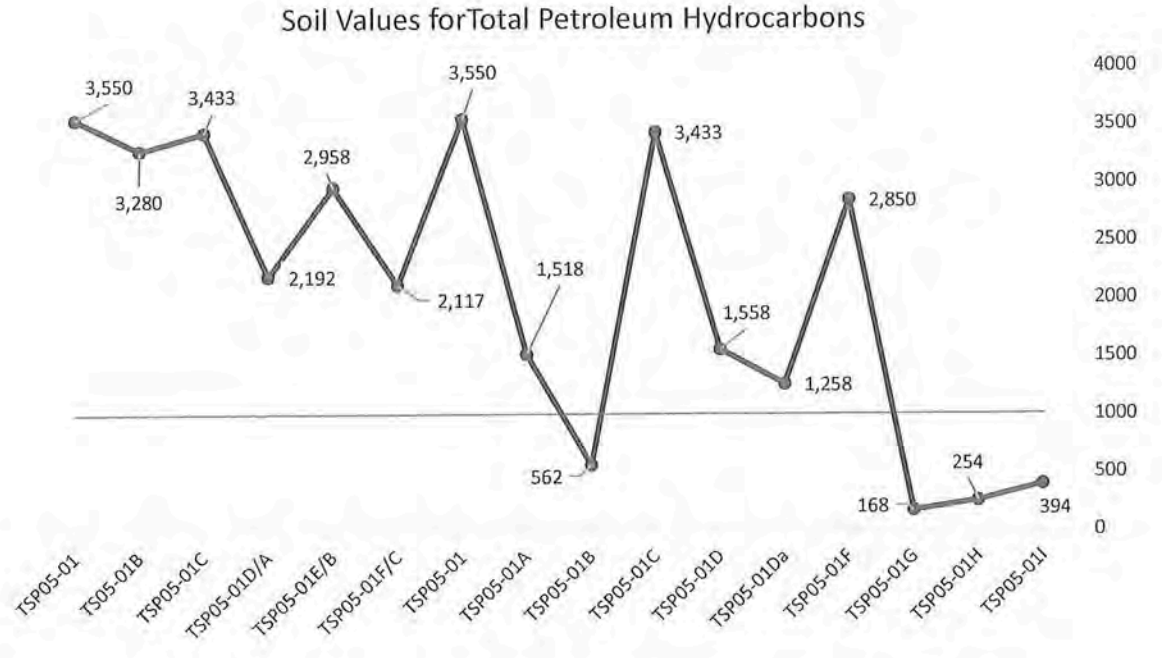
Data Review

Data Trend for Total TPH levels:

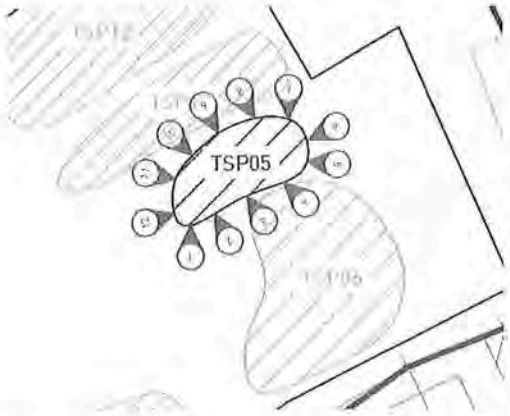


Additional Trendline Data – long term review:

Further to the above spread of data for the final 3 No. rounds, the total TPH levels from January 2024, for the treated stockpile, are shown below. The chart shows a significant decrease in the averaged total TPH levels, and the final result presents a reduction of total TPH level of 89% when compared to the initial material's contents (3,550 mg/kg (11th January 2024), compared to the final level of 394 mg/kg (23/07/2024)):



Treated Stockpile Sample Plan:



Sampling Strategy:

All samples have been taken in compliance with ISO BS 18400, including the following notes:

- Stainless steel/washable sampling devices (trowels, buckets, etc) will be employed for the gathering of the soils samples and cleaned between each sample location so that consecutive samples are not cross-contaminated.
- The sample positions shown above indicate the position relative to the base boundary of the stockpile. All samples are taken from a within the body of the Stockpile, retrieved by an excavator. This is done as a safe sample retrieval option as well as to target an internal representative sample location mid-way from the edge to the centre of the Stockpile, as discussed under BS ISO 18400-104:2018 (Sampling Strategies), subsection 9.
- The subsequent sample depths were between 1-2 m below the Stockpile's surface and a minimum of 4No. characteristic subsamples were taken from an area of approximately $1m^2$ of the newly exposed material. The 4No. or more sub-locations were chosen in a X-pattern and the combined testing soil material is described as a composite sample, following a systematic stratified random sub-sampling location of a 3-dimensional source.
- The mechanically retrieved material is then sub-sampled into the required sampling jars/pots by the Sanctus Engineer as a representative sample from the numbered location.

Sanctus Declaration:

We confirm that:

1. The material that this form relates to, has been sampled representatively, as discussed above and in accordance with the client's requirements (Ardrossan Remediation Specification Rev E).
2. The material has been proven to be suitable for REUSE on site as there are 3 No. consecutive rounds, with a statistical insignificant number of exceedances of the accepted reuse criteria. No exceedances are seen within the first two monitoring rounds and each round's average for the total TPH levels have been significantly below the 1,000 mg/kg threshold level.
3. The laboratory analysis results are representative of the materials investigated.
4. The material released will also be recorded spatially at its reuse location.

NAME: [redacted]
POSITION: Senior Environmental Engineer
DATE: 07/10/2024
SIGNED:

X [redacted]

[redacted]
Senior Environmental Engineer
Signed by: 7ee90afd-5b10-4b4f-a839-775383c68d48

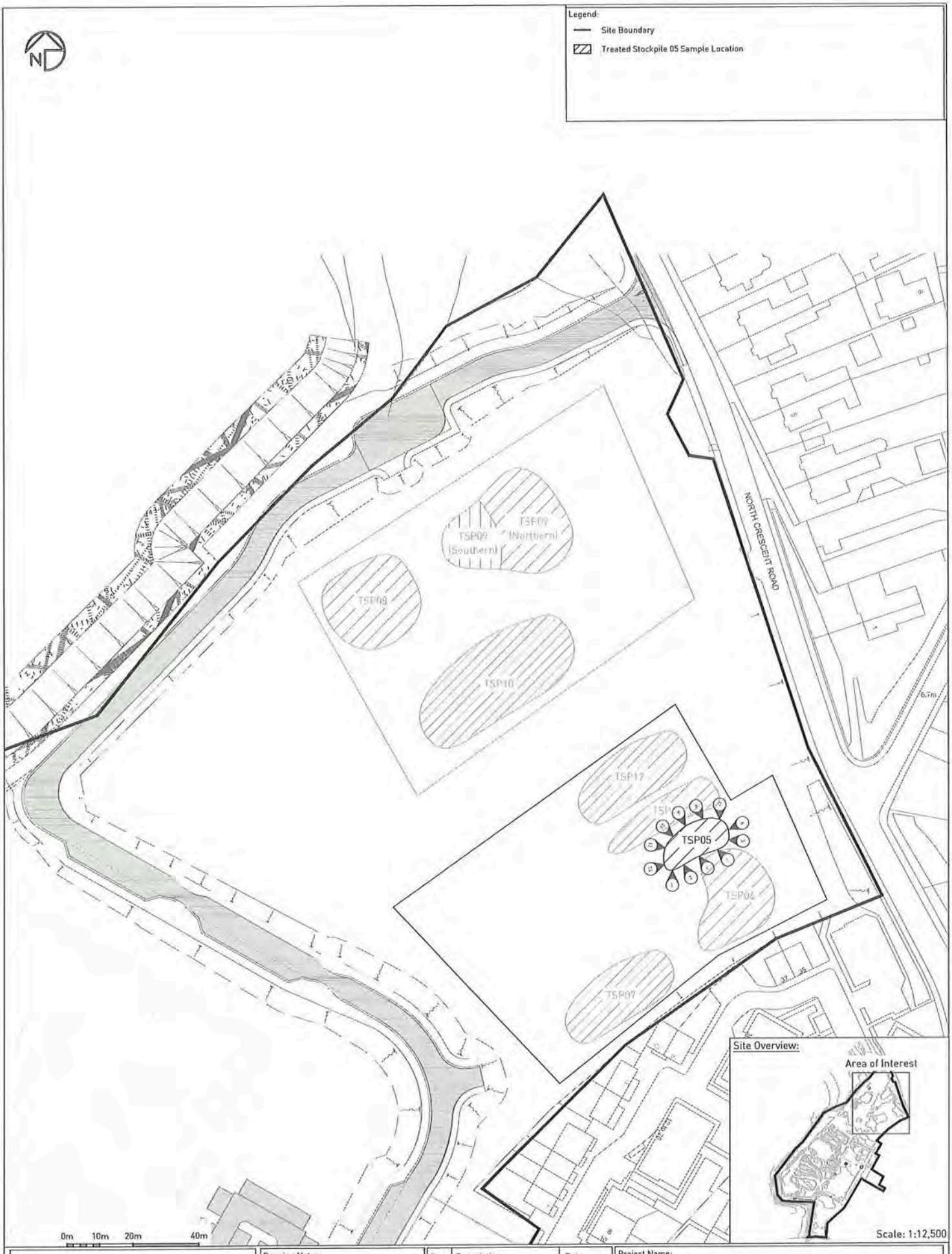
Record of reuse

For Sanctus Use Only:

Approved for reuse:

Beginning of Movement from stockpile:

End of Movement into site:



sanctus
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Drawing Notes:
Based on client supplied DWG - ARDROSSAN 2D produced by Aird Group 23/03/2020. All locations are approximate. Must be printed in colour.

Site Address:
Raylight Place
Ardrossan
North Ayrshire
Scotland

Rev.	Description	Date
A	First Issue	02/08/2024

APPROVED

Project Name:
North Shore, Ardrossan

Client:
North Ayrshire Council

Drawing Title:
Treated Stockpile 05 Sample Locations

Contract No:	Drawing No:	Scale @ A3:
S3240	D3240/075	1:1000
Drawn By: [redacted]	QC Check By: [redacted]	Approved By: [redacted]

Sample ID	Date Sampled	[illegible] Petroleum Hydrocarbons	Aliphatic TPH [illegible]	Aliphatic TPH [illegible]	Aliphatic TPH [illegible]	Aliphatic TPH [illegible]	Aliphatic TPH [illegible]	Aliphatic TPH [illegible]	Aliphatic TPH [illegible]	Aliphatic TPH [illegible]	Aromatic TPH [illegible]	Aromatic TPH [illegible]	Aromatic TPH [illegible]	Aromatic TPH [illegible]	Aromatic TPH [illegible]	Aromatic TPH [illegible]	Aromatic TPH [illegible]	[illegible] TPH [illegible]
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOD		10	0.02	0.02	0.05	1	2	8	8		0.01	0.01	0.05	1	2	10	10	
Screening Criteria		1300	[illegible]	210	[illegible]	190	1800	1600	1000	1000	140	250	7.34	48.3	173.17	560	1800	1500
TSP05-01G	09/07/2024	180	< 0.020	< 0.020	< 0.050	< 1.0	12	35	61	110	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	30	30
TSP05-02G	09/07/2024	150	< 0.020	< 0.020	< 0.050	< 1.0	13	29	43	86	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	13	25	38
TSP05-03G	09/07/2024	180	< 0.020	< 0.020	< 0.050	< 1.0	12	32	66	110	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	30	30
TSP05-04G	09/07/2024	110	< 0.020	< 0.020	< 0.050	< 1.0	5.8	19	31	55	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	11	25	36
TSP05-05G	09/07/2024	200	< 0.020	< 0.020	< 0.050	< 1.0	12	27	55	94	< 0.010	< 0.010	< 0.050	< 1.0	2.4	16	46	65
TSP05-06G	09/07/2024	320	< 0.020	< 0.020	< 0.050	1	27	36	74	140	< 0.010	< 0.010	< 0.050	< 1.0	7	23	76	110
TSP05-07G	09/07/2024	250	< 0.020	< 0.020	< 0.050	< 1.0	14	40	83	140	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	11	48	59
TSP05-08G	09/07/2024	110	< 0.020	< 0.020	< 0.050	< 1.0	6.8	19	26	51	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	11	28	39
TSP05-09G	09/07/2024	89	< 0.020	< 0.020	< 0.050	< 1.0	6.9	25	33	64	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	< 10	< 10
TSP05-10G	09/07/2024	110	< 0.020	< 0.020	< 0.050	< 1.0	7.2	21	25	53	< 0.010	< 0.010	< 0.050	< 1.0	3.2	14	24	41
TSP05-11G	09/07/2024	100	< 0.020	< 0.020	< 0.050	< 1.0	6.1	25	39	69	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	13	13
TSP05-12G	09/07/2024	220	< 0.020	< 0.020	< 0.050	< 1.0	10	37	75	120	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	10	42	52
TSP05-01H	17/07/2024	34	< 0.05	< 0.10	< 0.05	2.8	< 1.0	< 2.0	< 3.0	5.4	< 0.05	< 0.05	< 0.05	< 1.0	< 1.0	15	12	28
TSP05-02H	17/07/2024	320	< 0.05	< 0.10	< 0.05	5.3	43	100	42	200	< 0.05	< 0.05	< 0.05	< 1.0	8.6	34	18	60
TSP05-03H	17/07/2024	200	< 0.05	< 0.10	< 0.05	3	28	71	42	140	< 0.05	< 0.05	< 0.05	< 1.0	2.8	21	12	37
TSP05-04H	17/07/2024	330	< 0.05	< 0.10	< 0.05	5	51	94	47	200	< 0.05	< 0.05	< 0.05	1	5.7	34	29	70
TSP05-05H	17/07/2024	280	< 0.05	< 0.10	< 0.05	7.6	52	80	44	180	< 0.05	< 0.05	< 0.05	2.2	8.4	34	17	62
TSP05-06H	17/07/2024	180	< 0.05	< 0.10	< 0.05	< 2.0	9.2	19	13	43	< 0.05	< 0.05	< 0.05	< 1.0	1.1	42	74	120
TSP05-07H	17/07/2024	340	< 0.05	< 0.10	< 0.05	4.1	40	110	56	210	< 0.05	< 0.05	< 0.05	< 1.0	4.6	38	30	73
TSP05-08H	17/07/2024	410	< 0.05	< 0.10	< 0.05	9.4	65	140	70	280	< 0.05	< 0.05	< 0.05	2.5	9.9	43	25	80
TSP05-09H	17/07/2024	280	< 0.05	< 0.10	< 0.05	6.1	39	89	53	190	< 0.05	< 0.05	< 0.05	< 1.0	4.6	32	20	57
TSP05-10H	17/07/2024	180	< 0.05	< 0.10	< 0.05	2.4	26	47	29	100	< 0.05	< 0.05	< 0.05	< 1.0	2.6	24	28	54
TSP05-11H	17/07/2024	200	< 0.05	< 0.10	< 0.05	2.8	25	62	37	130	< 0.05	< 0.05	< 0.05	< 1.0	2.7	23	21	47
TSP05-12H	17/07/2024	290	< 0.05	< 0.10	< 0.05	5.7	34	87	49	180	< 0.05	< 0.05	< 0.05	1.3	4.2	30	23	59
TSP05-01I	23/07/2024	560	< 0.05	< 0.10	< 0.05	7.8	77	140	99	320	< 0.05	< 0.05	< 0.05	< 1.0	27	90	54	170
TSP05-02I	23/07/2024	720	< 0.05	< 0.10	< 0.05	15	91	190	95	390	< 0.05	< 0.05	< 0.05	1.2	28	120	110	260
TSP05-03I	23/07/2024	430	< 0.05	< 0.10	< 0.05	6.9	51	140	76	270	< 0.05	< 0.05	< 0.05	< 1.0	16	57	49	120
TSP05-04I	23/07/2024	13	< 0.05	< 0.10	< 0.05	< 2.0	1.1	< 2.0	< 3.0	< 5.0	< 0.05	< 0.05	< 0.05	< 1.0	< 1.0	3	< 2.0	< 5.0
TSP05-05I	23/07/2024	500	< 0.05	< 0.10	< 0.05	3.7	62	150	85	300	< 0.05	< 0.05	< 0.05	< 1.0	26	85	55	170
TSP05-06I	23/07/2024	10	< 0.05	< 0.10	< 0.05	< 2.0	< 1.0	< 2.0	< 3.0	< 5.0	< 0.05	< 0.05	< 0.05	< 1.0	< 1.0	3.1	< 2.0	< 5.0
TSP05-07I	23/07/2024	310	< 0.05	< 0.10	< 0.05	< 2.0	39	47	38	120	< 0.05	< 0.05	< 0.05	< 1.0	19	91	52	160
TSP05-08I	23/07/2024	370	< 0.05	< 0.10	< 0.05	7.6	50	110	77	240	< 0.05	< 0.05	< 0.05	< 1.0	19	56	23	99
TSP05-09I	23/07/2024	540	< 0.05	< 0.10	< 0.05	7.4	66	150	100	330	< 0.05	< 0.05	< 0.05	< 1.0	20	94	63	180
TSP05-10I	23/07/2024	420	< 0.05	< 0.10	< 0.05	4.5	52	100	62	220	< 0.05	< 0.05	< 0.05	< 1.0	34	84	49	170
TSP05-11I	23/07/2024	420	< 0.05	< 0.10	< 0.05	5.6	54	120	74	260	< 0.05	< 0.05	< 0.05	< 1.0	22	73	41	140
TSP05-12I	23/07/2024	430	< 0.05	< 0.10	< 0.05	11	47	120	69	250	< 0.05	< 0.05	< 0.05	< 1.0	26	77	48	150

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Analytical Report Number : 24-029772

Project / Site name:	Ardrossan North Shore	**Samples received on:**	09/07/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	09/07/2024
Your order number:	S3240	**Analysis completed by:**	17/07/2024
Report Issue Number:	1	**Report issued on:**	17/07/2024
Samples Analysed:	12 soil samples		

Signed: [redacted]

[redacted]
Senior Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252131	252132	252133	252134	252135
Sample Reference				TSP05-01G	TSP05-02G	TSP05-03G	TSP05-04G	TSP05-05G
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.00	0.00	0.00	0.00
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	28	26.7	< 0.1	23.2
Moisture Content	%	0.01	NONE	8.4	6.3	8.5	7.1	7.7
Total mass of sample received	kg	0.1	NONE	0.3	0.3	0.3	0.3	0.2
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.08
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.1	0.14	0.09	0.3	0.24
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.07	0.06
Fluoranthene	mg/kg	0.05	MCERTS	0.16	0.29	0.14	0.52	0.28
Pyrene	mg/kg	0.05	MCERTS	0.17	0.35	0.16	0.58	0.33
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09	0.16	0.1	0.3	0.18
Chrysene	mg/kg	0.05	MCERTS	0.11	0.18	0.07	0.3	0.16
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.18	< 0.05	0.36	0.18
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.1	< 0.05	0.13	0.07
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.2	< 0.05	0.3	0.17
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.09	< 0.05	0.13	0.08
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.12	< 0.05	0.18	0.12
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	1.81	< 0.80	3.18	1.96
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	12	13	12	5.8	12
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	35	29	32	19	27
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	61	43	66	31	55
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	110	86	110	55	94
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	2.4
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	13	< 10	11	16
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	30	25	30	25	46
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	30	38	30	36	65
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	180	150	180	110	200
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252131	252132	252133	252134	252135
Sample Reference				TSP05-01G	TSP05-02G	TSP05-03G	TSP05-04G	TSP05-05G
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.00	0.00	0.00	0.00
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252136	252137	252138	252139	252140
Sample Reference				TSP05-06G	TSP05-07G	TSP05-08G	TSP05-09G	TSP05-10G
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.00	0.00	0.00	0.00
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	40.2	27.9
Moisture Content	%	0.01	NONE	8.7	9.6	6.6	5.5	7
Total mass of sample received	kg	0.1	NONE	0.3	0.4	0.3	0.3	0.3
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.29	0.08	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.11	0.13	0.29	0.12	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.1	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.47	0.21	0.57	0.29	0.16
Pyrene	mg/kg	0.05	MCERTS	0.57	0.26	0.68	0.33	0.21
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.36	0.11	0.34	0.15	0.12
Chrysene	mg/kg	0.05	MCERTS	0.34	0.18	0.37	0.24	0.16
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.4	0.15	0.35	0.22	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.17	< 0.05	0.22	0.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.35	0.15	0.43	0.2	0.15
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.18	0.08	0.16	0.1	0.08
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.23	0.12	0.2	0.14	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.3	1.4	3.91	1.96	0.88
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	1	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	27	14	6.8	6.9	7.2
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	36	40	19	25	21
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	74	83	26	33	25
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	140	140	51	64	53
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	7	< 2.0	< 2.0	< 2.0	3.2
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	23	11	11	< 10	14
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	76	48	28	< 10	24
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	110	59	39	< 10	41
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	320	250	110	89	110
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252136	252137	252138	252139	252140
Sample Reference				TSP05-06G	TSP05-07G	TSP05-08G	TSP05-09G	TSP05-10G
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.00	0.00	0.00	0.00
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252141	252142
Sample Reference				TSP05-11G	TSP05-12G
Sample Number				None Supplied	None Supplied
Depth (m)				0.00	0.00
Date Sampled				09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	23.4
Moisture Content	%	0.01	NONE	7.2	7.9
Total mass of sample received	kg	0.1	NONE	0.3	0.3
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.11	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.23	0.11
Pyrene	mg/kg	0.05	MCERTS	0.28	0.12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.21	0.08
Chrysene	mg/kg	0.05	MCERTS	0.23	0.08
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.27	0.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.24	0.09
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.13	0.06
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.09
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.8	< 0.80
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	6.1	10
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	25	37
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	39	75
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	69	120
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	10
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	13	42
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	13	52
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	100	220
VOCs					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252141	252142
Sample Reference				TSP05-11G	TSP05-12G
Sample Number				None Supplied	None Supplied
Depth (m)				0.00	0.00
Date Sampled				09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-029772
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
252131	TSP05-01G	None Supplied	0	Brown loam and sand with gravel
252132	TSP05-02G	None Supplied	0	Brown loam and sand with gravel and stones
252133	TSP05-03G	None Supplied	0	Brown loam and sand with vegetation and stones
252134	TSP05-04G	None Supplied	0	Brown loam and sand with gravel and vegetation
252135	TSP05-05G	None Supplied	0	Brown loam and sand with vegetation and stones
252136	TSP05-06G	None Supplied	0	Brown loam and sand with gravel and vegetation
252137	TSP05-07G	None Supplied	0	Brown loam and sand with gravel and vegetation
252138	TSP05-08G	None Supplied	0	Brown loam and sand with gravel and vegetation
252139	TSP05-09G	None Supplied	0	Brown loam and sand with gravel and stones
252140	TSP05-10G	None Supplied	0	Brown loam and sand with gravel and stones
252141	TSP05-11G	None Supplied	0	Brown loam and sand with gravel and vegetation
252142	TSP05-12G	None Supplied	0	Brown loam and sand with gravel and stones

Analytical Report Number : 24-029772
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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UKAS TESTING 2183

mCERTS THE ENVIRONMENT AGENCY'S MONITORING CERTIFICATION SCHEME

Final Report

Report No.:	24-23192-1
Initial Date of Issue:	24-Jul-2024
Re-Issue Details:	
Client	Sanctus Limited
Client Address:	1 Olympus Park Business Centre Quedgeley Gloucester Gloucestershire GL2 4DH
Contact(s):	Labs
Project	S3240 Ardrossan North Shore
Quotation No.:	Q24-35340
Order No.:	S3240
No. of Samples:	12
Turnaround (Wkdays):	3
Date Approved:	24-Jul-2024
Approved By:	
Details:	[redacted] Technical Director

Date Received:	22-Jul-2024
Date Instructed:	22-Jul-2024
Results Due:	24-Jul-2024

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited					Chemtest Job No.:	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192
Quotation No.: Q24-35340					Chemtest Sample ID.:	1838810	1838811	1838812	1838813	1838814	1838815	1838816	1838817
Order No.: S3240					Client Sample Ref.:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
					Client Sample ID.:	TSP05-01H	TSP05-02H	TSP05-03H	TSP05-04H	TSP05-05H	TSP05-06H	TSP05-07H	TSP05-08H
					Sample Location:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Bottom Depth (m):	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					Date Sampled:	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Moisture		N	2030	%	0.020	8.4	9.1	7.9	7.3	9.4	8.4	8.6	10
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones	Stones and Roots	Stones and Roots	Roots and Stones	Roots and Stones	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	2.8	5.3	3.0	5.0	7.6	< 2.0	4.1	9.4
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	< 1.0	43	28	51	52	9.2	40	65
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	< 2.0	100	71	94	80	19	110	140
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	< 3.0	42	42	47	44	13	56	70
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	5.4	200	140	200	180	43	210	280
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	< 10	200	140	200	180	43	210	280
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	< 1.0	< 1.0	1.0	2.2	< 1.0	< 1.0	2.5
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	8.6	2.8	5.7	8.4	1.1	4.6	9.9
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	15	34	21	34	34	42	38	43
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	12	18	12	29	17	74	30	25
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	1.1	60	21	59	34	19	53	49
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	28	60	37	70	62	120	73	80
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	29	120	58	130	95	140	130	130
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00	33	260	180	270	240	160	280	360
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	34	320	200	330	280	180	340	410
Naphthalene		M	2700	mg/kg	0.10	< 0.10	0.20	0.14	0.25	0.31	0.32	0.17	< 0.10
Acenaphthylene		M	2700	mg/kg	0.10	0.32	0.61	0.53	0.57	0.52	0.42	0.39	0.64
Acenaphthene		M	2700	mg/kg	0.10	0.30	0.71	0.65	0.58	0.58	0.25	0.39	0.61
Fluorene		M	2700	mg/kg	0.10	0.37	1.6	1.0	0.67	0.73	0.48	0.40	0.83
Phenanthrene		M	2700	mg/kg	0.10	0.81	0.95	0.52	0.80	1.2	0.84	0.57	1.7

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23192	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1838810	1838811	1838812	1838813	1838814	1838815	1838816	1838817
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-01H	TSP05-02H	TSP05-03H	TSP05-04H	TSP05-05H	TSP05-06H	TSP05-07H	TSP05-08H
				Sample Location:		TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Bottom Depth (m):		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Date Sampled:		17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Anthracene		M	2700	mg/kg	0.10	0.33	0.33	0.21	0.58	0.45	0.55	0.26	0.55
Fluoranthene		M	2700	mg/kg	0.10	2.3	2.2	1.8	4.6	3.4	2.2	2.0	3.0
Pyrene		M	2700	mg/kg	0.10	2.4	2.5	2.2	5.7	3.3	2.6	1.9	3.2
Benzo[a]anthracene		M	2700	mg/kg	0.10	< 0.10	2.1	1.6	< 0.10	2.1	1.1	1.9	1.9
Chrysene		M	2700	mg/kg	0.10	< 0.10	0.48	1.1	0.70	1.6	1.5	1.6	1.8
Benzo[b]fluoranthene		M	2700	mg/kg	0.10	2.5	2.4	2.2	5.5	3.1	2.6	2.3	2.7
Benzo[k]fluoranthene		M	2700	mg/kg	0.10	1.1	1.2	0.82	2.0	1.3	0.70	1.1	1.0
Benzo[a]pyrene		M	2700	mg/kg	0.10	1.9	1.8	1.6	4.6	2.3	1.9	1.8	2.2
Indeno(1,2,3-c,d)Pyrene		M	2700	mg/kg	0.10	1.7	1.5	1.3	3.2	1.6	1.5	1.7	1.5
Dibenz(a,h)Anthracene		M	2700	mg/kg	0.10	0.94	0.82	0.78	1.0	0.76	0.35	0.85	0.86
Benzo[g,h,i]perylene		M	2700	mg/kg	0.10	2.3	2.2	1.4	4.0	2.0	2.0	1.7	1.8
Total Of 16 PAH's		M	2700	mg/kg	2.0	17	22	18	35	25	19	19	24

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23192	24-23192	24-23192	24-23192
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1838818	1838819	1838820	1838821
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-09H	TSP05-10H	TSP05-11H	TSP05-12H
				Sample Location:		TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.00	0.00	0.00	0.00
				Bottom Depth (m):		0.00	0.00	0.00	0.00
				Date Sampled:		17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**				
Moisture		N	2030	%	0.020	10	8.9	9.5	9.8
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	6.1	2.4	2.8	5.7
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	39	26	25	34
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	89	47	62	87
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	53	29	37	49
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	< 10	< 10	< 10	< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	190	100	130	180
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	190	100	130	180
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	< 1.0	< 1.0	1.3
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	4.6	2.6	2.7	4.2
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	32	24	23	30
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	20	28	21	23
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	32	22	31	52
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	57	54	47	59
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	89	76	78	110
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00	240	160	170	230
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	280	180	200	290
Naphthalene		M	2700	mg/kg	0.10	0.13	< 0.10	0.19	0.24
Acenaphthylene		M	2700	mg/kg	0.10	0.36	0.47	0.29	0.32
Acenaphthene		M	2700	mg/kg	0.10	0.32	0.58	0.10	0.26
Fluorene		M	2700	mg/kg	0.10	0.28	0.82	0.29	0.29
Phenanthrene		M	2700	mg/kg	0.10	0.67	< 0.10	0.63	0.80

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23192	24-23192	24-23192	24-23192
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1838818	1838819	1838820	1838821
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-09H	TSP05-10H	TSP05-11H	TSP05-12H
				Sample Location:		TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.00	0.00	0.00	0.00
				Bottom Depth (m):		0.00	0.00	0.00	0.00
				Date Sampled:		17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**				
Anthracene		M	2700	mg/kg	0.10	0.27	0.53	0.28	0.32
Fluoranthene		M	2700	mg/kg	0.10	2.0	3.0	2.1	2.3
Pyrene		M	2700	mg/kg	0.10	2.2	2.8	2.4	2.7
Benzo[a]anthracene		M	2700	mg/kg	0.10	1.5	1.6	1.1	1.4
Chrysene		M	2700	mg/kg	0.10	1.3	1.4	1.3	1.8
Benzo[b]fluoranthene		M	2700	mg/kg	0.10	2.5	2.4	2.7	2.7
Benzo[k]fluoranthene		M	2700	mg/kg	0.10	0.99	1.1	0.82	0.99
Benzo[a]pyrene		M	2700	mg/kg	0.10	2.1	1.8	2.2	2.3
Indeno(1,2,3-c,d)Pyrene		M	2700	mg/kg	0.10	1.5	1.4	1.6	1.7
Dibenz(a,h)Anthracene		M	2700	mg/kg	0.10	0.70	0.62	0.78	0.63
Benzo[g,h,i]perylene		M	2700	mg/kg	0.10	1.8	1.8	2.2	2.4
Total Of 16 PAH's		M	2700	mg/kg	2.0	19	20	19	21

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8-C10 Aromatics: >C5–C7,>C7-C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request.
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory.
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING 2183

mCERTS

Final Report

Report No.:	24-23866-1
Initial Date of Issue:	31-Jul-2024
Re-Issue Details:	
Client	Sanctus Limited
Client Address:	1 Olympus Park Business Centre Quedgeley Gloucester Gloucestershire GL2 4DH
Contact(s):	Labs
Project	S3240 Ardossan North Shore
Quotation No.:	Q24-35340
Order No.:	S3240
No. of Samples:	12
Turnaround (Wkdays):	3
Date Approved:	31-Jul-2024
Approved By:	[redacted]
Details:	David Smith, Technical Director

Date Received:	26-Jul-2024
Date Instructed:	26-Jul-2024
Results Due:	30-Jul-2024

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: S3240 Ardossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23866	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1841202	1841203	1841204	1841205	1841206	1841207	1841208	1841209
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-01I	TSP05-02I	TSP05-03I	TSP05-04I	TSP05-05I	TSP05-06I	TSP05-07I	TSP05-08I
				Sample Location:		TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0	0	0	0	0	0	0	0
				Bottom Depth (m):		0	0	0	0	0	0	0	0
				Date Sampled:		23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Moisture		N	2030	%	0.020	7.9	7.2	8.6	7.6	8.5	7.4	7.2	7.2
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones, Roots and Glass	Stones	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A	Loam	Loam	Sand	Sand	Loam	Loam	Loam	Loam
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	7.8	15	6.9	< 2.0	3.7	< 2.0	< 2.0	7.6
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	77	91	51	1.1	62	< 1.0	39	50
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	140	190	140	< 2.0	150	< 2.0	47	110
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	99	95	76	< 3.0	85	< 3.0	38	77
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	24	13	17	11	18	< 10	11	17
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	320	390	270	< 5.0	300	< 5.0	120	240
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	350	400	290	11	320	< 10	140	260
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	27	28	16	< 1.0	26	< 1.0	19	19
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	90	120	57	3.0	85	3.1	91	56
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	54	110	49	< 2.0	55	< 2.0	52	23
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	35	55	17	2.1	16	1.8	14	13
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	170	260	120	< 5.0	170	< 5.0	160	99
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	210	320	140	< 10	180	< 10	180	110
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00	500	660	400	< 10	470	< 10	290	340
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	560	720	430	13	500	< 10	310	370
Benzene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: S3240 Ardossan North Shore

Client: Sanctus Limited													
Quotation No.: Q24-35340					**Chemtest Job No.:**	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866
Order No.: S3240					**Chemtest Sample ID.:**	1841202	1841203	1841204	1841205	1841206	1841207	1841208	1841209
					Client Sample Ref.:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
					Client Sample ID.:	TSP05-01I	TSP05-02I	TSP05-03I	TSP05-04I	TSP05-05I	TSP05-06I	TSP05-07I	TSP05-08I
					Sample Location:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0	0	0	0	0	0	0	0
					Bottom Depth (m):	0	0	0	0	0	0	0	0
					Date Sampled:	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	0.35	0.38	0.30	< 0.10	0.37	0.44	0.49	0.44
Anthracene		M	2800	mg/kg	0.10	0.16	0.20	0.20	< 0.10	0.12	0.17	0.19	0.22
Fluoranthene		M	2800	mg/kg	0.10	1.2	1.5	1.2	0.13	1.0	1.4	1.5	1.3
Pyrene		M	2800	mg/kg	0.10	1.3	1.5	1.1	0.12	1.0	1.4	1.5	1.4
Benzo[a]anthracene		M	2800	mg/kg	0.10	0.68	0.82	0.60	< 0.10	0.59	0.85	0.80	0.69
Chrysene		M	2800	mg/kg	0.10	0.53	0.87	0.66	< 0.10	0.45	0.90	0.88	0.55
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	1.2	1.7	0.85	< 0.10	1.0	1.5	1.5	1.4
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.41	0.56	0.37	< 0.10	0.28	0.51	0.63	0.48
Benzo[a]pyrene		M	2800	mg/kg	0.10	0.93	1.5	0.72	< 0.10	0.79	1.2	1.1	1.3
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	0.85	1.1	0.51	< 0.10	0.60	0.97	1.1	1.0
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.15	0.26	< 0.10	< 0.10	< 0.10	< 0.10	0.31	0.23
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	0.74	1.1	0.60	< 0.10	0.63	1.0	0.94	0.96
Total Of 16 PAH's		N	2800	mg/kg	2.0	8.5	12	7.1	< 2.0	6.9	10	11	10

Results - Soil

Project: S3240 Ardossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23866	24-23866	24-23866	24-23866
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1841210	1841211	1841212	1841213
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-09I	TSP05-10I	TSP05-11I	TSP05-12I
				Sample Location:		TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0	0	0	0
				Bottom Depth (m):		0	0	0	0
				Date Sampled:		23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**				
Moisture		N	2030	%	0.020	6.2	6.8	8.1	7.5
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A	Loam	Loam	Loam	Sand
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	7.4	4.5	5.6	11
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	66	52	54	47
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	150	100	120	120
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	100	62	74	69
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	17	15	18	18
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	330	220	260	250
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	340	240	270	260
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	20	34	22	26
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	94	84	73	77
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	63	49	41	48
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	18	16	12	13
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	180	170	140	150
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	190	180	150	160
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00	500	390	390	400
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	540	420	420	430
Benzene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: S3240 Ardossan North Shore

Client: Sanctus Limited						**Chemtest Job No.:**	24-23866	24-23866	24-23866	24-23866
Quotation No.: Q24-35340						**Chemtest Sample ID.:**	1841210	1841211	1841212	1841213
Order No.: S3240						Client Sample Ref.:	TSP05	TSP05	TSP05	TSP05
						Client Sample ID.:	TSP05-09I	TSP05-10I	TSP05-11I	TSP05-12I
						Sample Location:	TSP05	TSP05	TSP05	TSP05
						Sample Type:	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0	0	0	0
						Bottom Depth (m):	0	0	0	0
						Date Sampled:	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Naphthalene		M	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10		0.40	0.69	0.37	< 0.10
Anthracene		M	2800	mg/kg	0.10		0.21	0.25	0.19	< 0.10
Fluoranthene		M	2800	mg/kg	0.10		1.3	1.6	1.1	0.46
Pyrene		M	2800	mg/kg	0.10		1.5	1.5	1.2	0.52
Benzo[a]anthracene		M	2800	mg/kg	0.10		0.72	0.81	0.59	< 0.10
Chrysene		M	2800	mg/kg	0.10		0.87	0.82	0.53	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10		1.9	1.5	1.2	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10		0.52	0.56	0.38	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10		1.5	1.3	0.94	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10		1.4	1.1	0.79	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10		0.25	0.21	0.16	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10		1.2	1.1	0.78	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0		12	11	8.2	< 2.0

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8-C10 Aromatics: >C5–C7,>C7-C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Treated Stockpile Reuse Validation Form 004 – TSP07

Stockpile ID

Stockpile ID: TSP07

Material Volume: 700 m^3

Validation Samples Included 7 No.

Tested Location: Treatment Area 02

Stockpile Creation Date: 21/03/2024

Release Date: TBC

Sampling Data (3No. full rounds for validation to release)

Passing Round 1 (Overall Sample Round 9 of 11)	Sample Date: 25/06/2024	Report Number & Date: 24-027484 – 03/07/2024	Lab: i2
Passing Round 1 (Overall Sample Round 10 of 11)	Sample Date: 09/07/2024	Report Number & Date: 24-029826 – 16/07/2024	Lab: i2
Passing Round 1 (Overall Sample Round 11 of 11)	Sample Date: 18/07/2024	Report Number & Date: 24-22823 – 22/07/2024	Lab: Eurofins

Sampling Data

Round 1

Report Number: 24-027484

Report Date: 03/07/2024

Sample ID (Sample Names): TSP07-01G – TSP07-07G

Report ID (Lab): i2

Comments:

Test Results: PASS / ~~FAIL~~

No exceedances seen throughout Average Total TPH = 699 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse. Please note that round H was abandoned and no results are published under that round's name.

Round 2

Report Number: 24-029826

Report Date: 16/07/2024

Sample ID (Sample Names): TSP07-01I – TSP07-07I

Report ID (Lab): i2

Comments:

Test Results: PASS / ~~FAIL~~

No exceedances seen throughout Average Total TPH = 170 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Round 3

Report Number: 24-22823

Report Date: 22/07/2024

Sample ID (Sample Names): TSP07-01J – TSP07-07J

Report ID (Lab): Eurofins

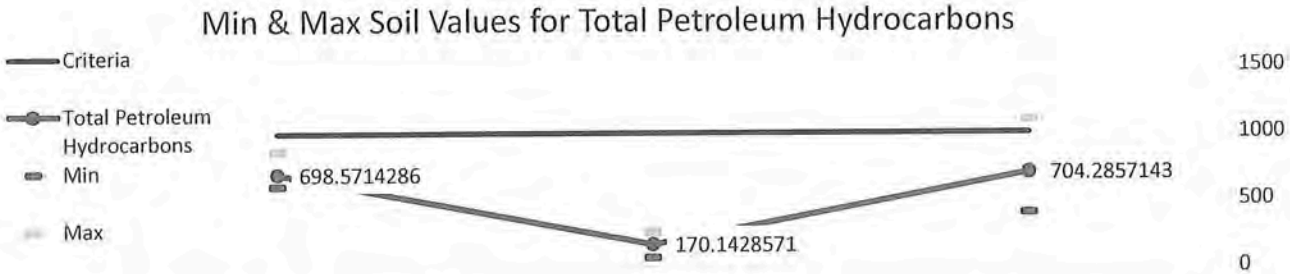
Comments:

Test Results: PASS / ~~FAIL~~

One exceedance in total TPH (and zero exceedances in the banded TPHs) was noted in TSP07-01J. Following a statistical review, a >95% confidence level is seen with the distribution of total TPH, using the critical value of 1,000mg/kg a normal-normal distribution. Average Total TPH = 704 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

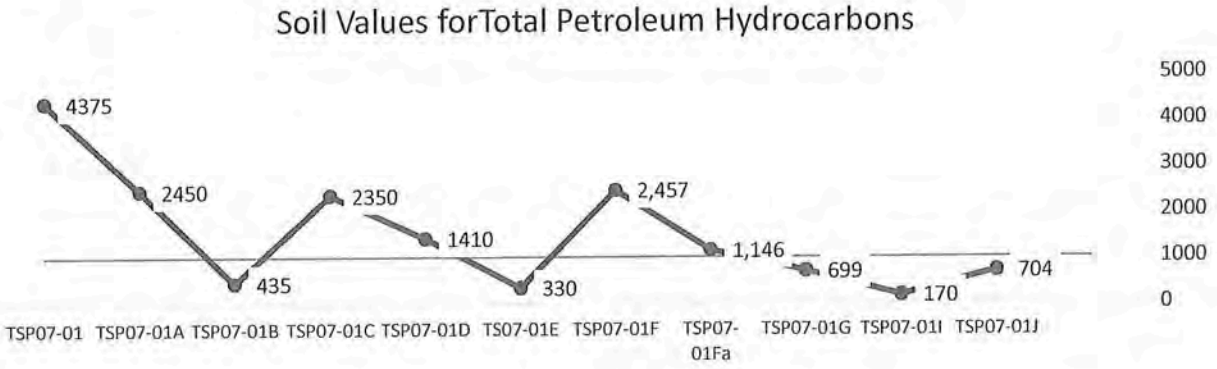
Data Review

Data Trend for Total TPH levels:



Additional Trendline Data – long term review:

Further to the above spread of data for the final 3 No. rounds, the total TPH levels from March 2024, for the treated stockpile, are shown below. The chart shows a significant decrease in the averaged total TPH levels, and the final result presents a reduction of total TPH level of 84% when compared to the initial material's contents (4,375 mg/kg (21st March 2024), compared to 704 mg/kg (16/07/2024)):



Treated Stockpile Sample Plan:

Sampling Strategy:

All samples have been taken in compliance with ISO BS 18400, including the following notes:

- Stainless steel/washable sampling devices (trowels, buckets, etc) will be employed for the gathering of the soils samples and cleaned between each sample location so that consecutive samples are not cross-contaminated.
- The sample positions shown above indicate the position relative to the base boundary of the stockpile. All samples are taken from a within the body of the Stockpile, retrieved by an excavator. This is done as a safe sample retrieval option as well as to target an internal representative sample location mid-way from the edge to the centre of the Stockpile, as discussed under BS ISO 18400-104:2018 (Sampling Strategies), subsection 9.
- The subsequent sample depths were between 1-2 m below the Stockpile's surface and a minimum of 4No. characteristic subsamples were taken from an area of approximately $1m^2$ of the newly exposed material. The 4No. or more sub-locations were chosen in a X-pattern and the combined testing soil material is described as a composite sample, following a systematic stratified random sub-sampling location of a 3-dimensional source.
- The mechanically retrieved material is then sub-sampled into the required sampling jars/pots by the Sanctus Engineer as a representative sample from the numbered location.

Sanctus Declaration:

We confirm that:

1. The material that this form relates to, has been sampled representatively, as discussed above and in accordance with the client's requirements (Ardrossan Remediation Specification Rev E).
2. The material has been proven to be suitable for REUSE on site as there are 3 No. consecutive rounds, with a statistical insignificant number of exceedances of the accepted reuse criteria. No exceedances are seen within the initial 2No monitoring round and all total TPH levels have decreased notably from round 1 and round 2, with round 3 returning a confidence level of >95% confidence when compared to the statistical confidence critical level of 1,000mg/kg for total TPH .
3. The laboratory analysis results are representative of the materials investigated.
4. The material released will also be recorded spatially at its reuse location

NAME: [redacted]
POSITION: Senior Environmental Engineer
DATE: 02/08/2024
SIGNED:

X [redacted]

[redacted]
Senior Environmental Engineer
Signed by: 7ee90afd-5b10-4b4f-a839-775383c68d48

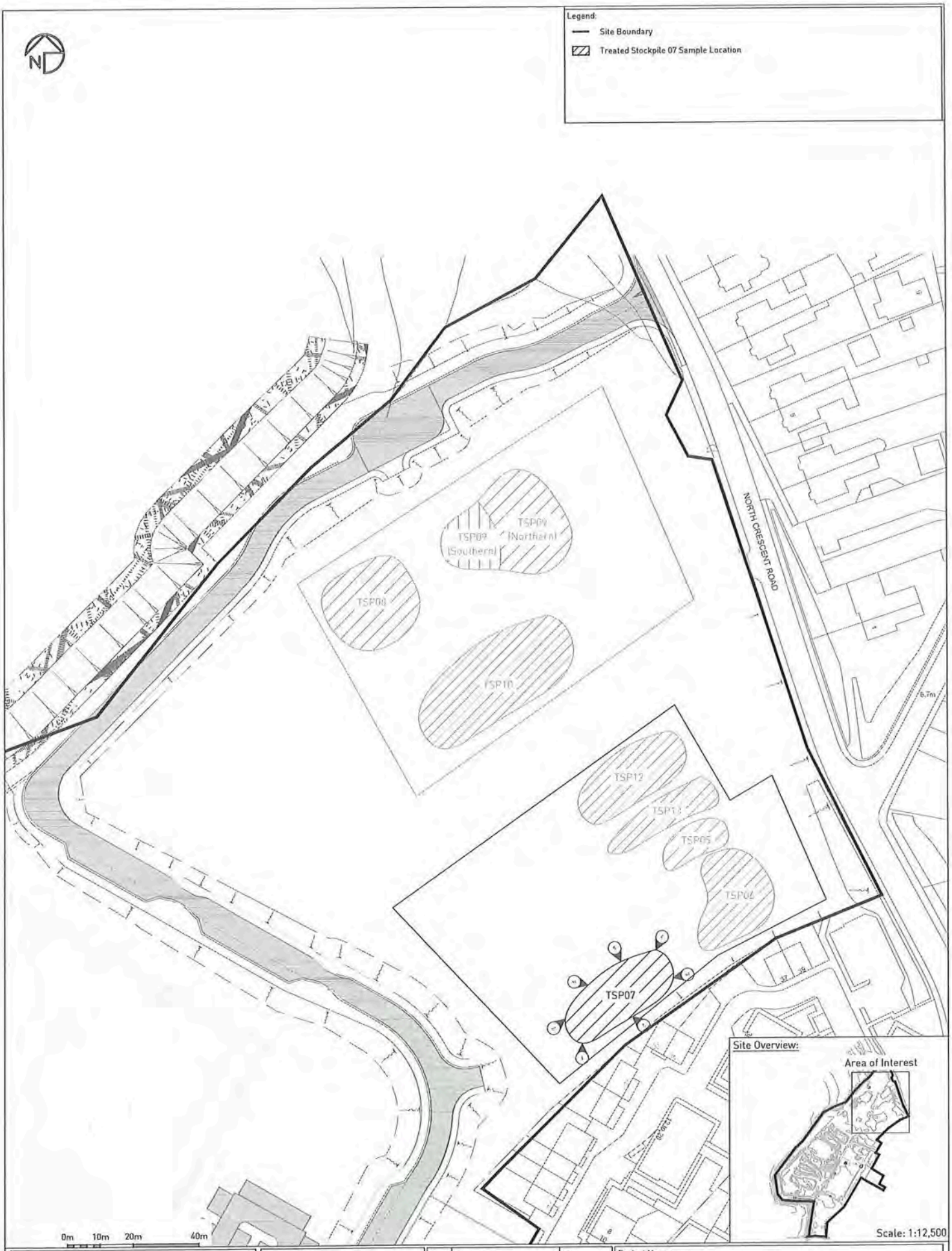
Record of reuse

For Sanctus Use Only:

Approved for reuse:

Beginning of Movement from stockpile:

End of Movement into site:



sanctus

Sanctus House, 1 Olympus Park Business Centre,
Quedgeley, Glos, GL2 4DH
T: 01453 828222
E: info@sanctusltd.co.uk www.sanctusltd.com

Drawing Notes:
Based on client supplied DWG - ARDROSSAN 2D produced by Aird Group 23/03/2020. All locations are approximate. Must be printed in colour.

Site Address:
Raylight Place
Ardrossan
North Ayrshire
Scotland

Rev.	Description	Date
A	First Issue	02/08/2024

APPROVED

Project Name:
North Shore, Ardrossan

Client:
North Ayrshire Council

Drawing Title:
Treated Stockpile 07 Sample Locations

Contract No:	Drawing No:	Scale @ A3:
S3240	03240/077	1:1000

Drawn By: [redacted] QC Check By: [redacted] Approved By: [redacted]

Sample ID	Date Sampled	Total Recoverable Hydrocarbons	Benzene TRH <C6-C7	Toluene TRH >C7-C8	Ethylbenzene TRH >C8-C10	Xylenes - m & p TRH >C8-C10	Xylenes - o TRH >C8-C10	Naphthalene TRH >C10-C11	Naphthalene TRH >C11-C12	Naphthalene TRH >C12-C16	Benzene TRH >C6-C10	Toluene TRH >C6-C10	Xylenes TRH >C6-C10	Benzene TRH >C10-C16	Toluene TRH >C10-C16	Ethylbenzene TRH >C10-C16	Xylenes - m & p TRH >C10-C16	Xylenes - o TRH >C10-C16	Naphthalene TRH >C10-C16
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOR		10	0.02	0.02	0.05	1	2	8	8		0.01	0.01	0.05	1	2	10	10		
Screening Criteria		1000	78	230	65	930	1000	1000	1000	1000	140	290	7.24	46.2	172.47	540	1000	1000	
TSP07-01G	25/06/2024	610	< 0.020	< 0.020	< 0.050	< 1.0	18	50	160	230	< 0.010	< 0.010	< 0.050	< 1.0	2.7	49	220	270	
TSP07-02G	25/06/2024	870	< 0.020	< 0.020	< 0.050	< 1.0	19	65	190	270	< 0.010	< 0.010	< 0.050	< 1.0	8.4	110	340	460	
TSP07-03G	25/06/2024	620	< 0.020	< 0.020	< 0.050	< 1.0	16	49	160	220	< 0.010	< 0.010	< 0.050	< 1.0	2.2	48	220	270	
TSP07-04G	25/06/2024	730	< 0.020	< 0.020	< 0.050	< 1.0	13	50	180	240	< 0.010	< 0.010	< 0.050	< 1.0	8.2	68	260	340	
TSP07-05G	25/06/2024	700	< 0.020	< 0.020	< 0.050	< 1.0	19	65	190	280	< 0.010	< 0.010	< 0.050	< 1.0	3.6	54	220	280	
TSP07-06G	25/06/2024	650	< 0.020	< 0.020	< 0.050	< 1.0	12	47	170	230	< 0.010	< 0.010	< 0.050	< 1.0	13	56	220	290	
TSP07-07G	25/06/2024	710	< 0.020	< 0.020	< 0.050	< 1.0	14	53	170	240	< 0.010	< 0.010	< 0.050	< 1.0	9.5	64	260	330	
TSP07-01I	09/07/2024	110	< 0.020	< 0.020	< 0.050	< 1.0	6.4	15	31	52	< 0.010	< 0.010	< 0.050	< 1.0	3.3	< 10	31	34	
TSP07-02I	09/07/2024	210	< 0.020	< 0.020	< 0.050	1.1	22	23	50	96	< 0.010	< 0.010	< 0.050	< 1.0	6	19	61	86	
TSP07-03I	09/07/2024	80	< 0.020	< 0.020	< 0.050	< 1.0	2.8	8.8	17	29	< 0.010	< 0.010	< 0.050	< 1.0	3.7	< 10	30	34	
TSP07-04I	09/07/2024	230	< 0.020	< 0.020	< 0.050	< 1.0	8.1	28	60	95	< 0.010	< 0.010	< 0.050	< 1.0	7.1	24	72	100	
TSP07-05I	09/07/2024	71	< 0.020	< 0.020	< 0.050	< 1.0	3.1	9.8	19	32	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	23	23	
TSP07-06I	09/07/2024	230	< 0.020	< 0.020	< 0.050	3.1	17	41	71	130	< 0.010	< 0.010	< 0.050	< 1.0	4.1	20	54	78	
TSP07-07I	09/07/2024	260	< 0.020	< 0.020	< 0.050	1.1	9.7	31	68	110	< 0.010	< 0.010	< 0.050	< 1.0	7.2	29	83	120	
TSP07-01J	16/07/2024	1100	< 0.05	< 0.10	< 0.05	19	180	370	250	820	< 0.05	< 0.05	< 0.05	2.7	19	100	27	150	
TSP07-02J	16/07/2024	750	< 0.05	< 0.10	< 0.05	29	110	220	120	480	< 0.05	< 0.05	< 0.05	3.9	23	81	33	140	
TSP07-03J	16/07/2024	480	< 0.05	< 0.10	< 0.05	14	77	170	120	380	< 0.05	< 0.05	< 0.05	< 1.0	12	57	8.7	79	
TSP07-04J	16/07/2024	400	< 0.05	0.16	0.3	18	65	120	68	270	< 0.05	< 0.05	< 0.05	2.1	11	42	20	74	
TSP07-05J	16/07/2024	1000	< 0.05	< 0.10	< 0.05	31	220	310	220	790	< 0.05	< 0.05	< 0.05	5.4	31	99	19	150	
TSP07-06J	16/07/2024	750	< 0.05	< 0.10	< 0.05	24	120	260	140	540	< 0.05	< 0.05	< 0.05	2.8	21	77	12	110	
TSP07-07J	16/07/2024	450	< 0.05	< 0.10	< 0.05	13	70	150	100	340	< 0.05	< 0.05	< 0.05	< 1.0	10	48	12	70	

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Analytical Report Number : 24-029772

Project / Site name:	Ardrossan North Shore	**Samples received on:**	09/07/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	09/07/2024
Your order number:	S3240	**Analysis completed by:**	17/07/2024
Report Issue Number:	1	**Report issued on:**	17/07/2024
Samples Analysed:	12 soil samples		

Signed: [redacted]

[redacted]
Senior Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252131	252132	252133	252134	252135
Sample Reference				TSP05-01G	TSP05-02G	TSP05-03G	TSP05-04G	TSP05-05G
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.00	0.00	0.00	0.00
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	28	26.7	< 0.1	23.2
Moisture Content	%	0.01	NONE	8.4	6.3	8.5	7.1	7.7
Total mass of sample received	kg	0.1	NONE	0.3	0.3	0.3	0.3	0.2
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.08
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.1	0.14	0.09	0.3	0.24
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.07	0.06
Fluoranthene	mg/kg	0.05	MCERTS	0.16	0.29	0.14	0.52	0.28
Pyrene	mg/kg	0.05	MCERTS	0.17	0.35	0.16	0.58	0.33
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09	0.16	0.1	0.3	0.18
Chrysene	mg/kg	0.05	MCERTS	0.11	0.18	0.07	0.3	0.16
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.18	< 0.05	0.36	0.18
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.1	< 0.05	0.13	0.07
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.2	< 0.05	0.3	0.17
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.09	< 0.05	0.13	0.08
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.12	< 0.05	0.18	0.12
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	1.81	< 0.80	3.18	1.96
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	12	13	12	5.8	12
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	35	29	32	19	27
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	61	43	66	31	55
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	110	86	110	55	94
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	2.4
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	13	< 10	11	16
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	30	25	30	25	46
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	30	38	30	36	65
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	180	150	180	110	200
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252131	252132	252133	252134	252135
Sample Reference				TSP05-01G	TSP05-02G	TSP05-03G	TSP05-04G	TSP05-05G
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.00	0.00	0.00	0.00
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252136	252137	252138	252139	252140
Sample Reference				TSP05-06G	TSP05-07G	TSP05-08G	TSP05-09G	TSP05-10G
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.00	0.00	0.00	0.00
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	40.2	27.9
Moisture Content	%	0.01	NONE	8.7	9.6	6.6	5.5	7
Total mass of sample received	kg	0.1	NONE	0.3	0.4	0.3	0.3	0.3
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.29	0.08	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.11	0.13	0.29	0.12	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.1	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.47	0.21	0.57	0.29	0.16
Pyrene	mg/kg	0.05	MCERTS	0.57	0.26	0.68	0.33	0.21
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.36	0.11	0.34	0.15	0.12
Chrysene	mg/kg	0.05	MCERTS	0.34	0.18	0.37	0.24	0.16
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.4	0.15	0.35	0.22	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.17	< 0.05	0.22	0.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.35	0.15	0.43	0.2	0.15
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.18	0.08	0.16	0.1	0.08
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.23	0.12	0.2	0.14	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.3	1.4	3.91	1.96	0.88
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	1	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	27	14	6.8	6.9	7.2
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	36	40	19	25	21
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	74	83	26	33	25
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	140	140	51	64	53
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	7	< 2.0	< 2.0	< 2.0	3.2
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	23	11	11	< 10	14
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	76	48	28	< 10	24
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	110	59	39	< 10	41
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	320	250	110	89	110
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252136	252137	252138	252139	252140
Sample Reference				TSP05-06G	TSP05-07G	TSP05-08G	TSP05-09G	TSP05-10G
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.00	0.00	0.00	0.00
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252141	252142
Sample Reference				TSP05-11G	TSP05-12G
Sample Number				None Supplied	None Supplied
Depth (m)				0.00	0.00
Date Sampled				09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	23.4
Moisture Content	%	0.01	NONE	7.2	7.9
Total mass of sample received	kg	0.1	NONE	0.3	0.3
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.11	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.23	0.11
Pyrene	mg/kg	0.05	MCERTS	0.28	0.12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.21	0.08
Chrysene	mg/kg	0.05	MCERTS	0.23	0.08
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.27	0.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.24	0.09
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.13	0.06
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.09
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.8	< 0.80
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	6.1	10
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	25	37
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	39	75
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	69	120
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	10
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	13	42
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	13	52
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	100	220
VOCs					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0

Analytical Report Number: 24-029772
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252141	252142
Sample Reference				TSP05-11G	TSP05-12G
Sample Number				None Supplied	None Supplied
Depth (m)				0.00	0.00
Date Sampled				09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number : 24-029772
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
252131	TSP05-01G	None Supplied	0	Brown loam and sand with gravel
252132	TSP05-02G	None Supplied	0	Brown loam and sand with gravel and stones
252133	TSP05-03G	None Supplied	0	Brown loam and sand with vegetation and stones
252134	TSP05-04G	None Supplied	0	Brown loam and sand with gravel and vegetation
252135	TSP05-05G	None Supplied	0	Brown loam and sand with vegetation and stones
252136	TSP05-06G	None Supplied	0	Brown loam and sand with gravel and vegetation
252137	TSP05-07G	None Supplied	0	Brown loam and sand with gravel and vegetation
252138	TSP05-08G	None Supplied	0	Brown loam and sand with gravel and vegetation
252139	TSP05-09G	None Supplied	0	Brown loam and sand with gravel and stones
252140	TSP05-10G	None Supplied	0	Brown loam and sand with gravel and stones
252141	TSP05-11G	None Supplied	0	Brown loam and sand with gravel and vegetation
252142	TSP05-12G	None Supplied	0	Brown loam and sand with gravel and stones

Analytical Report Number : 24-029772
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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UKAS TESTING 2183

mCERTS

Final Report

Report No.:	24-23192-1
Initial Date of Issue:	24-Jul-2024
Re-Issue Details:	
Client	Sanctus Limited
Client Address:	1 Olympus Park Business Centre Quedgeley Gloucester Gloucestershire GL2 4DH
Contact(s):	Labs
Project	S3240 Ardrossan North Shore
Quotation No.:	Q24-35340
Order No.:	S3240
No. of Samples:	12
Turnaround (Wkdays):	3
Date Approved:	24-Jul-2024
Approved By:	
Details:	[redacted] Technical Director

Date Received:	22-Jul-2024
Date Instructed:	22-Jul-2024
Results Due:	24-Jul-2024

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited						**Chemtest Job No.:**	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192
Quotation No.: Q24-35340						**Chemtest Sample ID.:**	1838810	1838811	1838812	1838813	1838814	1838815	1838816	1838817
Order No.: S3240						Client Sample Ref.:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
						Client Sample ID.:	TSP05-01H	TSP05-02H	TSP05-03H	TSP05-04H	TSP05-05H	TSP05-06H	TSP05-07H	TSP05-08H
						Sample Location:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
						Bottom Depth (m):	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
						Date Sampled:	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**									
Moisture		N	2030	%	0.020		8.4	9.1	7.9	7.3	9.4	8.4	8.6	10
Soil Colour		N	2040		N/A		Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A		Stones and Roots	Stones	Stones and Roots	Stones and Roots	Roots and Stones	Roots and Stones	Stones	Stones
Soil Texture		N	2040		N/A		Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		2.8	5.3	3.0	5.0	7.6	< 2.0	4.1	9.4
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		< 1.0	43	28	51	52	9.2	40	65
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		< 2.0	100	71	94	80	19	110	140
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		< 3.0	42	42	47	44	13	56	70
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		5.4	200	140	200	180	43	210	280
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		< 10	200	140	200	180	43	210	280
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	1.0	2.2	< 1.0	< 1.0	2.5
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	8.6	2.8	5.7	8.4	1.1	4.6	9.9
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		15	34	21	34	34	42	38	43
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		12	18	12	29	17	74	30	25
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		1.1	60	21	59	34	19	53	49
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		28	60	37	70	62	120	73	80
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00		29	120	58	130	95	140	130	130
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		33	260	180	270	240	160	280	360
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00		34	320	200	330	280	180	340	410
Naphthalene		M	2700	mg/kg	0.10		< 0.10	0.20	0.14	0.25	0.31	0.32	0.17	< 0.10
Acenaphthylene		M	2700	mg/kg	0.10		0.32	0.61	0.53	0.57	0.52	0.42	0.39	0.64
Acenaphthene		M	2700	mg/kg	0.10		0.30	0.71	0.65	0.58	0.58	0.25	0.39	0.61
Fluorene		M	2700	mg/kg	0.10		0.37	1.6	1.0	0.67	0.73	0.48	0.40	0.83
Phenanthrene		M	2700	mg/kg	0.10		0.81	0.95	0.52	0.80	1.2	0.84	0.57	1.7

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited						**Chemtest Job No.:**	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192	24-23192
Quotation No.: Q24-35340						**Chemtest Sample ID.:**	1838810	1838811	1838812	1838813	1838814	1838815	1838816	1838817
Order No.: S3240						Client Sample Ref.:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
						Client Sample ID.:	TSP05-01H	TSP05-02H	TSP05-03H	TSP05-04H	TSP05-05H	TSP05-06H	TSP05-07H	TSP05-08H
						Sample Location:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
						Bottom Depth (m):	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
						Date Sampled:	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**									
Anthracene		M	2700	mg/kg	0.10		0.33	0.33	0.21	0.58	0.45	0.55	0.26	0.55
Fluoranthene		M	2700	mg/kg	0.10		2.3	2.2	1.8	4.6	3.4	2.2	2.0	3.0
Pyrene		M	2700	mg/kg	0.10		2.4	2.5	2.2	5.7	3.3	2.6	1.9	3.2
Benzo[a]anthracene		M	2700	mg/kg	0.10		< 0.10	2.1	1.6	< 0.10	2.1	1.1	1.9	1.9
Chrysene		M	2700	mg/kg	0.10		< 0.10	0.48	1.1	0.70	1.6	1.5	1.6	1.8
Benzo[b]fluoranthene		M	2700	mg/kg	0.10		2.5	2.4	2.2	5.5	3.1	2.6	2.3	2.7
Benzo[k]fluoranthene		M	2700	mg/kg	0.10		1.1	1.2	0.82	2.0	1.3	0.70	1.1	1.0
Benzo[a]pyrene		M	2700	mg/kg	0.10		1.9	1.8	1.6	4.6	2.3	1.9	1.8	2.2
Indeno(1,2,3-c,d)Pyrene		M	2700	mg/kg	0.10		1.7	1.5	1.3	3.2	1.6	1.5	1.7	1.5
Dibenz(a,h)Anthracene		M	2700	mg/kg	0.10		0.94	0.82	0.78	1.0	0.76	0.35	0.85	0.86
Benzo[g,h,i]perylene		M	2700	mg/kg	0.10		2.3	2.2	1.4	4.0	2.0	2.0	1.7	1.8
Total Of 16 PAH's		M	2700	mg/kg	2.0		17	22	18	35	25	19	19	24

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23192	24-23192	24-23192	24-23192
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1838818	1838819	1838820	1838821
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-09H	TSP05-10H	TSP05-11H	TSP05-12H
				Sample Location:		TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.00	0.00	0.00	0.00
				Bottom Depth (m):		0.00	0.00	0.00	0.00
				Date Sampled:		17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**				
Moisture		N	2030	%	0.020	10	8.9	9.5	9.8
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	6.1	2.4	2.8	5.7
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	39	26	25	34
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	89	47	62	87
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	53	29	37	49
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	< 10	< 10	< 10	< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	190	100	130	180
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	190	100	130	180
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	< 1.0	< 1.0	1.3
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	4.6	2.6	2.7	4.2
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	32	24	23	30
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	20	28	21	23
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	32	22	31	52
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	57	54	47	59
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	89	76	78	110
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00	240	160	170	230
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	280	180	200	290
Naphthalene		M	2700	mg/kg	0.10	0.13	< 0.10	0.19	0.24
Acenaphthylene		M	2700	mg/kg	0.10	0.36	0.47	0.29	0.32
Acenaphthene		M	2700	mg/kg	0.10	0.32	0.58	0.10	0.26
Fluorene		M	2700	mg/kg	0.10	0.28	0.82	0.29	0.29
Phenanthrene		M	2700	mg/kg	0.10	0.67	< 0.10	0.63	0.80

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23192	24-23192	24-23192	24-23192
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1838818	1838819	1838820	1838821
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-09H	TSP05-10H	TSP05-11H	TSP05-12H
				Sample Location:		TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.00	0.00	0.00	0.00
				Bottom Depth (m):		0.00	0.00	0.00	0.00
				Date Sampled:		17-Jul-2024	17-Jul-2024	17-Jul-2024	17-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**				
Anthracene		M	2700	mg/kg	0.10	0.27	0.53	0.28	0.32
Fluoranthene		M	2700	mg/kg	0.10	2.0	3.0	2.1	2.3
Pyrene		M	2700	mg/kg	0.10	2.2	2.8	2.4	2.7
Benzo[a]anthracene		M	2700	mg/kg	0.10	1.5	1.6	1.1	1.4
Chrysene		M	2700	mg/kg	0.10	1.3	1.4	1.3	1.8
Benzo[b]fluoranthene		M	2700	mg/kg	0.10	2.5	2.4	2.7	2.7
Benzo[k]fluoranthene		M	2700	mg/kg	0.10	0.99	1.1	0.82	0.99
Benzo[a]pyrene		M	2700	mg/kg	0.10	2.1	1.8	2.2	2.3
Indeno(1,2,3-c,d)Pyrene		M	2700	mg/kg	0.10	1.5	1.4	1.6	1.7
Dibenz(a,h)Anthracene		M	2700	mg/kg	0.10	0.70	0.62	0.78	0.63
Benzo[g,h,i]perylene		M	2700	mg/kg	0.10	1.8	1.8	2.2	2.4
Total Of 16 PAH's		M	2700	mg/kg	2.0	19	20	19	21

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8-C10 Aromatics: >C5–C7,>C7-C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING 2183

mCERTS

Final Report

Report No.:	24-23866-1
Initial Date of Issue:	31-Jul-2024
Re-Issue Details:	
Client	Sanctus Limited
Client Address:	1 Olympus Park Business Centre Quedgeley Gloucester Gloucestershire GL2 4DH
Contact(s):	Labs
Project	S3240 Ardossan North Shore
Quotation No.:	Q24-35340
Order No.:	S3240
No. of Samples:	12
Turnaround (Wkdays):	3
Date Approved:	31-Jul-2024
Approved By:	
Details:	[redacted] Technical Director

Date Received:	26-Jul-2024
Date Instructed:	26-Jul-2024
Results Due:	30-Jul-2024

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: S3240 Ardossan North Shore

Client: Sanctus Limited						**Chemtest Job No.:**	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866
Quotation No.: Q24-35340						**Chemtest Sample ID.:**	1841202	1841203	1841204	1841205	1841206	1841207	1841208	1841209
Order No.: S3240						Client Sample Ref.:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
						Client Sample ID.:	TSP05-01I	TSP05-02I	TSP05-03I	TSP05-04I	TSP05-05I	TSP05-06I	TSP05-07I	TSP05-08I
						Sample Location:	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0	0	0	0	0	0	0	0
						Bottom Depth (m):	0	0	0	0	0	0	0	0
						Date Sampled:	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**									
Moisture		N	2030	%	0.020		7.9	7.2	8.6	7.6	8.5	7.4	7.2	7.2
Soil Colour		N	2040		N/A		Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A		Stones and Roots	Stones and Roots	Stones, Roots and Glass	Stones	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A		Loam	Loam	Sand	Sand	Loam	Loam	Loam	Loam
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		7.8	15	6.9	< 2.0	3.7	< 2.0	< 2.0	7.6
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		77	91	51	1.1	62	< 1.0	39	50
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		140	190	140	< 2.0	150	< 2.0	47	110
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		99	95	76	< 3.0	85	< 3.0	38	77
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		24	13	17	11	18	< 10	11	17
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		320	390	270	< 5.0	300	< 5.0	120	240
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		350	400	290	11	320	< 10	140	260
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		27	28	16	< 1.0	26	< 1.0	19	19
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		90	120	57	3.0	85	3.1	91	56
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		54	110	49	< 2.0	55	< 2.0	52	23
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		35	55	17	2.1	16	1.8	14	13
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		170	260	120	< 5.0	170	< 5.0	160	99
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00		210	320	140	< 10	180	< 10	180	110
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		500	660	400	< 10	470	< 10	290	340
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00		560	720	430	13	500	< 10	310	370
Benzene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: S3240 Ardossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23866	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866	24-23866
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1841202	1841203	1841204	1841205	1841206	1841207	1841208	1841209
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-01I	TSP05-02I	TSP05-03I	TSP05-04I	TSP05-05I	TSP05-06I	TSP05-07I	TSP05-08I
				Sample Location:		TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0	0	0	0	0	0	0	0
				Bottom Depth (m):		0	0	0	0	0	0	0	0
				Date Sampled:		23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	0.35	0.38	0.30	< 0.10	0.37	0.44	0.49	0.44
Anthracene		M	2800	mg/kg	0.10	0.16	0.20	0.20	< 0.10	0.12	0.17	0.19	0.22
Fluoranthene		M	2800	mg/kg	0.10	1.2	1.5	1.2	0.13	1.0	1.4	1.5	1.3
Pyrene		M	2800	mg/kg	0.10	1.3	1.5	1.1	0.12	1.0	1.4	1.5	1.4
Benzo[a]anthracene		M	2800	mg/kg	0.10	0.68	0.82	0.60	< 0.10	0.59	0.85	0.80	0.69
Chrysene		M	2800	mg/kg	0.10	0.53	0.87	0.66	< 0.10	0.45	0.90	0.88	0.55
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	1.2	1.7	0.85	< 0.10	1.0	1.5	1.5	1.4
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.41	0.56	0.37	< 0.10	0.28	0.51	0.63	0.48
Benzo[a]pyrene		M	2800	mg/kg	0.10	0.93	1.5	0.72	< 0.10	0.79	1.2	1.1	1.3
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	0.85	1.1	0.51	< 0.10	0.60	0.97	1.1	1.0
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.15	0.26	< 0.10	< 0.10	< 0.10	< 0.10	0.31	0.23
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	0.74	1.1	0.60	< 0.10	0.63	1.0	0.94	0.96
Total Of 16 PAH's		N	2800	mg/kg	2.0	8.5	12	7.1	< 2.0	6.9	10	11	10

Results - Soil

Project: S3240 Ardossan North Shore

Client: Sanctus Limited						**Chemtest Job No.:**	24-23866	24-23866	24-23866	24-23866
Quotation No.: Q24-35340						**Chemtest Sample ID.:**	1841210	1841211	1841212	1841213
Order No.: S3240						Client Sample Ref.:	TSP05	TSP05	TSP05	TSP05
						Client Sample ID.:	TSP05-09I	TSP05-10I	TSP05-11I	TSP05-12I
						Sample Location:	TSP05	TSP05	TSP05	TSP05
						Sample Type:	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0	0	0	0
						Bottom Depth (m):	0	0	0	0
						Date Sampled:	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Moisture		N	2030	%	0.020		6.2	6.8	8.1	7.5
Soil Colour		N	2040		N/A		Brown	Brown	Brown	Brown
Other Material		N	2040		N/A		Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A		Loam	Loam	Loam	Sand
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		7.4	4.5	5.6	11
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		66	52	54	47
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		150	100	120	120
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		100	62	74	69
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		17	15	18	18
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		330	220	260	250
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		340	240	270	260
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		20	34	22	26
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		94	84	73	77
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		63	49	41	48
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		18	16	12	13
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		180	170	140	150
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00		190	180	150	160
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		500	390	390	400
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00		540	420	420	430
Benzene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0
Toluene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: S3240 Ardossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-23866	24-23866	24-23866	24-23866
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1841210	1841211	1841212	1841213
Order No.: S3240				Client Sample Ref.:		TSP05	TSP05	TSP05	TSP05
				Client Sample ID.:		TSP05-09I	TSP05-10I	TSP05-11I	TSP05-12I
				Sample Location:		TSP05	TSP05	TSP05	TSP05
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0	0	0	0
				Bottom Depth (m):		0	0	0	0
				Date Sampled:		23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**				
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	0.40	0.69	0.37	< 0.10
Anthracene		M	2800	mg/kg	0.10	0.21	0.25	0.19	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	1.3	1.6	1.1	0.46
Pyrene		M	2800	mg/kg	0.10	1.5	1.5	1.2	0.52
Benzo[a]anthracene		M	2800	mg/kg	0.10	0.72	0.81	0.59	< 0.10
Chrysene		M	2800	mg/kg	0.10	0.87	0.82	0.53	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	1.9	1.5	1.2	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.52	0.56	0.38	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	1.5	1.3	0.94	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	1.4	1.1	0.79	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.25	0.21	0.16	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	1.2	1.1	0.78	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	12	11	8.2	< 2.0

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8-C10 Aromatics: >C5–C7,>C7-C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water

GW - Ground Water

LE - Land Leachate

NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Test Results

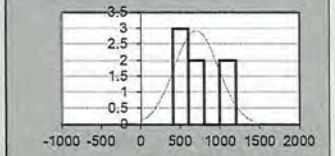
Client/client ref: Sanctus
Project ref: S3240

Site ref: Ardrossan
Data description: Total TPH levels TSP07 Round 3

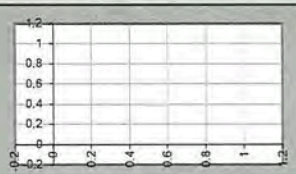
Date: 01-Aug-2024
User details: JRA

Dataset: Total TPH	
Sample mean, $\bar{x}$	704.29
Sample standard deviation, s	275.61
Sample size, n	7
Critical concentration, Cc	1000

Use Normal distribution to test



Outliers & non-detects	
Outliers present?	NO
Significance level	5%
Outliers removed?	0
Non-detects	0

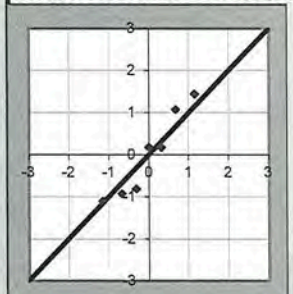


Normality test

Significance level: 5%

Normal distribution

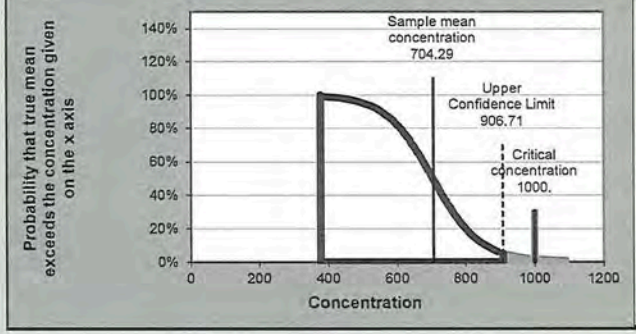
Use: Auto: One-sample t



Test scenario:

Planning: is true mean lower than critical concentration (μ < Cc)?

Null hypothesis:	The true mean concentration is equal to or greater than the critical concentration: μ≥ Cc
Alternative hypothesis	The true mean concentration is less than the critical concentration: μ < Cc



Evidence against Null hypothesis:	**99%**
Base decision on:	evidence level
Evidence level required:	95%
Balance of probability?	N/A
Reject Null Hypothesis?	Yes

μ < Cc (re this dataset)

Treated Stockpile Reuse Validation Form 005 – TSP09 North

Stockpile ID

Stockpile ID: TSP09 North | Material Volume: 1,200 m^3 | Validation Samples Included 13 No.

Tested Location: Treatment Area 01 | Stockpile Creation Date: 10/04/2024 | Release Date: TBC

Sampling Data (3No. full rounds for validation to release)

Passing Round 1 (Overall Sample Round 10 of 12)	Sample Date: 01/05/2024 & 09/07/2024	Report Number & Date: 24-017477 – 10/05/2024 & 24-029828 – 16/07/2024	Lab: i2
Passing Round 2 (Overall Sample Round 11 of 12)	Sample Date: 08/05/2024 & 16/07/2024	Report Number & Date: 24-018602 – 16/05/2024 & 24-22820 – 22/07/2024	Lab: i2 & Eurofins
Passing Round 3 (Overall Passing Round 12 of 12)	Sample Date: 29/05/2024 & 23/07/2024	Report Number & Date: 24-022316 – 11/06/2024 & 24-24035 – 01/08/2024	Lab: i2 & Eurofins

Sampling Data

Round 1

Report Number: 24-017477 & 24-029828 | Report Date: 10/05/2024 & 16/07/2024

Sample ID (Sample Names): **24-017477** - TSP09-04C, TSP09-05C, TSP09-07C, TSP09-10C, TSP09-11C, TSP09-12C. **24-029828** - TSP09-02J, TSP09-03J, TSP09-05J, TSP09-06J, TSP09-08J, TSP09-09J, TSP09-13J | Report ID (Lab): i2

Comments: | Test Results: PASS / ~~FAIL~~

Two main composition rounds for the remaining stockpile TSP09 North, following the previous partial removal of material (previously signed off as TSP09 South, Form 001). No exceedances seen throughout Average Total TPH = 318 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Round 2

Report Number: 24-018602 & 24-22820 | Report Date: 16/05/2024 & 22/07/2024

Sample ID (Sample Names): **24-018602** - TSP09-04D, TSP09-05D, TSP09-07D, TSP09-10D, TSP09-11D, TSP09-12D **24-22820** - TSP09-02K, TSP09-03K, TSP09-05K, TSP09-06K, TSP09-08K, TSP09-09K, TSP09-13K | Report ID (Lab): i2 & Eurofins

Comments: | Test Results: PASS / ~~FAIL~~

No exceedances seen throughout Average Total TPH = 519 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Round 3

Report Number: 24-022316 & 24-24035 | Report Date: 29/05/2024 & 01/08/2024

Sample ID (Sample Names): **24-022316** - TSP09-04E, TSP09-05E, TSP09-07E, TSP09-10E, TSP09-11E, TSP09-12E **24-24035** - TSP09-02L, TSP09-03L, TSP09-05L, TSP09-06L TSP09-08L, TSP09-09L, TSP09-13L | Report ID (Lab): i2 & Eurofins

Test Results: PASS / ~~FAIL~~

Comments:

No exceedances seen throughout. Average Total TPH = 274 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Data Review

Material split of treated Stockpile 09 and current testing

Following the sampling rounds which began at the end of April 2024, a significant portion of the treated Stockpile 09 was seen to have 3no.consecutive sampling rounds which passed all of the reuse criteria. 40% of the material (sample locations 01, 14 – 20 as seen in Figure 1 below), grouped together in the south of the stockpile achieved the consecutive rounds. The remaining material was interspersed with material which achieved the majority of the reuse criteria, but not all (failures seen within the Total TPH analytes), in such a fashion that the remaining sample locations which were seen as compliant, could not be easily/accurately separated and reused (samples from location 04, 07, 10, 11 and 12).

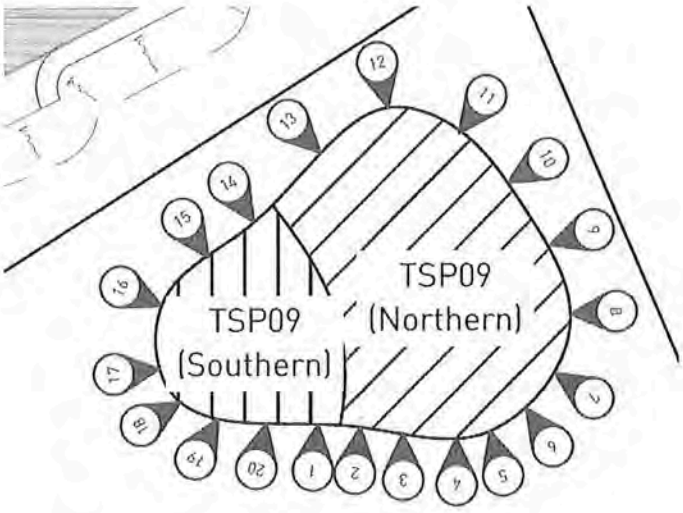
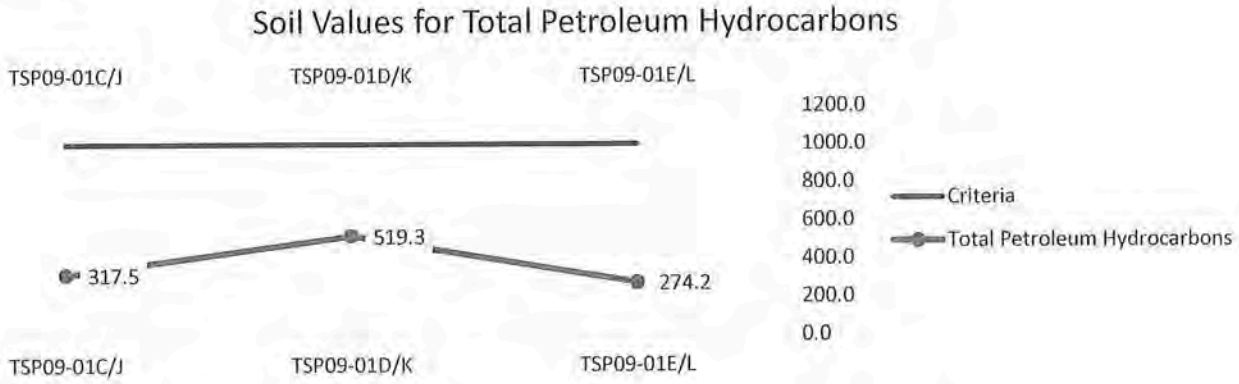


Figure 1 - Sampling locations of treated Stockpile 09

Subsequently, treated Stockpile 09 was split into a northern portion (1,200m^3) where treatment and testing will continue and a southern portion (800m^3) was deemed as chemically suitable for reuse by Sanctus.

Data Trend for Total TPH levels:



Further to the above spread of data for the final 3 No. rounds, the total TPH levels from May 2024, for the separated treated stockpile, are shown below. Due to the split of the material from the original TSP09, TSP09 North was only created on the 1st May 2024 and as such, a reduction from the initial total TPH level of 1025 mg/kg to a final average total TPH level of 274 mg/kg, a reduction of 73%. Due to its separation, no accurate total trend lines can be provided.

Sampling Strategy:

All samples have been taken in compliance with ISO BS 18400, including the following notes:

- Stainless steel/washable sampling devices (trowels, buckets, etc) will be employed for the gathering of the soils samples and cleaned between each sample location so that consecutive samples are not cross-contaminated.
- The sample positions shown above indicate the position relative to the base boundary of the stockpile. All samples are taken from a within the body of the Stockpile, retrieved by an excavator. This is done as a safe sample retrieval option as well as to target an internal representative sample location mid-way from the edge to the centre of the Stockpile, as discussed under BS ISO 18400-104:2018 (Sampling Strategies), subsection 9.
- The subsequent sample depths were between 1-2 m below the Stockpile's surface and a minimum of 4No. characteristic subsamples were taken from an area of approximately $1m^2$ of the newly exposed material. The 4No. or more sub-locations were chosen in a X-pattern and the combined testing soil material is described as a composite sample, following a systematic stratified random sub-sampling location of a 3-dimensional source.
- The mechanically retrieved material is then sub-sampled into the required sampling jars/pots by the Sanctus Engineer as a representative sample from the numbered location.

Naming sequence clarification:

Due to the size of the stockpile and the split of inseparable compliant and non-compliant material, approximately half of this volume (Group α - samples labelled TSP09-04, TSP09-05, TSP09-07, TSP09-10, TSP09-11 and TSP09-12) were deemed as suitable initially - sampled between 01/05/2024 and 29/05/2024, after which, no further samples were required. A second set of sampled locations (Group β, tested between 09/07/2024 and 23/07/2024 - TSP09-02, TSP09-03, TSP09-05, TSP09-06, TSP09-08, TSP09-09, TSP09-13) were seen to exceed the reuse criteria at this time in May 2024, but remained in their original location and unmixed between other suitable materials (Group α). This was only done as there was such a clear physical delineation between the group α and β sections, even though their positions were intermingled within the remaining stockpile and sampling was deemed repeatable in the positions shown on page 2 of this decalaration.

As such, the material combined exhibited 3 concurrent suitable rounds, even if the two constituent intermingled parts showed suitable test results in two separate time blocks.

Sanctus confirm that during this time, this Stockpiled material was not turned (as hydrocarbon deterioration levels were deemed sufficient without mechanical aeration during this period) and that all sampling positions were consistent and repeatable from the areas indicated on the attached Treated Stockpile sample plan.

Sanctus Declaration:

We confirm that:

1. The material that this form relates to, has been sampled representatively, as discussed above and in accordance with the client's requirements (Ardrossan Remediation Specification Rev E).
2. The material has been proven to be suitable for REUSE on site as there are 3 No. consecutive rounds, with a statistical insignificant number of exceedances of the accepted reuse criteria. No exceedances are seen within the first two monitoring rounds and each round's average for the total TPH levels have been significantly below the 1,000 mg/kg threshold level.
3. The laboratory analysis results are representative of the materials investigated.
4. The material released will also be recorded spatially at its reuse location

NAME: [redacted]

POSITION: Senior Environmental Engineer
DATE: 07/10/2024
SIGNED:

[redacted]

Senior Environmental Engineer

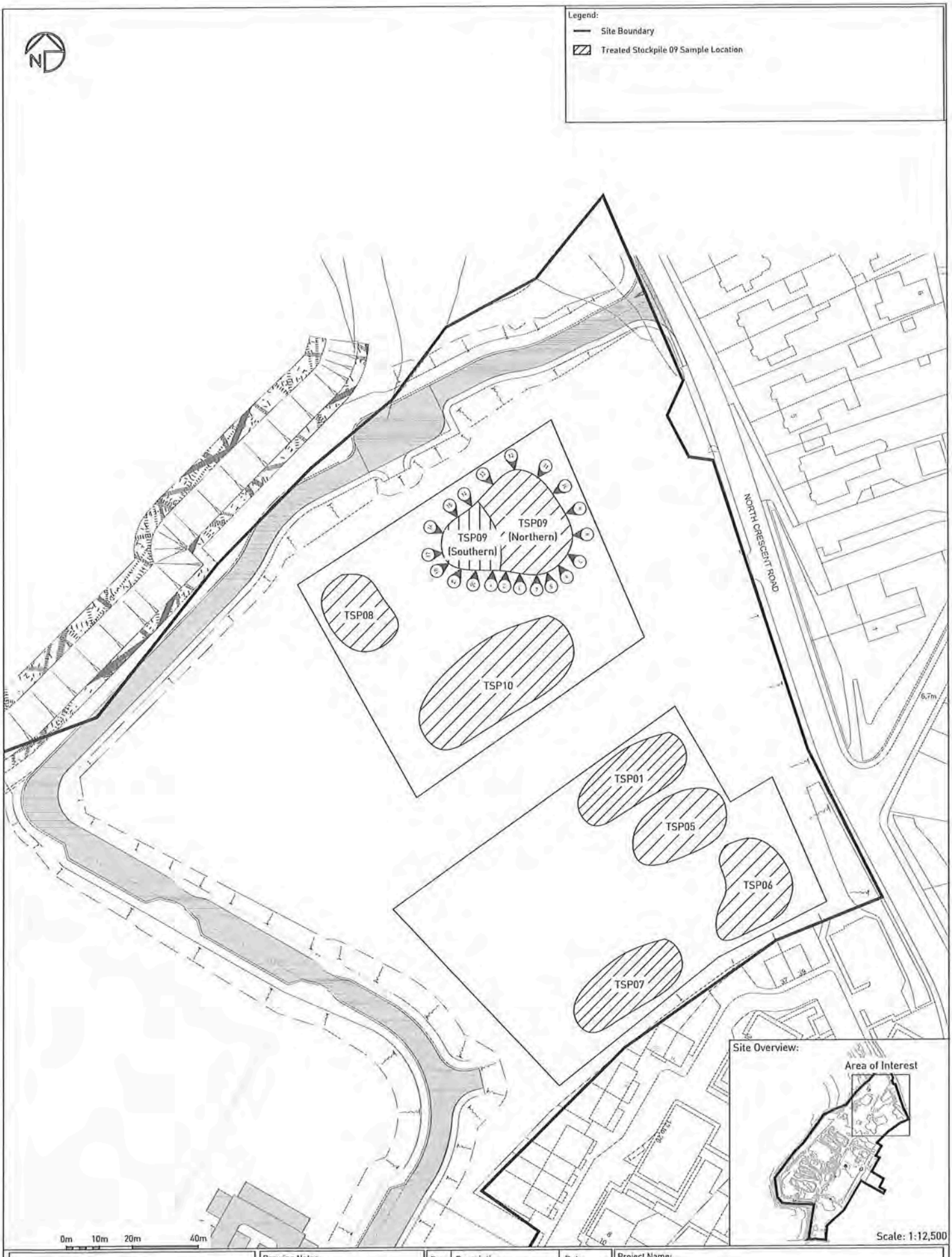
Record of reuse

For Sanctus Use Only:

Approved for reuse:

Beginning of Movement from stockpile:

End of Movement into site:



sanctus
Sanctus House, 1 Olympus Park Business Centre,
Quedgeley, Glos, GL2 4DH
T: 01453 828222
E: info@sanctusltd.co.uk www.sanctusltd.com

Drawing Notes:
Based on client supplied DWG - ARDROSSAN 2D produced by Aird Group 23/03/2020. All locations are approximate. Must be printed in colour.

Site Address:
Raylight Place
Ardrossan
North Ayrshire
Scotland

Rev.	Description	Date
A	First Issue	13/06/2024

APPROVED

Project Name: North Shore, Ardrossan
Client: North Ayrshire Council
Drawing Title: Treated Stockpile 09 Sample Locations

Contract No:	Drawing No:	Scale @ A3:
S3240	D3240/061	1:1000
Drawn By: [redacted]	QC Check By: [redacted]	Approved By: [redacted]

Sample ID	Date Sampled	Total Petroleum Hydrocarbons	Aliphatic TPH >C5-C6	Aliphatic TPH >C6-C8	Aliphatic TPH >C8-C10	Aliphatic TPH >C10-C12	Aliphatic TPH >C12-C16	Aliphatic TPH >C16-C21	Aliphatic TPH >C21-C35	Aliphatic TPH >C5-C35	Aromatic TPH >C5-C7	Aromatic TPH >C7-C8	Aromatic TPH >C8-C10	Aromatic TPH >C10-C12	Aromatic TPH >C12-C16	Aromatic TPH >C16-C21	Aromatic TPH >C21-C35	Aromatic TPH >C8-C35	Aromatic TPH >C5-C35	Aromatic TPH >C5-C8
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LCL		10	0.02	0.02	0.05	1	2	8	8		0.01	0.01	0.05	1	2	10	10			
Screening Criteria		1000	70	230	65	330	1000	1000	1000	1700	140	220	7.36	98.2	173.47	540	1000		1000	
Max Value		1000	0	0	0	33	91	180	250	400	0	0	0	0.2	19	100	230		400	
TSP09-04C	01/05/2024	330	< 0.020	< 0.020	< 0.050	< 1.0	11	30	89		< 0.010	< 0.010	< 0.050	< 1.0	3.2	26	95		120	
TSP09-05C	01/05/2024	160	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	17		< 0.010	< 0.010	< 0.050	< 1.0	3.2	20	75		99	
TSP09-07C	01/05/2024	770	< 0.020	< 0.020	< 0.050	< 1.0	25	77	220		< 0.010	< 0.010	< 0.050	< 1.0	6.1	52	220		280	
TSP09-10C	01/05/2024	900	< 0.020	< 0.020	< 0.050	< 1.0	31	89	250		< 0.010	< 0.010	< 0.050	< 1.0	8.4	62	260		330	
TSP09-11C	01/05/2024	68	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	< 8.0	< 8.0		< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	32		32	
TSP09-12C	01/05/2024	510	< 0.020	< 0.020	< 0.050	< 1.0	26	59	140		< 0.010	< 0.010	< 0.050	< 1.0	8.1	40	140		180	
TSP09-02J	09/07/2024	170	< 0.020	< 0.020	< 0.050	< 1.0	12	36	82	130	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	18		18	
TSP09-03J	09/07/2024	340	< 0.020	< 0.020	< 0.050	< 1.0	8.4	39	140	190	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	11	74		84	
TSP09-05J	09/07/2024	170	< 0.020	< 0.020	< 0.050	< 1.0	10	33	83	130	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	17		17	
TSP09-06J	09/07/2024	170	< 0.020	< 0.020	< 0.050	< 1.0	7.8	28	65	100	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	38		38	
TSP09-08J	09/07/2024	120	< 0.020	< 0.020	< 0.050	< 1.0	7.8	22	56	86	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	15		15	
TSP09-09J	09/07/2024	220	< 0.020	< 0.020	< 0.050	< 1.0	15	42	100	160	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	33		33	
TSP09-13J	09/07/2024	200	< 0.020	< 0.020	< 0.050	< 1.0	13	33	80	130	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	39		39	
TSP09-04D	08/05/2024	490	< 0.020	< 0.020	< 0.050	< 1.0	9.6	31	110	150	< 0.010	< 0.010	< 0.050	< 1.0	10	43	190		240	
TSP09-05D	08/05/2024	1000	< 0.020	< 0.020	< 0.050	< 1.0	40	110	250	400	< 0.010	< 0.010	< 0.050	1.8	19	100	330		460	
TSP09-07D	08/05/2024	840	< 0.020	< 0.020	< 0.050	< 1.0	37	100	230	370	< 0.010	< 0.010	< 0.050	< 1.0	12	75	250		340	
TSP09-10D	08/05/2024	730	< 0.020	< 0.020	< 0.050	3	44	81	160	290	< 0.010	< 0.010	< 0.050	< 1.0	14	73	260		340	
TSP09-11D	08/05/2024	720	< 0.020	< 0.020	< 0.050	< 1.0	22	66	170	260	< 0.010	< 0.010	< 0.050	< 1.0	5.7	60	270		340	
TSP09-12D	08/05/2024	940	< 0.020	< 0.020	< 0.050	2.3	45	99	220	370	< 0.010	< 0.010	< 0.050	< 1.0	17	90	310		420	
TSP09-02K	16/07/2024	91	< 0.05	< 0.10	< 0.05	5.6	22	36	15	79	< 0.05	< 0.05	< 0.05	< 1.0	1.3	6.3	2.9		11	
TSP09-03K	16/07/2024	210	< 0.05	< 0.10	< 0.05	7.7	37	62	54	160	< 0.05	< 0.05	< 0.05	< 1.0	3.8	18	12		33	
TSP09-05K	16/07/2024	400	< 0.05	< 0.10	< 0.05	10	66	120	89	280	< 0.05	< 0.05	< 0.05	< 1.0	8.9	41	14		64	
TSP09-06K	16/07/2024	240	< 0.05	< 0.10	< 0.05	17	52	69	34	170	< 0.05	< 0.05	< 0.05	1.9	9	37	18		65	
TSP09-08K	16/07/2024	420	< 0.05	< 0.10	< 0.05	12	51	100	62	230	< 0.05	< 0.05	< 0.05	< 1.0	10	33	25		68	
TSP09-09K	16/07/2024	450	< 0.05	< 0.10	< 0.05	23	79	140	97	340	< 0.05	< 0.05	< 0.05	5.2	13	43	12		73	
TSP09-13K	16/07/2024	220	< 0.05	< 0.10	< 0.05	9.7	35	73	51	170	< 0.05	< 0.05	< 0.05	< 1.0	4.3	18	8.9		31	
TSP09-04E	29/05/2024	77	< 0.020	< 0.020	< 0.050	< 1.0	< 2.0	9.7	32	42	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	< 10	22		22	
TSP09-05E	29/05/2024	230	< 0.020	< 0.020	< 0.050	< 1.0	5.5	25	60	90	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	15	84		99	
TSP09-07E	29/05/2024	230	< 0.020	< 0.020	< 0.050	< 1.0	2.8	24	63	90	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	15	83		98	
TSP09-10E	29/05/2024	410	< 0.020	< 0.020	< 0.050	< 1.0	8.7	47	120	180	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	30	140		170	
TSP09-11E	29/05/2024	390	< 0.020	< 0.020	< 0.050	< 1.0	5	31	110	150	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	25	140		170	
TSP09-12E	29/05/2024	270	< 0.020	< 0.020	< 0.050	< 1.0	4.8	25	67	97	< 0.010	< 0.010	< 0.050	< 1.0	< 2.0	22	95		120	
TSP09-02L	23/07/2024	520	< 0.05	< 0.10	< 0.05	8.1	91	140	65	300	< 0.05	< 0.05	< 0.05	< 1.0	14	84	83		200	
TSP09-03L	23/07/2024	230	< 0.05	< 0.10	< 0.05	2.5	32	54	40	130	< 0.05	< 0.05	< 0.05	< 1.0	9.6	37	23		80	
TSP09-05L	23/07/2024	14	< 0.05	< 0.10	< 0.05	< 2.0	< 1.0	< 2.0	< 3.0	< 5.0	< 0.05	< 0.05	< 0.05	< 1.0	< 1.0	2.8	< 2.0		< 10	
TSP09-06L	23/07/2024	14	< 0.05	< 0.10	< 0.05	2.1	< 1.0	< 2.0	< 3.0	< 5.0	< 0.05	< 0.05	< 0.05	< 1.0	< 1.0	2.9	< 2.0		< 10	
TSP09-08L	23/07/2024	320	< 0.05	< 0.10	< 0.05	2.5	47	73	53	180	< 0.05	< 0.05	< 0.05	< 1.0	14	60	36		120	
TSP09-09L	23/07/2024	380	< 0.05	< 0.10	< 0.05	4	44	95	63	210	< 0.05	< 0.05	< 0.05	< 1.0	10	68	44		150	
TSP09-13L	23/07/2024	480	< 0.05	< 0.10	< 0.05	5.6	57	150	57	270	< 0.05	< 0.05	< 0.05	< 1.0	16	84	72		190	

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Analytical Report Number : 24-017477

Project / Site name:	Ardrossan North Shore	**Samples received on:**	02/05/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	02/05/2024
Your order number:	S3240	**Analysis completed by:**	10/05/2024
Report Issue Number:	1	**Report issued on:**	10/05/2024
Samples Analysed:	32 soil samples		

Signed: [redacted]

[redacted]
Senior Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-017477
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187487	187488	187489	187490	187491
Sample Reference				TSP05-01C	TSP05-02C	TSP05-03C	TSP05-04C	TSP05-05C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024	01/05/2024	01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	10	9.1	11	9.7
Total mass of sample received	kg	0.1	NONE	0.4	0.3	0.4	0.4	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	2.5	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	9.8	21	12	26	12
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	29	52	32	63	30
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	83	130	72	150	66
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	120	200	120	240	110
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	5.3	3.4	6.6	4.3	5.4
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	28	39	26	35	28
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	100	150	89	120	86
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	130	190	120	160	120
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	310	480	280	480	260

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-017477
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187492	187493	187494	187495	187496
Sample Reference				TSP05-06C	TSP05-07C	TSP05-08C	TSP05-09C	TSP05-10C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024	01/05/2024	01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	20.6	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.3	6.4	7.4	6.8	8.3
Total mass of sample received	kg	0.1	NONE	0.3	0.4	0.3	0.7	0.4
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	1.5	1.6	1.2	2
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	9.3	22	24	24	40
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	26	36	36	53	82
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	67	140	120	230	340
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	100	190	190	310	460
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	2.5	1.5
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	5	11	9.6	18	15
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	24	38	30	73	74
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	79	160	130	280	310
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	110	210	170	370	400
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	250	580	480	1000	1200

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-017477
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187497	187498	187499	187500	187501
Sample Reference				TSP05-11C	TSP05-12C	TSP09-01C	TSP09-02C	TSP09-03C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024	01/05/2024	01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	39	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.8	7.9	11	11	11
Total mass of sample received	kg	0.1	NONE	0.3	0.4	0.4	0.3	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	26	27	8	15	8.8
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	48	55	19	40	18
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	160	220	52	96	43
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	230	300	79	150	70
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	7.3	11	2	5.5	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	37	41	12	32	13
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	150	180	50	110	44
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	190	230	64	150	56
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	630	790	200	390	160

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-017477
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187502	187503	187504	187505	187506
Sample Reference				TSP09-04C	TSP09-05C	TSP09-06C	TSP09-07C	TSP09-08C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024	01/05/2024	01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	23.5	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	12	10	13	13
Total mass of sample received	kg	0.1	NONE	0.4	0.4	0.4	0.2	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	11	< 2.0	3.3	25	17
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	30	< 8.0	15	77	48
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	89	17	53	220	130
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	130	17	72	320	190
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	3.2	3.2	5.5	6.1	4.8
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	26	20	30	52	31
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	95	75	100	220	120
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	120	99	140	280	160
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	330	160	270	770	450

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-017477
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187507	187508	187509	187510	187511
Sample Reference				TSP09-09C	TSP09-10C	TSP09-11C	TSP09-12C	TSP09-13C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024	01/05/2024	01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	12	11	10
Total mass of sample received	kg	0.1	NONE	0.3	0.4	0.4	0.3	0.4
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	26	31	< 2.0	26	8
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	68	89	< 8.0	59	18
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	180	250	< 8.0	140	35
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	270	370	< 10	220	61
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	7.5	8.4	< 2.0	8.1	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	45	62	< 10	40	16
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	180	260	32	140	60
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	230	330	32	180	76
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	650	900	68	510	180

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-017477
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187512	187513	187514	187515	187516
Sample Reference				TSP09-14C	TSP09-15C	TSP09-16C	TSP09-17C	TSP09-18C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024	01/05/2024	01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	11	9.8	11	12
Total mass of sample received	kg	0.1	NONE	0.3	0.3	0.4	0.4	0.4
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	2.2	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	6.1	17	< 2.0	< 2.0	2.8
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	14	30	< 8.0	9.1	18
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	25	67	< 8.0	38	60
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	45	120	< 10	47	80
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	3.3	< 2.0	3.9	3.7
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	11	20	< 10	18	18
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	40	72	< 10	67	63
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	51	96	< 10	88	85
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	120	260	< 10	170	210

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-017477
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				187517	187518
Sample Reference				TSP09-19C	TSP09-20C
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				01/05/2024	01/05/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	10
Total mass of sample received	kg	0.1	NONE	0.3	0.3
Monoaromatics					
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	4.8	8.1
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	16	26
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	44	60
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	65	93
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	4.2	2.6
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	19	20
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	56	72
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	79	94
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	180	230

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-017477
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
187487	TSP05-01C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187488	TSP05-02C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187489	TSP05-03C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187490	TSP05-04C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187491	TSP05-05C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187492	TSP05-06C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187493	TSP05-07C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187494	TSP05-08C	None Supplied	None Supplied	Brown sand with gravel and stones
187495	TSP05-09C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187496	TSP05-10C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187497	TSP05-11C	None Supplied	None Supplied	Brown sand with gravel and stones
187498	TSP05-12C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187499	TSP09-01C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187500	TSP09-02C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187501	TSP09-03C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187502	TSP09-04C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187503	TSP09-05C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187504	TSP09-06C	None Supplied	None Supplied	Brown sand with gravel and stones
187505	TSP09-07C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187506	TSP09-08C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187507	TSP09-09C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187508	TSP09-10C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187509	TSP09-11C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187510	TSP09-12C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187511	TSP09-13C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187512	TSP09-14C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187513	TSP09-15C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187514	TSP09-16C	None Supplied	None Supplied	Brown sand with gravel
187515	TSP09-17C	None Supplied	None Supplied	Brown sand with gravel
187516	TSP09-18C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187517	TSP09-19C	None Supplied	None Supplied	Brown sand with gravel and vegetation
187518	TSP09-20C	None Supplied	None Supplied	Brown sand with gravel and vegetation

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number : 24-017477
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 24-018602

Project / Site name:	Ardrossan North Shore	**Samples received on:**	09/05/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	09/05/2024
Your order number:	S3240	**Analysis completed by:**	16/05/2024
Report Issue Number:	1	**Report issued on:**	16/05/2024
Samples Analysed:	56 soil samples		

Signed: [redacted]

[redacted]
Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193663	193664	193665	193666	193667
Sample Reference				TSP05-01D	TSP05-02D	TSP05-03D	TSP05-04D	TSP05-05D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	41.9	< 0.1
Moisture Content	%	0.01	NONE	7	5.5	6	4.5	6.3
Total mass of sample received	kg	0.1	NONE	0.3	0.2	0.3	0.2	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	3.8	3.6	5.5
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	100	140	97	92	110
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	250	310	200	210	260
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	390	430	300	340	390
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	750	880	600	640	770
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	45	49	34	41	37
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	210	220	150	200	190
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	420	440	290	460	420
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	670	710	470	700	650
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1600	1800	1200	1500	1600

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193668	193669	193670	193671	193672
Sample Reference				TSP05-06D	TSP05-07D	TSP05-08D	TSP05-09D	TSP05-10D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5.3	6.1	6.6	5.5	5.8
Total mass of sample received	kg	0.1	NONE	0.3	0.3	0.2	0.3	0.2
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	6	4.5	6	3	2.7
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	140	140	150	92	85
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	290	310	340	230	210
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	410	450	500	370	340
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	850	900	1000	690	630
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	3.2	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	54	38	46	22	24
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	240	200	250	130	140
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	470	400	470	280	280
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	770	640	770	430	440
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1800	1700	2000	1300	1200

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193673	193674	193675	193676	193677
Sample Reference				TSP05-11D	TSP05-12D	TSP06-01D	TSP06-02D	TSP06-03D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.9	5.8	3.4	3.2	2.1
Total mass of sample received	kg	0.1	NONE	0.2	0.3	0.3	0.3	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	3.9	4.3	6.4	9.9	6.6
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	92	130	180	290	190
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	170	320	450	650	390
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	280	470	520	730	420
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	550	930	1200	1700	1000
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	1.7	3.4	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	36	38	63	72	47
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	150	210	270	310	200
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	290	430	450	500	280
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	480	670	790	880	530
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1200	1800	2100	2800	1700

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193678	193679	193680	193681	193682
Sample Reference				TSP06-04D	TSP06-05D	TSP06-06D	TSP06-07D	TSP06-08D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	2.6	3.3	2.8	2.9	3.7
Total mass of sample received	kg	0.1	NONE	0.2	0.3	0.2	0.3	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	2.6	11	3.6	8.8	8.1
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	150	240	170	180	180
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	400	550	440	330	290
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	460	630	540	350	320
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	1000	1400	1200	870	800
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	1.4	< 1.0	1.7	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	52	81	62	57	72
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	270	330	310	220	240
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	420	520	490	320	330
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	740	930	860	600	650
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1900	2600	2200	1600	1600

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193683	193684	193685	193686	193687
Sample Reference				TSP06-09D	TSP06-10D	TSP06-11D	TSP06-12D	TSP06-13D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	44.3	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	2.8	2.4	3.4	2.8	2.8
Total mass of sample received	kg	0.1	NONE	0.2	0.2	0.3	0.3	0.2
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	6.6	2.8	1.6	4.9	2.8
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	220	190	140	170	190
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	420	420	290	360	390
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	490	500	330	440	440
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	1100	1100	770	970	1000
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	1.1
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	97	65	81	68	71
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	360	270	290	270	250
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	530	400	410	450	360
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	990	740	780	790	680
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	2300	2000	1700	1900	1900

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193688	193689	193690	193691	193692
Sample Reference				TSP06-14D	TSP06-15D	TSP06-16D	TSP06-17D	TSP07-01D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.9	2.7	3	2.6	3.8
Total mass of sample received	kg	0.1	NONE	0.3	0.3	0.2	0.3	0.2
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020 ***	< 0.020 ***
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020 ***	< 0.020 ***
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050 ***	< 0.050 ***
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	8.2	4.1	6.5	7	6.8
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	220	210	280	320	190
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	360	500	630	670	320
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	390	580	770	780	330
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	990	1300	1700	1800	850
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	56	100	98	110	35
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	210	460	410	460	140
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	290	730	620	710	190
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	550	1300	1100	1300	360
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1700	2800	3100	3300	1300

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193693	193694	193695	193696	193697
Sample Reference				TSP07-02D	TSP07-03D	TSP07-04D	TSP07-05D	TSP07-06D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	45.7	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	3.6	3.7	3.5	3.9	3.7
Total mass of sample received	kg	0.1	NONE	0.3	0.2	0.3	0.2	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050 ***	< 0.050 ***	< 0.050 ***	< 0.050 ***	< 0.050 ***
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	7	9.5	8.7	6.3	8.4
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	160	240	200	150	180
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	290	430	360	250	260
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	300	490	380	270	240
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	760	1200	940	670	680
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	1.5	3.1	2.1
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	45	76	69	60	66
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	170	280	260	180	190
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	220	380	380	250	210
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	440	740	710	500	470
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1300	2100	1800	1300	1200

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193698	193699	193700	193701	193702
Sample Reference				TSP07-07D	TSP09-01D	TSP09-02D	TSP09-03D	TSP09-04D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	56.4
Moisture Content	%	0.01	NONE	3.1	7.4	9.2	10	6.8
Total mass of sample received	kg	0.1	NONE	0.2	0.3	0.2	0.3	0.2
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - $C6_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***
TPHCWG - Aliphatic >C6 - $C8_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***
TPHCWG - Aliphatic >C8 - $C10_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050 ***	< 0.050 ***	< 0.050 ***	< 0.050 ***	< 0.050 ***
TPHCWG - Aliphatic >C10 - $C12_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	6.1	3.1	1.3	4.2	< 1.0
TPHCWG - Aliphatic >C12 - $C16_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	97	41	62	120	9.6
TPHCWG - Aliphatic >C16 - $C21_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	190	120	160	270	31
TPHCWG - Aliphatic >C21 - $C35_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	180	280	350	550	110
TPHCWG - Aliphatic >C5 - $C35_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	470	450	570	950	150
TPHCWG - Aromatic >EC5 - $EC7_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - $EC8_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - $EC10_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - $EC12_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	1.1	< 1.0	1.3	< 1.0
TPHCWG - Aromatic >EC12 - $EC16_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	32	7.5	13	13	10
TPHCWG - Aromatic >EC16 - $EC21_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	160	80	120	160	43
TPHCWG - Aromatic >EC21 - $EC35_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	180	290	440	580	190
TPHCWG - Aromatic >EC5 - $EC35_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	360	380	580	760	240
TPH $(C10 - C40)_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	870	980	1400	2000	490

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193703	193704	193705	193706	193707
Sample Reference				TSP09-05D	TSP09-06D	TSP09-07D	TSP09-08D	TSP09-09D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	46.9	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.6	7.7	7.7	9.3	8.4
Total mass of sample received	kg	0.1	NONE	0.3	0.3	0.2	0.3	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020 ***	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050 ***	< 0.050 ***	< 0.050 ***	< 0.050 ***	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	2	< 1.0	4.6	3.8
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	40	57	37	87	90
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	110	160	100	210	190
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	250	360	230	440	380
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	400	580	370	730	660
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	1.8	< 1.0	< 1.0	1.5	1.6
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	19	18	12	20	24
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	100	120	75	140	160
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	330	390	250	480	570
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	460	530	340	640	760
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1000	1300	840	1600	1700

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193708	193709	193710	193711	193712
Sample Reference				TSP09-10D	TSP09-11D	TSP09-12D	TSP09-13D	TSP09-14D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	51.6	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.9	7.2	8	8.6	8.6
Total mass of sample received	kg	0.1	NONE	0.2	0.3	0.2	0.3	0.2
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	3	< 1.0	2.3	2	< 1.0
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	44	22	45	68	31
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	81	66	99	140	75
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	160	170	220	310	170
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	290	260	370	520	280
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	14	5.7	17	16	11
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	73	60	90	110	66
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	260	270	310	360	220
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	340	340	420	480	300
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	730	720	940	1200	700

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193713	193714	193715	193716	193717
Sample Reference				TSP09-15D	TSP09-16D	TSP09-17D	TSP09-18D	TSP09-19D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				08/05/2024	08/05/2024	08/05/2024	08/05/2024	08/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8	8.1	7.4	9.7	9.3
Total mass of sample received	kg	0.1	NONE	0.3	0.2	0.3	0.2	0.3
Monoaromatics								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	1.1	3.2	2.7	2.4	< 1.0
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	22	45	37	47	7.3
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	68	100	75	100	24
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	170	190	170	230	73
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	260	340	280	380	100
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	9.1	5.7	5.2	4.9	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	55	72	49	55	13
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	220	250	190	220	76
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	280	330	240	280	88
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	670	790	660	810	260

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-018602
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				193718
Sample Reference				TSP09-20D
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				08/05/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	9.3
Total mass of sample received	kg	0.1	NONE	0.3
Monoaromatics				
Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0
Petroleum Hydrocarbons				
TPHCWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020
TPHCWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020
TPHCWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050
TPHCWG - Aliphatic >C10 - C12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	2
TPHCWG - Aliphatic >C12 - C16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	56
TPHCWG - Aliphatic >C16 - C21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	120
TPHCWG - Aliphatic >C21 - C35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	260
TPHCWG - Aliphatic >C5 - C35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	430
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	9.1
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	74
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	280
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	360
TPH (C10 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	970

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-018602
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
193663	TSP05-01D	None Supplied	None Supplied	Brown loam with vegetation
193664	TSP05-02D	None Supplied	None Supplied	Brown loam with vegetation
193665	TSP05-03D	None Supplied	None Supplied	Brown loam with vegetation
193666	TSP05-04D	None Supplied	None Supplied	Brown loam with stones
193667	TSP05-05D	None Supplied	None Supplied	Brown loam with gravel
193668	TSP05-06D	None Supplied	None Supplied	Brown loam with gravel
193669	TSP05-07D	None Supplied	None Supplied	Brown loam with gravel
193670	TSP05-08D	None Supplied	None Supplied	Brown loam with gravel
193671	TSP05-09D	None Supplied	None Supplied	Brown loam with gravel
193672	TSP05-10D	None Supplied	None Supplied	Brown loam with gravel
193673	TSP05-11D	None Supplied	None Supplied	Brown loam with gravel
193674	TSP05-12D	None Supplied	None Supplied	Brown loam with gravel
193675	TSP06-01D	None Supplied	None Supplied	Brown loam with gravel
193676	TSP06-02D	None Supplied	None Supplied	Brown loam with gravel
193677	TSP06-03D	None Supplied	None Supplied	Brown loam with gravel
193678	TSP06-04D	None Supplied	None Supplied	Brown loam with gravel
193679	TSP06-05D	None Supplied	None Supplied	Brown loam with gravel
193680	TSP06-06D	None Supplied	None Supplied	Brown loam with gravel
193681	TSP06-07D	None Supplied	None Supplied	Brown loam with gravel
193682	TSP06-08D	None Supplied	None Supplied	Brown loam with gravel
193683	TSP06-09D	None Supplied	None Supplied	Brown loam with gravel
193684	TSP06-10D	None Supplied	None Supplied	Brown loam with gravel
193685	TSP06-11D	None Supplied	None Supplied	Brown loam with stones
193686	TSP06-12D	None Supplied	None Supplied	Brown loam with gravel
193687	TSP06-13D	None Supplied	None Supplied	Brown loam with gravel
193688	TSP06-14D	None Supplied	None Supplied	Brown loam with gravel
193689	TSP06-15D	None Supplied	None Supplied	Brown loam with gravel
193690	TSP06-16D	None Supplied	None Supplied	Brown loam with gravel
193691	TSP06-17D	None Supplied	None Supplied	Brown loam with gravel
193692	TSP07-01D	None Supplied	None Supplied	Brown loam with gravel
193693	TSP07-02D	None Supplied	None Supplied	Brown loam with gravel
193694	TSP07-03D	None Supplied	None Supplied	Brown loam with gravel
193695	TSP07-04D	None Supplied	None Supplied	Brown loam with stones
193696	TSP07-05D	None Supplied	None Supplied	Brown loam with gravel
193697	TSP07-06D	None Supplied	None Supplied	Brown loam with gravel
193698	TSP07-07D	None Supplied	None Supplied	Brown loam with gravel
193699	TSP09-01D	None Supplied	None Supplied	Brown loam with gravel
193700	TSP09-02D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193701	TSP09-03D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193702	TSP09-04D	None Supplied	None Supplied	Brown loam with vegetation and stones
193703	TSP09-05D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193704	TSP09-06D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193705	TSP09-07D	None Supplied	None Supplied	Brown loam with stones
193706	TSP09-08D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193707	TSP09-09D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193708	TSP09-10D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193709	TSP09-11D	None Supplied	None Supplied	Brown loam with vegetation and stones
193710	TSP09-12D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193711	TSP09-13D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193712	TSP09-14D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193713	TSP09-15D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193714	TSP09-16D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193715	TSP09-17D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193716	TSP09-18D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193717	TSP09-19D	None Supplied	None Supplied	Brown loam with gravel and vegetation
193718	TSP09-20D	None Supplied	None Supplied	Brown loam with gravel and vegetation

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number : 24-018602
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 24-022316

Replaces Analytical Report Number: 24-022316, issue no. 1
Client references/information amended.
Sample ID amended as per client's request.

Project / Site name:	Ardrossan North Shore	**Samples received on:**	30/05/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	31/05/2024
Your order number:	S3240	**Analysis completed by:**	06/06/2024
Report Issue Number:	2	**Report issued on:**	11/06/2024
Samples Analysed:	20 soil samples		

[redacted]

Signed:

[redacted]
Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				213463	213464	213465	213466	213467
Sample Reference				TSP09-01E	TSP09-02E	TSP09-03E	TSP09-04E	TSP09-05E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/05/2024	29/05/2024	29/05/2024	29/05/2024	29/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	12	9.2	12	12
Total mass of sample received	kg	0.1	NONE	1.3	1.2	1.3	1.2	1.3
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	IZJ	IZJ	IZJ	IZJ
Actinolite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Amosite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	Detected	-	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Tremolite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	0.002	-	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	Loose Fibres	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.12	< 0.05	0.09	0.08	0.11
Acenaphthylene	mg/kg	0.05	MCERTS	0.06	0.06	< 0.05	< 0.05	0.08
Acenaphthene	mg/kg	0.05	MCERTS	0.08	0.06	0.06	0.06	0.08
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.07
Phenanthrene	mg/kg	0.05	MCERTS	0.89	0.37	0.32	0.21	0.47
Anthracene	mg/kg	0.05	MCERTS	0.3	0.15	0.14	0.1	0.19
Fluoranthene	mg/kg	0.05	MCERTS	2.2	1	0.84	0.56	1.2
Pyrene	mg/kg	0.05	MCERTS	2	1	0.86	0.56	1.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.1	0.69	0.5	0.34	0.73
Chrysene	mg/kg	0.05	MCERTS	1.1	0.7	0.64	0.41	0.75
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.3	0.95	0.66	0.51	0.92
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.51	0.37	0.3	0.2	0.39
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.3	0.9	0.65	0.49	0.93
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.74	0.53	0.39	0.28	0.52
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.16	< 0.05	0.09	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.86	0.66	0.46	0.35	0.65
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	12.7	7.51	5.99	4.14	8.35
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	4.6	9.2	2.5	< 2.0	5.5
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	22	34	18	9.7	25
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	63	100	47	32	60
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	90	140	67	42	90
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				213463	213464	213465	213466	213467
Sample Reference				TSP09-01E	TSP09-02E	TSP09-03E	TSP09-04E	TSP09-05E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/05/2024	29/05/2024	29/05/2024	29/05/2024	29/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	12	22	< 10	< 10	15
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	65	120	41	22	84
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	77	140	41	22	99
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	200	340	130	77	230

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				213468	213469	213470	213471	213472
Sample Reference				TSP09-06E	TSP09-07E	TSP09-08E	TSP09-09E	TSP09-10E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/05/2024	29/05/2024	29/05/2024	29/05/2024	29/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	30.9	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	11	12	11	13
Total mass of sample received	kg	0.1	NONE	1.3	1.3	1.2	1.3	1.5
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	Not-detected	Detected	Detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	IZJ	IZJ	IZJ	PDO
Actinolite detected	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	-
Amosite detected	Type	N/A	ISO 17025	Not-detected	-	Detected	Detected	-
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	-
Chrysotile detected	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Detected	-
Crocidolite detected	Type	N/A	ISO 17025	Detected	-	Not-detected	Not-detected	-
Tremolite detected	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	-
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	< 0.001	-	< 0.001	< 0.001	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Loose Fibres	-	Loose Fibres	Loose Fibres	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.14	0.1	0.14	0.12	0.14
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.09	< 0.05	< 0.05	0.14	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.06	< 0.05	< 0.05	0.11	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.46	0.29	0.41	1.2	0.33
Anthracene	mg/kg	0.05	MCERTS	0.21	0.1	0.18	0.46	0.17
Fluoranthene	mg/kg	0.05	MCERTS	1.4	0.88	1.4	2.3	1.1
Pyrene	mg/kg	0.05	MCERTS	1.4	0.88	1.4	2.2	1.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.83	0.47	0.87	1.1	0.76
Chrysene	mg/kg	0.05	MCERTS	0.9	0.56	0.9	1.3	0.77
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.1	0.72	1.3	1.6	1.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.5	0.31	0.51	0.69	0.45
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.1	0.63	1.1	1.3	0.96
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.62	0.4	0.59	0.71	0.54
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.15	0.09	< 0.05	0.16	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.73	0.49	0.69	0.78	0.68
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	9.72	5.91	9.43	14	8.07
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	9.1	2.8	11	6.4	8.7
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	28	24	39	30	47
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	65	63	110	86	120
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	100	90	150	120	180
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				213468	213469	213470	213471	213472
Sample Reference				TSP09-06E	TSP09-07E	TSP09-08E	TSP09-09E	TSP09-10E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/05/2024	29/05/2024	29/05/2024	29/05/2024	29/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	17	15	17	17	30
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	78	83	83	89	140
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	95	98	100	110	170
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	240	230	310	290	410
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				213473	213474	213475	213476	213477
Sample Reference				TSP09-11E	TSP09-12E	TSP09-13E	TSP09-14E	TSP09-15E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/05/2024	29/05/2024	29/05/2024	29/05/2024	29/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	27.7	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	12	13	13
Total mass of sample received	kg	0.1	NONE	1.3	1.2	1.3	1.2	1.3
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected	Detected
Asbestos Analyst ID	N/A	N/A	N/A	MBI	MBI	MBI	MBI	MBI
Actinolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Amosite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Not-detected
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Chrysotile detected	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Detected	Detected
Crocidolite detected	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Not-detected
Tremolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Loose Fibres	Loose Fibres	Loose Fibres	Loose Fibres	Loose Fibres
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.17	0.17	0.13	0.11	0.15
Acenaphthylene	mg/kg	0.05	MCERTS	0.08	0.06	0.06	0.05	0.06
Acenaphthene	mg/kg	0.05	MCERTS	0.07	0.12	0.09	0.08	0.08
Fluorene	mg/kg	0.05	MCERTS	0.05	0.09	0.06	0.08	0.07
Phenanthrene	mg/kg	0.05	MCERTS	0.58	0.5	0.49	0.56	0.81
Anthracene	mg/kg	0.05	MCERTS	0.31	0.23	0.25	0.17	0.36
Fluoranthene	mg/kg	0.05	MCERTS	2.3	1.4	1.5	1.4	1.9
Pyrene	mg/kg	0.05	MCERTS	2.3	1.4	1.4	1.3	1.8
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.2	0.88	0.71	0.72	0.96
Chrysene	mg/kg	0.05	MCERTS	1.3	0.97	0.8	0.85	1.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.9	1.4	1.1	1.1	1.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.67	0.54	0.36	0.51	0.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.5	1.2	0.95	1	1.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.81	0.69	0.54	0.55	0.64
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.21	0.18	0.13	0.15	0.18
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.97	0.81	0.62	0.65	0.78
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	14.4	10.6	9.21	9.24	12.1
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	5	4.8	8.9	6	3.9
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	31	25	27	32	22
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	110	67	61	86	56
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	150	97	96	120	82
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				213473	213474	213475	213476	213477
Sample Reference				TSP09-11E	TSP09-12E	TSP09-13E	TSP09-14E	TSP09-15E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/05/2024	29/05/2024	29/05/2024	29/05/2024	29/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	28	22	< 10	16	14
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	140	95	51	88	78
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	170	120	51	100	92
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	390	270	200	280	220

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				213478	213479	213480	213481	213482
Sample Reference				TSP09-16E	TSP09-17E	TSP09-18E	TSP09-19E	TSP09-20E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/05/2024	29/05/2024	29/05/2024	29/05/2024	29/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	12	11	13	13
Total mass of sample received	kg	0.1	NONE	1.2	1.3	1.2	1.3	1.2
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected	Detected
Asbestos Analyst ID	N/A	N/A	N/A	MBI	MBI	MBI	MBI	MBI
Actinolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Amosite detected	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Detected	Detected
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Chrysotile detected	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Not-detected
Crocidolite detected	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Detected	Not-detected
Tremolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	< 0.001	< 0.001	< 0.001	< 0.001	0.001
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Loose Fibres	Loose Fibres	Loose Fibres	Loose Fibres	Loose Fibrous Debris
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.12	0.13	0.16	0.08	0.08
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.07	0.05	0.07	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.06	0.06	0.06	0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.5	0.54	0.47	0.41	0.41
Anthracene	mg/kg	0.05	MCERTS	0.21	0.24	0.22	0.17	0.27
Fluoranthene	mg/kg	0.05	MCERTS	1.3	1.4	1.5	1.1	1.4
Pyrene	mg/kg	0.05	MCERTS	1.2	1.4	1.5	1.1	1.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.66	0.69	0.8	0.55	0.73
Chrysene	mg/kg	0.05	MCERTS	0.82	0.87	0.93	0.65	0.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.96	1.1	1.2	0.81	1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.39	0.38	0.56	0.3	0.38
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.87	0.95	1.2	0.72	0.95
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.51	0.58	0.73	0.41	0.56
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.09	0.1	0.13	0.08	0.11
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.62	0.73	0.86	0.53	0.66
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	8.38	9.18	10.4	6.92	8.65
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >C5 - C6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C6 - C8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >C8 - C10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >C10 - C12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >C12 - C16 EH_CU_1D_AL	mg/kg	2	MCERTS	8.7	4.6	6.5	10	5.7
TPHCWG - Aliphatic >C16 - C21 EH_CU_1D_AL	mg/kg	8	MCERTS	53	27	28	53	41
TPHCWG - Aliphatic >C21 - C35 EH_CU_1D_AL	mg/kg	8	MCERTS	95	71	77	120	80
TPHCWG - Aliphatic >C5 - C35 EH_CU+HS_1D_AL	mg/kg	10	NONE	160	100	110	180	130
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				213478	213479	213480	213481	213482
Sample Reference				TSP09-16E	TSP09-17E	TSP09-18E	TSP09-19E	TSP09-20E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/05/2024	29/05/2024	29/05/2024	29/05/2024	29/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	4.8
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	19	22	16	24	26
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	75	100	99	98	120
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	94	130	120	120	150
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	310	280	280	370	330
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical i2 Environmental Science

Analytical Report Number: 24-022316
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
213465	TSP09-03E		160	Loose Fibres	Chrysotile	0.002	0.002
213468	TSP09-06E		161	Loose Fibres	Crocidolite	< 0.001	< 0.001
213470	TSP09-08E		172	Loose Fibres	Amosite	< 0.001	< 0.001
213471	TSP09-09E		172	Loose Fibres	Amosite & Chrysotile	< 0.001	< 0.001
213473	TSP09-11E		168	Loose Fibres	Crocidolite	< 0.001	< 0.001
213474	TSP09-12E		169	Loose Fibres	Chrysotile	< 0.001	< 0.001
213475	TSP09-13E		160	Loose Fibres	Amosite	< 0.001	< 0.001
213476	TSP09-14E		188	Loose Fibres	Chrysotile	< 0.001	< 0.001
213477	TSP09-15E		182	Loose Fibres	Chrysotile	< 0.001	< 0.001
213478	TSP09-16E		161	Loose Fibres	Chrysotile	< 0.001	< 0.001
213479	TSP09-17E		160	Loose Fibres	Amosite & Crocidolite	< 0.001	< 0.001
213480	TSP09-18E		158	Loose Fibres	Amosite	< 0.001	< 0.001
213481	TSP09-19E		158	Loose Fibres	Amosite & Crocidolite	< 0.001	< 0.001
213482	TSP09-20E		159	Loose Fibrous Debris	Amosite	0.001	0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Analytical Report Number : 24-022316
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
213463	TSP09-01E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213464	TSP09-02E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213465	TSP09-03E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213466	TSP09-04E	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation
213467	TSP09-05E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213468	TSP09-06E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213469	TSP09-07E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213470	TSP09-08E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213471	TSP09-09E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213472	TSP09-10E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213473	TSP09-11E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213474	TSP09-12E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213475	TSP09-13E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213476	TSP09-14E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213477	TSP09-15E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213478	TSP09-16E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213479	TSP09-17E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213480	TSP09-18E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213481	TSP09-19E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
213482	TSP09-20E	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation

Analytical Report Number : 24-022316
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references	HSE Report No: 83/1996, HSG 248 (2021), HSG 264 (2012) & SCA Blue Book (draft)	A006B	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

UKAS TESTING 4041

MCERTS

Environmental Science

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Sanctus House
1 Olympus Park Business Centre
Quedgeley
Gloucester
Gloucestershire
GL2 4DH

t: 01453 828222

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i2 Analytical Ltd.
Unit 9,
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G75 0YF

t: 01355202915
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Analytical Report Number : 24-029828

Project / Site name:	Ardrossan North Shore	**Samples received on:**	09/07/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	09/07/2024
Your order number:	S3240	**Analysis completed by:**	16/07/2024
Report Issue Number:	1	**Report issued on:**	16/07/2024
Samples Analysed:	7 soil samples		

[redacted]

Signed: _____

[redacted]
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041 MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-029828
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252486	252487	252488	252489	252490
Sample Reference				TSP09-02J	TSP09-03J	TSP09-05J	TSP09-06J	TSP09-08J
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	27.4	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	10	14	13	13
Total mass of sample received	kg	0.1	NONE	0.4	0.3	0.3	0.4	0.4
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.1	0.08	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.14	< 0.05	< 0.05	0.09
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.17	0.18	0.11	0.15	0.14
Pyrene	mg/kg	0.05	MCERTS	0.18	0.2	0.12	0.17	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.12	0.13	< 0.05	0.09	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.15	0.14	< 0.05	0.13	0.12
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.16	0.19	< 0.05	0.12	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06	0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.15	0.15	< 0.05	0.08	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.08	0.07	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.12	0.11	< 0.05	0.08	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.19	1.47	< 0.80	0.82	< 0.80
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	12	8.4	10	7.8	7.8
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	36	39	33	28	22
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	82	140	83	65	56
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	130	190	130	100	86
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	11	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	18	74	17	38	15
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	18	84	17	38	15
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	170	340	170	170	120

Analytical Report Number: 24-029828
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252486	252487	252488	252489	252490
Sample Reference				TSP09-02J	TSP09-03J	TSP09-05J	TSP09-06J	TSP09-08J
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/07/2024	09/07/2024	09/07/2024	09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-029828
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252491	252492
Sample Reference				TSP09-09J	TSP09-13J
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	13
Total mass of sample received	kg	0.1	NONE	0.3	0.4
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.09	0.08
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.12	0.13
Pyrene	mg/kg	0.05	MCERTS	0.16	0.19
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.13	0.12
Chrysene	mg/kg	0.05	MCERTS	0.08	0.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.18	0.16
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.16
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.09
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.11	0.13
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	0.88	1.16
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	15	13
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	42	33
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	100	80
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	160	130
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	33	39
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	33	39
TPH (EC10 - EC40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	220	200

Analytical Report Number: 24-029828
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				252491	252492
Sample Reference				TSP09-09J	TSP09-13J
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				09/07/2024	09/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
VOCs					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-029828
Project / Site name: Ardrossan North Shore

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
252486	TSP09-02J	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation
252487	TSP09-03J	None Supplied	None Supplied	Brown loam and sand with vegetation and stones
252488	TSP09-05J	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
252489	TSP09-06J	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation
252490	TSP09-08J	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation
252491	TSP09-09J	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation
252492	TSP09-13J	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation

Analytical Report Number : 24-029828
Project / Site name: Ardrossan North Shore

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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Email: info@chemtest.com

UKAS TESTING 2183

mCERTS

Final Report

Report No.:	24-22820-1
Initial Date of Issue:	22-Jul-2024
Re-Issue Details:	
Client	Sanctus Limited
Client Address:	1 Olympus Park Business Centre Quedgeley Gloucester Gloucestershire GL2 4DH
Contact(s):	Labs
Project	S3240 Androssan North Shore
Quotation No.:	Q24-35340
Order No.:	S3240
No. of Samples:	7
Turnaround (Wkdays):	3
Date Approved:	22-Jul-2024
Approved By:	[redacted]
Details:	[redacted] Technical Director

Date Received:	18-Jul-2024
Date Instructed:	18-Jul-2024
Results Due:	22-Jul-2024

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: S3240 Androssan North Shore

Client: Sanctus Limited						Chemtest Job No.:	24-22820	24-22820	24-22820	24-22820	24-22820	24-22820	24-22820
Quotation No.: Q24-35340						Chemtest Sample ID.:	1837305	1837306	1837307	1837308	1837309	1837310	1837311
Order No.: S3240						Client Sample Ref.:	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09
						Client Sample ID.:	TSP09-02K	TSP09-03K	TSP09-05K	TSP09-06K	TSP09-08K	TSP09-09K	TSP09-13K
						Sample Location:	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Date Sampled:	16-Jul-2024	16-Jul-2024	16-Jul-2024	16-Jul-2024	16-Jul-2024	16-Jul-2024	16-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Moisture		N	2030	%	0.020		5.8	5.6	6.9	6.9	7.2	5.8	6.4
Soil Colour		N	2040		N/A		Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A		Stones and Roots	Stones and Roots	Stones and Roots	Stones, Roots and Glass	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A		Loam	Loam	Loam	Loam	Loam	Loam	Loam
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		5.6	7.7	10	17	12	23	9.7
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		22	37	66	52	51	79	35
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		36	62	120	69	100	140	73
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		15	54	89	34	62	97	51
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		< 10	< 10	< 10	< 10	< 10	< 10	< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		79	160	280	170	230	340	170
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		79	160	280	170	230	340	170
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		< 1.0	< 1.0	< 1.0	1.9	< 1.0	5.2	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		1.3	3.8	8.9	9.0	10	13	4.3
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		6.3	18	41	37	33	43	18
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		2.9	12	14	18	25	12	8.9
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		1.2	13	55	5.9	130	38	15
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		11	33	64	65	68	73	31
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00		12	46	120	71	190	110	46
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		90	190	350	240	300	410	200
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00		91	210	400	240	420	450	220
Naphthalene		M	2700	mg/kg	0.10		0.18	< 0.10	0.16	0.12	< 0.10	0.24	0.39
Acenaphthylene		M	2700	mg/kg	0.10		0.27	< 0.10	0.35	0.16	< 0.10	0.22	0.31
Acenaphthene		M	2700	mg/kg	0.10		0.27	< 0.10	0.40	< 0.10	< 0.10	0.18	0.28
Fluorene		M	2700	mg/kg	0.10		0.24	< 0.10	0.46	0.29	< 0.10	0.21	0.30
Phenanthrene		M	2700	mg/kg	0.10		0.66	0.31	0.74	0.46	0.45	0.40	0.81
Anthracene		M	2700	mg/kg	0.10		0.25	0.22	0.29	0.17	0.16	0.24	0.25
Fluoranthene		M	2700	mg/kg	0.10		2.1	1.3	2.0	1.5	1.6	1.3	2.4

Results - Soil

Project: S3240 Androssan North Shore

Client: Sanctus Limited												
Quotation No.: Q24-35340				**Chemtest Job No.:**		24-22820	24-22820	24-22820	24-22820	24-22820	24-22820	24-22820
Order No.: S3240				**Chemtest Sample ID.:**		1837305	1837306	1837307	1837308	1837309	1837310	1837311
				Client Sample Ref.:		TSP09	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09
				Client Sample ID.:		TSP09-02K	TSP09-03K	TSP09-05K	TSP09-06K	TSP09-08K	TSP09-09K	TSP09-13K
				Sample Location:		TSP09	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		16-Jul-2024	16-Jul-2024	16-Jul-2024	16-Jul-2024	16-Jul-2024	16-Jul-2024	16-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Pyrene		M	2700	mg/kg	0.10	2.1	1.8	2.6	1.6	1.9	1.6	2.5
Benzo[a]anthracene		M	2700	mg/kg	0.10	0.72	0.73	0.61	0.59	0.61	0.65	0.74
Chrysene		M	2700	mg/kg	0.10	0.77	1.0	0.71	1.0	0.77	1.1	0.99
Benzo[b]fluoranthene		M	2700	mg/kg	0.10	1.8	1.5	1.9	1.6	1.7	1.6	2.1
Benzo[k]fluoranthene		M	2700	mg/kg	0.10	0.65	0.52	0.58	0.48	0.65	0.51	0.62
Benzo[a]pyrene		M	2700	mg/kg	0.10	1.5	1.3	1.5	1.4	1.4	1.3	1.7
Indeno(1,2,3-c,d)Pyrene		M	2700	mg/kg	0.10	1.2	1.2	1.5	1.1	1.2	1.1	1.5
Dibenz(a,h)Anthracene		M	2700	mg/kg	0.10	< 0.10	0.33	0.41	0.40	< 0.10	0.24	0.49
Benzo[g,h,i]perylene		M	2700	mg/kg	0.10	1.6	1.9	1.7	1.7	1.8	1.6	2.0
Total Of 16 PAH's		M	2700	mg/kg	2.0	14	12	16	13	12	13	17

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8-C10 Aromatics: >C5–C7,>C7-C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING 2183

mCERTS

Final Report

Report No.:	24-24035-1
Initial Date of Issue:	01-Aug-2024
Re-Issue Details:	
Client	Sanctus Limited
Client Address:	1 Olympus Park Business Centre Quedgeley Gloucester Gloucestershire GL2 4DH
Contact(s):	Labs
Project	S3240 Ardrossan North Shore
Quotation No.:	Q24-35340
Order No.:	S3240
No. of Samples:	7
Turnaround (Wkdays):	3
Date Approved:	01-Aug-2024
Approved By:	
Details:	[redacted] Technical Director

Date Received:	29-Jul-2024
Date Instructed:	29-Jul-2024
Results Due:	31-Jul-2024

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited					Chemtest Job No.:	24-24035	24-24035	24-24035	24-24035	24-24035	24-24035	24-24035
Quotation No.: Q24-35340					Chemtest Sample ID.:	1842173	1842174	1842175	1842176	1842177	1842178	1842179
Order No.: S3240					Client Sample Ref.:	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09
					Client Sample ID.:	TSP09-02L	TSP09-03L	TSP09-05L	TSP09-06L	TSP09-08L	TSP09-09L	TSP09-13L
					Sample Location:	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Date Sampled:	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Moisture		N	2030	%	0.020	6.4	6.9	7.0	8.1	8.0	8.3	8.6
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones and Roots	Stones	Stones and Roots	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	8.1	2.5	< 2.0	2.1	2.5	4.0	5.6
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	91	32	< 1.0	< 1.0	47	44	57
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	140	54	< 2.0	< 2.0	73	95	150
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	65	40	< 3.0	< 3.0	53	63	57
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	16	18	11	10	17	22	18
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	300	130	< 5.0	< 5.0	180	210	270
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	320	150	11	10	190	230	290
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	14	9.6	< 1.0	< 1.0	14	10	16
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	84	37	2.8	2.9	60	68	84
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	83	23	< 2.0	< 2.0	36	44	72
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	21	11	3.4	3.5	13	33	18
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	180	69	< 5.0	< 5.0	110	120	170
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	200	80	< 10	< 10	120	150	190
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00	480	200	< 10	< 10	290	330	440
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	520	230	14	14	320	380	480
Benzene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene		M	2800	mg/kg	0.10	< 0.10	0.12	< 0.10	< 0.10	< 0.10	1.0	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.4	< 0.10

Results - Soil

Project: S3240 Ardrossan North Shore

Client: Sanctus Limited				**Chemtest Job No.:**		24-24035	24-24035	24-24035	24-24035	24-24035	24-24035	24-24035
Quotation No.: Q24-35340				**Chemtest Sample ID.:**		1842173	1842174	1842175	1842176	1842177	1842178	1842179
Order No.: S3240				Client Sample Ref.:		TSP09	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09
				Client Sample ID.:		TSP09-02L	TSP09-03L	TSP09-05L	TSP09-06L	TSP09-08L	TSP09-09L	TSP09-13L
				Sample Location:		TSP09	TSP09	TSP09	TSP09	TSP09	TSP09	TSP09
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024	23-Jul-2024
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.7	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	< 0.10	0.42	0.46	0.39	0.32	5.6	0.28
Anthracene		M	2800	mg/kg	0.10	< 0.10	0.17	0.31	0.18	0.18	2.1	0.12
Fluoranthene		M	2800	mg/kg	0.10	0.66	1.2	1.2	1.0	0.86	7.1	0.88
Pyrene		M	2800	mg/kg	0.10	0.61	1.2	1.1	1.0	0.76	5.5	0.87
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	0.75	1.0	0.53	< 0.10	3.2	0.49
Chrysene		M	2800	mg/kg	0.10	< 0.10	0.66	0.99	0.51	< 0.10	2.6	0.54
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	1.3	1.6	1.0	< 0.10	3.3	0.95
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	0.47	0.93	0.37	< 0.10	1.3	0.37
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	1.1	1.2	0.87	< 0.10	2.5	0.65
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	0.91	1.3	0.64	< 0.10	1.6	0.62
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	0.21	0.79	< 0.10	< 0.10	0.27	0.13
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	0.89	1.2	0.68	< 0.10	1.4	0.54
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	9.3	12	7.2	2.1	41	6.4

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8–C10 Aromatics: >C5–C7,>C7-C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.
The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.
For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Treated Stockpile Reuse Validation Form 006 – TSP06

Stockpile ID

Stockpile ID: TSP06 | Material Volume: 1,700 m³ | Validation Samples Included 17 No.

Tested Location: Treatment Area 02 | Stockpile Creation Date: 07/03/2024 | Release Date: TBC

Sampling Data (3No. full rounds for validation to release)

Passing Round 1 (Overall Sample Round 11 of 13)	Sample Date: 02/07/2024 & 10/07/2024	Report Number & Date: 24-028869– 11/07/2024 & 24-22172– 16/07/2024	Lab: i2 & Eurofins
Passing Round 1 (Overall Sample Round 12 of 13)	Sample Date: 10/07/2024 & 16/07/2024	Report Number & Date: 24-22172 – 16/07/2024 & 24-22812 – 22/07/2024	Lab: Eurofins
Passing Round 1 (Overall Sample Round 13 of 13)	Sample Date: 16/07/2024 & 30/07/2024	Report Number & Date: 24-22812 – 22/07/2024 & 24-24570 – 05/08/2024	Lab: Eurofins

Sampling Data

Passing Round 1

Report Number: 24-028869 & 24-22172 | Report Date: 11/07/2024 & 16/07/2024

Sample ID (Sample Names): **24-028869** TSP06-01H, TSP06-02H, TSP06-03H, TSP06-04H, TSP06-05H, TSP06-06H & TSP06-13H, TSP06-14H, TSP06-15H, TSP06-16H, TSP06-17H. **24-22172** – TSP06-07I, TSP06-08I, TSP06-09I, TSP06-10I, TSP06-11I, TSP06-12I | Report ID (Lab): i2 & Eurofins

Comments: | Test Results: PASS / ~~FAIL~~

No exceedances seen throughout All three rounds are composites of two separate rounds, due to the middle section (locations 7 → 12) having previously been seen as unsuitable. No exceedances seen throughout this round. Average Total TPH = 302 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

Passing Round 2

Report Number: 24-22172 & 24-22812 | Report Date: 16/07/2024 & 22/07/2024

Sample ID (Sample Names): **24-22172** - TSP06-01I, TSP06-02I, TSP06-03I, TSP06-04I, TSP06-05I, TSP06-06I & TSP06-13I, TSP06-14I, TSP06-15I, TSP06-16I, TSP06-17I. **24-22812** - TSP06-07J, TSP06-08J, TSP06-09J, TSP06-10J, TSP06-11J, TSP06-12J | Report ID (Lab): Eurofins

Comments: | Test Results: PASS / ~~FAIL~~

Average Total TPH = 549 mg/kg. For total TPH 15 out of 17 <1,000 mg/kg, with the higher exceedance at TSP06-09J = 1,200 mg/kg. The average total TPH level is significantly below the 1,000 mg/kg threshold and only one other banded TPH failure was recorded (Aromatic TPH >C12-C16 for sample TSP06-16I at 180 mg/kg, only slightly above the modelled threshold of 173.47 mg/kg, with an average level of 37.5 mg/kg for the same band over the 17 No. samples). Following a statistical review, a >95% confidence level is seen with the distribution of total TPH, using the critical value of 1,000mg/kg a normal-normal distribution.
Sanctus deem this round of sampling as chemically suitable for reuse.

Passing Round 3

Report Number: 24-22812 & 24-24570

Report Date: 22/07/2024 & 05/08/2024

Sample ID (Sample Names): **24-22812** - TSP06-01J, TSP06-02J, TSP06-03J, TSP06-04J, TSP06-05J, TSP06-06J & TSP06-13J, TSP06-14J, TSP06-15J, TSP06-16J, TSP06-17J. **24-24570** - TSP06-07K, TSP06-08K, TSP06-09K, TSP06-10K, TSP06-11K, TSP06-12K

Report ID (Lab): Eurofins

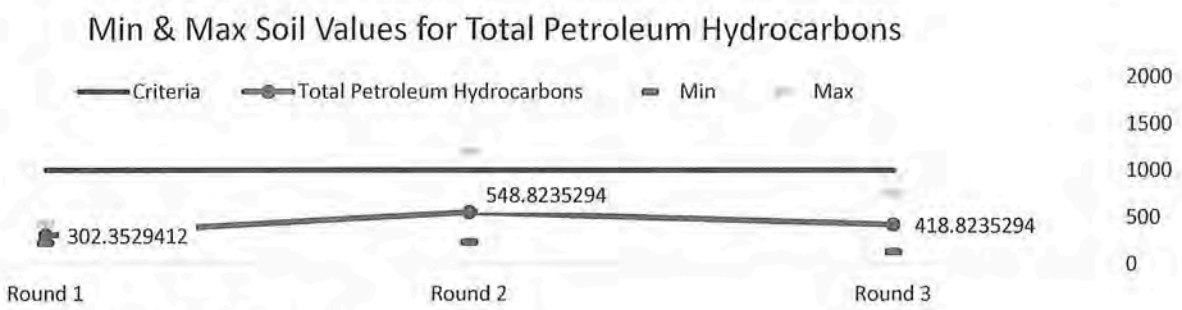
Comments:

Test Results: PASS / ~~FAIL~~

No exceedances seen throughout this round. Average Total TPH = 419 mg/kg. Sanctus deem this round of sampling as chemically suitable for reuse.

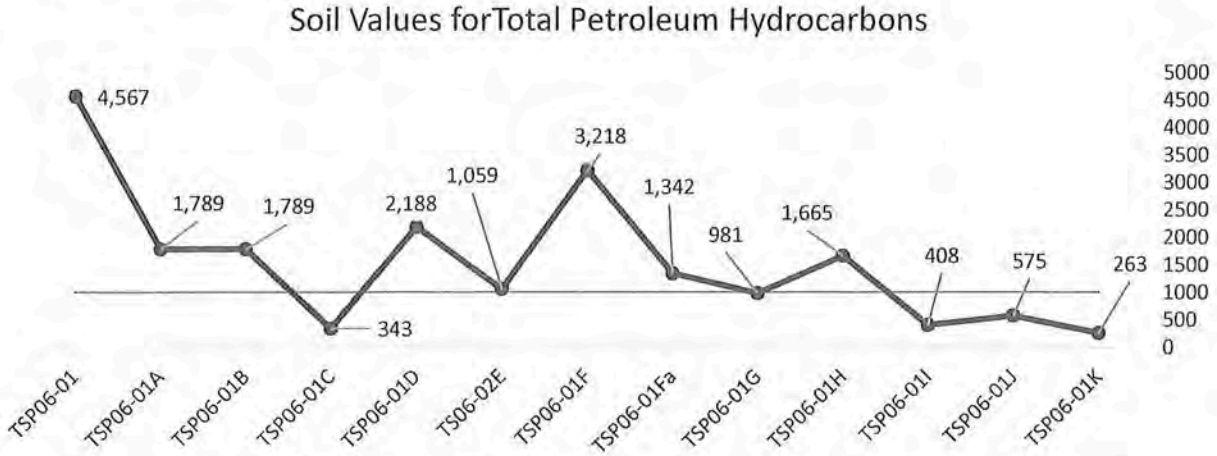
Data Review

Data Trend for Total TPH levels:

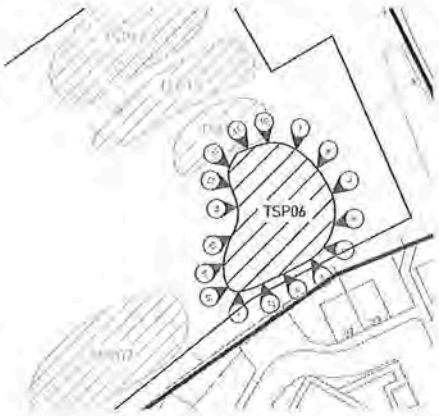


Additional Trendline Data – long term review:

Further to the above spread of data for the final 3 No. rounds, the total TPH levels from March 2024, for the treated stockpile, are shown below. The chart shows a significant decrease in the averaged total TPH levels, and the final result presents a reduction of total TPH level of 94% when compared to the initial material's contents (4,567 mg/kg (7th March 2024), compared to 263 mg/kg (30th July 2024)):



Treated Stockpile Sample Plan:



Sampling Strategy:

All samples have been taken in compliance with ISO BS 18400, including the following notes:

- Stainless steel/washable sampling devices (trowels, buckets, etc) will be employed for the gathering of the soils samples and cleaned between each sample location so that consecutive samples are not cross-contaminated.
- The sample positions shown above indicate the position relative to the base boundary of the stockpile. All samples are taken from a within the body of the Stockpile, retrieved by an excavator. This is done as a safe sample retrieval option as well as to target an internal representative sample location mid-way from the edge to the centre of the Stockpile, as discussed under BS ISO 18400-104:2018 (Sampling Strategies), subsection 9.
- The subsequent sample depths were between 1-2 m below the Stockpile's surface and a minimum of 4No. characteristic subsamples were taken from an area of approximately $1m^2$ of the newly exposed material. The 4No. or more sub-locations were chosen in a X-pattern and the combined testing soil material is described as a composite sample, following a systematic stratified random sub-sampling location of a 3-dimensional source.
- The mechanically retrieved material is then sub-sampled into the required sampling jars/pots by the Sanctus Engineer as a representative sample from the numbered location.

Naming sequence clarification:

Due to the size of the stockpile and the split of inseparable compliant and non-compliant material, approximately half of this volume (Group α - samples labelled TSP06-01, TSP06-02, TSP06-03, TSP06-04, TSP06-05, TSP06-06 & TSP06-13, TSP06-14, TSP06-15, TSP06-16, TSP06-17) were deemed as suitable initially - sampled between 02/07/2024 and 16/07/2024, after which, no further samples were required. A second set of sampled locations (Group β, tested between 10/07/2024 and 30/07/2024 - TSP06-07, TSP06-08, TSP06-09, TSP06-10, TSP06-11, TSP06-12) were seen to exceed the reuse criteria prior to this later sampling time within TSP06, but remained in their original location and unmixed between other suitable materials (Group α). This was only done as there was such a clear physical delineation between the group α and β sections and sampling was deemed repeatable in the positions shown above.

As such, the material combined exhibited 3 concurrent suitable rounds, even if the two constituent intermingled parts showed suitable test results in two separate time blocks.

Sanctus confirm that during this time, this Stockpiled material was not turned (as hydrocarbon deterioration levels were deemed sufficient without mechanical aeration during this period) and that all sampling positions were consistent and repeatable from the areas indicated on the attached Treated Stockpile sample plan.

Sanctus Declaration:

We confirm that:

1. The material that this form relates to, has been sampled representatively, as discussed above and in accordance with the client's requirements (Ardrossan Remediation Specification Rev E).
2. The material has been proven to be suitable for REUSE on site as there are 3 No. consecutive rounds, with a statistical insignificant number of exceedances of the accepted reuse criteria, with exceedances only seen in round 2. No exceedances are seen within the first and third monitoring rounds and each round's average for the total TPH levels have been significantly below the 1,000 mg/kg threshold level. Round 2 returns a confidence level of >95% confidence when compared to the statistical confidence critical level of 1,000mg/kg for total TPH.
3. The laboratory analysis results are representative of the materials investigated.
4. The material released will also be recorded spatially at its reuse location

NAME: [redacted]
POSITION: Senior Environmental Engineer
DATE: 07/10/2024
SIGNED:

Recoverable Signature

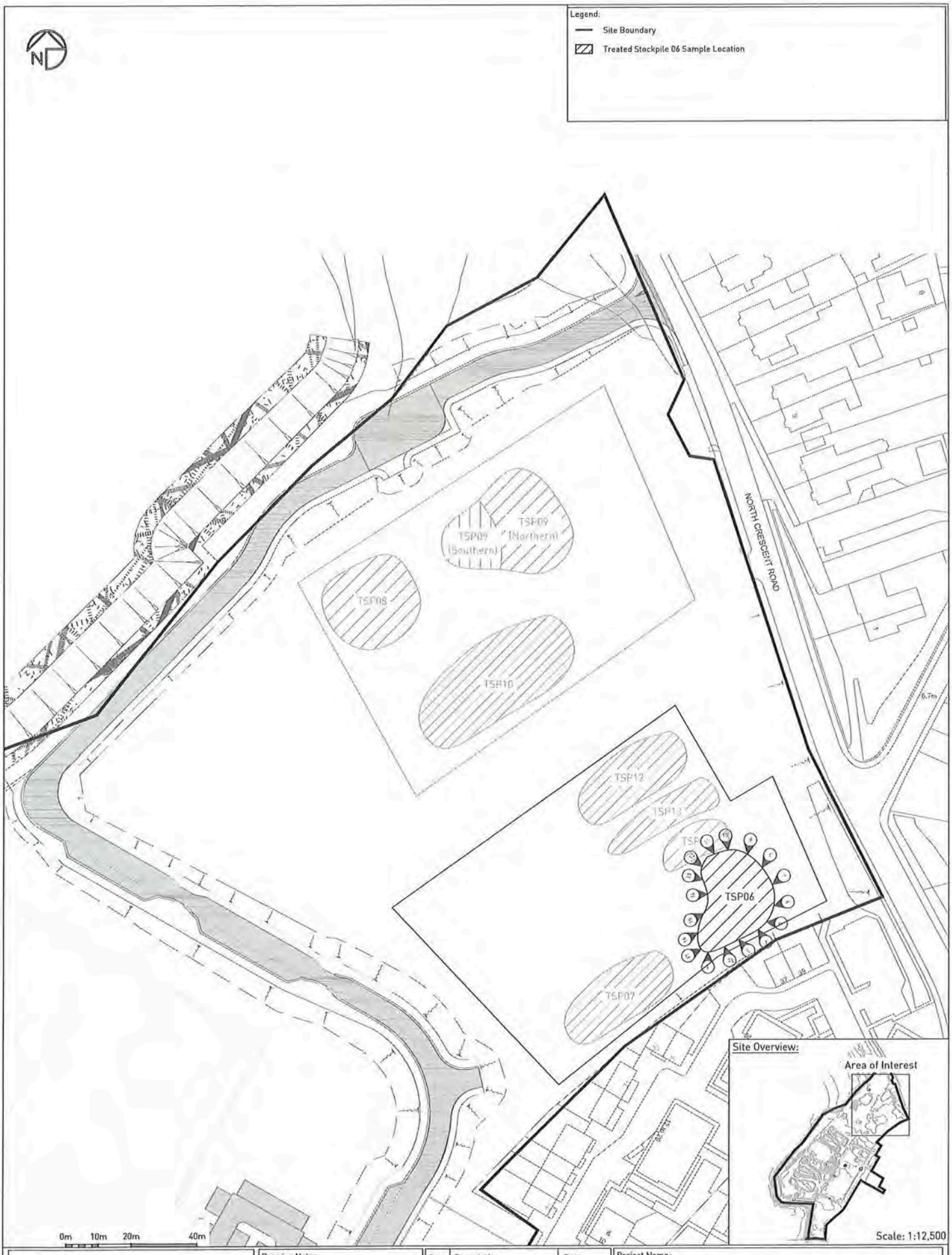
X [redacted]

[redacted]

Senior Environmental Engineer
Signed by: S-1-12-1-[illegible]

Record of reuse

For Sanctus Use Only: Approved for reuse: Beginning of Movement from stockpile: End of Movement into site:



sanctus

Sanctus House, 1 Olympus Park Business Centre,
Quedgeley, Glos, GL2 4DH
T: 01453 828222
E: info@sanctusltd.co.uk www.sanctusltd.com

Drawing Notes:
Based on client supplied DWG - ARDROSSAN 2D produced by Aird Group 23/03/2020. All locations are approximate. Must be printed in colour.

Site Address:
Raylight Place
Ardrossan
North Ayrshire
Scotland

Rev.	Description	Date
A	First Issue	02/08/2024

APPROVED

Project Name: North Shore, Ardrossan		
Client: North Ayrshire Council		
Drawing Title: Treated Stockpile 06 Sample Locations		
Contract No: S3240	Drawing No: D3240/076	Scale @ A3: 1:1000
Drawn By: [redacted]	QC Check By: [redacted]	Approved By: [redacted]

Sample ID	Date Sampled	Total Petroleum Hydrocarbons C6 - C36	Aliphatic TPH >C5-C6	Aliphatic TPH >C6-C8	Aliphatic TPH >C8-C10	Aliphatic TPH >C10-C12	Aliphatic TPH >C12-C16	Aliphatic TPH >C16-C21	Aliphatic TPH >C21-C35	Aliphatic TPH >C35-C44	Aromatic TPH >C5-C7	Aromatic TPH >C7-C8	Aromatic TPH >C8-C10	Aromatic TPH >C10-C12	Aromatic TPH >C12-C16	Aromatic TPH >C16-C21	Aromatic TPH >C21-C35	Aromatic TPH >C35-C44
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOR		10	0.02	0.02	0.05	1	2	8	8		0.01	0.01	0.05	1	2	10	10	
Screening Criteria		1600	78	236	65	330	1600	1000	1000	1000	140	230	7.34	48.2	172.17	540	1000	1000
TSP06-01H	02/07/2024	260	< 0.020	< 0.020	< 0.050	< 1.0	18	48	73	140	< 0.010	< 0.010	< 0.050	< 1.0	7.7	34	64	110
TSP06-02H	02/07/2024	270	< 0.020	< 0.020	< 0.050	3.2	23	50	74	150	< 0.010	< 0.010	< 0.050	< 1.0	5.3	36	69	110
TSP06-03H	02/07/2024	220	< 0.020	< 0.020	< 0.050	4.4	17	38	55	110	< 0.010	< 0.010	< 0.050	< 1.0	5.6	30	63	99
TSP06-04H	02/07/2024	350	< 0.020	< 0.020	< 0.050	1.7	18	50	84	150	< 0.010	< 0.010	< 0.050	< 1.0	14	56	100	170
TSP06-05H	02/07/2024	290	< 0.020	< 0.020	< 0.050	< 1.0	13	45	73	130	< 0.010	< 0.010	< 0.050	< 1.0	4.9	44	94	140
TSP06-06H	02/07/2024	230	< 0.020	< 0.020	< 0.050	< 1.0	13	38	62	110	< 0.010	< 0.010	< 0.050	< 1.0	6.1	34	68	110
TSP06-13H	02/07/2024	430	< 0.020	< 0.020	< 0.050	< 1.0	19	57	89	170	< 0.010	< 0.010	< 0.050	< 1.0	17	70	130	220
TSP06-14H	02/07/2024	260	< 0.020	< 0.020	< 0.050	< 1.0	9.7	34	49	93	< 0.010	< 0.010	< 0.050	< 1.0	13	45	87	150
TSP06-15H	02/07/2024	390	< 0.020	< 0.020	< 0.050	< 1.0	21	59	84	160	< 0.010	< 0.010	< 0.050	< 1.0	16	59	130	200
TSP06-16H	02/07/2024	330	< 0.020	< 0.020	< 0.050	2.7	18	51	81	150	< 0.010	< 0.010	< 0.050	< 1.0	14	57	92	160
TSP06-17H	02/07/2024	280	< 0.020	< 0.020	< 0.050	2.9	20	52	79	150	< 0.010	< 0.010	< 0.050	< 1.0	5	41	68	110
TSP06-07I	10/07/2024	240	< 0.05	< 0.10	< 0.05	11	34	32	18	95	< 0.05	< 0.05	< 0.05	1.2	28	76	30	130
TSP06-08I	10/07/2024	310	< 0.05	< 0.10	< 0.05	22	73	54	29	180	< 0.05	< 0.05	< 0.05	2.1	22	57	39	120
TSP06-09I	10/07/2024	270	< 0.05	< 0.10	< 0.05	13	47	47	28	130	< 0.05	< 0.05	< 0.05	2.1	16	72	35	120
TSP06-10I	10/07/2024	260	< 0.05	< 0.10	< 0.05	13	38	46	25	120	< 0.05	< 0.05	< 0.05	1.1	22	70	41	130
TSP06-11I	10/07/2024	320	< 0.05	< 0.10	< 0.05	62	86	59	23	230	< 0.05	< 0.05	< 0.05	4.6	16	36	23	80
TSP06-12I	10/07/2024	430	< 0.05	< 0.10	< 0.05	23	64	62	20	170	< 0.05	< 0.05	< 0.05	3.2	55	120	55	240
TSP06-01I	10/07/2024	410	< 0.05	< 0.10	< 0.05	17	30	17	18	82	< 0.05	< 0.05	< 0.05	2.4	75	190	50	310
TSP06-02I	10/07/2024	1100	< 0.05	< 0.10	< 0.05	40	210	360	110	720	< 0.05	< 0.05	< 0.05	15	76	120	85	290
TSP06-03I	10/07/2024	230	< 0.05	< 0.10	< 0.05	15	40	41	19	120	< 0.05	< 0.05	< 0.05	2.6	22	59	27	110
TSP06-04I	10/07/2024	370	< 0.05	< 0.10	< 0.05	24	85	95	29	230	< 0.05	< 0.05	< 0.05	2.8	26	49	45	120
TSP06-05I	10/07/2024	480	< 0.05	< 0.10	< 0.05	20	52	86	20	180	< 0.05	< 0.05	< 0.05	5.6	65	120	67	260
TSP06-06I	10/07/2024	390	< 0.05	< 0.10	< 0.05	23	86	96	44	250	< 0.05	< 0.05	< 0.05	3.2	19	47	34	100
TSP06-13I	10/07/2024	330	< 0.05	< 0.10	< 0.05	12	46	67	26	150	< 0.05	< 0.05	< 0.05	2.1	22	69	57	150
TSP06-14I	10/07/2024	330	< 0.05	< 0.10	< 0.05	19	54	54	26	150	< 0.05	< 0.05	< 0.05	3.6	33	84	44	160
TSP06-15I	10/07/2024	340	< 0.05	< 0.10	< 0.05	14	62	67	34	180	< 0.05	< 0.05	< 0.05	3.3	21	74	46	140
TSP06-16I	10/07/2024	600	< 0.05	< 0.10	< 0.05	19	11	3.7	13	46	< 0.05	< 0.05	< 0.05	4.8	180	310	44	530
TSP06-17I	10/07/2024	520	< 0.05	< 0.10	< 0.05	44	130	140	40	360	< 0.05	< 0.05	< 0.05	4.5	24	54	56	140
TSP06-07J	16/07/2024	520	< 0.05	< 0.10	< 0.05	15	88	170	110	390	< 0.05	< 0.05	< 0.05	< 1.0	9.6	51	14	75
TSP06-08J	16/07/2024	770	< 0.05	< 0.10	< 0.05	14	95	240	240	590	< 0.05	< 0.05	< 0.05	< 1.0	9.3	65	25	99
TSP06-09J	16/07/2024	1200	< 0.05	< 0.10	< 0.05	18	120	270	420	830	< 0.05	< 0.05	< 0.05	2.4	18	72	89	180
TSP06-10J	16/07/2024	300	< 0.05	< 0.10	< 0.05	11	58	99	57	230	< 0.05	< 0.05	< 0.05	< 1.0	5	30	13	47
TSP06-11J	16/07/2024	820	< 0.05	< 0.10	< 0.05	16	110	210	63	390	< 0.05	< 0.05	< 0.05	< 1.0	15	65	20	100
TSP06-12J	16/07/2024	620	< 0.05	< 0.10	< 0.05	20	120	190	140	470	< 0.05	< 0.05	< 0.05	3.1	17	67	12	99
TSP06-01J	16/07/2024	580	< 0.05	< 0.10	< 0.05	22	80	170	140	420	< 0.05	< 0.05	< 0.05	2.5	19	47	16	84
TSP06-02J	16/07/2024	610	< 0.05	< 0.10	< 0.05	17	110	210	130	470	< 0.05	< 0.05	< 0.05	< 1.0	15	60	18	94
TSP06-03J	16/07/2024	490	< 0.05	< 0.10	< 0.05	13	76	150	90	330	< 0.05	< 0.05	< 0.05	< 1.0	13	52	21	86
TSP06-04J	16/07/2024	450	< 0.05	< 0.10	< 0.05	13	53	140	130	340	< 0.05	< 0.05	< 0.05	< 1.0	9	38	18	65
TSP06-05J	16/07/2024	760	< 0.05	< 0.10	< 0.05	18	150	240	170	570	< 0.05	< 0.05	< 0.05	1.9	19	88	18	130
TSP06-06J	16/07/2024	760	< 0.05	< 0.10	< 0.05	40	180	230	130	580	< 0.05	< 0.05	< 0.05	16	33	71	16	140
TSP06-13J	16/07/2024	320	< 0.05	< 0.10	< 0.05	14	72	100	71	260	< 0.05	< 0.05	< 0.05	< 1.0	9.3	35	6.9	52
TSP06-14J	16/07/2024	610	< 0.05	< 0.10	< 0.05	10	65	190	210	470	< 0.05	< 0.05	< 0.05	< 1.0	7.7	54	13	75
TSP06-15J	16/07/2024	130	< 0.05	< 0.10	< 0.05	8.9	30	45	18	100	< 0.05	< 0.05	< 0.05	< 1.0	4.2	15	3.9	23
TSP06-16J	16/07/2024	160	< 0.05	< 0.10	< 0.05	13	38	57	23	130	< 0.05	< 0.05	< 0.05	< 1.0	5.6	13	4.7	24
TSP06-17J	16/07/2024	670	< 0.05	< 0.10	< 0.05	13	110	220	130	470	< 0.05	< 0.05	< 0.05	< 1.0	16	88	20	120
TSP06-07K	30/07/2024	230	< 0.05	< 0.10	< 0.05	5.8	44	65	55	170	< 0.05	< 0.05	< 0.05	< 1.0	5.1	21	9.8	36
TSP06-08K	30/07/2024	260	< 0.05	< 0.10	< 0.05	3.4	41	78	71	190	< 0.05	< 0.05	< 0.05	< 1.0	5.1	25	13	43
TSP06-09K	30/07/2024	200	< 0.05	< 0.10	< 0.05	< 2.0	27	65	51	140	< 0.05	< 0.05	< 0.05	< 1.0	5.1	24	9.9	39
TSP06-10K	30/07/2024	240	< 0.05	< 0.10	< 0.05	6.2	38	72	60	180	< 0.05	< 0.05	< 0.05	< 1.0	5.8	23	20	49
TSP06-11K	30/07/2024	180	< 0.05	< 0.10	< 0.05	< 2.0	31	53	42	130	< 0.05	< 0.05	< 0.05	< 1.0	2.6	17	9.9	30
TSP06-12K	30/07/2024	470	< 0.05	< 0.10	< 0.05	11	72	150	120	350	< 0.05	< 0.05	< 0.05	1.3	12	45	24	83

Sanctus Ltd
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e: [redacted]

i2 Analytical Ltd.
Unit 9,
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f: 01923237404
e: scotland@i2analytical.com

Analytical Report Number : 24-028869

Project / Site name:	Ardrossan North Shore	**Samples received on:**	03/07/2024
Your job number:	S3240	**Samples instructed on/ Analysis started on:**	04/07/2024
Your order number:	S3240	**Analysis completed by:**	10/07/2024
Report Issue Number:	1	**Report issued on:**	11/07/2024
Samples Analysed:	17 soil samples		

Signed: [redacted]

[redacted]
Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

UKAS TESTING 4041

MCERTS

Analytical i2 Environmental Science

Analytical Report Number: 24-028869
Project / Site name: Ardrossan North Shore
Your Order No: S3240

Lab Sample Number				247369	247370	247371	247372	247373
Sample Reference				TSP06-01H	TSP06-02H	TSP06-03H	TSP06-04H	TSP06-05H
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				02/07/2024	02/07/2024	02/07/2024	02/07/2024	02/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5.5	6.9	6.5	6	6.4
Total mass of sample received	kg	0.1	NONE	1.3	1.3	1.3	1.3	1.2
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	IZJ	EC	EC	EC
Actinolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Amosite detected	Type	N/A	ISO 17025	-	-	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Tremolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	0.13	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.12	0.08	0.08	0.18	0.07
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.14	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	0.15	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	3.2	4.4	1.7	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	18	23	17	18	13
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	48	50	38	50	45
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	73	74	55	84	73
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	140	150	110	150	130
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

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Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	7.7	5.3	5.6	14	4.9
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	34	36	30	56	44
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	64	69	63	100	94
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	110	110	99	170	140
TPH (EC10 - EC40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	260	270	220	350	290
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected