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Ground Gas Solutions
Pythia House (Unit 10)
Bamford Business Park
Hibbert Street
Stockpot
SK4 1PL

Attention :	Matt Askin
Date :	17th April, 2020
Your reference :	GGS1920
Our reference :	Test Report 20/5103 Batch 1
Location :	Balcombe
Date samples received :	7th April, 2020
Status :	Final report
Issue :	1

Eight samples were received for analysis on 7th April, 2020 of which eight were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Element Materials Technology

Client Name: Ground Gas Solutions
Reference: GGS1920
Location: Balcombe
Contact: Matt Askin
EMT Job No: 20/5103

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-44	45-52			LOD/LOR	Units	Method No.
Sample ID	BALSW01	BALSW02	BALSW03	BALSW04	BALSW05	BALSW06	BALGW01 PRE PURGE	BALGW01 POST PURGE					
Depth													
COC No / misc													
Containers	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P BOD G	V H HN P BOD G					
Sample Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020					
Sample Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Ground Water	Ground Water					
Batch Number	1	1	1	1	1	1	1	1					
Date of Receipt	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020					
Dissolved Aluminium #	<20	<20	<20	<20	<20	<20	<20	<20			<20	ug/l	TM30/PM14
Dissolved Antimony #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM30/PM14
Dissolved Arsenic #	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5			<2.5	ug/l	TM30/PM14
Dissolved Barium #	27	19	27	23	18	19	312	245			<3	ug/l	TM30/PM14
Dissolved Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM30/PM14
Dissolved Boron	24	32	24	23	33	34	787	773			<12	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM30/PM14
Dissolved Calcium #	44.8	31.5	49.7	39.0	29.8	32.0	1.3	1.1			<0.2	mg/l	TM30/PM14
Total Dissolved Chromium #	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			<1.5	ug/l	TM30/PM14
Dissolved Cobalt #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM30/PM14
Dissolved Copper #	<7	<7	<7	<7	<7	<7	<7	<7			<7	ug/l	TM30/PM14
Total Dissolved Iron #	<20	58	<20	44	55	54	<20	<20			<20	ug/l	TM30/PM14
Dissolved Lead #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM30/PM14
Dissolved Lithium	-	-	-	-	-	-	<5	<5			<5	ug/l	TM30/PM14
Dissolved Magnesium #	6.3	4.9	6.4	6.1	4.7	4.9	0.2	0.1			<0.1	mg/l	TM30/PM14
Dissolved Manganese #	17	49	8	120	60	40	5	5			<2	ug/l	TM30/PM14
Dissolved Mercury #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM30/PM14
Dissolved Molybdenum #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM30/PM14
Dissolved Nickel #	2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM30/PM14
Dissolved Potassium #	3.0	2.6	3.0	2.7	2.5	2.5	0.6	0.6			<0.1	mg/l	TM30/PM14
Dissolved Selenium #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM30/PM14
Dissolved Sodium #	17.2	17.0	17.0	16.9	16.5	17.0	191.8	193.0			<0.1	mg/l	TM30/PM14
Dissolved Strontium	-	-	-	-	-	-	30	27			<5	ug/l	TM30/PM14
Dissolved Tin	-	-	-	-	-	-	<5	<5			<5	ug/l	TM30/PM14
Dissolved Vanadium #	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			<1.5	ug/l	TM30/PM14
Dissolved Zinc #	3	<3	<3	3	<3	<3	4	<3			<3	ug/l	TM30/PM14

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Gas Solutions
Reference: GGS1920
Location: Balcombe
Contact: Matt Askin
EMT Job No: 20/5103

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-44	45-52			LOD/LOR	Units	Method No.
Sample ID	BALSW01	BALSW02	BALSW03	BALSW04	BALSW05	BALSW06	BALGW01 PRE PURGE	BALGW01 POST PURGE					
Depth													
COC No / misc													
Containers	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P BOD G	V H HN P BOD G					
Sample Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020					
Sample Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Ground Water	Ground Water					
Batch Number	1	1	1	1	1	1	1	1					
Date of Receipt	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020					
PAH MS													
Naphthalene #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-			<0.1	ug/l	TM4/PM30
Acenaphthylene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	-	-			<0.013	ug/l	TM4/PM30
Acenaphthene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	-	-			<0.013	ug/l	TM4/PM30
Fluorene #	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	-	-			<0.014	ug/l	TM4/PM30
Phenanthrene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	-	-			<0.011	ug/l	TM4/PM30
Anthracene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	-	-			<0.013	ug/l	TM4/PM30
Fluoranthene #	<0.012	<0.012	0.012	<0.012	<0.012	<0.012	-	-			<0.012	ug/l	TM4/PM30
Pyrene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	-	-			<0.013	ug/l	TM4/PM30
Benzo(a)anthracene #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	-	-			<0.015	ug/l	TM4/PM30
Chrysene #	<0.011	<0.011	0.012	<0.011	<0.011	<0.011	-	-			<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene #	<0.018	<0.018	0.021	<0.018	<0.018	<0.018	-	-			<0.018	ug/l	TM4/PM30
Benzo(a)pyrene #	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	-	-			<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	-	-			<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-			<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	-	-			<0.011	ug/l	TM4/PM30
PAH 16 Total #	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195	-	-			<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	-	-			<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-			<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	85	84	88	85	85	90	-	-			<0	%	TM4/PM30
GRO (>C4-C8) #	<10	<10	<10	<10	<10	<10	-	-			<10	ug/l	TM36/PM12
GRO (>C8-C12) #	<10	<10	<10	<10	<10	<10	-	-			<10	ug/l	TM36/PM12
GRO (>C4-C12) #	<10	<10	<10	<10	<10	<10	-	-			<10	ug/l	TM36/PM12
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
o-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
EPH (C8-C40) #	<10	<10	<10	<10	<10	<10	-	-			<10	ug/l	TM5/PM30
TPH CWG													
Aliphatics													
>C5-C6 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM36/PM12
>C6-C8 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM36/PM12
>C8-C10 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM36/PM12
>C10-C12 #	-	-	-	-	-	-	<5	<5			<5	ug/l	TM5/PM16/PM30
>C12-C16 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/PM16/PM30
>C16-C21 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/PM16/PM30
>C21-C35 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-35 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/TM36/PM12/PM16/PM30

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Gas Solutions
Reference: GGS1920
Location: Balcombe
Contact: Matt Askin
EMT Job No: 20/5103

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-44	45-52			LOD/LOR	Units	Method No.
Sample ID	BALSW01	BALSW02	BALSW03	BALSW04	BALSW05	BALSW06	BALGW01 PRE PURGE	BALGW01 POST PURGE					
Depth													
COC No / misc													
Containers	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P G	V H HN P BOD G	V H HN P BOD G					
Sample Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020	06/04/2020					
Sample Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Ground Water	Ground Water					
Batch Number	1	1	1	1	1	1	1	1					
Date of Receipt	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020	07/04/2020					
TPH CWG													
Aromatics													
>C5-EC7 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM36/PM12
>EC7-EC8 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM36/PM12
>EC8-EC10 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM36/PM12
>EC10-EC12 #	-	-	-	-	-	-	<5	<5			<5	ug/l	TM5/PM16/PM30
>EC12-EC16 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/PM16/PM30
>EC16-EC21 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/PM16/PM30
>EC21-EC35 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35 #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/TM36/PM12/PM16/PM30
Total aliphatics and aromatics(C5-35) #	-	-	-	-	-	-	<10	<10			<10	ug/l	TM5/TM36/PM12/PM16/PM30
Chloride #	31.6	26.9	31.6	31.1	26.3	26.6	-	-			<0.3	mg/l	TM38/PM0
Nitrate as NO3 #	-	-	-	-	-	-	<0.2	<0.2			<0.2	mg/l	TM38/PM0
Nitrite as NO2 #	-	-	-	-	-	-	<0.02	<0.02			<0.02	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.05	0.05	<0.03	0.03	0.05	0.06	0.32	0.30			<0.03	mg/l	TM38/PM0
Dissolved Methane #	-	-	-	-	-	-	>>16977	>>21161			<1	ug/l	TM25/PM0
Dissolved Ethene #	-	-	-	-	-	-	<1	<1			<1	ug/l	TM25/PM0
Dissolved Ethane #	-	-	-	-	-	-	>>1592	>>1913			<1	ug/l	TM25/PM0
Dissolved Carbon Dioxide	-	-	-	-	-	-	24243	24176			<1	ug/l	TM25/PM0
Dissolved Butane	-	-	-	-	-	-	<2	<2			<2	ug/l	TM25/PM0
Dissolved Propane	-	-	-	-	-	-	<2	<2			<2	ug/l	TM25/PM0
Total Alkalinity as CaCO3 #	96	70	108	78	72	70	-	-			<1	mg/l	TM75/PM0
BOD (Settled) #	-	-	-	-	-	-	3^{+}	1^{+}			<1	mg/l	TM58/PM0
COD (Settled) #	8	8	10	<7	10	8	10	<7			<7	mg/l	TM57/PM0
Electrical Conductivity @25C #	367	292	380	325	277	284	-	-			<2	uS/cm	TM76/PM0
pH #	8.07	7.36	7.99	7.44	7.83	7.27	8.90	8.90			<0.01	pH units	TM73/PM0
Salinity	-	-	-	-	-	-	<0.1	<0.1			<0.1	%	TM64/PM0
Total Dissolved Solids #	248	241	257	222	215	195	466	495			<35	mg/l	TM20/PM0
Total Suspended Solids #	<10	<10	<10	<10	<10	<10	<10	<10			<10	mg/l	TM37/PM0

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: Ground Gas Solutions
Reference: GGS1920
Location: Balcombe
Contact: Matt Askin

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/5103						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/5103

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/5103

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16/PM30	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE/Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5/TM36	please refer to TM5 and TM36 for method details	PM12/PM16/PM30	please refer to PM16/PM30 and PM12 for method details	Yes			
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes			
TM25	Determintaion of Dissolved Methane, Ethane and Ethene by Headspace GC-FID	PM0	No preparation is required.				
TM25	Determintaion of Dissolved Methane, Ethane and Ethene by Headspace GC-FID	PM0	No preparation is required.	Yes			
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified	Yes			

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Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
TM37	Modified methods USEPA 160.2 (1983), EN872:2005 and APHA SMEWW 2540D:1999 22nd Edition. Gravimetric determination of Total Suspended Solids. Sample is filtered through a 1.5um pore size glass fibre filter and the resulting residue is dried and weighed.	PM0	No preparation is required.	Yes			
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes			
TM57	Modified US EPA Method 410.4. (Rev. 2.0 1993) Comparable with ISO 15705:2002. Chemical Oxygen Demand is determined by hot digestion with Potassium Dichromate and measured spectrophotometerically.	PM0	No preparation is required.	Yes			
TM58	APHA SMEWW 5210B:1999 22nd Edition. Comparible with ISO 5815:1989. Measurement of Biochemical Oxygen Demand. When cBOD (Carbonaceous BOD) is requested a nitrification inhibitor is added which prevents the oxidation of reduced forms of nitrogen, such as am	PM0	No preparation is required.	Yes			
TM64	Determination of the salinity of liquid samples using a salinity conductivity meter.	PM0	No preparation is required.				
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM75	Modified US EPA method 310.1 (1978). Determination of Alkalinity by Metrohm automated titration analyser.	PM0	No preparation is required.	Yes			
TM76	Modified US EPA method 120.1 (1982). Determination of Specific Conductance by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			