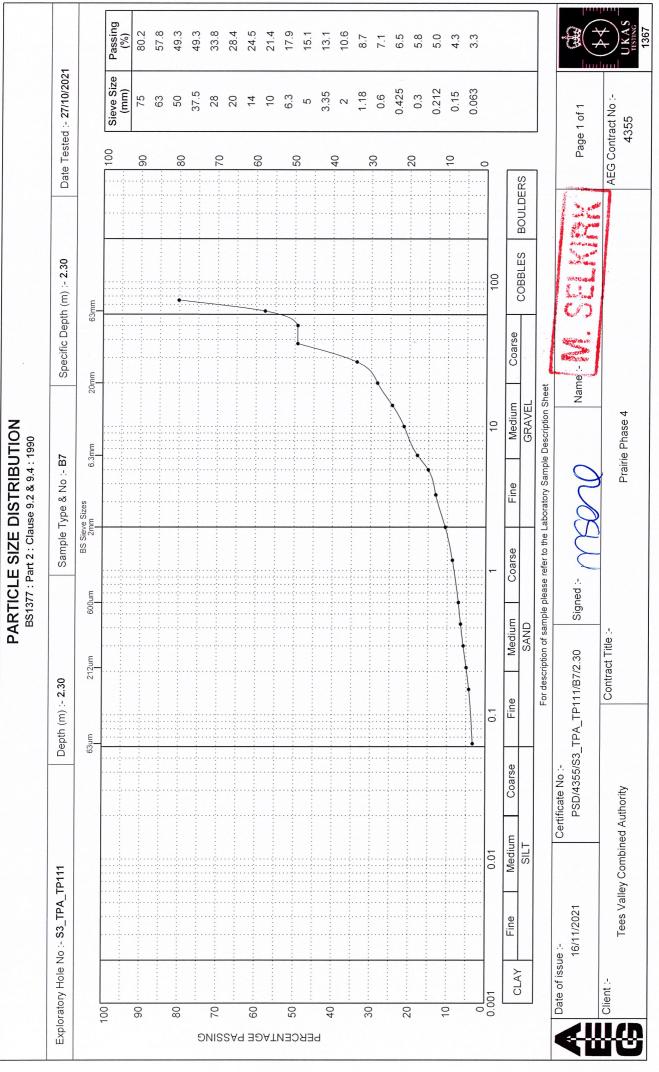
# ALLIED EXPLORATION & GEOTECHNICS LIMITED Head Office: Unit 25 Stella Gill Industrial Estate, Pellon Fall, Chester-de-Street, Co. Durham, DH2 2RG- Tel: 0191 387 4700 Fax; 0191 387 4710



Determination of Chloride, Sulphate and pH (Tested Externally)





Certificate of Analysis

Certificate Number 21-23829

Issued:

16-Nov-21

Client Allied Exploration & Geotechnics Limited

Unit 25

Stella Gill Industrial Estate

Pelton Fell DH2 2RG

Our Reference 21-23829

Client Reference 4355

Order No LA2594

Contract Title Prairie Phase 4

Description One Soil sample.

Date Received 08-Nov-21

Date Started 08-Nov-21

Date Completed 16-Nov-21

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be

reproduced except in full, without the prior written approval of the laboratory.

Approved By

Adam Fenwick Contracts Manager





# **Summary of Chemical Analysis Soil Samples**

Our Ref 21-23829 Client Ref 4355 Contract Title Prairie Phase 4

Lab No	1931263
.Sample ID	S3_BHA03
Depth	4.80
Other ID	12
Sample Type	ES
Sampling Date	23/09/2021
Sampling Time	n/s

Test	Method	LOD	Units	
Inorganics				
рН	DETSC 2008#		рН	8.1
Chloride Aqueous Extract	DETSC 2055	1	mg/l	22
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	650



# Information in Support of the Analytical Results

Our Ref 21-23829 Client Ref 4355 Contract Prairie Phase 4

### **Containers Received & Deviating Samples**

		Date			Inappropriate container for
Lab No	Sample ID	Sampled	<b>Containers Received</b>	Holding time exceeded for tests	tests
1931263	S3_BHA03 4.80 SOIL	23/09/21	PT 500ml	Anions 2:1 (30 days), pH + Conductivity (7 days)	

Key: P-Plastic T-Tub

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

### **Soil Analysis Notes**

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

### Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report



# Certificate of Analysis

Issued:

10-Nov-21

Certificate Number 21-23648

Client Allied Exploration & Geotechnics Limited

Unit 25

Stella Gill Industrial Estate

Pelton Fell DH2 2RG

Our Reference 21-23648

Client Reference 4355

Order No LA 2594

Contract Title Prairie Phase 4

Description One Soil sample.

Date Received 04-Nov-21

Date Started 04-Nov-21

Date Completed 10-Nov-21

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Adam Fenwick Contracts Manager

UKAS
TESTING
2139



# **Summary of Chemical Analysis Soil Samples**

Our Ref 21-23648
Client Ref 4355
Contract Title Prairie Phase 4

Lab No	1930095
.Sample ID	S3_BHA03
Depth	10.50
Other ID	17
Sample Type	
<b>Sampling Date</b>	27/09/2021
<b>Sampling Time</b>	n/s

Test	Method	LOD	Units	
Inorganics				
На	DETSC 2008#		рН	7.9
Chloride Aqueous Extract	DETSC 2055	1	mg/l	7.7
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	560



# Information in Support of the Analytical Results

Date

Our Ref 21-23648 Client Ref 4355 Contract Prairie Phase 4

## **Containers Received & Deviating Samples**

inappropriate container for

Lab No	Sample ID	Sampled	<b>Containers Received</b>	Holding time exceeded for tests	tests
1930095	S3 BHA03 10.50 SOIL	27/09/21	PT 500ml	Anions 2:1 (30 days), pH + Conductivity (7 days)	

Key: P-Plastic T-Tub

. DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

### **Soil Analysis Notes**

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377. Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis. The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

### Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

**End of Report** 

**Determination of Dry Density/Moisture Content Relationship** 



# **ALLIED EXPLORATION & GEOTECHNICS LIMITED**

### MOISTURE CONTENT/DRY DENSITY RELATIONSHIP

BS 1377: Part 4: 1990

Specimen Identification

Exploratory Hole No :- S3\_BHA04

Depth (m) :- 1.50

Sample Type & No :- B5

**Test Method** 

4.5kg Compaction

Single Sample

### **Test Results**

Optimum Moisture Content (%) = 14

Particle Density (Assumed) = 2.80

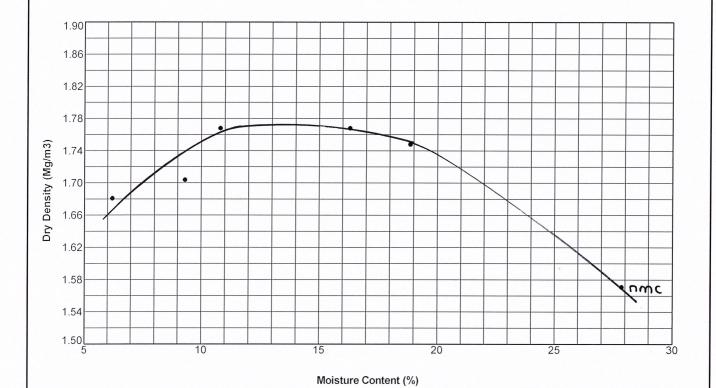
Maximum Dry Density (Mg/m3) = 1.77

Retained on 20mm Sieve (%) = 0.0

Date Tested = 23/10/2021

Retained on 37.5mm Sieve (%) = 0.0

### Remarks:



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-

Prairie Phase 4

Client :-

**Tees Valley Combined Authority** 

Page 1 of 1



Signed:-

Name:

Certificate No :-

AEG Contract No. :-

4355



15/11/2021

Date of issue :-

COMP/4355/1

# **ALLIED EXPLORATION & GEOTECHNICS LIMITED**

### MOISTURE CONTENT/DRY DENSITY RELATIONSHIP

BS 1377: Part 4: 1990

### **Specimen Identification**

Exploratory Hole No :- S3\_TPA\_TP101 Depth (m) :- 1.10

Sample Type & No :- B5

**Test Method** 

4.5kg Compaction

Single Sample

### **Test Results**

Optimum Moisture Content (%) = 19

Particle Density (Assumed) = 2.75

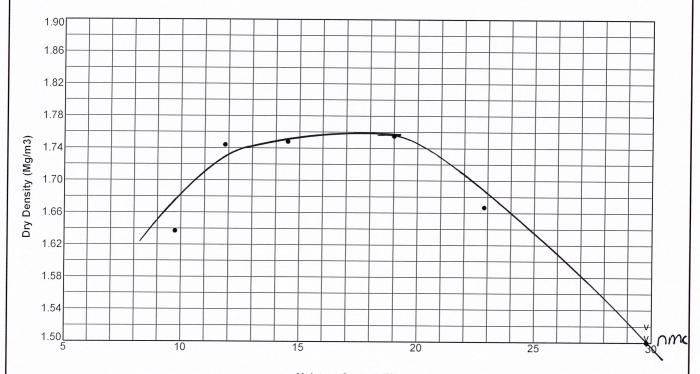
Maximum Dry Density (Mg/m3) = 1.76

Retained on 20mm Sieve (%) = 0.0

Date Tested = 28/10/2021

Retained on 37.5mm Sieve (%) = 0.0

### Remarks:



Moisture Content (%)

For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-

Prairie Phase 4

Client :-

**Tees Valley Combined Authority** 



Signed :-

Name :-

Page 1 of 1

Date of issue :-

15/11/2021

Certificate No :-

COMP/4355/1

AEG Contract No. :-

4355



# **ALLIED EXPLORATION & GEOTECHNICS LIMITED**

### MOISTURE CONTENT/DRY DENSITY RELATIONSHIP

BS 1377: Part 4: 1990

### **Specimen Identification**

Exploratory Hole No :- S3\_TPA\_TP102A Depth (m) :- 1.90

Sample Type & No :- B5

**Test Method** 

4.5kg Compaction

Single Sample

### **Test Results**

Optimum Moisture Content (%) = 16

Particle Density (Assumed) = 2.70

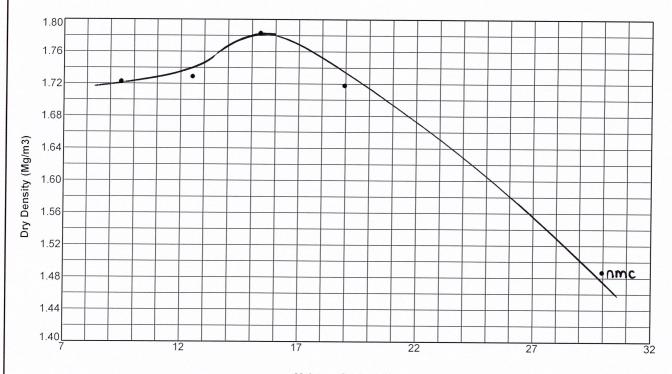
Maximum Dry Density (Mg/m3) = 1.78

Retained on 20mm Sieve (%) = 0.0

Date Tested = 26/10/2021

Retained on 37.5mm Sieve (%) = 0.0

### Remarks:



Moisture Content (%)

For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-

Prairie Phase 4

Client :-

**Tees Valley Combined Authority** 



Signed :-

15/11/2021

Date of issue :-

Name

Certificate No COMP/4355/1 Page 1 of 1

AEG Contract No. :-4355

