REPORT ON CHEMICAL ANALYSIS OF GROUND WATER
(Sulphate & Chloride Content & pH Value)

Report Ref. No.	: R 260315-039	Reporting Date	: 20/03/2026
Client	:	Sender's No.	: DOB-073
Consultant	: NP	Sampling Location	: NP
Contractor	: NP	Sampling date/time	: 15/03/2026/8:50 AM
BH No. /Depth, m	: NP	Sampling Method	: NP
Project Name & Location	: Testing program	Sample Description	: Ground Water
Project No.	: DOB-073	Sample size	: 1000 ML
Request No.	: Q 240315-039	Sampling certificate	: NP
Lab Project No.	: P-3351	Source of sample	: Borehole on site
Date Received	: 15/03/2026	Sample Container type	: Plastic Bottle
Date test started	: 15/03/2026	Lot No. & Lot size	: NP
Date completed	: 18/03/2026	Sampled by	: AML Rep
Test Method	: BS 1377-3:2018+A1:2021	Sample No	: S260315-039

Test Results

Sr. No.	Test Parameters	Test Method	Unit	Results
01	Average Water Soluble Sulphate Content (as SO_4)	BS 1377-3:2018+A1:2021 Cl., 7.6,7.8 (gravimetric method)	mg/l	398
02	Average Water Soluble Chloride Content	BS 1377-Part 3:2018 +A1:2021, Cl. 9.2.7 (Volhard's method)	%	0.09
03	pH Value @ 25^0C	BS 1377- Part 3:2018 +A1:2021 Cl.12	Value	8.0

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Sharjah - U.A.E.
ELEMENT ENGINEERING LABORATORY

Tested By: RAS

Authorized Signatory

Key Notes:

a) Commercial pH buffer solution used for pH meter calibration.
b) For Sulphate analysis presence of chloride is eliminated by washing with distilled water.
c) Average water soluble Sulphate reported nearest to 10 mg/l & Average water soluble Chloride content reported nearest to 0.01%.
d) The pH value of soil suspension reported nearest to 0.1 pH unit.

Method Variation: Nil
Remarks: Nil

Results related only to the items tested. This report shall not be reproduced except in full, without the written approval of the laboratory,
Any unauthorized amendment/corrections will invalidate this test report.

End of Report

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Worksheet for Determination of pH Value of Ground Water

Client Details		Laboratory Data Details	
Client		Request No.	
Consultant		Lab Project No.	
Contractor		Sample No.	
Project Name		Borehole no.	
Project No.		Depth, (m)	
Sender's No.		Date sample Received	
Source of Sample		Sample brought in by	
Location		Sample description	
Sampling Method	**BS 1377-Part 1:2016, Cl. 8.3**	Sampled by	
Sampling Certificate		Sampling Date / Time	
Test Method	**BS 1377-Part 3:2018, Cl. 12**	Testing Date	

Test Data **Ambient Temp.** _____

Beaker / Flask No.	Reading 1	Reading 2	Temperature, ^{0}C	Average pH Value (Nearest to 0.1)
			pH Value (nearest 0.1 pH unit)	

pH of standard buffer is_____ @_____ ^{0}C

Keynotes: Reference pH of standard buffer Solution is **pH 4.00 at 20°C, pH 7.00 at 20°C & pH 10.01 ±0.01 at 25°C used for Calibration** & recorded pH meter calibration values are available in the form No. available (AML-Form-pH).

Equipment: pH meter Ref: _____, Thermometer Ref: _____

Remarks: - Commercial pH Buffer Solution were used for the Calibration.

Test Method Variation:-_____

Tested by: _____ Checked by: _____

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Worksheet for Determination of Chloride Content of Water

Client	
Consultant	
Contractor	
Project Name	
Project No.	

Sender's No.		Sampling certificate	
Sample description		Sampling Method	
Sample size		Source of sample	
Sampling date/time		Sampling Location	
Sampled By		Lot No. & Lot size	

Request No.		Initial Sample Prep.	BS 1377:Part 1:2016, Cl. 8.3
Lab Project No.		Test Method	BS 1377:Part 3:2018, Cl. 9.2.8
BH No. / Depth, m		Sample brought in By	*Contractor/ Consultant/ Lab Rep *delete as appropriate
Date Sample received		Date test completed	
Date test started			

ANALYSIS DETAILS (Volhard's method)

Sample No.					
Volume of water used for test, ml	V_S				
Conical flask No.					
Volume of AgNO3 added, ml	V_2				
Molarity of AgNO3 (mol/L)					
Molarity of NH4SCN (mol/L)	C				
Volume of standard NH_4SCN, ml	V_3				
Chloride Content, Cl, (nearest to 0.01 %),	%				
Average Content, Cl, (nearest 0.01%),	%				

Calculation: Chloride ion content (%) = 0.007092 (V_2 –10 CV_3)

Test method Variation: _____

Remarks: _____

Equipment: Burette Ref:-_____ Pipettes Ref:-_____

Tested by: _____ Checked by: _____

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Worksheet for Determination of Sulphate Content of Water

Client	
Consultant	
Contractor	
Project Name	
Project No.	

Sender's No.		Sampling certificate	
Sample description		Sampling Method	
Sample size		Source of sample	
Sampling date/time		Sampling Location	
Sampled By		Lot No. & Lot size	

Request No.		Initial Sample Prep.	BS 1377:Part 1:2016, Cl. 8.3
Lab Project No.		Test Method	BS 1377:Part 3:2018, Cl. 7.6, 7.8
BH No. / Depth, m		Sample brought in By	*Contractor/ Consultant/ Lab Rep *delete as appropriate
Date Sample received		Date test completed	
Date test started			

ANALYSIS DETAILS

Sample No.						
pH Value of the unfiltered water sample (nearest to 0.1)						
Volume of sample used for test, ml	**V**					
Crucible Identification						
Weight of crucible, g	**A**					
Weight of crucible + Ignited $BaSO_4$, g	**B**					
Weight of Ignited $BaSO_4$, m_4, (B – A)	**g**					
Sulphate as SO_4 (nearest to 10 mg/L),	**mg/l**					
Average (nearest to 10 mg/l),	**mg/l**					

SO_4 (mg/l) = m_4 x 8232

Equipment: Balance Ref: _____ Furnace Ref: _____ Pipette Ref: _____

Test Method Variation:-_____

Remarks:-_____

Tested by: _____ Checked by: _____

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