

Ministry of Science & Technology, Government of Pakistan Khlaban-e-Johar , H-8/1, Islamabad www.pcrwr.gov.pk

WATER QUALITY TEST REPORT (MICROBIOLOGICAL ANALYSIS)

Report Serial No	Micro-0378	Total No. of Pages	1
Client Name & Address Scomi Oiltools Limited. Product name: GraphEAT-A&B.			
Sampling Date & Time	20-11-16,	Client Sample Code	Tap Water: (Before adding product)
NWQL Sample Code.	INT-ML-0378(1)-16	Sample Receipt Date	20-11-16
Temperature of sample at receipt °C	18 °C	Humidity (%) at receipt	38%
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16

Sr.	Parameter	Unit	Det.	Reference Method	Permissible	Limits	Results
(PSQC	Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)					
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	12
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	<1.8

WHO: World Health Organization MPN: Most Probable Number

USEPA: United States Environmental Protection Agency

AOAC: Association of Official Analytical Chemists

APHA: American Public Health Association, FAO: Food & Agriculture Organization

PSQCA: Pakistan Standard Quality Control Authority NSDWQ: National Standard for Drinking Water Quality

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Prepared by	File	Tech. Manager (Micro.)	OLI,	Tech. Manager (QC)	CWA
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Report Serial No	Micro-0378	Total No. of Pages	1
Client Name & Address	Scomi Oiltools Limited	d. Product name: GraphEAT-A	&B.
Sampling Date & Time	20-11-16,	Client Sample Code	Tap Water: After adding product (2ppm)
NWQL Sample Code.	INT-ML-0378(2)-16	Sample Receipt Date	20-11-16
Temperature of sample at receipt °C	18°C	Humidity (%) at receipt	38%
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16

Sr.	Parameter	Unit	Det.	Reference Method	Permissible	Limits	Results
#			Limit		Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)	
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-VC	<1.8
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	<1.8

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Report Serial No	Micro-0378	Total No. of Pages	1	
Client Name & Address	Scomi Oiltools Limited. Product name: GraphEAT-A&B.			
Sampling Date & Time	20-11-16,	Client Sample Code	Contaminated water at low risk (Before adding product)	
NWQL Sample Code.	INT-ML-0378(3)-16	Sample Receipt Date	20-11-16	
Temperature of sample at receipt °C	18°C	Humidity (%) at receipt	38%	
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16	

Sr.	Parameter	Unit	Det.	Reference Method	Permissible	Limits	Results
#			Limit		Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)	
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	140
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	10
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	+ve

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Report Serial No	Micro-0378	Total No. of Pages	1
Client Name & Address	Scomi Oiltools Limited	d. Product name :GraphEAT-Ad	&B.
Sampling Date & Time	20-11-16,	Client Sample Code	Contaminated water at low risk: After adding product (1ppm)
NWQL Sample Code.	INT-ML-0378(4)-16	Sample Receipt Date	20-11-16
Temperature of sample at receipt °C	18°C	Humidity (%) at receipt	38%
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16

Sr.	Parameter	Unit	Det.	Reference Method	Permissible	Limits	Results
#			Limit		Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)	
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	<1.8

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WATER QUALITY TEST REPORT (MICROBIOLOGICAL ANALYSIS)

Report Serial No	Micro-0378	Total No. of Pages	1
Client Name & Address	Scomi Oiltools Limite	d. Product name :GraphEAT-A&I	3.
Sampling Date & Time	20-11-16,	Client Sample Code	Contaminated water at low risk: After adding product (3ppm)
NWQL Sample Code.	INT-ML-0378(5)-16	Sample Receipt Date	20-11-16
Temperature of sample at receipt °C	18 °C	Humidity (%) at receipt	38%
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16

Sr.	Parameter	Unit	Det.	Reference Method	Permissible Limits		Results
#			Limit		Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)	
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	<1.8

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Report Serial No	Micro-0378	Total No. of Pages	1
Client Name & Address	Scomi Oiltools Limite	d. Product name :GraphEAT-A	&B.
Sampling Date & Time	20-11-16,	Client Sample Code	Contaminated water at high risk: Before adding product
NWQL Sample Code.	INT-ML-0378(6)-16	Sample Receipt Date	20-11-16
Temperature of sample at receipt °C	18°C	Humidity (%) at receipt	38%
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16

Sr.	Parameter	Unit	Det.	Reference Method	Permissible	Limits	Results
#			Limit		Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)	
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	1600
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	20
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	+ve · ·

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Report Serial No	Micro-0378	Total No. of Pages	1
Client Name & Address	Scomi Oiltools Limited. Product name: GraphEAT-A&B.		
Sampling Date & Time	20-11-16,	Client Sample Code	Contaminated water at high risk: After adding product (1ppm)
NWQL Sample Code.	INT-ML-0378(7)-16	Sample Receipt Date	20-11-16
Temperature of sample at receipt °C	18 °C	Humidity (%) at receipt	38%
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16

Sr.	Parameter	Unit	Det.	Reference Method	Permissible Limits		Results
#			Limit		Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)	
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	≤1.8

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Report Serial No	Micro-0378	Total No. of Pages	1
Client Name & Address	Scomi Oiltools Limite	d. Product name :GraphEAT-A&	В.
Sampling Date & Time .	20-11-16,	Client Sample Code	Contaminated water at high risk: After adding product (3ppm)
NWQL Sample Code.	INT-ML-0378(8)-16	Sample Receipt Date	20-11-16
Temperature of sample at receipt °C	18 °C	Humidity (%) at receipt	38%
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16

Sr.	Parameter	Unit	Det.	Reference Method	Permissible	Limits	Results
#			Limit		Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)	
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	<1.8

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Report Serial No	Micro-0378	Total No. of Pages	1		
Client Name & Address	Scomi Oiltools Limited. Product name :GraphEAT-A&B.				
Sampling Date & Time	20-11-16,	Client Sample Code	Contaminated water at high risk: After adding product (5ppm)		
NWQL Sample Code.	INT-ML-0378(9)-16	Sample Receipt Date	20-11-16		
Temperature of sample at receipt °C	18 °C	Humidity (%) at receipt	38%		
Date (s) of Analysis	20-11-16 to 26-11-16	Reporting Date	26-11-16		

Sr. #	Parameter	Unit	Det. Limit	Reference Method	Permissible Limits		Results
					Potable water (PSQCA/NSDWQ 2010)	Bottled water (PSQCA)	
1.	Total Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
2.	Fecal Coliforms	MPN/100ml CFU/100ml	<2	APHA, 22 nd Edition	-ve	-ve	<1.8
3.	E. coli	+ve/ -ve	<2	APHA, 22 nd Edition FAO, 1998 (Internal method based on APHA Standard Methods:9221B-C)	-ve	-ve	<1.8

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