



Arab Center
For Engineering Studies

المركز العربي
للدراسات الهندسية

TEST REPORT ON CHEMICAL ANALYSIS OF WATER

Page 1 of 1

Owner	Mr. Adnan Al Ramzani	Report No.	TMR10052302
ACES Client	Mr. Adnan Al Ramzani	Date Reported	05-12-10
Contractor	N.P	Sample No.	TMS10037636
Consultant	N.P	Request No.	TMQ0016126
Project No.	-	Client Reference	Fully paid in advance
Project Name	Suitability for Drinking		
Sample Description	Water Sample Collected from Atmosphere	Sample Size	-
Source	-	Sampling Date	27-11-10
Sample Location	-	Sampling Cert. No.	-
Lot No.	N.P.	Sampling Method	N.P.
Lot Size	N.P.	Sampled By	Client's Rep.
Test Method Var.	-	Sample Brt. In By	Client's Rep.
Tested By:	Ariel	Date Received	27-11-10
		Date Tested	05-12-10

Test Results:

Tests	Test Method	Test Results	Limit WHO
pH Value	APHA 4500 H ⁺ B	7.2	6.5-9.2
Calcium, mg/l	APHA 3500-CA B	17.78	200
Magnesium, mg/l	APHA 3500-Mg B	1.79	150
Sodium, mg/l	US EPA 3005 A	2.984	-
Potassium, mg/l	US EPA 3005 A	0.7527	-
Chloride, mg/l	APHA 4500 Cl ⁻ B	16.03	600
Sulphate, mg/l	BS 1377:1990: Part 3	16.81	400
Carbonate, mg/l	APHA 2320 B	Nil	-
Bicarbonate, mg/l	APHA 2320 B	33.59	-
Iron, mg/l	US EPA 3005 A	0.1171	-
Total Chlorine, mg/l	Hach Method 10060	0.04	-
Fluoride, mg/l			*
Zink, mg/l	US EPA 3005 A	1.177	-
Bromate, mg/l			*
Copper, mg/l	US EPA 3005 A	0.0744	-
Nitrate, mg/l	HANNA HI 3874 Nitrate Test Kit	< 5	-
E. Coli (MPN/100ml)	APHA 9223B/IDEXX COLISURE)	Nil	Nil
Total Coliform (MPN/100ml)	APHA 9223B/IDEXX COLISURE)	Nil	Nil
Turbidity, mg/l	APHA 2130 B	Nil	5
Total Hardness, mg/l	APHA 2340 C	49.05	500
Total Dissolved Solids, mg/l	APHA 2540 C	111	1500

* To be forwarded



Eng Ghaleb Alzubi
Head of Materials Department



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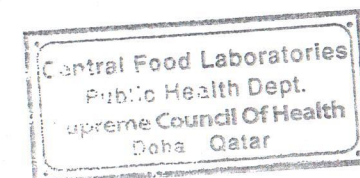


SUPREME COUNCIL OF HEALTH

CENTRAL LABORATORIES, FOOD CONTAMINATION MONITORING
Laboratory Report on Water Examination

and Address of Sender: Sender's Ref.No:3707	Total Solids at 180°C.....	mg/l	Free CO ₂	mg/l
EVENTIVE SERVICES Lab.Ref.No: DW\3787\10	Total Hardness as CaCO ₃ ...	38	Dissolved O ₂	--
re of Sample: DRINKING WATER	Total Alkalinity as CaCO ₃ ..	62	Hydrogen Sulfide (H ₂ S) ..	--
e Collected: C/O ADNAN AL-NAIMI	BOD	--	Residual Chlorine:	--
of collection/production: 01/12/10	COD	--	Free (as Cl ₂).....	--
of arrival at lab: 01/12/10	TOC	--	Total (as Cl ₂).....	<0.01
erature: --- °C at time of collection	Albuminoid Nitrogen (as N).....	--		--
arance : <u>Suspended matter.</u>	Total Silica (as SiO ₂)	--		--
idity : <u>1.63 N.T.units.</u> Colour: <u>18 Hazen Units</u>	Phenolic Compounds (as Phenol)	--		--
r : <u>INOFFENSIVE</u> Taste: ---	Anionic Detergents (as ABS)	--		--
t.cond.: <u>95</u> μS/cm. pH: <u>8.10</u>	Polynuclear Aromatic Hydrocarbons (PAH)	--		--
25°C)	Total oils and grease	--		--

IONS	mg/l	meq/l	ANIONS	mg/l	meq/l	TOXIC SUB.	mg/l	MICROBIOL. EXAM	REMARKS
+	--		OH ⁻	0.00		Arsenic	--	Std. Plate Counts/ml= --	-Suspended matter.
+	<0.001		Cl ⁻	1.06		Cadmium	--	Total Coliforms/100ml= NIL	-Color is undesirable
	1.29		NO ₂ ⁻	0.125		Cyanide	--	Fecal Coliforms/100ml= NIL	-Nitrite is high.
	0.26		NO ₃ ⁻	0.671		Lead	--	Pseudomonas aeruginosa ---	
	--		F ⁻	0.172		Mercury	--		
+	14.80		Br ⁻	<0.001		Selenium	--		
+	0.24		HCO ₃ ⁻	75.64					
+	--		CO ₃ ⁻	0.00				OTHER ANALYSIS	
+	--		SO ₄ ⁻	16.30					
+	--		PO ₄ ⁻	<0.001					
+	--		(Ortho)						
++	--								
6	--								
1	-----	-----		-----	-----				

Signed Ali, Date 15/12/2010

Client : Adnan Al-Ramzani
Exova Ref. : QL1257-10 CS 2876

08 December 2010

CHEMICAL ANALYSIS			
Client's Sample Reference			Water Sample
EXOVA Sample Reference			CS 2876
Item	Test Parameter	Test Method	Results
1.	pH Value	APHA 4500 H ⁺ B	7.61
2.	Total Dissolved Solids (TDS), mg/L	APHA 2540 B	63.2
3.	Total Hardness as CaCO ₃ , mg/L	APHA 2340	30.59
4.	Bromate, µg/L	Chem 3020 A GRP (IC)	8.5
5.	Bicarbonate (HCO ₃ ⁻), mg/L	APHA 2320 B	48.2
6.	Sulphate (SO ₄ ⁻), mg/L	APHA 4500 SO ₄ ⁻ B	4.9
7.	Chloride (Cl), mg/L	APHA 4500 Cl ⁻	8.99
8.	Fluoride (F ⁻), mg/L	HACH 8029	0.33
9.	Nitrate (NO ₃), mg/L	HACH 8171	0.8
10.	Chlorine Residual, mg/L	HACH 8021	0.1
11.	Silica, mg/L	APHA 3120 B / ICP	<0.197
12.	Sodium (Na), mg/L	APHA 3120 B / ICP	2.79
13.	Calcium (Ca), mg/L	APHA 3120 B / ICP	11.51
14.	Magnesium (Mg), mg/L	APHA 3120 B / ICP	0.45
15.	Potassium (K), mg/L	APHA 3120 B / ICP	0.74
16.	Iron (Fe), mg/L	APHA 3120 B / ICP	<0.060
17.	Zinc (Zn), mg/L	APHA 3120 B / ICP	2.87
18.	Copper (Cu), mg/L	APHA 3120 B / ICP	0.018
19.	Nickel (Ni), mg/L	APHA 3120 B / ICP	<0.015

- Bromate was tested in Exova-Dubai with Lab Ref. No. WR10-14957, Request No. WQ10-08677
Date tested: 05.12.2010

For and on behalf of EXOVA (Qatar) LLC
Tested By: GNK ; Date tested: 28 November – 07 December 2010

FOR : 1 Sample

Date Analysis: 7/12/2010

[illegible]

E.C. = Electrical conductivity M.Mhos/cm (at 25°C)

T.D.S. = Total dissolved solid

SAR = Sodium adsorption Ratio

Head of Central Agricultural Laboratory

Specialist:

M. AL-FA*



Water Chemical Analysis (2)

For : 1 Sample

52/2010

Farm No. :

Area: السيد / عدنان فهد راشد الرمزاني

Date Sampled : 2 9/11/2010

Date Analysis 7 / 12/2010

Lab No	Sample No.	Anion					Trace Elements										
		NH ₄ -N PPM	NH ₃ -N PPM	NO ₃ -N PPM	NO ₂ -N PPM	N PPM	Al PPM	Cr PPM	Mn PPM	Fe PPM	Co PPM	Ni PPM	Cu PPM	Zn PPM	Pb PPM	Hg PPM	
148	1						0.0073	0.00005	0.0078	0.1059	0.0039	0.0004	0.0120	2.2005	0.0009	0.000002	

ND = No Detection



Head of Central Agricultural Laboratory

Specialist: M. AL-FAR