Experiment - 1

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gwyng allamae dia Dendologice - pa ganeeri de laman (2000) on it allah d	CXPLI	ment - 1			200	149
100						123/0
Object:	To determine hardness of water by HCl.					
(a) the same of th	tus: Buretle. Pipette, conical flask, beaker, volumetric flask, unter sample, std N/40 HCl, methylorange					
Procedu	vu'					
		baretur	with	dist - 11	ntex	
	fill burette with NI40 HCI, note intial reading.					
	Pikette out	10 ml	e) wat	IH Sam	ble inti	i (
	Pikette out so ml of water sample into conical flash, add 2 drop of methylorange.					
<u> </u>	Mold HCl with constant string.					
-	Sharp colour change is noticed from Yellow to					
	Cherry Red. Not the reading					
	Repeat till a cornordant reading					
	Now, titrate with boil water in same manner.					
	The state of the s				Market Street	
	Vol of water	Table?	NIUN HILL	meumed		T
S-No	V	Below	Telton	concordan	treding	A= a-b
	sample taken	Before	ofter boiling	_a	1 6	= 2-0.4
1	10 ml	2.0	0.9	0 2		1 2 1.6
2	10 m	2.0	0.4	2.0	10.4	a pilotity of
_3 ·	10 ml	2.D.	0.4			1-14-12-2
	0.41					
	halculation:		<u> </u>			
	Calculation: Temporary ha	rdniss:	1.6	X1000	x 50.	mg.1L
•	•			10	40	0
			= 200	bbw		· · · · · · · · · · · · · · · · · · ·
	0 1	^				1
	formula used =	Нх	1000	Il. sean	L.	-10.H

10 % N40 HCP

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	Experiment = 2
	To determine the hardness of water sample by complex smither method using EDTA
4444	Switte fighte, convol flack beaker, burner, std MHDO ED TA soln, Exichrone Black Tindicator
	NHOL-NHON buffer sol of pH 10, hard sample
	Except out to ml of setd hard water in conical
*	And 2 ml of buffer sol", 2 drops of EBT as
	Report till concordant mading
-	Einste set some of boiled water, adel
	Titrate with MI200 EDTA soly till blue calcur appears.
1	Some repeat with sample water.
Bundin	A control of the same of the s
i Titulio	Marie

5-16	is direction	Jailio	grette ne	eding tinal	(Corncordant Reading
					The state of the s
1	10 m/			7	7
9	L W	0		7.5	

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			Land 6	DATE:	į.			
3.	EDTA VIS	Sample hard	water ()	's ml)				
S-No.	Vol of water	Sample hard swelle in	rediral	Concordant Read	urg			
1.	10 ml.	0	1.5	k k i i i i i i i i i i i i i i i i i i	<i>V</i> -			
2.	10 mg	0	1.5	125				
3.	10 mg	Liver gold						
					With a			
3. ED	3. EDTA VIS Boiled water (V3 ml)							
	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Land of Colonia		Dela de la secola de	100			
5.ND .	Vol of boiled	Durette "	unding	Consudand				
	water	Initial	Final.	Reading	- Lander Control of the Control of t			
1	16 mg	0	0.5					
2,	10 ml	0	0-5	0.5				
3,	10 ml.	The state of the s	1 2 2 11					
	had a for a mark of their and prefered all trailing							
Calcula	tion: Tot.	el hardness	Z 1000X	1.3				
	11.52 15.40	تعالمين المستريد		7.				
	Legaldina de marija de conduction se va ex							
	Permanent hardness = 1000 x 0.5							
				7	90			
-	1 emporary	hardness =	1000	1.5-0.5)	- 1			
	Litary and			7				
	- Married	3 1	42.85 pt	m	7			
	A Federal							
				4)				
Special parts of the special p				24/8/24				

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	& humant = 3	
	**************************************	Parasi 24 arran
Object 2	to date who sandy	think of given exter
- Color	to determine the conductive	its moter
Alh. tu	The state of the s	
reputans	and regignet required -	ter sample, distilled water
	Conductivity mises, in	on bour eta:
	0.01 N KCg solution, B.	Carries Se
D. 1	8 1-1 H + 1 mode	trit noter for about
Mocedine	& Switch on the condu	and inh
<u> </u>	15 to 20 min. for its is	and in distilled unter
*	which the conducting	tab to check bosetion
7	Sof the function suit	otherwise let it
7	Display must read 1	1 1 conditions
*		oh of conductivity meter
- Ar	Dip the washed and	Aried conductivity all
7	in the beaking and	taring conducting and time
4		taining sample solution
	a short first hand of fout &	experiment switch of the
7 - 1	water	the con in among
Physical	100 - 2 -1 \ 0001 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	a = 0.989
S. No	Water Sample Soly	Constructivity
1	A could so coll	0-50 x 0 . 98 4
2.	В	2.94 XD.984
3	C	6-23 x 0-984
Result =	The conductivity of give	en water sample are as follow
- Likeway	Sample	
	A	Conductivity [= = x conduct 0.492
	B	2.89
	C	6.130
		- Property