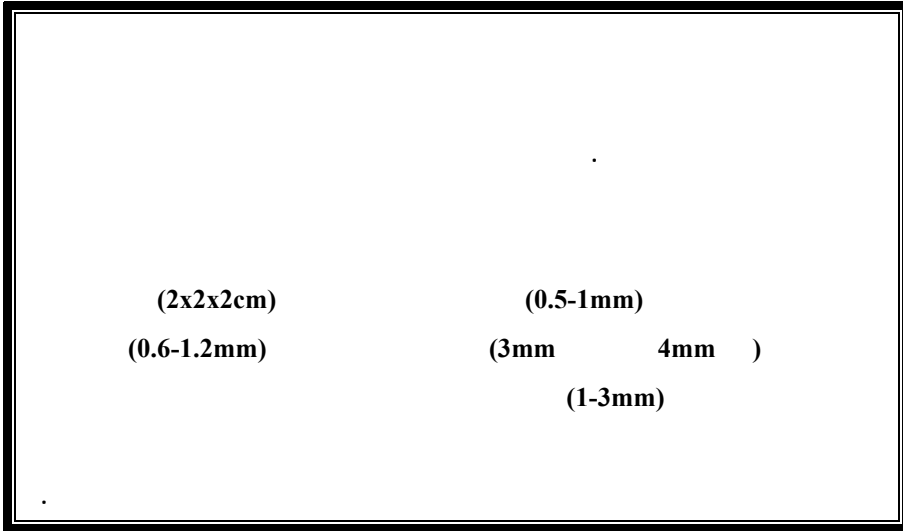


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<sup>1</sup>( )

3

2



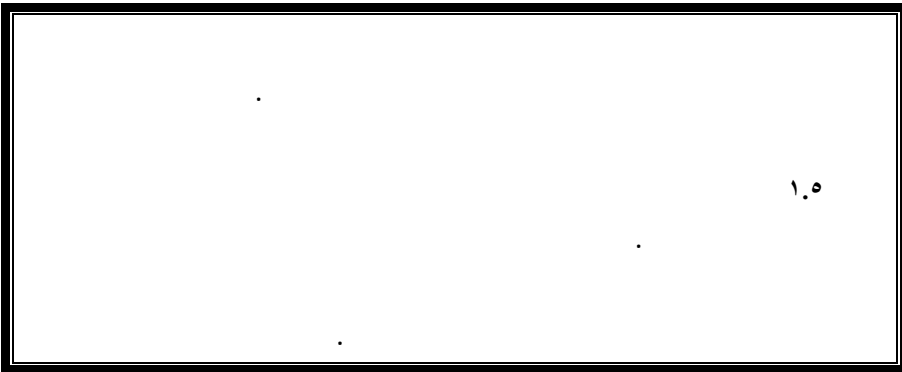
1

2

3

( )

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: -1

200-150mg/l

.242 mg/l

150-100 mg/l

100-50mg/l

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150-50mg/l

(۱)

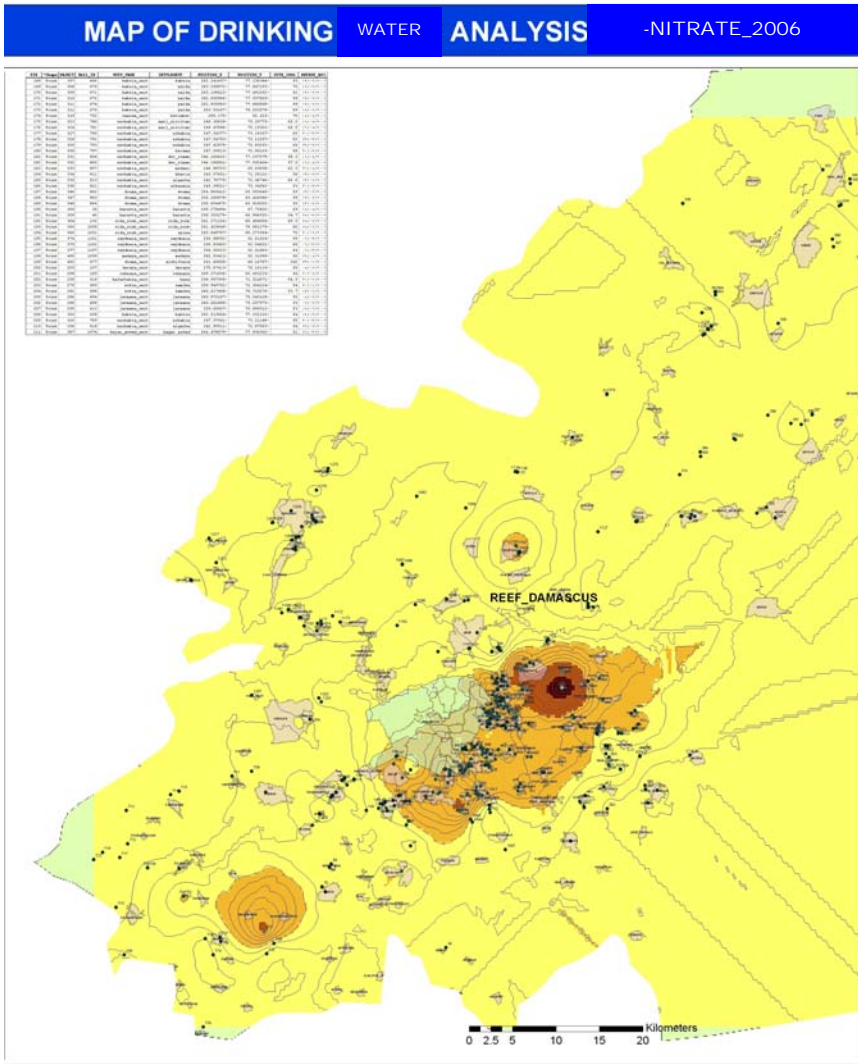
150mg/l

.150-100mg/l

100-50 mg/l

50-5 mg/l

( )



( )

[9].

:

-۲

**Treatment Ground Water Contamination by Nitrate**

[2]

-

(Reverse

(Distillation)

(Ion exchange)

-

.osmosis)

( )

[4,2]

(Autotrophic Bacteria)

.(Heterotrophic Bacteria)

.[ ]

[ ]

DO

.[ ]

(Biological Treatment)

( )

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.[ ]

-۳

:

(reactor)

(biofilm)

7.6m/h

(Na H<sub>2</sub> PO<sub>4</sub> )

. CO<sub>2</sub>

(Biomass)



)

(

.[^] N<sub>2</sub>

(2x2x2cm)

(0.5-1mm)

(0.6-1.2mm)

(3m 4mm )

(1-3mm)

: -4

PO<sub>4</sub><sup>3-</sup> TOC TDS

: (1)

( )

( )

	[2]	(0.6-1.2)mm	(0.5-1)mm	(2x2x2)cm	mm	(1-3mm)			
					mm				
		.	.	.	.	.	.	.	mg/l
						.	.	.	mg/l
	-				.	.	.	.	%
138		.	.	.	.	.	.	.	mg/l
.	.	.	.	.	.	.	.	.	NO <sub>2</sub> <sup>-</sup> mg/l
		-		.	.	.	.	.	PO <sub>4</sub> <sup>3-</sup> mg/l
.		-	.	.	.	.	.	.	TOC mg/l
		-							TDS mg/l
	-	.	.	.	.	.	.	.	NO <sub>3</sub> <sup>-</sup>



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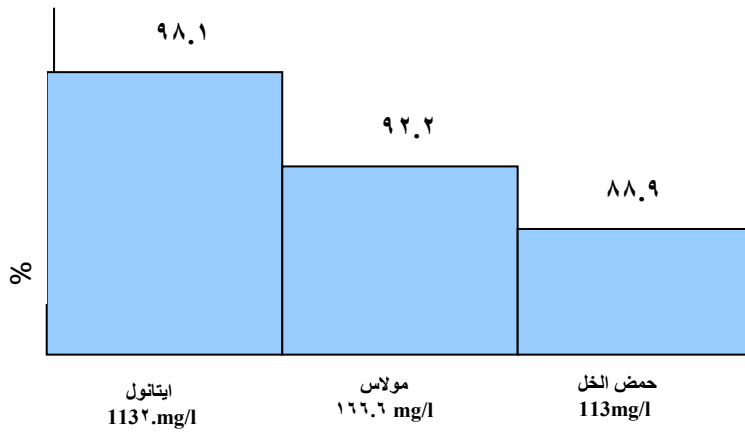
3mm 4mm  
NO<sub>2</sub><sup>-</sup>  
TDS  
NO<sub>3</sub><sup>-</sup>  
TOC 2.318  
2007 7.5mg/l  
.TOC=5mg/l  
(1-3mm)  
TDS PO<sub>4</sub><sup>3-</sup>  
TOC  
TOC 9.8mg/l  
.[3] 2007

( )

):

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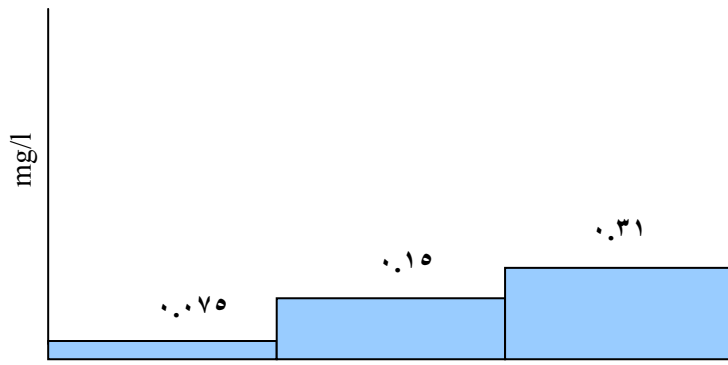
( )



( )

(٢)

(٣)



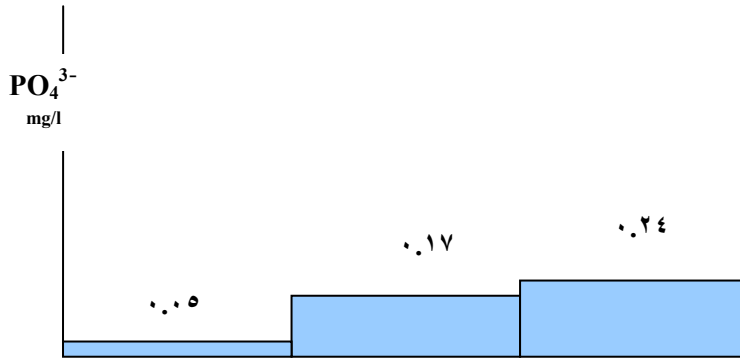
(1)

(3)

.0.2mg/l

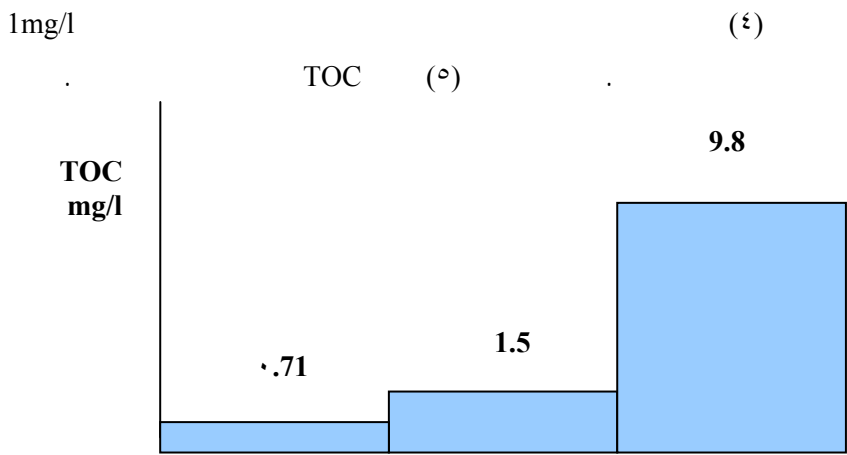
$\text{PO}_4^{3-}$

(4)

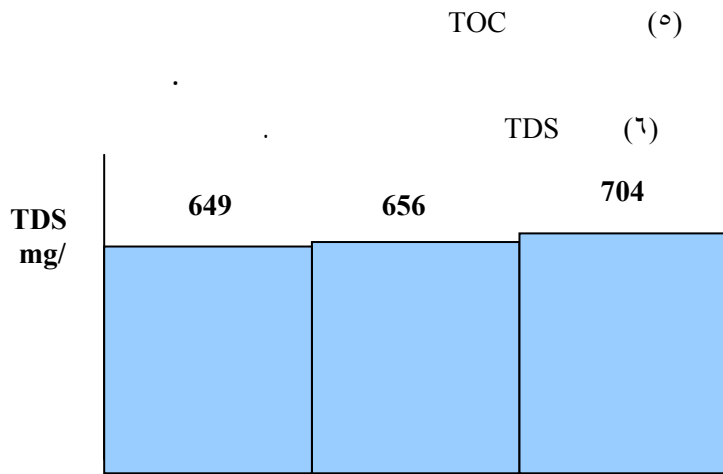


(1)

( )



( )



( )

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TDS (٦)

: ٥

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.٢

3mm (1-3mm)

.٣

.٤

١.٤٧٣

NO<sub>3</sub><sup>-</sup>

TDS

٠.٩٩٩

704mg/l

656 mg/l

0.71mg/l

1.5mg/l

TOC

( )

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	0.05mg/l	PO <sub>4</sub> <sup>3-</sup>	.
0.15mg/l	NO <sub>2</sub> <sup>-</sup>		0.17mg/l
	NO <sub>3</sub> <sup>-</sup>	0.075mg/l	
.	12.6mg/l		8.8mg/l

" ۲۰۰۸	-	-	.۱
"			
.۲۰۰۸/۳/۲۷	۶۱۵		
-	"	"۲۰۰۶	.۲
		.P.P.365	
.۲۰۰۷	۴۵		.۳

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