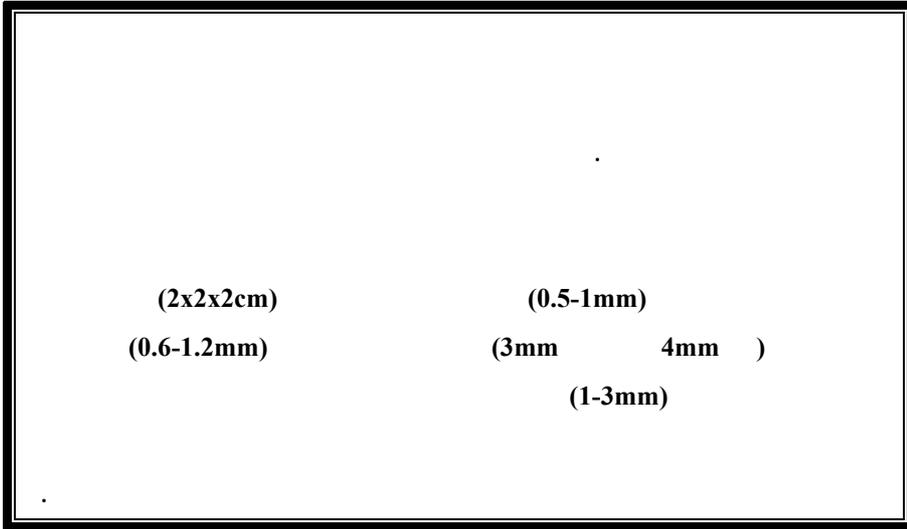

1()

3

2

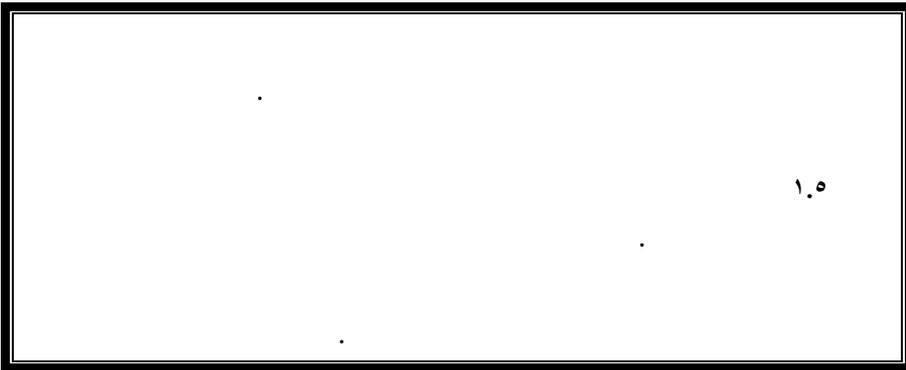


1

2

3

()



: -1

200-150mg/l

.242 mg/l

150-100 mg/l

100-50mg/l

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150-50mg/l

(۱)

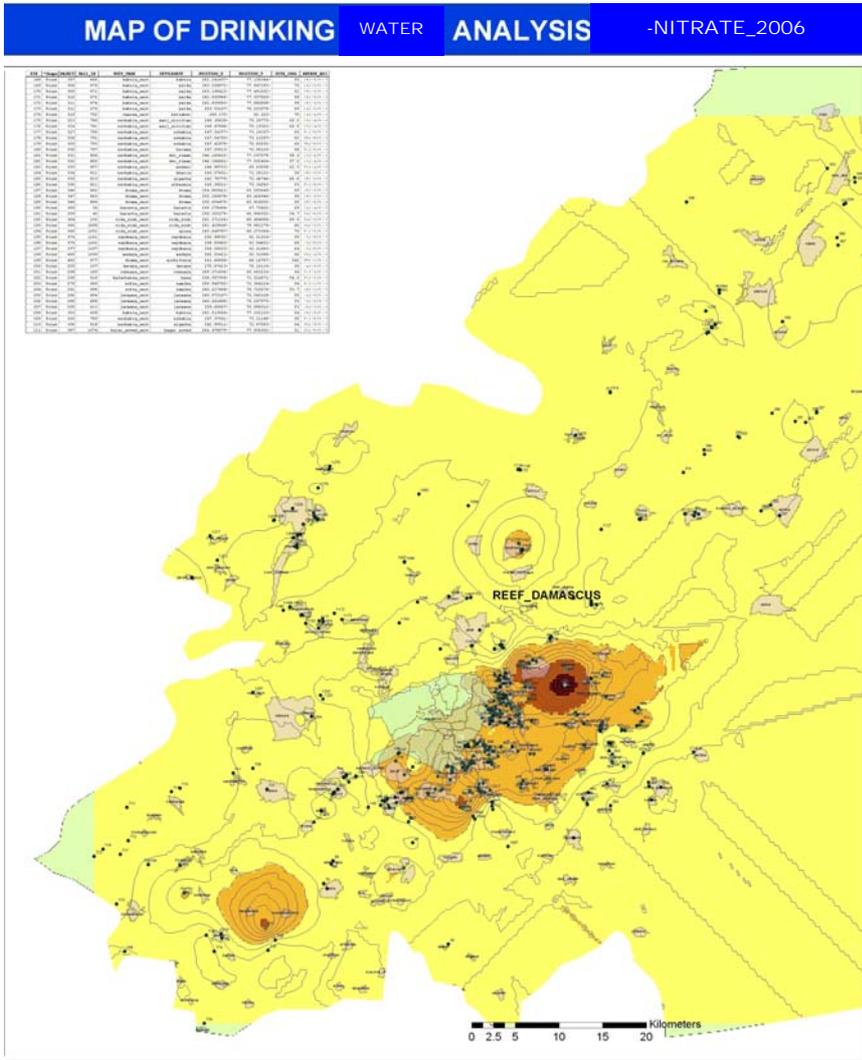
150mg/l

.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)

()

.[]

-۳

:

(reactor)

(biofilm)

7.6m/h

(Na H₂ PO₄)

. CO₂

(Biomass)



)

(

[^] N₂

(2x2x2cm)

(0.5-1mm)

(0.6-1.2mm)

(3m 4mm)

(1-3mm)

: -4

PO₄³⁻ 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 ₂ ⁻ mg/l
		-		PO ₄ ³⁻ mg/l
.		-	TOC mg/l
		-							TDS mg/l
	-	NO ₃ ⁻

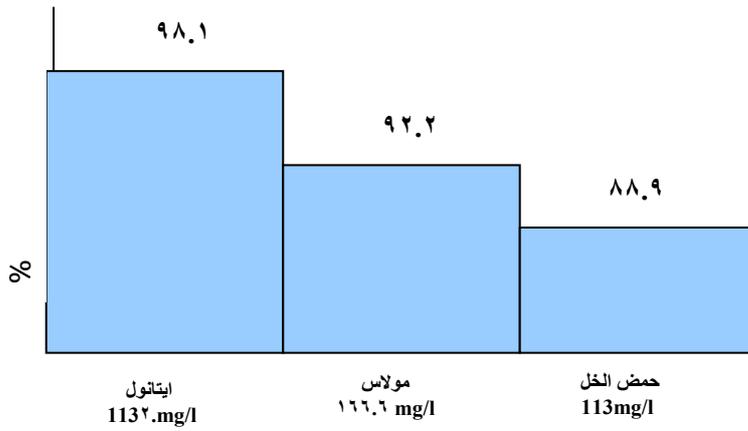
3mm 4mm
NO₂⁻
TDS
NO₃⁻
TOC 2.318
2007 7.5mg/l
.TOC=5mg/l
(1-3mm)
TDS PO₄³⁻
TOC
TOC 9.8mg/l
.[3] 2007

()

):

. (

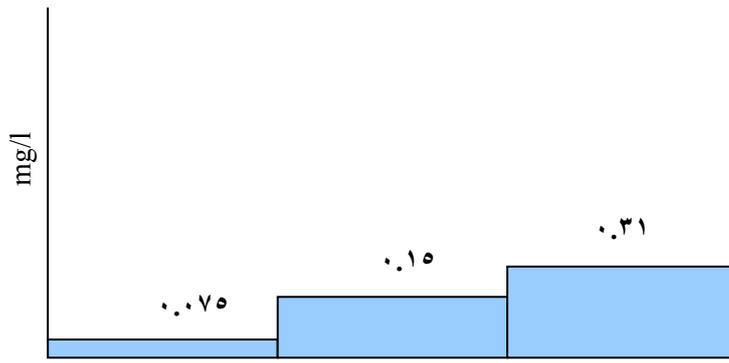
()



()

(٢)

(٣)



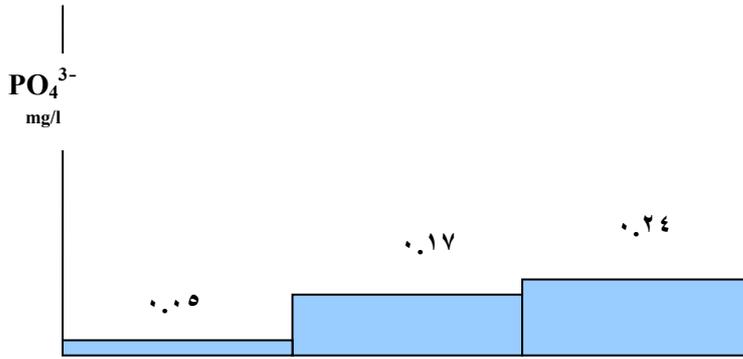
(1)

(3)

.0.2mg/l

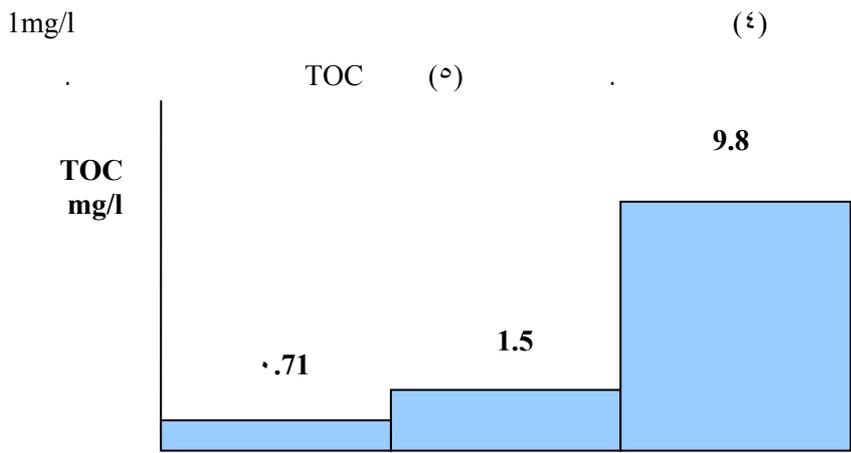
PO_4^{3-}

(4)

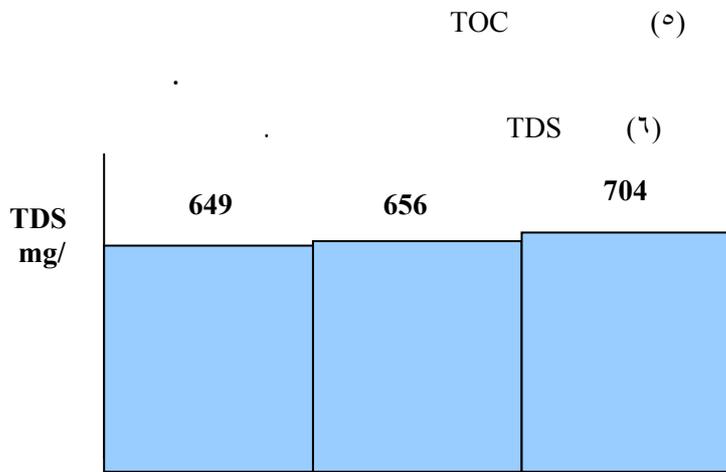


(1)

()



()



()

TDS (٦)

: ٠

.١

.٢

3mm (1-3mm)

.٣

.٤

١.٤٧٣

NO₃⁻

TDS

٠.٩٩٩

704mg/l

656 mg/l

0.71mg/l

1.5mg/l

TOC

()

	0.05mg/l	PO ₄ ³⁻	.
0.15mg/l	NO ₂ ⁻		0.17mg/l
	NO ₃ ⁻	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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