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(Sherard et al, 1972; Ingles,

1985)

.(Ouhadi and Goodarzi, 2006)

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.(ICOLD, 1990)

.(Askari and Fakher, 1994)

(1993) Haroon et al.

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mzomorod@shirazu.ac.ir :

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Bayer and Abden-Nabi .

(1993)

(1998) Shah and Omar .

(Baiat, 2007; Mallela et al.,

.2004)

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(2001) Tokta .

C

(2003) Boloori and Saghafy .

PVA

(2006) Ouhadi and Goodarzi .

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(ICOLD, 1990)

(ASTM D4647-93)

(ASTMD4224-99)

(ASTM D4542-95, D2967-71)

(Baiat, 2007;

.Mallela et al., 2004)

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C

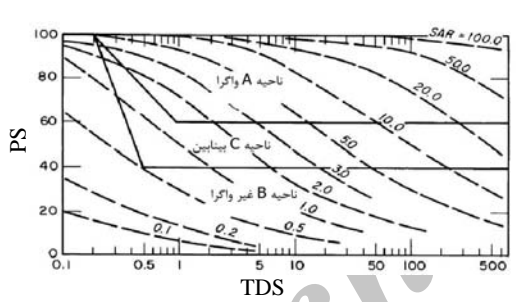
ASTM D 4647-93

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D1

(ASTM)

() D4224-99, D 422-63



(Ouhadi and Goodarzi , 2006)

(1972) Sherard et al.,

ASTM D4647-93

(mm)	(min)	(ml/s)	
D1		/	> 2
D2		/	> /
ND4		/	< /
ND3		/ /	> /
		/ /	
ND2			< /
ND1			

(SAR)

(PS) (TDS)

ASTM D4542-95, D2967-71

()

EC

$$SAR = \left[\frac{Na^+}{[(Ca^{2+} + Mg^{2+})/2]^{1/2}} \right] \quad ($$

EC

$$TDS = Na + Ca + K + Mg \quad ($$

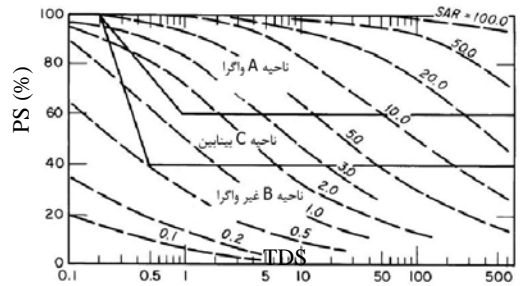
$$PS = \frac{Na}{TDS} \times 100 \quad ($$

(Fell et al., 1992)

(Rahimi and Delfi, 1993 ;

.Bell, and Walker, 2000)

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(Paul,)

()

PH	Na ⁺ (meq/lit)	K ⁺ (meq/lit)	Ca ²⁺ (meq/lit)	Mg ²⁺ (meq/lit)	EC (ms/cm)	TDS (meq/lit)	SAR	PS%
/	/	/	/	/	/	/	/	/

G_s

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G_s

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ASTM-C618

ASTM D698-91

ASTM D 4318-98

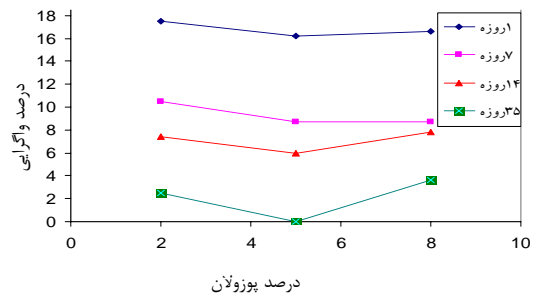
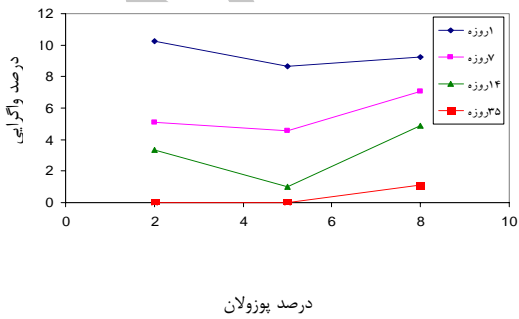
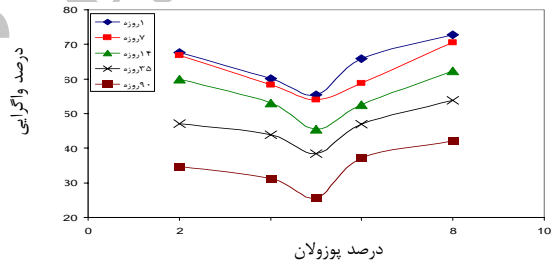
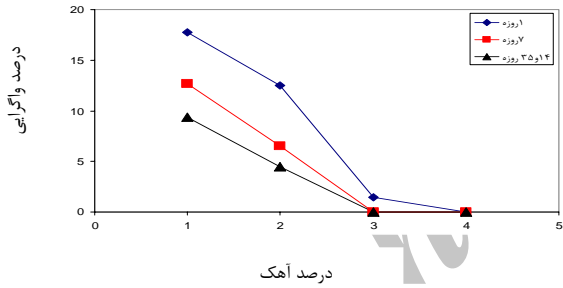
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H= mm

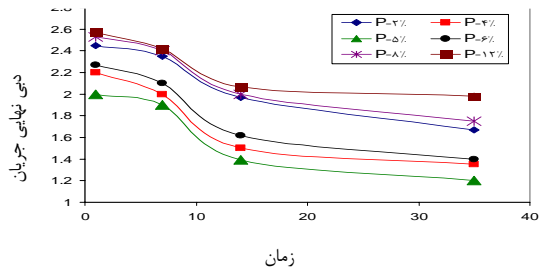
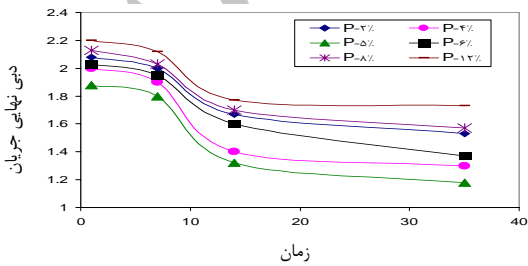
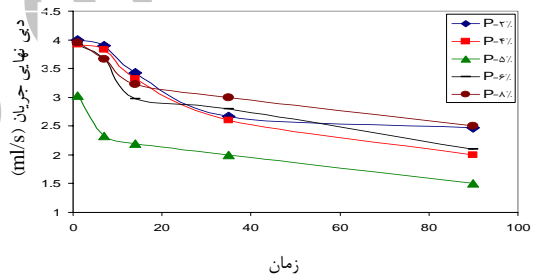
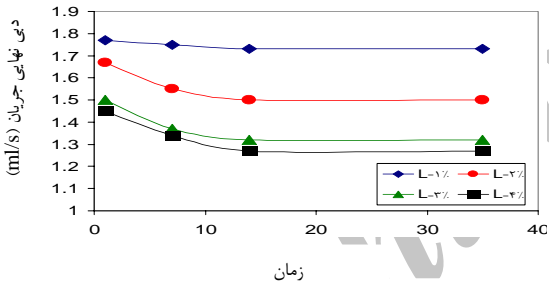
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ND ₃	ND ₃	ND ₄	D ₂	D ₂	P=2%
ND ₃	ND ₃	ND ₄	ND ₄	ND ₄	P=4%
ND ₂	ND ₃	ND ₃	ND ₄	ND ₃	P=5%
ND ₃	ND ₃	ND ₃	ND ₄	ND ₄	P=6%
ND ₃	ND ₃	ND ₃	ND ₄	D ₂	P=8%

ND ₂	ND ₂	ND ₂	ND ₃	L=1%
ND ₂	ND ₂	ND ₂	ND ₂	L=2%
ND ₁	ND ₁	ND ₁	ND ₂	L=3%
ND ₁	ND ₁	ND ₁	ND ₁	L=4%

ND ₁	ND ₂	ND ₃	ND ₃	P=2%
ND ₁	ND ₁	ND ₃	ND ₃	P=4%
ND ₁	ND ₁	ND ₃	ND ₃	P=5%
ND ₁	ND ₂	ND ₃	ND ₃	P=6%
ND ₂	ND ₂	ND ₃	ND ₃	P=8%
ND ₂	ND ₂	ND ₃	ND ₃	P=12%

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(Sherard et al., 1976)

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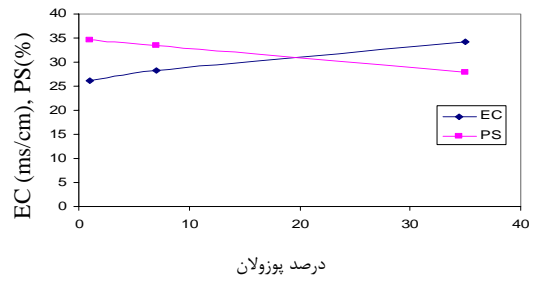
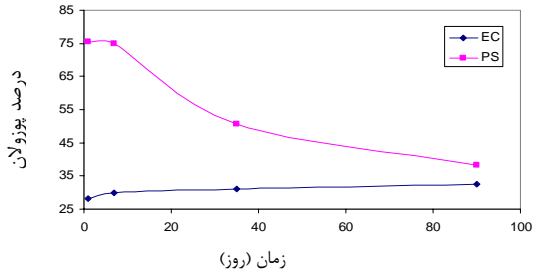
Archive of SID

PS TDS EC SAR

PS

EC . EC

PH



(Mallela et al, 2004)

EC ()

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PS

EC

Na⁺ Al³⁺ Ca²⁺

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PS

EC PS

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EC

EC PS

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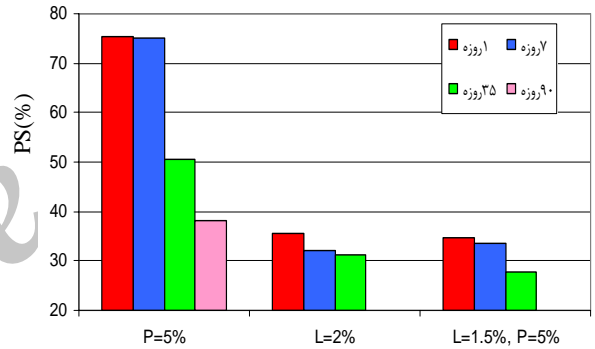
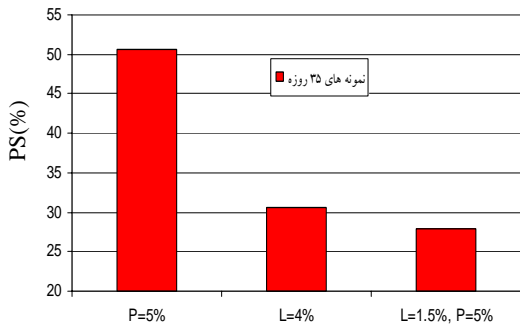
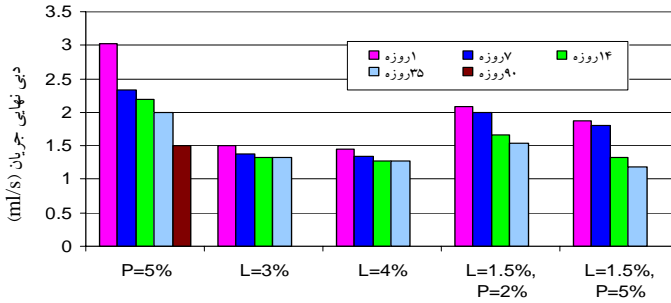
PS

EC

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EC

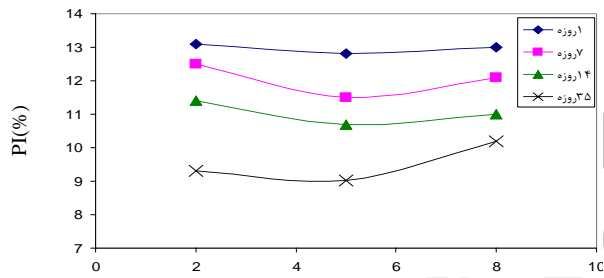
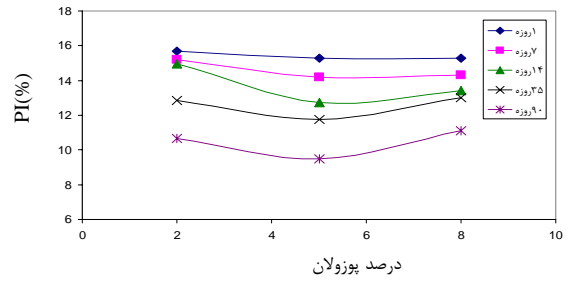
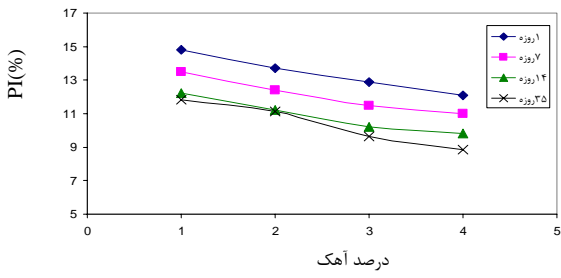
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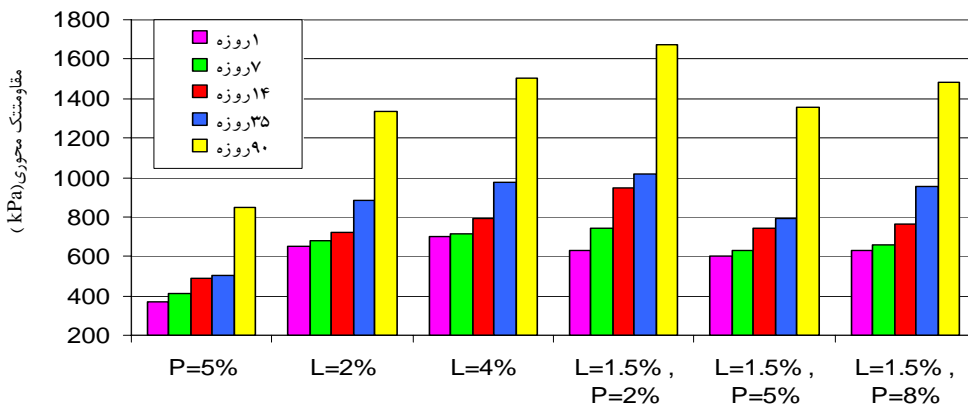
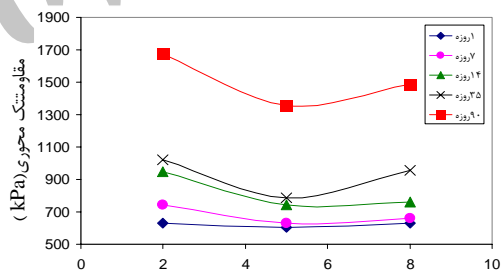
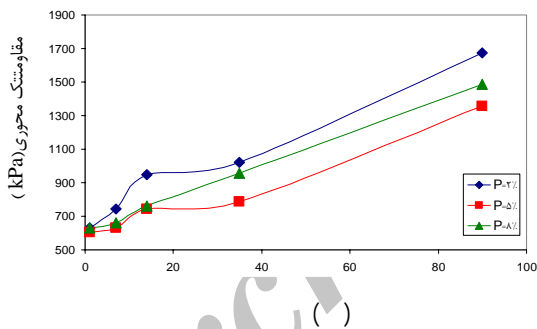
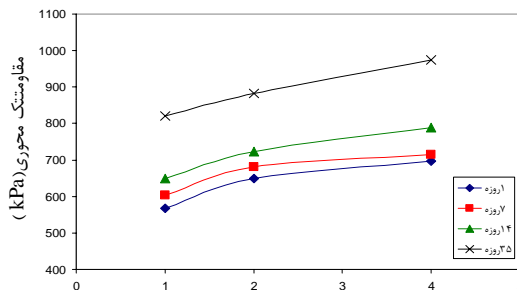
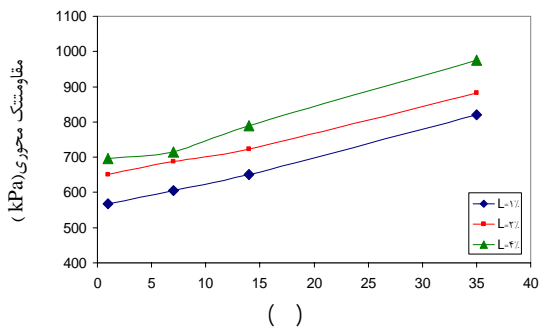
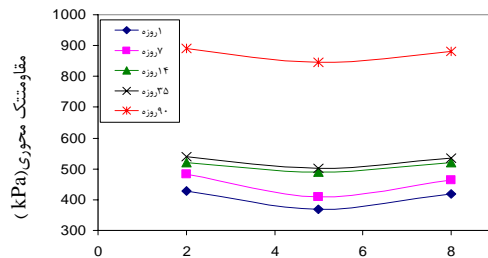
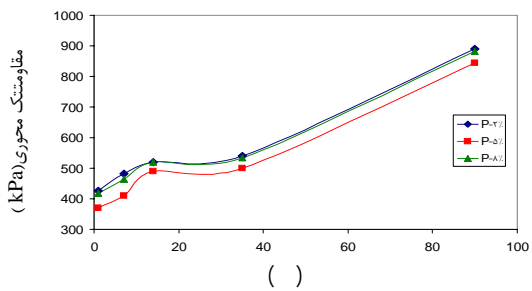
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PI

(Baiat, 2007)



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kPa

/

() ()

845 320 kPa

kPa

/

EC

PS

/

kPa

kPa

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