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اسد عبدالی

محمد حسین آدابی،

(I )

( )

( IV III II )

Na Sr Ca

Mn Fe Mg

Mg, Mn

Na, Ca, Sr

Mn/Ca

Asadabdi656@gmail.com Email:

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(Alavi 2004)

(Zenger and Dunham 1988)

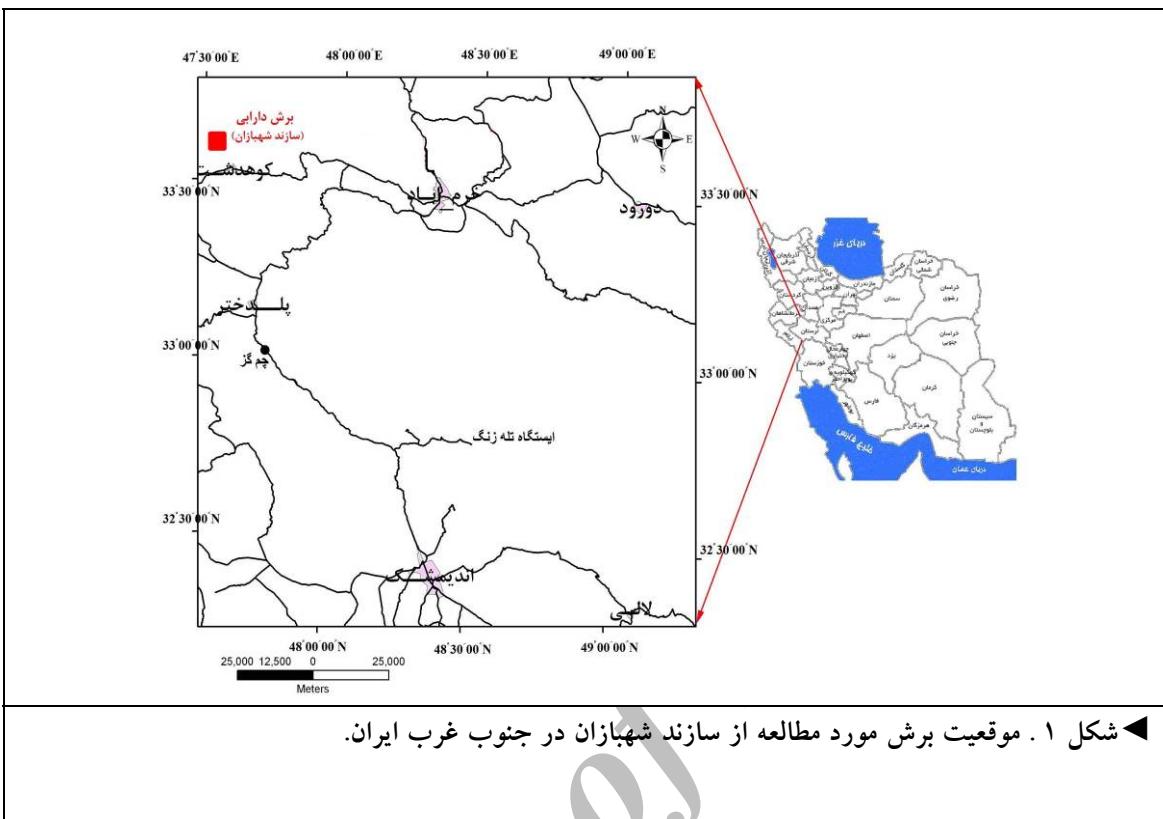
(Tucker and

Wright 1990)

(Alavi 2004)

( )

(Tucker and Wright 1990)



Sibley and )

(Mazzullo 1992) (Friedman 1965) (Gregg 1987)

(ARS)

(Dickson 1965)

(

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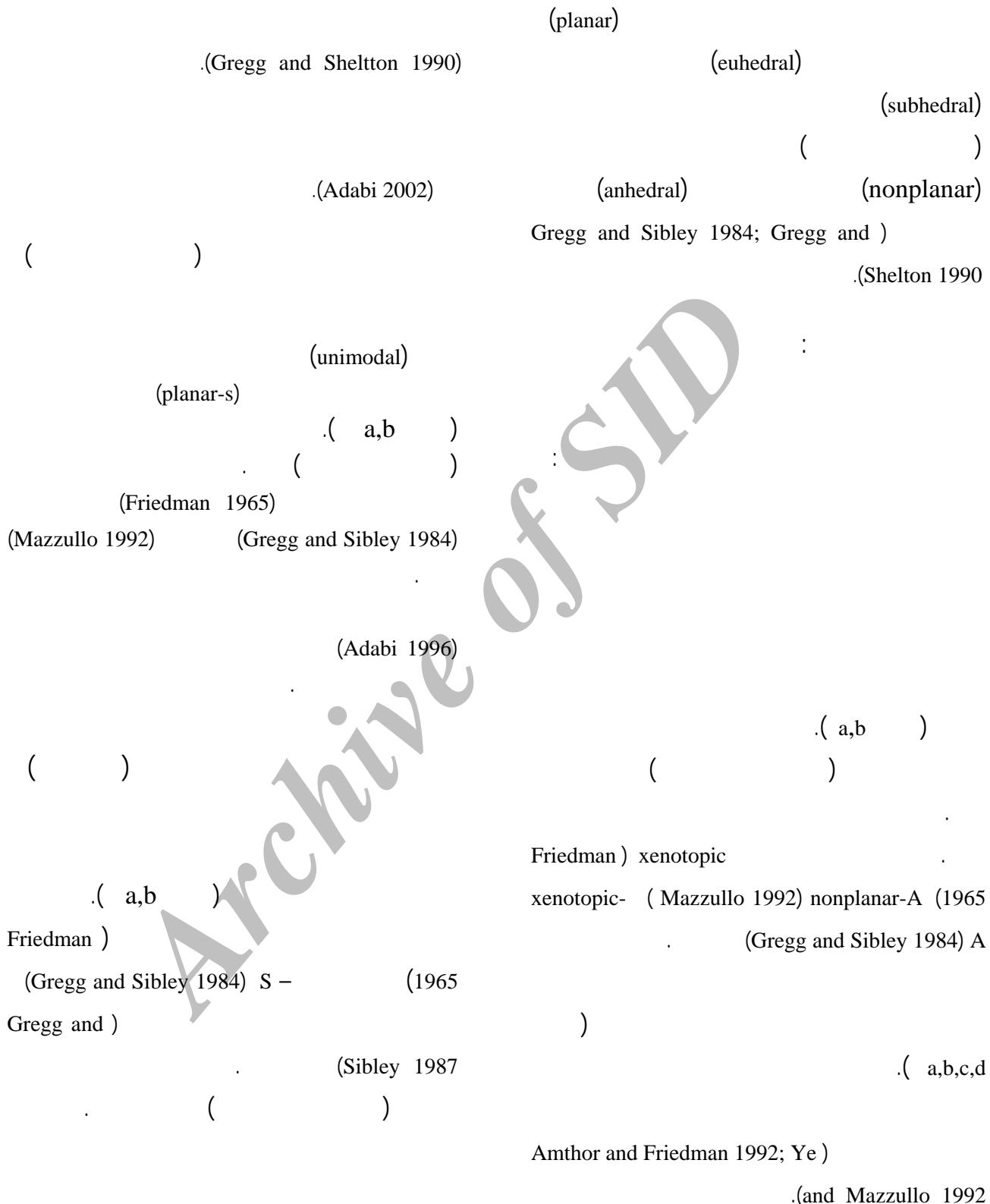
)

(Sr,Na,Fe,Ca,Mg and Mn)

AAS

MINITAB14

.(Sibley and Gregg 1987)



- .....
- : ( Gregg and Shelton 1990; Mazzullo 1992 )
- Shinn et al. 1965; Shukla and Baker 1988; )  
 .(Machel 2000; Mazzullo 2000
- : ( )
- (HMC)
- (Land 1985) Mazzullo )
- .(1992
- : ( a,b ) (Mutti1990)
- tidal )
- (Bush 1973; Carballo et al. 1987) (pumping  
 Adams and ) (seepage reflux)
- .( a,b )
- (Rhodes 1960 Coniglio et al. )
- 1994; Drivet and Mountjoy 1997; Lumsden and  
 .(Lloyd 1997; Yoo et al. 2000
- Warren ) (Mazzullo 1992)
- .(1999
- .(Mazzullo 2000) (Morrow 1982; Land 1985)
- ) Lee and Fridman )
- ( 1987; Machel and Anderson 1989; Barnaby and  
 .(Read 1992

- (Veizer 1983; Morrison and Veizer 1983; Morrison and )  
Sr (Brand 1987  
.(Rao 1996) (Mutti 1990)  
.(Veizer 1983) (Veizer 1983; Morrison and )  
.(Cander et al. 1988; Mukhopadhyay et al. 1996)  
.(e.g. Zeeh et al. 1995; Al-Aasm et al. 2000)  
Coniglio et al. 1994; Drivet and Mountjoy, )  
. (1997; Lumsden and Lloyd 1997; Yoo et al. 2000)

.(Rao 1996)

.(Winefield et al. 1996)

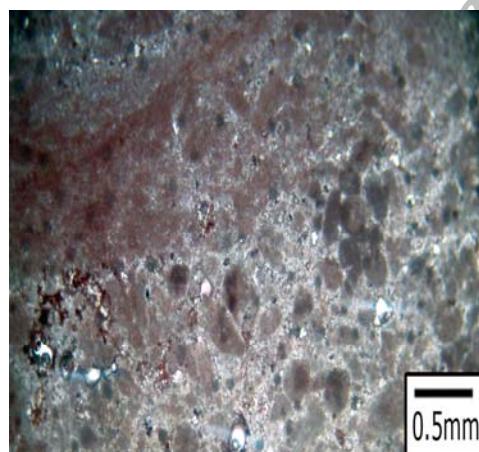
.( )

(Winefield et al. 1996)

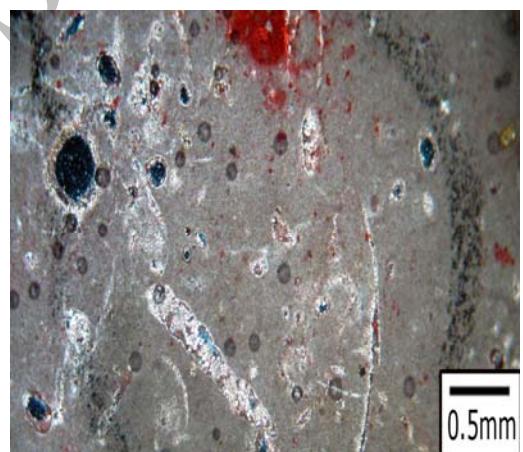
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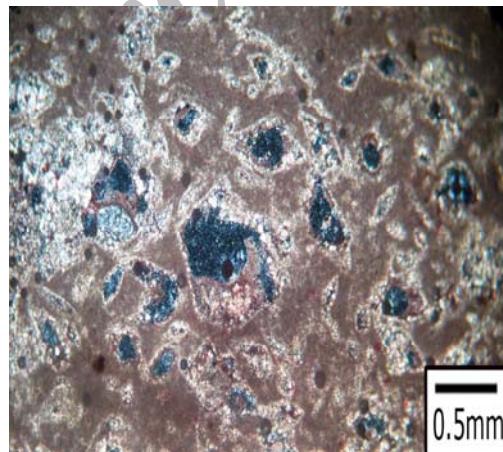
.(Veizer 1983)



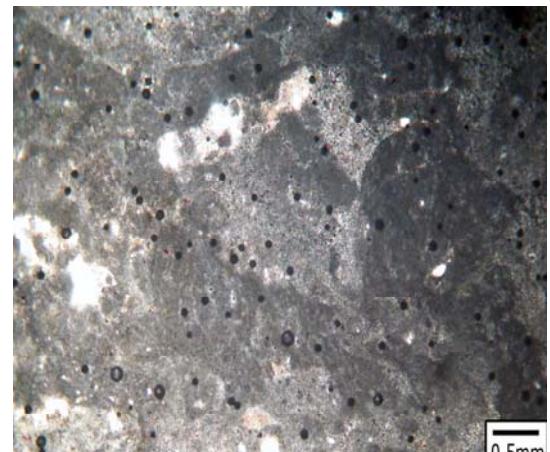
شکل ۲b نمایی از پلوئیدها



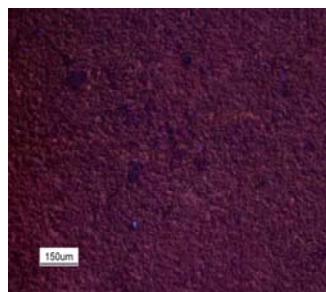
شکل ۲a نمایی از خرده های اسکلتی



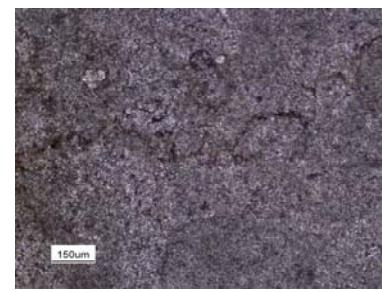
شکل ۲d نمایی از قالبهای تغییری شکل



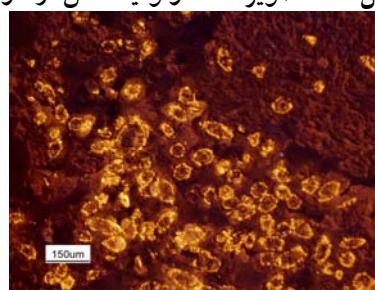
شکل ۲c نمایی از آثار جلبگی



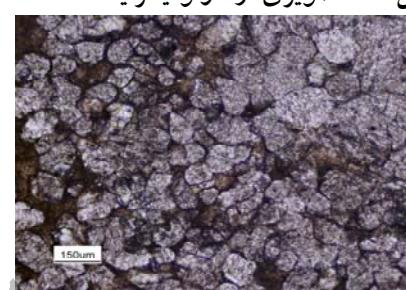
شکل ۳b تصویر کاتدولومینسانس از دولومیکرایت



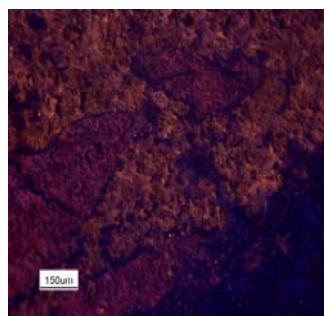
شکل ۳a تصویری از دولومیکرایت



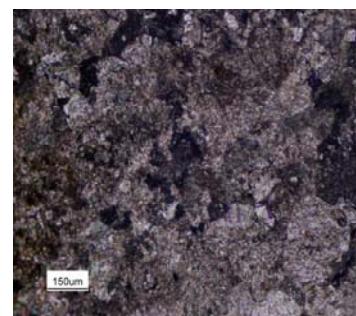
شکل ۴b تصویر کاتدولومینسانس از دولومیکرواسپارایت.



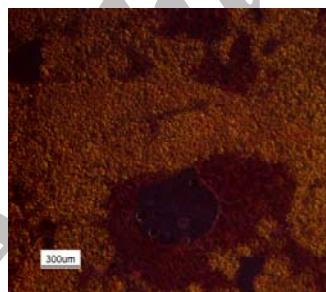
شکل ۴a تصویری از دولومیکرواسپارایت



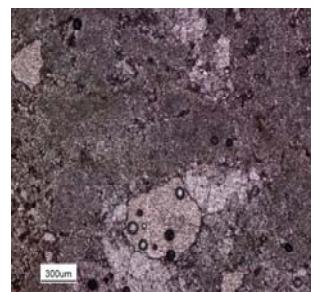
شکل ۵b تصویر کاتدولومینسانس از دولواسپارایت



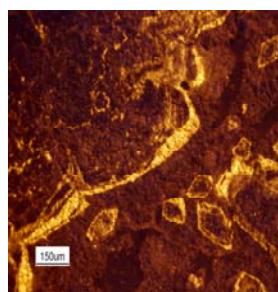
شکل ۵a تصویری از دولواسپارایت



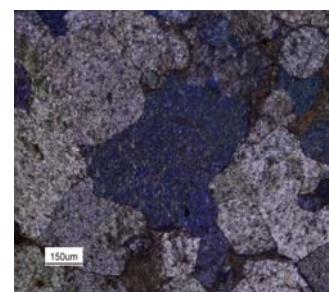
شکل ۶b تصویر کاتدولومینسانس از دولومیت پرکننده حفرات



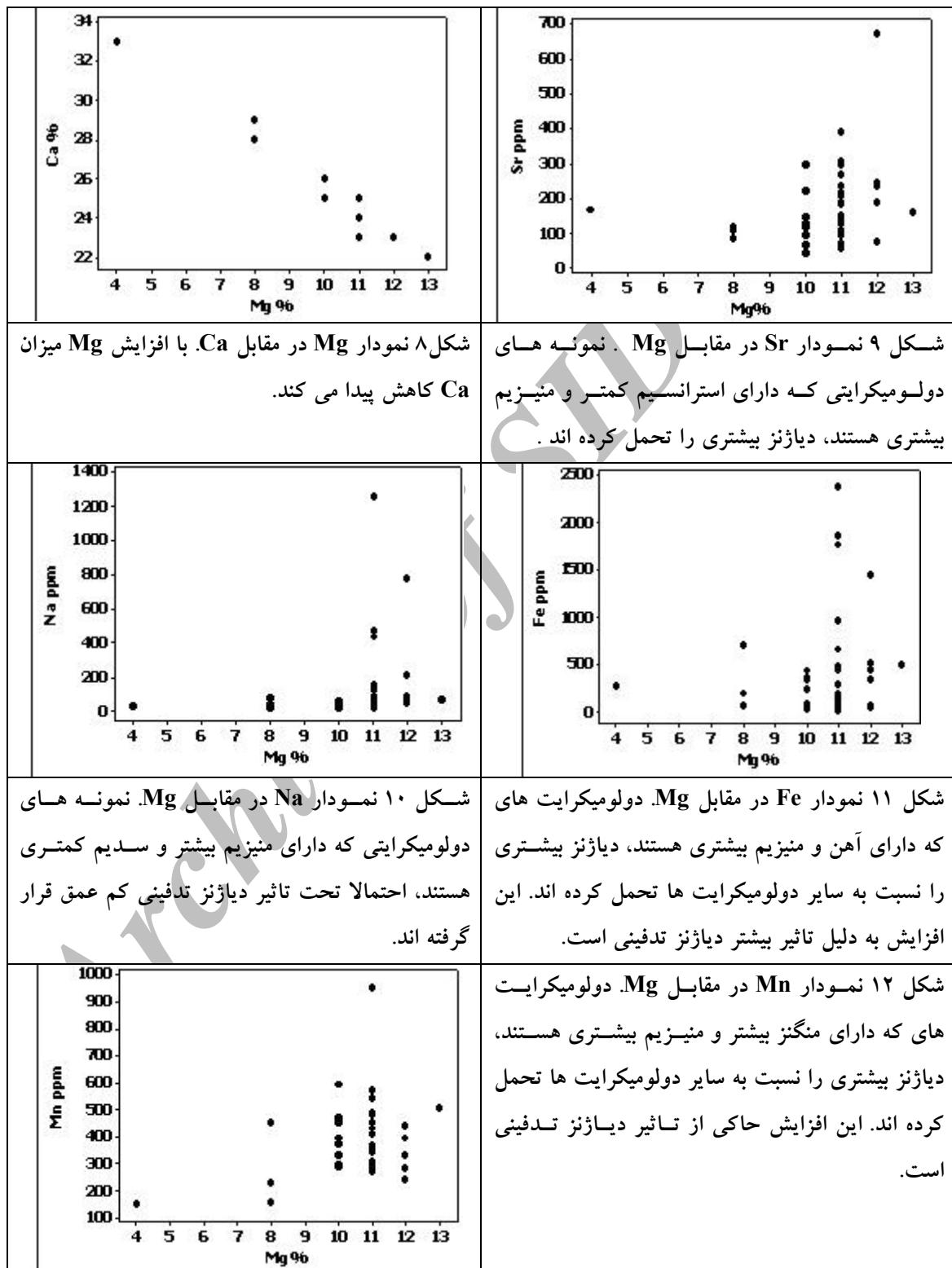
شکل ۶a تصویری از دولومیت پرکننده حفرات



شکل ۷b تصویر کاتدولومینسانس از دولومیت زین اسبی

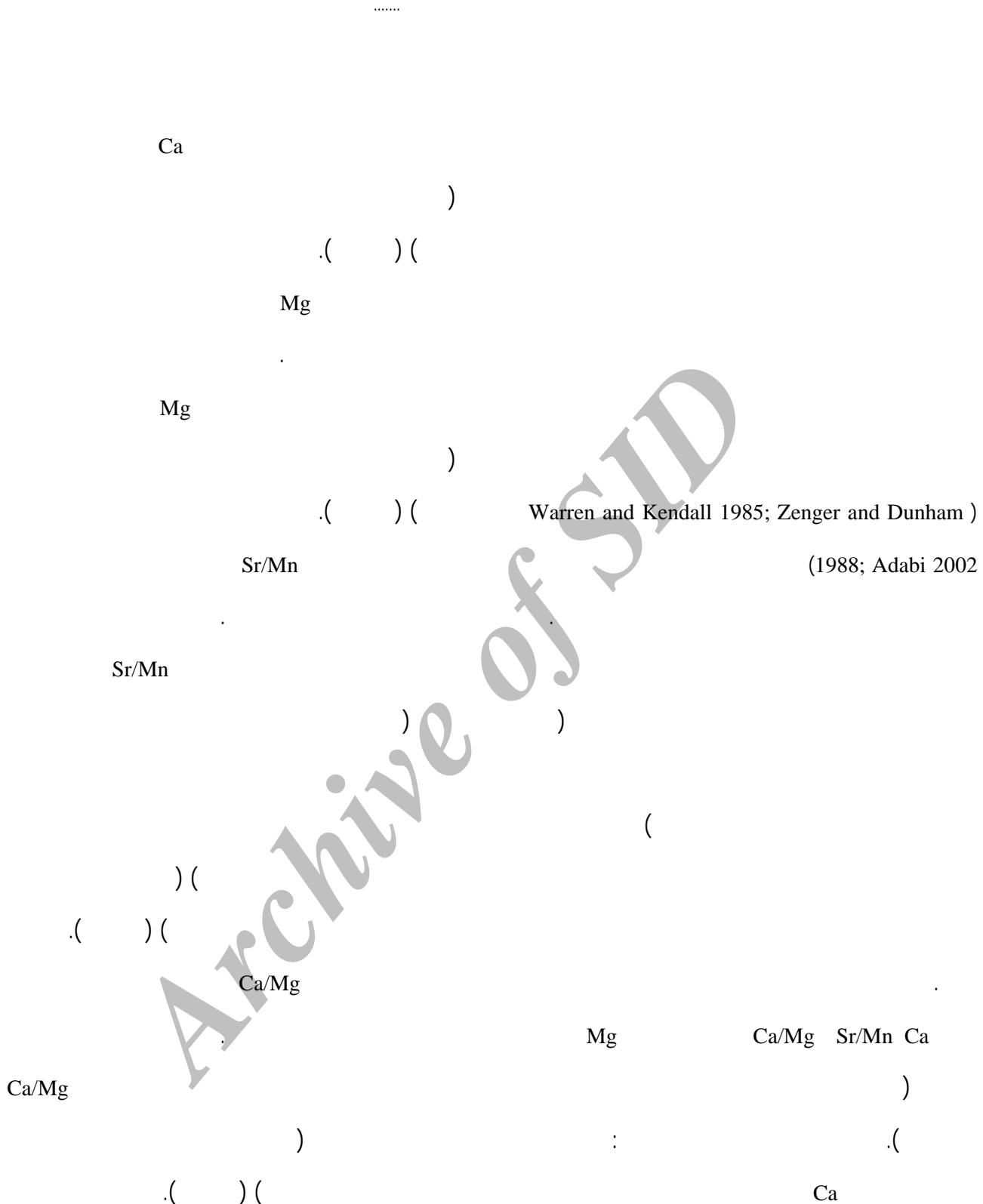


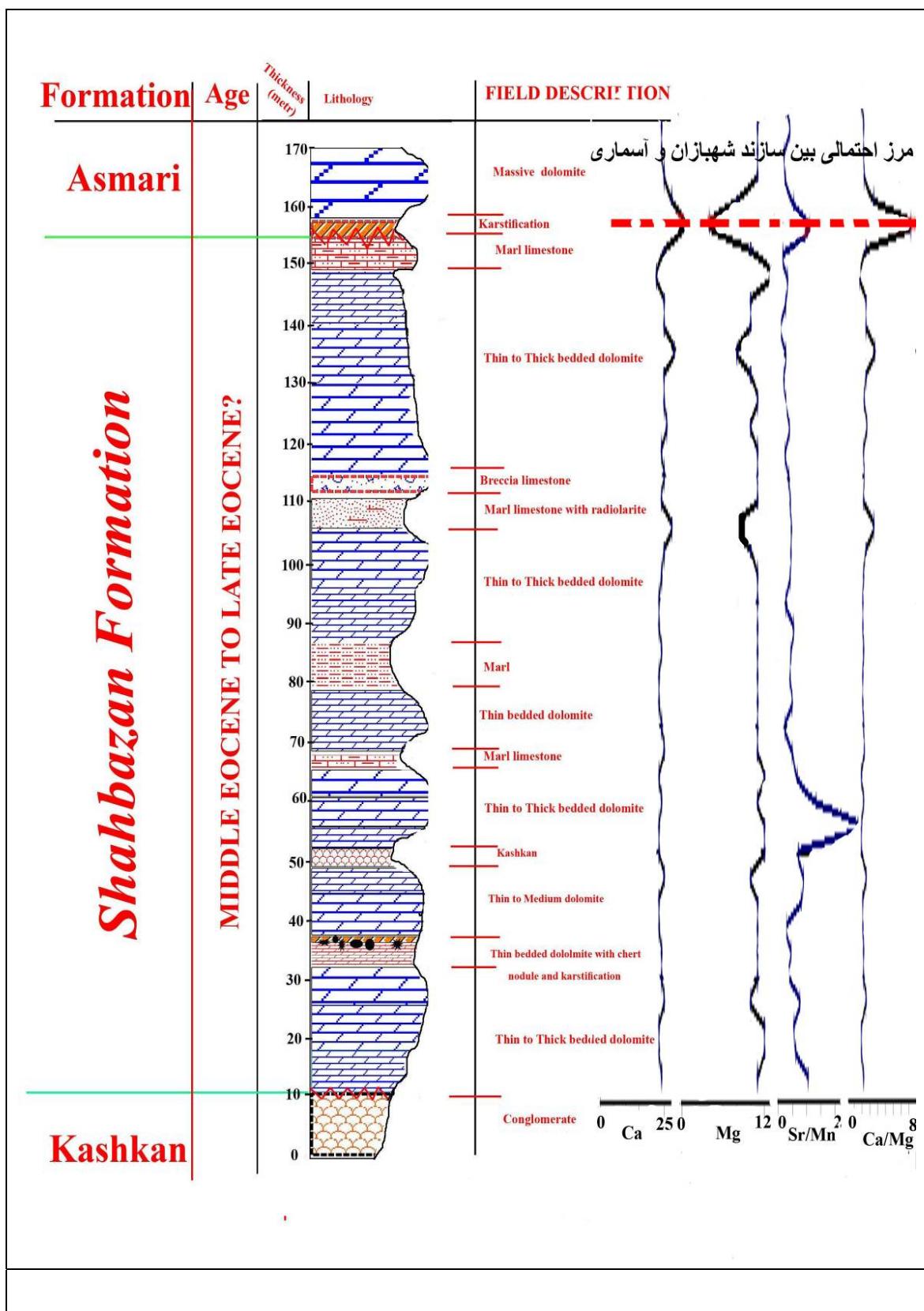
شکل ۷a نمایی از دولومیت زین اسبی



Sample No.	IR%	Mg%	Ca%	Mn (ppm)	Na (ppm)	Fe (ppm)	Sr (ppm)	
1	15.00	11.00	24	290.00	1256.00	2378.00	305.000	
2	13.00	12.00	23	392.00	780.00	1444.00	241.00	
3	12.00	12.00	23	440.00	77.00	333.00	243.00	
4	15.00	10.00	25	294.00	36.00	90.00	223.00	
5	11.00	11.00	24	569.00	31.00	52.00	212.00	
6	10.00	11.00	24	485.00	20.00	66.00	215.00	
7	10.00	11.00	23	949.00	39.00	79.00	269.00	
8	10.00	11.00	23	366.00	46.00	14.00	295.00	
9	12.00	10.00	25	333.00	36.00	36.00	296.00	
10	10.00	12.00	23	330.00	45.00	44.00	235.00	
11	10.00	0.00	0	239.00	62.00	72.00	672.00	
12	14.00	11.00	24	292.00	152.00	171.00	390.00	
13	12.00	12.00	23	281.00	211.00	447.00	189.00	
14	17.00	11.00	25	477.00	471.00	1765.00	234.00	
15	11.00	11.00	24	305.00	77.00	476.00	71.00	
16	11.00	11.00	23	428.00	439.00	1868.00	208.00	
17	11.00	11.00	23	452.00	84.00	432.00	188.00	
18	8.00	11.00	24	409.00	67.00	281.00	182.00	
19	12.00	11.00	23	341.00	45.00	149.00	183.00	
20	9.00	11.00	23	541.00	24.00	46.00	143.00	
21	22.00	11.00	24	363.00	18.00	76.00	151.00	
22	31.00	10.00	25	290.00	21.00	21.00	130.00	
23	23.00	8.00	28	231.00	17.00	65.00	107.00	
24	19.00	11.00	24	307.00	28.00	79.00	130.00	
25	25.00	11.00	25	296.00	24.00	76.00	109.00	
26	26.00	11.00	24	429.00	22.00	188.00	105.00	
27	36.00	10.00	26	372.00	58.00	430.00	145.00	
28	31.00	11.00	25	357.00	48.00	113.00	93.00	
29	31.00	10.00	25	468.00	41.00	236.00	94.00	
30	20.00	8.00	29	450.00	38.00	187.00	118.00	
31	32.00	10.00	25	593.00	30.00	352.00	43.00	
32	19.00	10.00	25	453.00	41.00	340.00	116.00	
33	29.00	13.00	22	506.00	66.00	486.00	163.00	
34	19.00	10.00	25	395.00	53.00	326.00	67.00	
35	24.00	4.00	33	152.00	33.00	264.00	168.00	
36	20.00	8.00	28	156.00	78.00	709.00	85.00	
37	5.00	11.00	25	287.00	76.00	655.00	71.00	
38	19.00	11.00	24	270.00	72.00	437.00	55.00	
39	17.00	11.00	24	367.00	123.00	955.00	148.00	
40	16.00	12.00	23	283.00	83.00	516.00	76.00	

جدول ١- جدول تغيرات عناصر اصلی و فرعی.





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**MINITAB14**

: ( )

.(Sharma 1996)

A

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( a

Wilson 1975; )

.(Johenson and Wichern 1988)

B

) (Schlager 2002; Fotini 2008

( b

(Fotini 2008)

. ( c C )

(Schlager 2002; Fotini 2008)

.( ) .( d )

Ca : ( )

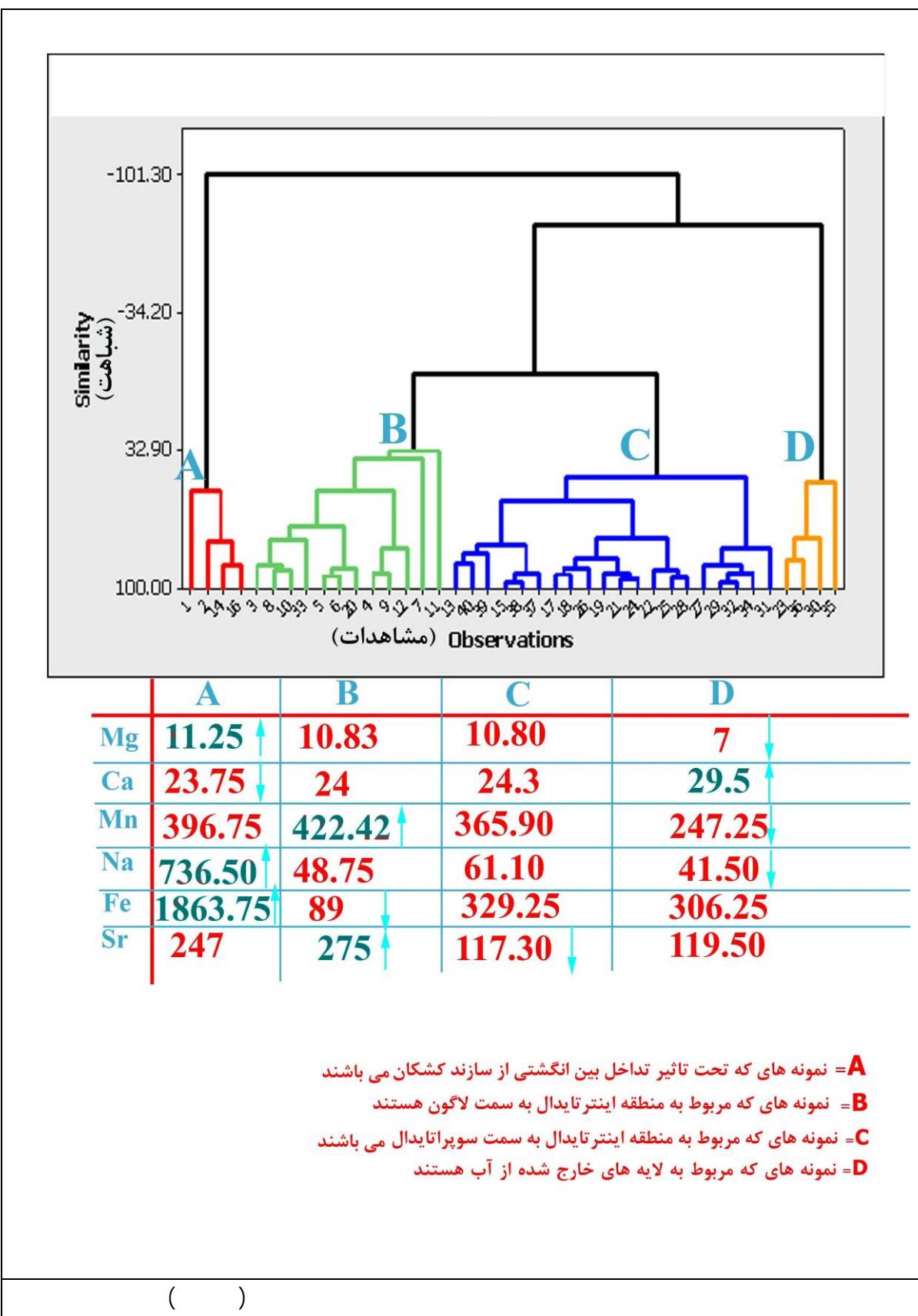
Mn

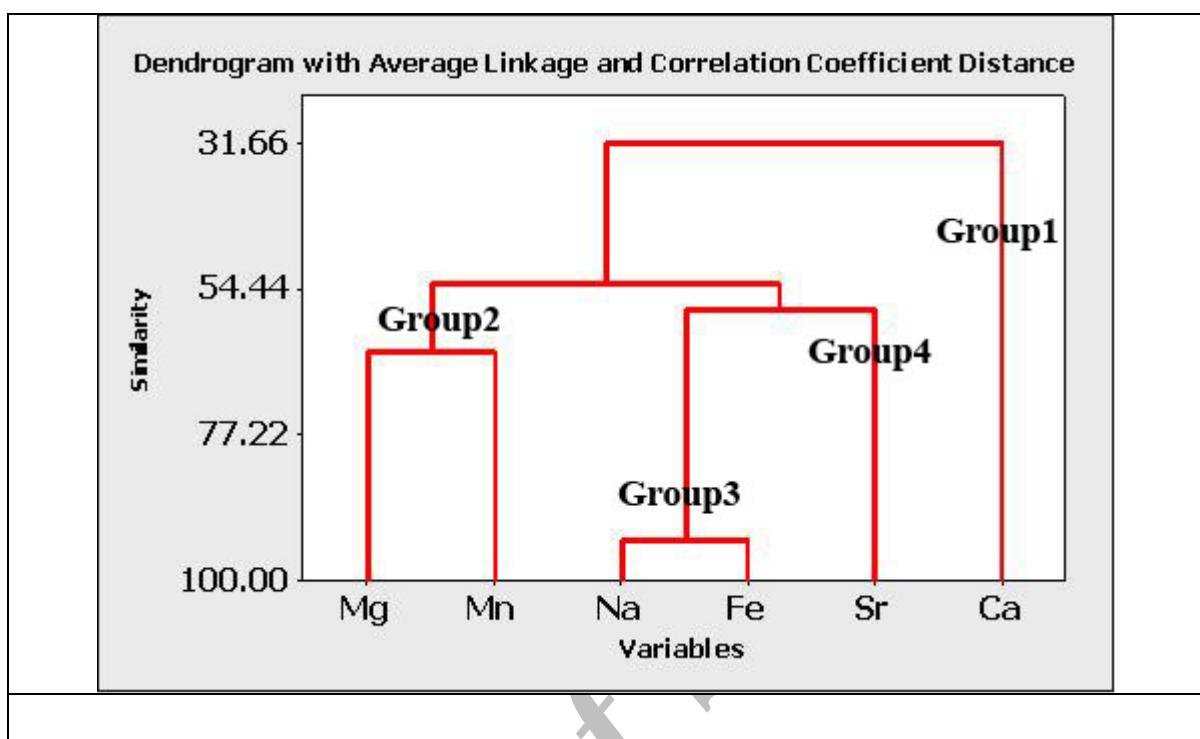
Mg

Na Fe

Sr

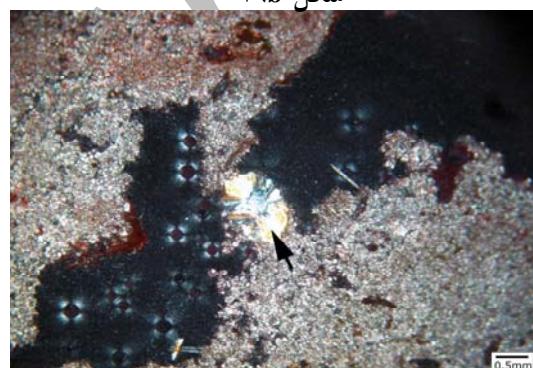
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شكل ١٦b

شكل ١٦a



شكل ١٦d

شكل ١٦c

- .....
- \*
- (        )
- Mg Ca/Mg Sr/Mn Ca
- \*
- (        )
- \*
- (        )
- \*
- (        )
- \*
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