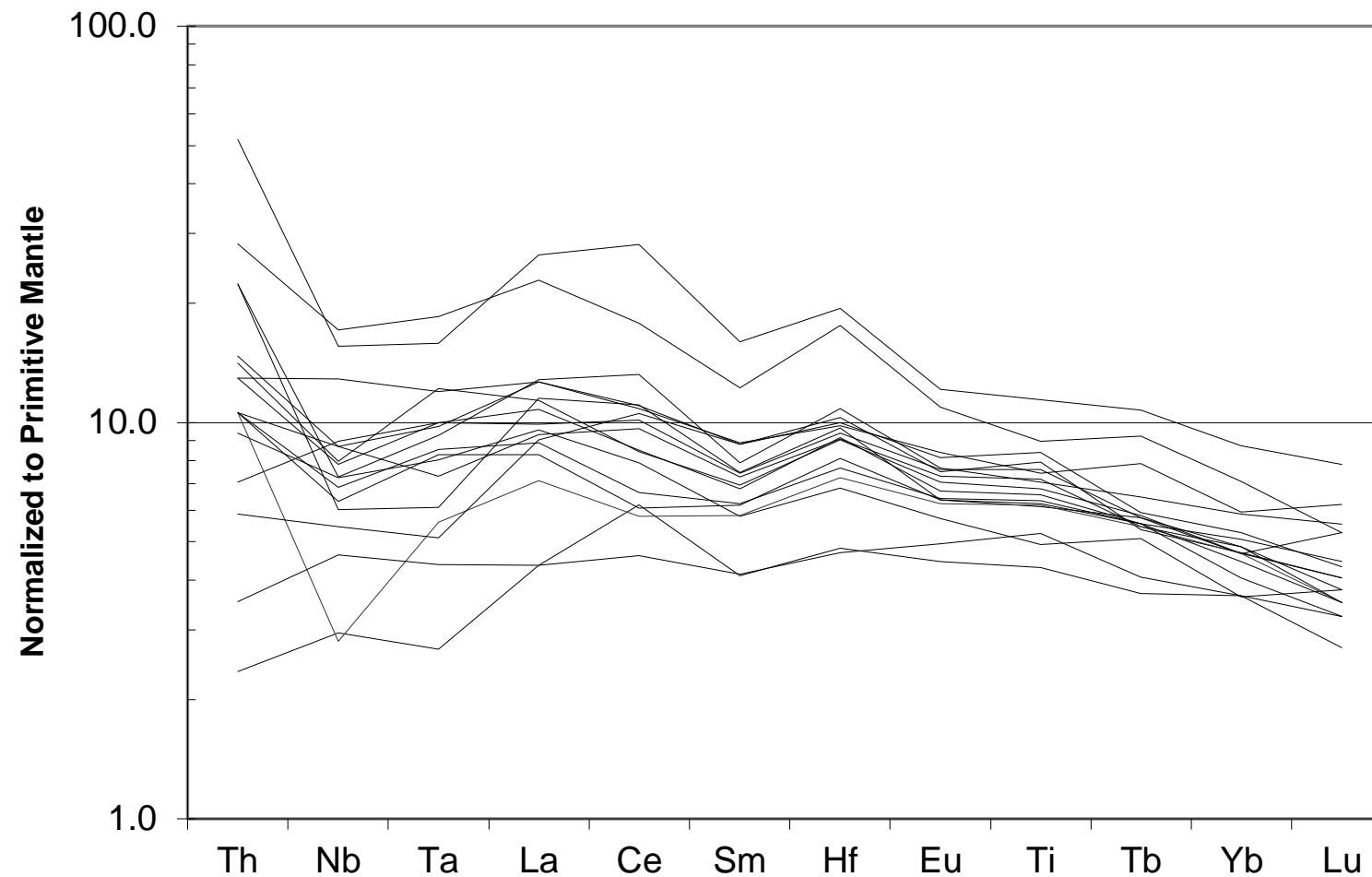


Figure DR-1. Spider diagram for mafic volcanic rocks from the Channel Islands located off the coast of southern California (Weigand et al (1998)).

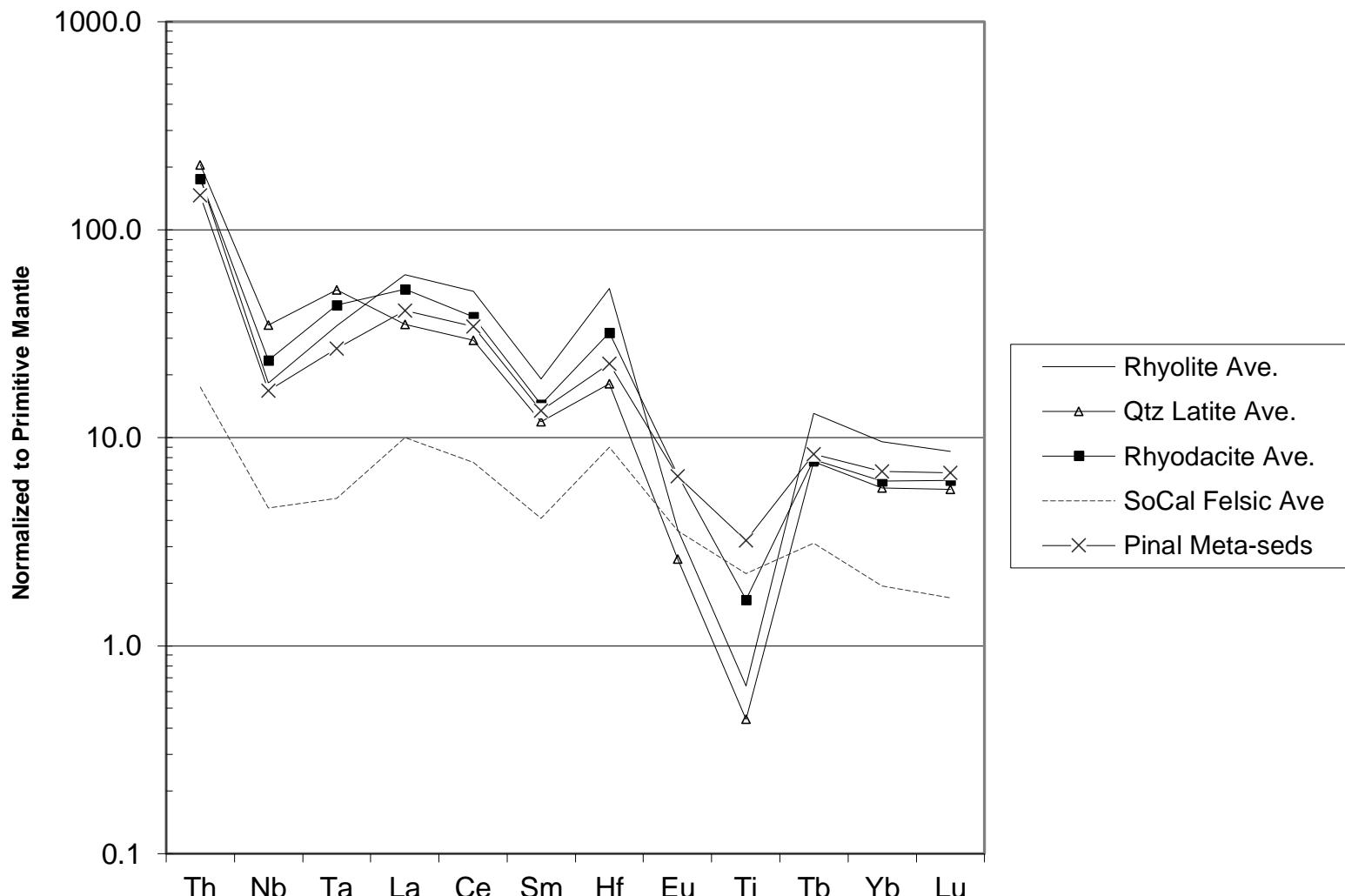
Figure DR-2. Spider diagram for averages of Neogene felsic volcanic rocks from coastal California based on data from Cole et al (1995, Weigand et al (1998), and Weigand et al (2002). An average pattern for felsic volcanic rocks from southern California (Weigand et al., 1998) and an average pattern for Pinal metasedimentary rocks are also plotted (De Melas, 1983; Copeland, 1986).

Figure DR-3. Spider diagram comparing average pattern for felsic meta-volcanic rocks from the Pinal terrane with average pattern for felsic rocks from the Alaskan terrane (Barker et al., 1992). An average pattern for Pinal metasedimentary rocks is also plotted (De Melas, 1983; Copeland, 1986).

Meijer, Figure DR-1, .xcl



Meijer, Figure DR-2, .xcl



Meijer, Figure DR-3, .xcl

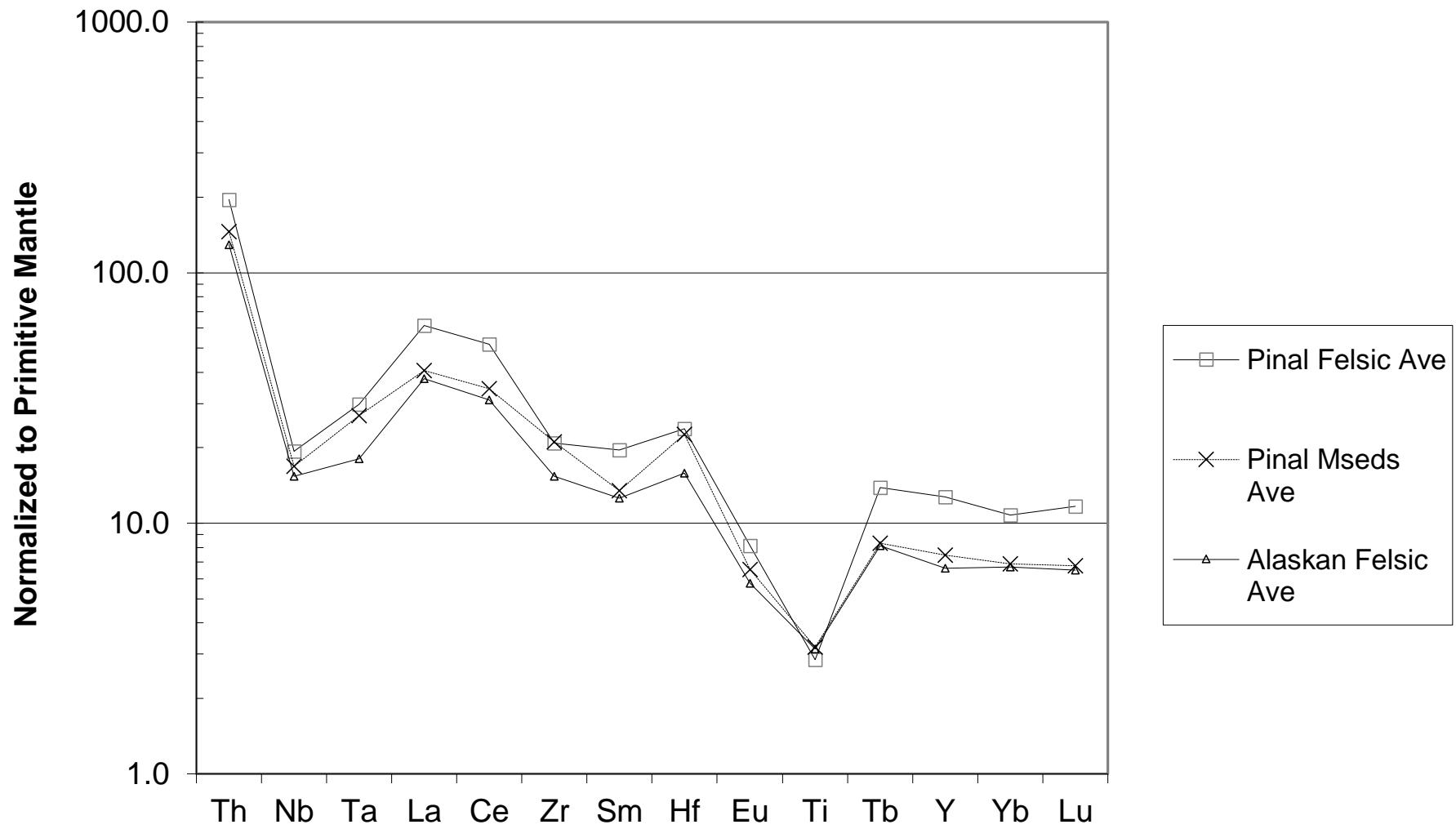


Table DR1 is available as a separate Excel file.

Quality Control Data for Major and Trace Element Analyses by ICP-MS (Lithium borate fusion)			
(ACT Labs of Ancaster, Ontario, CANADA)			
(Samples ground with iron plates)			
Analyte Symbol	%	Al2O3(T)	
Unit Symbol	%	MnO	
Detect Limit	ppm	ppm	
Analyte Method	FUS-ICP	FUS-ICP	
NIST 694 Meas	11.53	1.86	0.73
NIST 694 Cert	11.2	1.8	0.79
DNC-1 Meas	47.23	18.89	10.1
DNC-1 Cert	47.15	18.34	9.97
GBW 07113 Meas	72.66	12.69	3.2
GBW 07113 Cert	72.8	13	3.21
LK20-1 Meas	1.53	0.46	0.33
LK20-1 Cert	1.52	0.46	0.33
W-2a Meas	52.2	15.39	10.7
W-2a Cert	52.4	15.4	10.7
DTS-2b Meas	49.95	20.66	6.2
DTS-2b Cert	49.9	20.69	6.21
SY-4 Meas	1.53	0.46	0.33
SY-4 Cert	1.52	0.46	0.33
CTA-AC-1 Meas	47.75	15.38	11.44
CTA-AC-1 Cert	47.96	15.5	11.3
NCS DCE8312 Meas	26.2	7.09	2.60
NCS DCE8312 Cert	26.2	7.09	2.60
ZW-C Meas	1.53	0.46	0.33
ZW-C Cert	1.52	0.46	0.33
NCS DCT2014 Meas	26.2	7.09	2.60
NCS DCT2014 Cert	26.2	7.09	2.60
NCS DCT2009 (GBW07241) Meas	30	< 20	970
NCS DCT2009 (GBW07241) Cert	30	< 20	970
CREAS 100a (Fusion) Meas	17	170	132
CREAS 100a (Fusion) Cert	18.1	169	142
CREAS 101a (Fusion) Meas	29	430	241
CREAS 101a (Fusion) Cert	30	430	241
JR-1 Meas	< 20	< 1	< 20
JR-1 Cert	51.39	14.85	8.3
MO-1 Orig	50.89	14.96	8.27
MO-1 Dup	50.89	14.96	8.27
Method Blank			
SiO2	%	Al2O3(T)	
MnO	%	MgO	
CaO	%	Na2O	
K2O	%	TiO2	
P2O5	%	LOI	
Total	%		
Sc	ppm	ppm	
Ba	ppm	ppm	
V	ppm	ppm	
Cr	ppm	ppm	
Co	ppm	ppm	
Ni	ppm	ppm	
Cu	ppm	ppm	
Zn	ppm	ppm	
Ga	ppm	ppm	
Ge	ppm	ppm	
As	ppm	ppm	
Rb	ppm	ppm	
Sr	ppm	ppm	
Y	ppm	ppm	
Zr	ppm	ppm	
Nb	ppm	ppm	
Mo	ppm	ppm	
Ag	ppm	ppm	
In	ppm	ppm	
Sn	ppm	ppm	
Sb	ppm	ppm	
Cs	ppm	ppm	
Ba	ppm	ppm	
La	ppm	ppm	
Ce	ppm	ppm	
Pr	ppm	ppm	
Nd	ppm	ppm	
Sm	ppm	ppm	
Eu	ppm	ppm	
Gd	ppm	ppm	
Tb	ppm	ppm	
Dy	ppm	ppm	
Ho	ppm	ppm	
Er	ppm	ppm	
Tm	ppm	ppm	
Yb	ppm	ppm	
Hf	ppm	ppm	
Ta	ppm	ppm	
W	ppm	ppm	
Pb	ppm	ppm	
Bi	ppm	ppm	
Th	ppm	ppm	
U	ppm	ppm	

High-Grade Metamorphic Mineral Occurrences in the Pinal Terrane

Mineral	Localities	References	Comments
Garnet	Maricopa Mountains	this study	Contact metamorphism?
	San Tan Mountains	Ferguson and Skotnicki, 1996; this study	
	Table Top Mountains	this study	
	White Hills	this study	
	Casa Grande Mountains	Bergquist and Blacet, 1978; this study	
	Santa Teresa Mountains	Blacet and Miller, 1978	
	Mineral Mountains	Schmidt, 1967; this study	
	Peralta Trail Area	Ferguson and Skotnicki, 1995; this study	
	Squaw Peak, Phoenix	Thorpe and Burt, 1980	
Cordierite	Picketpost Mountain Quadrangle	this study	
	White Hills	this study	
Staurolite	Squaw Peak, Phoenix	Thorpe and Burt, 1980	Contact metamorphism?
	Santa Teresa Mountains	Blacet and Miller, 1978	
	Gila Bend Mountains	Gilbert, 1991; Gilbert et al., 1992; this study	
	"Salt River area"	Williams, 1991	
Kyanite	McDowell Mountains	Couch, 1981	
	Squaw Peak, Phoenix	Thorpe and Burt, 1980	
	Miami, Arizona	this study	
	Dos Cabezas Mountains	Elevatorski, 1978; this study	
Sillimanite	Superior Quadrangle	Peterson, 1969	Contact metamorphism?
	Pinal Mountains	Keep and Hanson, 1994	
	Four Peaks area	Estrada, 1987	
	McDowell Mountains	Couch, 1981	
	Tortolita Mountains	Ferguson et al. 2003	Tertiary metamorphism?
	Sierra Estrella	Sommer, 1982	
	White Tank Mountains	Reynolds and DeWitt, 1991	
	Gila Bend Mountains	Gilbert. 1991; Gilbert et al., 1992	

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UTM (Universal Transverse Mercator grid) Coordinates of samples listed in Table 1
Referenced to North America Datum of 1983 (NAD 1983)

Sample #	Northing	Easting
Cg-1	3633115	432109
Ja-1	3627911	370724
Jb-2	3568263	320011
Jw-9	3636097	513848
Ld-1	3554727	583837
Mi-9	3672652	478038
Mm-1	3640300	371797
Mo-1	3624300	241950
Ns-1	3634538	490905
Pk-13	3689220	487621
Pm-1	3681329	508835
Po-4	3616158	604420
Pt-5	3692125	463600
Sn-2	3665677	444399
Tm-1	3608400	493232
Wh-3	3628146	375917
Zw-19	3629173	543886