Apx. 9 Amounts of consumed materials and diamond bits of drilling survey

Apx. 9 Amount of consumed materials and diamond bits of Drilling survey

Equipment	Specification	単位	MJVD-1	MJVD-2	MJVD-3	MJVD-4	MJVD-5	MJVD-6	MJVD-7	MJVD-8	MJVD-9	MJVD-10	MJVD-11	MJVD-12	MJVD-13	MJVD-14	MJVD-15	MJVD-16	Total
Coring bits	PQ metal crown bits	ヶ	1	1	1	1	1	0.5	0.5	0.5	0.5	1	0.5	1	0.5	1.5	0.5	0.5	12.5
Coring bits	HQ Impregnated bits	ヶ	1	1	2	1.5	2	0.5	1	0.5	0.5	1	0.5	0.5	1.5	1.5	0.5	0.5	16
Reaming shell	PQ	ヶ	0	0	1	0	0	0.5	1	0.5	0.5	1	0	0	1	0	0	0	5.5
Reaming shell	HQ	ヶ	1	0.5	1	1.5	1	0.5	1	0.5	0.5	1	1	1	0.5	1.5	0.5	0.5	13.5
Casing	φ146mm 3.0m	本	5	7	10	8	8		3	5	3	3		2	2	4	3	2	65
Casing	φ108mm 3.0m					14	10	0	29	12		15		14		5	8	14	10	131
Bentonite		kg	2,000	2,500	1,500	3,000	1,500	1,500	2,200	2,000	3,000	3,000	1,500	2,000	3,500	2,500	2,000	1,500	35200
C. M. C		kg	4	3	2.5	7	3	3	4	4	5	3	3	4	5	4	3	3	60.5
Slaked lime		kg	4	3	2.5	7	3	3	4	4	5	3.5	3	4	5	4	3	3	61
Gas oil		l	300	200	450	500	400	400	300	250	250	250	400	300	200	250	200	200	4850
Engine oil		l	3	2	4	5	4	4	3	2	2	2	4	3	2	3	2	2	47

Apx. 10 (1)~(16)　Drilling progress results (MJVD-1~16)

Apx. 10 (1) Drilling progress results of drill hole MJVD -1

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 24	0.5	0.5	0	
Drilling	Dec. 24 - Dec.29	6.5	6.5	0	
Demobilization	Dec.30	1.0	1.0	0	
Total		8.0	8.0	0	28
Planned depth	80m				
Drilled depth	80m				
Core length	74.68				
Core recovery	93.35%				
Casing 146mm	13.5m				
Casing 108mm	0m				
Drilling speed	12.3m/Drilling day				

Apx. 10 (2) Drilling progress results of drill hole MJVD -2

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 30	0.5	0.5	0	
Drilling	Dec. 30 -Jan. 2	3.0	3.0	0	
Demobilization	Jan. 3	0.5	0.5	0	
Total		4.0	4.0	0	29.2
Planned depth	80m				
Drilled depth	80m				
Core length	75.80m				
Core recovery	94.75%				
Casing 146mm	20m				
Casing 108mm	0m				
Drilling speed	26.7m/Drilling day				

Apx. 10 (3) Drilling progress results of drill hole MJVD -3

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 7	0.5	0.5	0	
Drilling	Dec. 7- Dec. 15	8.5	8.5	0	
Demobilization	Dec. 15	0.5	0.5	0	
Total		9.5	9.5	0	22
Planned depth	80m				
Drilled depth	80m				
Core length	65.6m				
Core recovery	82.00%				
Casing 146mm	31.3m				
Casing 108mm	41.95m				
Drilling speed	9.4m/Drilling day				

Apx.10 (4) Drilling progress results of drill hole MJVD -4

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 15	0.5	0.5	0	
Drilling	Dec. 15 - Dec. 24	9.0	9.0	0	
Demobilization	Dec. 24	0.5	0.5	0	
Total		10.0	10.0	0	23.2
Planned depth	100m				
Drilled depth	100m				
Core length	96.80m				
Core recovery	96.80%				
Casing 146mm	23.30m				
Casing 108mm	29.45m				
Drilling speed	11.0m/Drilling day				

Apx. 10 (5) Drilling progress results of drill hole MJVD -5

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 6	1	1	0	
Drilling	Dec. 7 - Dec. 14	7.5	7.5	0	
Demobilization	Dec. 14	0.5	0.5	0	
Total		9.0	9.0	0	21.7
Planned depth	100m				
Drilled depth	100m				
Core length	95.68m				
Core recovery	95.68%				
Casing 146mm	22.3m				
Casing 108mm	0m				
Drilling speed	13.3m/Drilling day				

Apx. 10 (6) Drilling progress results of drill hole MJVD -6

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 6	1.0	1.0	0	
Drilling	Dec. 7 - Dec.14	7.5	7.5	0	
Demobilization	Dec.14	0.5	0.5	0	
Total		9.0	9.0	0	22.6
Planned depth	100m				
Drilled depth	100m				
Core length	94.35m				
Core recovery	94.35%				
Casing 146mm	0m				
Casing 108mm	85m				
Drilling speed	13.3m/Drilling day				

Apx. 10 (7) Drilling progress results of drill hole MJVD -7

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 16	0.5	0.5	0	
Drilling	Dec. 16 - Dec. 21	5.0	5.0	0	
Demobilization	Dec. 21	0.5	0.5	0	
Total		6.0	6.0	0	22
Planned depth	100m				
Drilled depth	100m				
Core length	89.00m				
Core recovery	89.00%				
Casing 146mm	10m				
Casing 108mm	37.15m				
Drilling speed	20.0m/Drilling day				

Apx. 10 (8) Drilling progress results of drill hole MJVD -8

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 31	0.5	0.5	0	
Drilling	Dec. 31 - Jan. 3	3.0	3.0	0	
Demobilization	Jan. 3	0.5	0.5	0	
Total		4.0	4.0	0	26.2
Planned depth	100m				
Drilled depth	100m				
Core length	97.80m				
Core recovery	97.80%				
Casing 146mm	15m				
Casing 108mm	0m				
Drilling speed	33.3m/Drilling day				

Apx. 10 (9) Drilling progress results of drill hole MJVD -9

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 26	0.5	0.5	0	
Drilling	Dec. 26 - Dec. 30	4.0	4.0	0	
Demobilization	Dec. 30	0.5	0.5	0	
Total		5.0	5.0	0	
Planned depth	100m				
Drilled depth	100m				
Core length	93.70m				
Core recovery	93.70%				
Casing 146mm	10m				
Casing 108mm	45m				
Drilling speed	25.0m/Drilling day				

Apx. 10 (10) Drilling progress results of drill hole MJVD -10

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 22	0.5	0.5	0	
Drilling	Dec. 22 - Dec. 27	5.0	5.0	0	
Demobilization	Dec. 27	0.5	0.5	0	
Total		6.0	6.0	0	23.5
Planned depth	100m				
Drilled depth	100m				
Core length	94.9m				
Core recovery	94.90%				
Casing 146mm	10m				
Casing 108mm	0m				
Drilling speed	20.0m/Drilling day				

Apx. 10 (11) Drilling progress results of drill hole MJVD -11

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 20	0.5	0.5	0	
Drilling	Dec. 20 - Dec. 27	7.0	7.0	0	
Demobilization	Dec. 27	0.5	0.5	0	
Total		8.0	8.0	0	26
Planned depth	100m				
Drilled depth	100m				
Core length	95.50m				
Core recovery	95.50%				
Casing 146mm	0m				
Casing 108mm	41.2m				
Drilling speed	14.3m/Drilling day				

Apx. 10 (12) Drilling progress results of drill hole MJVD -12

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 15	0.5	0.5	0	
Drilling	Dec. 15 - Dec. 20	5.0	5.0	0	
Demobilization	Dec. 20	0.5	0.5	0	
Total		6.0	6.0	0	22.8
Planned depth	100m				
Drilled depth	100m				
Core length	95.80m				
Core recovery	95.80%				
Casing 146mm	5.0m				
Casing 108mm	0mm				
Drilling speed	20.0m/Drilling day				

Apx. 10 (13) Drilling progress results of drill hole MJVD -9

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Jan. 4	0.5	0.5	0	
Drilling	Jan. 4 - Jan.8	4.0	4.0	0	
Demobilization	Jan. 8	0.5	0.5	0	
Total		5.0	5.0	0	29.7
Planned depth	80m				
Drilled depth	80m				
Core length	76.6m				
Core recovery	95.75%				
Casing 146mm	5m				
Casing 108mm	15m				
Drilling speed	20.0m/Drilling day				

Apx. 10 (14) Drilling progress results of drill hole MJVD -14

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 30	0.5	0.5	0	
Drilling	Dec. 30 - Jan. 3	4.5	4.5	0	
Demobilization	Jan. 4	1.0	1.0	0	
Total		6.0	6.0	0	28.1
Planned depth	80m				
Drilled depth	80m				
Core length	75.6m				
Core recovery	94.50%				
Casing 146mm	12m				
Casing 108mm	26.1m				
Drilling speed	17.8m/Drilling day				

Apx. 10 (15) Drilling progress results of drill hole MJVD -15

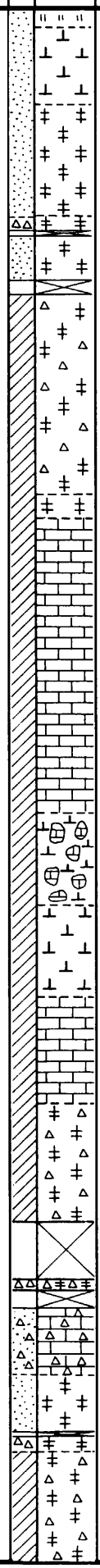
	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Dec. 27	0.5	0.5	0	
Drilling	Dec. 27 - Dec.30	3.0	3.0	0	
Demobilization	Dec. 30	0.5	0.5	0	
Total		4.0	4.0	0	27.6
Planned depth	80m				
Drilled depth	80m				
Core length	75.85m				
Core recovery	94.81%				
Casing 146mm	0m				
Casing 108mm	41.2m				
Drilling speed	26.6m/Drilling day				

Apx. 10 (16) Drilling progress results of drill hole MJVD -16

	Period	Number of days	Working days	Off work days	Number. of Workers
Mobilization	Jan. 3	0.5	0.5	0	
Drilling	Jan. 3 - Jan. 6	3.0	3.0	0	
Demobilization	Jan. 6	0.5	0.5	0	
Total		4.0	4.0	0	31.2
Planned depth	100m				
Drilled depth	100m				
Core length	93.4m				
Core recovery	93.40%				
Casing 146mm	5m				
Casing 108mm	30m				
Drilling speed	33.3m/Drilling day				

Apx. 11 Drilling column of MJVD-1~16 (scale:1/200)

MJVD - 1 (1/2) Depth : 80 m Angle : 90° Sea Level : 844.2 m



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
	0.60 – Overburden, brown soil	0.93	0.60	13.09	1-1
	Minette, weathered, dark brown, containing green biotite	0.84	0.53	9.67	1-2
		1.33	0.35	14.51	1-3
	3.00	1.72	0.25	15.65	1-4
	Syenite, weathered, blackish grey, containing barite	1.65	0.31	27.11	1-5
		2.72	0.23	27.70	1-6
	6.50~7.00 Syenite, weathered	1.96	0.23	24.05	1-7
		1.39	0.31	17.34	1-8
		0.99	0.29	13.29	1-9
	9.00	0.48	0.41	6.90	1-10
		0.35	0.35	4.83	1-11
	Syenite, weakly weathered, containing many breccia of limestone, pyrite dissemination	0.19	0.68	1.46	1-12
		0.55	0.47	6.37	1-13
		0.58	0.55	6.58	1-14
		0.66	0.39	7.60	1-15
	15.50 Contact, black siliceous rock	0.99	0.43	12.25	1-16
	16.30	0.87	1.99	8.07	1-17
		0.56	2.05	7.49	1-18
		0.91	6.04	16.01	1-19
	Limestone, pale grey, many small calcite veinlets, many druse, partly containing fluorite	0.56	3.31	8.00	1-20
		0.58	1.60	10.52	1-21
		0.34	2.34	4.79	1-22
		0.29	1.71	10.62	1-23
		0.22	1.40	5.34	1-24
		0.46	2.24	6.93	1-25
	25.90	0.38	1.71	6.29	1-26
	Minette, containing many breccia of limestone	0.59	1.97	13.82	1-27
		0.36	2.12	9.06	1-28
	28.85	0.39	1.81	13.05	1-29
	Brecciated minette with biotite, calcite veinlets, partly containing fluorite	0.27	1.07	3.81	1-30
		0.29	1.23	4.37	1-31
	31.80	0.47	1.71	6.27	1-32
	Limestone, pale grey, calcite crystal in druse	0.70	1.85	27.53	1-33
		0.98	1.05	17.25	1-34
		0.23	3.16	5.46	1-35
	35.25	0.53	1.64	20.99	1-36
	Syenite with many limestone breccia, containing network veinlets and dissemination of barite and partly fluirite	1.42	3.16	27.62	1-37
		0.92	1.36	25.58	1-38
		1.13	0.84	25.07	1-39
	39.10 Cave	1.55	0.58	24.47	1-40
	40.80	2.91	0.78	31.53	1-41
	Limestone, weathered, pale grey	2.30	1.91	32.89	1-42
		2.25	1.99	27.70	1-43
	44.00	2.00	1.25	18.86	1-44
	Syenite, weathered, dark greyish brown	2.40	0.78	43.85	1-45
		3.17	0.99	38.07	1-46
	46.40	2.74	0.74	28.98	1-47
	Syenite,weakly weathered, containing many breccia of black and brown altered rock	1.61	0.43	6.70	1-48
		1.11	0.35	14.11	1-49
		1.33	0.39	16.55	1-50

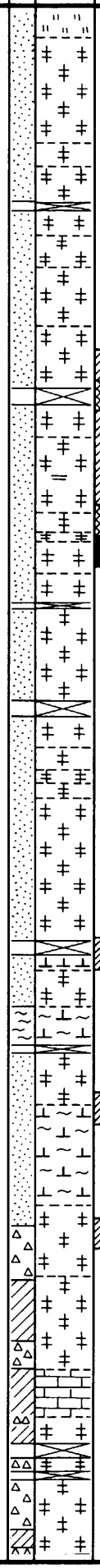
1 : 200

MJVD - 1 (2/2)

Depth	Weathering Column	High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50			Syenite,weakly weathered, containing many breccia of black and brown altered rock	1.38	0.45	25.75	1-51
				1.22	0.51	23.71	1-52
			51.70				
			Cave	1.17	0.37	18.95	1-53
			52.80				
			Syenite, weathered,dark grey colored	1.22	0.39	17.42	1-54
				1.09	0.39	19.29	1-55
			55.60~55.80 Clay, reddish brown colored	0.83	0.47	15.50	1-56
				1.16	0.51	20.90	1-57
				1.16	0.41	54.72	1-58
			58.00				
			Sand and small gravel(ϕ ±1cm), Secondary sediments in cave ?	0.90	0.37	29.91	1-59
60				1.15	0.64	26.94	1-60
				1.08	0.68	21.84	1-61
			61.80	1.36	0.53	29.06	1-62
				1.27	0.41	40.79	1-63
				1.00	0.33	53.36	1-64
			Syenite, containing breccia of barite	1.45	0.43	49.29	1-65
				1.31	0.41	53.53	1-66
				1.18	0.39	46.74	1-67
				1.74	0.53	45.38	1-68
			68.45	0.85	0.31	42.49	1-69
70			Syenite, reddish brown oxide in crack	0.39	0.33	14.90	1-70
				0.60	0.82	25.07	1-71
				0.32	0.43	11.52	1-72
			72.50 — gradual change	0.92	1.77	35.86	1-73
			Syenite, pale grey, network veinlets of barite	0.18	0.16	70.19	1-74
			75.00	0.47	0.33	51.33	1-75
				0.50	0.43	46.91	1-76
			Syenite, pale grey, containing barite and reddish brown mineral (rare earth mineral?)	0.63	0.62	26.09	1-77
				0.84	1.44	29.40	1-78
				1.26	3.02	14.53	1-79
80			80.00	1.00	1.75	12.02	1-80
90							
100							

1 : 200

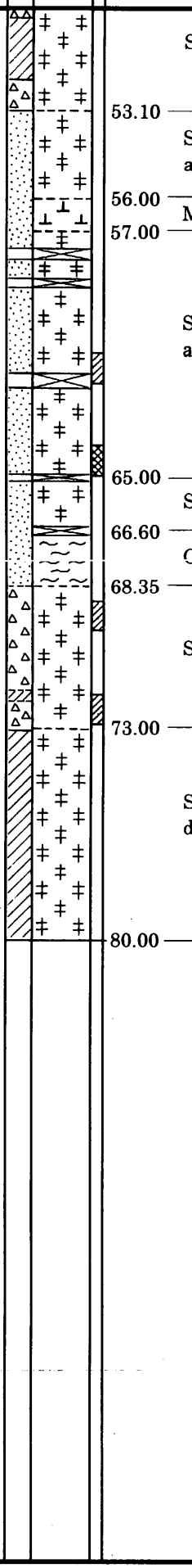
MJVD - 2 (1/2) Depth : 80 m Angle : 90° Sea Level : 835.3 m



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0	Overburden, brown soil	2.53	0.27	53.87	2-1
0.75	Syenite, weathered, blackish grey, included a little white barite and yellow clay	1.96	0.21	65.94	2-2
		2.24	0.23	59.14	2-3
		1.78	0.29	50.14	2-4
	4.25~4.80 weathered rock, yellow	1.10	0.35	33.99	2-5
4.80	Syenite, weathered, pinkish brown	0.75	0.31	6.22	2-6
		0.68	0.21	2.70	2-7
7.00	Syenite, pink	0.88	0.27	7.58	2-8
8.00	Syenite, weathered, blackish grey and pinkish brown	0.87	0.33	3.67	2-9
10		2.32	0.45	30.68	2-10
10.00	Syenite, weathered, white, pale brown and grey	3.43	0.80	77.84	2-11
		5.11	0.97	76.31	2-12
12.00	Syenite, weathered, blackish grey	10.28	0.18	70.36	2-13
13.50	Syenite, weathered, grey, yellow and white mixed, (barite-bastnaesite ore)	7.22	7.32	71.21	2-14
		6.74	16.01	59.65	2-15
	14.95~15.00 fluorite, barite	5.98	20.18	61.69	2-16
	16.00~16.70 bastnaesite>fluorite>barite	10.38	15.88	53.70	2-17
	17.00~18.10 ore, bastnaesite rich, pale yellow	16.41	23.12	51.16	2-18
18.10	Syenite, weathered, dark yellow	2.84	2.05	79.88	2-19
19.10		2.75	3.88	67.30	2-20
20	Syenite, weathered, barite rich, blackish grey	3.46	0.86	84.64	2-21
		3.25	0.74	79.54	2-22
		3.63	2.61	77.50	2-23
	23.90~24.50 barite rich	3.42	0.64	79.54	2-24
	25.00~25.50 barite rich	3.24	0.49	76.31	2-25
		3.84	0.39	78.01	2-26
	Syenite, weathered, barite rich, blackish grey	2.16	2.01	79.88	2-27
		3.71	0.62	69.34	2-28
		3.58	0.49	60.84	2-29
		3.16	0.64	65.43	2-30
30	30.15 Minette	6.27	1.36	57.10	2-31
31.20	Syenite, weathered, blackish grey	1.34	0.60	70.70	2-32
32.30	Minette, weathered, brown	0.77	0.76	20.48	2-33
33.60	Syenite, weathered , grey	1.78	0.97	41.13	2-34
		4.91	0.84	77.33	2-35
35.55	Minette, weathered, dark brown	6.26	1.21	40.28	2-36
		0.67	0.37	4.28	2-37
		0.75	0.92	8.40	2-38
38.80	Syenite, pale grey	2.58	1.81	21.07	2-39
40		5.16	2.22	8.16	2-40
41.00	Syenite, weakly weathered, grey	2.19	1.77	11.17	2-41
		1.69	3.25	14.84	2-42
		0.83	1.11	19.46	2-43
44.00	Limestone, pale grey	0.99	7.71	16.74	2-44
45.50	Syenite, dark grey	0.48	0.78	6.02	2-45
		1.35	0.82	5.37	2-46
		0.58	1.93	15.79	2-47
		3.79	2.32	16.66	2-48
		0.66	0.55	3.52	2-49
50		0.25	0.55	2.24	2-50

1 : 200

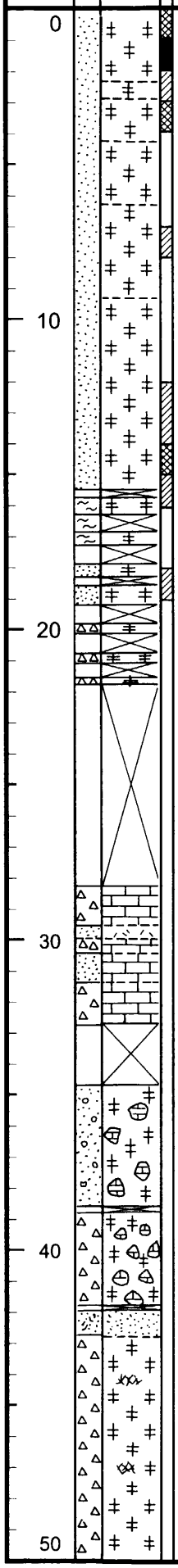
MJVD - 2 (2/2)



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50	Syenite, dark grey	1.31	4.56	15.14	2-51
		1.17	3.90	32.21	2-52
		0.80	1.44	20.73	2-53
53.10					
	Syenite, weathered, mixed color of dark grey, grey and brown	3.64	6.27	32.21	2-54
		2.20	4.32	59.99	2-55
		1.41	2.59	20.65	2-56
56.00					
	Minette contain biotite, weathered, dark brown	0.94	1.75	22.43	2-57
57.00					
		2.50	2.24	27.19	2-58
		2.64	2.94	40.96	2-59
60	Syenite, weathered, mixed color of dark grey, grey and brown	3.96	4.66	44.87	2-60
		2.84	3.21	47.93	2-61
		6.36	3.82	38.75	2-62
		4.87	4.58	46.40	2-63
		4.25	2.16	43.68	2-64
		11.63	5.88	37.73	2-65
65.00					
	Syenite, weathered, dark brown, sand-like	3.06	3.23	45.38	2-66
66.60					
	Clay, white to pink, partly dark grey	2.70	3.14	31.87	2-67
		0.11	0.64	1.02	2-68
68.35					
		1.43	0.80	23.62	2-69
70		5.40	2.32	16.37	2-70
	Syenite, dark grey to grey, partly contain barite	3.35	1.54	25.75	2-71
		1.69	0.86	25.75	2-72
		6.67	1.44	7.94	2-73
73.00					
		3.72	0.80	8.02	2-74
		2.28	0.70	9.57	2-75
	Syenite, weakly weathered, pale grey to dark grey, disseminated barite	1.28	0.51	15.40	2-76
		1.12	1.56	15.52	2-77
		2.47	2.92	25.75	2-78
		0.77	1.36	21.67	2-79
80		1.38	0.86	7.53	2-80
80.00					
90					
100					

1 : 200

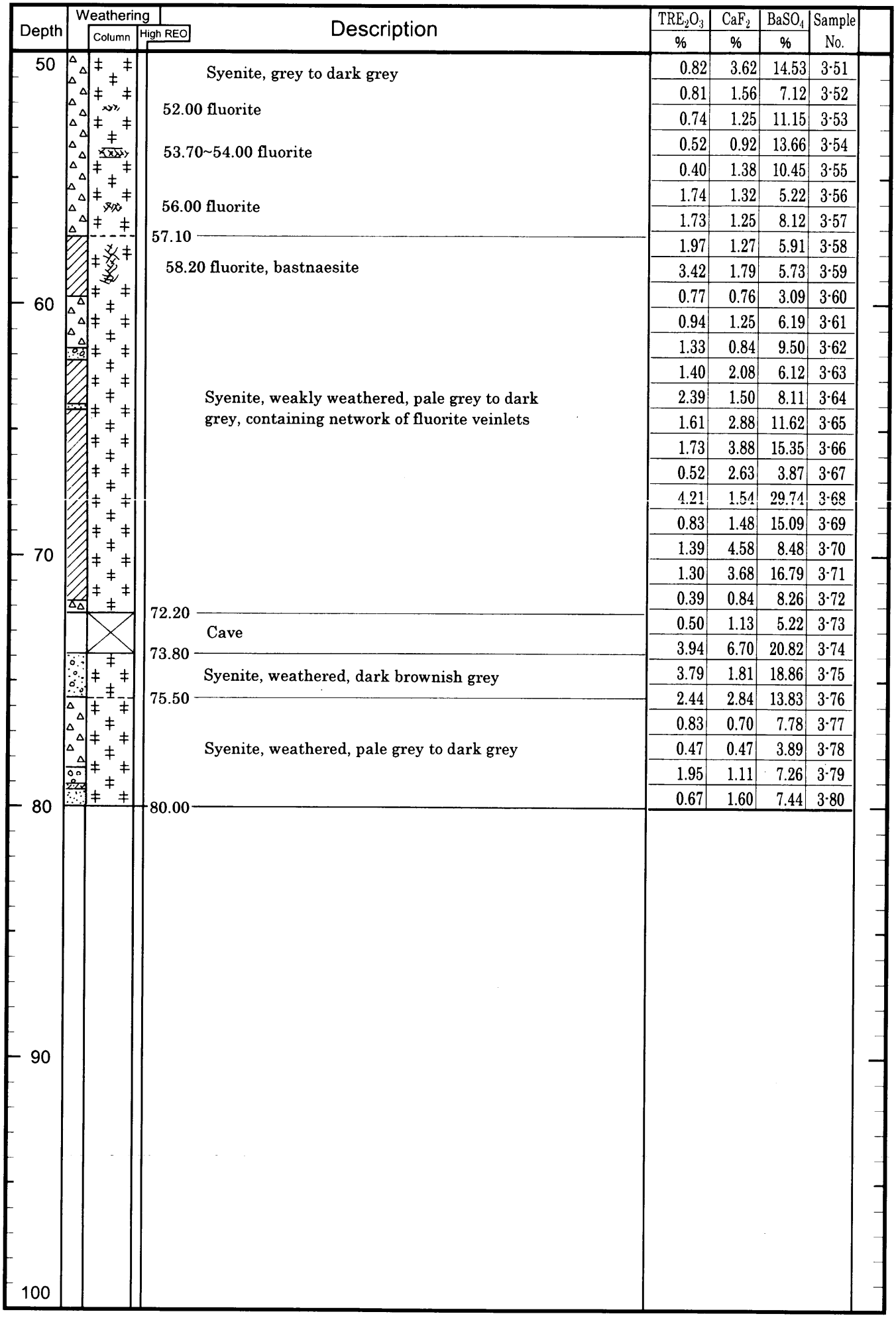
MJVD - 3 (1/2) Depth : 80 m Angle : 90° Sea Level : 845.9 m



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0	Syenite, weathered, blackish grey	10.42	3.02	49.97	3-1
		22.39	5.73	41.13	3-2
2.20	2.20~2.60 Ore, yellowish brown	8.41	2.77	59.65	3-3
	Syenite, weathered, dark grey and brown	11.14	2.98	56.59	3-4
4.00		3.70	0.92	67.47	3-5
	Syenite, weathered, blackish grey	1.99	1.03	68.15	3-6
6.00		2.15	0.72	74.44	3-7
	yellow color rich zone	5.44	0.39	72.23	3-8
		3.22	0.31	76.82	3-9
9.00		3.32	0.27	74.44	3-10
10		4.26	0.68	70.87	3-11
	Syenite, weathered, blackish grey, contining some yellow and white clay	4.93	0.74	68.83	3-12
		5.73	0.62	65.77	3-13
		5.13	2.49	57.27	3-14
		12.16	4.79	42.49	3-15
15.20		5.90	3.99	30.59	3-16
		1.28	1.54	29.40	3-17
		2.98	4.29	45.21	3-18
	Brown clay and many cave	5.23	6.23	36.37	3-19
20		1.37	1.19	35.69	3-20
		1.32	1.11	31.02	3-21
21.70		1.43	1.44	36.54	3-22
		–	–	–	–
		–	–	–	–
	Big cave	–	–	–	–
		–	–	–	–
		–	–	–	–
		–	–	–	–
28.30		0.19	0.29	7.63	3-29
	Limestone	0.97	0.72	4.45	3-30
30	29.50~30.00 weathered rock,dark grey	2.70	0.62	16.69	3-31
30.50	30.00~30.50 limestone	0.70	1.77	3.69	3-32
31.50	Limestone and weathered rock	0.19	0.27	1.84	3-33
32.80	Limestone,grey	–	–	–	–
	Big cave	1.19	1.93	13.77	3-35
34.80		0.66	1.25	9.13	3-36
	Syenite, weathered, brownish grey and dark grey, (breccia of limestone and syenite)	0.63	1.05	10.38	3-37
		1.16	3.00	23.03	3-38
38.75		0.72	2.57	14.51	3-39
	Syenite, weathered, white and dark grey, (breccia of limestone and syenite)	0.39	1.09	7.92	3-40
40		0.20	0.72	3.26	3-41
41.90		0.19	0.43	1.46	3-42
	Syenite, weathered, brown, sandlike	0.45	1.25	10.44	3-43
42.90	Syenite, grey to dark grey	2.44	0.95	5.15	3-44
44.50	barite, fluorite	0.21	0.74	7.77	3-45
		0.23	0.37	7.90	3-46
		0.59	0.86	13.68	3-47
47.00	fluorite, barite	0.49	0.51	6.17	3-48
		1.33	6.16	28.89	3-49
50		1.37	5.96	27.45	3-50

1 : 200

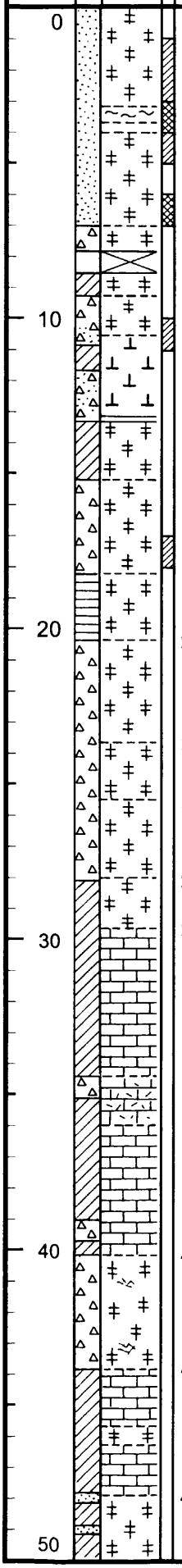
MJVD - 3 (2/2)



TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0.82	3.62	14.53	3-51
0.81	1.56	7.12	3-52
0.74	1.25	11.15	3-53
0.52	0.92	13.66	3-54
0.40	1.38	10.45	3-55
1.74	1.32	5.22	3-56
1.73	1.25	8.12	3-57
1.97	1.27	5.91	3-58
3.42	1.79	5.73	3-59
0.77	0.76	3.09	3-60
0.94	1.25	6.19	3-61
1.33	0.84	9.50	3-62
1.40	2.08	6.12	3-63
2.39	1.50	8.11	3-64
1.61	2.88	11.62	3-65
1.73	3.88	15.35	3-66
0.52	2.63	3.87	3-67
4.21	1.54	29.74	3-68
0.83	1.48	15.09	3-69
1.39	4.58	8.48	3-70
1.30	3.68	16.79	3-71
0.39	0.84	8.26	3-72
0.50	1.13	5.22	3-73
3.94	6.70	20.82	3-74
3.79	1.81	18.86	3-75
2.44	2.84	13.83	3-76
0.83	0.70	7.78	3-77
0.47	0.47	3.89	3-78
1.95	1.11	7.26	3-79
0.67	1.60	7.44	3-80

1 : 200

MJVD - 4 (1/2) Depth : 100 m Angle : 90° Sea Level : 843.2 m



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
	Syenite, weathered, blackish grey, partly yellow	4.90	0.74	72.40	4-1
		6.36	1.09	62.88	4-2
		7.68	1.29	77.16	4-3
3.10	3.10~3.50 brown clay	11.12	1.73	58.12	4-4
3.80	3.50~3.80 yellow bastnaesite	6.24	1.21	62.37	4-5
	Syenite, weathered, blackish grey, partly yellow, containing yellow bastnaesite	4.92	3.66	65.43	4-6
		11.34	4.73	48.95	4-7
6.90	Syenite, weakly weathered	2.69	1.44	36.88	4-8
	7.50~8.20 cave	0.52	1.07	25.32	4-9
9.00	Syenite, weathered	3.59	2.16	23.88	4-10
10.30	Minette, brown, weathered	5.16	2.05	17.59	4-11
		1.64	3.90	8.43	4-12
12.90	Syenite with barite and fluorite	3.68	3.08	6.90	4-13
		2.86	27.02	31.53	4-14
15.00	Syenite, weathered	2.48	15.60	29.49	4-15
		1.34	1.60	7.02	4-16
		1.47	1.09	4.71	4-17
18.00	Syenite, weakly weathered, containing barite	5.82	3.12	14.79	4-18
		2.13	2.84	12.29	4-19
20.20	Syenite, blackish grey	0.99	2.90	17.59	4-20
		1.83	2.73	25.58	4-21
		1.49	1.23	33.82	4-22
23.40	Syenite, dark grey, containing pinkish clay	1.78	1.42	17.59	4-23
		1.13	3.02	6.73	4-24
25.30	Syenite, dark grey	2.72	1.56	22.77	4-25
		3.20	1.11	20.99	4-26
		0.41	0.97	10.84	4-27
28.00	Syenite, weakly weathered, dark grey, containing pinkish clay	0.59	0.58	10.28	4-28
		1.10	0.68	22.01	4-29
29.60	Limestone, white to pale grey	1.48	1.34	26.51	4-30
		0.62	0.49	12.56	4-31
		0.43	0.27	2.75	4-32
		0.33	0.39	8.77	4-33
		0.65	0.45	7.92	4-34
	34.40~36.00 fluorite and barite	1.56	1.03	15.23	4-35
		1.37	1.62	21.50	4-36
		1.33	1.19	12.83	4-37
		0.87	0.68	4.28	4-38
		0.37	0.84	9.43	4-39
		0.28	0.35	3.08	4-40
40.10	41.00 fluorite	2.11	0.90	17.42	4-41
	Syenite, dark grey, containing barite	4.63	1.64	17.84	4-42
	43.10 fluorite	0.91	1.50	4.67	4-43
43.70	Limestone, micro crystalline, white colored	1.36	2.90	22.18	4-44
		0.69	0.72	6.93	4-45
	45.60~46.30 syenite	2.21	2.08	34.16	4-46
		2.31	1.79	13.95	4-47
47.70	Syenite, dark grey, containing pink mineral	1.32	1.32	9.89	4-48
		1.44	1.46	12.70	4-49
		4.07	2.73	9.06	4-50

1 : 200

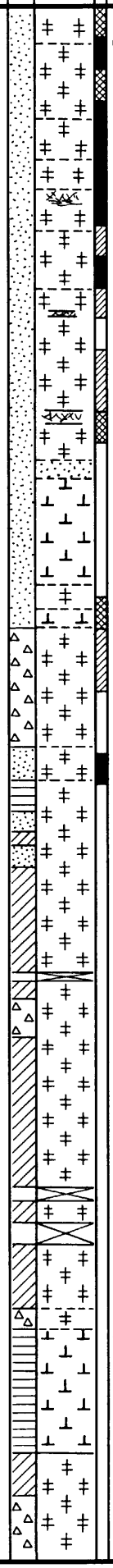
MJVD - 4 (2/2)

Depth	Weathering Column	High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50			50.50~50.80 limestone	1.66	1.03	8.51	4-51
				0.65	0.68	6.70	4-52
				5.98	1.95	15.18	4-53
				3.24	0.99	28.64	4-54
				0.74	0.41	15.04	4-55
			55.00~55.70 syenite, weakly weathered	0.79	0.66	9.89	4-56
				0.95	0.74	11.47	4-57
			57.00~57.60 clay, blackish grey	0.72	1.15	6.10	4-58
				0.22	0.37	4.11	4-59
			59.00	1.10	0.62	6.46	4-60
60				0.74	1.52	5.64	4-61
			Syanite, weakly weathered, grey	0.95	1.27	14.14	4-62
				0.50	1.34	8.53	4-63
				1.59	1.21	7.61	4-64
			64.00~64.70 Syenite, weathered, black	7.97	7.48	28.47	4-65
			64.70~65.70 limestone, grey	3.78	2.28	5.69	4-66
			65.70~66.10 Syenite, weathered, black	1.05	1.27	10.03	4-67
				0.65	1.09	10.88	4-68
				0.38	1.77	8.41	4-69
			69.30~70.00 cave	0.31	0.76	5.80	4-70
70			70.00~70.65 Syenite, weathered,	2.40	2.86	33.23	4-71
			70.65	0.95	2.24	6.63	4-72
			71.35~71.55 Syenite, weathered, black	0.47	0.90	7.75	4-73
				0.73	1.40	14.38	4-74
			Syenite, hard, grey, containing some barite	0.24	2.26	2.41	4-75
				4.03	4.01	6.22	4-76
				1.02	1.93	4.64	4-77
			78.00	0.58	1.32	17.51	4-78
				2.61	2.28	21.67	4-79
			79.40~79.60 fluorite and barite	2.37	6.43	15.09	4-80
80				1.42	2.73	10.55	4-81
			Syenite, dark grey and grey, containing barite, fluorite and bastnaesite	1.24	3.82	14.99	4-82
				1.31	1.83	7.82	4-83
				3.15	1.75	11.03	4-84
				3.90	2.22	9.98	4-85
			85.40	4.61	3.18	5.68	4-86
			86.00~86.50 syenite,grey	8.71	3.84	11.79	4-87
			87.30~87.35 syenite	3.48	5.16	14.38	4-88
			Limestone, dark grey to grey, veinlets of fluorite	0.58	1.73	18.69	4-89
90				0.30	2.01	2.75	4-90
			91.00~91.40 syenite	1.13	3.72	20.31	4-91
			92.00	1.72	1.71	14.36	4-92
				1.52	1.54	10.84	4-93
			Syenite, dark grey and grey, include limeston breccia, network veinlets of fluorite and barite	1.99	7.48	16.67	4-94
				1.34	16.46	16.55	4-95
				4.00	14.03	20.99	4-96
			95.60~96.40 cave	0.76	3.55	17.76	4-97
				4.11	2.28	18.10	4-98
			98.00	1.29	0.80	20.90	4-99
			Limestone, pale grey, fluorite veinlets included				
100			100.00	0.95	1.71	11.78	4-100

1 : 200

MJVD - 5 (1/2)

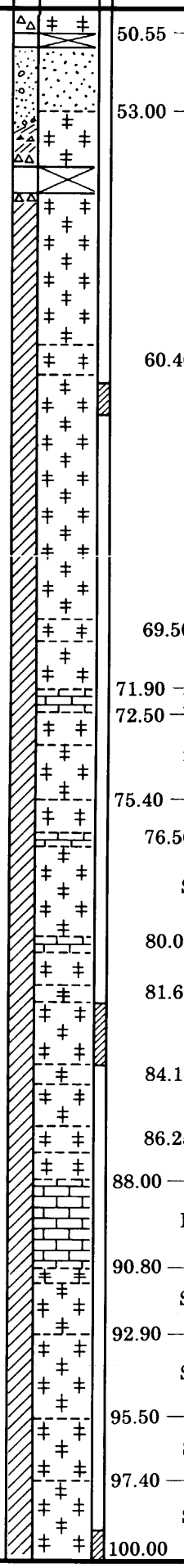
Depth : 100 m **Angle : 90°** **Sea Level : 841.4 m**



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0	Syenite, weathered, blakish grey, contain barite	12.42	1.89	60.50	5-1
0.90	Ore, pale yellow bastnaesite rich	35.26	4.46	37.39	5-2
		14.46	2.24	53.87	5-3
3.30	Syenite, weathered, blakish grey, containing barite	25.54	3.74	57.95	5-4
4.60	Syenite, weathered, pale yellow and pinkish yellow bastnaesite rich zone	16.86	2.47	42.83	5-5
		20.29	2.84	57.44	5-6
		34.88	6.21	37.22	5-7
6.90	Syenite, weathered, blakish grey, containing barite	5.28	16.79	64.58	5-8
8.70	9.65~9.75 bastnaesite	16.92	2.88	64.75	5-9
	Syenite, weathered, blakish grey, containing fluorite and barite	5.17	0.92	75.46	5-10
		3.26	20.75	65.77	5-11
		5.86	0.90	75.12	5-12
	12.70~13.20 bastnaesite, yellow and pink colored	8.72	12.43	64.24	5-13
		10.52	9.68	63.22	5-14
14.30	Sand, pale grey , (secondary sediments?)	3.58	14.92	64.41	5-15
15.00	Minette, weathered, brown to greyish brown, containing biotite	0.84	4.38	16.52	5-16
		0.28	2.34	4.64	5-17
		0.21	3.72	2.19	5-18
18.45	Syenite, weathered, dark brown	3.41	12.25	32.29	5-19
	19.20~19.75 minette	12.51	16.48	20.82	5-20
19.75	Barite, fluorite>>rare earth ore, white and grey	8.50	8.51	15.26	5-21
		7.17	10.54	18.35	5-22
		4.13	15.72	11.74	5-23
23.70	Syenite, weathered, dark brown and grey	3.66	10.40	10.04	5-24
24.80	Baraite -fluorite rich ore, white and grey	15.28	12.55	28.89	5-25
		4.18	16.97	10.94	5-26
		0.88	6.29	31.44	5-27
		0.97	9.53	37.22	5-28
		1.34	10.25	22.52	5-29
		0.69	8.30	14.72	5-30
		0.76	10.68	25.49	5-31
		2.15	10.71	31.61	5-32
		1.01	6.31	17.42	5-33
		0.80	9.70	47.42	5-34
		0.77	8.61	19.03	5-35
		1.80	6.80	12.71	5-36
		1.61	8.40	22.09	5-37
		1.59	4.48	10.54	5-38
		0.57	1.83	15.23	5-39
39.25	cave	0.56	2.57	16.54	5-40
40.00	Barite rich ore, white	0.46	3.06	62.20	5-41
		0.35	1.95	56.08	5-42
42.00	42.00~42.60 contact zone of minette and weathered syenite	1.89	3.70	29.23	5-43
42.60	Minette, weathered, dark brown to greenish brown	0.08	0.58	0.82	5-44
		0.05	0.41	0.78	5-45
		0.05	0.60	0.56	5-46
46.50	Syenite, weathered, pale grey	1.28	6.92	10.59	5-47
		1.49	5.86	13.46	5-48
		1.77	8.01	16.18	5-49
		1.92	11.98	13.80	5-50

1 : 200

MJVD - 5 (2/2)



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50	50.55	2.29	7.01	23.79	5-51
	Sand, dark grey , (secondary sediments?)	3.33	9.27	27.53	5-52
	53.00	2.37	9.82	52.18	5-53
		1.84	4.73	17.34	5-54
		2.29	6.78	20.31	5-55
		3.57	15.25	14.87	5-56
		1.61	21.88	20.48	5-57
	Syenite, weakly weathered, barite and fluorite rich	1.56	12.10	23.45	5-58
		2.11	20.05	24.64	5-59
60		1.14	10.52	19.29	5-60
		1.05	9.02	24.90	5-61
	60.40~61.40 weak mineralization	4.12	15.99	35.18	5-62
		5.89	7.99	19.12	5-63
		2.50	8.86	19.54	5-64
		3.57	10.15	13.38	5-65
		3.62	8.30	16.83	5-66
		4.68	16.56	27.62	5-67
		1.78	16.11	28.64	5-68
		1.56	10.50	25.32	5-69
70	69.50~70.30 weak mineralization	0.79	2.08	7.24	5-70
		2.27	15.95	12.49	5-71
	71.90	3.48	15.41	13.15	5-72
	Limestone	3.17	18.35	18.01	5-73
	72.50	2.26	22.91	27.62	5-74
	fluorite -barite >>bastnaesite ore	1.30	11.86	22.18	5-75
	75.40	1.80	10.27	9.43	5-76
	76.50~77.00 limestone, microcrystalline	1.18	6.84	12.73	5-77
		1.75	10.71	17.67	5-78
	Syenite, weakly weathered, barite and fluorite rich	2.44	9.37	17.08	5-79
80		2.72	7.81	12.92	5-80
	80.00~80.45 limestone, mineralized	3.02	6.80	15.43	5-81
	81.60~82.10 syenite	2.15	6.80	12.42	5-82
		7.18	11.24	32.46	5-83
		5.58	10.54	39.43	5-84
	84.15~84.90 small grain fluorite	1.73	5.16	8.36	5-85
		4.14	12.45	10.35	5-86
	86.25~87.00 syenite , weak mineralization	3.51	11.86	13.70	5-87
	88.00	3.36	7.87	13.89	5-88
	Limestone, pale grey , include fluorite veinlets	0.60	3.33	5.95	5-89
90		1.00	4.19	6.85	5-90
	90.80	3.25	9.27	9.25	5-91
	Syenite, dark brown, weakly mineralization	0.51	10.71	12.56	5-92
	92.90	1.64	6.84	17.08	5-93
	Syenite, gery and pink, fluorite-barite	4.25	5.84	13.41	5-94
		1.59	10.21	21.50	5-95
	95.50	1.41	2.67	7.32	5-96
	Syenite, mineralized barite and fluorite	2.30	4.27	16.21	5-97
	97.40	7.56	3.82	17.84	5-98
	Syenite, fluorite and barite >bastnaesite	4.99	10.46	20.48	5-99
100	100.00	9.32	11.18	17.34	5-100

1 : 200

MJVD - 6 (1/2)　　Depth : 100 m　　Angle : 90°　　Sea Level : 858.5 m

Depth	Weathering Column	Weathering High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0			Overburden, brown soil with clay	1.74	0.21	54.04	6-1
				1.75	0.16	69.34	6-2
			2.15 guradual change	1.85	0.12	67.64	6-3
			Syenite, weathered, yellowish brown, included barite	1.54	0.10	68.32	6-4
				1.52	0.10	74.95	6-5
				1.63	0.16	50.82	6-6
			6.20	1.53	0.21	39.09	6-7
				1.60	0.14	56.59	6-8
				1.17	0.18	57.44	6-9
				1.69	0.10	71.72	6-10
10			Syenite, weathered, blackish grey and yellow to yellowish brown colored, containing barite	2.05	0.10	76.65	6-11
				1.76	0.10	74.27	6-12
				2.60	0.16	50.31	6-13
				2.39	0.14	59.48	6-14
				1.74	0.21	53.02	6-15
				1.56	0.06	76.48	6-16
				2.56	0.12	63.22	6-17
				2.48	0.14	65.43	6-18
			18.00	2.36	0.25	47.59	6-19
			Syenite, weathered, yellowish brown and grey	1.32	0.31	24.22	6-20
20			19.40 Minette, weathered, yellowish brown	1.44	0.27	28.72	6-21
			21.75 gradual change	1.43	0.21	31.61	6-22
				1.66	0.14	64.58	6-23
			Syenite, weathered, blackish grey and brownish yellow	3.29	0.18	52.52	6-24
				2.66	0.25	58.80	6-25
			25.00	2.01	0.25	35.18	6-26
				2.80	0.27	52.85	6-27
				2.82	0.16	62.03	6-28
			Syenite, weathered, blackish grey, containing white barite and bastnaesite	2.63	0.16	60.50	6-29
30				2.32	0.14	57.61	6-30
				4.71	0.18	58.29	6-31
				2.62	0.39	53.19	6-32
				1.93	0.27	35.86	6-33
			34.00~34.70 dark brown and white mixed	4.80	0.55	40.45	6-34
			34.70	1.53	0.23	24.05	6-35
				2.64	0.33	48.78	6-36
			Syenite, weathered, blackish grey, containing many barite	2.12	0.18	72.23	6-37
				2.33	0.33	42.49	6-38
				2.44	0.39	58.12	6-39
			36.70~41.20 barite rich zone	3.94	0.53	54.72	6-40
40				2.29	0.47	64.58	6-41
				2.14	0.84	54.38	6-42
			42.00	1.55	1.25	33.57	6-43
			Syenite, weathered, blackish grey, yellow, brown and white colored	2.38	1.29	45.89	6-44
				1.72	0.25	26.09	6-45
				1.26	0.35	24.05	6-46
				1.50	1.52	15.26	6-47
			47.50	8.37	1.46	59.82	6-48
			Syenite, weathered, blackish grey, containing barite	1.92	0.60	56.08	6-49
50			49.70 Syenite, weathered, multicolored , containing barite	3.82	1.60	35.18	6-50

1 : 200

MJVD - 6 (2/2)

Depth	Weathering Column	Weathering High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50				2.71	1.05	19.12	6-51
			51.00	3.90	0.74	56.76	6-52
			52.30~52.40 barite	1.90	0.47	65.94	6-53
			53.30~53.90 yellow colored	3.07	0.39	52.35	6-54
				2.79	1.34	48.44	6-55
			Syenite, weathered, blackish grey, containing many barite	2.17	0.62	46.57	6-56
				2.07	1.21	54.21	6-57
			57.00~59.50 barite rich zone	2.26	0.70	63.90	6-58
				1.65	1.34	69.34	6-59
60				2.34	0.82	55.23	6-60
			60.00	1.11	0.39	22.01	6-61
			Clay, reddish brown, fault clay?	1.70	0.37	46.91	6-62
			61.00 Syenite, weathered, multicolored	3.31	0.51	50.65	6-63
			62.00	6.11	1.44	29.15	6-64
			Syenite, weathered, pale yellow and pink, containing barite and bastnaesite	5.52	7.91	39.94	6-65
			65.00	7.29	15.04	55.06	6-66
			Syenite, weathered, blackish grey, partly containing fluorite and barite	6.85	18.25	57.61	6-67
				4.52	2.71	69.51	6-68
			68.00 gradual change	4.34	0.72	72.40	6-69
			68.00~68.70 barite rich	21.37	15.18	42.32	6-70
70				8.68	17.69	42.32	6-71
			Syenite, weathered, mainly yellow and pale yellow, bastnaesite - barite - fluorite ore	11.41	31.95	44.02	6-72
				10.36	17.22	37.22	6-73
				28.60	15.39	38.07	6-74
			74.40	6.29	18.02	51.50	6-75
			Syenite, weathered, blackish grey, containing barite and fluorite	8.36	9.33	33.40	6-76
			76.30	27.18	11.57	27.28	6-77
				35.06	21.37	22.26	6-78
			Syenite, weathered, mainly yellow, bastnaesite- barite - fluorite ore	32.64	21.88	25.41	6-79
80				23.75	22.60	32.97	6-80
				22.10	16.50	27.28	6-81
			82.00	42.75	12.68	27.70	6-82
			Syenite, weathered, blackish grey, containing barite and fluorite	4.32	18.00	48.27	6-83
				2.26	34.01	38.24	6-84
				4.36	29.59	47.93	6-85
				11.68	24.97	37.22	6-86
			86.10	5.02	15.33	39.26	6-87
			Big cave	–	–	–	–
			88.90	4.90	8.71	30.08	6-89
90			Syenite, weathered, blackish grey, containing barite	4.07	15.06	38.92	6-90
				1.85	25.58	47.42	6-91
			91.50	2.31	12.43	36.88	6-92
			Syenite, weathered, dark brown, containing fluorite veinlets	1.69	28.66	32.55	6-93
				1.58	46.03	25.15	6-94
			95.00	2.69	61.44	20.48	6-95
			Syenite, weathered, pale grey, containing many veinlets and dissemination of fluorite	1.85	39.35	37.56	6-96
				1.10	60.21	24.47	6-97
				1.73	57.53	28.38	6-98
			98.10	0.73	65.55	12.66	6-99
100			Syenite, weathered, dark grey, containing fluorite	2.28	48.90	30.08	6-100
			100.00				

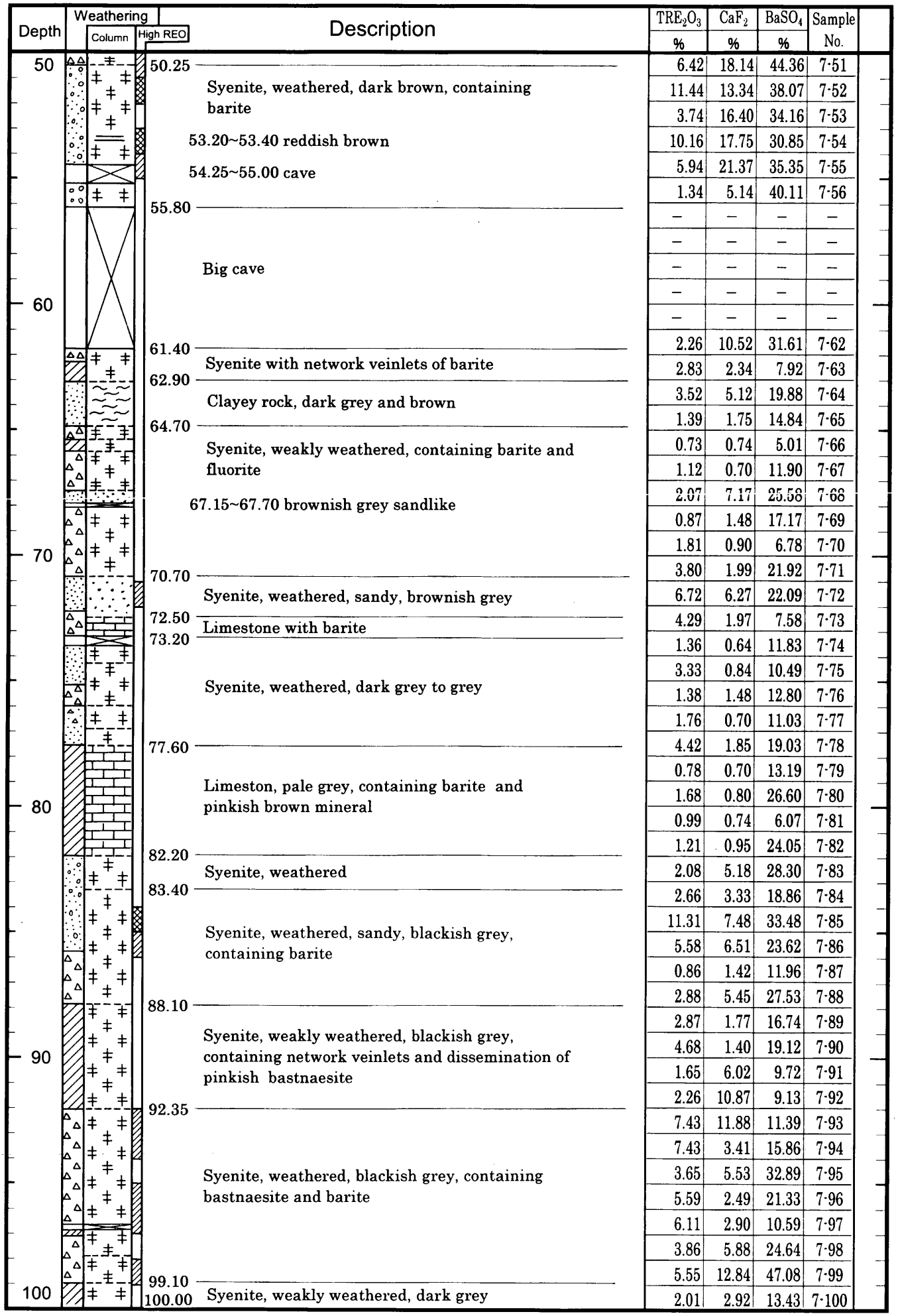
1 : 200

MJVD - 7 (1/2) Depth : 100 m Angle : 90° Sea Level : 851.8 m

Depth	Weathering Column	Weathering High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0			Overburden, dark brown soil	2.09	0.39	12.73	7-1
			1.50 gradual change	2.18	0.33	14.50	7-2
			Syenite, weathered, dark brown	2.05	0.25	55.91	7-3
				2.86	0.29	65.43	7-4
			4.40	1.78	0.51	43.17	7-5
			Minette, weathered, brown, containing green mica	1.24	0.62	2.26	7-6
				0.88	0.66	3.76	7-7
			7.20~7.60 reddish brown	0.76	0.53	4.45	7-8
			8.20	5.43	0.66	63.39	7-9
10			Syenite, weathered, black and dark grey, partly brown, containing white barite and bastnaesite	12.63	1.54	47.25	7-10
				1.49	1.01	14.22	7-11
				3.22	3.23	44.02	7-12
			12.00 Argillized rock 12.70	3.17	5.10	54.55	7-13
			Syenite, weathered, blackish grey, containing white clay and barite	4.88	10.36	37.22	7-14
				7.16	5.24	57.27	7-15
				10.78	6.47	41.47	7-16
			16.70 Limestone, grey, containing veinlets of barite 17.20	1.85	2.73	68.32	7-17
				8.92	5.26	46.06	7-18
				13.03	11.05	39.77	7-19
20			Syenite, weathered, blackish grey, containing pale yellow bastnaesite and small breccia of barite	13.95	8.49	38.75	7-20
				4.44	17.47	45.89	7-21
				4.83	9.39	44.70	7-22
			22.70	9.83	7.89	28.38	7-23
			Altered syenite, blackish grey, containing network veinlets and dissemination of barite	6.22	3.35	9.69	7-24
				2.69	2.08	11.01	7-25
				4.92	5.75	17.42	7-26
			26.30	2.98	17.10	42.66	7-27
			Syenite, weathered, grey, containing barite and fluorite	2.47	21.06	52.35	7-28
			28.65	4.70	9.14	61.86	7-29
30				6.10	10.13	38.07	7-30
				5.35	11.73	40.11	7-31
			Syenite, weathered, blackish grey, containing fluorite and barite	4.81	11.63	43.17	7-32
				6.12	12.21	49.80	7-33
				4.98	14.20	47.93	7-34
			35.00	8.13	9.14	42.32	7-35
			Syenite, weakly weathered, dark gery, containing barite and fluorite	2.47	9.41	31.61	7-36
				1.44	4.99	15.04	7-37
				0.62	1.62	4.67	7-38
			38.45 Cave 39.00	0.20	0.99	2.86	7-39
40			Syenite, weathered, blakish grey, including small breccia of barite and fluorite	15.76	13.87	43.85	7-40
				16.16	15.60	43.34	7-41
				14.01	3.14	54.89	7-42
			43.10 gradual change	11.73	2.30	57.61	7-43
				19.83	2.30	47.93	7-44
			44.70~45.55 bastnaesite rich, grey and brown	24.37	2.82	41.47	7-45
			Syenite, weathered, grey to dark grey, containing bastnaesite	20.64	3.47	42.49	7-46
				11.56	4.25	47.93	7-47
			47.15	2.22	2.88	10.93	7-48
			Syenite, weathered, yellow, brown and grey, containing fluorite and barite	8.73	14.34	37.05	7-49
50				4.78	25.89	48.10	7-50

1 : 200

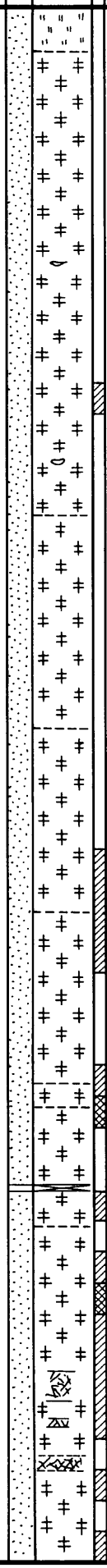
MJVD - 7 (2/2)



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50	50.25	6.42	18.14	44.36	7-51
	Syenite, weathered, dark brown, containing barite	11.44	13.34	38.07	7-52
		3.74	16.40	34.16	7-53
	53.20~53.40 reddish brown	10.16	17.75	30.85	7-54
	54.25~55.00 cave	5.94	21.37	35.35	7-55
		1.34	5.14	40.11	7-56
	55.80	–	–	–	–
		–	–	–	–
	Big cave	–	–	–	–
60		–	–	–	–
		–	–	–	–
	61.40	2.26	10.52	31.61	7-62
	Syenite with network veinlets of barite	2.83	2.34	7.92	7-63
	62.90	3.52	5.12	19.88	7-64
	Clayey rock, dark grey and brown	1.39	1.75	14.84	7-65
	64.70	0.73	0.74	5.01	7-66
	Syenite, weakly weathered, containing barite and fluorite	1.12	0.70	11.90	7-67
		2.07	7.17	25.58	7-68
	67.15~67.70 brownish grey sandlike	0.87	1.48	17.17	7-69
70		1.81	0.90	6.78	7-70
	70.70	3.80	1.99	21.92	7-71
	Syenite, weathered, sandy, brownish grey	6.72	6.27	22.09	7-72
	72.50	4.29	1.97	7.58	7-73
	Limestone with barite	1.36	0.64	11.83	7-74
	73.20	3.33	0.84	10.49	7-75
	Syenite, weathered, dark grey to grey	1.38	1.48	12.80	7-76
		1.76	0.70	11.03	7-77
	77.60	4.42	1.85	19.03	7-78
		0.78	0.70	13.19	7-79
	Limeston, pale grey, containing barite and pinkish brown mineral	1.68	0.80	26.60	7-80
80		0.99	0.74	6.07	7-81
		1.21	0.95	24.05	7-82
	82.20	2.08	5.18	28.30	7-83
	Syenite, weathered	2.66	3.33	18.86	7-84
	83.40	11.31	7.48	33.48	7-85
	Syenite, weathered, sandy, blackish grey, containing barite	5.58	6.51	23.62	7-86
		0.86	1.42	11.96	7-87
	88.10	2.88	5.45	27.53	7-88
		2.87	1.77	16.74	7-89
	Syenite, weakly weathered, blackish grey, containing network veinlets and dissemination of pinkish bastnaesite	4.68	1.40	19.12	7-90
90		1.65	6.02	9.72	7-91
		2.26	10.87	9.13	7-92
	92.35	7.43	11.88	11.39	7-93
		7.43	3.41	15.86	7-94
	Syenite, weathered, blackish grey, containing bastnaesite and barite	3.65	5.53	32.89	7-95
		5.59	2.49	21.33	7-96
		6.11	2.90	10.59	7-97
		3.86	5.88	24.64	7-98
	99.10	5.55	12.84	47.08	7-99
100	100.00 Syenite, weakly weathered, dark grey	2.01	2.92	13.43	7-100

1 : 200

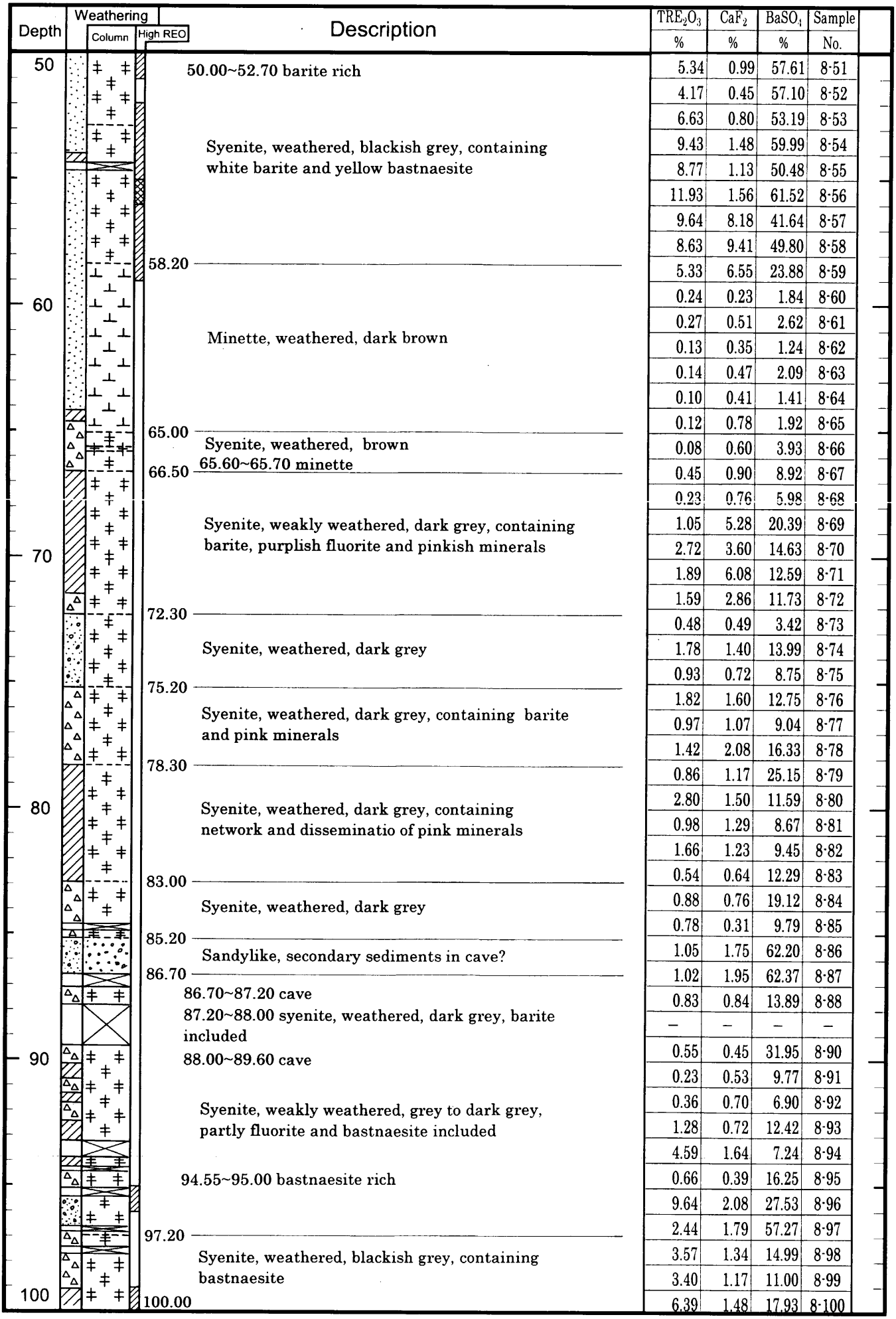
MJVD - 8 (1/2) Depth : 100 m Angle : 90° Sea Level : 858.8 m



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
	Overburden, pale brown soil	1.60	0.31	25.32	8-01
1.30		1.40	0.21	50.31	8-02
		1.26	0.29	46.23	8-03
	Syenite, weathered, blackish grey and dark brown, containing barite	1.59	0.21	46.23	8-04
		1.33	0.21	54.38	8-05
		1.61	0.16	51.50	8-06
		2.24	0.21	54.72	8-07
		2.88	0.21	55.40	8-08
	8.30 barite (width 10 cm)	2.63	0.25	51.16	8-09
		2.56	0.35	37.90	8-10
		2.12	0.25	43.00	8-11
		2.43	0.16	50.65	8-12
		7.81	1.05	60.50	8-13
		1.04	0.25	70.87	8-14
	14.40 barite (width 10 cm)	1.37	0.53	70.36	8-15
		4.11	0.66	64.75	8-16
16.20		0.76	0.16	79.03	8-17
		–	–	–	–
	Syenite, weathered, grey to pale grey, containing many white barite	0.37	0.06	81.07	8-19
		0.64	0.84	85.83	8-20
		1.00	13.81	61.69	8-21
	22.00~23.15 barite rich	1.21	5.32	70.53	8-22
		1.05	0.21	75.80	8-23
23.15		4.11	0.51	62.20	8-24
		4.52	0.58	43.85	8-25
	Syenite, weathered, yellow and dark grey, containing bastnaesite	4.14	0.58	62.88	8-26
		4.73	0.74	71.04	8-27
		5.92	0.82	67.13	8-28
29.20		6.48	0.78	70.02	8-29
		6.20	0.64	76.31	8-30
	Syenite, weathered, dark grey to grey, containing barite and bastnaesite	6.23	0.53	76.14	8-31
		3.98	0.08	73.42	8-32
		3.54	0.08	77.16	8-33
		4.87	0.06	69.51	8-34
34.80	Syenite, weathered, pale yellow, containing many bastnaesite	5.21	0.41	72.40	8-35
35.40		11.65	1.34	67.64	8-36
	Syenite, weathered, blackish grey and pale grey	4.31	0.08	71.89	8-37
		4.90	0.25	71.89	8-38
38.15	Syenite, weathered, yellow>dark grey mixed colors	7.23	1.03	64.75	8-39
39.30		1.37	0.16	65.77	8-40
	Syenite, weathered, blackish grey, containing white barite and yellow bastnaesite	8.80	1.32	64.24	8-41
		11.11	1.48	46.40	8-42
		8.37	1.01	53.70	8-43
	44.00~45.00 barite rich	9.67	1.11	52.52	8-44
	45.50~45.80 barite rich	7.15	0.90	61.01	8-45
		7.00	2.84	57.10	8-46
	46.70~47.35 pale yellow bastnaesite	4.75	14.16	48.95	8-47
		5.20	4.32	66.11	8-48
		4.18	1.15	67.47	8-49
		6.41	1.25	56.93	8-50

1 : 200

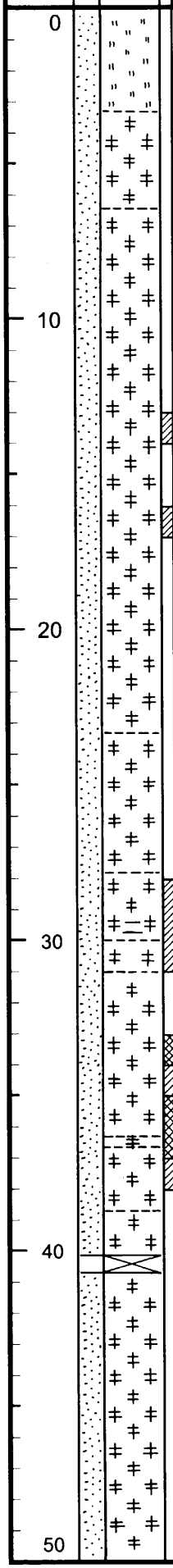
MJVD - 8 (2/2)



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50	50.00~52.70 barite rich	5.34	0.99	57.61	8-51
		4.17	0.45	57.10	8-52
		6.63	0.80	53.19	8-53
	Syenite, weathered, blackish grey, containing white barite and yellow bastnaesite	9.43	1.48	59.99	8-54
		8.77	1.13	50.48	8-55
		11.93	1.56	61.52	8-56
		9.64	8.18	41.64	8-57
		8.63	9.41	49.80	8-58
	58.20	5.33	6.55	23.88	8-59
60		0.24	0.23	1.84	8-60
		0.27	0.51	2.62	8-61
	Minette, weathered, dark brown	0.13	0.35	1.24	8-62
		0.14	0.47	2.09	8-63
		0.10	0.41	1.41	8-64
	65.00	0.12	0.78	1.92	8-65
	Syenite, weathered, brown	0.08	0.60	3.93	8-66
	65.60~65.70 minette 66.50	0.45	0.90	8.92	8-67
		0.23	0.76	5.98	8-68
	Syenite, weakly weathered, dark grey, containing barite, purplish fluorite and pinkish minerals	1.05	5.28	20.39	8-69
70		2.72	3.60	14.63	8-70
		1.89	6.08	12.59	8-71
		1.59	2.86	11.73	8-72
	72.30	0.48	0.49	3.42	8-73
	Syenite, weathered, dark grey	1.78	1.40	13.99	8-74
		0.93	0.72	8.75	8-75
	75.20	1.82	1.60	12.75	8-76
	Syenite, weathered, dark grey, containing barite and pink minerals	0.97	1.07	9.04	8-77
		1.42	2.08	16.33	8-78
	78.30	0.86	1.17	25.15	8-79
80		2.80	1.50	11.59	8-80
	Syenite, weathered, dark grey, containing network and disseminatio of pink minerals	0.98	1.29	8.67	8-81
		1.66	1.23	9.45	8-82
	83.00	0.54	0.64	12.29	8-83
	Syenite, weathered, dark grey	0.88	0.76	19.12	8-84
		0.78	0.31	9.79	8-85
	85.20	1.05	1.75	62.20	8-86
	Sandylike, secondary sediments in cave?	1.02	1.95	62.37	8-87
	86.70	0.83	0.84	13.89	8-88
	86.70~87.20 cave	–	–	–	–
	87.20~88.00 syenite, weathered, dark grey, barite included	0.55	0.45	31.95	8-90
90	88.00~89.60 cave	0.23	0.53	9.77	8-91
		0.36	0.70	6.90	8-92
	Syenite, weakly weathered, grey to dark grey, partly fluorite and bastnaesite included	1.28	0.72	12.42	8-93
		4.59	1.64	7.24	8-94
	94.55~95.00 bastnaesite rich	0.66	0.39	16.25	8-95
		9.64	2.08	27.53	8-96
	97.20	2.44	1.79	57.27	8-97
	Syenite, weathered, blackish grey, containing bastnaesite	3.57	1.34	14.99	8-98
		3.40	1.17	11.00	8-99
100	100.00	6.39	1.48	17.93	8-100

1 : 200

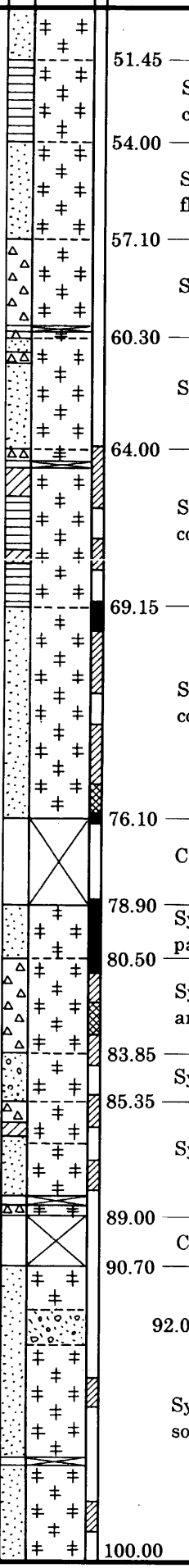
MJVD - 9 (1/2) Depth : 100 m Angle : 90° Sea Level : 864.5 m



Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
Overburden, pale brown soil	0.97	0.35	1.60	9-01
	1.02	0.37	1.26	9-02
	1.06	0.39	5.74	9-03
3.00 gradual change	1.05	0.25	16.20	9-04
Syenite, weathered, dark brown, containing small breccia of barite	1.43	0.33	17.08	9-05
	1.63	0.16	51.67	9-06
6.20 gradual change	0.69	0.06	77.33	9-07
	0.96	0.08	69.17	9-08
	1.57	0.16	61.01	9-09
	1.97	0.23	52.85	9-10
Syenite, weathered, blackish grey, containing barite	2.27	0.47	22.43	9-11
	1.76	0.55	25.49	9-12
	2.67	0.72	29.49	9-13
	5.46	0.95	30.42	9-14
	2.64	0.39	59.99	9-15
	4.94	0.72	42.66	9-16
	9.35	1.50	29.57	9-17
	2.78	0.49	37.05	9-18
	3.79	0.70	37.05	9-19
	2.82	0.68	30.85	9-20
	1.92	0.58	50.99	9-21
	1.53	0.27	68.83	9-22
	1.61	0.25	63.22	9-23
23.20 gradual change	2.66	0.49	57.61	9-24
Syenite, weathered, blackish grey, containing patches of yellow bastnaesite	3.15	0.53	40.45	9-25
	2.08	0.33	48.61	9-26
	2.71	0.41	60.16	9-27
27.70	4.30	0.72	47.76	9-28
Syenite, weathered, yellow bastnaesite >>fluorite	7.06	1.09	58.80	9-29
29.50~29.85 fluorite veinlets	9.81	11.24	52.68	9-30
30.00 Syenite, weathered, black and yellow, bastnaesite rich	7.81	12.16	55.23	9-31
31.00	3.23	16.13	54.55	9-32
	3.06	24.35	51.50	9-33
Syenite, weathered, pale grey and purplish grey, containing fluirute	12.33	22.91	34.50	9-34
	5.69	23.94	47.25	9-35
	13.62	23.42	45.04	9-36
36.40~36.75 yellow bastnaesite rich	13.64	16.85	43.85	9-37
	7.05	26.82	44.02	9-38
38.85	3.34	14.20	55.23	9-39
	2.90	17.51	50.99	9-40
	1.29	11.10	59.99	9-41
	1.08	18.80	57.27	9-42
Syenite, weathered, blackish grey, containing some white barite	1.84	31.75	45.38	9-43
	3.64	15.66	57.27	9-44
	4.87	14.94	58.63	9-45
	2.79	33.39	39.60	9-46
	2.72	35.55	37.39	9-47
	1.97	36.99	32.38	9-48
	1.02	45.21	29.23	9-49
	2.99	33.29	29.66	9-50

1 : 200

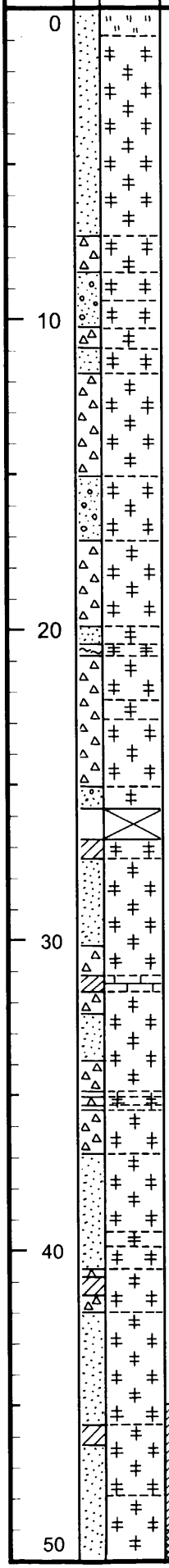
MJVD - 9 (2/2)



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50		4.60	28.25	31.78	9-51
	51.45	1.03	9.55	16.13	9-52
	Syenite, weathered, pale grey and brown, containing barite and fluirute	0.87	4.64	16.23	9-53
		1.12	29.38	17.34	9-54
	54.00	0.77	50.14	14.04	9-55
	Syenite, weathered, pale grey, containing many fluirute	0.76	9.88	15.26	9-56
		0.44	27.84	9.23	9-57
	57.10	0.52	16.19	16.91	9-58
	Syenite, weakly weathered, pale grey	0.52	16.32	16.67	9-59
60		1.05	8.20	4.13	9-60
	60.30	1.35	23.84	4.50	9-61
	Syenite, weathered, blackish grey	4.18	23.53	16.69	9-62
		3.36	26.92	13.09	9-63
	64.00	4.50	18.68	12.70	9-64
	Syenite, weathered, weakly mineralization containing veinlets and dissemination of fluirute	7.95	16.87	10.01	9-65
		5.03	4.13	5.83	9-66
		2.46	5.40	4.79	9-67
		6.73	8.34	8.26	9-68
	69.15	1.89	12.21	18.10	9-69
70		29.69	10.29	17.42	9-70
	Syenite, weathered,white and purplish grey, containing fluirute	5.22	26.51	40.45	9-71
		6.89	29.18	25.07	9-72
		3.56	25.99	37.73	9-73
		5.71	18.84	34.67	9-74
		5.02	35.03	39.09	9-75
	76.10	11.24	31.34	30.25	9-76
	Cave	30.66	13.07	17.93	9-77
		–	–	–	–
	78.90	32.66	13.29	17.67	9-79
	Syenite, weathered, dark brown, containing white patches of barite	30.91	13.34	16.91	9-80
80	80.50	25.37	9.25	13.70	9-81
	Syenite, weathered, dark grey, containing fluirute and barite	6.53	8.49	9.86	9-82
		12.76	9.23	12.80	9-83
	83.85	5.41	22.60	9.89	9-84
	Syenite, weathered, dark grey	2.26	17.10	28.04	9-85
	85.35	7.91	9.78	29.06	9-86
	Syenite, weathered, pale and dark brown	2.73	8.65	21.41	9-87
		5.58	26.40	32.55	9-88
	89.00	2.06	15.06	10.42	9-89
90	Cave	–	–	–	–
	90.70	2.05	42.12	11.13	9-91
	92.05~93.20 sandylike	3.53	34.93	18.61	9-92
		1.33	31.13	32.12	9-93
		1.73	15.97	17.76	9-94
	Syenite, weathered, blackish grey, containing some mineralization of rare earth	8.60	24.66	28.55	9-95
		3.08	33.80	41.64	9-96
		3.81	9.92	59.99	9-97
		3.95	9.70	57.78	9-98
		5.00	16.71	52.35	9-99
100	100.00	4.91	17.67	43.17	9-100

1 : 200

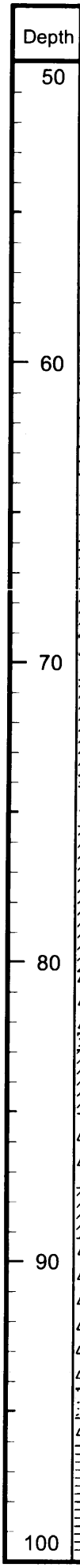
MJVD - 10 (1/2)　　Depth : 100 m　　Angle : 90°　　Sea Level : 874.6 m



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0	Overburden, pale brown soil	1.30	0.64	2.89	10-1
0.75		1.57	0.66	19.20	10-2
		1.53	0.43	37.90	10-3
	Syenite, weathered, blackish grey and dark brown	1.31	0.41	47.76	10-4
		0.79	0.23	55.23	10-5
		2.31	0.62	48.10	10-6
		1.75	0.39	63.39	10-7
7.20		0.67	0.37	30.42	10-8
	Syenite, weathered, grey, containing spotted barite	0.61	0.68	19.29	10-9
	8.35~8.50 black	0.49	0.37	33.14	10-10
10	8.50~9.20 barite rich	0.48	0.33	15.86	10-11
	10.10~10.70 barite rich	0.48	0.72	18.44	10-12
11.60		0.48	0.72	24.47	10-13
	Syenite, weathered, white and partly brown, containing veinlets of barite	0.28	1.32	13.68	10-14
		0.32	0.78	15.55	10-15
15.00		0.84	0.62	14.75	10-16
	Syenite, weathered, dark brown	0.47	0.51	17.08	10-17
17.00		0.31	0.74	17.67	10-18
	Syenite, weathered, white and pale brown, containing barite	0.36	0.78	14.33	10-19
		0.29	0.49	14.41	10-20
19.90		0.37	1.27	17.84	10-21
	Syenite, weathered, purplish grey, containing fluorite and barite	0.31	1.38	10.40	10-22
20	20.40~20.70 brown clay	0.32	0.78	62.71	10-23
	22.30~22.90 barite	0.40	0.37	20.31	10-24
22.90		0.30	0.49	19.97	10-25
	Syenite, weathered, darty brown, containing barite	0.64	0.62	16.33	10-26
	25.50~25.85 grey colored	0.28	0.31	58.63	10-27
25.85		1.35	0.74	16.08	10-28
	Cave	1.18	0.78	26.34	10-29
26.80		0.92	0.60	20.73	10-30
	26.80~27.35 barite	0.56	0.37	14.45	10-31
	Syenite, weathered, purplish grey to pale grey, containing fluorite and barite	0.27	0.29	9.42	10-32
30		0.30	0.45	25.15	10-33
	31.25~31.85 white limestone	0.54	0.37	36.03	10-34
		0.12	0.12	1.90	10-35
	35.05~35.20 barite	0.05	0.14	0.68	10-36
	35.50~35.65 barite	0.22	0.51	8.02	10-37
37.00		1.16	0.37	25.24	10-38
	Syenite, weathered, brown and dark brown	0.39	0.23	10.96	10-39
	39.60~40.00 pale grey	0.35	0.18	9.04	10-40
40		0.49	0.23	15.55	10-41
40.70	Syenite, weakly weathered	0.32	0.14	8.14	10-42
42.15		1.93	0.64	26.94	10-43
	Syenite, weathered, dark grey, brown and dark brown	2.61	0.82	27.62	10-44
		4.09	0.99	31.70	10-45
45.90		6.75	2.82	32.21	10-46
	Syenite, weathered, white color, containing bastnaesite and partly barite	8.06	7.71	19.63	10-47
48.00		5.83	11.71	22.18	10-48
	Syenite, strongly altered, contaiming fluorite, bastnaesite and barite	7.44	16.36	37.90	10-49
50		10.25	29.38	27.62	10-50

1 : 200

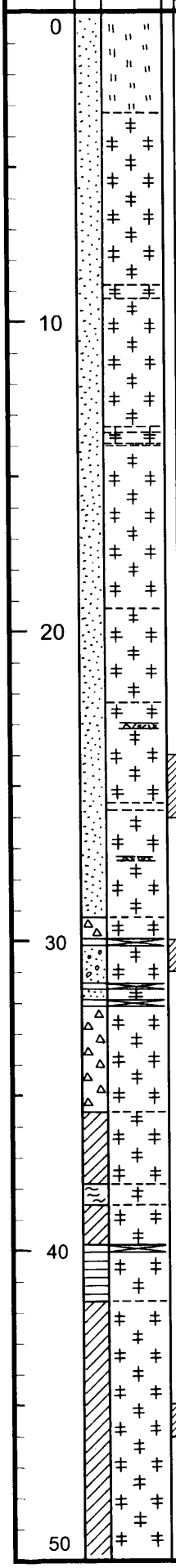
MJVD - 10 (2/2)



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
	Syenite, strongly altered, containing fluorite, bastnaesite and barite	15.53	33.70	29.23	10-51
		16.33	18.64	19.20	10-52
		17.96	9.53	12.22	10-53
	52.65~53.50 cave	21.17	15.06	18.27	10-54
53.50		26.77	14.67	15.94	10-55
	Syenite, strongly altered, dark brown	17.02	21.47	25.41	10-56
		19.41	14.53	25.32	10-57
	56.40~57.20 cave	7.50	29.38	28.30	10-58
	58.00~58.50 pale grey	22.51	31.44	16.89	10-59
	58.70~59.30 cave	35.85	16.99	17.76	10-60
59.30		28.83	21.58	18.35	10-61
	60.45~61.00 cave	40.14	11.30	17.93	10-62
	Syenite, strongly altered, dark grey, containing bastnaesite and fluorite	20.26	17.14	34.16	10-63
62.70		11.09	14.08	37.39	10-64
	Syenite, strongly altered, black and white, containing bastnaesite, barite and fluorite	7.38	12.31	38.24	10-65
64.50		3.61	7.56	42.66	10-66
	Syenite, weathered, blackish brown	3.87	9.02	23.54	10-67
66.30		4.66	8.51	16.49	10-68
	Syenite, weakly weathered, blackish brown, brecciated	6.86	9.47	19.54	10-69
69.00		5.58	12.74	34.50	10-70
	Syenite, strongly altered, containing bastnaesite and fluorite	12.45	8.42	28.98	10-71
70.40		14.99	9.62	23.03	10-72
	Syenite, weakly weathered, white and grey, containing barite and fluorite	19.87	7.34	12.15	10-73
72.10		9.56	12.41	29.15	10-74
	73.80~74.00 bastonaesite rich	9.32	13.77	19.46	10-75
		0.81	4.11	7.51	10-76
	Syenite, strongly altered, white, yellow and black mixed, containing barite and fluorite	1.24	5.03	20.99	10-77
		0.60	3.12	13.34	10-78
		5.83	23.22	28.98	10-79
		6.59	15.08	26.34	10-80
80.30		1.42	6.76	17.93	10-81
		1.66	5.45	14.50	10-82
		3.05	11.12	14.29	10-83
	Syenite, weakly weathered, brown and grey, containing barite	1.33	8.49	45.38	10-84
		1.32	5.14	35.01	10-85
		3.88	9.04	31.36	10-86
		2.00	3.95	20.48	10-87
87.90		1.39	2.98	7.58	10-88
	Limestone, white, containing fluorite	1.37	3.78	12.85	10-89
89.30		4.11	2.75	25.24	10-90
		14.60	15.92	12.90	10-91
		6.01	36.37	26.94	10-92
	Syenite, weathered, containing bastnaesite, fluorite and barite	14.63	24.14	10.74	10-93
		7.04	42.12	17.34	10-94
		16.21	14.77	10.08	10-95
96.30		6.98	29.49	17.34	10-96
		2.53	49.52	26.51	10-97
	Syenite, weakly weathered, containing fluorite and barite	2.47	71.51	28.81	10-98
		2.70	35.86	28.47	10-99
100.00		5.42	26.61	21.92	10-100

1 : 200

MJVD - 11 (1/2) Depth : 100 m Angle : 90° Sea Level : 848.5 m



Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
Overburden, brown soil with some breccia of barite	1.57	0.23	50.82	11-1
	1.19	0.21	58.80	11-2
	1.85	0.27	55.91	11-3
3.00	0.96	0.08	70.53	11-4
	1.28	0.12	70.70	11-5
Syenite, weathered, blackish grey	1.13	0.18	75.80	11-6
	1.96	0.25	66.45	11-7
	1.78	0.43	66.62	11-8
	2.82	0.49	76.48	11-9
8.50~9.00 brown	3.60	0.60	59.82	11-10
	4.00	0.68	68.49	11-11
	3.08	0.33	69.68	11-12
	4.36	0.62	71.72	11-13
13.20~13.40 brown and yellow, bastnaesite?	3.61	0.47	75.12	11-14
13.70~13.80 barite	2.13	0.27	68.66	11-15
	2.99	0.70	54.04	11-16
	3.10	0.58	44.53	11-17
	2.71	0.60	65.26	11-18
	2.41	0.33	62.54	11-19
19.05	1.23	0.27	55.06	11-20
Syenite, weathered, white and darty yellow, containing barite	1.07	0.25	31.61	11-21
	0.91	0.21	22.18	11-22
22.15	2.88	0.45	58.12	11-23
23.00~23.15 reddish brown and white clay	3.27	0.70	59.65	11-24
Syenite, weathered, blackish grey	5.74	2.36	46.06	11-25
25.50~25.80 barite>bastnaesite	6.84	1.46	62.71	11-26
	2.19	0.74	68.83	11-27
27.25~27.35 barite	4.12	1.36	47.93	11-28
	4.74	1.79	64.92	11-29
29.40~30.15 black and white	1.74	1.87	21.16	11-30
30.15	9.64	3.31	33.74	11-31
	2.69	1.44	16.79	11-32
Syenite, weathered, black	0.23	0.64	1.89	11-33
	0.42	0.92	9.53	11-34
	1.25	0.74	8.04	11-35
35.60	2.37	1.11	9.16	11-36
Syenite, weakly weathered, grey, partly brown	0.67	1.79	5.44	11-37
38.00	1.77	6.99	18.18	11-38
Clay, brown	0.48	1.13	3.86	11-39
38.70	0.60	0.86	6.36	11-40
Syenite, weakly weathered, dark brown to brown	0.09	0.41	0.85	11-41
41.80	0.58	0.62	2.11	11-42
	1.57	1.13	8.33	11-43
	0.81	0.70	3.06	11-44
Syenite, weakly weathered, grey to pale grey, containing veinlets and dissemination of fluorite	1.59	0.97	3.69	11-45
	5.19	4.83	12.41	11-46
	0.76	1.85	9.31	11-47
	0.31	3.86	8.23	11-48
	2.68	1.34	5.37	11-49
	3.36	10.19	18.10	11-50

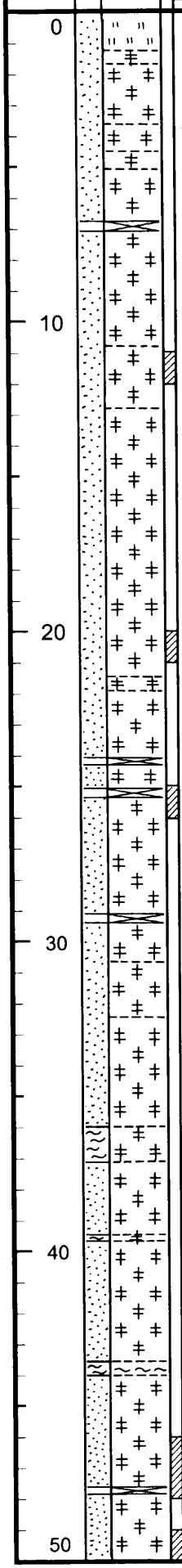
1 : 200

MJVD - 11 (2/2)

Depth	Weathering Column	Weathering High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50				3.38	3.58	11.01	11-51
				0.95	0.68	1.87	11-52
			Syenite, weakly weathered, grey to pale grey, containing veinlets and dissemination of fluorite	0.44	0.45	15.43	11-53
				0.45	0.72	3.25	11-54
				0.89	0.55	30.34	11-55
				1.17	0.60	4.06	11-56
				1.00	0.49	2.89	11-57
				0.21	0.53	3.42	11-58
				0.31	0.33	0.92	11-59
60			59.90	0.27	0.31	1.24	11-60
				1.29	0.51	2.62	11-61
				0.48	0.45	3.98	11-62
				0.20	0.58	2.28	11-63
				0.27	0.62	6.39	11-64
				0.84	1.01	16.13	11-65
			Syenite, weakly weathered, grey to dark grey	0.41	0.70	9.50	11-66
				0.97	1.11	2.14	11-67
				0.62	2.01	4.78	11-68
				0.64	0.95	9.23	11-69
70				1.49	1.44	14.16	11-70
				1.01	0.95	19.03	11-71
				0.25	0.62	2.21	11-72
				0.95	0.82	5.63	11-73
			73.20 – gradual change	0.45	0.70	5.03	11-74
			73.20~74.00 fluorite rich	1.31	1.64	14.67	11-75
				3.67	4.56	16.42	11-76
				2.51	2.94	8.96	11-77
				1.35	3.08	20.39	11-78
				0.93	2.36	18.44	11-79
80			Syenite, weathered, dark grey, containing some fluorite veinlets and dissemination	8.07	6.70	15.21	11-80
				4.43	4.66	6.37	11-81
				1.28	0.99	8.45	11-82
				0.54	1.03	4.66	11-83
				0.49	1.19	3.20	11-84
				0.88	2.86	13.32	11-85
				0.65	5.16	20.73	11-86
				0.32	0.82	10.01	11-87
			87.30	0.47	1.15	22.86	11-88
			88.50~88.80 pink minerals	0.59	3.10	21.24	11-89
90				0.62	1.13	6.14	11-90
			Syenite, weakly weathered, dark brown, containing dissemination of fluorite and barite	0.87	1.56	23.79	11-91
				0.92	3.08	17.42	11-92
				1.18	2.69	15.84	11-93
			93.75	1.06	1.60	15.75	11-94
				1.51	2.18	7.02	11-95
			Syenite, weathered, dark grey, containing some fluorite	1.38	1.71	7.90	11-96
				1.14	0.76	10.76	11-97
			97.40	0.28	2.38	5.40	11-98
			Syenite, weakly weathered, dark grey	1.58	1.75	18.61	11-99
100			100.00	1.39	0.78	15.86	11-100

1 : 200

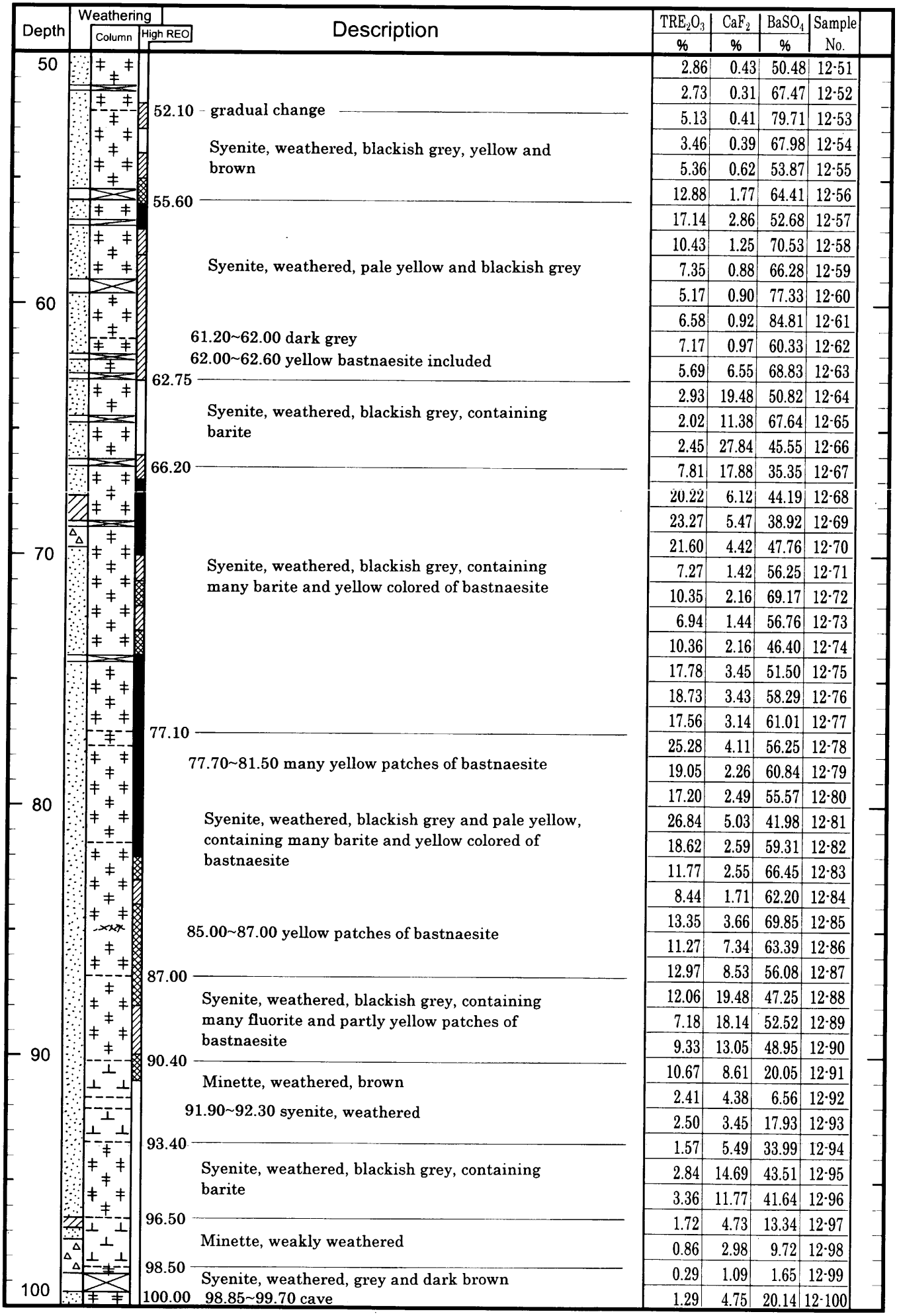
MJVD - 12 (1/2) Depth : 100 m Angle : 90° Sea Level : 852.0 m



Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
Overburden, brown soil	1.45	0.35	8.94	12-1
1.00	0.80	0.12	69.00	12-2
1.00~1.40 weathered rock, dark brown	1.56	0.25	52.35	12-3
3.30	1.25	0.88	50.48	12-4
4.30~4.80 brown	0.85	0.18	71.72	12-5
	1.33	0.90	44.02	12-6
	1.43	0.10	67.30	12-7
Syenite, weathered, blackish grey	1.29	0.08	72.91	12-8
	1.18	0.14	66.28	12-9
	1.29	0.14	52.68	12-10
	1.88	0.12	68.15	12-11
10.40~12.40 yellow patches of bastnaesite	6.99	0.74	58.63	12-12
12.40	2.85	0.16	71.55	12-13
	1.63	0.23	60.50	12-14
	1.69	0.33	41.47	12-15
Syenite, weathered, blackish grey, containing barite	1.74	0.23	66.79	12-16
	2.47	0.47	52.01	12-17
	1.94	0.31	45.89	12-18
	3.44	0.27	52.35	12-19
	3.63	0.53	53.19	12-20
	5.81	0.62	50.82	12-21
21.20~21.80 pinkish yellow	2.61	0.45	69.34	12-22
21.80	2.94	0.47	72.74	12-23
	3.93	0.47	60.67	12-24
	4.55	0.47	71.55	12-25
Syenite, weathered, blackish grey, containing yellow and brown color of bastnaesite	5.14	0.45	64.07	12-26
	2.06	0.16	62.54	12-27
	2.81	0.37	50.31	12-28
	3.51	0.49	38.75	12-29
	4.02	0.33	54.72	12-30
30.75	4.87	0.58	49.63	12-31
Syenite, weathered, blackish grey	2.05	0.12	73.25	12-32
32.45~32.55 yellow	2.09	0.16	65.09	12-33
32.45	3.25	0.45	60.84	12-34
Syenite, weathered, blackish grey, pale yellow partly reddish brown	3.11	0.51	65.77	12-35
	3.04	0.45	78.69	12-36
36.00	2.87	0.58	34.33	12-37
Clay,dark brown, fault clay?	2.77	0.45	55.06	12-38
37.10	2.99	0.45	60.16	12-39
39.65~39.85 dark brown clay	3.23	0.41	45.89	12-40
	3.44	0.23	49.97	12-41
	3.63	0.66	70.19	12-42
	2.96	0.72	67.81	12-43
43.60~44.00 dark reddish brown clay	2.34	0.49	37.05	12-44
	2.88	0.51	74.10	12-45
	3.18	0.45	82.60	12-46
Syenite, weathered, blackish grey, containing barite and yellow patches of bastnaesite	5.40	0.72	60.67	12-47
	5.57	0.70	52.68	12-48
	4.68	0.43	49.29	12-49
	6.21	0.60	63.56	12-50

1 : 200

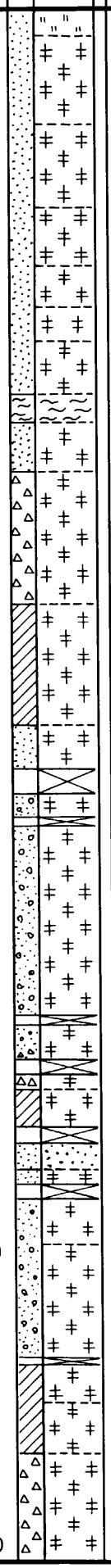
MJVD - 12 (2/2)



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50		2.86	0.43	50.48	12-51
		2.73	0.31	67.47	12-52
	52.10 gradual change	5.13	0.41	79.71	12-53
	Syenite, weathered, blackish grey, yellow and brown	3.46	0.39	67.98	12-54
		5.36	0.62	53.87	12-55
	55.60	12.88	1.77	64.41	12-56
		17.14	2.86	52.68	12-57
		10.43	1.25	70.53	12-58
	Syenite, weathered, pale yellow and blackish grey	7.35	0.88	66.28	12-59
60		5.17	0.90	77.33	12-60
		6.58	0.92	84.81	12-61
	61.20~62.00 dark grey	7.17	0.97	60.33	12-62
	62.00~62.60 yellow bastnaesite included	5.69	6.55	68.83	12-63
	62.75	2.93	19.48	50.82	12-64
	Syenite, weathered, blackish grey, containing barite	2.02	11.38	67.64	12-65
		2.45	27.84	45.55	12-66
	66.20	7.81	17.88	35.35	12-67
		20.22	6.12	44.19	12-68
		23.27	5.47	38.92	12-69
70		21.60	4.42	47.76	12-70
	Syenite, weathered, blackish grey, containing many barite and yellow colored of bastnaesite	7.27	1.42	56.25	12-71
		10.35	2.16	69.17	12-72
		6.94	1.44	56.76	12-73
		10.36	2.16	46.40	12-74
		17.78	3.45	51.50	12-75
		18.73	3.43	58.29	12-76
	77.10	17.56	3.14	61.01	12-77
		25.28	4.11	56.25	12-78
	77.70~81.50 many yellow patches of bastnaesite	19.05	2.26	60.84	12-79
80		17.20	2.49	55.57	12-80
	Syenite, weathered, blackish grey and pale yellow, containing many barite and yellow colored of bastnaesite	26.84	5.03	41.98	12-81
		18.62	2.59	59.31	12-82
		11.77	2.55	66.45	12-83
		8.44	1.71	62.20	12-84
	85.00~87.00 yellow patches of bastnaesite	13.35	3.66	69.85	12-85
		11.27	7.34	63.39	12-86
	87.00	12.97	8.53	56.08	12-87
	Syenite, weathered, blackish grey, containing many fluorite and partly yellow patches of bastnaesite	12.06	19.48	47.25	12-88
		7.18	18.14	52.52	12-89
90		9.33	13.05	48.95	12-90
	90.40	10.67	8.61	20.05	12-91
	Minette, weathered, brown	2.41	4.38	6.56	12-92
	91.90~92.30 syenite, weathered	2.50	3.45	17.93	12-93
	93.40	1.57	5.49	33.99	12-94
	Syenite, weathered, blackish grey, containing barite	2.84	14.69	43.51	12-95
		3.36	11.77	41.64	12-96
	96.50	1.72	4.73	13.34	12-97
	Minette, weakly weathered	0.86	2.98	9.72	12-98
	98.50	0.29	1.09	1.65	12-99
100	Syenite, weathered, grey and dark brown				
	100.00 98.85~99.70 cave	1.29	4.75	20.14	12-100

1 : 200

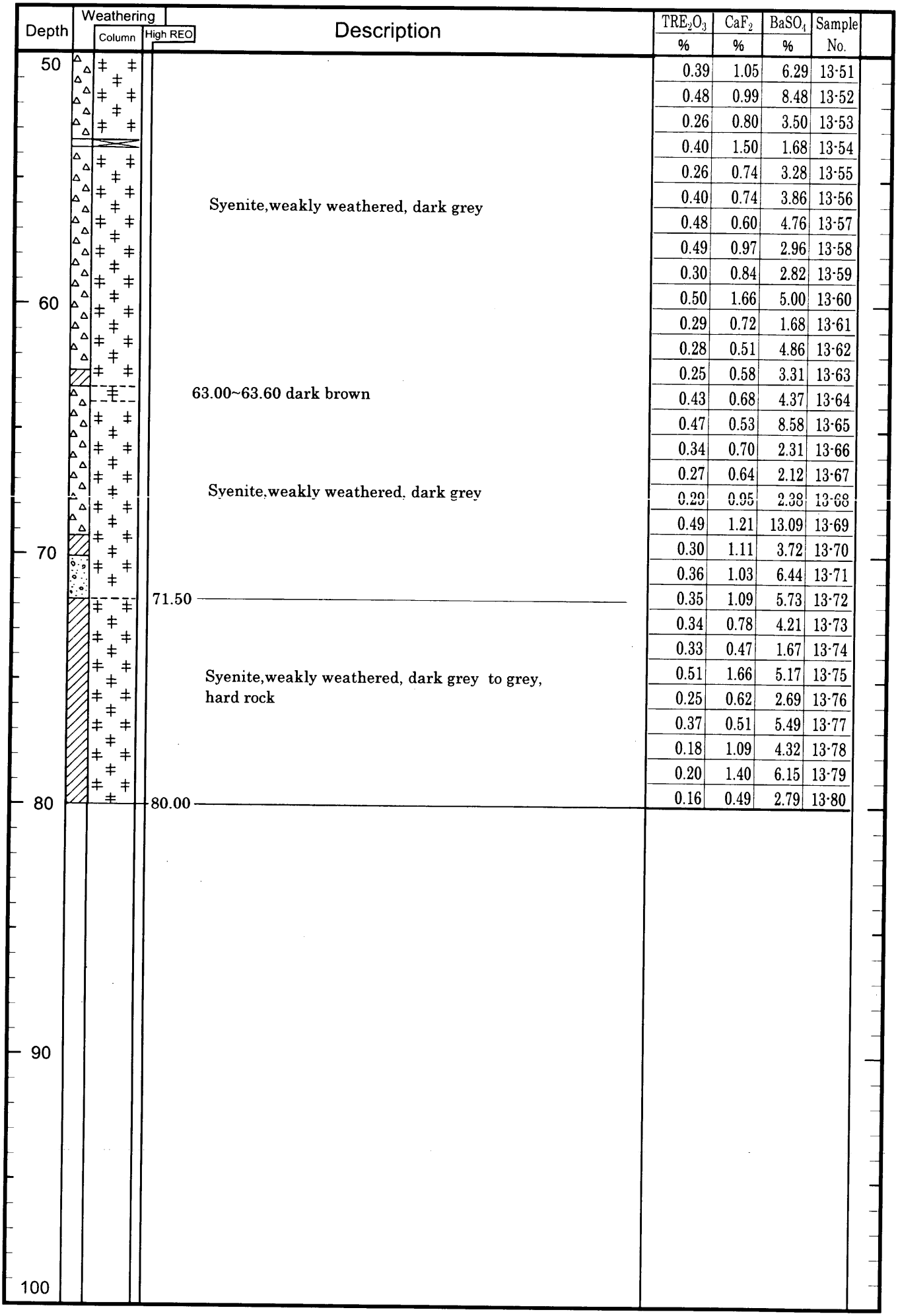
MJVD - 13 (1/2) Depth : 80 m Angle : 90° Sea Level : 825.7 m



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0	Overburden, brown soil	1.37	0.29	13.70	13-1
0.70	Syenite, weathered, brown and pale brown, containing white clay	1.15	0.51	18.95	13-2
		1.13	0.39	18.61	13-3
3.50	Syenite, weathered, blackish grey, containing white clay	1.58	0.37	35.35	13-4
		2.27	0.43	28.30	13-5
6.10	Syenite, weathered, yellow, containing white clay	1.80	0.33	26.94	13-6
		1.52	0.60	24.13	13-7
8.00	Syenite, weathered, blackish grey	1.15	0.33	12.12	13-8
		1.88	0.92	18.10	13-9
		1.79	0.95	14.39	13-10
	9.45~10.35 barite rich	2.09	0.72	28.89	13-11
		2.49	0.64	27.36	13-12
12.15	yellow to brown clay, fault clay?	4.03	1.34	13.92	13-13
13.00	Syenite, weathered, black to dark brown	4.63	2.57	46.57	13-14
		1.31	1.81	37.22	13-15
14.70	Syenite, weathered, blackish grey, containing barite and some fluorite	0.60	0.53	82.77	13-16
		0.68	0.92	21.24	13-17
		1.06	1.11	32.89	13-18
		0.39	1.95	8.38	13-19
19.00	Syenite, weakly weathered, grey, containing many barite	0.40	1.42	4.71	13-20
		0.30	2.84	2.84	13-21
		0.92	4.34	23.54	13-22
23.00	Syenite, weathered, dark brown to brown, weakly minerarized	1.83	4.52	21.92	13-23
		4.46	14.49	58.63	13-24
		1.72	6.92	26.34	13-25
		0.46	1.42	6.20	13-26
		0.66	1.54	9.55	13-27
		2.51	2.42	15.30	13-28
		2.18	6.08	18.86	13-29
		1.55	5.22	22.43	13-30
		1.51	4.79	15.11	13-31
		1.77	4.66	15.81	13-32
		1.26	3.68	14.99	13-33
		2.38	6.72	32.46	13-34
35.00	Syenite, weakly weathered, grey, containing many barite	1.03	21.47	16.35	13-35
		3.79	12.00	46.40	13-36
		2.43	2.51	12.44	13-37
	36.65~37.60 sandlike (sediments in cave?)	0.94	4.36	19.80	13-38
		2.52	7.48	21.07	13-39
40.00	Syenite, weathered, blackish grey, containing some yellow clay	2.50	7.36	17.08	13-40
		3.27	12.37	59.14	13-41
		1.55	8.92	32.46	13-42
		3.72	10.17	44.19	13-43
43.80	Syenite, weakly weathered, pink and yellow	2.96	9.47	37.39	13-44
45.00	Syenite, weakly weathered, pale grey	0.50	1.07	5.71	13-45
46.60	Syenite, weakly weathered, dark grey	0.34	0.37	2.33	13-46
		0.35	0.31	10.28	13-47
		0.10	0.51	5.30	13-48
		0.50	0.76	5.01	13-49
		0.39	1.97	8.29	13-50

1 : 200

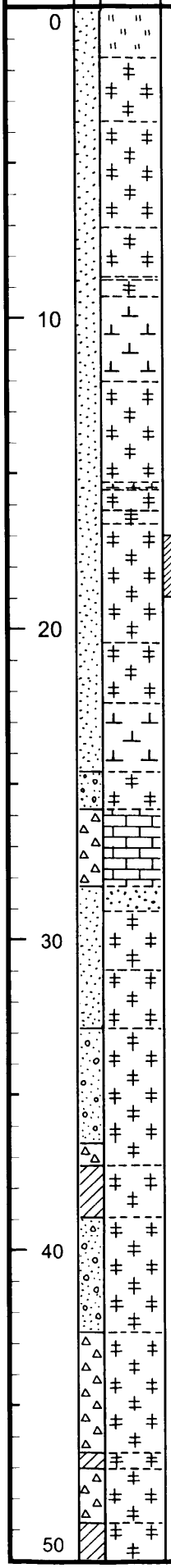
MJVD - 13 (2/2)



TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0.39	1.05	6.29	13-51
0.48	0.99	8.48	13-52
0.26	0.80	3.50	13-53
0.40	1.50	1.68	13-54
0.26	0.74	3.28	13-55
0.40	0.74	3.86	13-56
0.48	0.60	4.76	13-57
0.49	0.97	2.96	13-58
0.30	0.84	2.82	13-59
0.50	1.66	5.00	13-60
0.29	0.72	1.68	13-61
0.28	0.51	4.86	13-62
0.25	0.58	3.31	13-63
0.43	0.68	4.37	13-64
0.47	0.53	8.58	13-65
0.34	0.70	2.31	13-66
0.27	0.64	2.12	13-67
0.29	0.95	2.38	13-68
0.49	1.21	13.09	13-69
0.30	1.11	3.72	13-70
0.36	1.03	6.44	13-71
0.35	1.09	5.73	13-72
0.34	0.78	4.21	13-73
0.33	0.47	1.67	13-74
0.51	1.66	5.17	13-75
0.25	0.62	2.69	13-76
0.37	0.51	5.49	13-77
0.18	1.09	4.32	13-78
0.20	1.40	6.15	13-79
0.16	0.49	2.79	13-80

1 : 200

MJVD - 14 (1/2) Depth : 80 m Angle : 90° Sea Level : 833.0 m



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
	Overburden, brown soil	2.52	0.27	20.90	14-1
1.50	Syenite, weathered, blackish grey, containing white clay	1.75	0.18	36.54	14-2
3.40		2.33	0.16	41.81	14-3
	Syenite, weathered, brown,yellow and dark grey	4.13	0.27	64.41	14-4
6.80		2.47	0.16	47.93	14-5
	Syenite, weathered, dark grey and partly pale brown	3.48	0.55	37.39	14-6
	8.60~8.70 minette	6.81	0.66	60.67	14-7
9.00		3.60	0.47	45.89	14-8
	Minette, weathered brown, some biotite included	3.72	0.41	41.81	14-9
11.70		1.36	0.43	9.31	14-10
	Syenite, weathered, blackish grey	0.61	0.35	4.52	14-11
	15.10~15.30 minette	1.64	0.45	30.51	14-12
	16.00~16.40 barite rich	2.43	0.70	34.16	14-13
		2.51	0.39	36.71	14-14
		3.37	0.47	44.53	14-15
		2.50	0.55	36.54	14-16
		2.27	1.64	76.31	14-17
		5.37	8.79	57.27	14-18
		5.32	15.23	59.82	14-19
		4.25	6.86	56.59	14-20
20.30		2.51	5.82	43.51	14-21
	Syenite, weathered, blackish grey partly brown	0.71	0.51	19.88	14-22
22.30		0.22	0.60	4.20	14-23
	Minette, weathered, brown partly reddish brown	0.38	0.53	10.33	14-24
24.70	Syenite and limestone, weathered, dark brown, yellow and dark grey	0.49	0.51	4.15	14-25
25.80		0.49	0.47	14.07	14-26
	Limestone, weathered	0.19	0.21	4.59	14-27
28.40		0.70	0.47	15.98	14-28
	Sandlike (sediments in cave?)	0.45	0.60	36.03	14-29
29.20	Syenite, weathered, brown and dark grey, containing barite and fluorite	0.84	2.34	39.94	14-30
31.20		1.32	3.29	55.06	14-31
	Syenite, weathered, dark grey	0.87	2.20	57.27	14-32
33.00		1.02	2.30	40.11	14-33
		0.83	0.66	14.53	14-34
	Syenite, weathered, brown	0.64	0.64	18.35	14-35
		0.49	1.42	14.38	14-36
		0.36	0.58	8.50	14-37
37.50	Syenite, weakly weathered, pale grey, containing pink minerals	0.31	0.99	14.62	14-38
39.10		0.22	0.78	2.74	14-39
	Syenite, weathered, dark brown	1.00	10.27	22.69	14-40
		1.61	8.40	18.01	14-41
		1.47	9.21	35.52	14-42
42.80		1.43	9.23	22.01	14-43
	Syenite, weathered, white and dark grey, containing barite and fluorite	1.33	6.23	7.29	14-44
		1.74	9.23	15.50	14-45
		1.84	7.23	24.73	14-46
46.50	barite and fluorite rich	2.62	9.41	29.57	14-47
47.00	Syenite, weathered, darty brown	1.15	7.13	15.91	14-48
48.80	Syenite, weakly weathered, grey to dark grey, containing veinlets of fluorite	0.88	5.84	16.09	14-49
		0.40	3.92	7.04	14-50

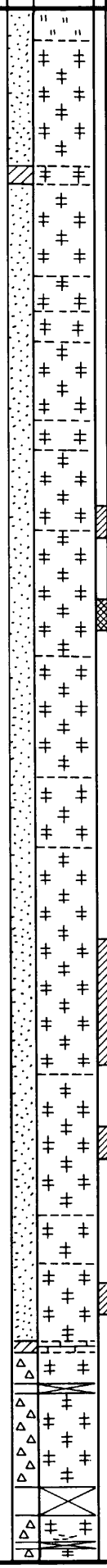
1 : 200

MJVD - 14 (2/2)

Depth	Weathering Column	High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50				0.42	3.14	7.97	14-51
			51.20	0.46	2.55	9.60	14-52
			Syenite, weathered, darty brown, containing barite and fluorite	1.80	6.80	32.21	14-53
				1.20	8.63	30.76	14-54
				1.37	7.68	37.39	14-55
			55.00~55.20 barite and fluorite	0.68	4.81	16.74	14-56
			56.00	0.48	1.29	7.19	14-57
			57.00 Syenite, weakly weathered, pale grey, with breccia of limestone	1.40	7.17	37.56	14-58
			Syenite, weathered, dark brown,containing barite and fluorite	2.05	7.21	32.97	14-59
60			59.50	1.18	11.01	19.88	14-60
				1.27	14.24	11.27	14-61
			Limestone, pale grey, crystalline, containing barite and fluorite	0.79	8.67	21.24	14-62
				0.77	3.60	9.87	14-63
			63.50~64.10 crystalline limestone with pyrite	0.25	0.92	37.05	14-64
			64.10	0.86	6.12	52.18	14-65
			Weathered rock, sandlike	1.05	6.90	52.85	14-66
			65.40	2.10	3.14	52.01	14-67
				1.92	2.90	55.57	14-68
			Syenite, weathered, blackish grey and darty brown	1.22	6.41	48.27	14-69
70				1.11	5.10	28.55	14-70
				1.19	4.07	35.01	14-71
				1.34	4.40	38.92	14-72
			72.80	1.45	3.80	26.51	14-73
			Syenite, weathered, darty brown	0.47	2.14	41.30	14-74
			74.30~74.80 Limestone, white crystalline	0.31	1.83	19.54	14-75
			76.30~76.70 limestone, barite and fluorite included	0.94	2.63	23.54	14-76
			76.90	0.61	1.85	11.15	14-77
				0.62	1.36	15.21	14-78
			Syenite,weakly weathered, dark grey	0.14	0.78	2.50	14-79
80			80.00	0.38	1.21	5.10	14-80
90							
100							

1 : 200

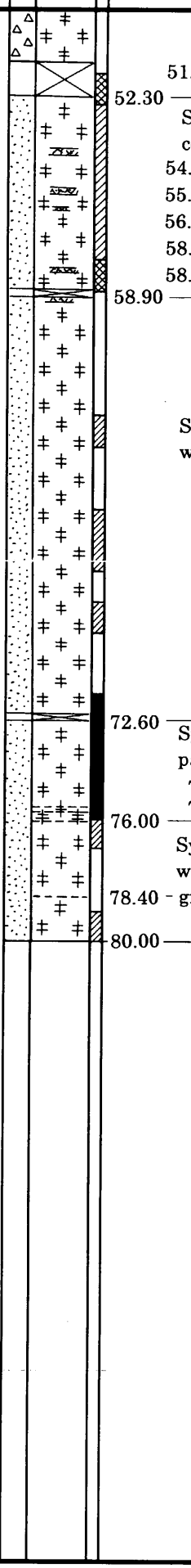
MJVD - 15 (1/2) Depth : 80 m Angle : 90° Sea Level : 833.2 m



Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
Overburden, dark brown soil (0.80)	1.44	0.51	15.81	15-1
	1.24	0.64	21.41	15-2
Syenite, weathered, blackish grey, containing small patches of yellow and white clay	0.90	0.45	15.48	15-3
	0.85	0.29	49.12	15-4
	0.70	0.27	34.67	15-5
4.80~5.30 syenite, weakly weathered	0.66	0.16	21.92	15-6
	1.50	0.21	42.15	15-7
	2.66	0.18	66.79	15-8
(8.30)	1.68	0.16	66.62	15-9
Syenite, weathered, reddish brown, brown and yellow (9.50)	4.75	0.47	74.78	15-10
Syenite, weathered, blackish grey (10.50)	1.84	0.16	87.36	15-11
Syenite, weathered, brown, grey and pale grey	1.25	0.08	83.96	15-12
	2.62	0.23	74.78	15-13
13.00~14.00 many small breccia of barite	1.56	0.16	82.77	15-14
	1.81	0.18	82.43	15-15
	2.53	0.27	87.02	15-16
(16.50) — gradual change	5.53	0.84	82.09	15-17
	4.62	0.60	86.00	15-18
Syenite, weathered, grey to blackish grey, containing yellow, red and white clay of barite	3.40	0.37	74.10	15-19
	11.79	1.77	79.20	15-20
(20.70)	3.33	0.55	61.52	15-21
	0.41	0.21	4.37	15-22
Syenite, weathered, whitish grey to pale brown	0.33	0.23	0.97	15-23
	0.29	0.21	1.29	15-24
(24.80)	0.49	0.29	8.65	15-25
Syenite, weathered, blackish grey, containing white barite and yellow clay	4.94	0.55	73.93	15-26
(27.00)	4.79	0.51	78.69	15-27
	4.04	0.70	60.33	15-28
	3.71	0.49	75.29	15-29
Syenite, weathered, reddish brown to pale brown, partly dark grey	4.25	0.43	64.92	15-30
	6.25	0.66	66.79	15-31
	6.73	0.74	76.48	15-32
	5.81	0.62	78.86	15-33
	7.64	0.90	69.17	15-34
(34.40) — gradual change	4.55	0.86	70.70	15-35
	3.01	0.53	85.49	15-36
Syenite, weathered, blackish grey, partly yellow	7.73	2.47	61.18	15-37
	4.21	1.68	51.33	15-38
(39.00)	4.70	1.13	49.29	15-39
Syenite, weathered, brown	1.73	1.50	12.17	15-40
(40.40)	2.53	4.05	20.73	15-41
	6.24	9.53	46.23	15-42
	1.61	6.55	43.68	15-43
43.00~43.25 limestone	1.11	2.38	22.01	15-44
	0.56	0.53	8.41	15-45
Syenite, weathered, blackish grey, containing veinlets of fluorite and yellow clay	0.45	0.76	4.78	15-46
	1.08	4.07	26.17	15-47
	3.36	2.63	13.41	15-48
47.70~48.55 cave	1.85	3.66	16.60	15-49
	1.90	2.77	17.34	15-50

1 : 200

MJVD - 15 (2/2)



Depth	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50		1.37	2.84	23.62	15-51
		0.87	0.92	8.43	15-52
	51.40~52.30 cave	12.05	6.23	37.22	15-53
	52.30	6.60	2.82	36.88	15-54
	Syenite, weathered, brown to blackish grey color, containing barite, fluorite and yellow to brown clay	6.91	1.97	25.58	15-55
	54.20~54.35 pale yellow and pinkish clay	6.86	3.18	60.67	15-56
	55.40~55.60 yellowish brown clay	8.63	7.13	56.42	15-57
	56.00 fluorite and yellow clay	6.33	9.27	54.55	15-58
	58.00~58.30 brown clay	10.45	11.75	48.10	15-59
	58.70~58.90 yellow clay	2.90	16.17	52.68	15-60
	58.90	4.53	10.89	50.31	15-61
60		3.39	9.60	52.68	15-62
		3.37	15.60	46.57	15-63
	Syenite, weathered, blackish grey, containing white barite and fluorite	6.32	15.66	53.70	15-64
		2.75	25.38	43.68	15-65
		4.77	16.89	53.36	15-66
		7.23	23.01	51.84	15-67
		7.47	17.12	44.02	15-68
		4.09	7.40	42.66	15-69
70		6.01	12.92	54.21	15-70
		4.31	15.45	61.69	15-71
		2.54	17.86	49.46	15-72
	72.60	21.69	13.58	44.36	15-73
	Syenite, weathered, grey, containing many yellow patches of bastnaesite, white barite and fluorite	31.70	10.38	34.16	15-74
	75.50~75.70 black	25.79	13.89	34.16	15-75
	75.70~76.00 brownish yellow clay	22.90	14.90	38.07	15-76
	76.00	5.05	14.12	38.41	15-77
	Syenite, weathered, blackish grey, containing white barite and fluorite	2.06	14.59	39.77	15-78
	78.40 - gradual change	2.79	21.16	45.38	15-79
	Syenite, weathered, black and pale grey, containing barite and fluorite	8.95	11.55	47.42	15-80
80	80.00				
90					
100					

1 : 200

MJVD - 16 (1/2) Depth : 100 m Angle : 90° Sea Level : 853.4 m

Depth	Weathering Column	High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
0			0.50 Overburden, brown soil with barite breccia	1.12	0.53	11.85	16-1
				0.96	0.55	7.65	16-2
			Syenite, weathered, brown, containing white breccia of barite	0.71	0.45	4.44	16-3
				0.84	0.55	5.05	16-4
				0.83	0.49	7.12	16-5
				0.93	0.49	7.85	16-6
			6.00 – gradual change	0.71	0.41	8.77	16-7
				0.63	0.33	10.52	16-8
			Syenite, weathered, reddish brown to brown and pale grey	0.57	0.29	15.70	16-9
				0.75	0.37	11.22	16-10
10				9.32	1.27	55.91	16-11
			10.40	2.51	0.47	36.20	16-12
				2.96	0.35	54.89	16-13
			Syenite, weathered, dark brown and dark grey	2.27	0.55	55.91	16-14
				1.57	0.49	43.34	16-15
				1.50	0.72	12.76	16-16
				2.25	1.34	24.47	16-17
			17.00	1.61	0.74	80.22	16-18
			Syenite, weathered, blackish grey	1.57	0.16	82.43	16-19
				1.44	0.16	90.75	16-20
20			20.40 barite	1.07	0.18	90.58	16-21
				1.51	0.29	82.77	16-22
			22.40 barite	1.32	0.51	83.28	16-23
				1.76	0.84	66.62	16-24
				2.83	0.53	77.67	16-25
				2.32	0.64	80.39	16-26
				1.41	0.49	67.98	16-27
			27.00	1.93	3.06	50.48	16-28
			Syenite, weathered, grey to dark grey	2.22	1.85	49.12	16-29
			28.85	2.48	0.70	56.93	16-30
30			Syenite, weathered, blackish grey	3.88	1.25	52.01	16-31
				6.02	1.36	52.01	16-32
			32.60	3.58	0.64	80.05	16-33
				–	–	–	–
			Big cave	–	–	–	–
				–	–	–	–
			36.60	2.10	1.60	77.50	16-37
				1.98	4.99	61.01	16-38
				2.33	4.48	48.44	16-39
			39.80~40.00 barite	1.58	4.23	62.37	16-40
40				1.12	6.55	64.58	16-41
				1.57	7.58	60.50	16-42
			Syenite, weathered, blackish grey, containing fluorite	3.78	5.42	54.04	16-43
				6.84	3.99	51.33	16-44
				4.31	2.55	56.59	16-45
				2.69	6.37	36.37	16-46
				2.06	3.35	63.22	16-47
			47.30	2.98	1.56	70.36	16-48
			Syenite, weathered, dark grey	2.85	1.03	83.45	16-49
50			50.00 barite	1.52	1.03	83.62	16-50

1 : 200

MJVD - 16 (2/2)

Depth	Weathering Column	Weathering High REO	Description	TRE_2O_3 %	CaF_2 %	$BaSO_4$ %	Sample No.
50			50.00	2.09	0.53	70.87	16-51
			Syenite, weathered, dark grey and brown	3.72	0.53	84.47	16-52
				2.57	0.53	56.08	16-53
			53.20	1.50	0.74	79.20	16-54
				1.54	1.05	70.19	16-55
			Syenite, weathered, dark grey	1.91	1.17	70.19	16-56
				2.11	1.19	70.70	16-57
			57.00 – gradual change	1.08	0.29	80.56	16-58
				1.98	0.86	69.51	16-59
60			Syenite, weathered, blackish grey	2.18	0.88	71.89	16-60
				2.19	0.82	79.03	16-61
				2.33	0.78	82.43	16-62
			62.55~62.75 yellowish brown	3.11	0.78	78.86	16-63
			63.55~64.00 yellowish brown	6.10	1.07	72.06	16-64
				3.48	1.09	76.82	16-65
				2.06	0.62	80.73	16-66
				2.38	0.49	78.69	16-67
				2.79	0.39	75.97	16-68
			Syenite, weathered, blackish grey	2.75	0.35	68.49	16-69
70				2.55	0.16	73.93	16-70
				2.81	0.18	60.33	16-71
				3.67	0.41	59.48	16-72
				5.38	2.26	51.50	16-73
			73.50 – gradual change	2.41	1.36	55.74	16-74
			Syenite, weathered, dark grey and pale yellow, containing fluorite	3.05	2.05	61.18	16-75
			75.60 – gradual change	1.16	36.58	26.43	16-76
			Syenite with breccia of limestone, pale grey and dark grey, containing fluorite	0.69	7.71	24.73	16-77
				0.67	9.29	7.05	16-78
			78.50	0.55	21.58	17.17	16-79
			Limestone, pale grey, containing fluorite veinlets and pyrite dissemination	0.40	5.79	11.37	16-80
80				0.70	3.74	14.92	16-81
			81.00	0.62	4.15	18.78	16-82
			81.90 Limestone, dark grey and pale brown	0.68	5.47	24.73	16-83
				7.37	17.96	45.21	16-84
				8.09	21.68	30.93	16-85
			Syenite, weathered, dark brown, containing pale yellow bastnaesite and fluorite	2.34	22.19	53.19	16-86
				2.36	18.02	54.72	16-87
				5.16	28.05	44.70	16-88
				7.66	15.70	42.32	16-89
90				5.52	9.82	34.84	16-90
			90.90	2.98	5.82	13.19	16-91
			Limestone, pale grey, partly dark grey, containing fluorite veinlets and dissemination	1.91	7.52	13.22	16-92
				2.01	5.61	14.09	16-93
				1.86	1.81	6.93	16-94
			94.75~95.30 syenite, weathered, dark brown	3.68	9.27	8.85	16-95
				6.17	4.73	8.21	16-96
				2.00	8.55	10.38	16-97
				0.63	5.26	10.54	16-98
			98.60~98.70 dark grey clay	2.03	4.32	20.73	16-99
100			100.00	1.43	3.41	7.53	16-100

1 : 200

Apx. 12 Assay results (mainly rare earth) of drilling core samples (MJVD-1~16)

MJVD-1 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-1-1	0.60	13.09	30	33	<20	116	3,180	2,520	439	1,310	142	<70.0	72	8	25	4	12	1	8	1	0.93
MJVD-1-2	0.53	9.67	30	25	<20	100	2,800	2,330	396	1,190	132	<50.0	70	7	24	4	11	1	6	1	0.84
MJVD-1-3	0.35	14.51	40	29	<20	136	3,870	4,420	581	1,765	204	<80.0	101	11	33	5	16	2	8	1	1.33
MJVD-1-4	0.25	15.65	50	40	<20	200	4,170	6,400	729	2,330	282	<90.0	139	16	53	8	23	2	7	1	1.72
MJVD-1-5	0.31	27.11	40	43	<20	228	4,640	5,420	713	2,250	277	<150.0	135	15	48	8	26	3	11	1	1.65
MJVD-1-6	0.23	27.70	45	71	<20	274	5,890	10,980	1,100	3,550	453	<150.0	204	24	68	11	33	3	15	2	2.72
MJVD-1-7	0.23	24.05	70	57	<20	188	3,530	9,100	694	2,230	296	<150.0	143	17	48	7	21	2	9	1	1.96
MJVD-1-8	0.31	17.34	55	30	<20	206	3,510	5,100	567	1,800	220	<100.0	114	14	46	8	22	2	10	1	1.39
MJVD-1-9	0.29	13.29	75	19	<20	167	2,490	3,610	397	1,280	167	<80.0	92	11	33	6	17	1	6	1	0.99
MJVD-1-10	0.41	6.90	40	7	<20	83	1,210	1,800	182	547	73	<40.0	38	5	17	3	10	1	4	1	0.48
MJVD-1-11	0.35	4.83	35	6	<20	77	857	1,320	133	425	58	<20.0	31	4	16	2	8	1	4	1	0.35
MJVD-1-12	0.68	1.46	20	6	<20	59	456	689	67	221	29	8	15	2	10	2	7	1	5	1	0.19
MJVD-1-13	0.47	6.37	105	14	<20	102	1,315	2,060	215	677	92	<40.0	53	6	23	4	10	1	5	0	0.55
MJVD-1-14	0.55	6.58	165	13	<20	105	1,360	2,190	227	747	102	<40.0	54	7	23	4	10	1	5	0	0.58
MJVD-1-15	0.39	7.60	60	6	<20	131	1,600	2,480	252	810	110	<40.0	62	8	33	5	13	1	5	0	0.66
MJVD-1-16	0.43	12.25	45	19	<20	142	2,470	3,710	379	1,190	163	<70.0	91	10	36	6	13	1	5	0	0.99
MJVD-1-17	1.99	8.07	30	14	<20	117	2,430	3,270	309	907	123	<50.0	70	8	23	4	10	1	4	0	0.87
MJVD-1-18	2.05	7.49	40	4	<20	73	1,555	2,120	197	576	69	<40.0	38	5	15	2	7	1	3	0	0.56
MJVD-1-19	6.04	16.01	25	13	<20	86	2,650	3,460	315	883	106	<100.0	52	6	17	3	9	1	3	0	0.91
MJVD-1-20	3.31	8.00	20	8	<20	72	1,530	2,100	200	602	76	<50.0	37	5	13	2	6	1	3	0	0.56
MJVD-1-21	1.60	10.52	20	4	<1	71	1,625	2,210	204	593	76	<60.0	42	5	17	3	7	1	4	0	0.58
MJVD-1-22	2.34	4.79	20	5	<20	62	915	1,280	125	374	50	<20.0	29	3	13	2	7	1	4	0	0.34
MJVD-1-23	1.71	10.62	30	<1	<20	46	778	1,090	108	327	51	<60.0	24	3	9	1	5	1	2	0	0.29
MJVD-1-24	1.40	5.34	15	<1	<20	45	572	818	81	252	36	<30.0	20	2	8	1	4	0	3	0	0.22
MJVD-1-25	2.24	6.93	30	3	<20	62	1,275	1,760	165	484	61	<40.0	32	4	12	2	6	1	3	0	0.46
MJVD-1-26	1.71	6.29	25	6	<20	53	1,060	1,440	135	403	52	<40.0	27	3	10	2	5	1	3	0	0.38
MJVD-1-27	1.97	13.82	40	5	<20	66	1,720	2,210	201	573	72	<80.0	34	5	13	2	7	1	4	1	0.59
MJVD-1-28	2.12	9.06	10	1	<20	61	975	1,355	133	391	55	<50.0	30	3	12	2	6	1	3	0	0.36
MJVD-1-29	1.81	13.05	10	6	<20	64	994	1,430	143	458	70	<70.0	34	4	13	2	6	1	3	0	0.39
MJVD-1-30	1.07	3.81	25	9	<20	52	709	1,015	98	308	42	<20.0	21	3	10	2	5	1	3	0	0.27
MJVD-1-31	1.23	4.37	20	11	<20	50	799	1,070	101	292	37	<20.0	20	3	8	2	6	0	4	0	0.29
MJVD-1-32	1.71	6.27	20	13	<20	90	1,185	1,775	183	560	75	<30.0	36	5	16	3	9	1	5	1	0.47
MJVD-1-33	1.85	27.53	25	14	<20	101	1,770	2,640	268	847	130	<150.0	56	7	22	4	11	1	5	0	0.70
MJVD-1-34	1.05	17.25	50	21	<20	154	2,420	3,700	375	1,180	159	<100.0	81	10	33	5	15	1	5	1	0.98
MJVD-1-35	3.16	5.46	20	2	<20	107	449	798	90	316	57	<30.0	34	4	20	3	7	1	4	1	0.23
MJVD-1-36	1.64	20.99	20	12	<20	96	1,105	1,985	225	786	129	<150.0	57	7	20	3	10	1	3	0	0.53
MJVD-1-37	3.16	27.62	35	31	<20	123	3,690	5,460	535	1,665	218	<150.0	98	11	31	5	13	1	4	0	1.42
MJVD-1-38	1.36	25.58	30	28	<20	107	1,915	3,500	395	1,385	211	<150.0	92	9	26	3	11	1	3	0	0.92
MJVD-1-39	0.84	25.07	55	22	<20	184	2,670	4,290	451	1,460	212	<150.0	105	13	41	7	17	1	5	1	1.13
MJVD-1-40	0.58	24.47	70	37	<20	218	3,690	5,890	621	2,010	275	<150.0	141	16	49	8	20	2	6	1	1.55
MJVD-1-41	0.78	31.53	60	45	<20	201	8,310	11,170	1,040	2,980	323	<150.0	160	18	49	7	21	1	6	1	2.91

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-1-42	1.91	32.89	35	39	<20	137	6,920	8,700	771	2,200	237	<150.0	107	12	33	5	16	1	4	1	2.30
MJVD-1-43	1.99	27.70	45	33	<20	151	6,490	8,600	785	2,260	248	<150.0	117	13	35	6	17	1	4	0	2.25
MJVD-1-44	1.25	18.86	50	31	<20	147	5,850	7,630	691	1,970	213	<100.0	111	12	33	5	14	1	5	1	2.00
MJVD-1-45	0.78	43.85	65	41	<20	167	5,810	10,780	710	2,030	242	<150.0	109	14	38	6	18	1	5	1	2.40
MJVD-1-46	0.99	38.07	70	57	<20	192	8,670	13,580	920	2,510	263	<150.0	138	16	45	7	19	2	6	1	3.17
MJVD-1-47	0.74	28.98	55	24	<20	170	8,260	10,420	929	2,570	260	<150.0	126	15	46	6	19	1	4	0	2.74
MJVD-1-48	0.43	6.70	30	10	<20	120	4,980	6,020	527	1,485	152	<40.0	79	10	28	4	10	1	3	0	1.61
MJVD-1-49	0.35	14.11	20	12	<20	69	3,390	4,210	369	1,015	113	<80.0	53	6	16	2	6	1	2	0	1.11
MJVD-1-50	0.39	16.55	30	10	<20	104	3,910	5,050	459	1,300	142	<100.0	73	8	23	3	9	1	3	0	1.33
MJVD-1-51	0.45	25.75	30	16	<20	111	3,960	5,200	481	1,425	174	<150.0	80	9	25	4	11	1	4	0	1.38
MJVD-1-52	0.51	23.71	25	12	<20	80	3,700	4,590	398	1,145	128	<150.0	58	7	19	3	8	1	4	0	1.22
MJVD-1-53	0.37	18.95	45	30	<20	128	2,990	4,610	424	1,315	166	<100.0	83	10	30	5	15	1	6	1	1.17
MJVD-1-54	0.39	17.42	55	31	<20	137	3,190	4,780	434	1,325	161	<100.0	80	10	30	5	15	1	6	1	1.22
MJVD-1-55	0.39	19.29	45	29	<20	124	2,750	4,370	398	1,180	152	<100.0	70	8	27	5	14	1	6	1	1.09
MJVD-1-56	0.47	15.50	45	20	<20	113	2,150	3,130	305	938	128	<100.0	62	7	24	4	11	1	5	1	0.83
MJVD-1-57	0.51	20.90	40	35	<20	129	2,750	4,450	456	1,495	197	<100.0	96	11	30	5	13	1	5	1	1.16
MJVD-1-58	0.41	54.72	25	15	<20	75	3,420	4,420	392	1,120	167	<150.0	59	6	18	3	8	1	3	0	1.16
MJVD-1-59	0.37	29.91	30	12	<20	87	2,410	3,430	326	975	142	<150.0	61	7	20	3	8	1	3	0	0.90
MJVD-1-60	0.64	26.94	30	15	<20	96	3,230	4,390	402	1,195	149	<150.0	71	8	20	3	10	1	3	0	1.15
MJVD-1-61	0.68	21.84	35	16	2	95	3,000	4,140	393	1,140	137	<150.0	67	7	22	4	9	1	3	0	1.08
MJVD-1-62	0.53	29.06	35	43	<20	122	3,610	5,170	505	1,580	221	<100.0	92	10	30	4	13	1	4	0	1.36
MJVD-1-63	0.41	40.79	30	26	<20	88	3,380	4,850	472	1,435	200	<150.0	81	8	22	3	10	1	2	0	1.27
MJVD-1-64	0.33	53.36	25	14	<20	78	2,670	3,800	365	1,095	179	<200	67	7	22	3	9	0	2	0	1.00
MJVD-1-65	0.43	49.29	35	20	<20	110	3,980	5,580	518	1,520	212	<300	88	10	28	4	11	1	2	0	1.45
MJVD-1-66	0.41	53.53	35	21	<20	97	3,510	5,020	486	1,440	208	<300	81	10	24	3	10	1	3	0	1.31
MJVD-1-67	0.39	46.74	25	12	<20	92	3,270	4,520	420	1,210	180	<300	71	8	23	3	9	0	2	0	1.18
MJVD-1-68	0.53	45.38	50	40	<20	125	4,380	6,710	685	2,100	284	<300	119	12	34	5	14	1	3	0	1.74
MJVD-1-69	0.31	42.49	25	10	<20	104	2,270	3,200	302	935	156	<200	64	8	23	4	10	1	3	0	0.85
MJVD-1-70	0.33	14.90	15	2	<20	70	979	1,445	142	444	69	<100.0	34	5	15	2	7	1	4	1	0.39
MJVD-1-71	0.82	25.07	20	17	<20	91	1,540	2,240	223	710	121	<150.0	55	6	21	3	10	1	5	1	0.60
MJVD-1-72	0.43	11.52	15	10	<20	76	744	1,175	123	418	75	<70.0	34	4	15	3	7	1	4	1	0.32
MJVD-1-73	1.77	35.86	15	12	<20	99	2,560	3,510	331	968	135	<200	52	6	19	3	9	1	4	0	0.92
MJVD-1-74	0.16	70.19	<0.5	<1	<20	20	483	656	58	176	98	<100.0	11	1	4	1	3	0	2	0	0.18
MJVD-1-75	0.33	51.33	5	3	<20	51	1,265	1,785	170	501	119	<100.0	34	4	11	2	5	1	3	0	0.47
MJVD-1-76	0.43	46.91	15	5	<20	56	1,310	1,890	184	562	120	<100.0	36	4	12	2	5	1	3	0	0.50
MJVD-1-77	0.62	26.09	30	6	<20	68	1,690	2,420	235	685	98	<100.0	44	5	15	3	8	1	3	0	0.63
MJVD-1-78	1.44	29.40	20	17	<20	86	2,250	3,220	307	925	139	<100.0	58	7	20	3	9	1	4	1	0.84
MJVD-1-79	3.02	14.53	25	6	<20	127	3,500	4,840	446	1,305	150	<80.0	76	8	26	4	14	1	5	1	1.26
MJVD-1-80	1.75	12.02	50	6	<20	134	2,750	3,810	356	1,045	125	<70.0	68	8	27	5	14	1	6	1	1.00
																				Av.	1.0

MJVD-2 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-2-1	0.27	53.87	70	65	<20	118	2,170	16,990	318	858	156	<100.0	53	8	26	4	12	1	6	1	2.53
MJVD-2-2	0.21	65.94	70	81	<20	134	2,880	11,200	428	1,215	202	<100.0	72	10	31	5	13	1	6	1	1.96
MJVD-2-3	0.23	59.14	95	57	<20	260	5,880	8,430	885	2,610	340	<100.0	157	20	63	11	28	3	13	1	2.24
MJVD-2-4	0.29	50.14	65	62	<20	158	3,570	8,450	544	1,630	229	<100.0	93	12	40	6	17	2	8	1	1.78
MJVD-2-5	0.35	33.99	25	125	<20	85	2,640	4,460	424	1,275	162	<100.0	71	9	22	3	10	1	4	1	1.10
MJVD-2-6	0.31	6.22	15	16	<20	61	2,530	2,060	361	1,060	96	<30.0	47	5	15	2	8	1	3	0	0.75
MJVD-2-7	0.21	2.70	15	19	<20	59	2,480	1,570	364	1,035	94	<20.0	48	6	13	2	8	1	3	0	0.68
MJVD-2-8	0.27	7.58	20	17	<20	72	2,640	2,980	385	1,120	107	<40.0	51	6	16	3	9	1	3	0	0.88
MJVD-2-9	0.33	3.67	15	9	<20	59	2,670	2,860	391	1,135	96	<20.0	46	5	14	2	9	1	3	0	0.87
MJVD-2-10	0.45	30.68	75	39	<20	154	5,120	10,390	803	2,310	266	<150.0	113	14	40	6	18	2	8	1	2.32
MJVD-2-11	0.80	77.84	25	45	<20	182	10,920	11,420	1,400	4,060	445	<200	191	20	44	6	23	1	7	1	3.43
MJVD-2-12	0.97	76.31	15	40	<20	242	16,760	16,770	2,100	5,900	564	<200	255	26	54	8	31	2	9	1	5.11
MJVD-2-13	0.18	70.36	40	123	<20	424	29,400	37,400	4,190	12,390	1,220	<400	542	56	111	14	57	3	15	2	10.28
MJVD-2-14	7.32	71.21	35	68	<20	650	24,200	22,600	2,860	8,520	870	<400	470	48	116	17	57	4	19	2	7.22
MJVD-2-15	16.01	59.65	25	70	<20	501	19,940	25,400	2,430	6,760	631	<400	328	36	92	15	47	4	14	2	6.74
MJVD-2-16	20.18	61.69	20	56	<20	274	17,640	22,800	2,170	6,030	548	<400	261	26	54	8	34	2	7	1	5.98
MJVD-2-17	15.88	53.70	55	85	<20	296	30,400	41,400	3,550	9,510	756	<400	385	39	71	10	45	2	11	1	10.38
MJVD-2-18	23.12	51.16	30	95	<20	306	51,900	63,800	5,290	13,870	968	<300	472	50	71	9	53	2	9	1	16.41
MJVD-2-19	2.05	79.88	35	103	<20	52	3,880	17,500	455	1,225	202	<100.0	53	7	13	2	6	1	3	0	2.84
MJVD-2-20	3.88	67.30	50	41	<20	289	7,490	10,350	1,020	3,030	418	<100.0	198	23	73	11	34	3	13	2	2.75
MJVD-2-21	0.86	84.64	30	153	1	196	10,650	13,090	1,165	3,160	351	<200	147	17	37	6	21	1	7	1	3.46
MJVD-2-22	0.74	79.54	25	66	<20	191	10,090	12,290	1,070	2,930	335	<200	134	14	36	5	18	1	7	1	3.25
MJVD-2-23	2.61	77.50	60	81	<20	324	9,410	14,640	1,305	3,790	441	<200	174	19	46	8	29	2	11	1	3.63
MJVD-2-24	0.64	79.54	55	68	<20	362	9,660	12,620	1,250	3,760	509	<200	225	24	66	11	34	3	12	2	3.42
MJVD-2-25	0.49	76.31	65	34	<20	293	9,470	12,120	1,135	3,220	412	<200	190	22	66	11	34	3	15	2	3.24
MJVD-2-26	0.39	78.01	65	30	<20	334	11,220	14,240	1,380	3,980	463	<200	223	26	76	12	37	3	15	2	3.84
MJVD-2-27	2.01	79.88	45	33	<20	183	5,700	8,730	725	2,140	325	<200	129	15	42	7	20	2	10	1	2.16
MJVD-2-28	0.62	69.34	125	54	<20	456	9,980	13,460	1,445	4,500	569	<200	287	32	96	16	46	4	21	2	3.71
MJVD-2-29	0.49	60.84	105	47	<20	493	9,850	13,740	1,235	3,620	454	<200	238	29	100	17	48	5	23	2	3.58
MJVD-2-30	0.64	65.43	120	36	<20	439	8,990	11,540	1,140	3,400	438	<200	219	26	88	15	42	4	19	2	3.16
MJVD-2-31	1.36	57.10	105	28	<20	610	21,200	22,500	1,965	5,160	452	<200	246	31	90	17	58	5	24	3	6.27
MJVD-2-32	0.60	70.70	40	11	<20	134	3,880	5,150	442	1,255	196	<200	68	8	26	4	14	1	6	1	1.34
MJVD-2-33	0.76	20.48	30	23	<20	136	2,280	2,840	248	705	92	<100.0	48	5	19	4	11	1	6	1	0.77
MJVD-2-34	0.97	41.13	35	20	<20	163	5,220	6,830	588	1,680	201	<200	86	10	33	5	17	2	7	1	1.78
MJVD-2-35	0.84	77.33	25	38	<20	150	15,000	19,070	1,610	4,380	427	<200	177	19	38	6	24	2	7	1	4.91
MJVD-2-36	1.21	40.28	30	51	<20	203	19,270	24,800	1,970	5,180	428	<200	203	24	50	8	30	2	9	1	6.26
MJVD-2-37	0.37	4.28	5	17	<20	118	3,080	1,170	302	847	74	<20.0	47	5	20	4	10	1	5	1	0.67
MJVD-2-38	0.92	8.40	10	15	<20	54	2,260	2,900	250	692	63	<50.0	31	4	11	2	6	1	3	0	0.75
MJVD-2-39	1.81	21.07	25	26	<20	94	7,760	10,010	879	2,440	202	<100.0	101	10	21	3	13	1	4	1	2.58
MJVD-2-40	2.22	8.16	25	30	<20	146	15,550	19,930	1,800	4,880	360	50	190	21	38	6	22	1	6	1	5.16
MJVD-2-41	1.77	11.17	15	14	<20	150	6,210	8,510	786	2,240	210	<80.0	109	12	33	5	18	2	7	1	2.19

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-2-42	3.25	14.84	20	21	<20	109	5,190	6,390	561	1,555	147	<100.0	73	9	25	4	13	1	5	1	1.69
MJVD-2-43	1.11	19.46	25	6	<20	101	2,130	3,130	313	966	125	<100.0	62	7	24	4	12	1	4	1	0.83
MJVD-2-44	7.71	16.74	10	9	<20	107	2,720	3,740	363	1,070	130	<100.0	65	8	23	4	12	1	4	1	0.99
MJVD-2-45	0.78	6.02	5	126	<20	72	1,075	1,800	197	664	95	<30.0	54	6	19	3	8	1	3	0	0.48
MJVD-2-46	0.82	5.37	25	7	<20	65	3,980	5,220	474	1,325	116	<30.0	60	6	15	3	9	1	2	0	1.35
MJVD-2-47	1.93	15.79	130	<1	<20	97	1,460	2,190	216	661	98	<100.0	47	6	19	4	9	1	4	1	0.58
MJVD-2-48	2.32	16.66	30	30	<20	175	11,100	14,640	1,345	3,770	319	<100.0	162	18	38	6	24	2	8	1	3.79
MJVD-2-49	0.55	3.52	20	<1	<20	80	1,785	2,540	238	713	73	<20.0	43	5	16	3	9	1	4	0	0.66
MJVD-2-50	0.55	2.24	10	<1	<20	63	581	940	95	302	40	10	28	4	14	2	6	1	3	0	0.25
MJVD-2-51	4.56	15.14	10	2	<20	103	3,830	5,000	458	1,295	139	<100.0	70	8	23	4	11	1	5	1	1.31
MJVD-2-52	3.90	32.21	15	7	<20	105	3,060	4,490	443	1,315	169	<200	77	8	25	4	12	1	5	1	1.17
MJVD-2-53	1.44	20.73	25	5	<20	82	2,080	3,060	305	947	128	<100.0	56	6	19	3	9	1	4	0	0.80
MJVD-2-54	6.27	32.21	215	27	<20	216	10,480	13,890	1,315	3,760	366	<200	179	21	50	8	27	2	9	1	3.64
MJVD-2-55	4.32	59.99	35	17	<20	126	6,300	8,400	787	2,250	269	<300	106	12	31	4	15	1	6	1	2.20
MJVD-2-56	2.59	20.65	35	11	<20	102	4,030	5,420	497	1,435	151	<100.0	69	8	24	4	12	1	5	1	1.41
MJVD-2-57	1.75	22.43	20	16	<20	71	2,650	3,590	336	950	113	<100.0	50	6	16	3	9	1	4	0	0.94
MJVD-2-58	2.24	27.19	55	25	<20	137	7,210	9,660	896	2,520	245	<150.0	119	13	33	5	18	1	6	1	2.50
MJVD-2-59	2.94	40.96	80	20	<20	153	7,700	10,050	938	2,660	281	<200	132	15	36	5	18	1	5	1	2.64
MJVD-2-60	4.66	44.87	50	31	<20	163	11,480	15,210	1,410	4,060	386	<200	181	19	41	6	21	1	6	1	3.96
MJVD-2-61	3.21	47.93	55	22	4	157	8,200	10,910	1,015	2,880	304	<250	138	15	38	6	20	1	6	1	2.84
MJVD-2-62	3.82	38.75	140	49	<20	293	18,620	24,400	2,300	6,400	569	<200	278	32	71	11	36	2	10	1	6.36
MJVD-2-63	4.58	46.40	55	42	<20	190	14,270	18,790	1,740	4,870	449	<200	205	22	48	7	27	2	9	1	4.87
MJVD-2-64	2.16	43.68	40	35	<20	179	12,500	16,430	1,505	4,150	376	<200	179	20	42	6	22	1	6	1	4.25
MJVD-2-65	5.88	37.73	110	83	<20	476	33,400	45,800	4,090	11,380	914	100	468	50	114	17	59	4	17	2	11.63
MJVD-2-66	3.23	45.38	35	17	<20	111	9,060	11,780	1,080	2,970	285	<200	126	13	28	4	15	1	5	1	3.06
MJVD-2-67	3.14	31.87	30	15	<20	108	7,960	10,430	943	2,650	235	<200	111	12	24	4	15	1	4	1	2.70
MJVD-2-68	0.64	1.02	5	<1	<20	31	288	412	37	113	11	3	7	1	5	1	3	0	2	0	0.11
MJVD-2-69	0.80	23.62	35	8	<20	132	4,100	5,410	504	1,455	165	<100.0	80	10	28	4	16	1	6	1	1.43
MJVD-2-70	2.32	16.37	80	34	<20	251	15,850	20,800	1,920	5,380	430	<100.0	223	25	56	10	32	2	10	1	5.40
MJVD-2-71	1.54	25.75	60	21	<20	232	9,590	12,910	1,195	3,390	321	<100.0	165	19	51	9	26	2	10	1	3.35
MJVD-2-72	0.86	25.75	45	7	<20	105	4,790	6,520	605	1,710	182	<100.0	84	9	26	5	14	1	5	1	1.69
MJVD-2-73	1.44	7.94	35	52	<20	139	20,200	25,600	2,370	6,470	467	50	230	24	40	6	28	1	6	1	6.67
MJVD-2-74	0.80	8.02	35	15	<20	110	11,130	14,340	1,310	3,600	268	50	138	15	30	4	19	1	4	0	3.72
MJVD-2-75	0.70	9.57	15	9	<20	78	6,750	8,830	811	2,240	176	<50.0	88	10	19	3	12	1	3	0	2.28
MJVD-2-76	0.51	15.40	25	2	<20	95	3,700	4,870	449	1,290	136	<50.0	69	8	24	4	11	1	4	0	1.28
MJVD-2-77	1.56	15.52	165	2	<20	113	3,050	4,270	407	1,230	149	<50.0	81	9	27	5	14	1	5	1	1.12
MJVD-2-78	2.92	25.75	15	12	<20	134	7,250	9,440	862	2,450	237	<150.0	117	13	33	5	16	1	6	1	2.47
MJVD-2-79	1.36	21.67	20	<1	<20	99	1,985	2,960	292	897	118	<100.0	58	7	23	4	12	1	4	1	0.77
MJVD-2-80	0.86	7.53	25	<1	<20	80	4,000	5,350	492	1,370	116	<50.0	64	7	16	3	10	1	4	0	1.38
																				Av.	3.14

MJVD-3 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-3-1	3.02	49.97	179.0	107	<20	548	31,600	38,600	3,500	10,890	1,010	<300	507	58	134	21	72	5	27	3	10.42
MJVD-3-2	5.73	41.13	282.0	177	<20	669	70,200	85,900	6,920	20,200	1,470	200	755	89	155	23	122	4	25	3	22.39
MJVD-3-3	2.77	59.65	124.5	77	<20	324	25,400	32,500	2,660	8,020	709	<300	329	39	78	12	47	3	15	2	8.41
MJVD-3-4	2.98	56.59	201.0	77	<20	410	34,100	43,100	3,450	10,360	824	<300	408	48	95	15	60	4	22	3	11.14
MJVD-3-5	0.92	67.47	142.0	149	<20	491	10,360	13,800	1,225	3,960	508	<400	246	31	96	17	48	4	24	3	3.70
MJVD-3-6	1.03	68.15	41.5	24	<20	552	5,840	6,490	667	2,270	365	<400	196	26	98	18	49	5	26	4	1.99
MJVD-3-7	0.72	74.44	53.5	21	<20	653	6,960	5,610	846	2,930	476	<500	257	32	117	20	55	6	29	4	2.15
MJVD-3-8	0.39	72.23	103.5	61	<20	744	17,780	17,950	1,830	5,770	697	<400	386	49	154	26	75	7	38	5	5.44
MJVD-3-9	0.31	76.82	94.5	31	<20	973	11,280	7,930	1,205	4,200	607	<400	393	49	185	33	87	9	47	6	3.22
MJVD-3-10	0.27	74.44	68.0	33	<20	915	10,780	9,930	1,125	3,760	537	<400	326	41	158	29	78	8	43	6	3.32
MJVD-3-11	0.68	70.87	71.5	37	<20	715	13,480	14,140	1,450	4,650	562	<400	294	37	115	20	61	6	29	4	4.26
MJVD-3-12	0.74	68.83	103.0	43	<20	959	16,830	14,620	1,710	5,690	676	<400	425	50	169	29	80	8	42	5	4.93
MJVD-3-13	0.62	65.77	141.0	50	<20	997	18,140	18,460	1,990	6,620	786	<400	488	61	203	35	96	9	38	6	5.73
MJVD-3-14	2.49	57.27	105.0	65	<20	453	14,890	19,600	1,625	5,130	554	<300	275	33	90	15	48	4	19	3	5.13
MJVD-3-15	4.79	42.49	261.0	87	<20	602	36,300	47,100	3,760	11,520	990	200	530	66	153	24	83	6	25	4	12.16
MJVD-3-16	3.99	30.59	86.5	45	<20	209	18,160	22,900	1,795	5,380	435	<100.0	215	26	50	8	31	2	8	1	5.90
MJVD-3-17	1.54	29.40	22.5	16	<20	91	3,830	4,880	411	1,245	152	<100.0	60	7	19	3	11	1	4	1	1.28
MJVD-3-18	4.29	45.21	33.5	33	<20	110	9,120	11,490	905	2,720	286	<300	113	13	27	4	15	1	4	1	2.98
MJVD-3-19	6.23	36.37	39.5	34	<20	149	17,200	19,360	1,600	4,700	401	<200	188	21	36	5	25	1	7	1	5.23
MJVD-3-20	1.19	35.69	16.5	13	<20	82	4,170	5,190	424	1,280	165	<200	61	7	19	3	10	1	4	1	1.37
MJVD-3-21	1.11	31.02	20.0	16	<1	78	3,860	5,050	425	1,285	166	<200	64	8	19	3	10	1	3	1	1.32
MJVD-3-22	1.44	36.54	31.5	14	<20	88	4,220	5,450	461	1,425	183	<200	69	8	21	3	11	1	3	1	1.43
MJVD-3-29	0.29	7.63	12.0	1	<20	38	425	816	57	191	35	<40.0	14	2	7	1	4	0	2	0	0.19
MJVD-3-30	0.72	4.45	19.5	8	<20	66	2,820	3,730	316	980	89	<20.0	48	6	14	2	8	1	2	0	0.97
MJVD-3-31	0.62	16.69	52.5	27	<20	179	7,550	10,660	873	2,760	260	<100.0	134	16	39	6	21	2	7	1	2.70
MJVD-3-32	1.77	3.69	16.5	6	<20	60	1,990	2,670	230	715	69	<20.0	37	5	12	2	7	1	2	0	0.70
MJVD-3-33	0.27	1.84	8.5	<1	<20	38	510	736	63	211	24	<10.0	14	2	7	1	4	0	2	0	0.19
MJVD-3-35	1.93	13.77	64.5	14	<20	114	3,340	4,510	397	1,260	143	<80.0	71	8	24	4	13	1	5	1	1.19
MJVD-3-36	1.25	9.13	36.0	6	<20	96	1,820	2,490	223	729	89	<50.0	48	6	20	4	10	1	4	1	0.66
MJVD-3-37	1.05	10.38	28.0	5	<20	85	1,740	2,380	210	677	85	<60.0	41	5	18	3	10	1	4	1	0.63
MJVD-3-38	3.00	23.03	27.5	17	<20	126	3,190	4,410	393	1,270	167	<150.0	71	9	25	4	12	1	4	1	1.16
MJVD-3-39	2.57	14.51	21.0	19	<20	91	1,985	2,730	242	786	102	<90.0	46	6	18	3	9	1	4	1	0.72
MJVD-3-40	1.09	7.92	25.0	8	<20	67	1,030	1,480	134	435	62	<40.0	32	4	13	2	6	1	3	0	0.39
MJVD-3-41	0.72	3.26	8.5	4	<20	47	500	733	66	223	32	<20.0	17	2	9	1	4	0	2	0	0.20
MJVD-3-42	0.43	1.46	5.0	1	<20	51	470	714	67	231	30	8	18	3	10	2	4	1	2	0	0.19
MJVD-3-43	1.25	10.44	15.0	5	<20	65	1,245	1,700	148	490	65	<60.0	31	4	13	2	6	1	4	0	0.45
MJVD-3-44	0.95	5.15	7.5	33	<20	107	7,080	9,630	779	2,390	195	30	105	12	23	3	14	1	4	1	2.44
MJVD-3-45	0.74	7.77	7.5	4	<20	55	468	768	75	276	50	<40.0	23	3	11	2	5	1	2	0	0.21
MJVD-3-46	0.37	7.90	28.0	4	<20	55	586	842	76	257	45	<40.0	20	3	10	2	5	1	2	0	0.23
MJVD-3-47	0.86	13.68	39.0	16	<20	92	1,645	2,200	191	633	93	<80.0	41	5	18	3	9	1	4	1	0.59
MJVD-3-48	0.51	6.17	12.0	12	<20	69	1,315	1,835	170	555	70	<30.0	36	4	14	2	7	1	3	0	0.49

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-3-49	6.16	28.89	13.5	34	<20	95	4,180	4,900	406	1,235	155	<150.0	65	7	21	3	10	1	3	1	1.33
MJVD-3-50	5.96	27.45	19.5	30	<20	131	4,190	5,040	428	1,300	170	<150.0	79	9	26	5	13	1	5	1	1.37
MJVD-3-51	3.62	14.53	25.0	11	<20	89	2,310	3,080	273	871	113	<90.0	52	6	19	3	10	1	3	0	0.82
MJVD-3-52	1.56	7.12	25.0	103	<20	117	2,100	3,010	287	968	120	<40.0	68	7	25	4	12	1	5	1	0.81
MJVD-3-53	1.25	11.15	24.0	10	<20	112	2,030	2,750	250	803	99	<60.0	51	6	22	4	11	1	4	1	0.74
MJVD-3-54	0.92	13.66	13.0	6	<20	89	1,390	1,915	177	583	85	<80.0	49	5	19	3	9	1	4	1	0.52
MJVD-3-55	1.38	10.45	18.0	3	<20	87	998	1,495	144	494	77	<60.0	39	4	18	3	9	1	4	1	0.40
MJVD-3-56	1.32	5.22	33.5	7	<20	124	5,010	6,570	593	1,840	166	30	94	10	27	5	16	1	5	1	1.74
MJVD-3-57	1.25	8.12	25.5	10	<20	121	4,990	6,560	592	1,830	174	<40.0	92	10	27	4	16	1	5	1	1.73
MJVD-3-58	1.27	5.91	25.0	9	<20	99	5,870	7,460	667	2,010	167	30	89	9	23	4	14	1	4	0	1.97
MJVD-3-59	1.79	5.73	33.0	17	<20	125	10,370	13,170	1,085	3,260	256	30	139	15	31	5	19	1	5	1	3.42
MJVD-3-60	0.76	3.09	15.5	4	<20	103	2,060	2,900	261	848	94	20	56	6	23	4	11	1	4	0	0.77
MJVD-3-61	1.25	6.19	32.0	5	<20	95	2,600	3,560	315	1,020	107	<30.0	59	7	22	4	11	1	4	0	0.94
MJVD-3-62	0.84	9.50	37.0	8	<20	129	3,710	5,040	457	1,460	153	<50.0	85	9	30	5	16	1	6	1	1.33
MJVD-3-63	2.08	6.12	38.5	7	<20	143	3,920	5,270	473	1,505	151	30	89	10	32	5	16	1	5	1	1.40
MJVD-3-64	1.50	8.11	39.0	10	<20	124	6,850	9,420	781	2,370	202	<40.0	112	12	31	5	18	1	5	1	2.39
MJVD-3-65	2.88	11.62	17.5	9	<20	96	4,740	6,150	536	1,645	159	<60.0	80	9	23	4	13	1	4	0	1.61
MJVD-3-66	3.88	15.35	43.5	9	<20	120	5,060	6,560	581	1,785	183	<100.0	94	10	28	4	16	1	4	0	1.73
MJVD-3-67	2.63	3.87	26.0	1	<20	85	1,460	1,925	172	564	70	<20.0	42	5	20	3	9	1	3	0	0.52
MJVD-3-68	1.54	29.74	60.5	19	1	100	12,860	16,280	1,325	3,940	335	<150.0	156	16	28	4	19	1	3	0	4.21
MJVD-3-69	1.48	15.09	34.0	4	<20	82	2,340	3,120	273	867	114	<100.0	55	6	19	3	9	1	3	0	0.83
MJVD-3-70	4.58	8.48	42.5	8	<20	139	4,030	5,210	466	1,465	159	<50.0	90	10	33	5	15	1	5	1	1.39
MJVD-3-71	3.68	16.79	39.5	7	<20	136	3,690	4,860	434	1,380	163	<100.0	84	9	30	5	14	1	5	1	1.30
MJVD-3-72	0.84	8.26	42.5	<1	<20	109	937	1,420	135	483	79	<50.0	49	6	26	5	11	1	5	1	0.39
MJVD-3-73	1.13	5.22	52.0	1	<20	166	1,225	1,730	170	601	98	<30.0	68	9	38	6	17	2	7	1	0.50
MJVD-3-74	6.70	20.82	43.0	37	<20	252	11,700	15,070	1,260	3,880	368	<100.0	201	21	55	9	29	2	8	1	3.94
MJVD-3-75	1.81	18.86	43.5	16	<20	92	11,630	14,660	1,190	3,540	288	<100.0	142	14	27	4	18	1	4	0	3.79
MJVD-3-76	2.84	13.83	29.5	25	<20	187	7,050	9,390	804	2,490	241	<80.0	129	14	39	6	21	1	7	1	2.44
MJVD-3-77	0.70	7.78	29.0	4	<20	101	2,490	2,880	307	980	106	<40.0	59	6	22	4	11	1	4	1	0.83
MJVD-3-78	0.47	3.89	15.0	3	<20	80	1,300	1,740	165	540	62	<20.0	37	5	16	3	9	1	3	0	0.47
MJVD-3-79	1.11	7.26	35.5	12	<20	137	6,370	6,230	782	2,380	213	40	118	12	34	6	19	1	6	1	1.95
MJVD-3-80	1.60	7.44	22.0	6	<20	86	1,855	2,480	230	734	88	<40.0	47	5	19	3	10	1	4	0	0.67
																				Av.	2.55

MJVD-4 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-4-1	0.74	72.40	74.5	79	<20	390	15,190	16,970	1,825	5,320	693	<450	330	33.6	101.5	13.6	45.1	3.2	18.9	2.3	4.90
MJVD-4-2	1.09	62.88	95.5	92	<20	602	21,600	19,610	2,460	7,270	912	<400	464	47.7	145.5	19.7	64.4	4.5	27.8	3	6.36
MJVD-4-3	1.29	77.16	127.5	60	<20	933	30,300	16,830	3,400	10,510	1,370	<450	758	75.4	236	30.3	96.6	6.7	41.2	4.6	7.68
MJVD-4-4	1.73	58.12	176.0	94	<20	485	35,300	40,000	3,950	11,120	1,115	<350	536	55.3	129.5	17.4	72.7	4	25.5	2.8	11.12
MJVD-4-5	1.21	62.37	209.0	46	<20	621	20,700	19,640	2,370	7,200	903	<350	468	48.4	158.5	22.2	73.1	5.6	31.7	4	6.24
MJVD-4-6	3.66	65.43	145.0	45	<20	546	14,430	18,500	1,655	4,790	616	<400	297	32.3	103	15.2	51.4	4	23	2.6	4.92
MJVD-4-7	4.73	48.95	159.0	112	<20	461	34,800	43,700	3,690	10,200	953	<300	463	47.2	103	13.7	62.5	3	18.2	2	11.34
MJVD-4-8	1.44	36.88	76.5	20	<20	280	7,500	10,510	906	2,560	335	<200	159.5	17.5	57.3	8.7	28.6	2.4	13.3	1.6	2.69
MJVD-4-9	1.07	25.32	30.0	8	<20	102	1,345	1,900	191	599	126	<150.0	52.5	6	24	3.6	10.5	0.9	5.9	0.6	0.52
MJVD-4-10	2.16	23.88	105.0	18	<20	195	12,150	12,540	1,225	3,290	315	<150.0	157.5	17.3	45.8	6.4	25.5	1.6	9.9	1.2	3.59
MJVD-4-11	2.05	17.59	75.5	32	<20	157	17,190	20,000	1,485	3,720	274	<100.0	146.5	16.7	35.5	5.1	23.4	1.2	7.2	1	5.16
MJVD-4-12	3.90	8.43	21.5	17	<20	110	5,100	6,220	529	1,455	148	<50.0	77.2	8.4	24.3	3.6	13	0.9	5.8	0.7	1.64
MJVD-4-13	3.08	6.90	38.5	16	<20	211	11,740	14,160	1,105	2,900	250	40	144	16.8	48.3	7	25.9	1.9	10.2	1.1	3.68
MJVD-4-14	27.02	31.53	20.0	45	<20	197	8,010	11,490	955	2,640	292	<200	139.5	14.7	38.8	5.5	21.2	1.3	7.7	0.9	2.86
MJVD-4-15	15.60	29.49	39.0	18	<20	204	6,800	9,890	852	2,400	287	<200	129.5	13.5	34.4	4.8	18.8	1.3	7	0.8	2.48
MJVD-4-16	1.60	7.02	33.0	6	<20	142	3,990	5,070	442	1,205	133	<40.0	77.1	9.1	30.8	4.8	16.4	1.4	8	0.8	1.34
MJVD-4-17	1.09	4.71	23.5	6	<20	147	4,260	5,630	496	1,360	137	20	84.4	9.9	33.5	4.9	17.5	1.3	8.6	0.9	1.47
MJVD-4-18	3.12	14.79	55.5	29	<20	211	19,020	22,300	1,775	4,540	353	<90.0	196	21.1	47	6.4	29.2	1.6	9.2	1.1	5.82
MJVD-4-19	2.84	12.29	25.5	11	<20	152	6,430	8,160	709	1,915	186	<70.0	101.5	11.3	32.3	4.7	18.4	1.2	8	0.9	2.13
MJVD-4-20	2.90	17.59	21.0	113	<20	135	2,620	3,740	359	1,075	164	<100.0	85.3	9.6	34.1	4.7	14.7	1.1	7.1	0.8	0.99
MJVD-4-21	2.73	25.58	36.0	15	<20	138	5,390	7,000	628	1,750	209	<150.0	94.9	11	32.3	4.3	16.7	1.2	6.6	0.8	1.83
MJVD-4-22	1.23	33.82	34.5	15	<20	151	4,230	5,670	516	1,455	213	<200	91	10.4	33.4	4.9	17.2	1.3	7.9	0.9	1.49
MJVD-4-23	1.42	17.59	36.0	13	<20	129	5,240	6,850	613	1,695	190	<100.0	93.1	10.3	29.6	4.5	16.1	1.2	7.8	0.9	1.78
MJVD-4-24	3.02	6.73	28.0	6	<20	118	3,230	4,340	390	1,115	126	<40.0	68.5	7.8	25.2	3.9	13.7	1.1	6.1	0.6	1.13
MJVD-4-25	1.56	22.77	52.0	14	<20	129	7,740	10,950	897	2,460	249	<140.0	120.5	12.5	30.4	4.3	18.2	1.3	7.1	0.9	2.72
MJVD-4-26	1.11	20.99	44.5	13	<20	127	9,830	12,490	1,020	2,730	259	<130.0	124.5	13.2	29.1	4	18.2	1.1	6.6	0.7	3.20
MJVD-4-27	0.97	10.84	20.0	2	<20	84	1,055	1,565	146	445	80	<60.0	39	4.5	18	2.8	8.5	0.9	4.8	0.5	0.41
MJVD-4-28	0.58	10.28	15.5	2	<20	74	1,660	2,270	202	571	83	<60.0	37.6	4.5	15.3	2.3	8.1	0.6	4.4	0.4	0.59
MJVD-4-29	0.68	22.01	43.5	5	<20	83	3,190	4,260	372	1,040	140	<140.0	58.8	6.4	19.7	2.6	9.9	0.8	4.4	0.6	1.10
MJVD-4-30	1.34	26.51	47.5	8	<20	130	4,250	5,670	514	1,440	195	<150.0	86.4	9.6	30.5	4.3	15.2	1.1	7.2	0.9	1.48
MJVD-4-31	0.49	12.56	18.0	2	<20	92	1,680	2,330	214	629	95	<70.0	47.5	5.5	22.3	3.1	10.9	0.9	5.1	0.7	0.62
MJVD-4-32	0.27	2.75	13.5	<1	<20	65	1,185	1,670	149	429	54	<20.0	30.5	3.7	13.7	2.1	7.3	0.6	3.8	0.4	0.43
MJVD-4-33	0.39	8.77	21.0	<1	<20	56	880	1,265	118	355	60	<50.0	27.6	3.3	12.5	1.7	6	0.5	3	0.4	0.33
MJVD-4-34	0.45	7.92	16.0	17	<20	54	1,840	2,490	224	625	78	<50.0	38	4.2	13.5	2	6.5	0.5	3.4	0.4	0.65
MJVD-4-35	1.03	15.23	30.0	7	<20	84	4,700	6,010	520	1,390	149	<100.0	70.9	7.8	20.1	3	11.1	0.8	4.9	0.6	1.56
MJVD-4-36	1.62	21.50	51.5	6	<20	89	4,010	5,300	467	1,300	158	<150.0	66	7.7	20.7	2.9	11.7	0.8	5.3	0.6	1.37
MJVD-4-37	1.19	12.83	25.0	6	<20	93	3,960	5,100	445	1,215	138	<80.0	65.2	7.6	21.4	3.1	12.1	0.9	4.9	0.6	1.33
MJVD-4-38	0.68	4.28	16.5	3	<20	103	2,380	3,370	308	900	98	<25.0	57.3	6.6	22.5	3.6	11.3	0.9	5.2	0.7	0.87
MJVD-4-39	0.84	9.43	26.0	<1	<20	73	959	1,390	130	393	69	<50.0	34.5	4.1	15.8	2.5	7.9	0.7	4	0.4	0.37
MJVD-4-40	0.35	3.08	16.0	5	<20	78	660	1,040	103	330	53	<20.0	32.4	3.8	18.4	2.6	7.7	0.8	4.8	0.5	0.28
MJVD-4-41	0.90	17.42	29.0	14	<20	106	6,470	8,060	704	1,870	192	<100.0	94.1	10.6	27.2	3.6	14.8	0.9	5.7	0.7	2.11

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-4-42	1.64	17.84	53.5	54	<20	131	14,640	18,030	1,435	3,800	332	<100.0	166	17.8	34.2	4.8	22.7	1	7	0.8	4.63
MJVD-4-43	1.50	4.67	30.5	18	<20	115	2,520	3,470	318	933	110	20	64.7	7.4	26.2	3.8	13.1	1	6.2	0.8	0.91
MJVD-4-44	2.90	22.18	46.0	17	<20	108	3,980	5,170	458	1,305	171	<150.0	75.7	8.4	25.4	3.6	13.2	0.9	6.4	0.8	1.36
MJVD-4-45	0.72	6.93	21.5	8	<20	72	2,020	2,630	232	640	80	<40.0	41.9	4.7	16	2.4	8.1	0.6	3.8	0.4	0.69
MJVD-4-46	2.08	34.16	39.0	16	<20	72	6,790	8,480	747	1,990	230	<200	86.4	9.1	16.8	2.3	11.2	0.5	3.9	0.5	2.21
MJVD-4-47	1.79	13.95	44.5	211	<20	125	6,440	9,170	789	2,280	260	<100.0	134	14.2	36.6	5	18.3	1	6.8	0.8	2.31
MJVD-4-48	1.32	9.89	53.0	19	<20	100	3,690	5,130	471	1,335	150	<50.0	75.7	8	24.5	3.4	13	0.9	5.4	0.6	1.32
MJVD-4-49	1.46	12.70	53.5	16	<20	113	4,030	5,550	508	1,480	164	<80.0	82.1	8.7	25.9	3.7	13.7	1	6.2	0.8	1.44
MJVD-4-50	2.73	9.06	54.0	24	<20	144	12,780	15,820	1,270	3,360	296	50	158.5	16.6	36.1	4.7	22.2	1.2	7.3	0.8	4.07
MJVD-4-51	1.03	8.51	137.5	12	<20	270	4,420	6,290	590	1,745	240	40	137.5	16.1	62	9.4	29.8	2.8	17	1.7	1.66
MJVD-4-52	0.68	6.70	54.0	4	<20	109	1,750	2,460	228	683	96	<40.0	55.8	6.4	24.6	3.9	11.8	1.1	6.4	0.8	0.65
MJVD-4-53	1.95	15.18	91.0	36	<20	204	18,400	23,400	1,890	5,150	455	<100.0	237	25	49.8	6.5	31.1	1.6	9.6	1.1	5.98
MJVD-4-54	0.99	28.64	51.5	18	<20	140	9,810	12,720	1,035	2,820	292	<150.0	134	14.2	34.6	4.7	20.5	1.2	7.4	0.8	3.24
MJVD-4-55	0.41	15.04	48.5	5	<20	90	1,975	2,820	262	771	114	<100.0	54.1	5.9	20.1	3.3	10.4	0.8	5.1	0.6	0.74
MJVD-4-56	0.66	9.89	34.0	5	<20	98	2,140	3,020	282	841	113	<50.0	57.6	6.3	22.7	3.4	11.1	0.9	5.1	0.6	0.79
MJVD-4-57	0.74	11.47	36.5	8	<20	96	2,730	3,640	327	934	120	<60.0	59.5	6.5	21.9	3.2	11.9	0.8	5.3	0.6	0.95
MJVD-4-58	1.15	6.10	30.0	7	<20	96	1,880	2,780	257	784	102	<30.0	56.6	6.2	21	3.3	11	0.8	5.9	0.6	0.72
MJVD-4-59	0.37	4.11	10.5	1	<20	50	544	809	78	234	42	<20.0	22	2.7	11	1.7	5.1	0.5	3.2	0.3	0.22
MJVD-4-60	0.62	6.46	31.0	6	<20	88	3,240	4,210	373	1,060	116	<40.0	62.8	6.9	20.7	3	11.5	0.8	4.6	0.5	1.10
MJVD-4-61	1.52	5.64	32.5	6	<20	96	1,990	2,800	261	784	99	<30.0	56.3	6.6	22.4	3.3	10.4	0.9	5.2	0.6	0.74
MJVD-4-62	1.27	14.14	47.5	7	<20	108	2,660	3,600	326	948	131	<100.0	63.3	7.1	23.9	3.8	13.5	1.1	6.4	0.7	0.95
MJVD-4-63	1.34	8.53	47.0	3	<20	93	1,300	1,890	178	552	90	<50.0	46.8	5.5	21.8	3.3	9.4	0.9	5.7	0.6	0.50
MJVD-4-64	1.21	7.61	39.0	16	<20	148	4,360	6,120	565	1,660	189	<45.0	104	11.4	34.1	5.2	16.8	1.3	8	0.8	1.59
MJVD-4-65	7.48	28.47	128.0	49	<20	370	23,200	31,200	2,640	7,650	775	<200	381	38.4	83.2	11.1	47.8	2.4	13.8	1.5	7.97
MJVD-4-66	2.28	5.69	84.0	28	<20	278	7,670	14,880	1,600	5,620	774	120	355	31.6	71.1	9.7	40.5	2.3	15	1.5	3.78
MJVD-4-67	1.27	10.03	59.5	9	<20	132	2,790	4,000	378	1,130	148	<60.0	77.4	8.7	28.3	4.1	13.7	1.1	7.1	0.8	1.05
MJVD-4-68	1.09	10.88	48.0	8	<20	107	1,650	2,450	235	728	114	<60.0	53.2	6.5	22.3	3.6	11.4	1.1	6	0.7	0.65
MJVD-4-69	1.77	8.41	37.0	5	<20	80	971	1,435	138	432	75	<50.0	37.2	4.3	18.2	2.7	8	0.7	4.6	0.6	0.38
MJVD-4-70	0.76	5.80	26.0	1	<20	94	676	1,130	115	377	70	<40.0	40.5	4.9	20.4	3.4	9.5	0.8	5.5	0.6	0.31
MJVD-4-71	2.86	33.23	72.0	21	<20	159	6,550	9,640	808	2,310	290	<200	131	14.1	36.2	5.2	19.6	1.4	8.2	1	2.40
MJVD-4-72	2.24	6.63	35.5	12	<20	117	2,600	3,610	335	999	123	<40.0	67.7	7.6	26.9	4.2	12.8	1.1	5.8	0.7	0.95
MJVD-4-73	0.90	7.75	82.5	3	<20	102	1,140	1,780	174	558	90	<40.0	49.7	5.6	23.5	3.6	9.6	1	5.8	0.7	0.47
MJVD-4-74	1.40	14.38	110.0	18	<20	108	1,925	2,760	258	783	124	<100.0	59.3	6.7	25.9	3.9	12.5	1.2	6.5	0.8	0.73
MJVD-4-75	2.26	2.41	15.5	2	<20	64	553	907	91	296	48	<15.0	28.8	3.6	14	2	6	0.5	3.3	0.3	0.24
MJVD-4-76	4.01	6.22	76.5	22	<20	233	11,900	15,810	1,315	3,660	334	40	185	20.2	53.1	7.4	28.1	1.7	10.3	1.1	4.03
MJVD-4-77	1.93	4.64	49.5	8	<20	133	2,680	3,900	365	1,110	132	30	79.3	8.7	30	4.6	13.7	1.1	7.1	0.8	1.02
MJVD-4-78	1.32	17.51	40.5	3	<20	86	1,500	2,190	208	641	112	<100.0	49.7	5.8	19.2	2.9	9.7	0.8	4.8	0.5	0.58
MJVD-4-79	2.28	21.67	68.5	19	<20	161	7,230	10,510	880	2,470	261	<150.0	128.5	14.4	37.1	5.5	20.3	1.3	8.2	1.1	2.61
MJVD-4-80	6.43	15.09	88.0	16	<20	159	6,710	9,440	778	2,190	231	<100.0	120.5	13.2	36.8	5.1	19.5	1.4	8.6	1	2.37
MJVD-4-81	2.73	10.55	37.5	11	<20	172	3,570	5,620	541	1,580	188	<60.0	109.5	10.4	34.4	5.1	16.6	1.4	7.4	1	1.42
MJVD-4-82	3.82	14.99	30.0	19	<20	145	3,080	4,930	473	1,375	178	<95.0	91.8	8.2	28.2	4.1	14.8	1.2	7	0.8	1.24

MJVD-4 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-4-83	1.83	7.82	40.0	10	<20	130	3,470	5,260	477	1,280	130	<45.0	81.2	8.3	28.7	4.3	14.5	1.1	5.9	0.8	1.31
MJVD-4-84	1.75	11.03	68.5	27	<20	205	8,440	12,890	1,100	2,950	279	60	169	15.6	46.8	7	26.7	1.7	10.1	1	3.15
MJVD-4-85	2.22	9.98	66.0	26	<20	195	10,630	16,020	1,350	3,610	312	50	186.5	17.2	46.4	6.6	27	1.5	9.4	1	3.90
MJVD-4-86	3.18	5.68	79.5	30	<20	143	13,100	18,940	1,535	3,980	312	60	183.5	16.6	35.8	4.8	24	1.1	6.4	0.8	4.61
MJVD-4-87	3.84	11.79	116.0	138	<20	225	25,100	35,800	2,880	7,430	557	60	334	30.1	64.7	8	41.4	1.7	9.2	1	8.71
MJVD-4-88	5.16	14.38	80.5	22	<20	130	10,070	14,230	1,145	2,910	238	<90.0	138.5	13.1	30.6	4.2	19.5	1	6.5	0.7	3.48
MJVD-4-89	1.73	18.69	50.5	4	<20	74	1,430	2,320	216	621	101	<120.0	44.8	4.5	16.9	2.6	8	0.8	4	0.5	0.58
MJVD-4-90	2.01	2.75	92.5	<1	<20	87	642	1,160	117	366	55	10	38.2	4.2	19.6	3	9.4	0.9	4.5	0.6	0.30
MJVD-4-91	3.72	20.31	36.0	6	<20	121	2,870	4,540	424	1,180	157	<150.0	78.9	7.8	26.6	3.8	12.8	0.9	6	0.7	1.13
MJVD-4-92	1.71	14.36	38.5	11	<20	137	4,410	6,940	648	1,820	196	<90.0	107	9.9	31.1	4.5	15.6	1	6.2	0.6	1.72
MJVD-4-93	1.54	10.84	94.0	5	<20	114	4,200	6,080	537	1,405	140	<60.0	82.2	8	26.6	4.1	13.1	1.1	6.2	0.7	1.52
MJVD-4-94	7.48	16.67	42.5	11	<20	150	5,470	7,970	721	1,915	197	<100.0	113.5	10.7	32.9	5	17.6	1.2	6.9	0.9	1.99
MJVD-4-95	16.46	16.55	23.0	6	<20	141	3,600	5,310	481	1,325	165	<100.0	85.2	8	26.9	4.1	14.9	1.1	5.6	0.7	1.34
MJVD-4-96	14.03	20.99	87.5	17	<20	144	11,990	16,250	1,260	3,170	273	<120.0	143.5	13.3	31.9	4.7	21.3	1.2	6.5	0.7	4.00
MJVD-4-97	3.55	17.76	36.5	2	<20	101	1,900	3,010	280	807	117	<110.0	62.6	6	22.9	3.6	10.9	0.8	5.5	0.6	0.76
MJVD-4-98	2.28	18.10	58.5	19	<20	185	11,370	16,880	1,390	3,730	341	<120.0	193	18.2	47.8	6.9	28.2	1.6	9.6	1.2	4.11
MJVD-4-99	0.80	20.90	38.5	6	<20	107	3,410	5,180	470	1,295	159	<130.0	80.8	7.4	24.4	3.4	12.1	0.9	5.1	0.6	1.29
MJVD-4-100	1.71	11.78	28.5	3	<20	88	2,670	3,650	327	977	114	<70.0	61.8	5.9	17.7	2.7	9.8	0.7	4.2	0.5	0.95
																				Av.	2.28

MJVD-5 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-5-1	1.89	60.50	168.0	157	<20	1,055	37,000	45,000	4,380	13,690	1,365	<350	749	67.2	175	28.1	110	6.1	36.3	4	12.42
MJVD-5-2	4.46	37.39	273.0	365	<20	1,420	114,800	123,900	12,850	35,600	3,010	500	1730	150.5	299	43.8	215	9.5	45.6	5.7	35.26
MJVD-5-3	2.24	53.87	178.5	133	<20	895	46,600	52,800	4,580	13,390	1,225	<350	740	69	171.5	27.5	109	6.5	37.6	4.1	14.46
MJVD-5-4	3.74	57.95	168.5	242	<20	1,160	78,200	96,000	8,940	24,600	2,090	350	1185	105	214	33	153.5	7.2	42.3	4.7	25.54
MJVD-5-5	2.47	42.83	167.5	146	<20	1,225	53,000	62,200	5,250	15,850	1,495	200	940	86.9	238	37.6	141.5	9	48.8	5.6	16.86
MJVD-5-6	2.84	57.44	154.5	180	<20	1,175	59,400	79,000	6,810	19,070	1,760	300	1010	93.6	234	37.2	152.5	9	41	5.5	20.29
MJVD-5-7	6.21	37.22	254.0	281	<20	1,660	112,300	131,100	11,310	29,700	2,310	400	1415	131.5	281	45.2	207	10.1	42.3	6.2	34.88
MJVD-5-8	16.79	64.58	51.0	63	<20	602	15,090	20,000	1,695	5,330	700	<400	381	35.9	112	18.5	58.3	3.9	22.5	2.7	5.28
MJVD-5-9	2.88	64.75	199.5	167	<20	1,260	54,300	62,800	4,930	14,920	1,495	<400	928	86.8	243	39.1	139	9.4	42.8	6.3	16.92
MJVD-5-10	0.92	75.46	111.5	80	<20	550	14,990	18,850	1,765	5,530	740	<500	407	38.8	123.5	19.8	62.2	4.7	26.7	3.1	5.17
MJVD-5-11	20.75	65.77	53.0	38	<20	475	9,640	11,320	1,115	3,630	530	<400	284	26.6	88.1	14.3	45.1	3.5	19.8	2.3	3.26
MJVD-5-12	0.90	75.12	127.5	51	<20	416	17,800	22,200	1,860	5,430	640	<500	336	32.6	93.7	14.9	51.4	3.2	20.8	2.3	5.86
MJVD-5-13	12.43	64.24	72.0	121	<20	900	25,200	33,500	2,760	8,470	972	<400	555	53.6	158	26.5	88.2	5.6	31.9	3.5	8.72
MJVD-5-14	9.68	63.22	133.0	158	<20	972	29,100	40,800	3,470	10,960	1,225	<400	685	63	180	29.4	110	7.7	42.5	4.9	10.52
MJVD-5-15	14.92	64.41	66.0	47	<20	422	9,960	13,660	1,180	3,680	524	<400	266	25.1	79.9	13.4	42	3.3	19.3	2.1	3.58
MJVD-5-16	4.38	16.52	65.0	32	<20	166	2,250	3,090	295	943	136	<100.0	71.9	7.4	27.9	5	17.9	1.7	11.3	1.6	0.84
MJVD-5-17	2.34	4.64	28.5	22	<20	109	758	979	96	305	42	<20.0	24.7	2.6	11.9	2.6	10.1	1.2	7.7	1	0.28
MJVD-5-18	3.72	2.19	13.0	18	<20	83	565	741	71	227	29	<10.0	18	1.8	8.5	1.9	6.1	0.7	4.3	0.6	0.21
MJVD-5-19	12.25	32.29	59.0	51	<20	259	9,540	13,160	1,130	3,520	428	<200	226	20.8	56.3	8.3	29	1.7	10.2	1.1	3.41
MJVD-5-20	16.48	20.82	157.5	107	<20	443	38,500	48,600	3,790	11,110	966	100	542	49.4	96.5	14.6	67.6	3.3	18.8	2.1	12.51
MJVD-5-21	8.51	15.26	107.5	99	<20	253	25,700	33,300	2,640	7,720	647	100	355	31	54.2	7.7	42	1.8	10.2	1.1	8.50
MJVD-5-22	10.54	18.35	106.5	72	<20	279	21,400	27,800	2,260	6,760	634	100	356	30.7	64.3	9.3	42.9	2	11.7	1.3	7.17
MJVD-5-23	15.72	11.74	83.0	39	<20	281	11,630	16,060	1,365	4,230	428	60	245	21.6	55.3	8.9	33.3	2	13	1.3	4.13
MJVD-5-24	10.40	10.04	76.5	34	<20	285	10,410	14,130	1,195	3,680	390	60	226	21.1	57.4	9.8	34.9	2.4	15.3	1.7	3.66
MJVD-5-25	12.55	28.89	235.0	119	<20	450	45,200	59,700	4,810	14,720	1,300	200	686	58.8	101.5	14.8	82.9	3.3	21.3	2.3	15.28
MJVD-5-26	16.97	10.94	80.5	159	<20	297	11,640	16,160	1,400	4,430	471	60	269	24	60.8	9.1	35	2.1	12.5	1.5	4.18
MJVD-5-27	6.29	31.44	15.0	8	<20	152	2,370	3,260	301	934	170	<200	80.6	8.5	31.5	5.2	16.3	1.6	8.4	1	0.88
MJVD-5-28	9.53	37.22	18.5	15	<20	156	2,720	3,530	319	991	189	<250	84.9	8.7	30.8	5.3	16.2	1.4	8.1	0.9	0.97
MJVD-5-29	10.25	22.52	41.5	60	<20	191	3,690	5,000	459	1,425	207	<150.0	117.5	11.7	40.7	6.7	21.9	1.8	9.8	1	1.34
MJVD-5-30	8.30	14.72	40.0	10	<20	170	1,715	2,460	243	824	144	<100.0	85.9	9.2	35.9	6.3	17.1	1.5	8.5	1	0.69
MJVD-5-31	10.68	25.49	25.0	6	<20	163	1,900	2,800	275	889	165	<150.0	85.9	8.8	31.7	5.4	17.2	1.4	8.7	1	0.76
MJVD-5-32	10.71	31.61	33.0	16	<20	172	6,290	8,420	655	1,910	240	<200	117.5	11.6	34.4	5.5	19.4	1.4	8.1	1	2.15
MJVD-5-33	6.31	17.42	40.0	12	<20	185	2,710	3,700	344	1,095	163	<100.0	97.8	9.7	36.5	6.5	20	1.9	9.8	1.1	1.01
MJVD-5-34	9.70	47.42	11.5	5	<20	137	2,080	2,950	278	902	202	<300	74.9	7.5	25.7	4.5	14.3	1.3	7.8	0.8	0.80
MJVD-5-35	8.61	19.03	25.5	4	<20	217	1,900	2,770	271	899	167	<125.0	98.3	10.7	45.2	8	21.7	2.1	11.8	1.5	0.77
MJVD-5-36	6.80	12.71	50.5	8	<20	191	5,420	6,740	582	1,695	187	<80.0	115.5	11.8	39.8	6.6	22.2	1.7	10.7	1.2	1.80
MJVD-5-37	8.40	22.09	33.0	11	<20	180	4,640	6,050	538	1,620	204	<150.0	111.5	11.2	35.6	6.4	19.6	1.6	8.9	1.1	1.61
MJVD-5-38	4.48	10.54	40.0	12	<20	179	4,600	5,960	528	1,570	185	<60.0	114.5	11.2	36.4	6.2	20.4	1.6	9.8	1.2	1.59
MJVD-5-39	1.83	15.23	39.0	2	<20	144	1,445	2,060	197	648	116	<100.0	66.3	7.1	29.7	5	15.5	1.3	8.2	0.9	0.57
MJVD-5-40	2.57	16.54	28.5	6	<20	118	1,415	2,040	193	632	118	<100.0	58.8	6.2	24.4	3.9	12.6	1.1	6.3	0.7	0.56
MJVD-5-41	3.06	62.20	15.0	<1	<20	65	1,225	1,680	154	492	181	<400	38.7	3.7	13.5	2.1	7.7	0.7	4	0.5	0.46

MJVD-5 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-5-42	1.95	56.08	19.5	<1	<20	77	885	1,245	117	382	162	<350	38.6	4	15.8	2.9	7.8	0.9	4.5	0.6	0.35
MJVD-5-43	3.70	29.23	44.5	21	<20	130	5,530	7,150	643	1,905	230	<200	109.5	10.7	27.2	4.4	17.2	1.1	6.3	0.7	1.89
MJVD-5-44	0.58	0.82	8.5	12	<20	23	201	293	28	95	14	3.3	8.6	0.9	4.2	0.8	2.5	0.3	1.9	0.2	0.08
MJVD-5-45	0.41	0.78	7.5	12	<20	22	121	194	19	66	11	2.4	7.4	0.8	3.8	0.9	2.7	0.3	1.8	0.3	0.05
MJVD-5-46	0.60	0.56	7.0	12	<20	22	99	156	16	58	9	2.1	7.1	0.8	3.8	0.9	2.5	0.3	2	0.3	0.05
MJVD-5-47	6.92	10.59	25.5	20	<20	97	3,830	4,900	423	1,215	129	<60.0	70.7	6.8	19.6	3	11.8	0.9	5	0.6	1.28
MJVD-5-48	5.86	13.46	40.5	7	<20	173	4,060	5,630	526	1,630	191	<90.0	115	11.2	37.7	6.5	20.5	1.6	9.9	1.2	1.49
MJVD-5-49	8.01	16.18	47.0	13	<20	197	4,890	6,670	632	1,920	223	<100.0	132.5	12.7	41	6.8	23.9	1.8	9.8	1.1	1.77
MJVD-5-50	11.98	13.80	36.5	9	<20	157	5,710	7,260	641	1,865	199	<90.0	114	11	30.8	5.1	19.5	1.3	7.6	0.8	1.92
MJVD-5-51	7.01	23.79	30.5	10	<20	193	6,260	9,100	761	2,270	266	<150.0	148	13.7	40.7	6.7	23	1.6	9.7	1.1	2.29
MJVD-5-52	9.27	27.53	48.5	20	<20	250	9,900	12,770	1,055	3,120	344	<150.0	195.5	18.7	52.4	8.3	29.8	2	11.9	1.4	3.33
MJVD-5-53	9.82	52.18	42.5	20	<20	261	6,630	9,100	784	2,340	336	<350	157	15.2	47.5	8.5	28.5	2.1	11.7	1.3	2.37
MJVD-5-54	4.73	17.34	35.0	12	<20	193	5,100	6,980	647	1,985	235	<110.0	139.5	13.5	43.7	7.1	22.5	1.8	10.8	1.2	1.84
MJVD-5-55	6.78	20.31	33.0	13	<20	194	6,170	9,140	758	2,320	266	<130.0	146	14.1	41.1	6.8	23.7	1.7	9.2	1.1	2.29
MJVD-5-56	15.25	14.87	37.0	19	<20	209	10,730	13,880	1,110	3,220	305	<100.0	173.5	17.2	41.7	6.9	27.2	1.7	9.8	1.1	3.57
MJVD-5-57	21.88	20.48	19.5	6	<20	186	4,570	6,090	551	1,670	202	<150.0	106.5	10.8	33.8	5.6	19.4	1.5	9	0.9	1.61
MJVD-5-58	12.10	23.45	20.0	5	<20	183	4,320	5,880	542	1,645	213	<150.0	116	11.2	37.4	6.4	20	1.7	8.5	1.1	1.56
MJVD-5-59	20.05	24.64	22.0	16	<20	148	5,660	8,490	703	2,120	232	<150.0	123	11.3	29	4.6	18.4	1	6.8	0.7	2.11
MJVD-5-60	10.52	19.29	20.5	9	<20	154	3,010	4,330	414	1,285	173	<120.0	93.7	9.2	31.2	5.2	17.3	1.4	7.3	0.9	1.14
MJVD-5-61	9.02	24.90	24.0	37	<20	171	2,830	3,890	361	1,125	174	<150.0	90.3	9.4	32.5	5.6	17.7	1.4	8.1	1	1.05
MJVD-5-62	15.99	35.18	40.0	38	<20	221	12,810	15,970	1,240	3,450	346	<250	177.5	16.9	38.4	5.9	25.2	1.5	8.9	0.9	4.12
MJVD-5-63	7.99	19.12	59.0	50	<20	256	17,730	23,200	1,820	5,210	468	<130.0	270	24.9	56.8	8.6	37.9	1.9	10	1.3	5.89
MJVD-5-64	8.86	19.54	37.5	23	<20	168	6,840	10,050	817	2,440	269	<130.0	144	13.8	36.2	5.7	22.1	1.4	8.1	0.9	2.50
MJVD-5-65	10.15	13.38	41.5	86	<20	196	9,920	14,260	1,190	3,530	320	<100.0	188.5	17.6	41.6	6.7	27.5	1.5	9.3	1.1	3.57
MJVD-5-66	8.30	16.83	60.0	145	<20	232	10,540	14,070	1,165	3,460	358	<100.0	209	19.9	50.9	8	29	1.7	9.8	1.2	3.62
MJVD-5-67	16.56	27.62	50.0	70	<20	225	12,630	18,810	1,615	4,850	461	<200	246	22.6	48.6	7	31.5	1.5	8.8	0.9	4.68
MJVD-5-68	16.11	28.64	23.0	12	<20	197	5,010	6,700	616	1,855	236	<200	115.5	11.4	33.7	5.7	18.8	1.3	8.1	0.9	1.78
MJVD-5-69	10.50	25.32	23.5	8	<20	180	4,270	5,900	542	1,670	226	<150.0	112.5	10.9	33	5.9	19.6	1.4	8.1	1	1.56
MJVD-5-70	2.08	7.24	104.0	3	<20	171	1,995	2,930	282	916	137	<40.0	87.2	9.4	37.9	6.3	17.7	1.7	8.9	1.1	0.79
MJVD-5-71	15.95	12.49	39.5	11	<20	210	6,020	9,060	761	2,330	251	<80.0	144.5	13.3	37.5	6.1	22.5	1.5	9.1	0.9	2.27
MJVD-5-72	15.41	13.15	40.5	63	<20	230	10,360	13,470	1,090	3,260	329	<90.0	186.5	17.8	43.3	7.2	27.6	1.7	9.4	1.1	3.48
MJVD-5-73	18.35	18.01	43.5	16	<20	231	9,480	12,250	971	2,910	296	<120.0	162	15.3	38.7	6.4	24.6	1.5	9.1	0.9	3.17
MJVD-5-74	22.91	27.62	32.5	15	<20	208	6,290	9,030	723	2,150	244	<190.0	128	12.3	31.8	5.3	20.3	1.3	7.1	0.9	2.26
MJVD-5-75	11.86	22.18	28.0	13	<20	199	3,560	4,860	449	1,380	187	<150.0	97.7	9.4	30.4	4.9	16.6	1.2	6.8	0.7	1.30
MJVD-5-76	10.27	9.43	92.5	14	<20	208	5,030	6,770	626	1,945	224	<60.0	128.5	12.6	37.2	6.1	21	1.5	8.4	1	1.80
MJVD-5-77	6.84	12.73	41.0	8	<20	171	3,150	4,440	416	1,320	172	<80.0	102	9.8	32.4	5.6	17.4	1.4	7.7	0.9	1.18
MJVD-5-78	10.71	17.67	46.5	27	<20	211	4,840	6,610	611	1,880	229	<120.0	131	12.4	38.9	6.2	20.8	1.5	7.8	1	1.75
MJVD-5-79	9.37	17.08	42.5	16	<20	155	6,670	9,900	805	2,370	244	<110.0	136	12.5	31.6	5	20.8	1.2	7.3	0.8	2.44
MJVD-5-80	7.81	12.92	91.5	39	<20	197	7,490	10,930	888	2,630	275	<80.0	154.5	14.8	38.3	6.1	22.1	1.4	8.1	0.9	2.72
MJVD-5-81	6.80	15.43	64.5	29	<20	217	8,780	11,760	971	2,900	302	<100.0	170.5	16.1	44	7.1	26	1.7	9.1	1	3.02
MJVD-5-82	6.80	12.42	148.0	22	<20	193	5,870	8,570	706	2,130	232	<80.0	132	12.8	36.6	5.9	20.8	1.6	7.8	0.9	2.15

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-5-83	11.24	32.46	72.0	40	<20	167	22,200	28,200	2,170	6,200	548	<220	283	25.1	38.7	5.4	31.1	1.1	7.4	0.7	7.18
MJVD-5-84	10.54	39.43	71.0	30	<20	189	17,050	21,800	1,715	4,970	495	<280	239	21.7	36.4	5.5	29.2	1.2	7.4	0.7	5.58
MJVD-5-85	5.16	8.36	33.0	14	<20	141	4,970	6,550	586	1,780	186	<50.0	109	10.4	28.5	4.9	17.2	1.3	7.1	0.8	1.73
MJVD-5-86	12.45	10.35	51.5	29	<20	186	12,920	15,970	1,225	3,540	320	60	187.5	17.3	37.1	5.7	26.9	1.3	8.2	0.9	4.14
MJVD-5-87	11.86	13.70	59.0	14	<20	167	10,850	13,600	1,045	3,030	297	<100.0	166.5	15	34.9	5.5	24.6	1.5	8.3	1	3.51
MJVD-5-88	7.87	13.89	57.5	34	<20	184	9,850	13,160	1,065	3,190	316	<90.0	176	16.2	37.9	5.7	25	1.4	8.5	0.9	3.36
MJVD-5-89	3.33	5.95	79.0	3	<20	95	1,600	2,270	208	665	92	<40.0	56.9	5.8	21.1	3.7	10.9	0.9	5.6	0.6	0.60
MJVD-5-90	4.19	6.85	61.0	4	<20	119	2,770	3,780	335	1,030	126	<40.0	77.3	7.8	26.3	4.3	13.7	1.1	5.9	0.7	1.00
MJVD-5-91	9.27	9.25	45.5	9	<20	151	10,230	12,590	957	2,720	244	<60.0	148	13.8	32.5	5.5	22.1	1.2	7.1	0.8	3.25
MJVD-5-92	10.71	12.56	16.0	<1	<20	161	1,245	1,855	176	594	114	<90.0	69.4	7.5	32.9	5.9	17	1.6	8.8	1	0.51
MJVD-5-93	6.84	17.08	34.5	4	<20	196	4,510	6,220	562	1,745	222	<120.0	128.5	12.6	41.4	6.9	23.3	1.8	10.2	1.2	1.64
MJVD-5-94	5.84	13.41	58.5	23	<20	209	12,700	16,710	1,315	3,850	355	<100.0	209	19.7	44.9	7.4	29.6	1.8	9.2	1.1	4.25
MJVD-5-95	10.21	21.50	30.5	4	<20	199	4,510	6,000	531	1,625	213	<150.0	113	11.5	35.5	5.9	20	1.5	8.1	1	1.59
MJVD-5-96	2.67	7.32	34.0	2	<20	193	3,850	5,310	481	1,505	182	<50.0	122.5	12.1	42.4	7.3	22.8	1.8	10.2	1.2	1.41
MJVD-5-97	4.27	16.21	46.5	8	<20	188	6,370	9,190	728	2,160	253	<120.0	151.5	14.9	44.4	7.2	24.1	1.8	10	1.2	2.30
MJVD-5-98	3.82	17.84	83.5	59	<20	278	22,700	29,600	2,320	6,830	637	120	364	32.3	68.9	10.1	48.3	2.4	14.4	1.7	7.56
MJVD-5-99	10.46	20.48	55.5	32	<20	176	15,210	19,540	1,515	4,450	410	<150.0	222	20.3	40.5	6.2	29.1	1.4	8.7	1	4.99
MJVD-5-100	11.18	17.34	0.9	39	<20	198	29,000	36,500	2,760	7,950	641	120	358	31.9	48	6.7	43.5	1.6	9.9	1.1	9.32
																				Av.	4.47

MJVD-6 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-6-1	0.21	54.04	65	129	<20	92.3	2,900	9,660	367	1,030	214	<300	67.1	7.7	20.4	3.7	12.5	0.8	4.7	0.4	1.74
MJVD-6-2	0.16	69.34	46.5	95	<20	46.4	2,270	10,840	261	686	197	<400	36.9	5	10	1.7	7.4	0.4	2.9	0.3	1.75
MJVD-6-3	0.12	67.64	50	146	<20	56.7	1,810	12,170	229	656	204	<400	39	5.4	13.4	2.3	8.8	0.6	3.1	0.4	1.85
MJVD-6-4	0.10	68.32	37	126	<20	36	1,345	10,370	167	456	184	<400	27.3	4.1	8.9	1.3	5.9	0.4	2	0.3	1.54
MJVD-6-5	0.10	74.95	37.5	114	<20	40.5	1,415	10,050	182	494	210	<400	29.4	4.1	10.3	1.6	6.4	0.5	2.2	0.4	1.52
MJVD-6-6	0.16	50.82	47.5	128	<20	52.2	1,980	10,180	252	697	176.5	<300	40.3	5.3	11.5	2.1	8	0.7	3.1	0.3	1.63
MJVD-6-7	0.21	39.09	60.5	94	<20	112	2,760	8,040	378	1,070	189.5	<200	73	7.9	21.7	4	14.4	0.8	4.8	0.5	1.53
MJVD-6-8	0.14	56.59	62	123	<20	131	3,060	7,880	444	1,310	264	<350	93.9	10.3	31.1	5.6	18.5	1.1	5.7	0.6	1.60
MJVD-6-9	0.18	57.44	49	177	<20	98.6	1,485	6,890	224	646	208	<350	55	6.9	24.5	4.8	15.1	1.3	5.5	0.7	1.17
MJVD-6-10	0.10	71.72	58	108	<20	113	2,820	9,000	406	1,170	278	<450	81.8	9	27.6	4.9	15.4	1	4.7	0.6	1.69
MJVD-6-11	0.10	76.65	60.5	105	<20	56.7	1,995	13,470	273	754	234	<450	49	6.5	13.6	2.5	9.9	0.6	3	0.5	2.05
MJVD-6-12	0.10	74.27	77	106	<20	81.5	1,625	11,470	248	708	229	<450	49.1	6.7	19.2	3.2	11.2	0.8	3.8	0.5	1.76
MJVD-6-13	0.16	50.31	140	97	<20	216	4,870	12,920	742	2,180	348	<300	150	15.4	47.9	8.3	29.3	1.9	9	1	2.60
MJVD-6-14	0.14	59.48	96	144	<20	202	4,380	12,010	672	1,935	338	<300	140.5	15.3	46.1	8.5	29.7	1.7	8.7	0.9	2.39
MJVD-6-15	0.21	53.02	74	150	<20	244	3,520	7,950	532	1,595	301	<300	138.5	15.1	54.1	9.8	29.8	2.3	10.4	1.2	1.74
MJVD-6-16	0.06	76.48	60.5	172	<20	54	1,215	10,520	177	506	217	<450	37.5	5.2	14.3	2.5	8.7	0.8	3.7	0.4	1.56
MJVD-6-17	0.12	63.22	134	158	<20	222	4,970	12,510	726	2,130	380	<400	151	16.8	50.2	8.8	31.3	2.1	10.8	1.1	2.56
MJVD-6-18	0.14	65.43	124.5	127	<20	172.5	5,060	11,960	721	2,080	345	<400	130.5	13.7	38.8	6.7	23.5	1.4	6.8	0.7	2.48
MJVD-6-19	0.25	47.59	143.5	136	<20	180	4,880	11,050	731	2,150	336	<300	151	15.6	44.6	7.5	26	1.5	8.3	1	2.36
MJVD-6-20	0.31	24.22	61.5	131	<20	79.7	2,320	7,080	303	859	135	<100.0	52.8	6.2	17.1	3	11.5	0.8	4.5	0.4	1.32
MJVD-6-21	0.27	28.72	56	149	<20	74.3	2,240	8,240	301	815	139.5	<150.0	47.3	5.4	16.6	2.9	10.3	0.7	3.5	0.4	1.44
MJVD-6-22	0.21	31.61	53.5	158	<20	85.5	2,240	8,120	292	819	153	<200	55.5	6.5	17.3	3.3	11.2	0.8	4.2	0.5	1.43
MJVD-6-23	0.14	64.58	68	154	<20	91.8	2,220	9,850	303	845	232	<400	60.8	7.2	22.5	4	14.2	1	5.3	0.5	1.66
MJVD-6-24	0.18	52.52	174	125	<20	351	8,860	12,710	1,220	3,390	463	<300	233	24	74.6	13.1	51.2	3.4	15.2	1.7	3.29
MJVD-6-25	0.25	58.80	111	154	<20	262	7,870	9,340	1,060	2,930	436	<300	200	19.5	54.7	9.4	35.3	1.8	10.2	1.2	2.66
MJVD-6-26	0.25	35.18	107	174	<20	320	5,410	6,950	856	2,540	373	<200	185.5	19.5	63.8	11.5	39	2.8	15.1	1.7	2.01
MJVD-6-27	0.27	52.85	115	193	<20	375	8,340	9,570	1,105	3,140	447	<300	225	23.6	71.1	14.2	48.4	3.1	15.9	1.9	2.80
MJVD-6-28	0.16	62.03	100.5	269	<20	333	8,020	10,020	1,095	3,190	496	<400	222	22.4	62.4	11.5	39.5	2.5	12.9	1.5	2.82
MJVD-6-29	0.16	60.50	95.5	167	<20	298	7,540	9,190	1,055	3,030	465	<350	199	20.4	60	10.9	41.4	2.4	11.3	1.3	2.63
MJVD-6-30	0.14	57.61	87	162	<20	200	5,760	9,560	814	2,330	364	<350	156.5	15.6	46	7.9	29	1.9	9.3	1.1	2.32
MJVD-6-31	0.18	58.29	147	163	<20	517	13,280	18,200	1,655	4,480	584	<350	309	33.2	104	19.2	68.6	4.6	21.5	2.7	4.71
MJVD-6-32	0.39	53.19	85	121	<20	395	8,630	8,250	976	2,830	426	<300	217	22.4	74.7	14.8	49.7	3.5	16.6	1.9	2.62
MJVD-6-33	0.27	35.86	81.5	190	<20	419	5,770	6,210	768	2,250	342	<200	198	21.5	73.9	14.6	47	3.1	15.4	1.6	1.93
MJVD-6-34	0.55	40.45	102	177	<20	714	16,910	14,560	1,790	4,950	588	<250	360	35.7	118.5	22.5	81.4	5.7	26.6	3.2	4.80
MJVD-6-35	0.23	24.05	53	148	<20	247	5,040	4,530	648	1,855	261	<150.0	131	13.5	46.1	8.6	30.7	2.2	12.4	1.4	1.53
MJVD-6-36	0.33	48.78	94	123	<20	481	8,410	7,820	1,175	3,320	466	<300	245	24.6	81.1	15.1	53.2	3.6	18.6	1.8	2.64
MJVD-6-37	0.18	72.23	90	59	<20	235	7,520	5,290	1,045	2,940	441	<400	183.5	18.1	54.1	9.7	36.3	2.1	10.7	1.3	2.12
MJVD-6-38	0.33	42.49	71	133	<20	440	8,970	4,750	1,115	3,440	457	<250	262	25.6	91.2	16.4	54.9	3.9	17.2	2	2.33
MJVD-6-39	0.39	58.12	103.5	153	<20	460	8,470	6,420	1,040	3,110	469	<300	251	25.1	87.4	16.2	57.5	3.8	18.4	2.1	2.44
MJVD-6-40	0.53	54.72	181.5	108	<20	793	14,120	9,920	1,645	5,090	686	<350	458	46.4	166.5	30.2	100	7.1	34.8	4	3.94
MJVD-6-41	0.47	64.58	92	100	<20	547	7,680	6,500	870	2,680	437	<350	261	25.7	98.8	19.7	63.1	4.9	22.3	2.9	2.29

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-6-42	0.84	54.38	99.5	139	<20	584	6,110	7,340	748	2,170	406	<300	242	24.8	98	18.6	56.6	4.4	20	2.9	2.14
MJVD-6-43	1.25	33.57	77.5	78	<20	485	4,390	5,310	518	1,565	297	<200	183.5	20.5	82.9	16.7	51.8	4	20	2.7	1.55
MJVD-6-44	1.29	45.89	79	124	<20	552	7,100	8,600	755	2,130	307	<250	172	19.5	74.2	15.8	55.6	4.3	19.6	2.7	2.38
MJVD-6-45	0.25	26.09	70.5	200	<20	549	5,530	5,320	615	1,775	245	<150.0	158	16.6	72.2	17	60.2	4.9	23	2.9	1.72
MJVD-6-46	0.35	24.05	45.5	123	<20	608	4,750	2,820	450	1,410	196	<150.0	150	15.3	71.2	16.1	56.4	4.9	21.3	3.1	1.26
MJVD-6-47	1.52	15.26	62	143	<20	481	6,130	2,820	655	1,965	251	<80.0	177	17.3	67.5	14.4	49.5	3.7	17.3	2.5	1.50
MJVD-6-48	1.46	59.82	91.5	99	<20	975	32,900	21,700	3,250	9,320	1005	<350	644	61.2	190	34.6	126.5	8.1	41.1	4.6	8.37
MJVD-6-49	0.60	56.08	58	78	<20	416	5,790	6,920	599	1,695	297	<350	152	15.8	59.7	13	43.6	3.7	18.2	2.5	1.92
MJVD-6-50	1.60	35.18	144	122	<20	1080	15,920	7,930	1,445	4,290	569	<200	435	44.4	175.5	35.7	117.5	8.8	42.9	5.6	3.82
MJVD-6-51	1.05	19.12	111.5	200	<20	519	11,530	4,690	1,250	3,770	449	100	317	31.1	109	20	65.7	4.6	23.2	2.8	2.71
MJVD-6-52	0.74	56.76	100.5	168	<20	756	16,850	7,330	1,590	4,850	645	<350	446	44.1	154.5	28.5	91.9	6.5	34.6	3.9	3.90
MJVD-6-53	0.47	65.94	74	98	<20	378	6,580	5,650	647	1,945	352	<400	173	17.8	68.8	13.5	44.1	3.6	16.4	2.1	1.90
MJVD-6-54	0.39	52.35	94	116	<20	769	10,070	9,980	954	2,840	414	<300	285	29.6	115	25.6	78.9	6.7	32.2	4.3	3.07
MJVD-6-55	1.34	48.44	85	105	<20	581	8,950	9,430	939	2,560	395	<300	218	22.7	86.3	17.2	68.4	5	24.5	3	2.79
MJVD-6-56	0.62	46.57	83.5	139	<20	560	5,730	7,620	788	2,430	473	<300	265	27.6	102	19.4	64.6	5	24.6	3.1	2.17
MJVD-6-57	1.21	54.21	97	130	<20	427	5,340	7,670	730	2,250	451	<300	221	22.1	76.8	14.4	47.6	3.6	17.1	2.3	2.07
MJVD-6-58	0.70	63.90	101	147	<20	419	6,360	8,250	769	2,260	426	<300	193.5	18.9	62.2	12	42.8	3.3	15.4	2	2.26
MJVD-6-59	1.34	69.34	71	105	<20	221	4,660	5,980	580	1,730	352	<400	146.5	14.1	42.7	8.1	27.6	2.1	9.5	1.3	1.65
MJVD-6-60	0.82	55.23	138	73	<20	585	6,260	7,930	884	2,830	516	<400	274	26.6	101	19.2	65.7	4.7	23.5	2.9	2.34
MJVD-6-61	0.39	22.01	51.5	40	<20	470	3,620	3,010	402	1,275	217	<100.0	138	13.8	55.5	11.8	42.5	3.5	16.5	2.3	1.11
MJVD-6-62	0.37	46.91	71	50	<20	411	4,560	5,720	653	2,120	402	<200	202	18.8	63.1	12.4	40.8	3.2	15.6	2	1.70
MJVD-6-63	0.51	50.65	61	72	<20	380	7,680	12,200	1,375	4,700	775	<300	331	27.6	64.2	10.4	40.2	1.8	8.5	0.8	3.31
MJVD-6-64	1.44	29.15	71	107	<20	628	15,880	23,500	2,270	6,950	887	150	451	40.7	97.2	16.8	66.7	2.9	13.8	1.5	6.11
MJVD-6-65	7.91	39.94	72.5	80	<20	406	15,560	21,000	1,915	5,900	768	<200	361	30.7	64.9	10.5	44.1	1.9	9.5	1	5.52
MJVD-6-66	15.04	55.06	83.5	59	<20	392	23,000	27,600	2,280	6,200	740	<300	357	32	77	12.9	56.3	2.9	14	1.6	7.29
MJVD-6-67	18.25	57.61	62.5	145	<20	405	22,000	26,200	2,040	5,340	617	<300	316	31.9	83.2	15.2	61	3.1	16	1.7	6.85
MJVD-6-68	2.71	69.51	127.5	47	<20	551	12,230	17,540	1,555	4,490	708	<400	342	33.9	105.5	19.6	74.6	5.5	25.2	3	4.52
MJVD-6-69	0.72	72.40	59.0	59	<20	509	10,920	17,130	1,590	4,760	703	<400	303	28.8	78.9	13.8	57.8	3.5	18.5	2.3	4.34
MJVD-6-70	15.18	42.32	198.5	88	<20	764	64,500	84,200	6,900	18,800	1570	200	822	77	120.5	21.2	122	3.9	18.5	2	21.37
MJVD-6-71	17.69	42.32	87.0	106	<20	601	22,800	34,000	3,200	9,870	1130	<200	528	45.6	86.3	14.2	71.2	2.6	13.3	1.3	8.68
MJVD-6-72	31.95	44.02	101.5	101	<20	393	32,900	45,100	3,890	10,980	1075	<200	519	46.5	71.6	11.6	66.7	1.9	11	1.3	11.41
MJVD-6-73	17.22	37.22	120.0	77	<20	549	30,200	40,400	3,530	9,950	987	<200	484	45.9	85.8	15	77.9	2.9	14.7	1.5	10.36
MJVD-6-74	15.39	38.07	196.5	90	<20	509	88,700	112,000	9,220	24,700	1790	200	963	88.7	110	17.7	136.5	2.7	16	1.6	28.60
MJVD-6-75	18.02	51.50	61.5	33	<20	361	18,920	24,500	2,010	5,490	623	<300	314	30	67	11.6	47.8	2.3	9.9	1.4	6.29
MJVD-6-76	9.33	33.40	143.0	59	<20	546	26,400	30,700	2,780	7,710	834	<200	468	45.8	120	21.2	83.8	4.7	24	2.7	8.36
MJVD-6-77	11.57	27.28	190.0	79	<20	514	90,300	104,600	7,940	20,300	1495	300	830	83.8	126	21.3	128.5	4	20.4	2.3	27.18
MJVD-6-78	21.37	22.26	241.0	105	<20	538	116,900	134,600	10,210	26,500	1785	400	1030	103	124	20.4	151	3.9	19.6	2.3	35.06
MJVD-6-79	21.88	25.41	257.0	73	<20	806	102,900	126,500	10,070	27,500	2110	450	1200	115	190.5	35.7	199	6.8	32.1	3.3	32.64
MJVD-6-80	22.60	32.97	190.5	50	<20	639	73,400	92,900	7,600	20,200	1680	200	885	84.5	149	26.5	148.5	5.4	24.7	2.6	23.75
MJVD-6-81	16.50	27.28	178.5	68	<20	511	66,000	88,800	6,430	19,480	1495	300	775	78.9	132	23	119	5	24	2.8	22.10
MJVD-6-82	12.68	27.70	307.0	129	<20	581	134,800	171,700	11,650	33,400	2100	450	1040	123.5	145	23.1	168.5	5.6	25.5	2.6	42.75

MJVD-6 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-6-83	18.00	48.27	108.5	25	<20	246	11,530	17,900	1,325	4,110	467	<200	211	24.1	56.1	10.1	38.7	2.1	10.4	1.1	4.32
MJVD-6-84	34.01	38.24	51.0	20	<20	351	5,890	8,810	729	2,410	363	<200	156	17.3	54.4	10	33	2.2	11.3	1.3	2.26
MJVD-6-85	29.59	47.93	47.0	19	<20	374	12,170	17,910	1,260	3,790	441	<300	200	22.7	63.5	12	43.4	2.7	13.2	1.5	4.36
MJVD-6-86	24.97	37.22	132.5	48	<20	775	35,500	46,300	3,240	9,640	946	<300	505	61.8	163	30	104	6.9	32.5	3.4	11.68
MJVD-6-87	15.33	39.26	100.0	34	<20	592	13,420	20,200	1,515	4,820	627	<300	329	40	132	26.1	82.1	6.1	27.8	3.1	5.02
MJVD-6-89	8.71	30.08	124.5	38	<20	568	12,730	19,880	1,480	4,740	621	150	346	40.8	131.5	24.8	79.1	5.7	28.8	3.6	4.90
MJVD-6-90	15.06	38.92	149.0	38	<20	589	10,940	15,530	1,315	4,300	604	<200	322	37.5	122	22.8	74.1	5.4	26.7	3.3	4.07
MJVD-6-91	25.58	47.42	101.0	19	<20	410	4,700	7,010	594	2,000	370	<300	177.5	22.1	80.8	15.1	46.7	3.8	16.6	2.2	1.85
MJVD-6-92	12.43	36.88	88.5	35	<20	367	5,930	8,840	759	2,580	400	<200	203	24.1	85.8	16.1	50.7	3.6	17	2.1	2.31
MJVD-6-93	28.66	32.55	35.0	41	<20	292	4,330	6,410	575	1,930	280	<200	122	13.8	43.5	8.3	26	1.9	10.2	1.1	1.69
MJVD-6-94	46.03	25.15	25.5	23	<20	306	3,910	6,100	534	1,830	252	<150.0	110.5	11.7	35.6	6.3	24.5	1.5	7.9	0.8	1.58
MJVD-6-95	61.44	20.48	42.5	21	<20	332	7,420	10,530	858	2,730	327	<150.0	148	16.3	41.8	6.9	27.2	1.5	6.1	0.9	2.69
MJVD-6-96	39.35	37.56	21.5	18	<20	268	5,090	7,230	586	1,830	236	<200	97.7	10.9	31.3	6	20.3	1.2	5	0.8	1.85
MJVD-6-97	60.21	24.47	11.5	10	<20	293	2,810	4,240	352	1,190	176.5	<150.0	71.2	7.9	26	4.4	15.1	0.9	4.5	0.4	1.10
MJVD-6-98	57.53	28.38	17.5	10	<20	268	4,610	6,720	566	1,845	234	<150.0	93.3	10.1	26.7	4.5	17.8	0.9	4.8	0.6	1.73
MJVD-6-99	65.55	12.66	11.5	10	<20	287	1,815	2,700	234	803	121.5	<75.0	62.4	6.3	22	4.4	12.6	0.8	3.7	0.5	0.73
MJVD-6-100	48.90	30.08	20.5	14	<20	277	6,440	8,900	720	2,230	252	<200	107.5	11.9	29.5	5.6	20.1	0.9	5.2	0.5	2.28
																				Av.	5.20

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-7-1	0.39	12.73	67.5	165	<20	98.1	2,190	13,770	234	695	103	<75	42.3	6.7	18.2	3.8	12.9	1.1	6.1	0.6	2.09
MJVD-7-2	0.33	14.50	71.5	164	<20	110.5	2,530	13,890	285	863	124	<80	53.2	8.2	22.3	4.1	14.5	1.1	6.4	0.7	2.18
MJVD-7-3	0.25	55.91	66.5	98	<20	115.0	3,490	11,190	439	1,340	261	<350	77.3	9.3	24.6	4.1	16.0	1.1	5.9	0.7	2.05
MJVD-7-4	0.29	65.43	125.5	103	<20	329.0	7,900	10,160	1,095	3,470	539	<450	212.0	23.4	68.0	11.6	39.9	2.3	12.3	1.8	2.86
MJVD-7-5	0.51	43.17	71.5	62	<20	244.0	5,480	5,270	754	2,510	372	<250	152.0	16.6	51.6	8.9	30.7	2.2	10.5	1.3	1.78
MJVD-7-6	0.62	2.26	37.0	175	20	223.0	4,850	1,780	678	2,370	269	60	146.0	15.2	45.9	7.8	27.2	2.1	9.9	1.3	1.24
MJVD-7-7	0.66	3.76	36.0	31	20	158.0	3,860	1,040	456	1,525	166	40	93.6	10.0	32.6	5.9	19.1	1.5	7.5	1.0	0.88
MJVD-7-8	0.53	4.45	16.5	31	20	145.5	3,320	855	407	1,370	151	40	85.7	8.6	27.1	5.3	17.1	1.3	5.9	0.8	0.76
MJVD-7-9	0.66	63.39	72.0	58	<20	360.0	16,130	19,890	1,810	5,880	743	<450	322.0	34.1	89.5	15.1	55.1	3.3	18.7	1.9	5.43
MJVD-7-10	1.54	47.25	143.0	112	<20	511.0	36,100	50,800	3,880	12,010	1,140	<350	533.0	56.0	107.5	17.8	81.0	3.1	16.8	1.9	12.63
MJVD-7-11	1.01	14.22	34.5	46	<20	137.0	4,020	5,880	488	1,545	189	<80	89.7	9.4	24.2	4.3	17.1	1.1	5.6	0.6	1.49
MJVD-7-12	3.23	44.02	41.5	51	<20	182.5	8,980	12,720	1,055	3,260	384	<250	149.5	16.1	34.6	5.7	26.1	1.4	7.7	1.0	3.22
MJVD-7-13	5.10	54.55	46.0	48	<20	164.0	8,760	12,490	1,045	3,270	423	<300	158.5	16.5	33.6	5.6	24.3	1.2	6.2	0.5	3.17
MJVD-7-14	10.36	37.22	63.5	60	<20	242.0	12,850	20,300	1,515	4,820	513	<250	227.0	23.2	52.3	8.6	35.1	1.7	9.9	1.2	4.88
MJVD-7-15	5.24	57.27	74.5	53	<20	241.0	20,500	28,900	2,150	6,680	740	<400	300.0	31.3	55.8	8.9	43.3	1.8	9.3	1.0	7.16
MJVD-7-16	6.47	41.47	95.5	88	<20	348.0	31,100	43,600	3,240	9,870	971	<300	443.0	47.3	84.8	12.9	63.7	2.6	13.4	1.4	10.78
MJVD-7-17	2.73	68.32	30.0	21	<20	95.4	5,060	7,320	597	1,855	319	<400	96.2	9.7	21.5	3.4	15.2	0.7	3.8	0.5	1.85
MJVD-7-18	5.26	46.06	103.0	60	<20	222.0	26,300	36,000	2,610	8,020	723	<300	322.0	32.8	54.4	8.1	45.8	1.7	9.4	0.9	8.92
MJVD-7-19	11.05	39.77	131.5	138	<20	367.0	38,300	53,000	3,770	11,420	978	<250	471.0	50.9	84.8	14.0	69.7	2.6	13.5	1.3	13.03
MJVD-7-20	8.49	38.75	136.0	119	<20	368.0	41,700	56,300	4,010	12,050	1,035	<250	497.0	53.9	87.1	13.6	71.8	2.5	12.7	1.2	13.95
MJVD-7-21	17.47	45.89	40.0	49	<20	274.0	12,230	18,460	1,320	3,940	441	<250	192.0	21.2	49.6	8.5	30.5	1.6	8.6	0.8	4.44
MJVD-7-22	9.39	44.70	63.0	80	<20	334.0	12,430	20,000	1,525	4,880	584	<250	257.0	27.0	62.4	10.0	39.5	1.9	11.3	1.1	4.83
MJVD-7-23	7.89	28.38	79.5	88	<20	335.0	28,600	39,800	2,870	8,750	796	150	387.0	40.4	73.2	11.8	57.3	2.2	10.8	1.1	9.83
MJVD-7-24	3.35	9.69	43.0	34	<20	168.5	18,410	25,200	1,795	5,470	436	50	210.0	23.5	41.2	6.9	34.1	1.5	9.2	0.8	6.22
MJVD-7-25	2.08	11.01	33.5	19	<20	146.0	7,960	10,550	833	2,480	242	<75	126.5	13.9	34.6	6.4	24.1	1.3	7.1	0.8	2.69
MJVD-7-26	5.75	17.42	42.5	29	<20	175.5	13,720	20,500	1,470	4,370	388	<100	183.5	20.8	39.1	6.4	29.6	1.6	7.4	0.8	4.92
MJVD-7-27	17.10	42.66	30.0	34	<20	191.0	8,430	11,830	932	2,860	368	<350	128.0	13.6	30.6	4.8	22.3	0.9	5.3	0.6	2.98
MJVD-7-28	21.06	52.35	29.5	33	<20	180.5	6,950	9,700	791	2,460	344	<350	114.0	11.3	24.9	3.7	17.0	0.7	3.4	0.5	2.47
MJVD-7-29	9.14	61.86	41.5	40	<20	171.5	12,720	19,650	1,415	4,340	515	<350	189.5	19.4	33.4	5.6	28.7	1.0	5.3	0.6	4.70
MJVD-7-30	10.13	38.07	71.5	66	<20	280.0	17,250	24,800	1,825	5,680	598	<250	264.0	28.5	55.3	8.8	41.8	2.0	9.7	0.9	6.10
MJVD-7-31	11.73	40.11	69.5	69	<20	289.0	13,860	22,400	1,660	5,290	592	<250	256.0	27.3	53.9	9.4	41.6	1.9	9.6	0.9	5.35
MJVD-7-32	11.63	43.17	82.0	62	<20	263.0	12,430	20,200	1,500	4,730	538	<250	232.0	23.8	51.5	8.1	35.6	1.7	7.6	0.8	4.81
MJVD-7-33	12.21	49.80	55.5	60	<20	250.0	17,350	24,800	1,830	5,710	614	<300	254.0	26.7	48.9	7.6	36.7	1.7	7.5	0.8	6.12
MJVD-7-34	14.20	47.93	45.0	49	<20	208.0	13,030	21,000	1,550	4,790	526	<300	216.0	22.6	41.7	6.6	32.7	1.2	6.5	0.8	4.98
MJVD-7-35	9.14	42.32	88.0	61	<20	260.0	23,500	33,100	2,360	7,330	715	<250	314.0	33.7	61.2	10.1	45.8	1.8	8.2	1.0	8.13
MJVD-7-36	9.41	31.61	50.5	46	<20	158.5	6,550	9,820	812	2,650	339	<200	136.0	13.5	29.7	4.7	18.9	1.0	4.8	0.6	2.47
MJVD-7-37	4.99	15.04	35.0	17	<20	107.5	3,600	5,790	501	1,655	191	<80	84.2	8.5	21.0	3.7	14.2	1.1	4.0	0.5	1.44
MJVD-7-38	1.62	4.67	24.0	8	<20	90.0	1,475	2,440	222	757	103	20	54.6	5.5	18.8	3.5	11.0	0.8	4.1	0.5	0.62
MJVD-7-39	0.99	2.86	6.5	1	<20	53.1	456	781	68	240	39	10	21.3	2.7	10.3	2.1	5.9	0.5	2.1	0.3	0.20
MJVD-7-40	13.87	43.85	126.5	95	<20	379.0	45,100	64,100	4,750	14,590	1,270	275	589.0	60.7	93.7	14.0	81.9	2.6	14.3	1.2	15.76
MJVD-7-41	15.60	43.34	117.0	95	<20	387.0	46,500	65,400	4,890	14,990	1,310	275	595.0	61.3	94.4	14.4	83.7	2.8	16.0	1.3	16.16

MJVD-7 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-7-42	3.14	54.89	126.5	85	<20	401.0	40,700	56,900	4,150	12,650	1,140	<300	509.0	54.5	91.1	14.2	77.8	2.9	14.3	1.4	14.01
MJVD-7-43	2.30	57.61	143.5	70	<20	392.0	34,000	47,300	3,510	10,740	1,030	<300	468.0	48.7	86.5	14.3	72.1	3.0	14.7	1.5	11.73
MJVD-7-44	2.30	47.93	166.5	158	<20	585.0	56,700	80,600	5,940	18,290	1,655	300	772.0	81.8	133.0	21.3	107.5	3.4	20.4	1.8	19.83
MJVD-7-45	2.82	41.47	197.5	274	<20	590.0	70,400	99,000	7,170	22,200	1,940	400	926.0	96.1	150.5	23.0	130.0	4.1	22.5	2.2	24.37
MJVD-7-46	3.47	42.49	150.5	113	<20	481.0	59,600	84,400	6,040	18,500	1,525	300	717.0	77.0	113.0	16.9	102.0	3.2	16.1	1.6	20.64
MJVD-7-47	4.25	47.93	110.0	71	<20	357.0	32,900	47,100	3,490	10,730	1,035	<350	462.0	49.7	87.6	14.0	69.9	2.6	12.9	1.3	11.56
MJVD-7-48	2.88	10.93	39.5	36	<20	122.0	6,200	8,860	713	2,210	213	<60	102.0	11.0	25.1	4.0	18.2	0.9	5.6	0.7	2.22
MJVD-7-49	14.34	37.05	76.5	62	<20	325.0	24,800	35,700	2,580	7,980	781	<350	346.0	35.8	67.0	10.8	54.2	2.3	12.2	1.1	8.73
MJVD-7-50	25.89	48.10	41.0	59	<20	336.0	11,950	19,990	1,545	5,010	603	<300	236.0	24.2	46.3	7.8	34.6	1.7	7.0	0.6	4.78
MJVD-7-51	18.14	44.36	90.0	61	<20	359.0	17,550	26,100	1,960	6,340	696	<300	302.0	31.8	70.5	11.7	49.9	2.5	11.9	1.2	6.42
MJVD-7-52	13.34	38.07	179.0	96	<20	587.0	32,500	46,000	3,410	10,600	1,065	250	527.0	56.6	139.0	23.0	89.1	5.1	25.9	2.4	11.44
MJVD-7-53	16.40	34.16	88.0	52	<20	332.0	9,900	14,730	1,255	4,070	497	<200	237.0	25.6	75.6	13.2	48.0	3.1	16.4	1.6	3.74
MJVD-7-54	17.75	30.85	134.5	105	<20	469.0	28,500	41,200	3,040	9,580	909	200	454.0	48.8	102.5	17.1	73.7	3.7	18.1	1.8	10.16
MJVD-7-55	21.37	35.35	98.5	72	<20	407.0	16,410	24,100	1,760	5,700	635	<200	293.0	32.0	75.7	12.7	52.4	3.0	14.9	1.4	5.94
MJVD-7-56	5.14	40.11	48.0	18	<20	132.5	3,440	5,290	442	1,470	244	<250	88.1	9.4	27.0	4.7	15.9	1.0	5.5	0.5	1.34
MJVD-7-62	10.52	31.61	75.5	31	<20	235.0	5,710	8,920	772	2,540	365	<250	152.0	16.8	43.7	7.6	29.6	1.8	9.3	1.0	2.26
MJVD-7-63	2.34	7.92	36.5	17	<20	108.5	7,990	11,260	904	2,820	246	40	118.5	13.0	24.9	4.2	22.1	1.0	4.7	0.6	2.83
MJVD-7-64	5.12	19.88	59.5	39	<20	213.0	9,710	14,000	1,145	3,560	368	<100	178.0	19.0	45.1	7.9	32.0	1.7	9.9	0.9	3.52
MJVD-7-65	1.75	14.84	23.0	18	<20	115.0	3,800	5,570	447	1,375	158	<60	74.7	8.5	22.6	4.4	16.1	1.1	5.9	0.6	1.39
MJVD-7-66	0.74	5.01	12.5	14	<20	90.9	1,825	2,920	244	819	104	<30	52.0	6.4	18.4	3.1	10.7	0.7	4.4	0.4	0.73
MJVD-7-67	0.70	11.90	17.5	9	<20	111.5	3,040	4,410	367	1,170	146	<60	70.8	8.1	22.9	4.4	14.8	1.1	4.6	0.6	1.12
MJVD-7-68	7.17	25.58	31.5	25	<20	145.5	5,610	8,230	683	2,150	261	<150	102.5	11.5	28.7	5.1	19.7	1.1	4.4	0.5	2.07
MJVD-7-69	1.48	17.17	20.5	3	<20	95.0	2,130	3,440	299	1,005	186	<200	62.4	7.0	22.0	4.1	13.4	1.1	4.4	0.6	0.87
MJVD-7-70	0.90	6.78	59.0	8	<20	117.5	4,970	7,160	592	1,835	181	30	94.1	10.9	26.3	4.6	19.7	1.0	4.7	0.5	1.81
MJVD-7-71	1.99	21.92	46.0	18	<20	129.0	10,890	15,160	1,235	3,660	338	<125	155.5	17.9	30.4	5.1	25.2	1.2	4.8	0.6	3.80
MJVD-7-72	6.27	22.09	37.0	34	<20	156.5	19,420	27,500	1,990	6,080	495	<125	232.0	25.0	38.6	6.0	34.2	1.1	5.5	0.5	6.72
MJVD-7-73	1.97	7.58	34.5	21	<20	121.5	11,610	18,080	1,325	3,940	326	40	156.0	17.2	30.1	5.1	25.8	1.1	4.6	0.6	4.29
MJVD-7-74	0.64	11.83	20.5	9	<20	108.5	3,630	5,400	449	1,435	172	<60	81.8	9.0	26.1	4.5	16.8	1.1	5.2	0.6	1.36
MJVD-7-75	0.84	10.49	32.5	27	<20	162.5	9,090	13,210	1,130	3,510	342	60	167.0	18.4	38.8	6.8	29.2	1.4	6.8	0.7	3.33
MJVD-7-76	1.48	12.80	47.0	10	<20	115.0	3,620	5,470	464	1,480	183	<70	82.8	9.4	25.7	4.6	16.2	1.1	4.7	0.6	1.38
MJVD-7-77	0.70	11.03	36.0	9	<20	114.0	4,800	6,990	580	1,800	194	<60	96.9	10.9	25.9	5.0	18.2	1.3	5.1	0.6	1.76
MJVD-7-78	1.85	19.03	45.0	25	<20	109.5	11,890	18,560	1,385	4,200	378	<100	173.5	18.8	29.5	4.9	25.7	1.0	4.5	0.5	4.42
MJVD-7-79	0.70	13.19	63.0	1	<20	85.5	2,000	3,070	258	843	127	<70	56.5	6.4	20.7	3.6	12.8	1.0	4.1	0.5	0.78
MJVD-7-80	0.80	26.60	61.5	10	<20	114.5	4,520	6,660	558	1,760	240	<150	98.9	10.4	27.5	4.8	18.0	1.2	4.9	0.5	1.68
MJVD-7-81	0.74	6.07	17.5	6	<20	162.0	2,400	3,840	344	1,170	153	30	101.0	10.2	35.0	6.9	20.3	1.8	6.6	0.7	0.99
MJVD-7-82	0.95	24.05	90.0	5	<20	88.7	3,280	4,780	392	1,245	179	<150	68.2	7.8	19.4	3.5	12.8	0.8	3.7	0.5	1.21
MJVD-7-83	5.18	28.30	33.5	13	<20	149.0	5,610	8,280	687	2,170	278	<150	113.5	12.4	30.1	5.3	21.0	1.2	5.4	0.6	2.08
MJVD-7-84	3.33	18.86	39.5	13	<20	118.0	7,450	10,590	868	2,690	280	<100	120.5	13.4	26.7	4.3	21.3	1.0	5.3	0.5	2.66
MJVD-7-85	7.48	33.48	105.0	51	<20	231.0	32,900	46,200	3,390	10,120	820	<200	382.0	42.0	60.1	9.3	57.6	1.6	8.1	0.8	11.31
MJVD-7-86	6.51	23.62	70.5	27	<20	186.5	16,040	22,700	1,660	5,100	470	<150	218.0	24.9	42.1	7.3	36.0	1.5	7.3	0.8	5.58
MJVD-7-87	1.42	11.96	12.5	2	<20	90.5	2,180	3,420	293	955	130	<60	60.0	6.4	19.7	3.7	12.0	0.9	3.8	0.4	0.86

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-7-88	5.45	27.53	41.5	18	<20	138.0	7,970	11,490	958	2,940	311	<150	133.0	13.7	27.6	5.0	21.9	1.2	6.0	0.6	2.88
MJVD-7-89	1.77	16.74	58.0	159	<20	134.5	7,890	11,350	958	3,010	306	<100	142.0	16.3	35.3	5.7	23.9	1.2	5.9	0.7	2.87
MJVD-7-90	1.40	19.12	53.5	28	<20	168.5	12,360	19,690	1,485	4,540	409	<100	190.5	21.2	39.8	7.2	31.4	1.5	6.6	0.8	4.68
MJVD-7-91	6.02	9.72	45.0	13	<20	150.0	4,300	6,470	555	1,785	211	50	107.0	12.7	33.7	6.4	21.3	1.5	6.9	0.7	1.65
MJVD-7-92	10.87	9.13	35.0	11	<20	138.5	6,410	8,890	724	2,190	213	50	107.5	12.3	28.8	5.3	21.3	1.3	5.2	0.6	2.26
MJVD-7-93	11.88	11.39	64.5	34	<20	212.0	21,500	30,200	2,250	6,670	548	120	277.0	32.0	54.2	8.6	42.7	1.6	6.6	0.8	7.43
MJVD-7-94	3.41	15.86	58.0	44	<20	175.0	21,900	30,000	2,200	6,620	546	80	269.0	30.5	43.8	7.4	41.6	1.3	6.8	0.7	7.43
MJVD-7-95	5.53	32.89	48.0	23	<20	137.5	10,300	14,530	1,185	3,610	394	<200	156.5	17.3	29.5	5.2	25.6	1.0	4.6	0.7	3.65
MJVD-7-96	2.49	21.33	54.5	40	<20	176.5	16,030	22,700	1,695	5,200	467	<150	218.0	24.5	43.3	6.8	35.1	1.2	6.6	0.8	5.59
MJVD-7-97	2.90	10.59	75.0	45	<20	253.0	17,320	24,300	2,010	6,040	563	<150	280.0	31.4	62.8	11.1	47.6	1.9	9.6	1.2	6.11
MJVD-7-98	5.88	24.64	54.5	23	<20	146.5	12,620	14,640	1,105	3,150	303	<150	144.5	16.3	32.2	5.7	24.2	1.2	5.3	0.5	3.86
MJVD-7-99	12.84	47.08	58.5	37	<20	197.5	18,360	21,000	1,515	4,470	482	<300	197.5	22.0	39.0	6.6	31.2	1.4	5.6	0.7	5.55
MJVD-7-100	2.92	13.43	50.5	13	<20	128.0	5,850	7,790	628	1,925	218	<70	105.0	11.8	28.7	5.0	19.6	1.1	5.1	0.6	2.01
																				Av.	5.26

MJVD-8 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-8-01	0.31	25.32	58	150	<20	115	2,340	9,510	233	690	156	<200	50.0	7.5	24.5	4.7	14.7	1.3	5.5	0.7	1.60
MJVD-8-02	0.21	50.31	53.5	133	<20	108.5	2,160	7,920	259	811	218	<300	52.7	7.3	23.2	4.4	14.3	1.1	5.0	0.7	1.40
MJVD-8-03	0.29	46.23	63.5	150	<20	87.8	1,215	8,160	153	474	183	<300	35.4	5.9	21.4	4.1	14.4	1.2	5.7	0.8	1.26
MJVD-8-04	0.21	46.23	80.5	115	<20	152	2,930	8,020	395	1,245	271	<300	82.1	10.7	34.7	6.6	21.7	1.6	7.0	0.9	1.59
MJVD-8-05	0.21	54.38	60.5	96	<20	135	2,520	6,480	348	1,095	283	<300	73.1	9.4	29.4	5.4	18.2	1.3	5.3	0.8	1.33
MJVD-8-06	0.16	51.50	69.5	152	<20	159	2,620	8,160	427	1,445	337	<400	96.7	12.1	39.0	6.9	23.7	1.8	7.3	1.0	1.61
MJVD-8-07	0.21	54.72	65.5	100	<20	363	6,310	7,640	845	2,730	465	<350	189.5	21.1	70.3	13.1	40.2	2.8	12.9	1.4	2.24
MJVD-8-08	0.21	55.40	80.5	102	<20	473	7,030	10,180	1,165	4,110	624	<350	262.0	28.4	85.9	16.5	54.5	3.6	14.9	2.0	2.88
MJVD-8-09	0.25	51.16	86.5	64	<20	429	6,940	9,200	1,000	3,390	551	<350	238.0	26.8	86.3	15.4	51.6	4.0	16.8	2.0	2.63
MJVD-8-10	0.35	37.90	91	71	<20	548	6,690	8,590	1,045	3,470	542	<250	251.0	29.1	96.3	19.1	61.3	4.8	21.8	2.6	2.56
MJVD-8-11	0.25	43.00	69	109	<20	279	5,620	7,760	791	2,510	414	<300	165.0	19.0	57.7	11.6	37.4	2.6	10.8	1.4	2.12
MJVD-8-12	0.16	50.65	77	80	<20	607	6,210	8,580	902	3,010	538	<400	215.0	26.7	84.7	16.8	54.7	3.9	18.2	2.2	2.43
MJVD-8-13	1.05	60.50	87.5	67	<20	461	25,500	26,700	2,650	8,320	956	<400	428.0	47.8	115.0	19.5	75.2	3.9	17.4	2.1	7.81
MJVD-8-14	0.25	70.87	70.5	41	<20	129	2,390	3,820	432	1,375	358	<400	82.9	9.7	30.1	5.5	17.8	1.1	6.3	0.9	1.04
MJVD-8-15	0.53	70.36	38	98	<20	107	2,450	6,620	393	1,280	361	<400	87.1	10.4	29.6	4.9	18.0	1.1	6.7	0.7	1.37
MJVD-8-16	0.66	64.75	96.5	275	<20	221	7,340	20,500	1,155	3,820	626	<400	223.0	26.2	67.9	11.2	39.4	2.5	11.6	1.5	4.11
MJVD-8-17	0.16	79.03	19	47	<20	53.1	1,410	3,450	228	747	317	<400	42.3	5.1	13.8	2.7	9.1	0.6	3.2	0.5	0.76
MJVD-8-19	0.06	81.07	9.5	15	<20	42.3	737	1,520	116	383	280	<400	24.8	2.9	7.8	1.6	5.1	0.4	2.3	0.3	0.37
MJVD-8-20	0.84	85.83	11.5	11	<20	89.6	1,640	2,000	270	939	347	<400	63.1	6.9	20.4	3.7	11.1	0.9	4.2	0.6	0.64
MJVD-8-21	13.81	61.69	17	21	<20	128.5	2,560	3,890	323	1,040	258	<400	60.4	7.0	17.8	3.0	11.3	0.7	3.5	0.3	1.00
MJVD-8-22	5.32	70.53	28.5	26	<20	136	3,090	4,610	420	1,350	317	<400	84.9	9.4	27.5	4.6	16.4	1.2	5.0	0.7	1.21
MJVD-8-23	0.21	75.80	21	27	<20	113	2,440	4,290	327	1,100	303	<400	70.8	8.0	24.1	4.1	14.0	1.1	4.8	0.7	1.05
MJVD-8-24	0.51	62.20	110.5	74	<20	268	10,950	15,020	1,555	5,290	725	<400	290.0	31.6	76.6	12.6	47.4	2.7	14.0	1.4	4.11
MJVD-8-25	0.58	43.85	176	90	<20	502	11,430	15,130	1,950	7,130	952	<300	423.0	45.8	126.0	22.1	82.8	5.6	25.7	2.7	4.52
MJVD-8-26	0.58	62.88	95.5	71	<20	393	12,970	12,500	1,705	5,690	813	<300	337.0	37.3	106.5	19.5	64.0	4.2	18.6	2.3	4.14
MJVD-8-27	0.74	71.04	65.5	59	<20	262	17,720	12,840	1,830	5,760	787	<300	287.0	31.3	74.2	11.5	46.7	2.2	10.2	1.2	4.73
MJVD-8-28	0.82	67.13	72	56	<20	296	20,700	17,780	2,220	7,150	910	<300	368.0	38.7	88.0	13.9	56.8	2.3	12.1	1.3	5.92
MJVD-8-29	0.78	70.02	64	64	<20	207	19,680	22,300	2,460	7,900	1,020	<300	378.0	38.8	72.0	10.4	49.9	1.7	9.4	1.1	6.48
MJVD-8-30	0.64	76.31	70	294	<20	203	17,940	22,600	2,300	7,320	914	<300	354.0	36.9	67.7	10.0	49.4	1.9	8.8	1.1	6.20
MJVD-8-31	0.53	76.14	86	83	<20	204	16,730	24,900	2,120	6,670	861	<300	303.0	33.1	59.2	9.5	44.7	2.0	9.4	0.9	6.23
MJVD-8-32	0.08	73.42	71.5	91	<20	140.5	4,170	25,100	632	2,070	423	<300	121.0	17.2	38.3	6.6	23.0	1.6	7.4	0.9	3.98
MJVD-8-33	0.08	77.16	70.5	68	<20	134	4,980	20,800	625	1,990	425	<300	118.5	15.8	34.7	6.3	22.4	1.5	6.1	0.8	3.54
MJVD-8-34	0.06	69.51	94.5	101	<20	128.5	4,470	31,900	661	2,130	473	<300	122.5	17.2	35.4	5.9	21.5	1.2	6.6	0.9	4.87
MJVD-8-35	0.41	72.40	61	87	<20	112	9,430	27,500	1,290	3,940	536	<300	166.5	19.2	33.8	5.6	26.9	1.0	6.1	0.7	5.21
MJVD-8-36	1.34	67.64	134.5	117	<20	226	26,200	54,900	3,330	10,320	1,085	<300	398.0	49.0	73.5	11.7	60.0	2.1	11.0	1.2	11.65
MJVD-8-37	0.08	71.89	81.5	72	<20	82.4	1,770	31,700	288	944	322	<300	61.6	12.3	24.9	4.7	14.7	1.2	6.3	0.7	4.31
MJVD-8-38	0.25	71.89	67	48	<20	112	5,480	31,400	673	2,030	382	<300	100.0	14.9	28.3	4.9	18.8	1.2	5.5	0.6	4.90
MJVD-8-39	1.03	64.75	79	63	<20	470	24,400	23,000	2,590	8,330	975	<300	469.0	49.4	119.5	19.3	71.8	3.6	18.5	2.0	7.23
MJVD-8-40	0.16	65.77	63.5	51	<20	107.5	2,300	6,910	370	1,150	334	<300	75.6	9.9	28.1	5.2	16.9	1.2	6.6	0.8	1.37
MJVD-8-41	1.32	64.24	96	50	<20	527	30,300	26,300	3,430	10,950	1,290	<300	590.0	60.2	143.0	22.4	86.1	4.1	20.8	2.1	8.80
MJVD-8-42	1.48	46.40	135.5	56	<20	520	38,300	35,200	3,970	12,660	1,365	<300	627.0	65.8	144.5	22.7	99.2	4.4	21.2	2.4	11.11

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-8-43	1.01	53.70	185.5	59	<20	509	25,900	29,300	2,900	9,350	1,120	<300	523.0	55.3	131.0	22.2	83.5	4.7	21.5	2.3	8.37
MJVD-8-44	1.11	52.52	280	103	<20	817	30,800	30,700	3,600	11,850	1,510	350	767.0	80.4	229.0	37.9	124.0	7.6	32.7	3.9	9.67
MJVD-8-45	0.90	61.01	133	86	<20	553	23,900	20,700	2,810	9,710	1,315	<400	598.0	61.3	155.5	25.1	91.9	4.8	22.2	2.5	7.15
MJVD-8-46	2.84	57.10	129.5	68	<20	635	24,500	18,040	2,990	10,220	1,355	<400	646.0	65.6	170.0	27.1	93.6	5.4	25.0	2.6	7.00
MJVD-8-47	14.16	48.95	105.5	67	<20	547	13,520	15,600	1,920	6,570	882	<400	413.0	43.3	118.5	21.0	71.2	4.3	20.8	2.3	4.75
MJVD-8-48	4.32	66.11	159	81	<20	963	12,090	20,400	1,785	6,210	925	<400	479.0	55.7	193.0	38.8	115.5	9.1	40.0	4.4	5.20
MJVD-8-49	1.15	67.47	128	55	<20	745	12,120	14,070	1,505	5,030	739	<400	378.0	42.4	138.5	27.3	82.0	5.9	24.7	3.0	4.18
MJVD-8-50	1.25	56.93	97.5	69	<20	968	21,700	18,870	2,300	7,790	1,030	<400	531.0	62.2	187.5	36.5	115.0	7.4	32.4	3.8	6.41
MJVD-8-51	0.99	57.61	92	64	<20	561	16,400	18,520	1,765	5,910	798	<400	394.0	41.2	115.5	21.7	71.6	4.9	20.4	2.6	5.34
MJVD-8-52	0.45	57.10	96.5	49	<20	438	12,640	13,150	1,605	5,590	787	<400	398.0	41.2	115.5	20.6	64.9	3.9	18.5	2.1	4.17
MJVD-8-53	0.80	53.19	125.5	60	<20	608	23,200	18,360	2,560	8,780	1,130	<400	602.0	61.9	168.0	27.9	93.8	5.6	24.4	2.7	6.63
MJVD-8-54	1.48	59.99	117.5	69	<20	893	40,000	15,670	4,380	14,850	1,850	400	1010.0	98.7	256.0	40.9	139.0	6.7	33.6	3.4	9.43
MJVD-8-55	1.13	50.48	165	70	<20	767	29,000	26,800	3,160	10,870	1,345	300	726.0	71.9	195.5	31.8	112.5	6.8	29.8	3.2	8.77
MJVD-8-56	1.56	61.52	152.5	78	<20	877	36,200	44,900	3,560	11,500	1,315	<400	690.0	69.9	174.5	32.0	117.0	6.7	32.3	3.5	11.93
MJVD-8-57	8.18	41.64	135	69	<20	568	27,200	38,300	2,970	9,420	1,065	<400	503.0	52.5	120.5	22.0	87.5	4.6	18.9	2.2	9.64
MJVD-8-58	9.41	49.80	127.5	57	<20	619	24,200	34,000	2,640	8,580	1,005	<400	500.0	54.0	140.0	26.3	92.0	5.8	24.5	3.0	8.63
MJVD-8-59	6.55	23.88	72	52	<20	314	13,360	22,500	1,725	5,440	549	<150	264.0	29.0	61.2	11.0	46.3	2.2	10.6	1.1	5.33
MJVD-8-60	0.23	1.84	11	16	<20	45.5	658	878	84	288	39	<10	20.3	2.2	8.2	1.5	5.3	0.4	2.7	0.4	0.24
MJVD-8-61	0.51	2.62	12	21	<20	41.4	696	1,030	92	301	43	<10	21.5	2.2	7.6	1.5	6.2	0.5	1.9	0.4	0.27
MJVD-8-62	0.35	1.24	7.5	17	<20	26.6	299	486	43	145	20	4.8	12.1	1.3	4.5	1.1	3.5	0.3	0.9	0.2	0.13
MJVD-8-63	0.47	2.09	8	22	<20	27.5	302	628	42	146	25	<10	12.4	1.3	5.2	1.1	4.2	0.4	2.2	0.2	0.14
MJVD-8-64	0.41	1.41	7	18	<20	28.4	215	415	31	110	19	4.4	8.8	1.2	4.7	1.0	3.5	0.4	2.1	0.2	0.10
MJVD-8-65	0.78	1.92	11.5	19	<20	29.7	296	433	42	142	23	<10	12.1	1.4	4.9	1.3	4.0	0.2	1.6	0.3	0.12
MJVD-8-66	0.60	3.93	18	16	<20	21.2	169	312	25	94	22	<10	8.3	0.9	3.2	0.6	2.6	0.2	1.4	0.2	0.08
MJVD-8-67	0.90	8.92	19.5	14	<20	41	1,160	1,805	151	481	70	<50	27.6	3.1	9.2	1.7	6.2	0.3	2.1	0.2	0.45
MJVD-8-68	0.76	5.98	19	1	<20	46.8	492	910	78	282	51	<50	22.6	2.7	8.9	1.6	6.2	0.5	2.0	0.2	0.23
MJVD-8-69	5.28	20.39	46.0	6	<20	97.2	2,780	4,140	347	1,115	167	<100	65.4	7.4	19.0	3.8	11.8	0.8	3.9	0.5	1.05
MJVD-8-70	3.60	14.63	37.5	25	<20	154	7,970	10,740	847	2,480	253	<100	122.5	13.7	29.6	5.2	22.0	1.1	5.2	0.5	2.72
MJVD-8-71	6.08	12.59	36.0	29	<20	158	5,160	7,460	613	1,915	238	<100	114.0	12.5	33.1	6.2	21.0	1.3	5.6	0.5	1.89
MJVD-8-72	2.86	11.73	56.5	13	<20	115	4,490	6,340	495	1,510	168	<100	86.2	9.6	23.9	4.3	16.2	1.1	5.1	0.6	1.59
MJVD-8-73	0.49	3.42	11.0	3	<20	64.4	1,245	1,925	152	483	63	<100	34.4	3.6	12.9	2.8	8.0	0.6	2.7	0.3	0.48
MJVD-8-74	1.40	13.99	28.0	12	<20	128.5	4,990	6,930	578	1,845	207	<100	100.5	11.3	27.8	4.8	18.5	1.2	5.2	0.7	1.78
MJVD-8-75	0.72	8.75	17.0	4	<20	85.1	2,570	3,610	311	979	125	<100	61.3	6.7	18.7	3.4	12.2	0.8	3.5	0.5	0.93
MJVD-8-76	1.60	12.75	44.5	11	<20	120	4,970	7,210	600	1,860	203	<100	96.9	10.9	27.5	4.9	18.5	1.1	5.3	0.5	1.82
MJVD-8-77	1.07	9.04	40.0	5	<20	123	2,380	3,830	328	1,090	154	<100	75.5	8.7	26.0	5.1	17.0	1.2	5.8	0.7	0.97
MJVD-8-78	2.08	16.33	66.5	6	<20	138.5	3,670	5,680	482	1,520	208	<100	93.0	10.5	30.9	5.3	18.9	1.2	6.3	0.7	1.42
MJVD-8-79	1.17	25.15	43.0	5	<20	128	2,050	3,330	294	1,015	200	<100	84.4	8.7	29.2	5.5	17.1	1.2	6.7	0.6	0.86
MJVD-8-80	1.50	11.59	44.0	20	<20	142	7,840	11,040	920	2,850	295	<100	140.5	15.3	32.9	5.7	24.7	1.3	5.2	0.7	2.80
MJVD-8-81	1.29	8.67	31.5	13	<20	133	2,640	3,710	354	1,050	151	<50	78.8	9.0	28.0	5.1	17.1	1.2	5.5	0.6	0.98
MJVD-8-82	1.23	9.45	37.5	13	<20	151	4,700	6,330	574	1,720	205	<50	104.0	11.9	33.7	6.1	22.4	1.5	6.6	0.8	1.66
MJVD-8-83	0.64	12.29	21.0	6	<20	95.4	1,400	2,020	191	610	114	<50	52.6	6.2	20.6	4.1	12.5	0.9	4.1	0.5	0.54

MJVD-8 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-8-84	0.76	19.12	51.5	6	<20	88.7	2,390	3,260	303	916	154	100	58.8	6.8	18.7	3.3	13.6	0.8	3.8	0.5	0.88
MJVD-8-85	0.31	9.79	22.0	5	<20	113.5	2,120	2,930	272	847	137	<50	66.8	7.7	24.7	4.5	14.2	1.1	4.9	0.5	0.78
MJVD-8-86	1.75	62.20	24.0	15	<20	108.5	3,150	3,600	369	1,105	295	<400	72.1	8.0	21.3	3.9	14.0	0.9	4.3	0.6	1.05
MJVD-8-87	1.95	62.37	23.0	14	<20	96.3	3,030	3,550	356	1,060	296	<400	66.1	7.4	19.5	3.5	12.8	0.9	4.2	0.6	1.02
MJVD-8-88	0.84	13.89	18.0	10	<20	113.5	2,170	3,120	297	926	150	<80	66.9	7.5	22.8	4.3	15.1	1.1	4.1	0.5	0.83
MJVD-8-90	0.45	31.95	21.0	3	<20	79.2	1,460	2,010	193	598	162	<200	44.8	5.3	16.6	3.3	10.3	0.9	3.5	0.5	0.55
MJVD-8-91	0.53	9.77	7.5	1	<20	54	542	828	84	278	65	<50	24.4	2.6	10.3	2.0	6.6	0.5	2.4	0.2	0.23
MJVD-8-92	0.70	6.90	25.0	4	<20	85.5	814	1,325	135	461	82	<50	43.3	5.0	16.5	3.2	9.4	0.8	3.2	0.4	0.36
MJVD-8-93	0.72	12.42	25.5	13	<20	126	3,530	4,800	457	1,400	190	<50	87.6	10.2	28.6	5.1	18.9	1.3	5.1	0.6	1.28
MJVD-8-94	1.64	7.24	99.0	124	<20	141	13,380	17,960	1,560	4,450	410	80	216.0	23.5	38.3	6.4	31.0	1.2	6.0	0.6	4.59
MJVD-8-95	0.39	16.25	50.5	6	<20	132	1,680	2,400	236	742	150	<100	66.9	7.9	27.2	5.4	16.1	1.3	6.0	0.7	0.66
MJVD-8-96	2.08	27.53	65.5	56	<20	232	28,500	37,700	3,200	9,180	833	150	418.0	44.1	63.8	10.1	59.1	1.9	8.4	0.9	9.64
MJVD-8-97	1.79	57.27	32.5	22	<20	125	7,260	9,110	856	2,440	383	<350	127.0	14.4	26.8	5.0	21.2	1.0	4.7	0.6	2.44
MJVD-8-98	1.34	14.99	27.0	20	<20	131	10,010	14,380	1,215	3,440	338	<100	162.0	18.0	31.5	5.4	26.2	1.2	5.7	0.6	3.57
MJVD-8-99	1.17	11.00	32.0	21	<20	138.5	9,260	13,650	1,165	3,460	333	50	163.5	18.2	32.9	5.6	27.4	1.4	5.2	0.7	3.40
MJVD-8-100	1.48	17.93	44.0	33	<20	165	18,670	25,100	2,140	6,140	572	100	269.0	28.8	43.4	7.1	41.0	1.5	6.7	0.9	6.39
																				Av.	3.43

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-9-01	0.35	1.60	29.0	172	<20	71.6	980	6,450	101	281	38	11.6	19.9	3.6	11.2	2.2	8.1	0.9	3.0	0.4	0.97
MJVD-9-02	0.37	1.26	29.5	196	<20	71.6	1,130	6,590	117	326	42	13	22.1	3.8	10.1	2.4	8.0	0.7	3.1	0.4	1.02
MJVD-9-03	0.39	5.74	30.5	177	<20	81	1,270	6,760	135	367	55	<30	23.8	4.2	11.8	2.6	9.3	0.8	3.2	0.5	1.06
MJVD-9-04	0.25	16.20	26.0	206	<20	88.7	1,015	6,920	125	359	85	<100	26.7	4.5	14.3	2.9	9.8	1.0	4.3	0.5	1.05
MJVD-9-05	0.33	17.08	35.5	254	<20	134	1,805	8,660	236	675	126	<100	43.2	7.4	24.5	4.8	17.5	1.5	5.8	0.8	1.43
MJVD-9-06	0.16	51.67	47.5	215	<20	175.5	3,070	8,170	423	1,240	256	<250	86.5	11.8	35.2	7.1	23.6	1.9	7.8	1.0	1.63
MJVD-9-07	0.06	77.33	14.5	76	<20	45	1,020	3,830	130	368	272	<500	24.6	3.8	10.2	2.0	6.0	0.6	2.6	0.4	0.69
MJVD-9-08	0.08	69.17	26.0	154	<20	118.5	1,895	4,600	240	702	286	<500	55.7	7.2	23.5	4.5	13.9	1.2	5.8	0.8	0.96
MJVD-9-09	0.16	61.01	41.0	209	<20	157	2,680	8,390	361	1,020	255	<300	72.1	10.0	31.4	5.9	18.9	1.8	7.0	0.9	1.57
MJVD-9-10	0.23	52.85	44.0	136	<20	270	5,030	8,110	612	1,805	361	<300	125.0	15.1	45.7	9.0	29.7	2.2	9.3	1.1	1.97
MJVD-9-11	0.47	22.43	65.0	264	<20	585	6,310	7,740	825	2,570	400	<150	248.0	29.7	111.5	22.4	67.0	6.2	27.1	3.4	2.27
MJVD-9-12	0.55	25.49	50.0	206	<20	528	5,060	5,690	661	2,040	329	<150	177.0	21.5	76.2	15.8	47.1	3.9	15.9	2.1	1.76
MJVD-9-13	0.72	29.49	67.5	230	<20	739	8,700	7,560	1,075	3,230	494	<150	278.0	32.8	117.5	23.7	69.5	5.5	21.5	2.5	2.67
MJVD-9-14	0.95	30.42	74.5	206	<20	863	25,300	4,970	3,080	9,550	1,180	200	638.0	70.4	213.0	36.1	120.5	7.7	33.2	3.7	5.46
MJVD-9-15	0.39	59.99	64.0	87	<20	447	9,080	6,460	1,225	3,820	633	<400	283.0	31.6	100.5	18.0	58.3	4.3	18.6	2.1	2.64
MJVD-9-16	0.72	42.66	106.5	128	<20	862	21,700	7,110	2,470	7,600	990	<300	541.0	59.4	190.5	33.4	111.0	7.4	31.5	3.6	4.94
MJVD-9-17	1.50	29.57	161.5	159	<20	1570	46,700	5,410	5,210	16,060	1,920	400	1,155.0	124.5	399.0	68.4	219.0	14.1	61.3	6.7	9.35
MJVD-9-18	0.49	37.05	123.0	124	<20	805	10,140	6,330	1,165	3,650	572	<200	351.0	41.8	154.0	29.0	85.3	7.1	31.6	3.6	2.78
MJVD-9-19	0.70	37.05	104.5	131	<20	1035	14,800	8,140	1,525	4,790	719	<200	435.0	51.0	184.5	36.4	109.0	8.9	36.2	4.5	3.79
MJVD-9-20	0.68	30.85	77.0	140	<20	741	8,140	9,310	1,020	3,200	522	<200	286.0	33.8	121.5	23.4	73.5	6.2	29.3	3.3	2.82
MJVD-9-21	0.58	50.99	64.0	87	<20	653	5,850	5,970	675	2,090	416	<300	196.5	23.6	88.5	18.9	58.9	4.9	22.1	2.9	1.92
MJVD-9-22	0.27	68.83	49.0	81	<20	338	4,420	5,130	529	1,640	417	<400	141.5	16.2	56.5	11.2	35.8	2.6	11.8	1.7	1.53
MJVD-9-23	0.25	63.22	57.0	83	<20	530	4,760	5,070	545	1,760	422	<400	178.0	20.7	78.5	16.6	51.4	4.5	18.9	2.3	1.61
MJVD-9-24	0.49	57.61	78.5	159	<20	789	7,260	9,120	917	2,940	597	<400	285.0	31.9	110.0	22.7	74.2	6.0	27.7	3.6	2.66
MJVD-9-25	0.53	40.45	87.0	195	<20	880	7,730	10,740	1,225	4,210	790	<300	404.0	44.5	142.0	27.6	92.2	7.2	30.7	3.9	3.15
MJVD-9-26	0.33	48.61	68.5	128	<20	620	4,920	7,290	773	2,610	588	<300	283.0	31.0	105.0	19.9	60.0	4.9	19.2	2.5	2.08
MJVD-9-27	0.41	60.16	117.0	110	<20	475	7,180	9,640	973	3,110	672	<300	305.0	32.6	101.0	17.6	53.6	3.5	16.4	1.9	2.71
MJVD-9-28	0.72	47.76	162.0	178	<20	679	9,450	16,850	1,625	5,470	965	<300	452.0	46.0	130.5	21.8	70.0	4.0	17.5	2.0	4.30
MJVD-9-29	1.09	58.80	91.5	192	<20	958	17,060	27,100	2,630	8,980	1,250	<300	548.0	54.5	130.5	24.3	87.8	3.9	17.4	1.8	7.06
MJVD-9-30	11.24	52.68	125.0	161	<20	937	29,000	37,600	3,080	9,140	1,135	<300	546.0	59.8	148.0	27.0	95.7	4.7	19.1	2.2	9.81
MJVD-9-31	12.16	55.23	95.0	83	<20	524	23,900	29,900	2,400	7,010	839	<300	361.0	39.8	87.3	14.9	63.9	2.9	12.8	1.5	7.81
MJVD-9-32	16.13	54.55	35.5	57	<20	305	8,290	12,990	1,150	3,430	469	<300	170.0	19.0	40.7	7.4	29.5	1.3	5.1	0.6	3.23
MJVD-9-33	24.35	51.50	33.5	62	<20	290	7,360	12,380	1,125	3,570	495	<300	187.5	20.0	42.4	6.9	30.4	1.2	5.0	0.5	3.06
MJVD-9-34	22.91	34.50	134.0	336	<20	597	35,900	48,000	4,080	12,030	1,265	<300	613.0	64.1	118.5	19.5	93.5	3.3	15.3	1.7	12.33
MJVD-9-35	23.94	47.25	62.5	96	<20	384	16,560	21,800	1,895	5,670	681	<300	287.0	31.0	59.0	10.7	47.5	1.9	8.1	1.0	5.69
MJVD-9-36	23.42	45.04	87.5	168	<20	526	41,000	53,300	4,330	12,380	1,220	<300	555.0	58.3	87.3	13.9	80.2	2.5	11.6	1.2	13.62
MJVD-9-37	16.85	43.85	91.0	130	<20	442	39,400	53,300	4,530	13,580	1,380	250	602.0	62.4	87.8	14.6	88.3	2.7	12.8	1.3	13.64
MJVD-9-38	26.82	44.02	96.5	72	<20	329	19,720	27,700	2,370	7,230	850	<300	374.0	39.5	70.8	11.7	53.5	2.2	10.0	1.0	7.05
MJVD-9-39	14.20	55.23	92.0	26	<20	336	8,960	13,150	1,100	3,350	539	<300	226.0	27.2	78.9	14.0	45.7	3.0	13.7	1.7	3.34
MJVD-9-40	17.51	50.99	127.0	26	<20	342	8,250	10,680	1,025	3,030	488	<300	215.0	26.4	81.5	14.6	47.6	3.2	13.3	1.6	2.90
MJVD-9-41	11.10	59.99	148.0	17	<20	219	3,310	4,650	460	1,470	384	<300	132.5	16.3	54.7	10.7	29.6	2.3	8.9	1.1	1.29

MJVD-9 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-9-42	18.80	57.27	73.0	17	<20	217	2,890	3,820	384	1,215	308	<300	95.9	11.0	35.6	7.1	21.5	1.5	6.4	0.8	1.08
MJVD-9-43	31.75	45.38	105.5	20	<20	398	4,650	6,690	662	2,170	423	<300	186.5	21.0	72.7	13.5	41.3	3.0	13.8	1.5	1.84
MJVD-9-44	15.66	57.27	96.0	25	<20	244	10,710	14,230	1,150	3,260	450	<300	181.5	20.4	49.2	8.3	32.1	1.8	6.6	0.9	3.64
MJVD-9-45	14.94	58.63	97.0	39	<20	242	15,340	18,560	1,490	4,140	512	<300	206.0	23.6	49.9	9.1	38.1	1.7	6.5	0.9	4.87
MJVD-9-46	33.39	39.60	61.0	29	<20	402	7,930	10,240	970	2,930	443	<300	198.0	22.6	66.6	12.2	40.9	2.7	11.6	1.3	2.79
MJVD-9-47	35.55	37.39	51.5	24	<20	432	7,650	>10000	938	2,830	415	<300	202.0	24.2	73.2	14.3	46.9	3.3	13.7	1.7	2.72
MJVD-9-48	36.99	32.38	42.0	29	<20	411	5,630	6,950	697	2,100	354	<300	169.0	19.7	62.9	12.9	39.8	2.9	12.5	1.4	1.97
MJVD-9-49	45.21	29.23	20.0	21	<20	328	2,600	3,430	377	1,245	280	<200	134.0	15.0	52.5	9.6	28.1	2.2	9.7	1.0	1.02
MJVD-9-50	33.29	29.66	46.5	31	<20	505	8,130	10,890	1,070	3,310	511	<200	281.0	32.7	107.5	19.5	58.3	4.3	17.1	1.9	2.99
MJVD-9-51	28.25	31.78	60.0	57	<20	488	13,130	17,410	1,495	4,640	618	<200	318.0	36.0	103.0	19.0	61.0	3.7	16.9	2.0	4.60
MJVD-9-52	9.55	16.13	23.5	18	<20	257	2,770	3,570	366	1,150	213	<100	111.5	13.4	47.6	9.6	29.8	2.5	11.2	1.3	1.03
MJVD-9-53	4.64	16.23	22.5	4	<20	181.5	2,280	3,210	295	934	170	<100	80.6	9.9	36.8	6.8	22.7	1.8	7.7	0.8	0.87
MJVD-9-54	29.38	17.34	14.5	3	<20	222	3,140	4,130	374	1,120	181	<100	89.1	10.7	33.7	6.6	21.1	1.6	6.3	0.7	1.12
MJVD-9-55	50.14	14.04	130.5	15	<20	310	1,900	2,720	258	843	166	<100	88.7	10.1	38.7	7.3	21.9	1.5	7.3	0.7	0.77
MJVD-9-56	9.88	15.26	81.5	7	<20	301	1,900	2,690	248	792	171	<100	93.4	12.7	52.8	10.8	32.3	2.9	12.9	1.4	0.76
MJVD-9-57	27.84	9.23	38.0	4	<20	287	1,000	1,495	142	482	110	<100	65.0	9.4	42.2	9.2	28.2	2.7	11.2	1.2	0.44
MJVD-9-58	16.19	16.91	27.5	4	<20	240	1,315	1,775	165	523	131	<100	64.2	8.5	39.0	8.4	23.7	2.1	9.5	1.1	0.52
MJVD-9-59	16.32	16.67	15.5	3	<20	208	1,360	1,815	169	551	140	<100	56.7	7.1	29.3	6.5	19.3	2.0	8.2	1.0	0.52
MJVD-9-60	8.20	4.13	48.5	14	<20	194.5	3,040	3,870	338	981	129	20	80.5	9.8	33.4	6.9	23.9	2.1	7.5	1.0	1.05
MJVD-9-61	23.84	4.50	24.5	11	<20	239	4,000	4,960	427	1,240	157	25	94.5	12.3	39.2	8.2	27.9	2.3	10.0	1.0	1.35
MJVD-9-62	23.53	16.69	64.0	20	<20	320	13,250	15,890	1,260	3,440	344	<100	179.5	22.1	53.9	10.6	42.4	2.5	10.7	1.4	4.18
MJVD-9-63	26.92	13.09	176.5	22	<20	488	9,410	13,090	1,070	3,070	361	75	203.0	24.3	78.9	16.6	57.2	4.7	19.1	2.2	3.36
MJVD-9-64	18.68	12.70	93.0	31	<20	413	13,910	17,120	1,385	3,830	389	100	223.0	26.8	73.8	14.0	51.0	3.5	15.7	1.7	4.50
MJVD-9-65	16.87	10.01	136.0	45	<20	526	25,200	30,500	2,380	6,360	565	150	326.0	39.6	96.3	17.9	67.4	3.8	15.1	1.6	7.95
MJVD-9-66	4.13	5.83	104.5	11	<20	265	16,430	19,380	1,470	3,720	308	70	184.5	23.8	54.4	10.7	42.6	2.7	12.7	1.4	5.03
MJVD-9-67	5.40	4.79	109.0	3	<20	224	7,520	9,200	803	2,200	231	50	136.5	16.7	47.5	9.4	30.9	2.4	10.6	1.2	2.46
MJVD-9-68	8.34	8.26	76.0	18	<20	318	21,600	25,900	2,010	5,340	443	100	267.0	31.9	67.6	12.2	50.4	2.7	11.8	1.3	6.73
MJVD-9-69	12.21	18.10	69.0	2	<20	195	5,630	7,150	636	1,760	225	<130	109.0	13.3	38.2	7.2	24.7	1.9	7.8	0.9	1.89
MJVD-9-70	10.29	17.42	252.0	164	<20	551	93,000	116,700	9,110	24,600	1,790	400	967.0	107.5	115.5	19.5	147.5	3.3	17.6	1.4	29.69
MJVD-9-71	26.51	40.45	56.0	37	<20	272	15,450	20,500	1,690	4,740	492	<250	222.0	24.1	39.2	6.6	36.0	1.3	5.6	0.7	5.22
MJVD-9-72	29.18	25.07	81.5	50	<20	428	19,960	27,200	2,290	6,440	626	<200	303.0	33.1	59.4	11.1	54.0	2.3	10.8	1.2	6.89
MJVD-9-73	25.99	37.73	43.0	29	<20	281	9,640	14,300	1,215	3,500	453	<200	180.5	19.1	41.6	7.4	30.6	1.5	6.3	0.8	3.56
MJVD-9-74	18.84	34.67	62.0	137	<20	273	16,720	22,400	1,900	5,370	535	<200	246.0	26.8	42.3	7.4	40.3	1.6	7.7	0.9	5.71
MJVD-9-75	35.03	39.09	56.5	29	<20	333	14,190	19,890	1,710	4,840	533	<200	230.0	24.5	44.1	7.7	38.2	1.7	6.5	0.8	5.02
MJVD-9-76	31.34	30.25	91.5	54	<20	307	34,400	44,400	3,600	9,660	775	<200	382.0	42.3	49.5	8.2	58.3	1.6	8.3	0.8	11.24
MJVD-9-77	13.07	17.93	182.0	61	<20	388	95,600	121,300	9,320	25,500	1,740	400	949.0	106.5	96.9	14.9	138.0	3.1	17.0	1.9	30.66
MJVD-9-79	13.29	17.67	217.0	65	<20	409	99,100	130,400	11,140	27,400	1,875	400	993.0	109.5	93.7	14.2	146.0	3.1	16.5	1.8	32.66
MJVD-9-80	13.34	16.91	186.5	61	<20	385	93,500	122,900	10,510	26,600	1,905	400	998.0	108.0	95.4	13.2	142.0	3.1	17.4	1.8	30.91
MJVD-9-81	9.25	13.70	168.5	54	<20	372	77,000	101,100	8,040	22,000	1,555	240	819.0	89.2	82.4	12.8	123.5	2.9	15.8	1.7	25.37
MJVD-9-82	8.49	9.86	61.5	13	<20	160.5	19,760	25,900	2,070	5,610	448	100	237.0	26.9	33.0	6.4	38.1	1.4	7.2	0.8	6.53
MJVD-9-83	9.23	12.80	108.5	53	<20	227	39,700	50,500	3,990	10,420	752	150	405.0	44.5	52.6	8.9	63.3	1.9	10.3	1.0	12.76

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-9-84	22.60	9.89	60.5	24	<20	235	16,560	21,200	1,710	4,620	410	50	219.0	24.3	44.7	8.0	39.0	1.9	8.5	0.9	5.41
MJVD-9-85	17.10	28.04	44.0	9	<20	190	6,580	8,530	793	2,210	285	<150	126.5	13.9	34.8	6.5	26.8	1.6	7.0	1.0	2.26
MJVD-9-86	9.78	29.06	101.0	49	<20	277	24,300	31,000	2,520	6,780	619	<150	306.0	33.3	56.3	10.3	52.1	2.3	10.4	1.1	7.91
MJVD-9-87	8.65	21.41	74.5	10	<20	174.5	7,990	10,390	982	2,690	289	<150	132.0	15.4	31.8	6.0	26.5	1.5	6.5	0.8	2.73
MJVD-9-88	26.40	32.55	64.5	36	<20	283	16,850	21,700	1,795	5,030	511	<150	242.0	26.8	50.0	9.0	43.8	2.0	8.5	1.1	5.58
MJVD-9-89	15.06	10.42	35.5	18	<20	217	5,900	7,750	726	2,100	238	<60	129.5	15.0	40.9	8.0	30.9	2.0	9.9	1.1	2.06
MJVD-9-91	42.12	11.13	32.0	9	<20	235	5,680	7,800	738	2,170	248	<60	126.5	14.5	39.5	7.5	27.9	2.0	8.8	1.0	2.05
MJVD-9-92	34.93	18.61	65.5	41	<20	350	9,850	14,100	1,150	3,240	365	<100	186.0	21.9	56.7	11.2	42.0	3.2	14.5	1.5	3.53
MJVD-9-93	31.13	32.12	25.5	16	<20	201	4,010	4,690	466	1,335	219	<200	87.7	9.9	26.6	5.5	18.4	1.3	6.4	0.7	1.33
MJVD-9-94	15.97	17.76	25.0	46	<20	271	5,120	6,500	561	1,535	205	<100	99.4	11.8	35.5	7.4	27.7	2.1	10.3	1.3	1.73
MJVD-9-95	24.66	28.55	87.0	60	<20	389	25,600	33,900	2,760	7,720	707	<200	357.0	39.5	69.4	12.1	58.3	2.2	12.0	1.3	8.60
MJVD-9-96	33.80	41.64	68.0	15	<20	223	9,400	11,560	1,055	2,850	356	<200	145.0	16.3	33.0	5.7	25.5	1.3	6.6	0.6	3.08
MJVD-9-97	9.92	59.99	48.0	35	<20	277	10,820	14,020	1,430	4,230	607	<200	250.0	26.7	59.8	10.2	39.7	2.0	9.4	1.0	3.81
MJVD-9-98	9.70	57.78	49.5	37	<20	262	10,930	14,860	1,480	4,380	627	<200	249.0	27.3	57.5	8.9	38.4	1.9	9.0	1.1	3.95
MJVD-9-99	16.71	52.35	57.0	53	<20	312	14,680	18,870	1,740	5,010	653	<200	275.0	30.0	58.4	9.9	41.1	2.1	9.5	1.1	5.00
MJVD-9-100	17.67	43.17	54.0	58	<20	333	13,900	19,470	1,635	4,650	515	<200	245.0	27.3	56.6	9.7	42.5	2.1	8.1	1.0	4.91
																				Av.	5.14

MJVD-10 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-10-01	0.64	2.89	37.5	171	<20	125.5	2,420	6,640	340	973	125	30	66.4	9.2	27.2	5.3	17.4	1.5	6.0	0.8	1.30
MJVD-10-02	0.66	19.20	42.5	163	<20	193.0	3,430	7,120	489	1,380	225	<100	105.5	13.7	42.7	8.2	27.0	2.1	9.4	1.1	1.57
MJVD-10-03	0.43	37.90	43.0	128	<20	201.0	3,860	5,920	566	1,680	313	<200	120.5	15.2	45.7	8.8	28.4	2.0	9.5	1.3	1.53
MJVD-10-04	0.41	47.76	34.0	97	<20	157.5	3,220	5,060	493	1,490	312	<200	109.5	13.4	42.9	7.9	24.4	1.9	9.2	1.1	1.31
MJVD-10-05	0.23	55.23	25.5	26	<20	101.0	2,330	2,500	324	972	264	<200	71.8	8.3	25.9	4.5	15.0	1.0	6.1	0.7	0.79
MJVD-10-06	0.62	48.10	77.0	89	<20	332.0	7,150	6,140	1,135	3,540	605	<200	285.0	31.0	96.7	16.1	50.3	3.3	16.3	1.7	2.31
MJVD-10-07	0.39	63.39	69.5	51	<20	334.0	5,200	5,380	714	2,200	445	<200	190.0	21.6	71.4	14.0	43.4	3.5	15.1	1.8	1.75
MJVD-10-08	0.37	30.42	26.5	13	<20	159.0	1,805	2,250	255	779	192	<200	67.5	7.7	27.0	5.7	15.8	1.4	6.0	0.8	0.67
MJVD-10-09	0.68	19.29	10.5	7	<20	104.0	1,735	2,160	216	631	139	<100	50.2	5.9	20.2	3.8	12.9	1.0	4.7	0.5	0.61
MJVD-10-10	0.37	33.14	10.5	2	<20	108.5	1,290	1,735	170	508	164	<200	44.5	5.1	16.2	3.5	11.3	1.0	4.2	0.5	0.49
MJVD-10-11	0.33	15.86	15.5	1	<20	101.5	1,240	1,750	168	512	108	<100	41.8	4.8	15.8	3.2	10.1	0.7	4.4	0.5	0.48
MJVD-10-12	0.72	18.44	19.0	7	<20	126.5	1,165	1,755	174	549	122	<120	47.5	5.6	20.4	3.6	12.3	1.0	4.2	0.5	0.48
MJVD-10-13	0.72	24.47	13.5	7	<20	113.5	1,140	1,775	178	569	146	<160	48.3	5.6	18.4	3.5	11.8	1.0	4.6	0.6	0.48
MJVD-10-14	1.32	13.68	9.0	<1	<20	54.9	702	1,020	99	301	80	<80	26.8	3.0	9.9	2.0	6.2	0.4	2.5	0.3	0.28
MJVD-10-15	0.78	15.55	8.0	<1	<20	70.7	779	1,200	115	371	96	<100	32.2	3.6	12.1	2.3	7.2	0.5	2.7	0.3	0.32
MJVD-10-16	0.62	14.75	27.5	152	<20	249.0	1,800	3,070	341	1,155	209	<80	98.0	11.2	37.1	7.0	25.3	1.9	8.3	1.1	0.84
MJVD-10-17	0.51	17.08	17.5	7	<20	137.5	1,095	1,715	178	571	131	<100	51.6	5.5	20.9	4.2	13.1	1.1	4.6	0.6	0.47
MJVD-10-18	0.74	17.67	8.5	<1	<20	66.6	790	1,150	110	343	92	<100	28.3	3.5	11.3	2.1	7.3	0.6	2.4	0.4	0.31
MJVD-10-19	0.78	14.33	13.0	<1	<20	85.1	871	1,305	128	400	100	<100	38.7	4.3	15.2	2.9	8.6	0.7	3.1	0.4	0.36
MJVD-10-20	0.49	14.41	11.0	<1	<20	54.9	732	1,075	105	333	86	<100	27.8	3.3	8.7	2.0	6.4	0.5	2.3	0.3	0.29
MJVD-10-21	1.27	17.84	11.5	<1	<20	77.9	931	1,395	133	406	104	<100	36.8	4.3	15.1	3.1	8.7	0.8	3.2	0.4	0.37
MJVD-10-22	1.38	10.40	8.5	<1	<20	75.2	750	1,125	110	354	78	<100	31.8	3.8	12.9	2.6	7.2	0.6	2.7	0.2	0.31
MJVD-10-23	0.78	62.71	9.0	<1	<20	50.4	756	1,105	108	331	234	<400	26.5	3.0	9.4	1.6	5.8	0.4	2.5	0.4	0.32
MJVD-10-24	0.37	20.31	29.0	<1	<20	77.0	1,005	1,475	143	449	124	<100	36.9	4.3	15.0	2.5	8.3	0.5	2.7	0.4	0.40
MJVD-10-25	0.49	19.97	23.0	<1	<20	84.2	681	1,065	108	349	121	<100	36.2	4.4	15.3	2.8	8.7	0.7	3.8	0.3	0.30
MJVD-10-26	0.62	16.33	24.5	8	<20	134.5	1,495	2,380	245	807	162	<100	67.0	8.0	25.7	4.5	14.6	1.1	5.2	0.7	0.64
MJVD-10-27	0.31	58.63	7.5	<1	<20	42.3	668	974	97	301	203	<400	24.0	2.4	8.4	1.4	5.6	0.3	2.3	0.4	0.28
MJVD-10-28	0.74	16.08	23.5	25	<20	75.6	3,800	5,170	483	1,400	189	<90	79.8	8.4	17.2	3.0	12.3	0.6	3.6	0.4	1.35
MJVD-10-29	0.78	26.34	26.0	20	<20	78.3	3,240	4,530	432	1,255	204	<175	72.3	7.5	17.0	2.8	12.8	0.7	3.2	0.4	1.18
MJVD-10-30	0.60	20.73	38.5	14	<20	72.0	2,500	3,520	331	956	165	<150	60.1	6.5	15.1	2.8	11.0	0.6	3.0	0.3	0.92
MJVD-10-31	0.37	14.45	34.5	4	<20	63.9	1,480	2,100	201	608	114	<80	41.6	4.5	12.4	2.4	8.2	0.5	2.3	0.4	0.56
MJVD-10-32	0.29	9.42	18.5	<1	<20	44.6	686	990	96	288	64	<50	22.8	2.7	8.9	1.6	5.5	0.4	1.6	0.3	0.27
MJVD-10-33	0.45	25.15	11.0	<1	<20	65.3	739	1,090	106	332	121	<150	29.8	3.5	13.7	2.5	8.1	0.7	2.9	0.3	0.30
MJVD-10-34	0.37	36.03	12.5	4	<20	87.3	1,360	2,000	197	602	191	<300	44.6	5.5	18.0	3.4	11.4	0.8	4.4	0.4	0.54
MJVD-10-35	0.12	1.90	4.5	<1	<20	41.9	278	424	42	137	26	<10	15.4	1.8	7.4	1.5	4.6	0.4	1.8	0.2	0.12
MJVD-10-36	0.14	0.68	4.5	<1	<20	32.4	111	177	20	70	15	5	10.2	1.3	5.8	1.3	3.7	0.3	1.6	0.1	0.05
MJVD-10-37	0.51	8.02	6.5	10	<20	63.5	517	790	78	247	59	<50	24.9	2.9	12.5	2.3	7.5	0.7	2.8	0.3	0.22
MJVD-10-38	0.37	25.24	11.0	24	<20	95.0	3,650	4,330	372	992	170	<100	62.5	7.5	18.2	3.0	12.2	0.9	3.3	0.5	1.16
MJVD-10-39	0.23	10.96	7.5	6	<20	99.5	1,000	1,425	138	421	92	<100	41.8	5.4	21.2	4.0	12.0	1.1	4.7	0.6	0.39
MJVD-10-40	0.18	9.04	8.5	22	<20	104.0	817	1,235	125	410	94	<100	46.2	5.7	21.8	3.7	11.8	1.1	4.0	0.5	0.35
MJVD-10-41	0.23	15.55	13.5	10	<20	86.0	1,200	1,800	184	575	119	<100	46.1	5.3	16.3	2.9	9.0	0.6	3.1	0.3	0.49

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-10-42	0.14	8.14	14.5	<1	<20	86.9	753	1,175	119	378	81	<100	37.0	4.2	15.2	2.8	8.8	0.7	2.6	0.3	0.32
MJVD-10-43	0.64	26.94	25.0	12	<20	178.0	5,680	7,300	651	1,845	263	<100	107.0	12.3	33.2	6.1	22.7	1.4	6.7	0.8	1.93
MJVD-10-44	0.82	27.62	46.0	10	<20	184.0	7,960	9,920	876	2,320	295	<100	129.0	14.8	34.5	6.2	24.2	1.5	6.6	0.7	2.61
MJVD-10-45	0.99	31.70	83.0	10	<20	277.0	13,010	15,770	1,230	3,190	345	<100	165.5	19.1	46.5	9.1	35.5	2.0	8.1	1.0	4.09
MJVD-10-46	2.82	32.21	126.0	16	<20	299.0	21,700	26,100	2,040	5,230	505	<200	250.0	28.3	60.5	11.0	46.7	2.3	9.8	1.1	6.75
MJVD-10-47	7.71	19.63	77.0	25	<20	264.0	26,000	31,100	2,430	6,250	573	120	294.0	32.8	61.4	10.6	47.3	1.9	8.5	0.8	8.06
MJVD-10-48	11.71	22.18	74.5	17	<20	231.0	18,740	22,500	1,755	4,600	436	<150	223.0	24.8	52.8	9.0	37.8	1.5	7.3	0.8	5.83
MJVD-10-49	16.36	37.90	91.0	13	<20	192.0	24,300	28,800	2,190	5,670	514	<150	238.0	26.1	37.2	6.8	36.8	1.0	4.4	0.4	7.44
MJVD-10-50	29.38	27.62	100.5	152	<20	242.0	29,400	40,800	3,510	9,870	873	150	413.0	42.7	52.6	8.0	54.2	1.2	5.2	0.6	10.25
MJVD-10-51	33.70	29.23	151.5	33	<20	320.0	46,400	61,800	5,090	13,900	1,050	150	525.0	56.9	61.2	9.5	79.5	1.5	7.8	0.8	15.53
MJVD-10-52	18.64	19.20	140.5	34	<20	260.0	49,700	65,000	5,190	14,040	1,030	150	538.0	57.4	61.8	9.3	77.0	1.5	6.9	0.8	16.33
MJVD-10-53	9.53	12.22	97.0	49	<20	298.0	54,200	71,000	5,870	15,970	1,250	250	643.0	69.9	72.2	10.9	86.3	1.7	9.7	1.1	17.96
MJVD-10-54	15.06	18.27	91.0	53	<20	313.0	63,900	83,900	6,830	18,730	1,425	300	737.0	77.6	74.6	11.1	99.5	1.8	9.6	1.1	21.17
MJVD-10-55	14.67	15.94	106.5	52	<20	313.0	83,400	105,500	8,350	22,500	1,605	300	848.0	90.3	77.1	12.0	117.5	1.9	10.1	1.0	26.77
MJVD-10-56	21.47	25.41	76.5	35	<20	262.0	52,300	67,400	5,450	14,460	1,100	150	558.0	58.4	55.1	9.0	80.5	1.2	7.0	0.8	17.02
MJVD-10-57	14.53	25.32	89.5	38	<20	272.0	60,000	76,600	6,150	16,490	1,205	200	618.0	66.1	61.6	9.2	88.0	1.5	8.4	0.9	19.41
MJVD-10-58	29.38	28.30	80.0	24	<20	238.0	22,900	29,700	2,360	6,320	556	<200	262.0	29.1	40.1	6.4	42.8	1.2	5.1	0.7	7.50
MJVD-10-59	31.44	16.89	201.0	69	<20	415.0	68,200	89,500	7,180	19,490	1,425	300	747.0	81.0	84.2	13.7	104.0	2.0	10.5	1.1	22.51
MJVD-10-60	16.99	17.76	219.0	57	<20	365.0	113,600	139,700	12,090	29,400	1,955	400	1040.0	110.0	86.5	12.9	146.0	1.9	11.7	1.1	35.85
MJVD-10-61	21.58	18.35	101.5	66	<20	337.0	91,100	113,700	8,790	23,300	1,595	300	867.0	94.8	83.8	12.8	120.0	1.8	10.6	1.0	28.83
MJVD-10-62	11.30	17.93	152.5	85	<20	358.0	127,800	155,300	13,600	33,200	2,270	500	1230.0	132.0	108.0	15.3	175.5	1.9	11.9	1.2	40.14
MJVD-10-63	17.14	34.16	122.5	75	<20	348.0	61,400	80,200	6,470	17,750	1,465	250	704.0	73.9	71.7	10.3	95.5	1.7	9.4	0.9	20.26
MJVD-10-64	14.08	37.39	111.5	39	<20	312.0	32,700	43,600	3,690	10,370	938	200	451.0	46.6	62.9	10.6	66.3	2.2	10.2	1.1	11.09
MJVD-10-65	12.31	38.24	66.5	34	<20	245.0	22,300	29,100	2,370	6,400	634	<200	287.0	31.2	51.4	8.6	46.6	1.7	9.1	1.1	7.38
MJVD-10-66	7.56	42.66	40.5	19	<20	152.0	10,130	14,710	1,210	3,270	386	<200	149.5	16.5	31.8	5.7	27.2	1.3	6.1	0.8	3.61
MJVD-10-67	9.02	23.54	44.0	10	<20	173.5	10,630	15,710	1,325	3,720	390	<200	174.0	18.9	35.6	6.3	31.4	1.4	8.0	0.6	3.87
MJVD-10-68	8.51	16.49	54.0	12	<20	168.5	14,810	18,060	1,420	3,760	339	<100	173.5	18.8	34.9	6.2	29.2	1.4	6.2	0.8	4.66
MJVD-10-69	9.47	19.54	56.0	16	<20	193.5	21,500	27,000	2,100	5,580	470	<100	239.0	26.8	41.3	7.2	40.7	1.4	7.6	0.9	6.86
MJVD-10-70	12.74	34.50	24.5	16	<20	231.0	16,540	22,000	1,820	5,040	527	<200	230.0	24.3	39.8	6.8	36.2	1.1	5.4	0.7	5.58
MJVD-10-71	8.42	28.98	78.5	23	<20	191.0	39,300	49,100	3,830	10,040	748	<200	378.0	41.3	41.8	6.1	54.8	0.9	5.9	0.6	12.45
MJVD-10-72	9.62	23.03	20.0	34	<20	195.0	45,900	59,200	4,840	12,940	1,015	200	505.0	53.1	45.8	6.4	67.3	0.9	6.3	0.6	14.99
MJVD-10-73	7.34	12.15	20.5	47	<20	164.5	61,600	78,900	6,170	16,620	1,150	200	615.0	64.5	50.3	7.0	80.3	1.1	6.9	0.6	19.87
MJVD-10-74	12.41	29.15	39.0	31	<20	229.0	28,700	37,900	3,130	8,490	739	<200	352.0	36.6	42.7	7.2	50.6	1.1	6.0	0.7	9.56
MJVD-10-75	13.77	19.46	20.0	20	<20	173.5	29,000	36,700	2,910	7,730	609	120	314.0	33.2	39.3	6.0	44.3	1.2	6.8	0.7	9.32
MJVD-10-76	4.11	7.51	21.0	<1	<20	109.0	2,210	3,050	297	854	117	<40	61.6	7.1	22.7	4.1	13.7	0.9	4.7	0.6	0.81
MJVD-10-77	5.03	20.99	97.0	<1	<20	164.5	3,350	4,570	455	1,380	214	<150	101.0	11.5	34.5	6.7	20.4	1.2	5.0	0.6	1.24
MJVD-10-78	3.12	13.34	25.0	<1	<20	111.0	1,495	2,180	230	732	130	<70	59.3	6.7	21.2	4.1	12.5	0.8	4.3	0.5	0.60
MJVD-10-79	23.22	28.98	10.5	45	<20	235.0	15,550	23,400	2,090	6,260	651	<150	295.0	28.8	40.6	6.2	39.3	1.0	5.2	0.6	5.83
MJVD-10-80	15.08	26.34	15.5	27	<20	168.5	16,870	26,600	2,470	7,520	798	<150	353.0	34.0	38.7	5.9	45.0	1.0	5.4	0.5	6.59
MJVD-10-81	6.76	17.93	19.5	10	<20	208.0	3,640	5,410	518	1,600	244	<100	131.0	13.7	39.7	7.3	25.0	1.6	7.7	0.9	1.42
MJVD-10-82	5.45	14.50	22.5	7	<20	159.5	4,660	6,240	594	1,770	226	<100	121.5	12.4	32.9	6.0	21.8	1.4	5.3	0.7	1.66

MJVD-10 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-10-83	11.12	14.29	22.5	19	<20	263.0	8,080	11,560	1,175	3,530	417	75	225.0	22.8	52.2	9.0	35.4	1.7	7.8	0.9	3.05
MJVD-10-84	8.49	45.38	9.0	8	<20	151.0	3,470	5,070	480	1,485	275	<200	106.5	10.5	25.6	4.9	16.5	1.2	4.9	0.7	1.33
MJVD-10-85	5.14	35.01	5.0	4	<20	142.5	3,410	5,050	479	1,495	245	<200	99.5	9.6	25.5	4.5	17.4	0.9	4.5	0.7	1.32
MJVD-10-86	9.04	31.36	142.5	12	<20	176.5	10,850	15,480	1,335	3,810	417	<200	198.0	19.7	34.7	5.9	27.8	1.2	5.5	0.6	3.88
MJVD-10-87	3.95	20.48	11.0	6	<20	187.0	5,530	7,540	740	2,180	282	<200	151.0	14.3	35.1	6.3	25.3	1.5	6.2	0.8	2.00
MJVD-10-88	2.98	7.58	20.0	163	<20	186.0	3,460	5,170	537	1,765	237	40	141.5	14.1	38.0	6.8	22.3	1.5	5.5	0.6	1.39
MJVD-10-89	3.78	12.85	98.5	4	<20	105.0	3,970	5,180	490	1,390	161	<50	82.8	8.4	19.1	3.6	14.6	0.8	3.7	0.4	1.37
MJVD-10-90	2.75	25.24	144.0	13	<20	137.0	11,610	16,570	1,405	3,900	352	<150	169.0	17.5	25.5	4.2	27.4	1.1	4.4	0.5	4.11
MJVD-10-91	15.92	12.90	45.5	73	<20	185.5	46,900	56,900	4,550	11,710	742	150	433.0	45.0	39.5	6.0	61.8	0.9	5.6	0.6	14.60
MJVD-10-92	36.37	26.94	5.5	20	<20	167.0	19,630	23,200	1,845	4,730	338	<150	175.0	18.0	17.9	2.8	25.0	0.5	2.2	0.2	6.01
MJVD-10-93	24.14	10.74	16.5	61	<20	210.0	47,200	57,000	4,490	11,650	728	150	429.0	43.5	37.9	5.8	57.1	0.9	5.1	0.6	14.63
MJVD-10-94	42.12	17.34	2.5	21	<20	204.0	23,000	27,300	2,110	5,400	362	<100	202.0	21.4	21.1	3.8	29.5	0.6	3.1	0.3	7.04
MJVD-10-95	14.77	10.08	5.5	52	<20	181.5	52,100	63,200	5,030	13,100	763	150	442.0	45.7	35.5	5.7	64.2	1.1	5.9	0.6	16.21
MJVD-10-96	29.49	17.34	7.5	29	<20	179.0	22,300	27,200	2,200	5,650	388	<100	214.0	23.0	24.4	4.1	31.4	0.7	3.3	0.4	6.98
MJVD-10-97	49.52	26.51	6.0	10	<20	205.0	7,790	9,620	856	2,220	227	<150	104.0	11.4	16.9	3.0	16.4	0.5	3.0	0.3	2.53
MJVD-10-98	71.51	28.81	3.5	7	<20	166.0	7,610	9,350	839	2,230	223	<150	102.0	10.2	16.5	2.8	16.6	0.6	2.5	0.2	2.47
MJVD-10-99	35.86	28.47	2.5	12	<20	181.5	8,070	10,240	940	2,590	272	<150	119.0	12.3	21.1	3.6	19.1	0.8	3.1	0.4	2.70
MJVD-10-100	26.61	21.92	2.0	25	<20	200.0	17,170	21,100	1,695	4,390	343	<100	181.5	19.6	28.8	5.1	29.0	0.9	4.5	0.4	5.42
																				Av.	5.88

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-11-01	0.23	50.82	48.00	106	<20	113.5	2,640	8,730	313	873	203	<300	54.2	7.0	18.5	3.5	13.1	1.1	4.2	0.6	1.57
MJVD-11-02	0.21	58.80	44.50	91	<20	90.0	1,420	7,370	177	495	193	<300	35.5	5.3	15.2	3.0	10.8	1.0	4.2	0.6	1.19
MJVD-11-03	0.27	55.91	62.50	141	<20	164.5	3,040	9,900	443	1,270	282	<300	87.9	10.8	29.5	5.7	19.2	1.6	7.5	0.8	1.85
MJVD-11-04	0.08	70.53	48.50	70	<20	108.0	1,105	5,720	173	484	231	<300	39.6	5.8	19.8	4.3	12.3	1.2	5.8	0.7	0.96
MJVD-11-05	0.12	70.70	58.50	84	<20	133.0	1,440	7,720	225	648	247	<300	47.9	6.5	21.2	4.3	14.6	1.3	5.7	0.8	1.28
MJVD-11-06	0.18	75.80	45.50	45	<20	99.5	1,805	6,130	245	706	252	<300	51.4	6.1	17.2	3.4	11.6	0.9	4.2	0.6	1.13
MJVD-11-07	0.25	66.45	73.50	102	<20	252.0	3,450	9,850	524	1,575	339	<300	108.5	13.3	39.5	7.4	25.7	2.0	9.3	1.2	1.96
MJVD-11-08	0.43	66.62	62.00	91	<20	229.0	3,430	8,560	516	1,520	335	<300	107.5	12.3	36.2	6.9	22.4	1.9	7.8	1.1	1.78
MJVD-11-09	0.49	76.48	105.50	53	<20	343.0	9,190	7,800	1,280	3,990	612	<300	269.0	26.3	68.4	10.5	41.1	2.2	9.9	1.4	2.82
MJVD-11-10	0.60	59.82	129.00	86	<20	340.0	10,370	11,070	1,725	5,390	697	<300	347.0	34.5	83.6	14.4	56.5	3.3	16.2	1.7	3.60
MJVD-11-11	0.68	68.49	111.50	108	<20	380.0	13,660	10,590	1,860	5,740	754	<300	370.0	35.2	88.2	15.5	55.6	3.2	14.9	1.8	4.00
MJVD-11-12	0.33	69.68	142.00	89	<20	338.0	8,640	9,740	1,475	4,490	642	<300	279.0	28.2	70.2	12.0	44.9	2.7	12.4	1.5	3.08
MJVD-11-13	0.62	71.72	86.50	91	<20	268.0	13,490	14,220	1,890	5,550	649	<300	271.0	26.7	51.7	8.9	41.7	1.9	8.4	1.0	4.36
MJVD-11-14	0.47	75.12	67.50	80	<20	214.0	9,240	13,990	1,465	4,320	555	<300	210.0	21.5	42.2	6.9	32.5	1.6	5.8	1.0	3.61
MJVD-11-15	0.27	68.66	64.50	71	<20	221.0	4,600	9,380	721	2,170	384	<300	144.5	15.2	39.0	7.2	27.0	1.8	8.0	1.0	2.13
MJVD-11-16	0.70	54.04	90.50	63	<20	387.0	9,930	8,180	1,400	4,190	543	<300	266.0	27.0	66.9	12.2	43.3	2.5	11.9	1.6	2.99
MJVD-11-17	0.58	44.53	117.00	68	<20	484.0	10,560	8,390	1,410	4,200	535	<300	274.0	27.3	71.6	13.1	47.8	3.1	12.7	1.8	3.10
MJVD-11-18	0.60	65.26	83.50	51	<20	230.0	8,970	8,120	1,165	3,440	488	<300	205.0	21.1	49.3	7.8	31.1	1.6	7.7	1.0	2.71
MJVD-11-19	0.33	62.54	62.50	26	<20	222.0	7,330	8,150	945	2,760	422	<300	172.0	17.2	46.6	7.8	30.9	1.9	8.6	1.1	2.41
MJVD-11-20	0.27	55.06	37.00	15	<20	136.5	3,830	4,000	485	1,440	280	<300	95.1	9.3	23.8	4.4	16.0	0.9	3.8	0.6	1.23
MJVD-11-21	0.25	31.61	37.00	29	<20	140.5	3,500	3,040	459	1,395	231	<300	103.0	10.0	27.5	4.7	16.4	0.9	4.4	0.4	1.07
MJVD-11-22	0.21	22.18	34.00	16	<20	151.5	3,060	2,230	434	1,375	219	<300	107.5	11.1	33.1	5.5	17.5	1.1	4.8	0.6	0.91
MJVD-11-23	0.45	58.12	96.50	104	<20	529.0	8,950	7,910	1,340	4,170	637	<300	339.0	33.7	98.1	16.8	54.2	3.2	14.3	1.8	2.88
MJVD-11-24	0.70	59.65	116.50	54	<20	677.0	10,000	8,980	1,560	4,860	710	<300	369.0	38.4	113.5	20.7	65.5	4.4	19.4	2.2	3.27
MJVD-11-25	2.36	46.06	260.00	78	<20	599.0	16,550	21,300	2,050	6,000	734	<300	390.0	42.2	102.0	18.1	66.3	4.0	18.8	2.1	5.74
MJVD-11-26	1.46	62.71	184.50	84	<20	667.0	20,300	25,500	2,360	6,810	765	<300	382.0	39.5	89.1	16.5	62.8	3.4	15.4	1.7	6.84
MJVD-11-27	0.74	68.83	131.50	47	<20	279.0	5,780	8,160	823	2,460	445	<300	190.5	20.6	57.0	9.7	31.8	2.2	9.4	1.2	2.19
MJVD-11-28	1.36	47.93	182.50	199	<20	923.0	9,830	14,870	1,680	5,480	818	<300	456.0	45.6	137.5	23.1	74.1	4.6	23.0	2.8	4.12
MJVD-11-29	1.79	64.92	98.50	71	<20	949.0	16,490	11,180	2,230	7,040	966	<300	542.0	53.9	165.0	30.5	101.5	7.0	31.2	4.0	4.74
MJVD-11-30	1.87	21.16	45.50	48	<20	424.0	4,280	6,320	667	2,120	339	<100	199.5	22.0	69.3	13.5	41.8	3.2	14.1	1.7	1.74
MJVD-11-31	3.31	33.74	86.50	71	<20	436.0	29,500	37,300	3,110	8,600	754	<200	417.0	43.2	74.5	12.7	65.9	2.6	12.3	1.4	9.64
MJVD-11-32	1.44	16.79	57.00	29	<20	309.0	7,910	9,670	1,010	2,910	312	<100	179.0	18.6	46.7	9.1	32.0	2.1	9.8	1.2	2.69
MJVD-11-33	0.64	1.89	6.00	<1	<20	68.9	563	825	86	268	40	<10	24.7	3.0	10.6	2.0	6.2	0.5	2.2	0.3	0.23
MJVD-11-34	0.92	9.53	22.50	1	<20	95.0	1,070	1,550	158	487	83	<50	40.5	4.4	14.6	3.1	9.3	0.7	3.0	0.3	0.42
MJVD-11-35	0.74	8.04	24.00	4	<20	116.0	3,550	4,760	449	1,300	145	<50	81.7	8.3	20.4	3.8	14.7	0.9	4.3	0.5	1.25
MJVD-11-36	1.11	9.16	32.50	25	<20	140.0	7,000	8,980	833	2,340	223	50	122.5	13.0	25.3	4.5	19.0	0.8	4.2	0.5	2.37
MJVD-11-37	1.79	5.44	15.00	6	<20	67.5	1,995	2,520	232	666	76	<20	41.3	4.5	10.7	2.4	8.6	0.6	2.4	0.3	0.67
MJVD-11-38	6.99	18.18	22.00	8	<20	109.5	5,500	6,650	584	1,595	181	<100	90.6	9.6	19.8	3.6	14.2	0.7	3.4	0.5	1.77
MJVD-11-39	1.13	3.86	16.00	12	<20	70.7	1,330	1,815	172	510	62	<20	37.9	4.0	10.9	2.2	7.5	0.4	2.6	0.4	0.48
MJVD-11-40	0.86	6.36	25.00	5	<20	81.5	1,625	2,250	214	649	89	<30	46.1	4.9	13.3	2.7	9.8	0.7	3.0	0.3	0.60
MJVD-11-41	0.41	0.85	7.50	10	<20	36.9	203	300	32	106	16	4.1	11.9	1.3	4.5	1.2	3.6	0.3	1.5	0.2	0.09

MJVD-11 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-11-42	0.62	2.11	13.00	8	<20	51.3	1,640	2,230	213	603	62	10	34.1	3.4	7.9	1.8	6.4	0.4	1.6	0.3	0.58
MJVD-11-43	1.13	8.33	22.50	4	<20	107.5	4,510	6,020	560	1,615	166	<50	92.1	9.2	19.2	3.5	14.6	0.7	3.4	0.4	1.57
MJVD-11-44	0.70	3.06	10.50	<1	<20	70.7	2,300	3,070	288	824	85	10	48.7	5.3	12.4	2.4	8.9	0.5	2.2	0.2	0.81
MJVD-11-45	0.97	3.69	15.50	4	<20	99.0	4,640	6,040	570	1,580	143	20	83.7	8.9	16.9	3.0	14.3	0.7	2.9	0.3	1.59
MJVD-11-46	4.83	12.41	31.00	28	<20	178.5	15,370	20,300	1,725	4,850	421	50	238.0	22.8	35.4	5.7	29.8	0.9	4.7	0.6	5.19
MJVD-11-47	1.85	9.31	81.50	1	<20	90.5	2,030	2,890	275	807	109	<50	54.8	5.9	15.9	2.7	10.7	0.7	3.3	0.3	0.76
MJVD-11-48	3.86	8.23	8.50	<1	<20	82.4	790	1,135	110	345	63	<50	29.9	3.3	10.1	2.0	7.4	0.5	1.9	0.2	0.31
MJVD-11-49	1.34	5.37	20.50	17	<20	109.5	7,780	10,270	959	2,730	229	50	130.5	12.9	22.2	3.9	19.3	0.7	4.1	0.4	2.68
MJVD-11-50	10.19	18.10	19.50	35	<20	243.0	8,420	13,830	1,245	3,610	352	<100	190.5	18.4	33.6	5.5	26.8	1.1	5.1	0.6	3.36
MJVD-11-51	3.58	11.01	25.00	61	<20	155.5	7,750	14,180	1,340	3,940	391	50	206.0	19.9	35.2	5.5	27.8	1.1	4.5	0.6	3.38
MJVD-11-52	0.68	1.87	8.50	19	<20	70.7	2,130	3,810	406	1,250	126	20	71.0	6.9	14.8	2.5	10.6	0.5	2.5	0.3	0.95
MJVD-11-53	0.45	15.43	29.00	<1	<20	68.4	1,180	1,640	150	444	86	<100	33.7	3.5	11.5	2.1	7.8	0.6	2.3	0.3	0.44
MJVD-11-54	0.72	3.25	10.50	<1	<20	70.7	1,240	1,700	155	471	58	<20	33.4	3.8	10.6	2.2	8.2	0.5	2.0	0.3	0.45
MJVD-11-55	0.55	30.34	14.50	1	<20	77.0	2,530	3,400	310	885	156	<150	53.4	5.6	13.7	2.4	9.5	0.6	2.8	0.3	0.89
MJVD-11-56	0.60	4.06	16.00	9	<20	105.5	2,830	4,630	476	1,430	152	20	88.1	9.0	20.3	3.7	14.6	0.8	3.5	0.4	1.17
MJVD-11-57	0.49	2.89	14.00	5	<20	92.3	2,420	3,960	408	1,205	126	30	73.1	7.5	19.0	3.2	12.5	0.7	2.9	0.3	1.00
MJVD-11-58	0.53	3.42	10.00	<1	<20	63.9	493	754	76	235	41	<15	26.1	2.7	10.4	2.1	7.0	0.4	2.1	0.3	0.21
MJVD-11-59	0.33	0.92	5.50	0	<20	54.9	755	1,185	123	376	44	11.2	29.0	3.1	9.1	1.9	6.6	0.5	2.0	0.2	0.31
MJVD-11-60	0.31	1.24	5.00	<1	<20	56.3	731	1,025	97	287	37	9.2	21.2	2.7	9.2	1.9	6.0	0.5	1.7	0.2	0.27
MJVD-11-61	0.51	2.62	18.00	39	<20	101.0	2,920	5,260	531	1,585	178	30	102.0	9.9	24.7	4.3	16.2	0.9	4.9	0.5	1.29
MJVD-11-62	0.45	3.98	19.50	1	<20	75.2	1,190	1,820	189	561	81	20	47.1	5.0	16.7	2.9	9.5	0.7	3.1	0.3	0.48
MJVD-11-63	0.58	2.28	7.50	<1	<20	43.2	588	591	89	277	42	10	25.0	2.6	9.7	1.7	5.7	0.4	1.8	0.2	0.20
MJVD-11-64	0.62	6.39	9.00	<1	<20	46.4	694	1,045	101	293	53	<40	25.8	2.7	9.0	1.7	5.3	0.4	2.2	0.2	0.27
MJVD-11-65	1.01	16.13	54.50	<1	<20	95.0	2,180	3,300	299	879	145	<100	67.8	6.9	20.9	3.7	12.7	1.0	4.3	0.4	0.84
MJVD-11-66	0.70	9.50	31.50	<1	<20	75.2	971	1,600	152	476	92	<50	44.5	4.8	16.0	2.9	9.9	0.7	3.3	0.4	0.41
MJVD-11-67	1.11	2.14	14.50	<1	<20	81.9	2,580	3,830	336	979	115	20	67.0	6.8	17.5	3.2	12.1	0.8	3.3	0.3	0.97
MJVD-11-68	2.01	4.78	17.00	131	<20	91.4	1,310	2,410	248	826	132	20	76.0	7.8	23.0	3.7	12.1	0.7	4.1	0.4	0.62
MJVD-11-69	0.95	9.23	30.00	<1	<20	85.5	1,550	2,510	229	707	113	<50	58.5	6.0	19.0	3.3	11.5	0.9	3.9	0.5	0.64
MJVD-11-70	1.44	14.16	60.50	2	<20	114.0	3,850	5,980	546	1,585	206	<100	99.0	10.0	26.4	4.2	16.7	1.1	5.6	0.5	1.49
MJVD-11-71	0.95	19.03	37.50	<1	<20	110.5	2,630	3,970	361	1,070	169	<100	79.2	8.1	24.1	4.2	14.7	1.1	4.7	0.5	1.01
MJVD-11-72	0.62	2.21	7.50	<1	<20	65.7	554	942	91	287	49	20	32.4	3.4	13.2	2.6	7.8	0.5	2.8	0.3	0.25
MJVD-11-73	0.82	5.63	13.00	<1	<20	90.5	2,710	3,700	310	863	110	<30	60.2	6.5	20.0	3.6	12.4	0.9	4.5	0.5	0.95
MJVD-11-74	0.70	5.03	10.00	<1	<20	81.5	1,065	1,730	162	509	81	<30	44.4	5.0	17.3	3.1	9.9	0.9	3.6	0.4	0.45
MJVD-11-75	1.64	14.67	38.00	<1	<20	99.9	3,440	5,240	469	1,345	172	<100	85.4	8.5	24.8	4.2	15.3	1.0	4.6	0.6	1.31
MJVD-11-76	4.56	16.42	78.00	12	<20	159.5	9,280	15,560	1,305	3,610	361	<100	190.0	18.9	35.1	6.4	28.6	1.2	6.2	0.6	3.67
MJVD-11-77	2.94	8.96	45.00	5	<20	121.5	6,940	10,030	893	2,510	243	<100	134.5	13.0	25.4	4.4	20.1	1.0	4.8	0.5	2.51
MJVD-11-78	3.08	20.39	44.50	<1	<20	121.0	3,650	5,320	469	1,345	196	<100	93.9	8.8	24.1	4.3	16.0	0.8	4.7	0.6	1.35
MJVD-11-79	2.36	18.44	76.50	<1	<20	108.0	2,410	3,640	329	961	157	<100	72.7	7.8	22.8	4.2	14.0	0.8	4.4	0.6	0.93
MJVD-11-80	6.70	15.21	97.50	41	<20	186.0	22,200	33,300	2,720	7,520	656	100	357.0	33.7	46.7	7.4	44.2	1.4	7.4	0.7	8.07
MJVD-11-81	4.66	6.37	30.50	15	<20	180.0	11,000	18,910	1,550	4,400	400	80	217.0	22.1	42.1	7.0	31.0	1.4	7.5	0.8	4.43
MJVD-11-82	0.99	8.45	22.00	<1	<20	108.5	3,380	5,100	469	1,325	156	<50	84.1	8.8	23.9	4.3	17.0	1.2	5.5	0.7	1.28

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-11-83	1.03	4.66	27.50	<1	<20	87.3	1,315	2,110	201	607	91	<50	48.4	5.6	19.5	3.4	10.7	0.9	4.5	0.5	0.54
MJVD-11-84	1.19	3.20	17.50	<1	<20	85.1	1,195	1,915	183	547	78	<50	47.6	5.1	17.3	3.2	10.8	0.8	4.1	0.4	0.49
MJVD-11-85	2.86	13.32	13.00	<1	<20	122.0	2,180	3,490	324	954	150	<50	73.8	7.8	23.3	4.4	15.5	1.1	5.1	0.6	0.88
MJVD-11-86	5.16	20.73	15.00	<1	<20	102.5	1,595	2,520	238	734	146	<100	60.3	6.2	20.3	3.7	12.8	0.8	4.7	0.4	0.65
MJVD-11-87	0.82	10.01	10.00	<1	<20	78.3	695	1,210	118	383	85	<100	40.5	4.2	16.8	3.2	9.5	0.8	3.6	0.5	0.32
MJVD-11-88	1.15	22.86	11.00	<1	<20	88.2	1,065	1,800	175	550	144	<100	52.2	5.5	19.5	3.5	11.1	0.9	3.9	0.4	0.47
MJVD-11-89	3.10	21.24	11.50	<1	<20	90.0	1,420	2,300	216	659	145	<100	57.3	6.1	19.3	3.4	11.3	0.8	4.0	0.5	0.59
MJVD-11-90	1.13	6.14	17.50	<1	<20	109.0	1,510	2,430	227	695	110	<50	67.6	6.9	24.7	4.4	13.3	1.2	4.4	0.5	0.62
MJVD-11-91	1.56	23.79	24.50	<1	<20	108.5	2,170	3,420	313	921	173	<100	76.6	7.6	23.9	4.3	14.7	1.2	4.1	0.5	0.87
MJVD-11-92	3.08	17.42	38.50	<1	<20	77.9	2,440	3,650	320	910	141	<100	61.5	6.2	17.0	3.0	11.1	0.7	3.7	0.3	0.92
MJVD-11-93	2.69	15.84	27.50	<1	<20	94.5	3,190	4,690	418	1,170	158	<100	74.5	7.7	19.1	3.6	13.9	0.9	4.3	0.5	1.18
MJVD-11-94	1.60	15.75	26.00	<1	<20	104.0	2,760	4,190	375	1,090	157	<100	72.2	7.4	21.5	4.2	14.2	1.0	5.0	0.6	1.06
MJVD-11-95	2.18	7.02	25.00	<1	<20	103.5	4,070	6,070	537	1,515	159	<50	90.4	8.8	22.9	3.8	15.1	1.0	4.5	0.5	1.51
MJVD-11-96	1.71	7.90	37.50	<1	<20	93.2	3,730	5,510	497	1,400	153	<50	82.5	8.0	19.2	3.7	14.4	0.8	3.8	0.4	1.38
MJVD-11-97	0.76	10.76	20.50	<1	<20	67.1	3,150	4,580	398	1,080	129	<50	63.2	6.6	14.6	2.6	9.8	0.6	2.9	0.3	1.14
MJVD-11-98	2.38	5.40	26.00	<1	<20	63.5	657	1,095	105	332	59	<50	30.3	3.3	12.7	2.5	6.8	0.6	2.8	0.3	0.28
MJVD-11-99	1.75	18.61	30.50	2	<20	85.1	4,270	6,380	553	1,530	192	<100	86.6	9.0	18.2	3.4	15.0	0.8	3.9	0.4	1.58
MJVD-11-100	0.78	15.86	48.00	<1	<20	122.0	3,660	5,550	494	1,400	196	<100	94.5	10.0	28.0	4.9	17.0	1.2	5.6	0.6	1.39
																				Av.	1.77

MJVD-12 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-12-01	0.35	8.94	38.50	209	<20	73.8	1,450	9,770	131	373	61	<50	25.6	4.7	12.9	2.7	8.6	0.8	3.6	0.5	1.45
MJVD-12-02	0.12	69.00	22.50	74	<20	36.5	566	5,520	56	170	195	<300	13.3	2.5	6.2	1.5	4.6	0.4	2.3	0.4	0.80
MJVD-12-03	0.25	52.35	69.00	115	<20	215.0	2,020	9,170	258	800	240	<300	63.9	10.1	38.2	8.1	25.5	2.7	13.2	1.5	1.56
MJVD-12-04	0.88	50.48	90.0	126	<20	94.5	649	8,940	77	237	164	<300	20.6	4.9	16.0	3.2	10.9	1.1	5.1	0.6	1.25
MJVD-12-05	0.18	71.72	31.5	44	<20	52.7	645	5,720	68	208	227	<300	16.7	3.3	10.0	2.2	5.7	0.8	3.2	0.5	0.85
MJVD-12-06	0.90	44.02	73.0	110	<20	112.5	1,105	8,980	112	321	167	<300	27.1	5.5	19.1	4.1	13.4	1.2	5.8	0.7	1.33
MJVD-12-07	0.10	67.30	81.0	43	<20	84.2	1,650	8,750	236	722	264	<300	48.2	6.9	20.7	4.1	12.7	1.1	5.6	0.7	1.43
MJVD-12-08	0.08	72.91	47.5	162	<20	102.0	2,710	5,660	420	1,340	356	<300	88.2	10.5	28.5	4.7	16.0	1.0	5.4	0.8	1.29
MJVD-12-09	0.14	66.28	52.0	49	<20	68.9	1,810	6,750	196	561	237	<300	34.0	4.9	16.1	3.1	10.6	1.0	4.1	0.6	1.18
MJVD-12-10	0.14	52.68	54.0	49	<20	110.0	1,330	8,090	185	585	213	<300	44.5	6.6	21.7	4.6	15.7	1.7	7.6	1.0	1.29
MJVD-12-11	0.12	68.15	65.5	54	<20	79.7	2,310	11,710	266	777	253	<300	43.3	7.1	19.0	3.7	13.0	1.0	5.9	0.8	1.88
MJVD-12-12	0.74	58.63	134.5	79	<20	309.0	17,810	31,200	1,855	5,730	667	<300	298.0	34.4	74.6	13.4	50.7	2.9	12.3	1.3	6.99
MJVD-12-13	0.16	71.55	104.0	26	<20	103.5	4,290	16,500	540	1,595	354	<300	91.6	12.2	28.3	5.2	19.0	1.3	7.3	0.8	2.85
MJVD-12-14	0.23	60.50	60.0	49	<20	111.5	2,750	8,630	367	1,145	288	<300	83.7	10.7	30.5	5.2	18.3	1.5	6.0	0.7	1.63
MJVD-12-15	0.33	41.47	67.5	59	<20	211.0	4,520	5,920	641	2,120	367	<300	165.5	18.1	56.6	9.7	31.8	2.3	10.3	1.2	1.69
MJVD-12-16	0.23	66.79	69.0	59	<20	212.0	4,720	6,080	661	2,200	378	<300	158.0	18.5	58.0	10.5	32.0	2.5	10.6	1.1	1.74
MJVD-12-17	0.47	52.01	86.5	29	<20	127.5	4,760	12,470	603	1,880	380	<300	115.0	14.4	38.3	6.6	22.5	1.6	8.3	0.9	2.47
MJVD-12-18	0.31	45.89	64.0	47	<20	212.0	5,460	6,800	725	2,340	397	<300	165.0	19.1	59.6	9.8	32.9	2.0	9.4	1.1	1.94
MJVD-12-19	0.27	52.35	145.0	33	<20	395.0	9,080	12,290	1,335	4,410	674	<300	294.0	32.7	91.9	15.6	53.5	3.6	16.9	1.9	3.44
MJVD-12-20	0.53	53.19	104.5	51	<20	334.0	11,080	11,060	1,525	5,030	722	<300	355.0	39.7	124.0	20.6	64.8	4.0	21.2	2.3	3.63
MJVD-12-21	0.62	50.82	131.5	41	<20	706.0	23,100	9,800	3,050	9,980	1,215	<300	665.0	70.7	206.0	32.9	110.0	6.9	30.8	3.5	5.81
MJVD-12-22	0.45	69.34	77.0	22	<20	208.0	7,790	9,330	927	2,820	423	<300	169.5	18.5	52.6	9.2	30.8	2.0	8.4	1.0	2.61
MJVD-12-23	0.47	72.74	74.5	28	<20	231.0	9,910	7,430	1,425	4,630	651	<300	270.0	29.4	81.3	12.1	44.7	2.8	13.3	1.4	2.94
MJVD-12-24	0.47	60.67	93.0	49	<20	228.0	10,910	15,340	1,340	4,090	498	<300	201.0	24.3	55.9	9.3	37.8	2.2	9.8	1.2	3.93
MJVD-12-25	0.47	71.55	85.5	31	<20	212.0	13,510	17,580	1,430	4,370	528	<300	210.0	23.1	47.6	7.4	33.6	1.7	8.5	0.9	4.55
MJVD-12-26	0.45	64.07	105.0	66	<20	235.0	15,060	19,900	1,645	5,070	581	<300	250.0	28.5	61.2	9.7	41.8	2.3	10.1	1.2	5.14
MJVD-12-27	0.16	62.54	63.0	56	<20	155.5	3,810	10,540	498	1,560	295	<300	105.5	13.6	37.6	6.7	21.9	1.6	7.8	1.0	2.06
MJVD-12-28	0.37	50.31	88.0	64	<20	241.0	6,960	11,930	865	2,710	381	<300	162.0	19.4	52.6	9.2	32.6	2.2	10.2	1.2	2.81
MJVD-12-29	0.49	38.75	143.5	51	<20	669.0	9,980	11,980	1,285	4,190	541	<300	324.0	36.2	125.5	24.9	78.5	6.5	26.9	3.2	3.51
MJVD-12-30	0.33	54.72	186.0	73	<20	485.0	10,940	14,750	1,490	4,770	593	<300	311.0	34.4	98.8	18.2	63.6	4.1	18.9	2.5	4.02
MJVD-12-31	0.58	49.63	196.0	110	<20	310.0	12,430	19,080	1,785	5,760	674	<300	328.0	35.8	89.6	14.4	55.6	3.0	14.8	1.5	4.87
MJVD-12-32	0.12	73.25	66.0	87	<20	99.9	2,940	11,860	377	1,200	315	<300	80.8	10.9	28.6	4.8	15.7	1.1	5.4	0.6	2.05
MJVD-12-33	0.16	65.09	87.5	80	<20	110.5	3,100	11,840	419	1,310	297	<300	83.6	11.4	30.3	5.3	17.1	1.3	6.3	0.7	2.09
MJVD-12-34	0.45	60.84	90.5	77	<20	297.0	9,710	11,570	1,140	3,530	488	<300	233.0	25.7	75.8	12.7	43.1	2.8	13.4	1.6	3.25
MJVD-12-35	0.51	65.77	65.5	58	<20	212.0	9,450	11,460	1,030	3,080	444	<300	181.0	19.8	52.3	8.9	33.4	2.1	9.7	1.1	3.11
MJVD-12-36	0.45	78.69	54.0	27	<20	132.5	10,140	10,580	976	2,890	461	<300	162.0	17.2	38.1	6.4	24.3	1.1	5.8	0.7	3.04
MJVD-12-37	0.58	34.33	74.0	97	<20	330.0	8,810	9,600	1,055	3,350	428	<300	212.0	24.4	72.8	13.3	43.0	3.3	14.9	1.8	2.87
MJVD-12-38	0.45	55.06	73.5	58	<20	230.0	7,850	10,200	972	3,070	439	<300	196.0	22.1	57.7	9.9	34.4	2.1	10.8	1.3	2.77
MJVD-12-39	0.45	60.16	77.5	68	<20	230.0	8,540	11,130	1,020	3,240	446	<300	185.0	21.7	55.7	9.9	36.2	2.1	10.3	1.2	2.99
MJVD-12-40	0.41	45.89	96.5	55	<20	266.0	9,370	11,550	1,195	3,740	462	<300	223.0	23.9	62.0	11.1	40.6	2.3	11.1	1.4	3.23
MJVD-12-41	0.23	49.97	159.0	44	<20	316.0	9,020	12,900	1,285	4,160	541	<300	256.0	29.5	78.0	13.5	44.3	2.9	12.8	1.4	3.44

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-12-42	0.66	70.19	96.0	65	<20	307.0	11,400	12,090	1,320	4,170	582	<300	266.0	30.2	78.8	14.0	43.8	2.9	13.9	1.5	3.63
MJVD-12-43	0.72	67.81	70.5	61	<20	262.0	9,070	10,120	1,065	3,380	501	<300	214.0	24.9	68.8	11.3	34.5	2.5	11.4	1.3	2.96
MJVD-12-44	0.49	37.05	64.5	109	<20	310.0	6,310	8,560	858	2,750	375	<300	187.5	21.6	67.3	13.2	38.2	3.2	15.5	1.7	2.34
MJVD-12-45	0.51	74.10	99.5	160	<20	179.0	8,270	10,430	1,030	3,280	500	<300	200.0	22.1	55.7	9.0	28.4	1.9	8.4	1.1	2.88
MJVD-12-46	0.45	82.60	73.5	51	<20	196.0	9,100	12,170	1,035	3,170	516	<300	188.5	20.3	46.7	8.1	29.3	1.6	7.8	1.0	3.18
MJVD-12-47	0.72	60.67	126.0	101	<20	397.0	16,710	19,100	1,840	5,780	687	<300	342.0	38.8	95.3	16.4	55.5	3.3	15.7	1.9	5.40
MJVD-12-48	0.70	52.68	134.5	55	<20	522.0	18,690	17,670	2,020	6,300	731	<300	395.0	42.6	118.5	20.7	67.2	4.3	20.4	2.3	5.57
MJVD-12-49	0.43	49.29	174.5	59	<20	316.0	10,960	20,600	1,450	4,590	548	<300	263.0	31.8	78.6	13.5	46.1	3.1	14.2	1.6	4.68
MJVD-12-50	0.60	63.56	165.5	81	<20	413.0	17,120	23,900	2,100	6,810	815	<300	398.0	43.4	102.0	16.5	60.6	3.5	16.2	1.6	6.21
MJVD-12-51	0.43	50.48	88.5	72	<20	309.0	8,130	10,060	1,060	3,410	481	<300	229.0	25.6	73.4	12.3	40.6	3.1	13.6	1.6	2.86
MJVD-12-52	0.31	67.47	82.0	25	<20	259.0	8,090	9,310	1,010	3,300	504	<300	218.0	24.3	66.7	11.5	35.8	2.4	11.7	1.3	2.73
MJVD-12-53	0.41	79.71	112.0	84	<20	269.0	14,480	19,040	1,810	5,930	765	<300	340.0	34.8	78.6	12.7	46.4	2.4	12.9	1.5	5.13
MJVD-12-54	0.39	67.98	147.5	59	<20	251.0	9,770	12,500	1,285	4,120	578	<300	249.0	27.8	70.8	11.8	42.8	3.4	14.9	1.8	3.46
MJVD-12-55	0.62	53.87	184.0	88	<20	315.0	15,330	19,730	1,910	6,150	736	<300	352.0	37.9	88.2	15.0	53.9	3.6	16.7	2.0	5.36
MJVD-12-56	1.77	64.41	183.5	127	<20	527.0	40,000	45,400	4,690	14,570	1,390	<300	706.0	73.8	129.5	20.4	91.3	3.3	18.1	1.8	12.88
MJVD-12-57	2.86	52.68	170.5	184	<20	686.0	53,800	59,500	6,220	19,540	1,795	300	935.0	101.5	190.5	30.1	129.5	5.6	27.4	2.9	17.14
MJVD-12-58	1.25	70.53	131.0	115	<20	456.0	32,000	38,000	3,520	11,030	1,195	<300	578.0	63.2	129.0	20.7	82.3	4.2	19.5	2.2	10.43
MJVD-12-59	0.88	66.28	115.5	103	<20	370.0	21,000	27,900	2,470	7,970	897	<300	435.0	47.1	96.8	15.8	62.1	3.5	15.8	1.8	7.35
MJVD-12-60	0.90	77.33	71.5	137	<20	400.0	12,040	22,200	1,645	5,490	714	<300	331.0	34.9	81.5	14.8	50.1	3.1	14.2	1.6	5.17
MJVD-12-61	0.92	84.81	89.5	156	<20	450.0	17,430	26,400	2,110	6,970	845	<300	394.0	41.7	92.7	15.7	59.6	3.0	14.5	1.7	6.58
MJVD-12-62	0.97	60.33	173.5	102	<20	555.0	21,000	26,000	2,510	8,110	931	<300	478.0	52.3	126.5	22.2	76.9	4.7	23.2	2.7	7.17
MJVD-12-63	6.55	68.83	55.0	49	<20	551.0	19,850	17,770	1,875	6,100	739	<300	429.0	45.4	116.5	20.2	63.4	4.4	20.0	2.3	5.69
MJVD-12-64	19.48	50.82	67.5	45	<20	504.0	7,320	10,500	1,115	3,910	587	<300	301.0	34.5	107.0	19.6	60.2	4.7	21.0	2.4	2.93
MJVD-12-65	11.38	67.64	99.5	22	<20	266.0	5,470	7,230	734	2,420	412	<300	168.5	19.3	58.3	11.2	31.6	2.7	10.6	1.2	2.02
MJVD-12-66	27.84	45.55	50.5	29	<20	367.0	6,470	8,780	902	3,050	445	<300	221.0	24.5	72.6	13.9	44.0	3.2	12.4	1.5	2.45
MJVD-12-67	17.88	35.35	98.0	52	<20	870.0	25,000	28,700	2,270	6,840	686	<300	415.0	49.5	139.5	26.5	82.9	6.0	25.0	2.9	7.81
MJVD-12-68	6.12	44.19	213.0	69	<20	5290.0	94,900	20,800	8,830	32,000	3,360	1000	2700.0	289.0	956.0	181.0	512.0	39.4	166.5	18.6	20.22
MJVD-12-69	5.47	38.92	263.0	64	<20	5490.0	111,200	23,500	10,130	36,200	3,740	1200	3030.0	317.0	1080.0	200.0	571.0	42.9	183.5	20.7	23.27
MJVD-12-70	4.42	47.76	250.0	83	<20	4280.0	100,000	28,000	9,030	32,100	3,420	900	2730.0	287.0	933.0	169.5	474.0	35.1	149.5	17.2	21.60
MJVD-12-71	1.42	56.25	196.0	64	<20	1280.0	26,200	21,300	2,380	7,680	932	<400	602.0	68.1	224.0	43.5	130.5	11.0	50.4	6.6	7.27
MJVD-12-72	2.16	69.17	229.0	67	<20	1735.0	38,000	30,400	3,200	10,600	1,170	<400	860.0	93.5	302.0	58.5	168.5	13.6	57.5	7.9	10.35
MJVD-12-73	1.44	56.76	209.0	46	<20	1530.0	26,600	17,630	2,320	7,860	928	<400	713.0	78.6	270.0	53.7	148.5	11.9	49.9	7.3	6.94
MJVD-12-74	2.16	46.40	256.0	93	<20	1075.0	32,100	37,800	3,230	10,190	972	<400	629.0	69.9	190.5	38.2	125.0	9.2	41.4	6.4	10.36
MJVD-12-75	3.45	51.50	210.0	152	<20	1040.0	52,700	68,100	5,620	17,590	1,535	300	851.0	93.2	177.0	32.4	143.5	7.5	35.4	4.8	17.78
MJVD-12-76	3.43	58.29	242.0	162	<20	1065.0	55,200	71,600	6,050	18,960	1,630	300	922.0	100.5	178.5	33.0	144.5	7.5	32.1	4.4	18.73
MJVD-12-77	3.14	61.01	128.5	175	<20	504.0	53,000	67,700	5,600	16,890	1,510	<400	817.0	88.5	142.0	22.2	106.0	4.3	21.6	2.5	17.56
MJVD-12-78	4.11	56.25	317.0	195	<20	625.0	77,400	97,200	7,780	24,000	1,935	350	1060.0	116.5	175.0	27.4	142.5	4.7	23.7	2.6	25.28
MJVD-12-79	2.26	60.84	296.0	162	<20	482.0	56,900	73,400	6,050	18,570	1,700	400	925.0	100.0	162.0	24.7	114.0	3.8	18.7	2.4	19.05
MJVD-12-80	2.49	55.57	375.0	149	<20	423.0	51,700	66,300	5,440	16,880	1,500	<375	811.0	87.8	141.0	21.7	101.0	3.5	18.4	2.1	17.20
MJVD-12-81	5.03	41.98	212.0	218	<20	748.0	83,900	104,000	8,370	23,100	1,865	300	1050.0	90.5	142.5	23.1	137.0	4.6	20.7	2.6	26.84
MJVD-12-82	2.59	59.31	164.5	199	<20	623.0	57,500	72,200	5,850	16,310	1,540	<400	830.0	72.3	148.5	24.4	113.0	5.3	23.7	2.7	18.62

MJVD-12 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-12-83	2.55	66.45	127.5	127	<20	579.0	35,800	45,800	3,690	10,220	1,120	<400	576.0	49.6	126.5	22.1	85.2	4.8	23.8	2.6	11.77
MJVD-12-84	1.71	62.20	137.5	99	<20	529.0	24,500	33,000	2,760	7,890	933	<400	467.0	41.0	113.0	19.2	70.8	3.9	18.0	2.1	8.44
MJVD-12-85	3.66	69.85	136.0	202	<20	543.0	39,500	51,800	4,410	12,580	1,355	<400	716.0	60.7	153.5	24.3	95.6	4.4	21.1	2.3	13.35
MJVD-12-86	7.34	63.39	111.5	87	<20	375.0	33,700	44,100	3,710	10,290	1,035	<400	521.0	43.9	85.3	13.8	68.8	2.6	12.3	1.5	11.27
MJVD-12-87	8.53	56.08	106.5	94	<20	374.0	39,200	50,700	4,200	11,680	1,105	<400	575.0	49.0	94.2	15.2	74.3	2.7	11.8	1.4	12.97
MJVD-12-88	19.48	47.25	92.0	97	<20	465.0	35,800	47,500	3,910	10,950	1,030	<400	556.0	49.0	98.4	17.0	79.5	3.8	18.8	2.2	12.06
MJVD-12-89	18.14	52.52	95.5	62	<20	620.0	20,900	27,800	2,330	6,730	783	<400	406.0	37.4	118.5	21.9	79.3	5.8	26.1	3.0	7.18
MJVD-12-90	13.05	48.95	87.0	71	<20	527.0	27,400	36,400	3,020	8,660	973	<400	505.0	43.4	114.0	19.8	78.8	4.6	22.2	2.6	9.33
MJVD-12-91	8.61	20.05	66.0	85	<20	405.0	32,500	41,800	3,320	9,220	798	200	469.0	40.3	85.9	14.3	69.0	3.2	15.5	1.8	10.67
MJVD-12-92	4.38	6.56	28.5	44	<20	129.0	7,160	9,160	851	2,340	235	30	129.0	11.2	29.9	5.1	19.7	1.2	6.0	0.8	2.41
MJVD-12-93	3.45	17.93	29.0	40	<20	151.5	7,320	9,450	894	2,540	285	<100	153.0	13.4	35.4	6.6	23.1	1.5	7.6	0.9	2.50
MJVD-12-94	5.49	33.99	161.0	28	<20	248.0	3,730	5,880	591	1,960	355	<200	179.0	15.3	61.5	11.4	31.9	2.8	12.4	1.4	1.57
MJVD-12-95	14.69	43.51	241.0	28	<20	347.0	7,310	10,560	1,080	3,380	570	<200	287.0	24.9	89.4	14.9	44.6	3.2	13.2	1.5	2.84
MJVD-12-96	11.77	41.64	190.0	36	<20	338.0	8,000	13,410	1,215	3,870	609	<200	313.0	27.4	94.0	16.1	47.9	3.4	14.9	1.8	3.36
MJVD-12-97	4.73	13.34	49.0	18	<20	185.0	4,780	6,460	623	1,820	230	<75	126.5	11.4	38.7	7.2	23.9	1.7	8.0	0.9	1.72
MJVD-12-98	2.98	9.72	28.0	18	<20	109.0	2,390	3,220	304	896	119	<50	62.8	6.0	20.5	4.1	13.3	1.2	4.6	0.6	0.86
MJVD-12-99	1.09	1.65	12.0	23	<20	56.7	837	1,060	102	294	35	9	22.4	2.3	9.3	2.3	6.4	0.7	3.1	0.4	0.29
MJVD-12-100	4.75	20.14	67.5	22	<20	150.0	3,390	4,900	480	1,435	234	<100	113.5	10.1	35.8	6.1	17.9	1.3	5.7	0.8	1.29
																				Av.	6.31

MJVD-13 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-13-01	0.29	13.70	49.0	136	<20	91.4	1,470	8,960	161	433	81	<75.0	33.2	4.8	17.0	3.8	10.4	1.2	5.0	0.7	1.37
MJVD-13-02	0.51	18.95	42.0	130	<20	82.8	1,140	7,560	129	358	89	<200	28.6	3.9	14.7	3.2	8.9	1.0	4.2	0.6	1.15
MJVD-13-03	0.39	18.61	44.0	135	<20	86.0	1,180	7,400	134	363	89	<200	26.6	4.1	15.8	3.2	10.4	1.0	4.0	0.5	1.13
MJVD-13-04	0.37	35.35	44.0	92	<20	157.0	3,040	8,010	395	1,130	215	<200	85.7	9.4	33.3	5.8	17.5	1.6	7.2	0.7	1.58
MJVD-13-05	0.43	28.30	52.5	133	<20	291.0	6,540	8,150	840	2,440	344	<200	187.0	16.8	58.4	10.3	32.1	2.6	10.0	1.3	2.27
MJVD-13-06	0.33	26.94	50.0	82	<20	217.0	4,460	7,350	620	1,840	277	<200	145.0	13.2	45.6	8.4	25.8	2.0	8.7	1.0	1.80
MJVD-13-07	0.60	24.13	40.5	85	<20	176.0	4,750	4,620	664	1,980	289	<200	140.0	12.1	41.9	7.1	20.8	1.4	7.1	0.7	1.52
MJVD-13-08	0.33	12.12	48.0	111	<20	130.5	3,750	3,030	567	1,715	238	<100	119.0	10.2	34.6	5.7	18.5	1.3	5.6	0.7	1.15
MJVD-13-09	0.92	18.10	65.0	95	<20	262.0	6,230	4,860	876	2,740	402	<100	223.0	19.0	69.3	10.9	32.6	2.4	10.2	1.1	1.88
MJVD-13-10	0.95	14.39	73.5	73	<20	307.0	6,390	3,770	901	2,840	406	<100	246.0	19.5	76.2	12.1	36.6	2.5	11.6	1.4	1.79
MJVD-13-11	0.72	28.89	67.5	99	<20	333.0	6,730	5,160	1,060	3,330	503	<150	257.0	22.4	78.4	13.1	40.6	3.0	13.1	1.4	2.09
MJVD-13-12	0.64	27.36	87.5	170	<20	390.0	7,890	6,040	1,320	4,170	602	<150	325.0	27.0	95.6	15.8	47.4	3.3	15.3	1.6	2.49
MJVD-13-13	1.34	13.92	73.0	76	<20	923.0	17,740	4,080	2,160	6,870	959	240	651.0	53.7	214.0	37.0	101.0	7.7	34.0	3.9	4.03
MJVD-13-14	2.57	46.57	66.5	95	<20	1255.0	19,090	6,820	2,220	7,130	1,005	240	722.0	60.0	256.0	47.4	127.0	10.4	45.8	5.1	4.63
MJVD-13-15	1.81	37.22	46.5	33	<20	331.0	3,140	4,550	521	1,720	321	<240	161.5	15.1	69.8	12.8	34.6	2.9	13.9	1.6	1.31
MJVD-13-16	0.53	82.77	11.0	16	<20	106.0	1,825	1,705	236	723	301	<500	66.1	5.7	21.7	3.9	12.2	1.0	4.5	0.7	0.60
MJVD-13-17	0.92	21.24	12.5	24	<20	95.9	1,795	2,540	244	725	140	<100	57.4	5.2	21.6	4.0	11.7	0.9	4.4	0.5	0.68
MJVD-13-18	1.11	32.89	21.5	37	<20	90.5	2,980	4,020	372	1,085	191	<200	66.3	6.2	19.4	3.7	11.7	0.8	4.2	0.5	1.06
MJVD-13-19	1.95	8.38	35.5	22	<20	79.7	950	1,480	143	447	78	<50	38.4	3.5	16.4	3.1	9.1	0.7	3.6	0.4	0.39
MJVD-13-20	1.42	4.71	37.5	22	<20	95.0	960	1,510	153	490	76	<25.0	44.7	4.6	19.6	3.9	9.9	0.9	4.1	0.4	0.40
MJVD-13-21	2.84	2.84	21.5	20	<20	89.1	775	1,030	110	370	67	15	36.8	4.0	20.7	3.5	8.9	0.8	3.2	0.3	0.30
MJVD-13-22	4.34	23.54	22.0	60	<20	87.8	2,590	3,520	323	928	148	<150	52.2	5.7	17.8	3.2	10.9	0.6	2.8	0.3	0.92
MJVD-13-23	4.52	21.92	45.5	111	<20	111.0	5,310	7,030	647	1,795	218	<150	95.2	9.3	25.7	4.2	15.6	0.8	4.0	0.4	1.83
MJVD-13-24	14.49	58.63	76.5	236	<20	484.0	13,620	15,640	1,600	4,710	643	<400	293.0	28.3	91.7	17.3	55.0	3.5	16.0	2.0	4.46
MJVD-13-25	6.92	26.34	36.5	235	<20	161.0	4,700	6,440	642	1,925	284	<200	123.0	11.5	35.4	5.9	19.8	1.1	5.6	0.7	1.72
MJVD-13-26	1.42	6.20	29.5	26	<20	87.3	1,210	1,715	164	483	72	<50	36.4	4.1	17.3	3.9	11.2	0.8	4.0	0.4	0.46
MJVD-13-27	1.54	9.55	19.0	21	<20	89.1	1,795	2,540	227	652	93	<50	47.9	5.3	19.9	3.4	11.2	0.7	3.7	0.4	0.66
MJVD-13-28	2.42	15.30	21.0	45	<20	93.6	7,750	9,690	846	2,200	209	<100	101.5	10.4	22.8	4.0	16.6	0.8	3.8	0.4	2.51
MJVD-13-29	6.08	18.86	19.5	101	<20	131.0	6,730	8,180	728	1,985	224	<100	104.5	10.4	28.7	4.8	18.5	1.1	5.0	0.6	2.18
MJVD-13-30	5.22	22.43	24.0	61	<20	120.0	4,640	5,870	520	1,435	185	<100	81.0	8.6	25.0	4.5	15.7	1.1	5.0	0.6	1.55
MJVD-13-31	4.79	15.11	20.5	46	<20	106.0	4,600	5,680	503	1,375	163	<100	76.6	7.7	23.3	4.1	14.8	0.8	4.1	0.5	1.51
MJVD-13-32	4.66	15.81	41.5	26	<20	98.6	5,380	6,830	588	1,580	178	<100	78.9	8.4	22.7	4.1	15.3	0.9	4.2	0.6	1.77
MJVD-13-33	3.68	14.99	14.0	21	<20	91.8	3,800	4,770	422	1,150	143	<100	62.8	6.6	20.5	3.6	12.3	0.7	3.5	0.5	1.26
MJVD-13-34	6.72	32.46	15.0	45	<20	82.4	7,800	8,990	746	1,900	223	<100	86.3	9.0	18.9	3.2	14.8	0.6	3.3	0.4	2.38
MJVD-13-35	21.47	16.35	16.5	41	<20	231.0	2,640	3,700	400	1,290	209	<100	91.6	8.0	26.9	4.9	15.2	1.0	3.6	0.4	1.03
MJVD-13-36	12.00	46.40	28.0	37	<20	67.5	11,840	15,360	1,115	2,740	297	<100	102.0	10.5	15.4	2.2	16.4	0.4	2.2	0.3	3.79
MJVD-13-37	2.51	12.44	12.5	16	<20	95.4	7,820	9,250	771	1,995	183	<100	87.9	9.3	22.5	4.0	16.5	0.9	3.8	0.5	2.43
MJVD-13-38	4.36	19.80	27.0	19	<20	87.8	2,790	3,520	318	883	138	<100	52.4	5.3	17.9	3.3	10.9	0.8	3.7	0.4	0.94
MJVD-13-39	7.48	21.07	58.5	19	<20	94.5	7,950	9,600	830	2,150	211	<100	91.0	9.9	21.0	3.7	16.3	0.6	4.0	0.5	2.52
MJVD-13-40	7.36	17.08	12.0	13	<20	93.6	8,130	9,430	789	2,040	208	<100	86.6	9.3	20.0	3.7	16.4	0.8	4.2	0.5	2.50
MJVD-13-41	12.37	59.14	69.0	43	<20	176.5	9,840	12,430	1,125	3,020	426	<400	151.5	15.0	36.3	6.2	27.0	1.3	6.3	0.8	3.27

MJVD-13 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-13-42	8.92	32.46	41.5	61	<20	233.0	3,950	5,990	559	1,700	279	<200	129.0	12.7	47.7	9.1	26.4	1.8	8.3	0.9	1.55
MJVD-13-43	10.17	44.19	62.0	108	<20	313.0	9,860	15,120	1,255	3,560	468	<200	208.0	21.2	68.1	11.7	39.8	2.3	10.1	1.1	3.72
MJVD-13-44	9.47	37.39	98.5	98	<20	168.0	8,780	11,380	1,020	2,730	353	<200	139.5	14.3	36.5	6.5	25.2	1.3	5.7	0.7	2.96
MJVD-13-45	1.07	5.71	39.5	13	<20	75.2	1,315	1,905	178	525	75	<50	38.6	3.8	15.9	2.8	9.0	0.7	3.0	0.3	0.50
MJVD-13-46	0.37	2.33	10.5	4	<20	64.8	837	1,335	129	382	57	<50	32.1	3.5	13.9	2.7	7.2	0.5	2.8	0.3	0.34
MJVD-13-47	0.31	10.28	8.0	11	<20	60.3	850	1,345	126	388	76	<50	29.6	3.0	12.7	2.3	7.2	0.6	2.6	0.3	0.35
MJVD-13-48	0.51	5.30	8.0	13	<20	37.4	225	373	32	101	27	<50	9.4	1.0	6.0	1.2	3.8	0.4	1.8	0.3	0.10
MJVD-13-49	0.76	5.01	23.0	6	<20	60.8	1,370	1,955	174	501	68	<50	32.7	3.5	14.1	2.6	7.5	0.5	2.4	0.3	0.50
MJVD-13-50	1.97	8.29	26.0	13	<20	81.5	919	1,490	142	451	80	<50	37.1	3.6	16.1	3.2	8.6	0.8	3.0	0.4	0.39
MJVD-13-51	1.05	6.29	25.5	9	<20	85.1	917	1,490	141	446	72	<50	37.6	3.8	16.4	3.5	9.6	0.8	3.3	0.3	0.39
MJVD-13-52	0.99	8.48	32.0	11	<20	92.7	1,130	1,825	179	563	99	<50	48.0	5.0	19.6	3.2	9.9	0.7	3.3	0.3	0.48
MJVD-13-53	0.80	3.50	15.5	8	<20	48.2	591	1,065	96	298	48	<50	24.2	2.3	9.9	2.0	4.9	0.4	1.5	0.2	0.26
MJVD-13-54	1.50	1.68	14.0	14	<20	67.1	998	1,560	140	433	54	15.3	30.3	3.1	12.1	2.4	7.2	0.5	2.5	0.3	0.40
MJVD-13-55	0.74	3.28	10.5	9	<20	63.5	640	957	93	295	48	<50	25.2	2.7	12.3	2.5	7.3	0.7	2.9	0.4	0.26
MJVD-13-56	0.74	3.86	11.5	6	<20	64.4	1,020	1,490	146	457	64	<50	34.2	3.6	13.3	2.5	7.6	0.5	2.6	0.3	0.40
MJVD-13-57	0.60	4.76	8.5	6	<20	70.7	1,315	1,780	177	518	74	<50	38.4	4.1	16.8	2.9	8.7	0.6	2.6	0.4	0.48
MJVD-13-58	0.97	2.96	19.0	36	<20	82.8	1,240	1,845	182	557	82	<50	44.7	4.4	19.7	3.3	9.8	0.9	3.4	0.3	0.49
MJVD-13-59	0.84	2.82	11.5	2	<20	55.8	747	1,125	116	363	52	<50	28.2	3.0	11.4	2.4	6.8	0.6	2.4	0.2	0.30
MJVD-13-60	1.66	5.00	84.5	7	<20	72.0	1,305	1,930	182	541	75	<50	39.3	4.0	16.0	2.7	9.1	0.7	3.5	0.3	0.50
MJVD-13-61	0.72	1.68	5.0	3	<20	52.2	698	1,085	114	367	52	<50	28.4	3.0	11.0	2.2	6.1	0.4	1.9	0.3	0.29
MJVD-13-62	0.51	4.86	9.0	5	<20	64.8	634	1,045	114	381	65	<50	31.9	3.3	15.5	2.9	7.4	0.6	2.4	0.3	0.28
MJVD-13-63	0.58	3.31	29.0	1	<20	55.4	569	947	102	333	52	<50	28.7	3.0	12.8	2.2	6.8	0.6	2.3	0.2	0.25
MJVD-13-64	0.68	4.37	8.0	13	<20	80.1	1,010	1,590	166	535	82	<50	43.3	4.4	18.9	3.3	9.6	0.7	2.7	0.4	0.43
MJVD-13-65	0.53	8.58	12.5	161	<20	90.0	951	1,875	176	600	105	<50	47.6	5.1	19.2	3.8	11.5	0.9	4.6	0.4	0.47
MJVD-13-66	0.70	2.31	9.0	7	<20	65.3	854	1,320	127	390	55	<50	30.9	3.4	12.4	2.9	7.6	0.7	2.7	0.4	0.34
MJVD-13-67	0.64	2.12	8.5	3	<20	59.0	653	991	102	334	49	10	28.2	2.8	11.4	2.4	6.5	0.5	2.6	0.3	0.27
MJVD-13-68	0.95	2.38	10.5	3	<20	56.7	722	1,095	109	345	49	10	26.5	2.6	12.0	2.5	6.8	0.5	2.8	0.3	0.29
MJVD-13-69	1.21	13.09	16.5	14	<20	74.7	1,285	1,790	177	551	97	<50	39.0	4.0	14.9	3.1	9.2	0.6	3.5	0.3	0.49
MJVD-13-70	1.11	3.72	27.5	4	<20	64.4	682	1,110	120	385	61	<50	32.6	3.5	14.2	2.6	7.2	0.5	3.1	0.4	0.30
MJVD-13-71	1.03	6.44	11.0	3	<20	65.3	872	1,340	132	420	70	<50	33.6	3.5	15.2	2.7	8.2	0.7	2.8	0.3	0.36
MJVD-13-72	1.09	5.73	26.5	9	<20	79.2	831	1,310	138	444	70	<50	35.7	4.0	17.1	3.3	9.1	0.7	3.8	0.4	0.35
MJVD-13-73	0.78	4.21	10.5	1	<20	59.0	854	1,300	127	402	60	<50	29.9	3.1	12.7	2.4	7.5	0.5	2.6	0.3	0.34
MJVD-13-74	0.47	1.67	103.5	21	<20	79.2	711	1,235	137	453	69	20	39.6	4.2	18.7	3.5	9.2	0.8	3.5	0.3	0.33
MJVD-13-75	1.66	5.17	58.5	7	<20	77.9	1,330	1,900	192	606	81	<50	42.8	4.3	17.8	3.1	9.4	0.9	3.8	0.3	0.51
MJVD-13-76	0.62	2.69	21.0	2	<20	61.7	550	920	96	325	53	<50	27.8	2.8	12.8	2.5	8.1	0.6	2.4	0.3	0.25
MJVD-13-77	0.51	5.49	10.0	3	<20	55.8	968	1,390	132	403	62	<50	28.5	3.1	11.9	2.4	7.0	0.7	2.9	0.3	0.37
MJVD-13-78	1.09	4.32	7.0	1	<20	34.2	495	646	57	173	33	<50	12.9	1.4	7.2	1.3	4.0	0.2	1.6	0.2	0.18
MJVD-13-79	1.40	6.15	10.0	6	<20	57.2	498	727	72	224	47	<50	20.6	2.3	10.3	2.2	6.0	0.5	2.5	0.3	0.20
MJVD-13-80	0.49	2.79	8.5	2	<20	38.7	366	587	59	192	33	<50	17.7	1.8	7.7	1.7	5.1	0.4	2.2	0.3	0.16
																				Av.	1.18

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-14-01	0.27	20.90	69.00	168	<20	143.0	2,100	17,220	226	706	129	<200	49.6	7.4	27.5	6.0	16.0	1.7	6.9	0.8	2.52
MJVD-14-02	0.18	36.54	52.50	107	<20	120.0	1,745	11,400	213	661	161	<200	40.6	6.5	23.4	4.7	14.1	1.3	5.9	0.7	1.75
MJVD-14-03	0.16	41.81	62.00	133	<20	193.5	2,030	15,430	270	866	198	<200	56.7	9.1	38.9	8.0	22.2	1.9	8.2	0.9	2.33
MJVD-14-04	0.27	64.41	104.00	266	<20	379.0	3,470	27,200	526	1,685	361	<200	107.5	17.1	71.8	14.6	42.0	3.6	13.7	1.6	4.13
MJVD-14-05	0.16	47.93	66.50	130	<20	242.0	1,875	16,490	291	952	235	<200	68.1	10.2	43.4	9.6	24.5	2.1	8.9	1.1	2.47
MJVD-14-06	0.55	37.39	61.50	139	<20	456.0	10,630	9,640	1,640	5,570	695	<200	333.0	32.8	113.0	19.8	59.0	3.2	16.0	1.8	3.48
MJVD-14-07	0.66	60.67	113.00	69	<20	469.0	19,060	23,800	2,750	9,140	988	<200	423.0	41.9	123.0	21.2	76.3	3.6	17.4	1.8	6.81
MJVD-14-08	0.47	45.89	68.00	125	<20	455.0	9,690	12,970	1,385	4,460	569	<200	248.0	27.0	102.5	18.9	59.4	4.2	18.7	2.1	3.60
MJVD-14-09	0.41	41.81	73.00	94	<20	275.0	9,190	15,860	1,185	3,630	440	<200	186.5	20.3	67.2	11.7	39.3	2.4	11.8	1.4	3.72
MJVD-14-10	0.43	9.31	53.00	50	<20	196.0	4,940	3,210	607	1,960	214	50	115.5	11.8	44.5	7.8	25.2	1.5	7.8	0.9	1.36
MJVD-14-11	0.35	4.52	45.00	38	<20	148.0	2,660	864	293	953	105	25	57.5	5.8	24.1	5.0	14.6	1.0	4.6	0.8	0.61
MJVD-14-12	0.45	30.51	54.50	51	<20	258.0	5,410	4,530	721	2,290	305	<200	140.0	14.5	58.0	10.8	31.3	2.4	11.0	1.3	1.64
MJVD-14-13	0.70	34.16	170.50	60	<20	347.0	6,540	8,200	980	3,350	459	<200	224.0	23.7	98.7	17.1	49.6	3.7	17.4	1.9	2.43
MJVD-14-14	0.39	36.71	86.50	73	<20	339.0	7,020	9,100	878	2,850	373	<200	175.0	19.4	75.5	14.0	42.3	3.2	14.4	1.6	2.51
MJVD-14-15	0.47	44.53	90.00	104	<20	402.0	9,760	12,030	1,210	3,860	466	<200	223.0	23.3	78.2	14.9	45.4	3.2	14.2	1.7	3.37
MJVD-14-16	0.55	36.54	254.00	67	<20	407.0	6,280	9,110	943	3,210	461	<200	227.0	23.9	96.9	17.2	47.7	3.7	15.7	1.7	2.50
MJVD-14-17	1.64	76.31	138.50	40	<20	220.0	6,810	8,080	762	2,430	430	<200	149.0	14.9	48.5	9.1	27.6	1.7	8.4	1.0	2.27
MJVD-14-18	8.79	57.27	85.50	50	<20	317.0	18,880	18,700	1,515	4,550	512	<200	225.0	22.9	65.7	11.9	41.3	2.2	10.9	1.3	5.37
MJVD-14-19	15.23	59.82	77.00	61	<20	386.0	18,350	18,370	1,550	4,760	564	<200	258.0	25.0	78.2	14.0	45.7	2.8	13.5	1.6	5.32
MJVD-14-20	6.86	56.59	97.00	61	<20	469.0	15,280	12,640	1,440	4,680	577	<200	290.0	27.3	97.1	17.1	54.5	3.7	16.7	2.1	4.25
MJVD-14-21	5.82	43.51	65.00	53	<20	350.0	7,770	8,320	896	2,940	407	<200	183.0	17.8	67.9	12.6	37.8	2.6	12.1	1.4	2.51
MJVD-14-22	0.51	19.88	57.50	32	<20	157.5	1,905	2,510	241	818	140	<100	59.4	6.4	27.7	5.5	15.8	1.2	5.5	0.8	0.71
MJVD-14-23	0.60	4.20	21.00	25	<20	73.8	596	759	73	259	38	<25	21.5	2.3	10.9	2.4	6.9	0.7	3.2	0.4	0.22
MJVD-14-24	0.53	10.33	28.50	31	<20	101.0	1,145	1,200	142	469	74	<50	33.9	4.0	17.2	3.4	10.4	0.9	4.0	0.5	0.38
MJVD-14-25	0.51	4.15	25.00	134	<20	104.5	1,385	1,390	209	764	104	25	57.4	5.8	23.2	4.3	13.3	1.0	4.1	0.5	0.49
MJVD-14-26	0.47	14.07	24.50	12	<20	77.0	1,140	1,965	159	539	93	<100	36.0	3.9	14.9	2.9	8.6	0.6	3.0	0.5	0.49
MJVD-14-27	0.21	4.59	10.50	3	<20	35.1	465	718	66	222	34	<25	15.2	1.6	6.3	1.1	4.0	0.3	1.4	0.2	0.19
MJVD-14-28	0.47	15.98	15.00	18	<20	76.5	1,880	2,680	243	788	114	<100	45.0	4.8	15.9	3.1	10.0	0.7	3.2	0.4	0.70
MJVD-14-29	0.60	36.03	19.00	16	<20	67.5	1,105	1,625	158	539	155	<300	37.4	3.7	14.9	2.7	7.1	0.6	2.6	0.4	0.45
MJVD-14-30	2.34	39.94	28.5	20	<20	118.5	2,280	3,100	280	930	194	<300	61.6	6.4	25.6	4.6	13.2	1.0	4.8	0.6	0.84
MJVD-14-31	3.29	55.06	42.5	62	<20	223.0	3,370	4,800	471	1,650	323	<300	110.5	10.4	36.5	6.4	20.4	1.5	6.8	0.8	1.32
MJVD-14-32	2.20	57.27	37.5	32	<20	144.0	2,190	3,170	304	1,050	270	<300	70.7	6.9	26.5	4.9	15.6	1.1	5.2	0.7	0.87
MJVD-14-33	2.30	40.11	43.5	22	<20	113.5	2,770	3,650	379	1,250	212	<300	70.9	7.5	24.5	4.8	13.2	1.1	4.0	0.5	1.02
MJVD-14-34	0.66	14.53	18.0	34	<20	72.0	2,260	2,970	326	1,090	150	<100	58.7	5.6	16.5	2.8	9.8	0.5	2.2	0.4	0.83
MJVD-14-35	0.64	18.35	23.5	18	<20	67.5	1,675	2,380	231	777	128	<100	45.9	4.5	15.7	2.7	8.5	0.5	2.3	0.3	0.64
MJVD-14-36	1.42	14.38	20.5	10	<20	55.8	1,285	1,835	173	592	94	<100	34.3	3.5	12.4	2.1	6.8	0.4	2.3	0.3	0.49
MJVD-14-37	0.58	8.50	17.0	6	<20	39.6	930	1,380	120	393	62	<50	23.3	2.4	8.4	1.4	5.3	0.3	1.6	0.2	0.36
MJVD-14-38	0.99	14.62	27.0	3	<20	58.5	712	1,160	115	400	86	<100	30.0	3.2	12.9	2.4	6.9	0.5	2.6	0.2	0.31
MJVD-14-39	0.78	2.74	12.0	<1	<20	36.9	597	829	79	262	36	<20	17.0	1.9	8.4	1.4	4.1	0.3	1.4	0.2	0.22
MJVD-14-40	10.27	22.69	17.0	9	<20	95.4	2,970	3,750	313	961	144	<100	55.0	5.8	19.2	3.6	10.4	0.8	3.0	0.4	1.00
MJVD-14-41	8.40	18.01	25.0	15	<20	92.3	5,160	5,940	503	1,430	149	<100	70.2	7.3	19.5	3.7	13.2	0.8	3.7	0.4	1.61

MJVD-14 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-14-42	9.21	35.52	15.5	21	<20	87.8	4,830	5,430	439	1,215	190	<100	56.9	6.2	17.5	3.2	12.1	0.7	3.3	0.5	1.47
MJVD-14-43	9.23	22.01	15.0	7	<20	79.7	4,840	5,260	419	1,150	127	<100	50.6	5.6	16.3	3.0	10.9	0.7	3.0	0.4	1.43
MJVD-14-44	6.23	7.29	15.5	2	<20	60.3	4,560	4,900	385	1,030	84	<100	42.5	5.0	11.5	2.4	8.2	0.5	2.0	0.3	1.33
MJVD-14-45	9.23	15.50	14.0	20	<20	97.7	5,640	6,480	529	1,485	152	<100	67.0	7.3	20.2	3.7	13.0	0.9	4.2	0.4	1.74
MJVD-14-46	7.23	24.73	22.0	49	<20	105.0	5,780	6,860	591	1,695	201	<100	83.3	9.1	24.1	4.1	15.3	0.8	3.8	0.5	1.84
MJVD-14-47	9.41	29.57	40.0	19	<20	102.5	8,830	9,600	781	2,180	216	<100	92.1	9.8	21.4	3.8	16.5	0.8	4.0	0.5	2.62
MJVD-14-48	7.13	15.91	27.0	9	<20	86.4	3,580	4,240	362	1,065	127	<100	55.8	5.9	19.4	3.5	12.4	0.8	3.2	0.4	1.15
MJVD-14-49	5.84	16.09	23.0	7	<20	75.2	2,680	3,260	280	837	111	<100	44.9	5.0	15.2	3.1	10.2	0.8	3.6	0.4	0.88
MJVD-14-50	3.92	7.04	12.0	11	<20	65.3	1,020	1,465	140	476	78	<50	33.5	3.4	14.0	2.5	7.7	0.5	2.8	0.3	0.40
MJVD-14-51	3.14	7.97	22.5	9	<20	58.5	1,140	1,555	149	488	74	<50	32.7	3.3	13.9	2.4	7.0	0.5	2.4	0.2	0.42
MJVD-14-52	2.55	9.60	18.0	6	<20	63.0	1,285	1,720	149	476	72	<50	29.4	3.1	13.4	2.4	7.6	0.6	2.5	0.3	0.46
MJVD-14-53	6.80	32.21	19.5	10	<20	84.6	5,450	6,850	588	1,705	206	<200	74.8	7.8	18.7	3.5	13.7	0.8	3.6	0.5	1.80
MJVD-14-54	8.63	30.76	16.0	14	<20	98.1	3,680	4,380	395	1,170	179	<200	64.1	6.8	21.6	3.6	12.9	0.8	4.2	0.4	1.20
MJVD-14-55	7.68	37.39	18.5	11	<20	81.0	4,240	5,110	433	1,250	194	<200	58.0	6.5	17.1	3.2	11.8	0.7	3.2	0.4	1.37
MJVD-14-56	4.81	16.74	35.5	3	<20	72.5	1,945	2,540	223	706	107	<100	42.1	4.4	16.3	3.1	9.6	0.7	3.1	0.4	0.68
MJVD-14-57	1.29	7.19	89.5	2	<20	63.5	1,270	1,775	169	557	79	<50	37.3	3.9	15.7	2.9	8.5	0.5	2.8	0.3	0.48
MJVD-14-58	7.17	37.56	33.0	22	<20	122.5	4,280	5,070	476	1,425	217	<200	77.2	8.2	24.7	4.5	14.7	0.8	4.3	0.5	1.40
MJVD-14-59	7.21	32.97	34.0	34	<20	139.5	6,380	7,460	697	2,060	245	<200	98.3	10.0	26.7	5.2	17.8	1.1	5.1	0.6	2.05
MJVD-14-60	11.01	19.88	17.0	4	<20	80.1	3,710	4,360	376	1,080	151	<200	52.1	5.6	14.6	3.1	10.6	0.6	2.9	0.3	1.18
MJVD-14-61	14.24	11.27	17.5	12	<20	79.7	4,070	4,750	400	1,120	110	<50	54.9	5.6	15.7	2.8	9.3	0.5	2.7	0.3	1.27
MJVD-14-62	8.67	21.24	18.5	2	<20	70.7	2,440	2,910	244	738	113	<100	39.6	4.4	14.1	2.5	8.5	0.7	3.0	0.4	0.79
MJVD-14-63	3.60	9.87	14.0	5	<20	39.2	2,470	2,890	238	675	71	<50	31.8	3.3	9.0	1.6	5.8	0.3	1.5	0.2	0.77
MJVD-14-64	0.92	37.05	7.5	<1	<20	28.8	697	877	83	258	117	<200	17.6	1.7	6.9	1.2	4.1	0.3	1.3	0.2	0.25
MJVD-14-65	6.12	52.18	20.5	137	<20	74.3	2,280	3,220	294	978	228	<200	61.2	6.1	19.1	3.3	10.1	0.6	2.7	0.5	0.86
MJVD-14-66	6.90	52.85	25.0	14	<20	119.0	3,500	3,170	405	1,240	254	<200	74.9	7.5	24.6	4.6	14.5	1.0	4.8	0.6	1.05
MJVD-14-67	3.14	52.01	77.0	91	<20	205.0	5,360	8,430	686	2,170	382	<200	135.5	14.3	48.5	8.1	26.4	1.7	8.7	1.0	2.10
MJVD-14-68	2.90	55.57	72.5	64	<20	171.0	4,320	8,680	548	1,715	329	<200	106.5	11.8	40.0	6.9	21.7	1.4	7.2	0.9	1.92
MJVD-14-69	6.41	48.27	35.0	36	<20	140.0	3,080	4,920	388	1,210	284	<200	79.3	8.2	28.6	5.4	17.1	1.3	5.5	0.6	1.22
MJVD-14-70	5.10	28.55	28.5	52	<20	175.0	3,090	4,120	369	1,165	193	<200	75.8	8.4	31.9	6.8	18.7	1.5	6.8	0.8	1.11
MJVD-14-71	4.07	35.01	42.5	49	<20	188.0	3,280	4,420	410	1,265	222	<200	88.0	9.4	35.8	7.2	22.0	1.8	7.7	0.9	1.19
MJVD-14-72	4.40	38.92	55.5	61	<20	264.0	3,340	4,900	470	1,620	295	<200	125.0	13.6	58.4	10.7	30.3	2.4	11.5	1.3	1.34
MJVD-14-73	3.80	26.51	58.0	60	<20	293.0	3,720	5,270	515	1,760	282	<200	140.0	15.0	60.7	12.3	32.0	2.6	12.0	1.4	1.45
MJVD-14-74	2.14	41.30	13.5	20	<20	55.8	1,235	1,720	157	512	170	<200	33.8	3.6	13.4	2.5	7.1	0.6	2.0	0.4	0.47
MJVD-14-75	1.83	19.54	10.5	5	<20	36.9	827	1,155	100	308	88	<200	18.7	2.1	8.1	1.6	4.2	0.3	1.9	0.2	0.31
MJVD-14-76	2.63	23.54	27.5	54	<20	139.5	2,570	3,550	313	967	160	<200	59.2	6.9	25.4	5.0	15.8	1.2	6.4	0.7	0.94
MJVD-14-77	1.85	11.15	52.5	34	<20	127.5	1,425	2,250	226	809	147	<100	73.3	7.1	27.8	5.2	13.7	1.2	5.2	0.5	0.61
MJVD-14-78	1.36	15.21	24.0	29	<20	90.9	1,595	2,290	215	715	136	<100	61.3	6.0	21.8	4.1	11.0	0.9	3.5	0.5	0.62
MJVD-14-79	0.78	2.50	14.0	1	<20	36.0	294	543	50	176	29	<10	16.6	1.8	8.2	1.9	4.1	0.3	1.3	0.1	0.14
MJVD-14-80	1.21	5.10	66.5	13	<20	75.6	893	1,410	140	511	80	<30	43.3	4.3	17.5	3.2	8.4	0.5	3.8	0.3	0.38
																				Av.	1.51

MJVD-15 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-15-01	0.51	15.81	63.5	132	<20	103	3,820	5,720	495	1,540	174	<100	76.7	7.6	21.7	4.2	13.2	0.7	4.1	0.4	1.44
MJVD-15-02	0.64	21.41	64.5	114	<20	86	3,060	5,150	419	1,300	167	<100	64.8	6.6	20.0	3.4	12.0	0.6	3.1	0.4	1.24
MJVD-15-03	0.45	15.48	36.5	96	<20	69	2,060	3,970	289	904	117	<100	47.7	4.8	15.9	2.6	9.0	0.4	2.6	0.4	0.90
MJVD-15-04	0.29	49.12	33.0	62	<20	65	1,930	3,710	264	822	206	<400	42.7	4.6	14.6	2.6	8.0	0.5	2.3	0.4	0.85
MJVD-15-05	0.27	34.67	33.0	60	<20	58	1,530	3,150	211	652	145	<200	35.6	3.3	11.9	2.3	7.8	0.4	3.2	0.3	0.70
MJVD-15-06	0.16	21.92	29.0	66	<20	55	1,330	3,110	187	583	108	<100	33.7	3.3	11.2	2.0	7.5	0.4	2.5	0.2	0.66
MJVD-15-07	0.21	42.15	49.0	78	<20	103	2,690	7,810	364	1,140	214	<350	62.9	7.1	22.2	4.2	13.5	0.7	4.4	0.5	1.50
MJVD-15-08	0.18	66.79	115.0	70	<20	271	6,570	10,940	862	2,720	445	<350	164.0	16.9	57.8	10.7	32.1	1.8	8.9	1.1	2.66
MJVD-15-09	0.16	66.62	50.5	65	<20	106	2,870	8,940	396	1,210	274	<350	64.2	7.5	23.3	4.2	13.4	1.0	4.7	0.6	1.68
MJVD-15-10	0.47	74.78	59.5	78	<20	286	13,570	18,510	1,545	4,700	593	<350	219.0	21.4	61.8	10.3	38.7	1.9	9.4	1.1	4.75
MJVD-15-11	0.16	87.36	27.5	28	<20	122	5,080	6,950	653	1,980	389	<350	97.6	10.2	27.0	4.7	17.2	0.9	4.6	0.6	1.84
MJVD-15-12	0.08	83.96	32.0	15	<20	129	3,330	4,450	457	1,500	395	<350	89.7	9.1	31.3	5.1	16.6	1.0	5.1	0.6	1.25
MJVD-15-13	0.23	74.78	43.0	40	<20	190	7,410	9,590	972	3,030	438	<350	149.0	14.3	39.8	7.0	26.6	1.5	6.8	0.8	2.62
MJVD-15-14	0.16	82.77	19.0	18	<20	122	4,360	5,690	581	1,765	361	<350	82.0	8.2	23.0	4.1	16.0	0.8	4.9	0.6	1.56
MJVD-15-15	0.18	82.43	21.5	21	<20	125	5,130	6,560	674	2,080	375	<350	89.4	9.0	24.1	4.2	17.1	0.9	4.4	0.6	1.81
MJVD-15-16	0.27	87.02	36.0	22	<20	158	7,170	9,320	948	2,880	458	<350	130.0	13.4	34.2	6.1	21.6	1.1	5.1	0.7	2.53
MJVD-15-17	0.84	82.09	33.5	45	<20	297	17,840	20,300	1,750	5,060	534	<350	211.0	21.4	46.8	9.4	39.3	1.7	9.0	1.0	5.53
MJVD-15-18	0.60	86.00	35.0	49	<20	289	14,420	17,430	1,410	4,110	541	<350	185.0	18.7	50.2	9.4	35.7	1.9	9.0	1.3	4.62
MJVD-15-19	0.37	74.10	64.0	72	<20	429	9,480	12,780	1,150	3,590	528	<350	208.0	22.3	81.1	16.3	52.9	4.0	18.0	2.2	3.40
MJVD-15-20	1.77	79.20	26.5	65	<20	328	35,900	48,000	3,450	9,390	684	<350	311.0	33.2	46.8	9.1	55.1	1.9	8.4	1.1	11.79
MJVD-15-21	0.55	61.52	35.5	34	<20	372	11,920	7,210	1,740	5,550	687	<350	300.0	28.0	83.9	15.2	51.7	2.8	13.0	1.7	3.33
MJVD-15-22	0.21	4.37	8.0	7	<20	106	1,805	573	197	648	71	<30	43.2	3.8	15.7	3.6	10.1	0.7	3.8	0.4	0.41
MJVD-15-23	0.23	0.97	7.5	7	<20	124	1,575	283	158	537	54	15	42.4	3.7	17.7	4.0	11.8	0.9	3.7	0.5	0.33
MJVD-15-24	0.21	1.29	8.0	7	<20	115	1,325	277	132	454	49	13.1	36.7	3.4	15.9	3.5	10.2	0.7	3.2	0.5	0.29
MJVD-15-25	0.29	8.65	15.0	106	<20	129	1,520	1,300	205	760	114	<50	58.8	5.4	22.6	4.4	13.0	0.9	4.6	0.5	0.49
MJVD-15-26	0.55	73.93	90.5	154	<20	677	10,860	19,600	1,800	6,450	979	<350	467.0	43.4	155.5	27.1	78.9	4.9	23.3	3.0	4.94
MJVD-15-27	0.51	78.69	78.5	109	<20	649	10,840	19,220	1,700	5,880	891	<350	390.0	35.6	125.5	24.9	72.8	4.8	23.5	2.7	4.79
MJVD-15-28	0.70	60.33	72.0	127	<20	468	9,490	15,520	1,490	5,330	784	<350	340.0	31.4	104.0	18.5	59.1	3.4	19.0	2.1	4.04
MJVD-15-29	0.49	75.29	55.5	112	<20	374	9,310	12,970	1,535	5,450	788	<350	331.0	29.4	90.6	15.1	50.5	2.8	15.2	1.5	3.71
MJVD-15-30	0.43	64.92	62.5	100	<20	433	9,880	16,530	1,605	5,630	775	<350	342.0	31.2	95.6	17.2	54.5	3.1	16.6	2.0	4.25
MJVD-15-31	0.66	66.79	90.0	113	<20	505	16,210	23,800	2,290	7,690	932	<350	426.0	39.0	111.5	19.4	68.4	3.9	19.7	2.5	6.25
MJVD-15-32	0.74	76.48	98.0	124	<20	463	16,840	27,500	2,250	7,470	917	<350	396.0	37.5	101.5	17.5	64.1	3.3	15.6	2.0	6.73
MJVD-15-33	0.62	78.86	73.5	116	<20	332	13,910	24,900	1,850	6,090	768	<350	317.0	29.7	79.3	13.0	51.4	2.3	12.7	1.4	5.81
MJVD-15-34	0.90	69.17	86.0	81	<20	482	21,100	28,300	2,840	9,290	993	<350	478.0	42.4	111.0	19.3	72.6	3.4	15.5	1.7	7.64
MJVD-15-35	0.86	70.70	117.0	61	<20	305	10,910	17,740	1,775	5,930	747	<350	318.0	29.4	91.8	16.1	55.0	3.0	15.9	1.6	4.55
MJVD-15-36	0.53	85.49	49.5	23	<20	195	8,600	10,660	1,145	3,650	552	<350	195.0	18.8	58.8	10.1	36.7	1.9	9.1	1.3	3.01
MJVD-15-37	2.47	61.18	111.0	65	<20	606	21,200	30,500	2,520	7,990	858	<350	438.0	43.9	144.5	25.2	84.2	5.3	24.5	2.9	7.73
MJVD-15-38	1.68	51.33	122.0	49	<20	457	9,500	17,800	1,435	4,680	614	<350	290.0	29.8	106.5	19.6	59.1	4.0	18.0	1.9	4.21
MJVD-15-39	1.13	49.29	164.0	66	<20	406	10,300	20,500	1,555	5,140	636	<350	297.0	29.9	100.5	17.1	55.4	3.5	15.9	1.8	4.70
MJVD-15-40	1.50	12.17	54.0	41	<20	385	5,390	5,120	654	2,290	263	60	160.0	15.5	65.0	14.0	40.8	3.2	14.2	1.9	1.73
MJVD-15-41	4.05	20.73	41.0	50	<20	348	7,040	9,210	917	2,960	317	<100	171.5	16.5	59.2	11.9	39.5	2.5	11.2	1.3	2.53

MJVD-15 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-15-42	9.53	46.23	80.0	98	<20	323	16,820	24,900	2,080	6,670	676	<300	303.0	28.8	73.0	12.5	49.3	2.2	11.2	1.2	6.24
MJVD-15-43	6.55	43.68	52.0	45	<20	212	3,970	6,170	592	1,955	319	<300	124.5	11.9	42.6	8.0	23.9	1.7	7.4	1.0	1.61
MJVD-15-44	2.38	22.01	41.0	31	<20	177	2,700	4,230	404	1,355	197	<100	92.0	9.5	36.6	6.9	20.9	1.5	6.7	0.8	1.11
MJVD-15-45	0.53	8.41	23.0	11	<20	110	1,300	2,130	207	719	108	<50	55.4	5.9	24.6	4.2	13.0	1.0	4.6	0.5	0.56
MJVD-15-46	0.76	4.78	21.5	6	<20	119	972	1,660	171	597	92	25	50.4	5.4	25.9	4.7	12.9	1.0	4.9	0.5	0.45
MJVD-15-47	4.07	26.17	52.5	11	<20	162	2,590	4,140	399	1,355	216	<200	91.1	8.9	34.5	6.4	18.0	0.9	5.8	0.5	1.08
MJVD-15-48	2.63	13.41	67.5	31	<20	211	8,940	13,180	1,210	3,750	337	70	170.5	17.0	45.4	8.5	32.1	1.6	8.2	0.8	3.36
MJVD-15-49	3.66	16.60	50.0	22	<20	194	4,720	7,210	678	2,190	244	<90	119.5	12.4	42.6	8.0	26.3	1.7	8.3	0.8	1.85
MJVD-15-50	2.77	17.34	39.5	32	<20	175	4,790	7,430	696	2,270	249	<90	119.5	11.8	37.6	6.6	23.5	1.4	7.2	0.8	1.90
MJVD-15-51	2.84	23.62	47.5	15	<20	145	3,460	5,340	496	1,610	220	<150	93.4	9.8	32.1	6.0	18.0	1.1	5.9	0.6	1.37
MJVD-15-52	0.92	8.43	23.5	11	<20	130	2,270	3,330	305	975	125	<50	65.7	7.1	28.6	5.3	16.6	1.1	5.5	0.7	0.87
MJVD-15-53	6.23	37.22	173.5	85	<20	446	33,400	48,400	3,930	12,050	1,065	250	556.0	53.7	124.5	20.8	88.3	3.6	17.3	1.9	12.05
MJVD-15-54	2.82	36.88	109.5	58	<20	461	18,340	26,000	2,150	6,690	706	<250	369.0	35.4	110.0	19.9	66.6	4.0	18.1	2.0	6.60
MJVD-15-55	1.97	25.58	117.0	67	<20	358	19,300	27,500	2,240	7,030	633	<250	338.0	32.0	87.2	15.7	55.0	2.7	13.2	1.4	6.91
MJVD-15-56	3.18	60.67	117.5	50	<20	343	19,870	27,000	2,160	6,600	674	<250	313.0	31.4	79.3	14.2	55.8	2.7	12.0	1.4	6.86
MJVD-15-57	7.13	56.42	152.0	83	<20	355	24,200	34,600	2,740	8,580	819	<250	379.0	36.8	83.8	14.6	63.7	2.3	11.9	1.4	8.63
MJVD-15-58	9.27	54.55	104.0	60	<20	384	17,080	25,500	2,060	6,490	686	<250	311.0	31.2	84.8	16.0	57.8	3.1	14.3	1.5	6.33
MJVD-15-59	11.75	48.10	88.0	139	<20	356	29,200	41,900	3,390	10,520	961	<250	469.0	45.5	99.5	16.2	73.3	2.8	14.3	1.6	10.45
MJVD-15-60	16.17	52.68	104.0	88	<20	250	7,410	11,140	1,055	3,480	459	<250	199.0	19.1	65.2	10.8	35.0	2.0	9.2	1.1	2.90
MJVD-15-61	10.89	50.31	51.5	74	<20	330	11,580	18,550	1,515	4,790	526	<250	243.0	24.1	75.3	13.4	46.4	2.8	12.8	1.3	4.53
MJVD-15-62	9.60	52.68	43.0	46	<20	257	9,110	13,040	1,210	3,810	469	<250	195.0	18.7	57.0	9.7	35.2	2.1	9.8	1.1	3.39
MJVD-15-63	15.60	46.57	57.5	28	<20	328	8,720	12,990	1,240	3,970	464	<250	214.0	21.5	70.2	12.8	43.4	2.6	12.2	1.1	3.37
MJVD-15-64	15.66	53.70	54.0	49	<20	313	17,260	25,300	2,070	6,480	710	<250	318.0	30.6	71.7	12.4	50.0	2.1	10.4	1.2	6.32
MJVD-15-65	25.38	43.68	79.5	135	<20	296	6,820	10,530	1,035	3,430	465	<250	205.0	20.9	65.1	11.3	38.4	2.5	10.3	1.3	2.75
MJVD-15-66	16.89	53.36	118.0	34	<20	275	11,830	19,680	1,640	5,200	617	<250	263.0	24.8	69.3	12.2	44.1	2.0	10.3	1.1	4.77
MJVD-15-67	23.01	51.84	52.0	51	<20	370	19,490	29,000	2,400	7,660	760	<250	355.0	34.1	80.6	15.0	60.9	2.7	13.4	1.6	7.23
MJVD-15-68	17.12	44.02	64.5	64	<20	468	19,900	29,800	2,490	8,080	845	<250	399.0	38.3	108.0	19.9	74.2	3.8	18.8	2.1	7.47
MJVD-15-69	7.40	42.66	79.5	38	<20	522	9,040	16,580	1,485	5,150	651	<250	319.0	32.2	119.0	22.6	72.8	5.2	24.3	2.8	4.09
MJVD-15-70	12.92	54.21	59.0	61	<20	399	16,030	24,000	1,990	6,400	718	<250	317.0	30.8	89.8	16.3	58.3	3.3	16.0	1.7	6.01
MJVD-15-71	15.45	61.69	42.0	48	<20	326	10,360	17,670	1,510	4,950	633	<250	257.0	24.4	72.9	13.3	45.5	2.6	11.6	1.5	4.31
MJVD-15-72	17.86	49.46	48.5	22	<20	237	6,450	9,810	924	3,040	415	<250	164.5	16.5	53.7	9.9	31.1	1.7	8.3	1.1	2.54
MJVD-15-73	13.58	44.36	214.0	130	<20	538	62,300	87,000	6,810	20,800	1,595	400	847.0	80.2	141.5	23.7	129.0	4.1	19.5	2.0	21.69
MJVD-15-74	10.38	34.16	220.0	200	<20	527	91,700	126,900	9,840	30,700	2,310	500	1185.0	113.5	168.0	26.6	163.0	3.9	21.9	2.3	31.70
MJVD-15-75	13.89	34.16	230.0	171	<20	479	74,700	103,100	8,160	24,900	1,890	300	966.0	94.2	147.0	22.0	136.0	3.3	18.2	1.8	25.79
MJVD-15-76	14.90	38.07	157.5	130	<20	428	65,300	91,600	7,330	22,800	1,805	250	928.0	85.3	138.5	21.0	133.0	3.1	16.6	1.6	22.90
MJVD-15-77	14.12	38.41	87.0	46	<20	270	12,120	21,000	1,765	5,780	637	<300	279.0	26.2	64.0	10.7	45.8	2.0	9.5	1.2	5.05
MJVD-15-78	14.59	39.77	67.0	21	<20	208	5,090	7,970	769	2,540	370	<300	149.5	14.7	46.4	7.9	26.7	1.5	7.1	0.9	2.06
MJVD-15-79	21.16	45.38	43.0	61	<20	320	7,050	10,790	1,015	3,280	428	<300	183.5	18.2	60.7	11.9	39.1	2.9	12.5	1.4	2.79
MJVD-15-80	11.55	47.42	84.5	64	<20	402	24,600	35,800	2,920	9,260	904	<300	434.0	41.9	104.5	17.9	71.4	3.0	16.3	1.6	8.95
																				Av.	4.92

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-16-01	0.53	11.85	62.5	131	<0.01	71.1	2,390	5,260	329	1,035	118	<60.0	49.9	6.1	17.0	2.8	9.7	0.7	3.6	0.4	1.12
MJVD-16-02	0.55	7.65	52.0	117	<0.01	56.3	1,695	5,110	223	686	81	<40.0	32.9	4.1	10.9	2.1	7.8	0.5	2.5	0.3	0.96
MJVD-16-03	0.45	4.44	36.0	96	<0.01	41.0	1,460	3,450	193	595	62	<25.0	27.0	3.2	8.6	1.9	6.6	0.3	1.8	0.3	0.71
MJVD-16-04	0.55	5.05	34.5	109	<0.01	43.2	1,690	4,170	216	680	70	<25.0	32.1	3.5	10.4	1.9	5.8	0.4	1.9	0.2	0.84
MJVD-16-05	0.49	7.12	34.5	110	<0.01	48.2	1,730	4,100	218	655	69	<40.0	30.0	3.4	9.8	1.8	7.9	0.5	2.8	0.3	0.83
MJVD-16-06	0.49	7.85	35.0	99	<0.01	54.0	2,230	4,160	285	861	88	<40.0	38.8	4.2	12.5	2.2	7.0	0.5	2.2	0.5	0.93
MJVD-16-07	0.41	8.77	38.0	82	<0.01	56.3	1,860	2,970	229	679	79	<40.0	35.6	3.7	11.0	2.3	8.1	0.4	2.9	0.3	0.71
MJVD-16-08	0.33	10.52	30.5	73	<0.01	55.4	1,700	2,510	211	640	79	<40.0	31.8	3.5	11.4	2.0	7.1	0.5	2.6	0.2	0.63
MJVD-16-09	0.29	15.70	27.5	93	<0.01	50.9	1,470	2,310	186	564	82	<80.0	27.8	2.9	11.0	2.0	6.6	0.5	2.2	0.3	0.57
MJVD-16-10	0.37	11.22	32.5	69	<0.01	56.7	1,995	3,030	255	762	91	<60.0	37.9	3.8	11.9	2.4	7.8	0.5	2.8	0.3	0.75
MJVD-16-11	1.27	55.91	63.0	168	0.01	223.0	29,200	36,600	2,780	7,860	623	<200	294.0	30.2	55.7	8.9	47.2	1.4	7.5	1.0	9.32
MJVD-16-12	0.47	36.20	60.0	105	0.02	352.0	6,300	8,490	1,115	3,840	491	<200	237.0	23.1	83.8	14.5	44.2	2.6	12.4	1.4	2.51
MJVD-16-13	0.35	54.89	58.5	73	0.01	259.0	8,150	10,340	1,205	3,850	528	<200	214.0	21.5	70.5	12.2	39.6	2.3	10.9	1.4	2.96
MJVD-16-14	0.55	55.91	52.0	83	0.01	198.0	6,960	7,650	852	2,650	414	<200	144.0	14.5	46.2	8.3	28.0	1.7	7.8	0.9	2.27
MJVD-16-15	0.49	43.34	37.0	44	0.02	159.5	4,530	5,180	650	2,100	302	<200	118.5	11.9	37.9	6.9	23.0	1.3	5.9	0.8	1.57
MJVD-16-16	0.72	12.76	24.5	45	0.04	277.0	5,600	2,690	783	2,620	283	70	159.0	15.1	58.4	10.5	34.1	2.4	10.3	1.3	1.50
MJVD-16-17	1.34	24.47	37.5	68	0.05	493.0	7,430	5,340	1,055	3,620	445	<200	241.0	25.4	106.0	18.5	55.6	3.9	17.3	2.0	2.25
MJVD-16-18	0.74	80.22	31.0	32	0.01	166.0	4,670	5,380	630	2,020	368	<200	120.5	11.8	40.3	6.5	21.2	1.4	7.4	0.8	1.61
MJVD-16-19	0.16	82.43	21.5	14	<0.01	150.0	4,640	5,420	562	1,805	372	<200	107.5	11.3	37.6	6.3	20.8	1.5	6.4	1.0	1.57
MJVD-16-20	0.16	90.75	27.5	14	<0.01	193.5	4,010	5,130	495	1,645	369	<200	102.0	10.4	40.3	7.9	24.0	1.8	9.6	1.2	1.44
MJVD-16-21	0.18	90.58	19.0	26	<0.01	132.0	2,870	3,880	367	1,215	327	<300	75.7	7.5	29.2	5.5	14.9	1.1	4.9	0.8	1.07
MJVD-16-22	0.29	82.77	34.5	55	<0.01	162.5	3,860	5,650	536	1,785	371	<300	110.0	11.1	38.4	6.7	20.0	1.6	7.3	0.8	1.51
MJVD-16-23	0.51	83.28	30.0	46	<0.01	150.0	3,560	4,830	462	1,510	337	<300	92.3	9.9	36.4	6.6	19.0	1.4	7.0	1.0	1.32
MJVD-16-24	0.84	66.62	57.0	101	<0.01	203.0	4,430	6,620	658	2,140	378	<300	129.0	13.1	45.5	8.4	25.9	1.7	8.8	1.0	1.76
MJVD-16-25	0.53	77.67	209.0	147	<0.01	447.0	7,960	9,020	1,165	3,990	600	<300	266.0	25.6	95.0	17.0	54.7	3.8	17.1	2.0	2.83
MJVD-16-26	0.64	80.39	194.5	34	<0.01	370.0	6,640	7,420	935	3,120	532	<300	204.0	19.8	78.1	14.4	43.4	3.0	13.3	1.7	2.32
MJVD-16-27	0.49	67.98	111.0	20	<0.01	231.0	3,980	4,560	565	1,875	359	<300	124.0	12.3	48.4	9.6	28.4	2.2	10.4	1.1	1.41
MJVD-16-28	3.06	50.48	87.5	79	0.01	418.0	5,140	6,660	698	2,390	397	<300	184.5	20.5	87.3	16.6	44.4	3.9	17.0	1.9	1.93
MJVD-16-29	1.85	49.12	91.0	121	<0.01	358.0	5,510	8,650	741	2,470	386	<300	175.0	18.7	75.5	15.0	41.0	3.3	13.6	1.8	2.22
MJVD-16-30	0.70	56.93	113.5	155	<0.01	312.0	5,930	9,890	856	2,860	436	<300	188.0	19.1	70.6	13.6	39.4	3.0	13.5	1.5	2.48
MJVD-16-31	1.25	52.01	87.5	292	<0.01	669.0	10,210	14,100	1,390	4,700	634	<300	339.0	33.0	130.0	24.9	74.8	5.4	23.3	2.9	3.88
MJVD-16-32	1.36	52.01	152.0	264	0.01	948.0	15,690	22,700	2,120	7,010	832	<300	469.0	46.3	172.0	32.5	105.0	7.4	29.4	3.7	6.02
MJVD-16-33	0.64	80.05	63.0	87	<0.01	736.0	10,540	13,080	1,130	3,500	494	<300	211.0	21.4	81.7	17.0	51.3	3.4	15.4	2.0	3.58
MJVD-16-37	1.60	77.50	34.5	146	<0.01	358.0	5,710	7,850	710	2,230	407	<300	146.0	13.6	47.7	9.0	30.0	2.1	9.0	1.3	2.10
MJVD-16-38	4.99	61.01	59.0	104	<0.01	798.0	5,060	7,030	647	2,120	396	<300	188.0	22.0	113.0	23.6	64.1	5.1	24.1	2.7	1.98
MJVD-16-39	4.48	48.44	105.0	120	<0.01	676.0	5,800	8,510	806	2,690	442	<300	222.0	25.7	127.5	25.5	71.4	6.1	27.1	3.3	2.33
MJVD-16-40	4.23	62.37	62.0	96	<0.01	325.0	3,870	5,890	559	1,885	355	<300	142.5	14.0	61.6	12.5	36.8	2.8	12.0	1.5	1.58
MJVD-16-41	6.55	64.58	38.5	41	<0.01	133.5	2,930	4,230	386	1,275	272	<300	74.8	8.3	28.2	4.8	15.7	1.1	4.8	0.6	1.12
MJVD-16-42	7.58	60.50	60.5	40	0.01	211.0	4,050	5,950	539	1,825	316	<300	108.5	11.8	41.3	7.7	23.4	1.7	7.1	1.0	1.57
MJVD-16-43	5.42	54.04	65.0	72	0.01	269.0	10,550	14,510	1,290	4,070	484	<300	198.5	19.9	55.3	9.3	34.9	1.8	9.5	1.1	3.78
MJVD-16-44	3.99	51.33	60.5	239	0.01	375.0	19,430	26,900	2,150	6,880	719	<300	336.0	32.6	83.8	14.1	54.0	2.7	12.3	1.5	6.84

MJVD-16 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-16-45	2.55	56.59	61.5	206	0.01	324.0	10,660	17,600	1,470	4,750	590	<300	276.0	26.0	80.7	14.3	44.8	2.6	13.3	1.5	4.31
MJVD-16-46	6.37	36.37	94.5	305	0.01	755.0	6,700	9,710	915	3,170	540	<300	328.0	33.7	157.0	28.8	76.0	6.4	26.2	3.2	2.69
MJVD-16-47	3.35	63.22	64.5	83	0.01	297.0	5,370	7,780	712	2,330	406	<300	157.5	15.7	56.6	9.7	30.9	1.9	9.9	1.3	2.06
MJVD-16-48	1.56	70.36	56.5	168	<0.01	575.0	7,920	10,660	1,060	3,610	558	<300	270.0	25.0	98.7	20.0	60.2	4.5	18.5	2.6	2.98
MJVD-16-49	1.03	83.45	52.5	141	<0.01	901.0	7,430	10,110	1,000	3,350	526	<300	220.0	21.7	84.5	21.7	68.9	5.0	18.9	2.9	2.85
MJVD-16-50	1.03	83.62	38.5	57	<0.01	752.0	4,160	4,830	516	1,735	387	<300	146.0	14.5	71.8	17.7	52.1	4.3	16.4	2.4	1.52
MJVD-16-51	0.53	70.87	57.0	64	<0.01	523.0	6,190	6,360	808	2,740	437	<300	193.5	19.4	86.7	18.2	50.4	4.0	16.4	2.3	2.09
MJVD-16-52	0.53	84.47	110.5	97	0.01	774.0	11,920	9,650	1,635	5,680	790	<300	402.0	39.0	156.0	28.1	79.6	5.3	23.7	2.9	3.72
MJVD-16-53	0.53	56.08	76.5	92	0.01	484.0	7,460	7,920	1,055	3,630	504	<300	242.0	23.8	93.9	17.5	52.6	3.6	14.6	1.9	2.57
MJVD-16-54	0.74	79.20	52.5	44	<0.01	291.0	4,180	4,890	553	1,935	394	<300	135.0	13.2	53.7	10.8	28.6	2.2	9.9	1.2	1.50
MJVD-16-55	1.05	70.19	68.0	52	<0.01	334.0	4,060	5,270	571	1,965	380	<300	146.5	14.4	60.1	11.3	33.6	2.6	11.0	1.5	1.54
MJVD-16-56	1.17	70.19	98.0	87	<0.01	431.0	4,830	6,690	697	2,430	462	<300	198.0	19.5	81.8	15.9	45.4	3.5	15.7	2.1	1.91
MJVD-16-57	1.19	70.70	107.5	106	<0.01	460.0	5,080	7,600	788	2,760	511	<300	220.0	22.5	91.6	17.8	49.9	4.0	17.0	2.2	2.11
MJVD-16-58	0.29	80.56	161.5	30	<0.01	248.0	2,740	3,870	377	1,290	330	<300	95.3	9.6	39.8	8.0	23.0	1.8	7.2	1.0	1.08
MJVD-16-59	0.86	69.51	83.5	83	<0.01	397.0	5,280	6,920	721	2,480	427	<300	176.5	17.2	68.3	13.4	39.1	2.8	13.6	1.6	1.98
MJVD-16-60	0.88	71.89	97.5	77	<0.01	419.0	5,960	7,350	818	2,810	473	<300	205.0	19.9	78.3	14.0	42.4	3.1	12.9	1.7	2.18
MJVD-16-61	0.82	79.03	98.5	68	<0.01	300.0	5,920	7,330	884	2,950	528	<300	197.5	19.6	69.9	12.3	36.9	2.4	11.5	1.4	2.19
MJVD-16-62	0.78	82.43	91.5	68	<0.01	357.0	6,410	7,820	915	3,060	524	<300	204.0	20.0	77.7	13.6	40.3	2.8	12.1	1.7	2.33
MJVD-16-63	0.78	78.86	115.5	79	<0.01	449.0	8,440	10,820	1,220	4,050	588	<300	239.0	24.6	87.3	15.3	50.9	3.1	14.8	1.7	3.11
MJVD-16-64	1.07	72.06	134.5	145	<0.01	677.0	18,290	19,900	2,390	7,990	935	<300	469.0	45.2	157.5	27.4	84.2	5.1	24.3	2.8	6.10
MJVD-16-65	1.09	76.82	106.5	64	<0.01	693.0	11,810	7,760	1,670	5,790	787	<300	396.0	39.8	154.0	27.9	77.8	5.1	25.2	2.8	3.48
MJVD-16-66	0.62	80.73	78.5	39	<0.01	388.0	6,550	5,830	839	2,830	484	<300	200.0	19.7	81.3	14.3	42.9	3.0	13.6	1.7	2.06
MJVD-16-67	0.49	78.69	108.0	54	<0.01	450.0	7,130	7,160	962	3,230	534	<300	238.0	23.7	96.4	18.6	52.7	3.8	17.2	2.2	2.38
MJVD-16-68	0.39	75.97	127.5	113	<0.01	500.0	7,480	9,570	1,075	3,600	581	<300	255.0	25.0	104.5	19.3	55.4	4.6	20.0	2.6	2.79
MJVD-16-69	0.35	68.49	136.5	48	<0.01	460.0	7,120	9,870	1,035	3,460	533	<300	245.0	24.6	88.4	17.8	56.8	4.4	20.2	2.6	2.75
MJVD-16-70	0.16	73.93	148.0	27	<0.01	455.0	6,910	9,420	871	2,820	436	<300	177.5	18.5	72.4	15.4	47.0	3.3	13.8	2.0	2.55
MJVD-16-71	0.18	60.33	211.0	81	<0.01	933.0	6,530	10,400	1,030	3,500	561	<300	252.0	25.2	100.0	19.3	55.1	3.7	17.0	2.0	2.81
MJVD-16-72	0.41	59.48	311.0	106	<0.01	966.0	8,600	13,570	1,360	4,720	718	<300	356.0	35.8	145.5	26.8	74.7	5.7	24.0	2.8	3.67
MJVD-16-73	2.26	51.50	299.0	84	0.01	545.0	13,240	22,300	1,795	5,630	621	<300	329.0	36.0	128.0	22.7	68.2	4.3	20.5	2.5	5.38
MJVD-16-74	1.36	55.74	208.0	87	<0.01	367.0	5,400	9,120	921	3,280	553	<300	237.0	22.3	84.6	15.4	45.8	3.1	15.0	1.7	2.41
MJVD-16-75	2.05	61.18	147.5	109	<0.01	417.0	7,130	11,510	1,160	4,130	640	<300	268.0	24.6	82.9	13.7	43.2	2.4	12.6	1.5	3.05
MJVD-16-76	36.58	26.43	55.0	30	<0.01	208.0	2,690	4,410	429	1,505	242	<300	102.0	9.4	33.0	6.1	18.8	1.3	4.8	0.7	1.16
MJVD-16-77	7.71	24.73	53.0	<1	<0.01	94.5	1,690	2,670	240	787	145	<300	48.0	4.8	17.5	3.4	10.8	0.8	3.6	0.4	0.69
MJVD-16-78	9.29	7.05	86.0	<1	<0.01	99.5	1,795	2,540	224	726	89	<40.0	42.4	4.7	20.0	3.8	11.2	0.7	3.8	0.4	0.67
MJVD-16-79	21.58	17.17	57.5	4	<0.01	132.5	1,100	2,050	214	831	154	<100.0	61.3	5.8	22.3	3.9	11.1	0.8	4.0	0.5	0.55
MJVD-16-80	5.79	11.37	88.0	9	<0.01	106.0	902	1,505	150	530	89	<100.0	42.1	4.5	19.8	3.9	10.7	0.9	4.0	0.4	0.40
MJVD-16-81	3.74	14.92	46.5	<1	<0.01	89.1	1,790	2,690	240	788	115	<100.0	48.8	4.8	18.3	3.4	10.5	0.6	3.8	0.4	0.70
MJVD-16-82	4.15	18.78	46.5	1	<0.01	79.7	1,425	2,380	230	790	133	<100.0	52.5	5.2	15.4	3.1	8.9	0.5	3.3	0.3	0.62
MJVD-16-83	5.47	24.73	68.0	11	<0.01	112.5	1,685	2,560	240	810	150	<100.0	55.3	5.6	20.3	4.3	12.4	1.0	3.6	0.5	0.68
MJVD-16-84	17.96	45.21	103.5	50	<0.01	305.0	20,300	29,200	2,480	7,840	726	<300	407.0	39.3	67.0	11.2	51.0	1.8	8.6	1.1	7.37
MJVD-16-85	21.68	30.93	79.0	75	<0.01	326.0	22,700	32,200	2,660	8,230	704	<300	432.0	41.8	64.6	11.0	50.9	1.8	7.8	1.1	8.09

MJVD-16 (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	TRE_2O_3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-16-86	22.19	53.19	37.0	24	<0.01	216.0	6,020	8,890	856	2,830	402	<300	182.5	17.1	35.2	6.1	23.5	1.2	4.9	0.8	2.34
MJVD-16-87	18.02	54.72	43.0	13	<0.01	197.5	6,060	9,080	877	2,850	377	<300	174.0	16.5	35.4	6.2	21.6	1.4	7.0	0.9	2.36
MJVD-16-88	28.05	44.70	79.5	30	<0.01	234.0	12,750	21,200	1,830	5,920	563	<300	317.0	28.9	45.8	7.5	36.6	1.3	6.5	0.8	5.16
MJVD-16-89	15.70	42.32	156.5	79	<0.01	356.0	22,100	30,000	2,450	7,590	707	<300	445.0	43.8	86.3	14.9	56.7	2.9	13.5	1.6	7.66
MJVD-16-90	9.82	34.84	91.5	50	<0.01	254.0	16,020	21,500	1,775	5,470	525	<300	312.0	30.2	61.6	10.2	40.9	2.0	10.3	1.1	5.52
MJVD-16-91	5.82	13.19	33.5	12	<0.01	180.0	8,320	11,400	1,045	3,250	303	70	194.0	18.6	41.5	7.5	29.7	1.6	6.9	1.0	2.98
MJVD-16-92	7.52	13.22	29.5	<1	<0.01	147.0	5,270	7,360	665	2,080	207	<70.0	130.5	13.4	32.9	6.2	21.9	1.3	5.6	0.8	1.91
MJVD-16-93	5.61	14.09	28.5	<1	<0.01	143.5	5,750	7,760	667	2,050	201	<70.0	127.0	12.5	30.3	5.8	20.7	1.1	5.7	0.8	2.01
MJVD-16-94	1.81	6.93	39.0	<1	<0.01	138.0	4,920	7,240	663	2,140	197	<70.0	132.0	13.4	30.0	6.0	19.9	1.3	5.5	0.7	1.86
MJVD-16-95	9.27	8.85	57.5	16	<0.01	206.0	10,590	14,010	1,270	3,970	339	<100.0	221.0	22.4	43.3	8.0	30.1	1.7	6.4	0.8	3.68
MJVD-16-96	4.73	8.21	74.0	21	<0.01	190.5	19,730	24,000	1,755	4,970	359	100	257.0	26.4	45.5	7.9	34.9	1.6	6.8	1.1	6.17
MJVD-16-97	8.55	10.38	51.0	4	<0.01	149.0	5,270	7,760	719	2,300	222	50	143.5	13.8	31.4	5.8	21.1	1.4	5.9	0.9	2.00
MJVD-16-98	5.26	10.54	50.0	<1	<0.01	115.0	1,565	2,320	232	784	116	<50.0	70.2	7.6	25.2	5.0	14.1	1.1	4.2	0.6	0.63
MJVD-16-99	4.32	20.73	70.5	16	<0.01	221.0	5,620	7,630	702	2,250	264	<100.0	157.5	16.2	43.1	8.3	27.0	2.0	8.4	1.1	2.03
MJVD-16-100	3.41	7.53	37.5	<1	<0.01	153.5	3,830	5,430	495	1,605	176	40	118.5	12.1	34.0	6.5	17.9	1.4	6.7	0.8	1.43
																				Av.	2.49

additional (REE)

SAMPLE	CaF_2	$BaSO_4$	U	Th	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	T-R2O3
	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MJVD-02N1	0.41	54.72	40.0	25	<20	122.5	3,180	4,160	344	973	207	<300	66.4	7.0	20.4	4.2	15.0	1.0	5.3	0.7	1.09
MJVD-02N2	0.53	70.87	37.5	26	<20	65.7	9,390	10,940	952	2,550	345	<400	112.5	10.8	18.6	3.0	15.7	0.6	3.6	0.5	2.92
MJVD-02N3	0.90	58.97	31.5	64	<20	163.5	17,480	30,700	1,770	4,610	502	<350	209.0	21.6	41.1	6.7	35.4	1.5	7.4	0.9	6.69
MJVD-04N1	4.42	43.68	228.0	68	<20	379.0	48,100	56,800	4,560	11,390	865	<250	464.0	47.2	86.5	15.1	76.7	2.9	14.0	1.5	14.73
MJVD-05N1	8.38	67.64	112.0	58	<20	509.0	12,130	18,300	1,710	5,170	739	<400	379.0	37.1	105.0	19.4	69.2	4.4	20.2	2.5	4.70
MJVD-05N2	17.69	59.65	40.0	31	<20	182.5	5,960	7,910	782	2,290	352	<350	138.5	13.0	31.5	5.4	22.9	1.4	7.9	0.8	2.12
MJVD-05N3	19.34	44.02	86.0	62	<20	301.0	13,720	20,000	1,830	5,400	669	<250	329.0	29.1	68.3	10.9	47.0	2.0	10.2	1.0	5.09
MJVD-05N4	10.38	19.29	177.5	120	<20	390.0	55,700	70,800	6,060	16,570	1,360	100	695.0	62.7	98.0	15.3	94.6	2.5	13.9	1.4	18.23
MJVD-05N5	3.92	36.71	38.5	19	<20	129.5	5,110	6,540	618	1,785	255	<200	109.5	10.0	27.7	4.8	19.2	1.0	5.7	0.7	1.75
MJVD-05N6	14.47	17.59	34.5	15	<20	164.0	8,370	10,790	998	2,690	284	<100.0	154.0	14.2	35.2	6.1	24.9	1.3	6.5	0.7	2.82
MJVD-11N1	7.07	5.95	14.5	7	<20	122.0	2,360	3,260	311	929	127	<35.0	72.5	7.6	25.6	4.9	17.3	1.3	6.1	0.7	0.87
MJVD-12N1	23.84	30.85	80.5	108	<20	514.0	59,800	75,100	6,400	17,540	1,480	150	808.0	71.3	107.5	17.0	106.5	3.4	19.1	2.0	19.44
MJVD-12N2	13.46	43.85	229.0	15	<20	394.0	4,940	8,910	966	3,260	601	<250	323.0	31.2	102.5	18.7	57.9	4.0	20.4	2.1	2.35
MJVD-12N3	7.17	39.09	119.0	19	<20	268.0	6,540	9,750	968	2,990	447	<200	225.0	21.8	62.8	11.0	37.7	2.3	12.9	1.4	2.56
MJVD-12N4	4.42	14.77	38.0	4	<20	139.5	2,720	3,800	372	1,100	162	<85.0	82.9	8.8	28.6	5.2	18.7	1.2	6.7	0.8	1.01
MJVD-13N1	0.33	44.70	55.5	65	<20	262.0	5,740	12,490	772	2,240	347	<250	169.5	18.1	55.2	10.1	36.1	2.3	12.1	1.1	2.67
MJVD-13N2	12.14	47.08	46.0	110	<20	146.5	17,360	21,600	1,780	4,580	435	<300	194.0	19.0	31.5	5.1	29.7	1.0	5.1	0.6	5.54
MJVD-13N3	2.90	1.70	35.5	4	<20	40.1	510	836	76	239	33	<10.0	19.9	2.2	7.6	1.4	5.7	0.3	2.0	0.1	0.21
MJVD-14N1	0.66	38.24	82.5	45	<20	328.0	6,990	8,060	988	2,950	406	<250	221.0	22.2	72.7	13.7	47.4	3.3	15.3	1.9	2.41
MJVD-15N1	13.05	45.21	114.0	62	<20	361.0	35,300	45,200	3,900	10,540	976	<250	498.0	45.8	88.8	15.0	72.7	2.8	14.6	1.5	11.64
MJVD-15N2	9.00	29.23	273.0	256	<20	623.0	77,000	97,900	8,200	22,400	1,840	300	980.0	91.7	147.5	23.9	140.5	4.9	26.5	2.8	25.15