GEOLOGIC MAP OF THE SADDLE MOUNTAINS, SOUTH-CENTRAL WASHINGTON

by
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WASHINGTON DIVISION OF GEOLOGY AND EARTH RESOURCES
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The Saddle Mountains are an east-trending anticlinal ridge in south-central Washington that extends about 68 mi between Ellensburg and Othello. This map set covers a portion of the structure between 119° and 120° longitude and complements a report by Reidel (1984).

The map set consists of five plates: Plates 1, 2, and 3 are geologic maps; Plate 4 consists of cross sections and an explanation; and Plate 5 is a set of isopach maps for the basalt flows. These data represent the results of fieldwork completed between 1977 and 1979 and additional work in 1981 and 1982 for the U.S. Department of Energy as part of the Basalt Waste Isolation Project.

Accompanying this text is a table of X-ray-fluorescence-determined chemical compositions for the basalt flows compiled from this and other studies. All complete analyses were performed at the Geology Department, Washington State University, under the direction of P. R. Hooper. A description of the method and an estimate of the precision and accuracy of the analyses are given by Hooper and others (1981). Some analyses were obtained for only CaO and TiO_2 using an energy-dispersive system (EDAX) at Rockwell laboratories in Richland, Wa.

Abbreviations in Table 1 include the following: GR, Grande Ronde Basalt; HI MG, high-magnesium chemical type of Swanson and others (1979); lettered Grande Ronde flows, exposed flows at Sentinel Gap, lettered from oldest to youngest (Taylor, 1976); LO MG, low-magnesium chemical type of Swanson and others (1979); numbered Grande Ronde flows, exposed flows at Sentinel Gap, numbered from oldest to youngest, numbered and lettered flows correspond (Reidel, 1978); SM, Saddle Mountains Basalt; TS, Schwana informal unit; TSB, Sentinel Bluffs informal unit; V HI MG, very high magnesium chemical type of Swanson and others (1979); WP, Wanapum Basalt.

The X-ray fluorescence analyses were obtained to verify the identification of basalt flows for geologic mapping as part of Quality Assurance procedures, for stratigraphic studies and thickness measurements (Long and Landon, 1981); to verify the identification of basalt flows at paleomagnetic sample sites (Reidel and others, 1984), and for ongoing miscellaneous studies including determining the source of compositional variations in basalt flows and petrogenesis studies (Reidel and Fecht, 1987). The analyses include major and minor elements reported as oxides, the identification of the sample to flow, if appropriate, and the location of the sample. The samples are located in four ways: (1) section, township, and range; (2) latitude and longitude; (3) State Plane [Lambert] coordinates; and (4) Universal Transverse Mercator (UTM) coordinates. UTM coordinates on Plates 1, 2, and 3 allow the most accurate location of samples.

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Table 1. Geochemistry of basalts in the Saddle Mountains area.

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
A1303	SWSE20	15N	23E	SM	ASOTIN	HUNTZINGER	51.13	16.11	2.00	8.53	6.87	10.13	2.08	1.15	1.52	0.29	0.18
A1304	SWSE20	15N	23E	SM	ASOTIN	HUNTZINGER	51.24	16.24	2.00	8.99	6.66	9.74	2.07	1.06	1.55	0.29	0.18
C4002	SWSE14	15N	23E	WP	PRIEST RAPIDS	LOLO	49.87	14.14	2.00	12.33	4.47	9.14	2.43	1.31	3.26	0.78	0.26
C4003	NWSE14	15N	23E	WP	PRIEST RAPIDS	ROSALIA	49.62	13.95	2.00	13.15	4.33	8.93	2.52	1.00	3.61	0.65	0.24
C4004	NWSE14	15N	23E	WP	ROZA		50.97	14.36	2.00	12.25	4.23	8.51	2.33	1.41	3.12	0.59	0.23
C4006	NWNW24	15N	23E	SM	POMONA		51.44	15.24	2.00	9.07	6.67	10.78	2.23	0.55	1.60	0.23	0.19
C4007	SWSW13	15N	23E	WP	PRIEST RAPIDS	ROSALIA	49.33	14.28	2.00	12.14	4.75	9.73	2.46	1.11	3.27	0.69	0.24
C4008	SWSW13	15N	23E	WP	PRIEST RAPIDS	ROSALIA	49.05	13.70	2.00	13.71	4.67	8.59	2.70	1.23	3.44	0.67	0.25
C4009	SWSW13	15N	23E	WP	ROZA		50.61	14.11	2.00	12.72	4.29	8.42	2.59	1.30	3.14	0.61	0.21
C4010	NWSW13	15N	25E	WP	ROZA	ROZA	51.06	14.28	2.00	12.28	4.07	8.37	2.65	1.49	3.01	0.55	0.23
C4011	NWSW13	15N	23E	WP	FRENCHMAN SP	SENTINEL GAP	50.64	13.94	2.00	13.27	4.28	8.18	2.50	1.43	2.99	0.53	0.23
C4012	NWSW13	15N	23E	WP	FRENCHMAN SP	SENTINEL GAP	50.82	14.03	2.00	13.00	4.14	8.21	2.47	1.54	2.99	0.56	0.23
C4013	NWSW13	15N	23E	WP	FRENCHMAN SP	SENTINEL GAP	51.02	13.87	2.00	12.91	4.23	8.20	2.47	1.55	2.96	0.56	0.23
C4014	NENW13	15N	23E	WP	FRENCHMAN SP	UNDIFF	NA	NA	NA	NA	NA	8.60	NA	NA	4.40	NA	NA
C4015	NENW13	15N	23E	WP	FRENCHMAN SP	SENTINEL GAP	51.39	13.80	2.00	12.54	4.32	8.25	2.30	1.59	3.00	0.56	0.23
C4016	NENW13	15N	23E	WP	FRENCHMAN SP	SENTINEL GAP	51.45	13.54	2.00	12.41	4.05	8.58	2.39	1.71	3.08	0.56	0.23
C4017	NWSE13	15N	23E	WP	PRIEST RAPIDS	ROSALIA	49.71	13.81	2.00	13.49	4.46	8.46	2.22	1.46	3.48	0.66	0.25
C4018	NENE24	15N	23E	SM	POMONA		51.51	15.30	2.00	8.80	7.09	10.82	1.98	0.48	1.59	0.24	0.18
C4019	SENE24	15N	23E	SM	ELEPHANT MT	ELEPHANT MT	50.44	13.64	2.00	13.36	4.13	8.52	2.36	1.34	3.48	0.50	0.22
C4020	SENE24	15N	23E	SM	ELEPHANT MT	WARD GAP	50.54	13.79	2.00	12.64	4.38	8.62	2.45	1.29	3.54	0.52	0.23
C4021	SENW18	15N	24E	WP	ROZA		51.56	13.98	2.00	12.68	4.43	8.07	2.26	1.31	2.97	0.52	0.23
C4028	NESE18	15N	24E	WP	PRIEST RAPIDS	ROSALIA	49.81	14.01	2.00	12.55	4.58	8.65	2.56	1.44	3.50	0.65	0.25
C4028R	NESE18	15N	24E	WP	PRIEST RAPIDS	ROSALIA	50.07	13.51	2.00	12.77	4.59	8.72	2.54	1.43	3.49	0.63	0.25
C4029	NENW19	15N	24E	SM	ELEPHANT MT	ELEPHANT MT	50.99	14.12	2.00	12.74	4.38	8.34	2.54	1.28	2.89	0.49	0.23
C4030	SWSW17	15N	24E	SM	ASOTIN	HUNTZINGER	51.90	16.10	2.00	8.12	6.01	10.60	2.21	0.94	1.65	0.30	0.16
C4035	NWNW21	15N	24E	SM	ASOTIN	HUNTZINGER	51.70	15.66	2.00	8.98	6.15	10.29	2.40	0.67	1.63	0.32	0.20
C4036	SESE30	15N	24E	SM	POMONA		51.60	15.43	2.00	8.69	6.61	10.76	2.70	0.23	1.59	0.21	0.18
C4038	SESE21	15N	24E	SM	ASOTIN	HUNTZINGER	52.21	15.81	2.00	8.79	5.61	10.14	2.19	1.08	1.67	0.33	0.17
C4039	SWSW22	15N	24E	SM	ASOTIN	HUNTZINGER	51.89	15.45	2.00	8.76	6.37	9.96	2.21	1.24	1.62	0.31	0.18
C4040	SWSW22	15N	24E	SM	ASOTIN	HUNTZINGER	51.00	15.89	2.00	8.32	7.35	10.21	2.13	1.11	1.52	0.29	0.18
C4041	SWSW22	15N	24E	SM	POMONA		50.90	15.76	2.00	8.08	7.56	10.90	2.07	0.84	1.47	0.22	0.21
C4046	NENW22	15N	24E	SM	ASOTIN	HUNTZINGER	52.59	15.79	2.00	8.53	5.95	10.31	2.12	0.83	1.44	0.27	0.17
C4048	NENW22	15N	24E	WP	PRIEST RAPIDS	ROSALIA	49.88	13.58	2.00	13.13	4.89	8.45	2.50	1.26	3.43	0.64	0.24
C4049	SWSE15	15N	24E	WP	ROZA		50.27	14.31	2.00	12.33	4.67	9.03	2.52	1.16	2.96	0.53	0.23
C4050	SWSE15	15N	24E	WP	FRENCHMAN SP	SENTINEL GAP	50.45	14.81	2.00	11.86	4.46	9.14	2.59	0.83	3.06	0.59	0.20
C4052	SWSE10	15N	24E	WP	FRENCHMAN SP	SAND HOLLOW	52.11	14.23	2.00	12.08	3.98	8.33	2.19	1.29	3.04	0.53	0.22
C4053	NWSE15	15N	24E	WP	ROZA		52.49	14.51	2.00	12.33	2.60	8.85	2.21	1.10	3.11	0.59	0.23
C4055	SWNE22	15N	24E	SM	POMONA		52.28	15.20	2.00	8.43	6.95	10.64	1.88	0.57	1.62	0.24	0.18
C4063	NENE10	15N	24E	WP	PRIEST RAPIDS	ROSALIA	50.05	13.98	2.00	12.62	4.42	8.79	2.47	1.18	3.55	0.70	0.23
C4069	SESE14	15N	24E	SM	POMONA		51.36	15.21	2.00	9.08	6.63	10.62	2.47	0.61	1.59	0.24	0.19
C4071	SESE18	15N	25E	SM	POMONA		51.93	15.33	2.00	8.50	6.59	10.64	2.21	0.70	1.67	0.23	0.18
C4072	NWSW18	15N	25E	SM	POMONA		52.06	15.60	2.00	8.56	6.65	10.37	2.16	0.56	1.64	0.22	0.19
C4073	SENE24	15N	24E	SM	POMONA		51.40	15.36	2.00	9.00	6.84	10.68	2.15	0.52	1.63	0.23	0.18

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4074	SENE24	15N	24E	SM	POMONA		51.74	15.16	2.00	8.91	6.81	10.48	2.19	0.64	1.62	0.24	0.19
C4075	SWNW19	15N	25E	SM	POMONA		51.82	15.19	2.00	8.93	6.71	10.60	2.06	0.62	1.65	0.23	0.19
C4076	SWSW17	15N	25E	SM	POMONA		51.78	15.39	2.00	8.73	6.00	11.37	2.12	0.53	1.66	0.23	0.18
C4077	SWNE17	15N	25E	WP	PRIEST RAPIDS	ROSALIA	49.77	13.88	2.00	13.39	4.22	8.72	2.36	1.18	3.57	0.67	0.23
C4078	SWSE17	15N	25E	SM	POMONA		52.14	15.49	2.00	8.13	6.16	11.05	2.29	0.62	1.71	0.24	0.17
C4080	SWSE18	15N	24E	SM	ASOTIN	HUNTZINGER	50.83	16.20	2.00	8.27	7.32	10.93	2.15	0.53	1.38	0.21	0.18
C4087	NWNW20	15N	24E	SM	ASOTIN	HUNTZINGER	50.43	16.29	2.00	8.30	7.66	10.77	2.18	0.61	1.36	0.23	0.18
C4088	NWNW20	15N	24E	SM	POMONA		51.89	15.39	2.00	9.07	6.04	10.89	2.18	0.52	1.60	0.24	0.18
C4089	NENW20	15N	24E	SM	ASOTIN	HUNTZINGER	51.46	16.32	2.00	8.75	6.37	10.41	1.88	0.89	1.46	0.27	0.18
C4090	NENE20	15N	24E	SM	ASOTIN	HUNTZINGER	50.71	16.28	2.00	8.53	7.00	10.61	2.18	0.80	1.45	0.26	0.19
C4092	SWNW16	15N	25E	WP	PRIEST RAPIDS	ROSALIA	48.84	13.46	2.00	14.14	4.74	8.75	2.47	1.05	3.65	0.66	0.26
C4093	NENE17	15N	25E	WP	ROZA		51.82	13.33	2.00	11.76	4.14	9.21	2.72	1.19	3.08	0.54	0.22
C4094	NENE17	15N	25E	WP	FRENCHMAN SP	SAND HOLLOW	52.08	14.44	2.00	11.79	4.42	8.28	1.87	1.30	3.05	0.51	0.26
C4103	NWNW11	15N	25E	WP	FRENCHMAN SP	SENTINEL GAP	50.98	13.54	2.00	13.13	4.31	8.40	2.35	1.46	3.06	0.55	0.23
C4104	NESE10	15N	25E	WP	PRIEST RAPIDS	ROSALIA	50.57	13.99	2.00	12.73	4.38	8.64	2.21	1.19	3.34	0.69	0.23
C4107	NWNE11	15N	25E	WP	FRENCHMAN SP	GINKGO	50.76	13.84	2.00	13.17	4.17	8.39	2.36	1.34	3.15	0.58	0.23
C4109	SENE11	15N	25E	WP	FRENCHMAN SP	SAND HOLLOW	51.62	14.18	2.00	12.64	4.26	8.22	2.04	1.30	3.00	0.52	0.21
C4110	SENE11	15N	25E	WP	FRENCHMAN SP	SAND HOLLOW	51.20	14.14	2.00	12.71	4.38	8.30	2.37	1.35	2.82	0.50	0.24
C4111	NESE11	15N	25E	WP	FRENCHMAN SP	WALLULA GAP	51.43	14.36	2.00	12.52	3.53	8.54	2.38	1.30	3.13	0.59	0.23
C4112	NESE11	15N	25E	WP	FRENCHMAN SP	SENTINEL GAP	51.22	14.06	2.00	12.62	4.04	8.33	2.46	1.42	3.07	0.54	0.24
C4113	NESE11	15N	25E	WP	ROZA		50.43	14.62	2.00	12.26	4.44	8.78	2.44	1.21	3.03	0.56	0.23
C4114	NESE11	15N	25E	SM	POMONA		50.71	16.41	2.00	8.50	7.32	10.78	1.88	0.64	1.35	0.23	0.19
C4118	SWNW12	15N	25E	WP	FRENCHMAN SP	SAND HOLLOW	52.46	14.23	2.00	12.18	4.14	7.92	1.98	1.49	2.84	0.53	0.23
C4119	SWNW12	15N	25E	WP	FRENCHMAN SP	SENTINEL GAP	52.23	13.94	2.00	12.28	4.21	8.13	2.12	1.39	2.95	0.53	0.23
C4120	NWSW12	15N	25E	WP	ROZA		50.27	14.15	2.00	12.60	4.74	9.12	2.19	1.01	3.13	0.57	0.23
C4121	SWNW12	15N	25E	WP	FRENCHMAN SP	SENTINEL GAP	51.80	14.58	2.00	11.93	3.67	8.44	2.19	1.46	3.11	0.57	0.24
C4122	SWSW01	15N	25E	WP	FRENCHMAN SP	SAND HOLLOW	51.27	13.95	2.00	12.99	4.16	8.30	2.21	1.41	2.96	0.52	0.22
C4123	SENW12	15N	25E	WP	FRENCHMAN SP	GINKGO	50.97	14.12	2.00	12.94	4.04	8.15	2.55	1.40	3.00	0.60	0.23
C4124	SENW12	15N	25E	WP	FRENCHMAN SP	SAND HOLLOW	51.52	14.20	2.00	12.46	4.18	8.20	2.40	1.52	2.79	0.49	0.23
C4125	NESE12	15N	25E	WP	FRENCHMAN SP	SILVER FALLS	50.64	14.24	2.00	13.21	4.10	8.33	2.40	1.31	3.00	0.54	0.23
C4126	SENE12	15N	25E	GR	TSB	HI MG	54.90	15.02	2.00	9.07	5.05	8.95	1.58	1.24	1.71	0.29	0.19
C4127	NENE12	15N	25E	WP	FRENCHMAN SP	UNDIFF	NA	NA	NA	NA	NA	6.20	NA	NA	1.80	NA	NA
C4132	SWNW07	15N	26E	WP	FRENCHMAN SP	GINKGO	50.87	14.02	2.00	13.25	4.06	7.98	2.49	1.50	3.00	0.59	0.24
C4133	SWNW07	15N	25E	WP	FRENCHMAN SP	GINKGO	51.02	14.15	2.00	13.10	4.01	7.99	2.48	1.42	2.99	0.60	0.24
C4134	SWSW07	15N	26E	WP	ROZA		50.29	14.43	2.00	12.99	4.59	8.60	2.19	1.17	2.97	0.55	0.23
C4135	SWSW24	15N	24E	SM	ELEPHANT MT	UNDIFF	51.42	13.56	2.00	13.23	4.12	8.62	1.68	1.11	3.53	0.50	0.22
C4136	NENW15	15N	24E	WP	ROZA		50.54	14.00	2.00	13.03	4.66	8.73	1.95	1.23	3.06	0.57	0.23
C4138	NESE22	15N	25E	SM	ASOTIN	HUNTZINGER	49.45	14.43	2.00	12.33	6.37	10.54	2.24	0.56	1.66	0.24	0.18
C4139	SWNE22	15N	24E	SM	POMONA		51.30	16.09	2.00	8.20	8.03	11.01	1.28	0.34	1.36	0.21	0.18
C4140	SWNW17	16N	26E	SM	ELEPHANT MT	UNDIFF	50.74	13.58	2.00	13.12	4.21	8.31	2.51	1.29	3.53	0.50	0.22
C4141	SENE35	16N	26E	SM	ELEPHANT MT	UNDIFF	50.64	14.05	2.00	12.10	4.22	8.84	2.44	1.22	3.72	0.51	0.24
C4142	SWSE07	15N	26E	SM	ELEPHANT MT	ELEPHANT MT	53.06	14.43	2.00	8.99	4.64	8.85	2.45	1.25	3.59	0.50	0.25
C4142R	SWSE07	15N	26E	SM	ELEPHANT MT	ELEPHANT MT	50.74	13.88	2.00	13.23	4.44	8.18	2.28	1.18	3.37	0.47	0.23

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4143	NESW07	15N	26E	WP	ROZA		50.93	13.98	2.00	13.32	4.14	8.06	2.26	1.56	2.99	0.54	0.22
C4144	NESW07	15N	26E	WP	FRENCHMAN SP	SAND HOLLOW	51.09	14.21	2.00	12.82	4.26	8.25	2.47	1.33	2.84	0.50	0.23
C4145	NESW07	15N	26E	WP	FRENCHMAN SP	SILVER FALLS	51.06	14.01	2.00	13.00	4.16	8.03	2.47	1.47	3.01	0.56	0.24
C4148	SESE08	15N	26E	WP	ROZA		50.66	14.50	2.00	12.15	4.24	8.81	2.57	1.23	3.06	0.57	0.22
C4149	SESE08	15N	26E	WP	ROZA		50.87	14.12	2.00	13.23	4.04	8.04	2.46	1.38	3.02	0.60	0.24
C4152	SWSW09	15N	26E	WP	ROZA		50.48	14.43	2.00	12.52	4.12	8.81	2.65	1.21	3.00	0.56	0.22
C4153	SWSW09	15N	26E	WP	FRENCHMAN SP	SENTINEL GAP	51.11	14.07	2.00	12.69	4.52	8.01	2.28	1.56	2.99	0.55	0.22
C4157	NENE09	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.95	13.99	2.00	13.41	4.03	8.68	2.23	1.23	3.57	0.66	0.24
C4158	NENE09	15N	26E	WP	PRIEST RAPIDS	ROSALIA	48.37	13.05	2.00	12.82	7.07	8.44	2.56	1.27	3.50	0.69	0.24
C4158R	NENE09	15N	26E	WP	PRIEST RAPIDS	ROSALIA	50.70	13.85	2.00	12.69	4.06	8.36	2.64	1.27	3.52	0.68	0.23
C4159	NENE09	15N	26E	WP	PRIEST RAPIDS	LOLO	50.28	14.26	2.00	12.44	4.39	9.32	2.22	1.02	3.16	0.66	0.24
C4160	NWNW10	15N	26E	SM	ASOTIN	HUNTZINGER	51.80	16.01	2.00	7.39	7.74	11.01	1.99	0.33	1.36	0.20	0.17
C4161	SENW10	15N	26E	SM	ASOTIN	HUNTZINGER	53.17	15.60	2.00	8.03	6.03	10.08	1.82	1.13	1.65	0.32	0.17
C4162	SENW10	15N	26E	SM	ASOTIN	HUNTZINGER	52.04	16.47	2.00	8.63	5.06	10.89	2.26	0.70	1.53	0.26	0.18
C4162R	SENW10	15N	26E	SM	ASOTIN	HUNTZINGER	50.97	16.20	2.00	8.26	7.24	10.55	2.17	0.69	1.49	0.26	0.18
C4163	NWNE16	15N	26E	WP	PRIEST RAPIDS	LOLO	49.45	13.97	2.00	12.44	5.35	9.51	2.18	0.97	3.19	0.67	0.25
C4164	NWNE16	15N	26E	WP	PRIEST RAPIDS	ROSALIA	51.75	14.08	2.00	11.74	3.57	8.93	2.24	1.21	3.60	0.68	0.21
C4165	NWNW15	15N	26E	SM	ASOTIN	HUNTZINGER	52.86	16.08	2.00	9.14	3.76	10.27	2.55	1.08	1.74	0.35	0.18
C4166	NWNW15	15N	26E	SM	POMONA		50.92	16.00	2.00	8.51	7.83	11.11	1.45	0.38	1.41	0.21	0.18
C4168	NENW15	15N	26E	SM	ASOTIN	HUNTZINGER	52.41	16.02	2.00	8.37	5.86	9.58	2.34	1.23	1.69	0.33	0.17
C4169	NENW15	15N	26E	SM	POMONA		49.88	16.49	2.00	8.71	7.78	11.04	1.95	0.24	1.51	0.23	0.18
C4170	NWNW14	15N	26E	WP	ROZA		50.90	14.91	2.00	11.52	4.47	8.82	2.29	1.26	3.02	0.61	0.22
C4171	SENE15	15N	26E	SM	ASOTIN	HUNTZINGER	52.05	15.83	2.00	8.40	6.24	9.93	2.27	1.11	1.68	0.32	0.17
C4172	SENE15	15N	26E	SM	POMONA		51.31	15.82	2.00	7.83	8.08	11.06	1.60	0.52	1.39	0.21	0.17
C4174	SENE14	15N	26E	WP	PRIEST RAPIDS	ROSALIA	50.62	14.31	2.00	12.39	3.44	8.97	2.43	1.29	3.63	0.70	0.21
C4175	SENE15	15N	26E	SM	ASOTIN	HUNTZINGER	52.41	16.16	2.00	8.05	5.75	10.13	2.23	1.10	1.68	0.33	0.16
C4177	NESW12	15N	26E	SM	POMONA		51.06	15.83	2.00	7.98	8.11	11.04	1.77	0.46	1.36	0.21	0.17
C4178	NESW12	15N	26E	SM	ASOTIN	HUNTZINGER	51.00	15.91	2.00	7.81	8.17	11.13	1.69	0.50	1.40	0.21	0.18
C4180	NENW08	15N	24E	SM	ELEPHANT MT	UNDIFF	NA	NA	NA	NA	NA	8.10	NA	NA	3.90	NA	NA
C4181	SENE07	15N	24E	WP	FRENCHMAN SP	SENTINEL GAP	51.29	14.00	2.00	12.38	4.21	8.43	2.35	1.46	3.09	0.55	0.24
C4182	SESE08	15N	24E	SM	ASOTIN	HUNTZINGER	50.92	16.06	2.00	8.58	6.76	10.73	2.21	0.85	1.45	0.28	0.16
C4183	SESE08	15N	24E	SM	ASOTIN	HUNTZINGER	52.19	15.77	2.00	8.82	6.07	10.37	2.03	0.73	1.56	0.29	0.17
C4184	NWNE18	15N	24E	SM	ASOTIN	HUNTZINGER	49.42	14.94	2.00	8.65	7.25	11.23	2.02	0.44	3.64	0.22	0.18
C4184R	NWNE18	15N	24E	SM	ASOTIN	HUNTZINGER	50.94	16.19	2.00	8.10	7.14	10.99	2.34	0.53	1.37	0.23	0.17
C4185	NWNE09	15N	24E	SM	ELEPHANT MT	UNDIFF	52.18	13.98	2.00	12.81	4.32	9.25	2.21	1.11	1.39	0.51	0.24
C4185R	NWNE09	15N	24E	SM	ELEPHANT MT	UNDIFF	51.25	13.46	2.00	12.84	4.12	8.67	2.30	1.18	3.46	0.49	0.24
C4186	NWNW03	15N	24E	SM	ELEPHANT MT	UNDIFF	51.49	13.58	2.00	13.00	4.29	8.32	2.14	1.00	3.48	0.50	0.21
C4186R	NWNW03	15N	24E	SM	ELEPHANT MT	UNDIFF	50.43	13.97	2.00	13.46	3.98	8.49	2.36	1.07	3.51	0.51	0.22
C4187	NWNW03	15N	24E	WP	PRIEST RAPIDS	LOLO	50.71	14.31	2.00	11.81	3.93	9.43	2.37	0.79	3.82	0.64	0.18
C4188	NWNW03	15N	24E	SM	ELEPHANT MT	UNDIFF	50.23	13.36	2.00	13.43	4.53	8.91	2.34	0.95	3.53	0.48	0.23
C4190	NESW01	15N	24E	WP	PRIEST RAPIDS	ROSALIA	51.04	14.03	2.00	12.11	4.10	8.88	2.34	1.01	3.58	0.67	0.24
C4192	NENW12	15N	24E	WP	ROZA		50.94	14.32	2.00	11.91	5.06	8.84	2.41	1.02	2.75	0.52	0.22
C4192R	NENW12	15N	24E	WP	ROZA		50.76	14.59	2.00	11.66	4.83	8.88	2.63	1.15	2.77	0.52	0.22

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4197	NENW07	15N	25E	SM	POMONA		51.56	15.66	2.00	8.66	6.23	11.05	2.37	0.44	1.61	0.22	0.18
C4199	SENE05	15N	25E	SM	POMONA		51.46	15.33	2.00	8.81	7.16	10.74	2.17	0.36	1.57	0.21	0.18
C4215	NWSW34	16N	25E	SM	ELEPHANT MT	ELEPHANT MT	51.52	13.94	2.00	12.14	3.67	8.78	2.41	1.22	3.58	0.50	0.23
C4216	SWSW34	16N	25E	WP	PRIEST RAPIDS	ROSALIA	52.09	14.57	2.00	10.06	3.30	9.43	2.57	1.26	3.83	0.71	0.18
C4217	SWSW34	16N	25E	GR	TSB	HI MG	53.76	15.28	2.00	8.89	5.00	9.42	2.64	0.86	1.70	0.28	0.19
C4218	SESE33	16N	25E	GR	TSB	HI MG	54.07	14.78	2.00	9.95	4.27	8.66	2.60	1.40	1.74	0.33	0.20
C4219	SESE33	16N	25E	GR	TSB	HI MG	54.15	14.65	2.00	9.87	4.74	8.45	2.75	1.23	1.66	0.30	0.21
C4220	SWSW34	N6N	25E	WP	FRENCHMAN SP	SAND HOLLOW	50.95	13.97	2.00	12.79	4.17	8.19	2.67	1.50	2.98	0.54	0.24
C4222	SWSE34	16N	25E	SM	ELEPHANT MT	ELEPHANT MT	51.17	13.27	2.00	14.02	4.06	8.02	2.01	1.25	3.51	0.48	0.22
C4225	NWSW03	15N	25E	WP	PRIEST RAPIDS	ROSALIA	50.62	14.17	2.00	12.48	3.28	9.25	2.61	1.07	3.58	0.71	0.22
C4226	SWNE03	15N	25E	GR	TSB	HI MG	54.12	15.12	2.00	10.04	4.19	8.88	2.50	0.88	1.73	0.31	0.21
C4227	NWSW02	15N	25E	GR	TSB	HI MG	54.88	14.62	2.00	9.12	4.56	8.59	2.38	1.61	1.75	0.30	0.20
C4228	NENW02	15N	25E	GR	TSB	HI MG	54.34	14.64	2.00	9.51	4.59	8.74	2.60	1.34	1.72	0.31	0.20
C4230	NWNW01	15N	25E	SM	ELEPHANT MT	ELEPHANT MT	49.59	13.86	2.00	14.12	4.37	8.77	2.19	0.69	3.63	0.51	0.27
C4232	NESE01	15N	25E	GR	TSB	HI MG	53.91	14.79	2.00	9.77	5.10	8.92	2.24	1.10	1.71	0.25	0.20
C4233	NWNW06	15N	26E	SM	POMONA		52.30	15.28	2.00	8.57	6.71	10.37	2.14	0.64	1.59	0.21	0.18
C4234	SESW06	15N	26E	WP	FRENCHMAN SP	GINKGO	51.19	14.04	2.00	12.80	4.05	8.03	2.66	1.45	2.97	0.58	0.23
C4235	SESE01	15N	26E	SM	ASOTIN	HUNTZINGER	52.06	16.04	2.00	8.96	5.42	10.24	2.24	1.02	1.56	0.31	0.16
C4236	SESE01	15N	26E	SM	ASOTIN	HUNTZINGER	51.48	15.31	2.00	8.83	6.86	10.80	2.11	0.55	1.63	0.24	0.20
C4237	SESE01	15N	26E	SM	ASOTIN	HUNTZINGER	51.91	15.76	2.00	7.98	5.92	10.81	2.27	1.20	1.64	0.32	0.19
C4238	SESE01	15N	26E	SM	POMONA		51.49	15.78	2.00	8.17	6.85	10.92	2.20	0.53	1.63	0.24	0.19
C4239	SESE01	15N	26E	SM	ASOTIN	HUNTZINGER	51.20	15.60	2.00	7.85	6.18	11.37	2.47	1.19	1.61	0.32	0.21
C4240	NWSW01	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.76	13.87	2.00	12.99	4.22	8.76	2.51	1.39	3.57	0.68	0.23
C4241	NWNE10	15N	26E	WP	FRENCHMAN SP	SENTINEL GAP	50.37	14.58	2.00	11.78	4.42	9.00	2.72	1.30	3.03	0.55	0.23
C4242	SESE04	15N	26E	GR	TSB	HI MG	54.06	15.22	2.00	9.32	4.59	9.10	2.31	1.21	1.70	0.29	0.20
C4243	SESE12	15N	26E	WP	FRENCHMAN SP	GINKGO	51.96	14.22	2.00	11.92	3.58	8.40	2.53	1.62	2.96	0.58	0.23
C4244	NWSW03	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.20	13.60	2.00	13.95	4.44	8.52	2.35	1.47	3.54	0.68	0.26
C4245	NENE04	15N	26E	WP	PRIEST RAPIDS	ROSALIA	50.63	13.60	2.00	14.06	3.83	7.97	2.21	1.13	3.61	0.71	0.24
C4246	NWNW04	15N	26E	SM	ASOTIN	HUNTZINGER	51.34	17.23	2.00	8.12	5.26	11.32	2.46	0.34	1.51	0.26	0.15
C4247	NESW04	15N	26E	WP	PRIEST RAPIDS	ROSALIA	51.46	14.10	2.00	12.75	3.82	8.00	2.57	1.67	2.82	0.59	0.22
C4248	NESW04	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.30	13.67	2.00	13.67	4.15	8.60	2.88	1.34	3.46	0.69	0.23
C4249	SESW04	15N	26E	GR	TSB	HI MG	55.19	15.66	2.00	7.43	4.75	9.21	2.34	1.19	1.75	0.32	0.16
C4250	SWNE05	15N	26E	WP	FRENCHMAN SP	SENTINEL GAP	51.60	13.96	2.00	12.66	3.87	8.01	2.39	1.80	2.90	0.58	0.23
C4251	NWNE05	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.60	13.86	2.00	12.94	4.26	9.02	2.58	1.26	3.57	0.68	0.23
C4252	NWNE05	15N	26E	SM	ELEPHANT MT	WARD GAP	50.57	13.56	2.00	13.82	4.12	8.23	2.23	1.27	3.46	0.51	0.22
C4253	SWSE05	15N	26E	WP	FRENCHMAN SP	SENTINEL GAP	50.53	13.87	2.00	13.47	4.14	8.20	2.72	1.27	3.01	0.56	0.24
C4254	NESE12	15N	26E	WP	FRENCHMAN SP	SENTINEL GAP	51.54	14.15	2.00	12.78	3.72	8.04	2.49	1.44	3.05	0.56	0.23
C4255	SENE12	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.66	13.55	2.00	13.65	4.35	8.51	2.61	1.30	3.45	0.68	0.25
C4256	SWNW12	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.16	13.64	2.00	14.41	4.04	8.58	2.65	1.12	3.48	0.66	0.25
C4257	NENE15	15N	23E	GR	TSB	HI MG	54.19	15.47	2.00	8.63	4.61	9.42	2.42	1.11	1.67	0.28	0.20
C4258	SENW11	15N	23E	GR	TSB	HI MG	54.65	14.88	2.00	9.22	4.53	8.54	2.39	1.53	1.77	0.31	0.20
C4259	NWSW11	15N	23E	GR	TSB	HI MG	54.97	15.12	2.00	8.61	4.64	8.77	2.31	1.35	1.72	0.31	0.21
C4260	NWSW11	15N	23E	GR	TSB	HI MG	54.63	14.67	2.00	9.78	4.66	8.36	2.33	1.38	1.68	0.30	0.21

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4261	NWSW11	15N	23E	GR	TSB	HI MG	54.76	14.66	2.00	10.14	4.30	8.05	2.48	1.38	1.72	0.30	0.19
C4263	NWSW11	15N	23E	GR	TSB	HI MG	54.56	15.25	2.00	8.21	4.99	9.40	2.25	1.16	1.71	0.27	0.20
C4264	NESE10	15N	23E	GR	TSB	HI MG	54.59	15.31	2.00	8.67	4.56	8.94	2.34	1.32	1.75	0.31	0.20
C4265	NESE10	15N	23E	GR	TSB	HI MG	54.12	15.01	2.00	9.67	4.42	8.61	2.56	1.32	1.77	0.31	0.20
C4266	NESE10	15N	23E	GR	TSB	HI MG	53.55	15.29	2.00	9.20	5.00	9.37	2.35	0.97	1.78	0.28	0.20
C4267	NESE10	15N	23E	GR	TSB	HI MG	54.07	15.16	2.00	8.58	5.13	9.38	2.47	1.01	1.73	0.26	0.20
C4268	NESE10	15N	23E	GR	TSB	HI MG	53.53	15.22	2.00	9.19	5.25	9.21	2.28	1.12	1.72	0.27	0.20
C4269	NESE10	15N	23E	GR	TSB	HI MG	53.41	14.63	2.00	10.04	4.88	8.83	2.73	1.14	1.80	0.32	0.21
C4270	NESE10	15N	23E	GR	TSB	HI MG	53.13	14.98	2.00	10.09	5.10	9.03	2.24	1.17	1.77	0.28	0.21
C4271	NESE10	15N	23E	GR	TSB	HI MG	53.21	14.99	2.00	9.86	5.13	9.12	2.47	0.95	1.78	0.28	0.21
C4272	NESE10	15N	23E	GR	TSB	HI MG	52.96	15.08	2.00	9.98	5.07	9.13	2.47	1.07	1.76	0.28	0.21
C4273	NESE10	15N	23E	GR	TSB	HI MG	52.84	14.97	2.00	10.36	5.08	9.07	2.41	1.06	1.74	0.26	0.21
C4275	NESE10	15N	23E	GR	TSB	HI MG	54.01	14.57	2.00	10.11	4.48	8.35	2.72	1.24	1.94	0.38	0.21
C4278	NESE10	15N	23E	GR	TSB	HI MG	53.01	15.05	2.00	9.64	5.15	9.41	2.57	0.92	1.78	0.27	0.21
C4279	NESE10	15N	23E	GR	TSB	HI MG	53.34	14.82	2.00	9.68	5.08	9.38	2.45	0.86	1.90	0.29	0.20
C4280	NESE10	15N	23E	GR	TSB	HI MG	53.13	14.75	2.00	10.49	4.93	8.96	2.31	1.11	1.83	0.28	0.21
C4281	NESE10	15N	23E	GR	TSB	HI MG	53.14	14.73	2.00	10.31	4.77	8.92	2.52	1.12	1.95	0.32	0.21
C4282	NENE11	15N	23E	GR	TSB	HI MG	53.91	15.06	2.00	9.74	4.61	8.60	2.35	1.41	1.78	0.32	0.21
C4282R	NENE11	15N	23E	GR	TSB	HI MG	53.84	14.91	2.00	10.16	4.53	8.33	2.55	1.33	1.80	0.35	0.20
C4283	NESW01	15N	23E	GR	TSB	HI MG	54.96	14.83	2.00	9.26	4.42	8.16	2.63	1.45	1.78	0.31	0.19
C4284	SENW01	15N	23E	WP	FRENCHMAN SP	GINKGO	51.05	14.10	2.00	13.18	3.99	7.95	2.61	1.33	2.97	0.56	0.24
C4285	SENW01	15N	23E	WP	FRENCHMAN SP	GINKGO	51.16	13.92	2.00	12.96	3.99	8.13	2.64	1.30	3.05	0.59	0.24
C4286	SENE01	15N	24E	GR	TSB	HI MG	54.66	14.93	2.00	9.23	4.73	8.29	2.61	1.37	1.70	0.29	0.19
C4287	SWNE06	15N	24E	GR	TSB	HI MG	54.10	14.98	2.00	9.55	4.67	8.49	2.63	1.39	1.67	0.32	0.19
C4288	SENE06	15N	24E	WP	ROZA		50.68	13.94	2.00	13.04	4.20	8.35	2.48	1.49	3.07	0.53	0.23
C4289	SESE10	15N	23E	GR	TSB	HI MG	53.29	14.78	2.00	10.56	4.70	8.70	2.43	1.17	1.87	0.30	0.21
C4290	SESE10	15N	23E	GR	TSB	HI MG	53.26	14.83	2.00	10.85	4.55	8.44	2.59	1.12	1.89	0.27	0.20
C4295	SESE10	15N	23E	GR	TSB	HI MG	53.44	14.57	2.00	10.74	4.66	8.56	2.46	1.16	1.90	0.30	0.21
C4296	SESE10	15N	23E	GR	TSB	HI MG	53.45	14.27	2.00	10.79	4.56	8.45	2.82	1.24	1.92	0.28	0.22
C4298	SESE10	15N	23E	GR	TSB	HI MG	53.26	14.62	2.00	10.85	4.43	8.43	2.79	1.18	1.93	0.30	0.22
C4299	SESE10	15N	23E	GR	TSB	HI MG	53.34	14.71	2.00	10.70	4.51	8.48	2.64	1.18	1.93	0.29	0.22
C4300	SESE10	15N	23E	GR	TSB	HI MG	53.23	14.68	2.00	10.71	4.51	8.55	2.80	1.16	1.86	0.28	0.21
C4300R	SESE10	15N	23E	GR	TSB	HI MG	53.02	14.71	2.00	10.84	4.57	8.61	2.67	1.18	1.90	0.30	0.21
C4301	SESE10	15N	23E	GR	TSB	HI MG	53.13	14.41	2.00	10.96	4.54	8.56	2.71	1.21	1.95	0.31	0.22
C4304	SESE10	15N	23E	GR	TSB	HI MG	53.08	14.72	2.00	10.94	4.63	8.57	2.51	1.17	1.88	0.29	0.22
C4305	SESE33	16N	24E	GR	TSB	HI MG	53.81	14.79	2.00	9.94	4.62	8.57	2.45	1.50	1.77	0.34	0.21
C4306	SESE33	16N	24E	GR	TSB	HI MG	53.39	15.62	2.00	9.20	5.02	9.15	2.41	1.11	1.62	0.29	0.19
C4307	SESE33	16N	24E	GR	FRENCHMAN SP	GINKGO	50.81	13.63	2.00	13.17	4.18	8.19	2.72	1.46	3.01	0.59	0.24
C4308A	SENW35	16N	23E	WP	PRIEST RAPIDS	ROSALIA	49.79	13.84	2.00	13.38	4.10	8.74	2.45	1.28	3.52	0.66	0.24
C4308B	SENW35	16N	23E	WP	PRIEST RAPIDS	ROSALIA	49.54	13.44	2.00	13.80	4.02	8.91	2.57	1.29	3.54	0.65	0.25
C4311	NWNW01	15N	23E	GR	TSB	HI MG	53.58	14.66	2.00	9.95	5.06	9.09	2.50	0.95	1.75	0.27	0.20
C4312	NWNW01	15N	23E	GR	TSB	LO MG	54.72	14.09	2.00	11.24	3.49	7.29	2.46	1.95	2.17	0.35	0.22
C4313	NENE02	15N	23E	GR	TSB	LO MG	54.98	14.14	2.00	10.98	3.60	7.22	2.73	1.67	2.13	0.34	0.22

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4314	NENE05	15N	25E	WP	ROZA		50.03	14.27	2.00	12.58	4.77	8.51	2.85	1.25	2.97	0.54	0.22
C4315	NENE05	15N	25E	WP	PRIEST RAPIDS	ROSALIA	50.20	13.95	2.00	12.74	4.45	8.55	2.68	1.01	3.50	0.68	0.23
C4316	NENE06	15N	25E	WP	PRIEST RAPIDS	ROSALIA	49.50	13.50	2.00	13.54	4.59	8.32	2.76	1.41	3.44	0.70	0.25
C4317	NENE01	15N	24E	WP	PRIEST RAPIDS	ROSALIA	49.49	13.98	2.00	13.63	4.46	8.38	2.24	1.46	3.44	0.67	0.25
C4318	NWNE33	16N	25E	WP	PRIEST RAPIDS	ROSALIA	49.27	13.74	2.00	13.41	4.42	8.48	2.84	1.38	3.52	0.69	0.25
C4319	NWSW33	16N	25E	WP	FRENCHMAN SP	GINKGO	50.93	13.81	2.00	13.13	4.13	7.93	2.63	1.60	2.98	0.62	0.24
C4320	NESW33	16N	25E	GR	TSB	HI MG	54.27	15.57	2.00	8.74	4.94	9.05	2.15	1.11	1.70	0.29	0.19
C4321	NESE33	16N	25E	GR	TSB	HI MG	54.28	15.04	2.00	9.28	4.68	8.47	2.52	1.50	1.72	0.32	0.19
C4321R	NESE33	16N	25E	GR	TSB	HI MG	54.52	15.08	2.00	8.91	4.62	8.52	2.62	1.45	1.76	0.32	0.19
C4322	NESE33	16N	25E	SM	ELEPHANT MT	ELEPHANT MT	50.27	13.82	2.00	13.65	4.12	8.44	2.29	1.20	3.48	0.50	0.22
C4322R	NESE33	16N	25E	SM	ELEPHANT MT	ELEPHANT MT	50.28	14.10	2.00	13.50	4.17	8.53	2.10	1.13	3.49	0.50	0.21
C4324	SWNE35	16N	26E	SM	ELEPHANT MT	UNDIFF	52.13	11.59	2.00	13.64	4.20	8.62	2.25	1.22	3.61	0.53	0.21
C4325	SWNW17	16W	26E	SM	ELEPHANT MT	UNDIFF	50.16	13.49	2.00	13.54	4.48	8.33	2.43	1.30	3.55	0.50	0.22
C4326	NESW22	16N	23E	WP	ROZA		50.45	14.27	2.00	12.39	4.60	8.69	2.60	1.25	3.05	0.56	0.22
C4327	SENE21	16N	23E	WP	FRENCHMAN SP	SENTINEL GAP	51.32	13.70	2.00	12.78	4.21	8.29	2.37	1.56	2.99	0.54	0.23
C4328	NWSE16	16N	23E	WP	PRIEST RAPIDS	ROSALIA	49.71	13.48	2.00	13.47	4.47	8.65	2.59	1.27	3.48	0.65	0.24
C4329	SESW16	16N	23E	WP	PRIEST RAPIDS	ROSALIA	49.58	13.48	2.00	13.79	4.31	8.75	2.53	1.14	3.52	0.65	0.25
C4330	SESE15	16N	23E	SM	ELEPHANT MT	UNDIFF	50.92	13.56	2.00	13.15	3.78	8.79	2.41	1.14	3.54	0.51	0.20
C4332	NWNE24	16N	23E	SM	ELEPHANT MT	UNDIFF	50.95	13.61	2.00	13.30	3.95	8.52	2.22	1.23	3.51	0.50	0.21
C4333	SWSW26	16N	23E	WP	PRIEST RAPIDS	ROSALIA	49.69	13.60	2.00	13.68	4.46	8.35	2.61	1.24	3.45	0.66	0.24
C4334	SENE25	16N	23E	SM	ELEPHANT MT	UNDIFF	50.84	13.61	2.00	13.11	4.16	8.42	2.45	1.24	3.46	0.50	0.22
C4335	SESE25	16N	24E	WP	PRIEST RAPIDS	ROSALIA	49.50	13.56	2.00	13.51	4.43	8.76	2.55	1.22	3.58	0.66	0.24
C4336	NENE25	16N	25E	WP	PRIEST RAPIDS	ROSALIA	49.73	13.66	2.00	13.24	4.21	8.88	2.57	1.22	3.57	0.66	0.25
C4337	SENE28	16N	25E	WP	PRIEST RAPIDS	ROSALIA	49.97	13.47	2.00	13.50	4.54	8.59	2.42	1.31	3.46	0.66	0.25
C4339	NESW20	16N	23E	WP	ROZA		50.37	14.25	2.00	12.44	4.69	8.42	2.78	1.23	3.05	0.56	0.22
C4340	NENW29	16N	26E	SM	POMONA		51.97	15.24	2.00	8.41	6.70	10.65	2.31	0.72	1.59	0.23	0.19
C4342	NWNW21	16N	29E	SM	WILBER CR	WAHLUKE	53.21	15.22	2.00	9.78	4.67	8.52	2.23	1.83	1.89	0.46	0.19
C4343	SWSW07	15N	27E	WP	FRENCHMAN SP	SENTINEL GAP	51.69	14.27	2.00	13.02	3.91	7.62	2.41	1.46	2.81	0.58	0.23
C4344	SWSW07	15N	27E	WP	FRENCHMAN SP	SENTINEL GAP	51.28	14.24	2.00	12.53	4.15	8.03	2.54	1.56	2.88	0.57	0.23
C4345	SWSW07	15N	27E	WP	ROZA		50.26	14.30	2.00	13.05	4.50	8.40	2.27	1.32	3.08	0.59	0.23
C4346	SESE12	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.79	13.95	2.00	13.37	4.41	8.46	2.36	1.31	3.45	0.67	0.24
C4347	SENE13	15N	26E	WP	PRIEST RAPIDS	LOLO	48.54	14.15	2.00	13.28	5.43	9.13	2.21	1.17	3.18	0.67	0.25
C4348	SENE13	15N	26E	SM	ELEPHANT MT	ELEPHANT MT	50.37	14.13	2.00	13.02	4.23	8.62	2.36	1.21	3.37	0.48	0.21
C4349	NWSW18	15N	27E	SM	ASOTIN	HUNTZINGER	50.79	16.28	2.00	8.69	7.10	10.28	2.03	0.91	1.48	0.27	0.17
C4350	NESW18	15N	26E	SM	POMONA		51.60	15.47	2.00	8.82	6.56	10.75	2.19	0.59	1.59	0.23	0.19
C4351	NWSW18	15N	27E	WP	PRIEST RAPIDS	LOLO	49.59	14.75	2.00	11.95	5.11	9.23	2.38	0.99	3.14	0.64	0.22
C4352	NENW18	15N	27E	WP	PRIEST RAPIDS	ROSALIA	48.90	13.54	2.00	13.79	4.58	8.58	2.76	1.35	3.57	0.68	0.25
C4353	NENE18	15N	27E	WP	PRIEST RAPIDS	LOLO	49.65	14.11	2.00	12.15	5.05	9.50	2.40	1.07	3.08	0.66	0.32
C4354	SESE18	15N	27E	SM	ELEPHANT MT	ELEPHANT MT	50.02	14.09	2.00	13.36	4.41	8.63	2.42	0.98	3.41	0.45	0.22
C4355	SESE18	15N	27E	WP	PRIEST RAPIDS	LOLO	50.38	14.91	2.00	11.39	4.55	9.35	2.29	1.02	3.21	0.70	0.22
C4356	NESE18	15N	27E	WP	PRIEST RAPIDS	LOLO	49.49	14.49	2.00	12.26	5.27	8.87	2.38	1.25	3.08	0.68	0.24
C4357	NESE18	15N	27E	WP	PRIEST RAPIDS	ROSALIA	49.71	14.11	2.00	13.34	4.30	8.49	2.50	1.21	3.44	0.68	0.22
C4358	NESE18	15N	27E	WP	PRIEST RAPIDS	ROSALIA	50.60	14.52	2.00	12.15	3.91	8.76	2.45	1.13	3.59	0.69	0.21

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4359	SWSW17	15N	27E	SM	POMONA		51.62	15.46	2.00	8.90	6.66	10.61	2.17	0.61	1.58	0.22	0.18
C4362	SESW16	15N	27E	SM	ELEPHANT MT	ELEPHANT MT	50.65	13.85	2.00	13.14	4.50	8.47	2.18	1.12	3.44	0.46	0.18
C4363	SESW16	15N	27E	SM	POMONA		52.19	15.26	2.00	8.39	6.65	10.71	2.16	0.63	1.61	0.22	0.18
C4364	NENW16	15N	27E	SM	ASOTIN	HUNTZINGER	52.40	15.34	2.00	8.64	6.38	9.73	2.19	1.20	1.62	0.32	0.17
C4365	NENW16	15N	27E	SM	ASOTIN	HUNTZINGER	51.49	15.78	2.00	9.47	5.65	10.43	2.23	0.85	1.62	0.30	0.17
C4366	NENW16	15N	27E	SM	ASOTIN	HUNTZINGER	52.17	15.48	2.00	9.12	5.55	10.26	2.46	0.84	1.65	0.29	0.17
C4367	NENW16	15N	27E	SM	POMONA		53.14	15.27	2.00	6.98	6.37	11.04	2.48	0.58	1.73	0.24	0.17
C4369	SWNW07	15N	27E	SM	ASOTIN	HUNTZINGER	52.87	15.61	2.00	7.02	5.05	11.28	2.63	1.31	1.70	0.34	0.18
C4371	NENE12	15N	26E	SM	ASOTIN	HUNTZINGER	53.24	15.81	2.00	8.17	5.32	10.24	2.26	0.86	1.63	0.30	0.15
C4372	SWNE07	15N	27E	SM	ASOTIN	HUNTZINGER	51.76	15.60	2.00	8.18	7.02	10.42	2.25	0.87	1.49	0.25	0.16
C4373	NENE07	15N	27E	SM	POMONA		52.75	15.28	2.00	8.26	6.09	11.01	2.16	0.38	1.66	0.23	0.18
C4374	SENE07	15N	27E	SM	ASOTIN	HUNTZINGER	53.18	15.16	2.00	9.48	4.32	9.73	2.49	1.34	1.74	0.37	0.17
C4375	SWSE05	15N	27E	SM	ELEPHANT MT	WARD GAP	50.70	13.32	2.00	13.73	3.98	8.45	2.23	1.36	3.53	0.49	0.21
C4377	NWSW09	15N	27E	SM	ASOTIN	HUNTZINGER	52.56	15.23	2.00	8.76	5.80	9.62	2.44	1.39	1.66	0.36	0.18
C4378	NESW09	15N	27E	SM	POMONA		51.72	15.39	2.00	8.48	7.03	10.31	2.21	0.84	1.59	0.26	0.17
C4379	SENE16	15N	27E	SM	ASOTIN	HUNTZINGER	52.19	15.88	2.00	8.38	6.41	9.80	2.10	1.14	1.64	0.30	0.16
C4380	NWSW16	15N	27E	SM	POMONA		51.97	15.41	2.00	8.57	6.58	10.75	2.02	0.68	1.62	0.23	0.18
C4381	SESE15	15N	27E	WP	PRIEST RAPIDS	LOLO	49.84	13.78	2.00	12.52	5.26	9.06	2.57	0.95	3.11	0.66	0.24
C4382	SESE15	15N	27E	SM	POMONA		51.96	14.89	2.00	8.89	6.96	10.59	2.07	0.58	1.63	0.23	0.19
C4384	SESW14	15N	27E	WP	PRIEST RAPIDS	LOLO	49.69	14.03	2.00	12.11	5.18	9.47	2.35	1.18	3.12	0.65	0.23
C4385	SWSE14	15N	27E	SM	ASOTIN	HUNTZINGER	53.73	15.84	2.00	7.72	4.74	9.63	2.42	1.51	1.84	0.41	0.16
C4386	NWNE23	15N	27E	SM	ASOTIN	HUNTZINGER	53.34	15.17	2.00	8.75	4.89	9.98	2.40	1.20	1.73	0.37	0.17
C4387	NENE23	15N	27E	SM	ASOTIN	HUNTZINGER	53.74	15.46	2.00	8.79	4.21	9.51	2.46	1.42	1.84	0.40	0.17
C4388	NWNE24	15N	27E	SM	POMONA		51.47	15.52	2.00	9.27	6.90	10.47	1.95	0.38	1.64	0.22	0.18
C4389	NWNE24	15N	27E	SM	ASOTIN	HUNTZINGER	51.14	15.44	2.00	8.58	6.76	10.15	2.52	1.24	1.67	0.33	0.17
C4390	NWNE24	15N	27E	SM	ASOTIN	HUNTZINGER	53.52	15.26	2.00	8.79	4.70	9.65	2.27	1.47	1.77	0.39	0.18
C4391	NESE14	15N	27E	SM	ASOTIN	HUNTZINGER	53.33	15.50	2.00	8.65	5.58	9.07	2.06	1.52	1.74	0.38	0.17
C4392	NENE14	15N	27E	SM	ELEPHANT MT	ELEPHANT MT	51.44	14.34	2.00	12.03	4.05	8.64	2.09	1.12	3.56	0.52	0.20
C4393	NWNW13	15N	27E	SM	POMONA		52.04	15.31	2.00	8.80	6.74	10.48	1.97	0.66	1.58	0.22	0.18
C4394	NWNE19	15N	28E	SM	ASOTIN	HUNTZINGER	52.20	15.43	2.00	8.55	5.30	10.51	2.23	1.41	1.78	0.39	0.18
C4395	SWNW21	15N	28E	SM	POMONA		51.98	15.09	2.00	8.94	6.51	10.68	1.92	0.72	1.73	0.23	0.19
C4396	SWNW21	15N	28E	SM	ASOTIN	HUNTZINGER	51.20	16.02	2.00	8.51	7.19	10.45	1.91	0.83	1.49	0.23	0.17
C4397	SENE20	15N	28E	SM	ASOTIN	HUNTZINGER	53.04	16.08	2.00	9.07	4.23	9.81	2.32	1.09	1.81	0.38	0.16
C4398	SWNE20	15N	28E	SM	ASOTIN	HUNTZINGER	51.07	16.15	2.00	8.26	7.34	10.90	1.76	0.67	1.49	0.20	0.16
C4399	SWNE21	15N	28E	SM	ASOTIN	HUNTZINGER	52.10	15.94	2.00	8.10	6.12	10.35	2.12	1.16	1.63	0.32	0.17
C4402	SENW21	15N	28E	SM	ASOTIN	HUNTZINGER	52.83	15.58	2.00	9.80	5.10	9.36	1.85	1.17	1.76	0.39	0.17
C4403	SENE19	15N	28E	SM	ASOTIN	HUNTZINGER	52.12	15.58	2.00	8.69	5.51	10.19	2.41	1.23	1.75	0.37	0.14
C4404	SESE21	15N	28E	SM	ASOTIN	HUNTZINGER	51.13	16.45	2.00	7.90	7.31	11.40	1.57	0.48	1.40	0.19	0.17
C4405	SWSE21	15N	28E	SM	ASOTIN	HUNTZINGER	53.29	15.66	2.00	9.44	4.82	9.43	1.87	1.19	1.75	0.39	0.17
C4406	NWNW28	15N	28E	SM	POMONA		52.11	15.53	2.00	8.47	6.88	10.64	1.75	0.61	1.61	0.22	0.18
C4407	NENW27	15N	28E	SM	POMONA		52.03	15.73	2.00	8.29	6.22	11.23	1.91	0.54	1.65	0.23	0.18
C4408	NENE27	15N	28E	SM	POMONA		51.82	15.73	2.00	7.88	6.20	11.56	2.16	0.60	1.64	0.23	0.17
C4409	NWNW26	15N	28E	SM	POMONA		51.00	15.11	2.00	9.35	6.70	11.03	2.15	0.53	1.72	0.24	0.18

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4410	NWNW25	15N	28E	SM	POMONA		52.12	15.44	2.00	8.30	5.83	11.59	2.11	0.55	1.65	0.24	0.17
C4411	NENE31	15N	28E	SM	ELEPHANT MT	ELEPHANT MT	51.46	14.09	2.00	12.76	3.76	8.47	2.06	1.19	3.52	0.50	0.20
C4412	SESE30	15N	28E	SM	POMONA		51.59	15.41	2.00	8.93	6.47	10.89	2.17	0.47	1.65	0.23	0.18
C4413	SESE30	15N	28E	SM	POMONA		52.08	15.23	2.00	8.89	6.78	10.44	1.86	0.69	1.60	0.24	0.18
C4414	NWNW30	15N	28E	SM	POMONA		51.44	15.17	2.00	8.99	6.25	11.21	2.19	0.63	1.72	0.23	0.18
C4415	NWNE09	15N	27E	SM	POMONA		51.83	15.34	2.00	9.04	6.84	10.66	1.93	0.39	1.58	0.22	0.18
C4416	NWNE09	15N	27E	SM	ELEPHANT MT	ELEPHANT MT	55.61	14.72	2.00	10.64	3.46	6.97	2.26	1.59	2.15	0.39	0.20
C4416R	NWNE09	15N	27E	SM	ELEPHANT MT	ELEPHANT MT	50.58	14.05	2.00	12.91	4.43	8.51	2.15	1.25	3.43	0.48	0.22
C4418	NENE23	15N	27E	SM	ASOTIN	HUNTZINGER	51.79	16.00	2.00	8.58	6.38	9.93	2.08	1.11	1.63	0.33	0.17
C4419	NENE23	15N	27E	SM	ASOTIN	HUNTZINGER	51.62	15.44	2.00	7.92	6.22	11.83	2.29	0.62	1.63	0.25	0.18
C4420	NENW23	15N	27E	SM	ASOTIN	HUNTZINGER	52.21	16.04	2.00	8.00	6.40	9.94	2.22	1.03	1.67	0.33	0.17
C4421	NENW23	15N	27E	SM	ASOTIN	HUNTZINGER	51.85	15.78	2.00	8.94	6.43	9.83	2.02	1.03	1.62	0.33	0.17
C4422	SENW14	15N	27E	SM	ASOTIN	HUNTZINGER	52.75	16.37	2.00	7.65	6.02	9.80	1.98	1.26	1.68	0.32	0.16
C4424	NESE33	16N	25E	WP	ROZA		52.33	14.09	2.00	12.77	4.40	7.65	1.86	1.12	3.03	0.56	0.19
C4425	SWNE34	16N	25E	SM	ELEPHANT MT	WARD GAP	50.48	13.78	2.00	13.38	4.34	8.40	2.37	1.17	3.39	0.47	0.22
C4426	SWNE34	16N	25E	SM	ELEPHANT MT	ELEPHANT MT	50.55	13.82	2.00	13.25	4.31	8.76	2.16	1.00	3.48	0.48	0.20
C4427	NWSE07	15N	28E	SM	ELEPHANT MT	WARD GAP	51.66	14.31	2.00	11.30	4.21	8.91	2.31	1.11	3.51	0.49	0.19
C4428	SWSW33	15N	29E	SM	ELEPHANT MT	UNDIFF	50.78	14.10	2.00	12.98	4.04	8.63	2.28	0.91	3.53	0.53	0.21
C4429	NWNE10	14N	30E	WP	PRIEST RAPIDS	LOLO	50.19	14.43	2.00	11.85	5.42	8.95	2.23	1.01	3.04	0.65	0.23
C4430	NWSW10	14N	30E	WP	PRIEST RAPIDS	LOLO	49.42	14.65	2.00	11.60	5.49	9.46	2.59	0.98	2.98	0.60	0.23
C4431	NESE09	14N	30E	SM	WILBUR CR	WAHLUKE	52.99	15.55	2.00	8.63	5.38	9.35	2.44	1.40	1.70	0.37	0.18
C4432	SENE09	14N	30E	WP	PRIEST RAPIDS	LOLO	49.50	14.26	2.00	12.47	5.23	8.96	2.33	1.25	3.11	0.64	0.24
C4433	SENW09	14N	30E	SM	WILBUR CR	WAHLUKE	52.45	15.68	2.00	9.62	4.75	9.60	2.21	1.27	1.81	0.43	0.17
C4434	SWNW09	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	51.01	14.03	2.00	12.71	3.77	8.80	2.33	1.11	3.51	0.51	0.22
C4435	SWNE09	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.08	13.83	2.00	12.85	3.91	9.96	2.11	1.15	3.37	0.50	0.25
C4437	SWSW10	14N	30E	SM	WILBUR CR	WAHLUKE	53.13	15.55	2.00	8.70	5.11	9.37	2.29	1.46	1.81	0.40	0.18
C4439	NENE16	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.87	13.94	2.00	12.66	3.94	9.13	2.27	0.98	3.39	0.55	0.27
C4440	NENE16	14N	30E	SM	WILBUR CR	WAHLUKE	51.91	15.87	2.00	10.22	4.99	9.45	2.24	0.80	1.93	0.42	0.17
C4440R	NENE16	14N	30E	SM	WILBUR CR	WAHLUKE	51.63	16.22	2.00	11.09	4.64	9.18	2.19	0.43	1.98	0.44	0.21
C4441	NWNW15	14N	30E	SM	WILBUR CR	WAHLUKE	52.41	15.65	2.00	9.48	5.48	9.44	1.96	1.23	1.79	0.38	0.18
C4442	NWNW15	14N	30E	SM	WILBUR CR	WAHLUKE	53.39	15.53	2.00	9.18	4.70	8.95	2.37	1.46	1.83	0.42	0.18
C4445	NWNW11	14N	30E	WP	PRIEST RAPIDS	LOLO	51.93	15.01	2.00	10.53	5.03	8.98	2.17	1.36	2.29	0.50	0.20
C4446	NWSE10	14N	30E	WP	PRIEST RAPIDS	ROSALIA	50.39	12.74	2.00	14.06	3.53	7.95	2.42	1.65	3.99	1.00	0.27
C4447	SESE11	14N	30E	WP	PRIEST RAPIDS	LOLO	49.62	14.01	2.00	12.66	5.18	9.04	2.31	1.11	3.16	0.67	0.24
C4448	NWSE14	14N	30E	WP	PRIEST RAPIDS	LOLO	49.57	14.25	2.00	12.27	5.26	9.17	2.29	1.13	3.17	0.66	0.23
C4449	NENE23	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	51.17	13.92	2.00	12.60	4.20	8.50	2.19	1.30	3.41	0.49	0.23
C4450	NWNE23	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.67	14.15	2.00	12.93	4.44	8.43	2.23	1.11	3.34	0.49	0.21
C4451	NWNE23	14N	30E	WP	PRIEST RAPIDS	LOLO	49.50	14.21	2.00	12.45	5.22	9.01	2.38	1.20	3.13	0.66	0.24
C4452	SWSW23	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.07	13.34	2.00	13.71	4.35	8.72	2.25	1.30	3.53	0.50	0.22
C4453	NESW26	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.56	13.78	2.00	13.17	4.37	8.56	2.21	1.26	3.39	0.47	0.22
C4454	NWNW23	14N	30E	WP	PRIEST RAPIDS	LOLO	49.57	14.37	2.00	12.35	5.19	9.16	2.37	1.02	3.08	0.65	0.23
C4455	SESE15	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.90	13.77	2.00	13.03	4.19	8.43	2.26	1.32	3.41	0.48	0.21
C4456	SESE22	14N	30E	SM	ELEPHANT MT	WARD GAP	51.10	13.81	2.00	12.99	4.13	8.12	2.51	1.24	3.40	0.49	0.21

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4457	SESE22	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.84	13.88	2.00	13.14	4.08	8.45	2.17	1.25	3.47	0.50	0.21
C4458	SENW22	14N	30E	SM	ELEPHANT MT	WARD GAP	50.62	13.85	2.00	13.06	4.24	8.69	2.19	1.24	3.41	0.49	0.21
C4459	NWSE04	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	50.48	14.22	2.00	13.94	4.06	8.30	2.12	0.88	3.40	0.41	0.20
C4460	SENW04	14N	29E	SM	ELEPHANT MT	WARD GAP	51.42	14.32	2.00	11.25	3.81	9.07	2.70	1.09	3.64	0.51	0.18
C4461	SENW08	14N	30E	SM	ELEPHANT MT	WARD GAP	50.91	13.76	2.00	13.34	3.87	8.44	2.16	1.30	3.49	0.50	0.23
C4462	SENW08	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.16	13.84	2.00	13.55	4.04	8.50	2.55	1.21	3.48	0.47	0.20
C4463	NESE08	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.69	14.37	2.00	11.68	4.20	9.17	2.49	1.12	3.59	0.49	0.20
C4464	SE20	16N	28E	SM	ELEPHANT MT	WARD GAP	49.74	14.03	2.00	13.64	3.85	8.64	2.71	1.05	3.61	0.50	0.22
C4465	SESW20	16N	28E	SM	ELEPHANT MT	ELEPHANT MT	50.01	14.11	2.00	13.31	4.07	8.78	2.41	1.13	3.46	0.50	0.23
C4466	NWNW21	16N	28E	SM	POMONA		52.01	15.35	2.00	8.78	6.61	10.65	1.94	0.57	1.66	0.24	0.20
C4467	SENW16	16N	28E	SM	POMONA		51.10	15.39	2.00	9.17	6.43	10.82	2.38	0.60	1.68	0.24	0.19
C4468	SWSE09	16N	28E	WP	PRIEST RAPIDS	ROSALIA	49.02	13.84	2.00	14.49	4.11	8.21	2.59	1.34	3.42	0.65	0.34
C4469	SESW09	16N	29E	SM	POMONA		51.05	15.35	2.00	8.95	6.61	10.85	2.42	0.72	1.64	0.23	0.20
C4471	SWSW18	16N	29E	SM	ELEPHANT MT	ELEPHANT MT	51.04	13.91	2.00	12.84	4.50	8.37	2.04	1.22	3.38	0.48	0.21
C4471R	SWSW09	16N	28E	WP	PRIEST RAPIDS	LOLO	49.82	14.31	2.00	12.33	5.33	9.12	2.20	0.98	3.05	0.64	0.22
C4472	SWSW19	16N	29E	SM	ELEPHANT MT	WARD GAP	49.76	13.97	2.00	13.40	4.24	8.44	2.86	1.21	3.43	0.48	0.22
C4473	SWSW19	16N	29E	SM	ELEPHANT MT	WARD GAP	50.08	13.81	2.00	13.43	4.01	8.46	2.72	1.29	3.51	0.49	0.22
C4474	SESW20	16N	29E	SM	ELEPHANT MT	WARD GAP	50.25	14.00	2.00	13.20	4.08	8.70	2.40	1.26	3.38	0.50	0.23
C4475	SWNE29	16N	29E	WP	PRIEST RAPIDS	LOLO	48.90	14.41	2.00	12.61	5.11	9.04	2.69	1.24	3.11	0.65	0.24
C4476	SESW20	16N	29E	SM	WILBUR CR	WAHLUKE	52.57	15.30	2.00	9.79	4.94	9.07	2.34	1.54	1.84	0.43	0.19
C4477	NESE23	16N	28E	SM	ELEPHANT MT	ELEPHANT MT	50.44	14.07	2.00	13.20	3.94	8.53	2.43	1.22	3.44	0.51	0.22
C4478	NESE23	16N	28E	SM	ELEPHANT MT	WARD GAP	50.68	13.97	2.00	13.11	4.08	8.59	2.22	1.10	3.52	0.50	0.22
C4479	SESE22	16N	28E	SM	ELEPHANT MT	WARD GAP	50.47	14.06	2.00	13.46	4.00	8.48	2.08	1.25	3.50	0.48	0.23
C4480	SESE15	16N	28E	SM	ELEPHANT MT	ELEPHANT MT	50.22	13.81	2.00	13.51	4.01	8.63	2.28	1.31	3.48	0.51	0.23
C4481	SENW21	16N	28E	SM	POMONA		52.03	15.31	2.00	8.71	6.76	10.49	2.13	1.50	1.64	0.24	0.19
C4482	SWSW18	16N	28E	SM	ELEPHANT MT	WARD GAP	50.53	13.92	2.00	13.38	4.04	8.34	2.27	1.39	3.41	0.49	0.22
C4483	NENE17	15N	23E	WP	FRENCHMAN SP	SAND HOLLOW	51.53	14.17	2.00	12.66	4.33	8.04	2.37	1.28	2.89	0.51	0.22
C4484	SESE17	15N	23E	SM	ASOTIN	HUNTZINGER	51.89	16.02	2.00	8.75	6.20	9.97	1.90	1.15	1.63	0.31	0.17
C4485	NWNE09	15N	23E	WP	FRENCHMAN SP	SAND HOLLOW	51.00	14.36	2.00	12.43	4.62	8.30	2.38	1.37	2.83	0.48	0.23
C4486	SESE20	15N	23E	SM	ASOTIN	HUNTZINGER	51.54	15.84	2.00	8.75	6.57	9.91	2.08	1.21	1.61	0.31	0.18
C4487	NENE09	15N	23E	GR	TSB	HI MG	53.26	14.77	2.00	10.80	4.58	8.45	2.56	1.14	1.93	0.28	0.22
C4488	NWSW32	16N	23E	GR	TSB	HI MG	54.78	15.23	2.00	8.70	4.42	8.55	2.78	1.32	1.73	0.30	0.20
C4489	SWNW18	15N	23E	WP	PRIEST RAPIDS	ROSALIA	49.38	13.96	2.00	13.57	4.63	8.43	2.45	1.24	3.45	0.64	0.25
C4490	SESE18	15N	23E	WP	PRIEST RAPIDS	ROSALIA	50.01	13.98	2.00	13.20	4.60	8.14	2.50	1.20	3.46	0.66	0.24
C4492	SESE30	16N	23E	GR	TS	LO MG	55.49	15.02	2.00	9.47	3.65	7.33	2.30	1.97	2.19	0.35	0.23
C4494	SESE27	15N	29E	SM	ELEPHANT MT	ELEPHANT MT	51.03	13.65	2.00	13.18	4.15	8.42	2.22	1.25	3.41	0.47	0.22
C4495	NENW11	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	50.02	14.49	2.00	13.60	3.65	8.58	2.30	1.10	3.57	0.49	0.20
C4496	NWSE11	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	52.82	14.81	2.00	9.28	4.26	8.86	2.25	1.31	3.66	0.51	0.25
C4497	SWNE02	14N	29E	SM	ELEPHANT MT	WARD GAP	49.96	13.85	2.00	13.55	3.97	8.98	2.22	1.16	3.49	0.49	0.34
C4498	SESE27	14N	29E	SM	POMONA		51.91	15.51	2.00	8.58	6.05	10.95	2.29	0.44	1.81	0.27	0.17
C4499	NWSE36	14N	29E	SM	POMONA		52.09	15.24	2.00	9.02	6.01	11.04	1.97	0.50	1.66	0.30	0.17
C4500	NWNE14	13N	29E	SM	ICE HARBOR	BASIN CITY	47.52	13.87	2.00	13.22	5.77	9.97	2.12	0.81	3.66	0.80	0.25
C4501	NWNE10	14N	29E	WP	PRIEST RAPIDS	ROSALIA	50.02	16.39	2.00	13.31	3.00	7.69	2.32	0.46	3.65	0.77	0.40

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4502	NWNE10	14N	29E	SM	WILBUR CR	WAHLUKE	52.97	15.99	2.00	8.50	5.12	9.57	2.30	1.22	1.78	0.38	0.18
C4503	NWNE10	14N	29E	SM	POMONA		50.74	15.43	2.00	8.08	6.31	12.71	2.11	0.59	1.59	0.24	0.20
C4504	NWNE10	14N	29E	SM	POMONA		52.13	15.64	2.00	7.93	6.50	10.90	2.15	0.70	1.64	0.24	0.17
C4505	NWNE10	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	50.64	14.10	2.00	12.92	4.33	8.54	2.08	1.24	3.42	0.51	0.22
C4506	SENE10	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	50.90	13.81	2.00	13.15	4.16	8.34	2.20	1.30	3.43	0.49	0.22
C4507	NWSW13	16N	28E	SM	ELEPHANT MT	WARD GAP	50.46	13.92	2.00	13.22	4.32	8.51	2.26	1.19	3.42	0.48	0.23
C4508	NWSW13	16N	28E	SM	ELEPHANT MT	ELEPHANT MT	50.99	13.74	2.00	13.21	4.01	8.44	2.09	1.32	3.47	0.51	0.22
C4509	NWSW13	16N	28E	WP	PRIEST RAPIDS	LOLO	50.06	14.25	2.00	12.43	5.47	8.55	2.27	1.06	3.05	0.64	0.21
C4510	NWSE15	16N	28E	SM	POMONA		51.90	15.38	2.00	8.59	6.84	10.75	1.95	0.53	1.63	0.23	0.19
C4511	SENW13	16N	28E	WP	PRIEST RAPIDS	ROSALIA	50.28	14.03	2.00	13.08	4.42	8.54	2.16	1.09	3.51	0.66	0.23
C4512	SE35	15N	30E	WP	ROZA		50.46	14.47	2.00	12.23	4.31	8.89	2.60	1.18	3.07	0.57	0.23
C4513	SWNE13	14N	27E	SM	ELEPHANT MT	ELEPHANT MT	51.71	14.57	2.00	11.92	3.25	8.89	2.51	0.89	3.58	0.51	0.18
C4515	SWNE13	14N	27E	SM	ASOTIN	HUNT	52.15	15.42	2.00	8.38	6.15	11.12	2.11	0.58	1.67	0.24	0.18
C4518	SWSE02	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	50.06	13.75	2.00	13.35	4.10	9.47	2.09	1.09	3.39	0.48	0.21
C4519	NWNW12	14N	29E	WP	PRIEST RAPIDS	LOLO	50.11	14.17	2.00	12.41	5.01	8.70	2.45	1.16	3.08	0.68	0.23
C4521	NWNW12	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	51.06	13.99	2.00	12.91	4.38	8.24	2.01	1.26	3.43	0.50	0.22
C4522	NWNW12	14N	29E	SM	ELEPHANT MT	WARD GAP	50.27	14.09	2.00	13.04	4.56	8.72	1.98	1.26	3.39	0.48	0.22
C4523	SWNW12	14N	29E	WP	PRIEST RAPIDS	LOLO	49.39	14.21	2.00	12.38	5.27	9.24	2.33	1.14	3.15	0.66	0.24
C4524	WCNE11	14N	29E	SM	WILBUR CREEK	WAHLUKE	52.77	15.73	2.00	8.94	5.32	9.22	2.40	1.26	1.78	0.40	0.18
C4526	CNW11	14N	29E	SM	POMONA		52.08	15.34	2.00	8.68	6.26	10.88	2.07	0.64	1.64	0.24	0.17
C4527	NWNE14	14N	29E	SM	POMONA		52.01	15.36	2.00	8.62	6.58	10.81	1.85	0.63	1.69	0.26	0.19
C4529	SWSW24	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	51.07	13.97	2.00	13.03	4.09	8.31	2.18	1.22	3.42	0.49	0.21
C4531	SWNE13	14N	29E	SM	ASOTIN	HUNTZINGER	51.72	15.87	2.00	8.95	6.39	9.86	2.20	0.89	1.64	0.30	0.18
C4532	SENE18	14N	30E	SM	WILBUR CREEK	WAHLUKE	52.48	15.52	2.00	9.27	5.41	9.62	2.23	1.19	1.74	0.37	0.17
C4533	SWNW24	14N	29E	SM	POMONA		51.83	15.53	2.00	8.44	6.89	10.75	1.99	0.53	1.62	0.24	0.18
C4534	SENW12	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	50.08	13.83	2.00	13.20	4.10	8.52	2.68	1.17	3.49	0.69	0.25
C4535	NESE12	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	51.72	14.25	2.00	11.73	4.14	8.36	1.96	1.57	3.54	0.52	0.21
C4537	SESE07	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	50.64	14.23	2.00	12.66	4.20	8.68	2.22	1.25	3.46	0.46	0.21
C4538	NWNW30	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.74	13.70	2.00	13.41	4.06	8.24	2.41	1.29	3.45	0.49	0.22
C4539	SWSE24	14N	29E	SM	ELEPHANT MT	UNDIFF.	51.43	14.00	2.00	12.66	4.00	8.19	2.38	1.22	3.43	0.49	0.21
C4540	NWNW12	14N	29E	WP	PRIEST RAPIDS	ROSALIA	50.84	14.42	2.00	11.92	3.64	8.94	2.42	1.22	3.63	0.76	0.21
C4542	SENE34	14N	30E	SM	ELEPHANT MT	ELEPHANT MT	50.77	13.91	2.00	13.10	4.10	8.53	2.32	1.13	3.44	0.48	0.21
C4543	SESW33	14N	29E	SM	ELEPHANT MT	ELEPHANT MT	50.67	13.94	2.00	12.30	4.32	8.96	2.51	1.13	3.46	0.50	0.21
C4544	SWSE14	13N	29E	SM	ICE HARBOR		47.75	13.76	2.00	13.98	5.46	9.61	2.16	0.66	3.60	0.80	0.23
C4546	NW11	13N	29E	SM	ICE HARBOR		48.00	13.86	2.00	13.40	5.53	9.67	2.12	0.80	3.62	0.77	0.24
C4548A	NWNE11	14N	29E	WP	PRIEST RAPIDS	LOLO	49.46	14.27	2.00	12.51	5.25	9.01	2.37	1.13	3.11	0.66	0.23
C4548B	NWNE11	14N	29E	WP	PRIEST RAPIDS	LOLO	49.56	14.50	2.00	12.08	5.18	9.11	2.45	1.18	3.09	0.63	0.22
C4549	NWNE32	16N	23E	GR	TS	LO MG	54.61	14.39	2.00	11.10	3.61	7.20	2.65	1.63	2.23	0.37	0.22
C4550	NWNE32	16N	23E	GR	TS	LO MG	55.46	14.86	2.00	9.80	3.60	7.24	2.84	1.73	1.95	0.31	0.20
C4551	NWNE32	16N	23E	GR	TS	LO MG	56.58	14.81	2.00	10.11	3.54	6.91	2.00	1.58	1.97	0.29	0.20
C4552	SWNE32	16N	23E	GR	TS	LO MG	55.95	14.82	2.00	9.17	3.47	7.18	2.81	2.08	2.01	0.32	0.20
C4553	SENW32	16N	23E	GR	TS	LO MG	55.32	14.92	2.00	9.84	3.61	7.14	2.80	1.81	2.01	0.34	0.20
C4554	SENW32	16N	23E	GR	TS	LO MG	55.69	15.01	2.00	9.35	3.77	7.24	2.66	1.81	1.96	0.31	0.20

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4555	SENW32	16N	23E	GR	TS	LO MG	54.67	14.52	2.00	10.81	3.58	7.26	2.51	1.82	2.22	0.36	0.23
C4556	SENW32	16N	23E	GR	TSB	HI MG	53.40	14.70	2.00	10.47	4.65	8.32	2.90	1.13	1.94	0.30	0.21
C4557	SENW32	16N	23E	GR	TSB	HI MG	53.23	14.81	2.00	10.14	4.69	8.73	2.61	1.30	1.95	0.31	0.21
C4558	SENW32	16N	23E	GR	TSB	HI MG	53.01	14.85	2.00	10.44	4.74	8.55	2.77	1.21	1.92	0.30	0.21
C4559	SENW32	16N	23E	GR	TSB	HI MG	53.41	14.86	2.00	10.24	4.64	8.46	2.70	1.20	1.89	0.38	0.22
C4560	SWNW32	16N	23E	GR	TSB	HI MG	53.08	15.03	2.00	10.09	5.05	9.07	2.48	0.92	1.80	0.28	0.20
C4561	SWNW32	16N	23E	GR	TSB	HI MG	54.00	15.15	2.00	8.96	4.78	8.74	2.85	1.25	1.77	0.31	0.20
C4562	NWNW32	16N	23E	GR	TSB	HI MG	54.11	14.91	2.00	9.83	4.54	8.40	2.51	1.39	1.78	0.31	0.20
C4563	NWSE17	15N	25E	SM	POMONA	POMONA	52.23	15.56	2.00	8.89	6.03	10.78	2.14	0.44	1.64	0.22	0.07
C4572	NENE33	16N	25E	WP	PRIEST RAPIDS	LOLO	51.65	14.41	2.00	12.39	3.56	8.42	2.40	1.28	3.07	0.60	0.23
C4573	NE33	16N	25E	GR	BRECCIA	HI MG	53.47	15.06	2.00	9.79	5.14	8.90	2.32	1.11	1.72	0.29	0.20
C4587	NENE04	15N	26E	SM	ASOTIN	HUNTZINGER	51.77	16.68	2.00	8.57	5.58	10.67	2.06	0.52	1.62	0.29	0.23
C4588	SENW04	15N	26E	SM	ASOTIN	HUNTZINGER	52.96	16.14	2.00	8.83	4.90	9.85	2.10	0.97	1.72	0.36	0.17
C4590	NENW05	15N	26E	SM	ELEPHANT MT	ELEPHANT MT	51.37	13.94	2.00	13.12	3.97	8.15	2.06	1.23	3.45	0.50	0.21
C4591	NENE06	15N	26E	SM	POMONA		51.89	15.38	2.00	8.34	6.65	10.48	2.37	0.78	1.67	0.24	0.19
C4624	NWSE01	15N	26E	SM	ASOTIN		52.20	15.90	2.00	7.35	5.85	10.87	2.41	1.16	1.69	0.33	0.24
C4625	NWSE01	15N	26E	SM	POMONA		52.15	15.56	2.00	8.08	6.63	10.78	2.14	0.55	1.69	0.25	0.18
C4627	NWSE01	15N	26E	SM	POMONA		52.43	15.86	2.00	8.07	6.20	10.63	2.34	0.38	1.69	0.24	0.16
C4633	NENE29	16N	25E	SM	ELEPHANT MT	UNDIFF	50.27	13.64	2.00	13.27	4.26	8.42	2.44	1.31	3.63	0.52	0.23
C4658	SESE33	15N	25E	GR	TSB	HI MG	53.96	15.52	2.00	8.43	5.10	9.13	2.48	1.16	1.75	0.29	0.18
C4659	NESE33	16N	25E	GR	TSB	HI MG	54.11	15.11	2.00	9.29	4.92	8.34	2.73	1.26	1.75	0.30	0.19
C4660	NESE33	16N	25E	GR	TSB	HI MG	54.40	15.62	2.00	7.85	4.91	9.19	2.71	1.06	1.79	0.30	0.17
C4661	NESE33	16N	25E	WP	PRIEST RAPIDS	LOLO	51.67	14.39	2.00	12.26	3.52	8.55	2.47	1.26	3.06	0.60	0.22
C4662	NESE33	16N	25E	GR	TSB	HI MG	53.49	15.59	2.00	9.31	4.56	9.07	2.58	0.89	1.99	0.27	0.25
C4663	NESE33	16N	25E	SM	ELEPHANT MT	ELEPHANT MT	50.78	13.89	2.00	12.86	4.39	8.33	2.36	1.24	3.46	0.48	0.20
C4664	NWSW34	16N	25E	WP	PRIEST RAPIDS	LOLO	51.01	14.04	2.00	12.82	4.31	8.13	2.58	1.42	2.88	0.60	0.22
C4665	NWSW34	16N	25E	WP	ROZA	ROZA	51.93	14.27	2.00	11.85	3.65	8.39	2.64	1.44	3.06	0.56	0.21
C4666	NWSW34	16N	25E	WP	ROZA	ROZA	51.85	14.26	2.00	11.42	4.05	8.43	2.52	1.65	3.06	0.55	0.21
C4667	NWSW34	16N	25E	WP	PRIEST RAPIDS	LOLO	52.18	14.41	2.00	11.66	3.79	8.60	2.45	0.98	3.10	0.60	0.23
C4668	NWSW34	16N	25E	WP	PRIEST RAPIDS	ROSALIA	51.89	14.24	2.00	12.05	3.38	8.62	2.30	1.18	3.62	0.53	0.19
C4669	NWSW34	16N	25E	WP	FRENCHMAN SP	GINKGO	51.54	14.39	2.00	12.88	4.01	8.43	2.14	0.68	3.16	0.54	0.23
C4690	NENW06	15N	26E	WP	PRIEST RAPIDS	ROSALIA	50.60	14.17	2.00	13.25	3.27	8.68	2.49	0.80	3.74	0.77	0.22
C4691	NENE01	15N	25E	WP	ROZA		53.48	15.73	2.00	7.63	3.38	9.25	2.87	1.43	3.40	0.66	0.17
C4693	NWNW01	15N	27E	WP	FRENCHMAN SP	SAND HOLLOW	51.25	14.26	2.00	12.50	4.19	8.10	2.45	1.48	3.03	0.53	0.22
C4694	NENE01	15N	25E	SM	ELEPHANT MT	ELEPHANT MT	51.46	13.58	2.00	13.02	3.63	8.58	2.48	1.03	3.49	0.51	0.22
C4695	SWNE02	15N	26E	SM	ASOTIN	HUNTZINGER	52.43	15.89	2.00	8.24	5.84	9.82	2.46	1.11	1.70	0.34	0.17
C4696	SESW17	15N	27E	SM	ASOTIN	HUNTZINGER	51.66	15.79	2.00	8.88	6.34	9.73	2.30	1.13	1.68	0.32	0.17
C4698	NENW15	15N	25E	SM	POMONA		52.00	15.42	2.00	8.20	5.95	11.58	2.32	0.48	1.65	0.23	0.17
C4700	SWNE13	15N	27E	SM	ASOTIN	HUNTZINGER	51.74	15.99	2.00	8.49	5.86	10.33	2.34	1.11	1.65	0.31	0.17
C4701	SWSE14	15N	27E	WP	PRIEST RAPIDS	LOLO	50.08	14.38	2.00	11.63	5.15	9.04	2.40	1.28	3.15	0.65	0.23
C4702	SWSE14	15N	27E	WP	PRIEST RAPIDS	ROSALIA	50.12	14.08	2.00	13.05	4.12	8.57	2.35	1.22	3.57	0.67	0.23
C4703	NWSW34	15N	25E	SM	ELEPHANT MT	ELEPHANT MT	51.28	14.18	2.00	12.63	3.93	8.16	2.25	1.35	3.53	0.49	0.19
C4704	SESE16	15N	27E	SM	ASOTIN	HUNTZINGER	52.02	15.56	2.00	9.00	5.93	9.42	2.45	1.35	1.73	0.36	0.17

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4705	NWSE12	15N	27E	WP	PRIEST RAPIDS	LOLO	49.67	14.42	2.00	12.03	5.30	9.09	2.50	0.98	3.14	0.65	0.22
C4707	SWNE07	15N	27E	SM	ASOTIN	HUNTZINGER	51.69	15.79	2.00	8.97	6.29	9.77	2.35	1.03	1.65	0.30	0.17
C4710	NWNW09	15N	27E	SM	POMONA		52.94	15.75	2.00	8.84	5.14	10.47	2.18	0.61	1.69	0.23	0.16
C4716	SENW32	16N	23E	GR	TS	LO MG	55.89	15.32	2.00	9.34	3.70	7.09	2.53	1.68	1.94	0.30	0.19
C4718	NWSE32	16N	23E	GR	TS	LO MG	54.56	15.25	2.00	9.40	4.41	8.70	2.31	0.92	1.97	0.28	0.21
C4719	NWSE32	16N	23E	GR	TSB	HI MG	53.67	15.26	2.00	10.01	4.78	8.35	2.40	1.09	1.94	0.30	0.20
C4720	NESE32	16N	23E	GR	TSB	HI MG	53.57	15.54	2.00	9.19	5.25	9.03	2.45	0.66	1.84	0.27	0.19
C4721	NESE32	16N	23E	GR	TSB	HI MG	54.39	15.53	2.00	8.42	4.84	8.49	2.48	1.35	1.92	0.36	0.22
C4722	NESE32	16N	23E	GR	TSB	HI MG	53.89	15.30	2.00	9.42	5.10	8.71	2.44	0.92	1.79	0.26	0.19
C4723	NESE32	16N	23E	GR	TSB	HI MG	54.19	15.43	2.00	9.04	4.82	8.56	2.46	1.25	1.76	0.29	0.19
C4724	NESE32	16N	23E	GR	TSB	HI MG	54.80	15.29	2.00	9.36	4.51	7.87	2.60	1.29	1.79	0.30	0.17
C4763	NESE30	16N	23E	WP	FRENCHMAN SP	GINKGO	52.71	15.27	2.00	11.01	2.92	8.54	2.49	1.04	3.20	0.64	0.18
C4764	NESE30	16N	23E	GR	TSB	HI MG	55.03	15.60	2.00	8.87	4.72	8.26	2.11	1.16	1.74	0.32	0.19
C4765	NESE30	16N	23E	GR	TSB	LO MG	54.82	15.96	2.00	9.58	3.99	8.10	2.32	0.89	1.90	0.27	0.18
C4766	NESE30	16N	23E	GR	TSB	HI MG	53.71	15.44	2.00	9.18	5.07	9.20	2.17	0.87	1.87	0.29	0.20
C4767	NESE30	16N	23E	GR	TSB	HI MG	53.94	15.19	2.00	9.75	4.75	8.42	2.21	1.30	1.94	0.28	0.21
C4768	SENE30	16N	23E	WP	PRIEST RAPIDS	ROSALIA	50.50	14.42	2.00	12.54	4.32	8.18	2.49	1.08	3.58	0.66	0.21
C4769	NWNW30	16N	23E	WP	PRIEST RAPIDS	LOLO	52.74	14.99	2.00	11.75	2.98	8.02	2.35	1.23	3.12	0.63	0.21
C4770	NWNW30	16N	23E	GR	TSB	HI MG	54.53	15.36	2.00	9.37	4.74	8.28	2.28	1.24	1.72	0.30	0.19
C4771	NWNW30	16N	23E	GR	TSB	HI MG	54.32	15.42	2.00	9.78	4.43	8.44	2.22	1.15	1.74	0.31	0.19
C4772	NWNW30	16N	23E	WP	ROZA		52.26	15.22	2.00	10.81	3.19	8.76	2.50	0.95	3.46	0.63	0.22
C4773	NESW29	16N	23E	GR	TSB	HI MG	54.62	15.63	2.00	9.14	4.52	8.66	2.24	0.97	1.72	0.31	0.18
C4782	SESE30	16N	23E	GR	TSB	HI MG	54.72	15.84	2.00	9.72	4.35	8.36	1.42	1.14	1.97	0.28	0.21
C4783	NESW30	16N	23E	GR	TSB	HI MG	54.00	15.41	2.00	10.20	4.58	8.38	1.71	1.04	2.18	0.30	0.21
C4784	SWNE30	16N	23E	WP	FRENCHMAN SP	SAND HOLLOW	50.06	16.00	2.00	14.06	3.72	8.78	1.03	0.44	3.10	0.51	0.30
C4785	SWNE30	16N	23E	WP	PRIEST RAPIDS	ROSALIA	50.84	14.71	2.00	12.82	4.24	8.01	1.78	1.12	3.57	0.69	0.22
C4786	SWNE30	16N	23E	WP	FRENCHMAN SP	SENTINEL GAP	52.89	15.38	2.00	12.34	3.63	7.71	1.19	1.07	3.03	0.55	0.21
C4787	SENW30	16N	23E	GR	TSB	HI MG	55.28	16.06	2.00	8.52	4.25	8.26	2.10	1.23	1.80	0.32	0.20
C4788	NENE31	15N	23E	GR	TSB	HI MG	54.43	15.83	2.00	9.31	4.45	9.08	1.45	0.90	2.01	0.32	0.20
C4789	NENE31	16N	23E	GR	TSB	HI MG	54.66	15.77	2.00	9.63	4.28	8.47	1.61	1.03	2.03	0.31	0.21
C4790	NENE31	16N	23E	GR	TSB	HI MG	54.01	15.47	2.00	9.86	4.77	8.67	1.71	1.07	1.92	0.31	0.21
C4791	NENE31	16N	23E	GR	TSB	HI MG	53.66	15.52	2.00	10.05	5.08	8.81	1.60	0.90	1.87	0.28	0.21
C4792	NWNW32	16N	23E	GR	TSB	HI MG	54.51	15.49	2.00	9.23	4.92	8.99	1.54	0.88	1.95	0.29	0.21
C4793	NWNW32	16N	23E	GR	TSB	HI MG	54.24	15.22	2.00	10.07	4.89	8.53	1.57	1.07	1.92	0.30	0.21
C4794	NWNW32	16N	23E	GR	TSB	HI MG	54.26	15.91	2.00	9.02	5.01	8.97	1.72	0.79	1.85	0.28	0.19
C4795	NWNW32	16N	23E	GR	TSB	HI MG	54.42	15.62	2.00	9.44	4.78	8.23	1.92	1.15	1.89	0.35	0.21
C4796	NWNW32	16N	23E	GR	TSB	HI MG	53.55	15.46	2.00	9.54	5.19	9.19	1.78	0.92	1.88	0.29	0.21
C4797	NWNW32	16N	23E	GR	TSB	HI MG	54.81	15.30	2.00	9.63	4.56	8.33	1.73	1.19	1.97	0.29	0.19
C4798	NWNW32	16N	23E	GR	TSB	HI MG	54.11	16.00	2.00	9.87	4.63	8.66	1.44	0.72	1.98	0.37	0.21
C4799	NENW32	16N	23E	GR	TSB	HI MG	52.86	14.69	2.00	10.39	4.77	8.33	3.05	1.15	2.22	0.33	0.23
C4800	NWNE32	16N	23E	GR	TSB	HI MG	52.67	15.84	2.00	9.83	4.83	8.41	3.00	1.05	1.87	0.27	0.22
C4801	NWNE32	16N	23E	GR	TSB	HI MG	54.13	14.85	2.00	10.77	3.66	7.22	3.07	1.55	2.20	0.33	0.21
C4802	NENW32	16N	23E	GR	TS	LO MG	53.87	15.61	2.00	10.34	3.66	7.17	3.05	1.63	2.14	0.34	0.21

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
C4803	SESW29	16N	23E	GR	TSB	V HI MG	50.56	15.33	2.00	8.64	7.08	10.90	2.87	0.51	1.68	0.24	0.19
C4804	SESW29	16N	23E	GR	TS	LO MG	51.82	15.02	2.00	11.20	3.84	7.58	3.10	1.90	2.99	0.36	0.20
C8003	SE10	15N	23E	GR	TSB	2	54.01	14.73	2.00	9.93	4.52	8.62	2.53	1.33	1.80	0.33	0.21
C8005	SE10	15N	23E	GR	TSB	2	54.06	15.05	2.00	9.39	4.78	8.75	2.44	1.29	1.74	0.29	0.21
C8007	SE10	15N	23E	GR	TSB	2	53.72	15.06	2.00	9.53	4.83	8.86	2.35	1.45	1.72	0.27	0.20
C8009	SE10	15N	23E	GR	TSB	2	54.30	14.99	2.00	9.32	4.70	8.66	2.51	1.26	1.76	0.30	0.20
C8011	SE10	15N	23E	GR	TSB	2	53.57	14.94	2.00	9.96	4.78	8.78	2.40	1.36	1.71	0.28	0.20
C8012	NW02	15N	23E	GR	TS	11	55.35	14.86	2.00	10.10	3.56	7.58	2.34	1.80	1.91	0.28	0.22
C8013	NW02	15N	23E	GR	TS	11	55.31	15.03	2.00	10.09	3.68	7.56	2.01	1.92	1.92	0.27	0.21
C8014	NW02	15N	23E	GR	TS	10	55.40	14.85	2.00	10.22	3.49	7.22	2.40	1.97	1.94	0.30	0.21
C8015	NW02	15N	23E	GR	TS	10	55.45	14.66	2.00	10.45	3.48	7.13	2.51	1.87	1.92	0.32	0.20
C8016	NW02	15N	23E	GR	TS	10	55.63	14.77	2.00	10.09	3.43	7.30	2.36	1.98	1.91	0.31	0.21
C8017	NW02	15N	23E	GR	TS	10	55.67	14.70	2.00	10.36	3.46	7.12	2.32	1.94	1.91	0.31	0.20
C8018	NW02	15N	23E	GR	TS	10	55.21	15.33	2.00	10.01	3.38	7.25	2.39	2.02	1.92	0.30	0.20
C8019	NW02	15N	23E	GR	TS	9	55.26	14.92	2.00	10.44	3.51	7.24	2.26	1.96	1.91	0.31	0.20
C8020	NW02	15N	23E	GR	TS	9	55.58	14.98	2.00	9.51	3.57	7.54	2.46	1.88	1.96	0.31	0.21
C8021	NW02	15N	23E	GR	TS	8	54.61	14.33	2.00	11.13	3.50	7.20	2.84	1.66	2.16	0.35	0.22
C8022	NW02	15N	23E	GR	TS	8	54.44	14.64	2.00	11.34	3.27	7.31	2.34	1.90	2.18	0.35	0.23
C8023	NW02	15N	23E	GR	TS	8	54.75	14.36	2.00	11.23	3.57	7.21	2.46	1.73	2.11	0.35	0.22
C8024	NW02	15N	23E	GR	TS	8	54.26	14.54	2.00	11.22	3.48	7.39	2.56	1.84	2.13	0.34	0.22
C8025	NW02	15N	23E	GR	TS	8	54.58	14.19	2.00	11.47	3.39	7.16	2.48	2.03	2.13	0.36	0.22
C8026	NW02	15N	23E	GR	TS	D	54.42	14.67	2.00	11.06	3.41	7.36	2.57	1.79	2.15	0.35	0.23
C8027	NW02	15N	23E	GR	TS	E	53.30	14.72	2.00	10.89	4.59	8.49	2.28	1.28	1.93	0.30	0.22
C8028	NW02	15N	23E	GR	TS	E	53.35	14.85	2.00	10.51	4.59	8.56	2.41	1.31	1.92	0.29	0.22
C8029	SE10	15N	23E	GR	TS		54.30	14.31	2.00	11.38	3.48	7.13	2.92	1.79	2.13	0.36	0.21
C8030	SE10	15N	23E	GR	TS		54.54	14.50	2.00	11.33	3.25	6.99	3.03	1.65	2.14	0.37	0.19
C9008	SE10	15N	23E	GR	TSB	7	54.65	14.39	2.00	11.25	3.48	7.31	2.62	1.61	2.13	0.34	0.22
C9014	SE10	15N	23E	GR	TSB	6	53.28	15.05	2.00	9.50	5.25	9.32	2.36	0.93	1.83	0.27	0.21
C9016	SE10	15N	23E	GR	TSB	5	53.28	15.11	2.00	9.86	5.04	9.06	2.24	1.14	1.77	0.28	0.21
C9019	SE10	15N	23E	GR	TSB	4	53.47	14.64	2.00	9.97	4.99	9.00	2.52	1.11	1.81	0.29	0.21
C9020	SE10	15N	23E	GR	TSB	3	53.38	14.93	2.00	9.61	5.23	9.23	2.49	0.90	1.78	0.27	0.19
C9022	SE10	15N	23E	GR	TSB	2	53.85	15.40	2.00	8.41	4.97	9.45	2.58	1.13	1.72	0.28	0.21
C9023	SE10	15N	23E	GR	TSB	1	54.10	15.20	2.00	10.01	4.53	8.29	2.48	1.22	1.69	0.28	0.21
C9036	NW02	15N	23E	GR	TS	10	55.33	14.47	2.00	10.77	3.28	6.96	2.46	2.06	2.11	0.35	0.21
C9039	NW02	15N	23E	GR	TS	10	55.17	14.96	2.00	10.34	3.50	7.39	2.36	1.85	1.92	0.31	0.21
C9041	NW02	15N	23E	GR	TS	9	55.89	14.74	2.00	9.86	3.40	6.98	2.58	2.06	1.97	0.32	0.20
C9042	NW02	15N	23E	GR	TS	8	54.83	14.27	2.00	11.21	3.43	7.18	2.48	1.82	2.21	0.36	0.22
C9043	NW02	15N	23E	GR	TS	8	54.08	14.42	2.00	11.44	3.73	7.46	2.33	1.82	2.17	0.34	0.22
C9044	NW02	15N	23E	GR	TSB	E	53.37	14.75	2.00	10.74	4.60	8.50	2.36	1.27	1.90	0.29	0.22
C9045	NW02	15N	23E	GR	TSB	F	52.78	14.77	2.00	10.53	4.93	9.03	2.26	1.25	1.92	0.30	0.22
GRC2000	NENW24	15N	23E	SM	ELEPHANT MT	WARD GAP	51.21	14.27	2.00	11.28	3.78	9.26	2.48	1.35	3.66	0.51	0.20
GRC2001	NENW24	15N	23E	SM	ELEPHANT MT	ELEPHANT MT	51.03	14.06	2.00	12.45	3.78	8.94	2.36	1.07	3.59	0.51	0.21
GRC2002	NESW13	15N	23E	WP	PRIEST RAPIDS	ROSALIA	49.68	13.56	2.00	13.70	4.69	8.38	2.29	1.33	3.45	0.68	0.24

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
GRC2003	CSW12	15N	23E	WP	FRENCHMAN SP	GINKGO	52.42	14.14	2.00	11.00	3.69	8.60	2.67	1.53	3.16	0.59	0.21
GRC2004	NENW13	15N	23E	WP	FRENCHMAN SP		51.52	13.87	2.00	12.37	3.95	8.54	2.62	1.29	3.09	0.55	0.22
GRC2005	SWSE11	15N	23E	WP	FRENCHMAN SP	SAND HOLLOW	51.73	14.04	2.00	11.93	4.19	8.45	2.49	1.28	3.12	0.57	0.22
GRC2006	SWSE11	15N	23E	WP	ROZA	GINKGO	51.59	14.35	2.00	11.19	3.95	9.10	2.37	1.32	3.24	0.69	0.21
GRC2007	SWSE11	15N	23E	WP	PRIEST RAPIDS	ROSALIA	50.14	14.31	2.00	12.55	3.58	9.11	2.61	1.09	3.67	0.72	0.23
GRC2008	SWSE02	15N	23E	GR	TSB	HI MG	52.92	15.05	2.00	9.80	5.17	9.29	2.45	1.07	1.77	0.28	0.20
GRC2009	NWSE02	15N	23E	GR	TS	LO MG	55.72	14.86	2.00	9.94	3.62	7.27	2.19	1.89	1.96	0.35	0.21
GRC2010	SENW02	15N	23E	GR	TS	LO MG	54.57	14.41	2.00	11.16	3.56	7.33	2.64	1.60	2.14	0.37	0.21
GRC2012	SESE03	15N	25E	WP	PRIEST RAPIDS	ROSALIA	49.43	13.80	2.00	13.18	4.43	8.76	2.82	1.17	3.49	0.67	0.23
GRC2013	NENE10	15N	25E	WP	PRIEST RAPIDS	ROSALIA	50.46	14.56	2.00	12.34	4.53	8.63	2.40	1.24	3.04	0.57	0.23
GRC2014	SWSW02	15N	25E	WP	FRENCHMAN SP	GINKGO	51.88	14.43	2.00	11.10	3.93	8.86	2.71	1.22	3.12	0.58	0.19
GRC2032	NESW03	15N	25E	WP	PRIEST RAPIDS	ROSALIA	50.18	13.95	2.00	12.59	4.27	8.70	2.50	1.36	3.54	0.67	0.25
GRC2033	NWSW03	15N	25E	WP	FRENCHMAN SP	GINKGO	50.65	15.00	2.00	11.13	3.94	9.42	2.97	1.03	3.10	0.57	0.21
GRC2034	SWNW03	15N	25E	WP	FRENCHMAN SP	GINKGO	51.26	14.14	2.00	12.45	3.88	8.43	2.47	1.55	3.03	0.57	0.23
GRC2035	NENE04	15N	25E	WP	FRENCHMAN SP	GINKGO	51.09	14.28	2.00	12.64	3.91	8.20	2.58	1.46	3.01	0.60	0.23
GRC2036	SWSW34	16N	25E	GR	TSB	HI MG	53.88	15.25	2.00	9.52	4.65	8.89	2.24	1.22	1.80	0.33	0.22
GRC2050	SWSW22	15N	24E	SM	POMONA		50.91	16.50	2.00	7.87	7.47	10.97	1.74	0.65	1.48	0.25	0.18
GRC2051	SWSW22	15N	24E	SM	POMONA		51.75	16.14	2.00	7.98	6.46	10.53	2.17	0.91	1.61	0.30	0.16
GRC2053	SESW22	15N	24E	WP	FRENCHMAN SP		51.70	15.37	2.00	8.81	6.74	10.61	2.01	0.67	1.65	0.25	0.19
GRC2054	SWNE22	15N	24E	WP	PRIEST RAPIDS	ROSALIA	49.33	13.94	2.00	13.47	4.41	8.58	2.50	1.33	3.50	0.70	0.25
GRC2055	SWNE22	15N	24E	SM	POMONA		50.62	16.44	2.00	8.24	7.09	11.06	1.99	0.67	1.46	0.24	0.18
GRC2056	SWSE15	15N	24E	WP	FRENCHMAN SP	GINKGO	51.11	14.57	2.00	11.77	3.89	9.21	2.42	0.98	3.24	0.62	0.18
GRC2057	SWSE10	15N	24E	WP	FRENCHMAN SP	SAND HOLLOW	51.33	14.15	2.00	12.45	4.02	8.55	2.27	1.36	3.06	0.56	0.23
GRC2058	NENE09	15N	26E	SM	POMONA		50.40	16.15	2.00	8.25	7.70	11.05	2.18	0.47	1.42	0.22	0.16
GRC2059	SENW10	15N	26E	WP	PRIEST RAPIDS	LOLO	49.47	14.46	2.00	11.93	5.57	9.31	2.19	1.08	3.08	0.65	0.25
GRC2060	NWNW10	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.23	13.70	2.00	13.55	4.48	8.81	2.65	1.19	3.49	0.66	0.23
GRC2061	NWNW10	15N	26E	WP	ROZA		50.28	14.65	2.00	11.96	4.53	8.84	2.56	1.33	3.05	0.58	0.23
GRC2062	NWSW10	15N	26E	WP	FRENCHMAN SP	GINKGO	51.35	14.44	2.00	12.65	3.90	7.89	2.22	1.82	2.89	0.59	0.24
GRC2063	NWSW10	15N	26E	WP	FRENCHMAN SP	SENTINEL GAP	50.51	14.18	2.00	13.04	4.29	8.32	2.32	1.51	3.03	0.55	0.23
GRC2064	SENE11	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.67	14.14	2.00	13.07	4.28	8.60	2.41	1.37	3.52	0.70	0.25
GRC2065	NENE11	15N	26E	SM	ASOTIN	HUNTZINGER	51.92	16.33	2.00	8.69	5.68	10.07	2.16	0.96	1.67	0.34	0.17
GRC2066	NESE02	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.88	14.31	2.00	12.75	3.92	9.05	2.46	0.95	3.74	0.73	0.20
GRC2067	NWSE02	15N	26E	WP	PRIEST RAPIDS	ROSALIA	49.82	14.34	2.00	12.99	4.53	8.51	2.24	1.29	3.39	0.65	0.24
GRC2068	NWNE11	15N	26E	WP	FRENCHMAN SP	SENTINEL GAP	51.06	14.76	2.00	12.21	4.03	8.35	2.20	1.53	3.09	0.54	0.23
GRC2084	NWNE03	15N	24E	SM	ELEPHANT MT	UNDIFF.	49.52	14.22	2.00	13.59	4.41	8.65	2.39	1.00	3.49	0.49	0.23
GRC2085	NWNW03	15N	24E	WP	PRIEST RAPIDS	ROSALIA	50.42	14.25	2.00	12.43	4.06	8.72	2.58	1.11	3.53	0.69	0.21
GRC2086	NWNW03	15N	24E	WP	PRIEST RAPIDS	ROSALIA	50.12	14.03	2.00	12.95	3.94	8.68	2.44	1.26	3.59	0.75	0.25
GRC2087	NWNW03	15N	24E	WP	FRENCHMAN SP	SAND HOLLOW	51.83	15.32	2.00	11.11	3.69	8.80	2.51	1.13	2.89	0.54	0.19
GRC2088	NWNW03	15N	24E	WP	FRENCHMAN SP	GINKGO	51.64	14.48	2.00	11.43	4.13	8.42	2.57	1.50	3.03	0.57	0.23
GRC2089	NWNW03	15N	24E	WP	FRENCHMAN SP	GINKGO	51.58	14.63	2.00	11.86	4.08	8.37	2.24	1.42	3.00	0.59	0.22
GRC2090	SWSW34	16N	24E	GR	TSB	HI MG	54.13	15.15	2.00	9.45	4.83	8.69	2.12	1.29	1.80	0.33	0.21
MH81001	SWSE30	16N	23E	GR	TSB	HI MG	53.75	15.50	2.00	9.81	5.11	8.89	1.68	1.00	1.79	0.27	0.20
MH81003	SWSE30	16N	23E	GR	TSB	HI MG	54.66	15.48	2.00	9.82	4.41	8.19	1.95	1.01	1.94	0.32	0.20

Table 1. Geochemistry of basalts in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	FM	MEMBER	FLOW	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO
MH81006	NWSE30	16N	23E	GR	TSB	HI MG	54.34	15.52	2.00	10.02	4.01	8.57	2.17	0.92	1.96	0.30	0.19
MH81008	SWNE30	16N	23E	WP	PRIEST RAPIDS	ROSALIA	52.06	15.62	2.00	10.53	3.60	8.97	1.98	1.15	3.31	0.60	0.17
SR85-01	NW03	16N	24E	WP	PRIEST RAPIDS	ROSALIA	51.42	14.83	2.00	11.21	3.73	9.05	2.22	0.85	3.79	0.71	0.20
SR85-02	NW16	15N	25E	WP	PRIEST RAPIDS	ROSALIA	51.18	13.88	2.00	12.78	4.32	8.08	2.19	1.11	3.56	0.67	0.22
SR85-02A	SE08	15N	25E	WP	PRIEST RAPIDS	ROSALIA	49.69	13.46	2.00	13.89	4.45	8.55	2.08	1.14	3.80	0.72	0.22
SR85-03	SE15	15N	24E	WP	PRIEST RAPIDS	ROSALIA	49.53	13.41	2.00	13.73	4.72	8.69	2.22	0.94	3.82	0.69	0.25
SR85-04	NW07	15N	25E	GR	TSB	HI MG	54.40	15.87	2.00	8.50	4.75	9.08	2.31	0.75	1.91	0.28	0.16
SR85-05	NW07	15N	25E	WP	FRENCHMAN SP	GINKGO	55.24	14.87	2.00	10.16	3.70	7.21	2.26	1.73	2.28	0.35	0.22
SR85-06	NW07	15N	25E	WP	FRENCHMAN SP	GINKGO	51.74	14.10	2.00	12.61	4.20	7.92	2.12	1.33	3.14	0.62	0.22
SR85-07	NW07	15N	25E	WP	FRENCHMAN SP	GINKGO	51.79	14.29	2.00	12.43	4.35	7.91	2.20	1.15	3.08	0.58	0.22
SR85-08	NW07	15N	25E	WP	FRENCHMAN SP	SAND HOLLOW	52.13	14.34	2.00	12.01	4.40	8.23	2.10	1.16	2.92	0.50	0.21
SR85-09	NW07	15N	25E	WP	FRENCHMAN SP	SENTINEL GAP	51.47	14.45	2.00	11.97	4.80	8.31	2.11	0.99	3.13	0.57	0.21
SR85-10	NW07	15N	25E	WP	FRENCHMAN SP	SENTINEL GAP	51.96	14.08	2.00	12.40	4.29	7.90	2.08	1.45	3.08	0.54	0.22
SR85-11	SESE33	16N	24E	WP	FRENCHMAN SP	SILVER FALLS	51.76	14.49	2.00	12.07	4.70	8.20	1.96	0.99	3.10	0.54	0.19
SR85-12	SESE33	16N	24E	GR	TSB	HI MG	49.86	14.04	2.00	12.28	5.56	9.08	2.13	0.85	3.28	0.67	0.23
SR85-29	NENW18	15N	27E	WP	PRIEST RAPIDS	ROSALIA	49.83	13.51	2.00	13.36	4.61	8.67	2.16	1.19	3.73	0.69	0.24
SR85-30	SWSW17	16N	29E	WP	PRIEST RAPIDS	ROSALIA	49.78	13.41	2.00	13.36	4.66	8.83	2.24	0.99	3.79	0.68	0.25

Table 2. Locations of geochemical samples in the Saddle Mountains area.

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
A1303	SWSE20	15N	23E	2133578.00	524304.2	46 46 11	119 58 0	273489	5183631	BEVERLY
A1304	SWSE20	15N	23E	2133578.00	524304.2	46 46 11	119 58 0	273489	5183631	BEVERLY
C4002	SWSE14	15N	23E	2149214.00	528755.9	46 46 54	119 54 15	278310	5184780	BEVERLY
C4003	NWSE14	15N	23E	2149257.00	528905.6	46 46 55	119 54 15	278311	5184811	BEVERLY
C4004	NWSE14	15N	23E	2149785.50	530732.4	46 47 13	119 54 7	278502	5185360	BEVERLY
C4006	NWNW24	15N	23E	2151759.50	527740.0	46 46 44	119 53 39	279062	5184443	BEVERLY
C4007	SWSW13	15N	23E	2152127.00	528794.6	46 46 54	119 53 34	279180	5184748	BEVERLY
C4008	SWSW13	15N	23E	2152357.50	529452.6	46 47 1	119 53 30	279272	5184961	BEVERLY
C4009	SWSW13	15N	23E	2152291.00	530282.0	46 47 9	119 53 31	279260	5185208	BEVERLY
C4010	NWSW13	15N	25E	2152388.00	530601.2	46 47 12	119 53 30	279285	5185300	BEVERLY
C4011	NWSW13	15N	23E	2152392.50	530721.7	46 47 13	119 53 29	279307	5185330	BEVERLY
C4012	NWSW13	15N	23E	2152560.00	531131.9	46 47 17	119 53 27	279354	5185452	BEVERLY
C4013	NWSW13	15N	23E	2152732.50	531421.4	46 47 20	119 53 25	279400	5185543	BEVERLY
C4014	NENW13	15N	23E	2153863.50	533803.4	46 47 43	119 53 8	279778	5186266	BEVERLY
C4015	NENW13	15N	23E	2154225.50	533664.2	46 47 42	119 53 3	279891	5186205	BEVERLY
C4016	NENW13	15N	23E	2154003.00	533649.2	46 47 42	119 53 6	279828	5186207	BEVERLY
C4017	NWSE13	15N	23E	2155184.50	530821.5	46 47 14	119 52 49	280156	5185330	BEVERLY
C4018	NENE24	15N	23E	2155584.50	527418.6	46 46 40	119 52 44	280224	5184277	BEVERLY
C4019	SENE24	15N	23E	2155603.00	526801.2	46 46 34	119 52 44	280217	5184091	BEVERLY
C4020	SENE24	15N	23E	2155457.00	526338.5	46 46 30	119 52 46	280170	5183969	BEVERLY
C4021	SENW18	15N	24E	2156953.00	531485.3	46 47 20	119 52 24	280693	5185496	BEVERLY SE
C4028	NESE18	15N	24E	2161180.00	530591.8	46 47 11	119 51 23	281976	5185171	BEVERLY SE
C4028R	NESE18	15N	24E	2161180.00	530591.8	46 47 11	119 51 23	281976	5185171	BEVERLY SE
C4029	NENW19	15N	24E	2158786.00	527818.1	46 46 44	119 51 58	281204	5184364	BEVERLY SE
C4030	SWSW17	15N	24E	2162678.00	529743.5	46 47 3	119 51 2	282413	5184908	BEVERLY SE
C4035	NWNW21	15N	24E	2168405.00	527801.0	46 46 43	119 49 40	284129	5184227	BEVERLY SE
C4036	SESE30	15N	24E	2166677.50	524230.8	46 46 8	119 50 5	283560	5183166	BEVERLY SE
C4038	SESE21	15N	24E	2172434.00	524322.8	46 46 8	119 48 42	285320	5183103	BEVERLY SE
C4039	SWSW22	15N	24E	2173524.50	524142.9	46 46 6	119 48 27	285636	5183030	BEVERLY SE
C4040	SWSW22	15N	24E	2173346.00	523881.5	46 46 4	119 48 29	285591	5182970	BEVERLY SE
C4041	SWSW22	15N	24E	2173240.50	523711.8	46 46 2	119 48 31	285547	5182909	BEVERLY SE
C4046	NENW22	15N	24E	2175858.50	527422.2	46 46 39	119 47 53	286393	5184023	BEVERLY SE
C4048	NENW22	15N	24E	2176475.00	527411.8	46 46 38	119 47 44	286583	5183985	BEVERLY SE
C4049	SWSE15	15N	24E	2175588.50	529096.0	46 46 55	119 47 56	286347	5184519	BEVERLY SE
C4050	SWSE15	15N	24E	2175625.00	529410.5	46 46 58	119 47 56	286351	5184611	BEVERLY SE
C4052	SWSE10	15N	24E	2175594.50	535436.6	46 47 58	119 47 55	286438	5186463	BEVERLY SE
C4053	NWSE15	15N	24E	2176557.50	526116.3	46 46 26	119 47 43	286591	5183614	BEVERLY SE
C4055	SWNE22	15N	24E	2176618.50	525175.7	46 46 16	119 47 42	286601	5183305	BEVERLY SE
C4063	NENE10	15N	24E	2176893.00	537865.2	46 48 22	119 47 36	286867	5187189	BEVERLY SE
C4069	SESE14	15N	24E	2182623.50	529524.0	46 46 59	119 46 15	288493	5184566	BEVERLY SE
C4071	SESE18	15N	25E	2192970.00	529891.0	46 47 1	119 43 46	291655	5184518	SMYRNA
C4072	NWSW18	15N	25E	2189510.50	530633.6	46 47 9	119 44 36	290603	5184801	SMYRNA
C4073	SENE24	15N	24E	2188816.00	526360.0	46 46 27	119 44 47	290325	5183513	SMYRNA
C4074	SENE24	15N	24E	2188923.00	526455.4	46 46 28	119 44 45	290368	5183543	SMYRNA
C4075	SWNW19	15N	25E	2190475.50	526766.9	46 46 31	119 44 23	290838	5183619	SMYRNA
C4076	SWSW17	15N	25E	2194896.00	530639.5	46 47 9	119 43 19	292236	5184745	SMYRNA
C4077	SWNE17	15N	25E	2197140.50	531999.4	46 47 22	119 42 46	292949	5185122	SMYRNA
C4078	SWSE17	15N	25E	2197648.00	530303.4	46 47 5	119 42 39	293079	5184592	SMYRNA
C4080	SWSE18	15N	24E	2160250.00	529940.8	46 47 5	119 51 37	281673	5184996	BEVERLY SE
C4087	NWNW20	15N	24E	2163782.50	527242.0	46 46 38	119 50 46	282724	5184124	BEVERLY SE
C4088	NWNW20	15N	24E	2163918.00	527397.3	46 46 39	119 50 44	282767	5184153	BEVERLY SE
C4089	NENW20	15N	24E	2164510.50	527948.5	46 46 45	119 50 36	282944	5184332	BEVERLY SE
C4090	NENE20	15N	24E	2166346.50	528643.3	46 46 51	119 50 9	283523	5184497	BEVERLY SE
C4092	SWNW16	15N	25E	2200151.00	531898.4	46 47 20	119 42 3	293859	5185028	SMYRNA
C4093	NENE17	15N	25E	2199396.50	533138.4	46 47 33	119 42 14	293639	5185438	SMYRNA

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4094	NENE17	15N	25E	2198975.00	534192.0	46 47 43	119 42 20	293523	5185751	SMYRNA
C4103	NWNW11	15N	25E	2210648.00	539250.7	46 48 32	119 39 31	297156	5187141	SMYRNA
C4104	NESE10	15N	25E	2209088.00	537030.1	46 48 10	119 39 54	296646	5186478	SMYRNA
C4107	NWNE11	15N	25E	2213290.00	538158.1	46 48 21	119 38 53	297950	5186774	SMYRNA
C4109	SENE11	15N	25E	2213466.00	537787.9	46 48 17	119 38 51	297988	5186649	SMYRNA
C4110	SENE11	15N	25E	2213487.00	537349.9	46 48 13	119 38 51	297984	5186526	SMYRNA
C4111	NESE11	15N	25E	2213437.50	537068.2	46 48 10	119 38 51	297981	5186433	SMYRNA
C4112	NESE11	15N	25E	2213983.50	536706.7	46 48 7	119 38 43	298148	5186335	SMYRNA
C4113	NESE11	15N	25E	2214170.50	536422.9	46 48 4	119 38 41	298187	5186241	SMYRNA
C4114	NESE11	15N	25E	2214473.50	536115.7	46 48 1	119 38 37	298268	5186145	SMYRNA
C4118	SWNW12	15N	25E	2215668.50	537640.2	46 48 16	119 38 19	298666	5186596	SMYRNA
C4119	SWNW12	15N	25E	2215725.50	537463.9	46 48 14	119 38 18	298685	5186533	SMYRNA
C4120	NWSW12	15N	25E	2215475.50	536573.7	46 48 5	119 38 22	298591	5186258	SMYRNA
C4121	SWNW12	15N	25E	2216231.50	537471.9	46 48 14	119 38 11	298833	5186528	SMYRNA
C4122	SWSW01	15N	25E	2216128.00	539942.7	46 48 38	119 38 12	298837	5187270	SMYRNA
C4123	SENW12	15N	25E	2216883.50	538278.7	46 48 22	119 38 2	299032	5186769	SMYRNA
C4124	SENW12	15N	25E	2217163.50	537161.6	46 48 11	119 37 58	299105	5186426	SMYRNA
C4125	NESE12	15N	25E	2218931.00	536805.7	46 48 7	119 37 32	299652	5186284	SMYRNA
C4126	SENE12	15N	25E	2219370.00	537759.6	46 48 16	119 37 26	299789	5186558	SMYRNA
C4127	NENE12	15N	25E	2219121.00	538594.4	46 48 25	119 37 29	299718	5186840	SMYRNA
C4132	SWNW07	15N	26E	2220463.50	537372.4	46 48 12	119 37 10	300124	5186423	SMYRNA
C4133	SWNW07	15N	25E	2220557.50	537128.0	46 48 10	119 37 9	300143	5186361	SMYRNA
C4134	SWSW07	15N	26E	2220786.00	536098.9	46 48 0	119 37 6	300196	5186050	SMYRNA
C4135	SWSW24	15N	24E	2220506.00	535588.2	46 47 55	119 37 10	300106	5185898	BEVERLY SE
C4136	NENW15	15N	24E	2175062.00	533333.5	46 47 37	119 48 3	286245	5185820	BEVERLY SE
C4138	NESE22	15N	25E	2177815.50	525923.1	46 46 24	119 47 25	286971	5183539	BEVERLY SE
C4139	SWNE22	15N	24E	2175995.00	526677.5	46 46 31	119 47 51	286427	5183774	BEVERLY SE
C4140	SWNW17	16N	26E	2225603.00	563892.2	46 52 34	119 35 52	302045	5194455	SMYRNA
C4141	SENE35	16N	26E	2244417.00	548278.5	46 49 57	119 31 24	307561	5189424	SMYRNA
C4142	SWSE07	15N	26E	2223782.50	534617.2	46 47 45	119 36 23	301092	5185557	SMYRNA
C4142R	SWSE07	15N	26E	2223782.50	534617.2	46 47 45	119 36 23	301092	5185557	SMYRNA
C4143	NESW07	15N	26E	2222388.50	535556.7	46 47 54	119 36 43	300678	5185848	SMYRNA
C4144	NESW07	15N	26E	2222327.00	535877.9	46 47 57	119 36 44	300660	5185942	SMYRNA
C4145	NESW07	15N	26E	2222472.00	536206.5	46 48 1	119 36 42	300706	5186064	SMYRNA
C4148	SESE08	15N	26E	2229931.00	534780.0	46 47 46	119 34 55	302959	5185526	SMYRNA
C4149	SESE08	15N	26E	2228969.50	536505.2	46 48 3	119 35 8	302700	5186060	SMYRNA
C4152	SWSW09	15N	26E	2231363.50	534691.1	46 47 45	119 34 34	303403	5185480	SMYRNA
C4153	SWSW09	15N	26E	2231293.00	535199.5	46 47 50	119 34 35	303387	5185635	SMYRNA
C4157	NENE09	15N	26E	2233957.00	538404.6	46 48 21	119 33 56	304245	5186565	SMYRNA
C4158	NENE09	15N	26E	2234157.50	538400.5	46 48 21	119 33 53	304308	5186563	SMYRNA
C4158R	NENE09	15N	26E	2234157.50	538400.5	46 48 21	119 33 53	304308	5186563	SMYRNA
C4159	NENE09	15N	26E	2235583.00	538603.2	46 48 23	119 33 33	304731	5186619	SMYRNA
C4160	NWNW10	15N	26E	2235898.00	538595.2	46 48 23	119 33 28	304840	5186608	SMYRNA
C4161	SENW10	15N	26E	2238103.00	538031.0	46 48 17	119 32 57	305491	5186401	SMYRNA
C4162	SENW10	15N	26E	2237926.00	537671.7	46 48 13	119 32 59	305445	5186279	SMYRNA
C4162R	SENW10	15N	26E	2237926.00	537671.7	46 48 13	119 32 59	305445	5186279	SMYRNA
C4163	NWNE16	15N	26E	2234315.00	534106.9	46 47 39	119 33 52	304287	5185266	SMYRNA
C4164	NWNE16	15N	26E	2233937.00	534265.7	46 47 40	119 33 57	304182	5185300	SMYRNA
C4165	NWNW15	15N	26E	2236213.00	534368.6	46 47 41	119 33 24	304883	5185308	SMYRNA
C4166	NWNW15	15N	26E	2236348.00	533841.4	46 47 36	119 33 23	304899	5185153	SMYRNA
C4168	NENW15	15N	26E	2238235.50	533655.0	46 47 34	119 32 55	305490	5185072	SMYRNA
C4169	NENW15	15N	26E	2238293.50	533400.2	46 47 31	119 32 55	305487	5184980	SMYRNA
C4170	NWNW14	15N	26E	2241400.00	533652.7	46 47 33	119 32 10	306443	5185011	SMYRNA
C4171	SENE15	15N	26E	2240144.50	532755.4	46 47 25	119 32 28	306054	5184776	SMYRNA
C4172	SENE15	15N	26E	2240976.00	532217.2	46 47 19	119 32 16	306302	5184583	SMYRNA

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4174	SENE14	15N	26E	2245209.00	533148.7	46 47 28	119 31 15	307604	5184819	SMYRNA
C4175	SENE15	15N	26E	2246030.50	532738.4	46 47 24	119 31 4	307834	5184688	SMYRNA
C4177	NESW12	15N	26E	2248564.00	537160.6	46 48 7	119 30 26	308682	5185989	SMYRNA
C4178	NESW12	15N	26E	2248728.50	536915.7	46 48 5	119 30 24	308722	5185926	SMYRNA
C4180	NENW08	15N	24E	2163843.00	538632.0	46 48 30	119 50 44	282883	5187601	BEVERLY SE
C4181	SENE07	15N	24E	2161221.00	537279.1	46 48 17	119 51 22	282072	5187207	BEVERLY SE
C4182	SESE08	15N	24E	2166596.00	535148.7	46 47 56	119 50 5	283680	5186500	BEVERLY SE
C4183	SESE08	15N	24E	2166527.50	534553.7	46 47 50	119 50 6	283652	5186315	BEVERLY SE
C4184	NWNE18	15N	24E	2160031.00	533548.7	46 47 40	119 51 39	281670	5186078	BEVERLY SE
C4184R	NWNE18	15N	24E	2160031.00	533548.7	46 47 40	119 51 39	281670	5186078	BEVERLY SE
C4185	NWNE09	15N	24E	2170073.00	537774.5	46 48 21	119 49 15	284768	5187233	BEVERLY SE
C4185R	NWNE09	15N	24E	2170073.00	537774.5	46 48 21	119 49 15	284768	5187233	BEVERLY SE
C4186	NWNW03	15N	24E	2173105.00	543554.8	46 49 18	119 48 30	285784	5188958	BEVERLY SE
C4186R	NWNW03	15N	24E	2173105.00	543554.8	46 49 18	119 48 30	285784	5188958	BEVERLY SE
C4187	NWNW03	15N	24E	2173653.50	543563.0	46 49 18	119 48 22	285954	5188952	BEVERLY SE
C4188	NWNW03	15N	24E	2175663.00	543362.6	46 49 16	119 47 53	286566	5188869	BEVERLY SE
C4190	NESW01	15N	24E	2185555.00	542114.7	46 49 3	119 45 31	289561	5188361	BEVERLY SE
C4192	NENW12	15N	24E	2185749.00	539174.5	46 48 34	119 45 29	289571	5187464	BEVERLY SE
C4192R	NENW12	15N	24E	2185749.00	539174.5	46 48 34	119 45 29	289571	5187464	BEVERLY SE
C4197	NENW07	15N	25E	2190947.50	539462.4	46 48 36	119 44 14	291163	5187470	SMYRNA
C4199	SENE05	15N	25E	2199193.00	543005.2	46 49 10	119 42 15	293721	5188432	SMYRNA
C4215	NWSW34	16N	25E	2205297.00	547001.5	46 49 49	119 40 47	295627	5189572	SMYRNA
C4216	SWSW34	16N	25E	2205189.50	546719.4	46 49 46	119 40 48	295602	5189480	SMYRNA
C4217	SWSW34	16N	25E	2205218.50	546157.0	46 49 41	119 40 48	295597	5189326	SMYRNA
C4218	SESE33	16N	25E	2204353.00	545452.9	46 49 34	119 41 1	295314	5189119	SMYRNA
C4219	SESE33	16N	25E	2203989.00	545289.4	46 49 32	119 41 6	295206	5189061	SMYRNA
C4220	SWSW34	N6N	25E	2206135.00	546290.7	46 49 42	119 40 35	295874	5189347	SMYRNA
C4222	SWSE34	16N	25E	2207716.50	546184.5	46 49 41	119 40 12	296360	5189300	SMYRNA
C4225	NWSW03	15N	25E	2205546.00	541680.5	46 48 57	119 40 44	295636	5187965	SMYRNA
C4226	SWNE03	15N	25E	2207319.50	543078.9	46 49 10	119 40 18	296200	5188348	SMYRNA
C4227	NWSW02	15N	25E	2210535.50	541554.4	46 48 55	119 39 32	297143	5187858	SMYRNA
C4228	NENW02	15N	25E	2211776.50	543549.7	46 49 14	119 39 14	297560	5188425	SMYRNA
C4230	NWNW01	15N	25E	2217053.00	544853.0	46 49 27	119 37 58	299184	5188772	SMYRNA
C4232	NESE01	15N	25E	2220113.50	542120.0	46 48 59	119 37 15	300066	5187877	SMYRNA
C4233	NWNW06	15N	26E	2221237.00	544600.4	46 49 24	119 36 58	300452	5188637	SMYRNA
C4234	SESW06	15N	26E	2222452.00	540583.0	46 48 44	119 36 41	300771	5187390	SMYRNA
C4235	SESE01	15N	26E	2250355.00	540353.2	46 48 38	119 30 0	309263	5186929	CORFU
C4236	SESE01	15N	26E	2250493.00	540739.7	46 48 42	119 29 58	309310	5187051	CORFU
C4237	SESE01	15N	26E	2250468.00	540478.6	46 48 40	119 29 58	309308	5186989	CORFU
C4238	SESE01	15N	26E	2250612.50	540536.6	46 48 40	119 29 56	309350	5186988	CORFU
C4239	SESE01	15N	26E	2249366.50	540912.4	46 48 44	119 30 14	308972	5187123	SMYRNA
C4240	NWSW01	15N	26E	2246952.50	542012.5	46 48 55	119 30 49	308242	5187486	SMYRNA
C4241	NWNE10	15N	26E	2238706.00	539885.7	46 48 35	119 32 48	305700	5186950	SMYRNA
C4242	SESE04	15N	26E	2233949.00	541309.5	46 48 50	119 33 56	304274	5187460	SMYRNA
C4243	SESE12	15N	26E	2235326.00	540559.7	46 48 42	119 33 36	304680	5187219	SMYRNA
C4244	NWSW03	15N	26E	2235830.50	542446.6	46 49 1	119 33 28	304878	5187780	SMYRNA
C4245	NENE04	15N	26E	2234621.50	543847.4	46 49 15	119 33 46	304511	5188225	SMYRNA
C4246	NWNW04	15N	26E	2231505.50	544068.5	46 49 17	119 34 30	303581	5188317	SMYRNA
C4247	NESW04	15N	26E	2231850.50	542253.6	46 48 59	119 34 26	303647	5187759	SMYRNA
C4248	NESW04	15N	26E	2231955.00	541887.7	46 48 56	119 34 24	303687	5187665	SMYRNA
C4249	SESW04	15N	26E	2231954.00	541221.9	46 48 49	119 34 24	303680	5187449	SMYRNA
C4250	SWNE05	15N	26E	2228422.00	542698.7	46 49 4	119 35 15	302614	5187947	SMYRNA
C4251	NWNE05	15N	26E	2227979.00	543636.1	46 49 13	119 35 21	302496	5188229	SMYRNA
C4252	NWNE05	15N	26E	2227894.00	544036.4	46 49 17	119 35 22	302479	5188353	SMYRNA
C4253	SWSE05	15N	26E	2227741.00	540908.6	46 48 46	119 35 25	302384	5187399	SMYRNA

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4254	NESE12	15N	26E	2251454.00	536847.9	46 48 4	119 29 45	309548	5185869	CORFU
C4255	SENE12	15N	26E	2248368.00	538328.5	46 48 19	119 30 29	308630	5186362	SMYRNA
C4256	SWNW12	15N	26E	2247764.50	538053.1	46 48 16	119 30 38	308436	5186275	SMYRNA
C4257	NENE15	15N	23E	2145691.00	533332.4	46 47 39	119 55 6	277280	5186209	BEVERLY
C4258	SENW11	15N	23E	2146066.50	535879.9	46 48 4	119 55 0	277436	5186976	BEVERLY
C4259	NWSW11	15N	23E	2145996.50	535799.1	46 48 4	119 55 1	277415	5186976	BEVERLY
C4260	NWSW11	15N	23E	2145925.50	535746.4	46 48 3	119 55 2	277393	5186946	BEVERLY
C4261	NWSW11	15N	23E	2146030.50	535865.6	46 48 4	119 55 0	277420	5187000	BEVERLY
C4263	NWSW11	15N	23E	2145890.00	535752.7	46 48 3	119 55 2	277375	5186968	BEVERLY
C4264	NESE10	15N	23E	2145890.00	535752.7	46 48 3	119 55 2	277375	5186968	BEVERLY
C4265	NESE10	15N	23E	2145812.50	535717.4	46 48 3	119 55 4	277351	5186958	BEVERLY
C4266	NESE10	15N	23E	2145738.50	535710.1	46 48 3	119 55 5	277329	5186957	BEVERLY
C4267	NESE10	15N	23E	2145739.50	535756.4	46 48 3	119 55 5	277330	5186971	BEVERLY
C4268	NESE10	15N	23E	2145717.00	535804.2	46 48 4	119 55 5	277323	5186986	BEVERLY
C4269	NESE10	15N	23E	2145689.00	535908.4	46 48 5	119 55 5	277316	5187018	BEVERLY
C4270	NESE10	15N	23E	2145876.50	535723.4	46 48 3	119 55 3	277372	5186947	BEVERLY
C4271	NESE10	15N	23E	2145681.50	536008.7	46 48 6	119 55 5	277315	5187049	BEVERLY
C4272	NESE10	15N	23E	2145686.00	536107.4	46 48 7	119 55 5	277318	5187079	BEVERLY
C4273	NESE10	15N	23E	2145686.00	536107.4	46 48 7	119 55 5	277318	5187079	BEVERLY
C4275	NESE10	15N	23E	2145632.50	536187.0	46 48 8	119 55 6	277303	5187104	BEVERLY
C4278	NESE10	15N	23E	2145576.50	536188.0	46 48 8	119 55 7	277286	5187105	BEVERLY
C4279	NESE10	15N	23E	2145469.00	536156.1	46 48 7	119 55 8	277253	5187096	BEVERLY
C4280	NESE10	15N	23E	2145771.50	535675.5	46 48 2	119 55 4	277349	5186917	BEVERLY
C4281	NESE10	15N	23E	2145750.00	535786.5	46 48 4	119 55 4	277352	5186979	BEVERLY
C4282	NENE11	15N	23E	2150189.00	538113.7	46 48 26	119 54 0	278733	5187607	BEVERLY
C4282R	NENE11	15N	23E	2150189.00	538113.7	46 48 26	119 54 0	278733	5187607	BEVERLY
C4283	NESW01	15N	23E	2153670.50	541394.9	46 48 58	119 53 10	279829	5188556	BEVERLY
C4284	SENW01	15N	23E	2153308.50	542546.4	46 49 10	119 53 15	279737	5188930	BEVERLY
C4285	SENW01	15N	23E	2153421.00	542467.5	46 49 9	119 53 13	279778	5188898	BEVERLY
C4286	SENE01	15N	24E	2156564.00	542485.6	46 49 9	119 52 28	280731	5188863	BEVERLY SE
C4287	SWNE06	15N	24E	2159597.50	542953.6	46 49 13	119 51 45	281647	5188953	BEVERLY SE
C4288	SENE06	15N	24E	2161575.00	542787.3	46 49 11	119 51 16	282259	5188869	BEVERLY SE
C4289	SESE10	15N	23E	2144618.00	535738.5	46 48 3	119 55 21	276988	5186981	BEVERLY
C4290	SESE10	15N	23E	2144678.50	535707.2	46 48 3	119 55 20	277006	5186970	BEVERLY
C4295	SESE10	15N	23E	2144727.50	535665.9	46 48 2	119 55 19	277020	5186957	BEVERLY
C4296	SESE10	15N	23E	2144801.50	535646.9	46 48 2	119 55 18	277042	5186950	BEVERLY
C4298	SESE10	15N	23E	2144836.00	535617.2	46 48 2	119 55 18	277053	5186941	BEVERLY
C4299	SESE10	15N	23E	2144932.50	535624.9	46 48 2	119 55 16	277082	5186942	BEVERLY
C4300	SESE10	15N	23E	2144972.50	535621.5	46 48 2	119 55 16	277094	5186940	BEVERLY
C4300R	SESE10	15N	23E	2144972.50	535621.5	46 48 2	119 55 16	277094	5186940	BEVERLY
C4301	SESE10	15N	23E	2144972.50	535605.4	46 48 2	119 55 16	277094	5186935	BEVERLY
C4304	SESE10	15N	23E	2145040.50	535630.6	46 48 2	119 55 15	277115	5186942	BEVERLY
C4305	SESE33	16N	24E	2171307.00	545227.2	46 49 35	119 48 56	285252	5189503	BEVERLY SE
C4306	SESE33	16N	24E	2171276.00	545067.1	46 49 33	119 48 56	285250	5189441	BEVERLY SE
C4307	SESE33	16N	24E	2171262.50	544904.7	46 49 32	119 48 57	285228	5189411	BEVERLY SE
C4308A	SENW35	16N	23E	2147464.50	547374.2	46 49 58	119 54 39	278012	5190478	BEVERLY
C4308B	SENW35	16N	23E	2147464.50	547374.2	46 49 58	119 54 39	278012	5190478	BEVERLY
C4311	NWNW01	15N	23E	2152387.00	543861.2	46 49 23	119 53 28	279476	5189342	BEVERLY
C4312	NWNW01	15N	23E	2151346.50	543470.7	46 49 19	119 53 43	279154	5189230	BEVERLY
C4313	NENE02	15N	23E	2149541.00	543029.2	46 49 15	119 54 9	278598	5189127	BEVERLY
C4314	NENE05	15N	25E	2197735.50	544621.5	46 49 26	119 42 36	293293	5188942	SMYRNA
C4315	NENE05	15N	25E	2198026.00	544487.1	46 49 25	119 42 32	293377	5188908	SMYRNA
C4316	NENE06	15N	25E	2192626.50	545134.1	46 49 32	119 43 49	291753	5189180	SMYRNA
C4317	NENE01	15N	24E	2187273.00	544694.7	46 49 28	119 45 6	290117	5189114	BEVERLY SE
C4318	NWNE33	16N	25E	2201822.00	549727.4	46 50 16	119 41 36	294617	5190441	SMYRNA

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4319	NWSW33	16N	25E	2200501.00	546706.9	46 49 47	119 41 56	294163	5189561	SMYRNA
C4320	NESW33	16N	25E	2201169.00	547122.0	46 49 51	119 41 46	294379	5189677	SMYRNA
C4321	NESE33	16N	25E	2203654.00	547093.2	46 49 50	119 41 10	295141	5189620	SMYRNA
C4321R	NESE33	16N	25E	2203654.00	547093.2	46 49 50	119 41 10	295141	5189620	SMYRNA
C4322	NESE33	16N	25E	2203521.50	547610.6	46 49 55	119 41 12	295103	5189775	SMYRNA
C4322R	NESE33	16N	25E	2203521.50	547610.6	46 49 55	119 41 12	295103	5189775	SMYRNA
C4324	SWNE35	16N	26E	2244170.00	548281.9	46 49 57	119 31 28	307477	5189427	SMYRNA
C4325	SWNW17	16W	26E	2224913.50	565194.9	46 52 47	119 36 2	301846	5194863	SMYRNA
C4326	NESW22	16N	23E	2141805.00	557729.6	46 51 40	119 55 59	276435	5193689	BEVERLY
C4327	SENE21	16N	23E	2139719.50	558799.5	46 51 51	119 56 29	275813	5194052	BEVERLY
C4328	NWSE16	16N	23E	2139523.50	562258.0	46 52 25	119 56 31	275810	5195103	BEVERLY
C4329	SESW16	16N	23E	2141265.50	562086.1	46 52 23	119 56 6	276336	5195022	BEVERLY
C4330	SESE15	16N	23E	2145771.50	562394.4	46 52 26	119 55 1	277716	5195063	BEVERLY
C4332	NWNE24	16N	23E	2154791.50	560412.6	46 52 6	119 52 52	280424	5194345	BEVERLY
C4333	SWSW26	16N	23E	2145950.00	551226.2	46 50 36	119 55 0	277611	5191667	BEVERLY
C4334	SENE25	16N	23E	2156242.50	553425.4	46 50 57	119 52 32	280769	5192199	BEVERLY
C4335	SESE25	16N	24E	2156530.00	551331.1	46 50 36	119 52 28	280830	5191548	BEVERLY SE
C4336	NENE25	16N	25E	2219844.50	555571.2	46 51 12	119 37 16	300182	5191983	SMYRNA
C4337	SENE28	16N	25E	2203765.00	553932.2	46 50 58	119 41 8	295255	5191717	SMYRNA
C4339	NESW20	16N	23E	2132039.00	557562.1	46 51 39	119 58 19	273470	5193770	BEVERLY
C4340	NENW29	16N	26E	2227233.00	554754.2	46 51 3	119 35 30	302418	5191631	SMYRNA
C4342	NWNW21	16N	29E	2139348.00	559867.2	46 52 2	119 56 34	275719	5194396	OTHELLO
C4343	SWSW07	15N	27E	2252941.00	535904.1	46 47 54	119 29 24	309983	5185546	CORFU
C4344	SWSW07	15N	27E	2252237.50	535337.2	46 47 49	119 29 34	309766	5185399	CORFU
C4345	SWSW07	15N	27E	2251825.50	536070.0	46 47 56	119 29 40	309646	5185619	CORFU
C4346	SESE12	15N	26E	2251552.50	536152.1	46 47 57	119 29 44	309562	5185652	CORFU
C4347	SENE13	15N	26E	2251624.00	532814.7	46 47 24	119 29 43	309551	5184633	CORFU
C4348	SENE13	15N	26E	2251289.00	532102.6	46 47 17	119 29 48	309438	5184420	CORFU
C4349	NWSW18	15N	27E	2252806.50	531507.1	46 47 11	119 29 26	309899	5184220	CORFU
C4350	NESW18	15N	26E	2253516.50	531852.6	46 47 14	119 29 16	310114	5184306	CORFU
C4351	NWSW18	15N	27E	2253333.50	532007.1	46 47 16	119 29 19	310052	5184370	CORFU
C4352	NENW18	15N	27E	2254064.00	534153.6	46 47 37	119 29 8	310306	5185011	CORFU
C4353	NENE18	15N	27E	2256418.00	533318.4	46 47 28	119 28 34	311018	5184710	CORFU
C4354	SESE18	15N	27E	2255522.50	530282.9	46 46 58	119 28 48	310692	5183794	CORFU
C4355	SESE18	15N	27E	2256538.00	531092.2	46 47 6	119 28 33	311017	5184031	CORFU
C4356	NESE18	15N	27E	2256587.50	531321.1	46 47 8	119 28 32	311041	5184092	CORFU
C4357	NESE18	15N	27E	2256596.00	531592.9	46 47 11	119 28 32	311043	5184184	CORFU
C4358	NESE18	15N	27E	2256587.50	531820.1	46 47 13	119 28 32	311045	5184246	CORFU
C4359	SWSW17	15N	27E	2257081.00	529928.0	46 46 55	119 28 25	311176	5183686	CORFU
C4362	SESW16	15N	27E	2264424.00	530148.7	46 46 56	119 26 40	313404	5183647	CORFU
C4363	SESW16	15N	27E	2264494.00	530514.0	46 46 59	119 26 39	313428	5183739	CORFU
C4364	NENW16	15N	27E	2264605.00	533423.4	46 47 28	119 26 37	313498	5184633	CORFU
C4365	NENW16	15N	27E	2264535.00	533491.2	46 47 29	119 26 37	313499	5184663	CORFU
C4366	NENW16	15N	27E	2264488.50	533511.9	46 47 29	119 26 38	313478	5184664	CORFU
C4367	NENW16	15N	27E	2264436.00	533592.1	46 47 30	119 26 39	313458	5184696	CORFU
C4369	SWNW07	15N	27E	2252816.50	538144.1	46 48 16	119 29 25	309983	5186226	CORFU
C4371	NENE12	15N	26E	2251431.50	539384.2	46 48 29	119 29 45	309572	5186641	CORFU
C4372	SWNE07	15N	27E	2254227.50	538324.0	46 48 18	119 29 5	310409	5186274	CORFU
C4373	NENE07	15N	27E	2256579.50	539313.0	46 48 27	119 28 31	311139	5186529	CORFU
C4374	SENE07	15N	27E	2256141.50	538354.4	46 48 18	119 28 37	311003	5186256	CORFU
C4375	SWSE05	15N	27E	2259837.50	540942.5	46 48 43	119 27 44	312150	5186992	CORFU
C4377	NWSW09	15N	27E	2262800.50	537270.2	46 48 6	119 27 2	313005	5185822	CORFU
C4378	NESW09	15N	27E	2263680.00	537295.2	46 48 6	119 26 49	313280	5185813	CORFU
C4379	SENE16	15N	27E	2266640.50	532443.2	46 47 18	119 26 7	314124	5184304	CORFU
C4380	NWSW16	15N	27E	2267705.50	532028.4	46 47 14	119 25 52	314439	5184171	CORFU

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4381	SESE15	15N	27E	2271686.00	530979.9	46 47 3	119 24 55	315637	5183794	CORFU
C4382	SESE15	15N	27E	2272636.50	531466.0	46 47 8	119 24 41	315938	5183939	CORFU
C4384	SESW14	15N	27E	2275173.50	531174.9	46 47 4	119 24 5	316698	5183792	CORFU
C4385	SWSE14	15N	27E	2276305.00	529971.5	46 46 52	119 23 49	317026	5183412	CORFU
C4386	NWNE23	15N	27E	2276344.00	529028.5	46 46 43	119 23 49	317017	5183134	CORFU
C4387	NENE23	15N	27E	2278111.50	528795.2	46 46 41	119 23 23	317567	5183055	CORFU
C4388	NWNE24	15N	27E	2281088.50	528684.4	46 46 39	119 22 41	318455	5182967	CORFU
C4389	NWNE24	15N	27E	2281153.00	528819.9	46 46 40	119 22 40	318478	5182997	CORFU
C4390	NWNE24	15N	27E	2281222.50	529398.7	46 46 46	119 22 39	318504	5183181	CORFU
C4391	NESE14	15N	27E	2277519.00	532251.5	46 47 15	119 23 31	317429	5184110	CORFU
C4392	NENE14	15N	27E	2278047.50	534536.0	46 47 37	119 23 23	317619	5184784	CORFU
C4393	NWNW13	15N	27E	2278284.00	534955.9	46 47 41	119 23 20	317687	5184905	CORFU
C4394	NWNE19	15N	28E	2287138.00	528642.9	46 46 38	119 21 14	320299	5182880	CORFU
C4395	SWNW21	15N	28E	2295346.00	528286.1	46 46 33	119 19 16	322797	5182651	CORFU
C4396	SWNW21	15N	28E	2294840.50	528025.7	46 46 31	119 19 23	322647	5182594	CORFU
C4397	SENE20	15N	28E	2294460.00	527808.4	46 46 28	119 19 29	322517	5182505	CORFU
C4398	SWNE20	15N	28E	2292635.00	528195.0	46 46 33	119 19 55	321970	5182676	CORFU
C4399	SWNE21	15N	28E	2297714.00	528173.5	46 46 32	119 18 42	323517	5182599	CORFU
C4402	SENW21	15N	28E	2297184.00	528569.2	46 46 36	119 18 49	323372	5182727	CORFU
C4403	SENE19	15N	28E	2289243.50	527363.0	46 46 25	119 20 44	320924	5182460	CORFU
C4404	SESE21	15N	28E	2298590.50	525694.7	46 46 7	119 18 30	323749	5181820	CORFU
C4405	SWSE21	15N	28E	2298265.00	525355.7	46 46 4	119 18 35	323640	5181731	CORFU
C4406	NWNW28	15N	28E	2295849.50	523453.2	46 45 45	119 19 10	322881	5181166	CORFU
C4407	NENW27	15N	28E	2301903.50	524394.4	46 45 54	119 17 42	324755	5181389	CORFU
C4408	NENE27	15N	28E	2304427.50	524240.2	46 45 52	119 17 6	325517	5181305	CORFU
C4409	NWNW26	15N	28E	2305888.00	523580.9	46 45 45	119 16 45	325956	5181076	CORFU
C4410	NWNW25	15N	28E	2312416.00	524471.6	46 45 53	119 15 11	327957	5181266	CORFU
C4411	NENE31	15N	28E	2132905.00	517324.9	46 45 2	119 58 11	273176	5181510	OTHELLO
C4412	SESE30	15N	28E	2133391.50	518119.1	46 45 10	119 58 4	273334	5181751	OTHELLO
C4413	SESE30	15N	28E	2132442.00	518834.4	46 45 17	119 58 17	273066	5181978	OTHELLO
C4414	NWNW30	15N	28E	2128237.00	522178.6	46 45 50	119 59 17	271832	5183044	OTHELLO
C4415	NWNE09	15N	27E	2265624.00	540280.7	46 48 36	119 26 21	313902	5186721	CORFU
C4416	NWNE09	15N	27E	2265503.00	540305.2	46 48 36	119 26 22	313881	5186722	CORFU
C4416R	NWNE09	15N	27E	2265503.00	540305.2	46 48 36	119 26 22	313881	5186722	CORFU
C4418	NENE23	15N	27E	2276579.00	529220.7	46 46 45	119 23 45	317104	5183193	CORFU
C4419	NENE23	15N	27E	2276742.50	529045.7	46 46 43	119 23 43	317144	5183130	CORFU
C4420	NENW23	15N	27E	2274992.50	528882.2	46 46 42	119 24 8	316613	5183115	CORFU
C4421	NENW23	15N	27E	2274558.50	529059.5	46 46 44	119 24 14	316488	5183181	CORFU
C4422	SENW14	15N	27E	2275101.00	532591.1	46 47 18	119 24 6	316685	5184253	CORFU
C4424	NESE33	16N	25E	2204345.00	547586.9	46 49 55	119 41 0	295358	5189767	SMYRNA
C4425	SWNE34	16N	25E	2207495.00	548517.9	46 50 4	119 40 15	296320	5190012	SMYRNA
C4426	SWNE34	16N	25E	2208103.50	548759.7	46 50 6	119 40 6	296513	5190067	SMYRNA
C4427	NWSE07	15N	28E	2287611.00	537406.7	46 48 4	119 21 5	320570	5185529	CORFU
C4428	SWSW33	15N	29E	2326848.00	515293.9	46 44 20	119 11 46	332225	5178272	MESA
C4429	NWNE10	14N	30E	2367730.00	509877.6	46 43 19	119 2 1	344590	5176055	MESA
C4430	NWSW10	14N	30E	2364297.00	506784.2	46 42 49	119 2 51	343505	5175157	MESA
C4431	NESE09	14N	30E	2364297.00	506784.2	46 42 49	119 2 51	343505	5175157	MESA
C4432	SENE09	14N	30E	2363526.00	507711.1	46 42 59	119 3 2	343279	5175472	MESA
C4433	SENW09	14N	30E	2361796.50	507870.2	46 43 1	119 3 27	342750	5175547	MESA
C4434	SWNW09	14N	30E	2360392.50	508207.3	46 43 4	119 3 47	342328	5175651	MESA
C4435	SWNE09	14N	30E	2362520.00	508195.7	46 43 4	119 3 16	342986	5175634	MESA
C4437	SWSW10	14N	30E	2365382.00	505418.2	46 42 36	119 2 36	343813	5174747	MESA
C4439	NENE16	14N	30E	2363867.00	504515.0	46 42 27	119 2 58	343339	5174482	MESA
C4440	NENE16	14N	30E	2363953.00	504390.9	46 42 26	119 2 57	343359	5174450	MESA
C4440R	NENE16	14N	30E	2363953.00	504390.9	46 42 26	119 2 57	343359	5174450	MESA

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4441	NWNW15	14N	30E	2364736.50	504309.4	46 42 25	119 2 45	343613	5174413	MESA
C4442	NWNW15	14N	30E	2364730.50	504311.2	46 42 25	119 2 45	343613	5174413	MESA
C4445	NWNW11	14N	30E	2369933.50	508810.6	46 43 8	119 1 30	345240	5175699	MESA
C4446	NWSE10	14N	30E	2367969.00	507348.1	46 42 54	119 1 58	344634	5175282	MESA
C4447	SESE11	14N	30E	2373731.50	505999.1	46 42 40	119 0 36	346364	5174805	MESA
C4448	NWSE14	14N	30E	2373570.50	501335.3	46 41 54	119 0 39	346264	5173387	MESA
C4449	NENE23	14N	30E	2375094.50	498828.3	46 41 29	119 0 18	346690	5172604	MESA
C4450	NWNE23	14N	30E	2373442.50	498370.4	46 41 25	119 0 42	346177	5172494	MESA
C4451	NWNE23	14N	30E	2373017.50	498512.6	46 41 26	119 0 48	346051	5172528	MESA
C4452	SWSW23	14N	30E	2371034.00	494113.8	46 40 43	119 1 18	345380	5171217	MESA
C4453	NESW26	14N	30E	2372415.00	490842.4	46 40 11	119 0 59	345758	5170219	MESA
C4454	NWNW23	14N	30E	2371479.00	498722.3	46 41 29	119 1 10	345586	5172632	MESA
C4455	SESE15	14N	30E	2368552.00	499547.9	46 41 37	119 1 52	344700	5172902	MESA
C4456	SESE22	14N	30E	2369042.50	495055.7	46 40 53	119 1 46	344793	5171541	MESA
C4457	SESE22	14N	30E	2369226.00	495024.1	46 40 53	119 1 43	344856	5171539	MESA
C4458	SENW22	14N	30E	2367117.00	492250.4	46 40 26	119 2 14	344176	5170723	MESA
C4459	NWSE04	14N	29E	2329930.50	511647.4	46 43 43	119 11 3	333106	5177105	MESA
C4460	SENW04	14N	29E	2329117.00	513382.1	46 44 1	119 11 14	332888	5177667	MESA
C4461	SENW08	14N	30E	2355697.00	508570.2	46 43 9	119 4 54	340910	5175843	MESA
C4462	SENW08	14N	30E	2356165.50	507912.6	46 43 2	119 4 47	341053	5175623	MESA
C4463	NESE08	14N	30E	2358616.00	506424.8	46 42 47	119 4 13	341762	5175141	MESA
C4464	SE20	16N	28E	2291662.50	557604.5	46 51 23	119 20 3	322066	5191632	CORFU
C4465	SESW20	16N	28E	2291805.50	557592.4	46 51 23	119 20 0	322130	5191630	CORFU
C4466	NWNW21	16N	28E	2294982.50	560924.4	46 51 55	119 19 14	323133	5192589	CORFU
C4467	SENW16	16N	28E	2296533.50	564846.9	46 52 34	119 18 51	323656	5193778	CORFU
C4468	SWSE09	16N	28E	2297748.00	568605.7	46 53 11	119 18 33	324070	5194909	CORFU
C4469	SESW09	16N	29E	2297047.50	568293.5	46 53 8	119 18 43	323856	5194823	CORFU
C4471	SWSW18	16N	29E	2128241.50	560877.6	46 52 12	119 59 14	272344	5194832	OTHELLO
C4471R	SWSW09	16N	28E	2128241.50	560877.6	46 52 12	119 59 14	272344	5194832	CORFU
C4472	SWSW19	16N	29E	2128540.00	556154.7	46 51 26	119 59 10	272375	5193409	OTHELLO
C4473	SWSW19	16N	29E	2128519.00	555791.2	46 51 22	119 59 10	272370	5193286	OTHELLO
C4474	SESW20	16N	29E	2135238.00	555620.7	46 51 20	119 57 34	274400	5193147	OTHELLO
C4475	SWNE29	16N	29E	2136203.50	553509.5	46 50 59	119 57 20	274672	5192488	OTHELLO
C4476	SESW20	16N	29E	2136194.00	555578.4	46 51 20	119 57 20	274697	5193136	OTHELLO
C4477	NESE23	16N	28E	2309774.00	559986.6	46 51 44	119 15 41	327633	5192118	CORFU
C4478	NESE23	16N	28E	2309673.00	559852.6	46 51 42	119 15 43	327589	5192057	CORFU
C4479	SESE22	16N	28E	2304959.50	557328.5	46 51 18	119 16 51	326127	5191358	CORFU
C4480	SESE15	16N	28E	2304829.00	563123.6	46 52 15	119 16 52	326157	5193118	CORFU
C4481	SENW21	16N	28E	2296729.00	560087.1	46 51 47	119 18 49	323655	5192326	CORFU
C4482	SWSW18	16N	28E	2284308.00	562588.2	46 52 13	119 21 47	319911	5193241	CORFU
C4483	NENE17	15N	23E	2134610.50	533540.1	46 47 42	119 57 45	273913	5186427	BEVERLY
C4484	SESE17	15N	23E	2134202.50	529492.4	46 47 2	119 57 51	273740	5185198	BEVERLY
C4485	NWNE09	15N	23E	2138658.00	539364.5	46 48 39	119 56 46	275230	5188140	BEVERLY
C4486	SESE20	15N	23E	2133578.00	524304.2	46 46 11	119 58 0	273489	5183631	BEVERLY
C4487	NENE09	15N	23E	2140321.50	538730.1	46 48 33	119 56 22	275732	5187935	BEVERLY
C4488	NWSW32	16N	23E	2131250.00	547076.9	46 49 56	119 58 32	273074	5190601	BEVERLY
C4489	SWNW18	15N	23E	2125864.50	531888.9	46 47 26	119 59 51	271224	5186035	BEVERLY
C4490	SESE18	15N	23E	2129249.50	529083.7	46 46 59	119 59 2	272231	5185162	BEVERLY
C4492	SESE30	16N	23E	2129018.00	550368.7	46 50 29	119 59 4	272435	5191649	BEVERLY
C4494	SESE27	15N	29E	2337703.00	490116.7	46 40 10	119 9 17	335176	5170468	MESA
C4495	NENW11	14N	29E	2340547.00	476617.9	46 37 56	119 8 39	335856	5166322	MESA
C4496	NWSE11	14N	29E	2341702.50	474245.4	46 37 32	119 8 23	336191	5165560	MESA
C4497	SWNE02	14N	29E	2340524.50	480945.4	46 38 39	119 8 39	335907	5167638	MESA
C4498	SESE27	14N	29E	2337462.00	489389.2	46 40 2	119 9 20	335105	5170223	MESA
C4499	NWSE36	14N	29E	2346971.00	485468.3	46 39 22	119 7 5	337940	5168911	MESA

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4500	NWNE14	13N	29E	2342202.00	471552.9	46 37 6	119 8 17	336296	5164754	MESA
C4501	NWNE10	14N	29E	2335912.00	508678.9	46 43 13	119 9 38	334884	5176129	MESA
C4502	NWNE10	14N	29E	2335912.00	508678.9	46 43 13	119 9 38	334884	5176129	MESA
C4503	NWNE10	14N	29E	2336015.00	509049.9	46 43 17	119 9 36	334930	5176251	MESA
C4504	NWNE10	14N	29E	2335581.00	508972.8	46 43 16	119 9 43	334781	5176224	MESA
C4505	NWNE10	14N	29E	2335878.00	509212.0	46 43 18	119 9 38	334889	5176283	MESA
C4506	SENE10	14N	29E	2336843.50	507976.1	46 43 6	119 9 25	335155	5175905	MESA
C4507	NWSW13	16N	28E	2310870.50	564733.4	46 52 30	119 15 25	328012	5193528	CORFU
C4508	NWSW13	16N	28E	2310904.50	564828.6	46 52 31	119 15 24	328034	5193558	CORFU
C4509	NWSW13	16N	28E	2310280.50	564825.0	46 52 31	119 15 33	327844	5193564	CORFU
C4510	NWSE15	16N	28E	2302710.50	563885.6	46 52 23	119 17 22	325529	5193384	CORFU
C4511	SENW13	16N	28E	2311400.00	565695.9	46 52 40	119 15 17	328191	5193832	CORFU
C4512	SE35	15N	30E	2373047.00	548811.2	46 49 43	119 0 34	346730	5187864	BRUCE
C4513	SWNE13	14N	27E	2280857.50	533322.5	46 47 25	119 22 43	318456	5184388	CORFU
C4515	SWNE13	14N	27E	2280914.00	533587.6	46 47 27	119 22 42	318479	5184449	CORFU
C4518	SWSE02	14N	29E	2340089.00	510032.0	46 43 26	119 8 38	336169	5176495	MESA
C4519	NWNW12	14N	29E	2344111.00	508820.2	46 43 13	119 7 40	337389	5176061	MESA
C4521	NWNW12	14N	29E	2344498.00	509156.7	46 43 16	119 7 35	337498	5176150	MESA
C4522	NWNW12	14N	29E	2344524.50	509494.8	46 43 20	119 7 34	337523	5176273	MESA
C4523	SWNW12	14N	29E	2343081.50	507702.2	46 43 2	119 7 55	337062	5175730	MESA
C4524	WCNE11	14N	29E	2340945.00	508528.5	46 43 11	119 8 26	336411	5176025	MESA
C4526	CNW11	14N	29E	2338841.50	507977.9	46 43 6	119 8 56	335770	5175888	MESA
C4527	NWNE14	14N	29E	2340094.00	503560.4	46 42 22	119 8 39	336094	5174520	MESA
C4529	SWSW24	14N	29E	2343131.00	494812.5	46 40 55	119 7 58	336892	5171812	MESA
C4531	SWNE13	14N	29E	2345582.00	502253.5	46 42 8	119 7 21	337739	5174043	MESA
C4532	SENE18	14N	30E	2352644.00	502786.3	46 42 12	119 5 39	339908	5174109	MESA
C4533	SWNW24	14N	29E	2343437.50	496874.9	46 41 15	119 7 53	337015	5172426	MESA
C4534	SENW12	14N	29E	2344830.50	507809.8	46 43 3	119 7 30	337593	5175746	MESA
C4535	NESE12	14N	29E	2347891.00	506842.9	46 42 53	119 6 46	338519	5175412	MESA
C4537	SESE07	14N	29E	2353033.50	505663.2	46 42 40	119 5 33	340058	5174970	MESA
C4538	NWNW30	14N	30E	2348394.50	493111.7	46 40 37	119 6 43	338470	5171213	MESA
C4539	SWSE24	14N	29E	2346629.50	494527.1	46 40 52	119 7 8	337951	5171690	MESA
C4540	NWNW12	14N	29E	2342838.50	508442.4	46 43 10	119 7 59	336984	5175979	MESA
C4542	SENE34	14N	30E	2369904.00	486737.5	46 39 31	119 1 36	344940	5169004	MESA
C4543	SESW33	14N	29E	2361661.50	484126.4	46 39 6	119 3 35	342391	5168298	MESA
C4544	SWSE14	13N	29E	2342736.00	468607.0	46 36 36	119 8 10	336414	5163853	MESA
C4546	NW11	13N	29E	2340482.50	476941.0	46 37 59	119 8 40	335852	5166403	MESA
C4548A	NWNE11	14N	29E	2340899.50	509789.1	46 43 23	119 8 26	336421	5176396	MESA
C4548B	NWNE11	14N	29E	2340899.50	509789.1	46 43 23	119 8 26	336421	5176396	MESA
C4549	NWNE32	16N	23E	2133173.00	549438.7	46 50 19	119 58 4	273694	5191288	BEVERLY
C4550	NWNE32	16N	23E	2132952.50	548889.1	46 50 14	119 58 7	273625	5191136	BEVERLY
C4551	NWNE32	16N	23E	2133111.50	549092.5	46 50 16	119 58 5	273669	5191197	BEVERLY
C4552	SWNE32	16N	23E	2132463.50	548417.9	46 50 9	119 58 14	273470	5190988	BEVERLY
C4553	SENW32	16N	23E	2132495.50	548495.5	46 50 10	119 58 14	273472	5191019	BEVERLY
C4554	SENW32	16N	23E	2132374.00	548361.6	46 50 9	119 58 15	273449	5190989	BEVERLY
C4555	SENW32	16N	23E	2132091.50	548271.6	46 50 8	119 58 20	273342	5190962	BEVERLY
C4556	SENW32	16N	23E	2131966.50	548328.6	46 50 8	119 58 21	273321	5190963	BEVERLY
C4557	SENW32	16N	23E	2131783.50	548473.4	46 50 10	119 58 24	273260	5191027	BEVERLY
C4558	SENW32	16N	23E	2131631.00	548203.6	46 50 7	119 58 26	273214	5190936	BEVERLY
C4559	SENW32	16N	23E	2131518.00	548057.5	46 50 6	119 58 28	273170	5190906	BEVERLY
C4560	SWNW32	16N	23E	2131254.50	547749.9	46 50 3	119 58 32	273082	5190817	BEVERLY
C4561	SWNW32	16N	23E	2131191.50	547614.7	46 50 1	119 58 33	273059	5190756	BEVERLY
C4562	NWNW32	16N	23E	2131100.50	547379.6	46 49 59	119 58 34	273035	5190695	BEVERLY
C4563	NWSE17	15N	25E	2197700.50	530520.9	46 47 7	119 42 38	293103	5184653	SMYRNA
C4572	NENE33	16N	25E	2204259.50	547401.4	46 49 53	119 41 2	295313	5189707	SMYRNA

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4573	NE33	16N	25E	2202665.50	548073.4	46 50 0	119 41 24	294835	5189950	SMYRNA
C4587	NENE04	15N	26E	2234082.00	543567.2	46 49 12	119 33 53	304360	5188137	SMYRNA
C4588	SENW04	15N	26E	2232620.00	543037.9	46 49 7	119 34 15	303889	5187998	SMYRNA
C4590	NENW05	15N	26E	2227729.00	543953.2	46 49 17	119 35 25	302415	5188356	SMYRNA
C4591	NENE06	15N	26E	2224713.00	544048.4	46 49 18	119 36 8	301505	5188417	SMYRNA
C4624	NWSE01	15N	26E	2248952.50	541322.5	46 48 48	119 30 20	308849	5187251	SMYRNA
C4625	NWSE01	15N	26E	2248382.50	541685.6	46 48 52	119 30 28	308684	5187380	SMYRNA
C4627	NWSE01	15N	26E	2250914.50	544068.1	46 49 15	119 29 51	309490	5188065	SMYRNA
C4633	NENE29	16N	25E	2197998.00	554512.1	46 51 4	119 42 31	293503	5191963	SMYRNA
C4658	SESE33	15N	25E	2203971.50	547015.2	46 49 49	119 41 6	295224	5189586	SMYRNA
C4659	NESE33	16N	25E	2203903.50	546874.9	46 49 48	119 41 7	295196	5189568	SMYRNA
C4660	NESE33	16N	25E	2203903.50	546874.9	46 49 48	119 41 7	295196	5189568	SMYRNA
C4661	NESE33	16N	25E	2203933.50	546944.9	46 49 49	119 41 6	295206	5189589	SMYRNA
C4662	NESE33	16N	25E	2203903.50	546989.4	46 49 49	119 41 7	295197	5189603	SMYRNA
C4663	NESE33	16N	25E	2203809.50	547010.5	46 49 49	119 41 8	295169	5189611	SMYRNA
C4664	NWSW34	16N	25E	2203827.50	547032.4	46 49 50	119 41 8	295175	5189617	SMYRNA
C4665	NWSW34	16N	25E	2203885.50	547057.9	46 49 50	119 41 7	295193	5189624	SMYRNA
C4666	NWSW34	16N	25E	2203944.00	547083.4	46 49 50	119 41 6	295211	5189631	SMYRNA
C4667	NWSW34	16N	25E	2203956.00	547111.4	46 49 50	119 41 6	295215	5189639	SMYRNA
C4668	NWSW34	16N	25E	2203994.00	547157.2	46 49 51	119 41 6	295227	5189653	SMYRNA
C4669	NWSW34	16N	25E	2204058.00	547172.6	46 49 51	119 41 5	295247	5189657	SMYRNA
C4690	NENW06	15N	26E	2222446.50	544056.9	46 49 18	119 36 41	300805	5188458	SMYRNA
C4691	NENE01	15N	25E	2219825.50	544085.0	46 49 19	119 37 18	300023	5188497	SMYRNA
C4693	NWNW01	15N	27E	2216200.50	543952.1	46 49 18	119 38 10	298921	5188503	SMYRNA
C4694	NENE01	15N	25E	2216814.50	544602.0	46 49 24	119 38 2	299096	5188682	SMYRNA
C4695	SWNE02	15N	26E	2243321.50	542569.9	46 49 1	119 31 41	307146	5187707	SMYRNA
C4696	SESW17	15N	27E	2259130.00	530702.7	46 47 2	119 27 56	311798	5183882	CORFU
C4698	NENW15	15N	25E	2206981.00	533446.9	46 47 35	119 40 25	295952	5185420	SMYRNA
C4700	SWNE13	15N	27E	2281350.50	533757.6	46 47 29	119 22 36	318608	5184507	CORFU
C4701	SWSE14	15N	27E	2276666.00	531233.2	46 47 5	119 23 44	317144	5183810	CORFU
C4702	SWSE14	15N	27E	2276393.50	531221.5	46 47 5	119 23 48	317059	5183812	CORFU
C4703	NWSW34	15N	25E	2204713.50	546934.7	46 49 48	119 40 55	295456	5189547	SMYRNA
C4704	SESE16	15N	27E	2267334.50	532305.2	46 47 17	119 25 57	314335	5184267	CORFU
C4705	NWSE12	15N	27E	2249488.00	536376.2	46 47 59	119 30 13	308949	5185734	CORFU
C4707	SWNE07	15N	27E	2253808.00	537769.1	46 48 12	119 29 11	310276	5186093	CORFU
C4710	NWNW09	15N	27E	2262758.50	540344.9	46 48 37	119 27 2	313034	5186779	CORFU
C4716	SENW32	16N	23E	2132610.50	548344.2	46 50 8	119 58 12	273512	5190955	BEVERLY
C4718	NWSE32	16N	23E	2133067.00	546849.0	46 49 54	119 58 6	273622	5190518	BEVERLY
C4719	NWSE32	16N	23E	2132806.50	547272.9	46 49 58	119 58 9	273547	5190654	BEVERLY
C4720	NESE32	16N	23E	2132856.50	547153.0	46 49 57	119 58 9	273560	5190617	BEVERLY
C4721	NESE32	16N	23E	2132853.50	546978.1	46 49 55	119 58 9	273557	5190564	BEVERLY
C4722	NESE32	16N	23E	2132771.50	546844.1	46 49 54	119 58 10	273530	5190524	BEVERLY
C4723	NESE32	16N	23E	2132626.00	546646.7	46 49 52	119 58 12	273483	5190466	BEVERLY
C4724	NESE32	16N	23E	2132325.50	546389.5	46 49 49	119 58 16	273405	5190372	BEVERLY
C4763	NESE30	16N	23E	2129964.50	552370.2	46 50 48	119 58 50	272750	5192246	BEVERLY
C4764	NESE30	16N	23E	2129751.50	552027.6	46 50 45	119 58 53	272687	5192130	BEVERLY
C4765	NESE30	16N	23E	2129599.00	551639.2	46 50 41	119 58 55	272640	5192008	BEVERLY
C4766	NESE30	16N	23E	2129510.50	551343.9	46 50 38	119 58 56	272615	5191917	BEVERLY
C4767	NESE30	16N	23E	2129395.50	550934.5	46 50 34	119 58 58	272568	5191795	BEVERLY
C4768	SENE30	16N	23E	2128401.00	552968.4	46 50 54	119 59 12	272295	5192423	BEVERLY
C4769	NWNW30	16N	23E	2125298.50	554651.9	46 51 11	119 59 57	271362	5192984	BEVERLY
C4770	NWNW30	16N	23E	2125233.00	554498.6	46 51 10	119 59 58	271340	5192954	BEVERLY
C4771	NWNW30	16N	23E	2125073.50	554335.5	46 51 8	120 0 0	271295	5192894	BEVERLY
C4772	NWNW30	16N	23E	2126061.00	555062.7	46 51 15	119 59 46	271599	5193099	BEVERLY
C4773	NESW29	16N	23E	2131750.00	552048.9	46 50 45	119 58 24	273301	5192107	BEVERLY

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C4782	SESE30	16N	23E	2128596.00	550586.9	46 50 31	119 59 10	272310	5191712	BEVERLY
C4783	NESW30	16N	23E	2126969.50	551557.9	46 50 41	119 59 33	271835	5192039	BEVERLY
C4784	SWNE30	16N	23E	2128201.50	552731.7	46 50 52	119 59 15	272229	5192364	BEVERLY
C4785	SWNE30	16N	23E	2128613.00	552863.1	46 50 53	119 59 9	272357	5192390	BEVERLY
C4786	SWNE30	16N	23E	2128691.50	552700.6	46 50 52	119 59 8	272377	5192358	BEVERLY
C4787	SENW30	16N	23E	2126963.00	552733.6	46 50 52	119 59 33	271848	5192379	BEVERLY
C4788	NENE31	15N	23E	2129265.50	549944.9	46 50 24	119 59 0	272514	5191488	BEVERLY
C4789	NENE31	16N	23E	2129714.50	549946.7	46 50 24	119 58 54	272641	5191483	BEVERLY
C4790	NENE31	16N	23E	2129769.50	549883.2	46 50 24	119 58 53	272662	5191482	BEVERLY
C4791	NENE31	16N	23E	2129967.50	549685.9	46 50 22	119 58 50	272723	5191418	BEVERLY
C4792	NWNW32	16N	23E	2130414.00	549949.1	46 50 24	119 58 44	272853	5191475	BEVERLY
C4793	NWNW32	16N	23E	2130633.50	549701.0	46 50 22	119 58 40	272935	5191410	BEVERLY
C4794	NWNW32	16N	23E	2130719.50	549506.1	46 50 20	119 58 39	272954	5191347	BEVERLY
C4795	NWNW32	16N	23E	2130751.50	549234.1	46 50 17	119 58 39	272950	5191255	BEVERLY
C4796	NWNW32	16N	23E	2130642.00	548700.1	46 50 12	119 58 40	272923	5191101	BEVERLY
C4797	NWNW32	16N	23E	2131450.00	549477.6	46 50 20	119 58 29	273166	5191339	BEVERLY
C4798	NWNW32	16N	23E	2131511.50	549536.5	46 50 20	119 58 28	273187	5191339	BEVERLY
C4799	NENW32	16N	23E	2132562.00	549832.2	46 50 23	119 58 13	273508	5191419	BEVERLY
C4800	NWNE32	16N	23E	2132629.50	549710.2	46 50 22	119 58 12	273528	5191387	BEVERLY
C4801	NWNE32	16N	23E	2133047.00	549349.1	46 50 18	119 58 6	273650	5191259	BEVERLY
C4802	NENW32	16N	23E	2132322.00	549765.4	46 50 22	119 58 16	273443	5191391	BEVERLY
C4803	SESW29	16N	23E	2132204.00	550127.7	46 50 26	119 58 18	273406	5191516	BEVERLY
C4804	SESW29	16N	23E	2131759.00	550135.7	46 50 26	119 58 24	273278	5191520	BEVERLY
C8003	SE10	15N	23E	2145769.50	534994.9	46 47 56	119 55 4	277328	5186739	BEVERLY
C8005	SE10	15N	23E	2145678.50	534919.0	46 47 55	119 55 6	277300	5186717	BEVERLY
C8007	SE10	15N	23E	2145609.50	534843.6	46 47 54	119 55 7	277278	5186695	BEVERLY
C8009	SE10	15N	23E	2145551.00	534756.1	46 47 53	119 55 7	277259	5186669	BEVERLY
C8011	SE10	15N	23E	2145347.00	534726.7	46 47 53	119 55 10	277196	5186663	BEVERLY
C8012	NW02	15N	23E	2147575.00	543294.6	46 49 18	119 54 37	278008	5189241	BEVERLY
C8013	NW02	15N	23E	2147618.50	543229.2	46 49 17	119 54 37	278003	5189222	BEVERLY
C8014	NW02	15N	23E	2147676.00	542992.9	46 49 15	119 54 36	278018	5189149	BEVERLY
C8015	NW02	15N	23E	2147745.00	542811.0	46 49 13	119 54 35	278036	5189093	BEVERLY
C8016	NW02	15N	23E	2147809.00	542707.5	46 49 12	119 54 34	278054	5189060	BEVERLY
C8017	NW02	15N	23E	2147836.00	542653.6	46 49 11	119 54 34	278062	5189043	BEVERLY
C8018	NW02	15N	23E	2147819.50	542677.5	46 49 11	119 54 34	278057	5189051	BEVERLY
C8019	NW02	15N	23E	2147866.50	542613.9	46 49 11	119 54 33	278071	5189031	BEVERLY
C8020	NW02	15N	23E	2147932.00	542516.5	46 49 10	119 54 32	278089	5189000	BEVERLY
C8021	NW02	15N	23E	2148035.50	542441.7	46 49 9	119 54 31	278120	5188976	BEVERLY
C8022	NW02	15N	23E	2148023.00	542351.0	46 49 8	119 54 31	278115	5188949	BEVERLY
C8023	NW02	15N	23E	2148182.50	542251.1	46 49 7	119 54 29	278162	5188916	BEVERLY
C8024	NW02	15N	23E	2148338.00	542173.1	46 49 6	119 54 27	278208	5188890	BEVERLY
C8025	NW02	15N	23E	2148392.50	542147.9	46 49 6	119 54 26	278224	5188882	BEVERLY
C8026	NW02	15N	23E	2148523.00	542141.9	46 49 6	119 54 24	278264	5188878	BEVERLY
C8027	NW02	15N	23E	2148593.00	542131.0	46 49 6	119 54 23	278285	5188874	BEVERLY
C8028	NW02	15N	23E	2148680.00	542088.1	46 49 6	119 54 22	278311	5188860	BEVERLY
C8029	SE10	15N	23E	2144578.00	535482.5	46 48 1	119 55 21	276972	5186903	BEVERLY
C8030	SE10	15N	23E	2144716.50	535444.5	46 48 0	119 55 19	277014	5186890	BEVERLY
C9008	SE10	15N	23E	2144546.00	535459.9	46 48 0	119 55 22	276962	5186897	BEVERLY
C9014	SE10	15N	23E	2144688.50	535464.1	46 48 0	119 55 20	277006	5186896	BEVERLY
C9016	SE10	15N	23E	2144912.50	535491.9	46 48 1	119 55 16	277074	5186902	BEVERLY
C9019	SE10	15N	23E	2145063.00	535466.1	46 48 0	119 55 14	277120	5186892	BEVERLY
C9020	SE10	15N	23E	2145431.00	535363.5	46 47 59	119 55 9	277230	5186856	BEVERLY
C9022	SE10	15N	23E	2145439.00	535122.2	46 47 57	119 55 9	277230	5186782	BEVERLY
C9023	SE10	15N	23E	2145437.00	534867.0	46 47 55	119 55 9	277225	5186704	BEVERLY
C9036	NW02	15N	23E	2147676.00	542992.9	46 49 15	119 54 36	278018	5189149	BEVERLY

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
C9039	NW02	15N	23E	2147809.00	542707.5	46 49 12	119 54 34	278054	5189060	BEVERLY
C9041	NW02	15N	23E	2147866.50	542613.9	46 49 11	119 54 33	278071	5189031	BEVERLY
C9042	NW02	15N	23E	2148023.00	542351.0	46 49 8	119 54 31	278115	5188949	BEVERLY
C9043	NW02	15N	23E	2148338.00	542173.1	46 49 6	119 54 27	278208	5188890	BEVERLY
C9044	NW02	15N	23E	2148680.00	542088.1	46 49 6	119 54 22	278311	5188860	BEVERLY
C9045	NW02	15N	23E	2148680.00	542088.1	46 49 6	119 54 22	278311	5188860	BEVERLY
GRC2000	NENW24	15N	23E	2153898.00	527934.9	46 46 45	119 53 8	279721	5184450	BEVERLY
GRC2001	NENW24	15N	23E	2153718.00	528596.0	46 46 52	119 53 11	279665	5184668	BEVERLY
GRC2002	NESW13	15N	23E	2153943.50	531343.7	46 47 19	119 53 7	279780	5185498	BEVERLY
GRC2003	CSW12	15N	23E	2152926.50	535210.7	46 47 57	119 53 21	279527	5186682	BEVERLY
GRC2004	NENW13	15N	23E	2153105.50	533862.4	46 47 44	119 53 19	279554	5186279	BEVERLY
GRC2005	SWSE11	15N	23E	2149719.00	534903.2	46 47 55	119 54 7	278549	5186656	BEVERLY
GRC2006	SWSE11	15N	23E	2149687.50	534562.4	46 47 51	119 54 8	278524	5186533	BEVERLY
GRC2007	SWSE11	15N	23E	2149661.50	534279.6	46 47 48	119 54 8	278520	5186441	BEVERLY
GRC2008	SWSE02	15N	23E	2148995.50	540111.9	46 48 46	119 54 17	278396	5188238	BEVERLY
GRC2009	NWSE02	15N	23E	2148990.50	541755.6	46 49 2	119 54 17	278414	5188732	BEVERLY
GRC2010	SENW02	15N	23E	2148040.50	542488.4	46 49 10	119 54 31	278126	5188990	BEVERLY
GRC2012	SESE03	15N	25E	2209234.00	540161.6	46 48 41	119 39 51	296728	5187451	SMYRNA
GRC2013	NENE10	15N	25E	2209427.50	539458.2	46 48 34	119 39 49	296777	5187234	SMYRNA
GRC2014	SWSW02	15N	25E	2210788.00	539843.7	46 48 38	119 39 29	297197	5187333	SMYRNA
GRC2032	NESW03	15N	25E	2206064.00	541834.6	46 48 58	119 40 37	295785	5188004	SMYRNA
GRC2033	NWSW03	15N	25E	2205800.00	542271.5	46 49 2	119 40 40	295711	5188140	SMYRNA
GRC2034	SWNW03	15N	25E	2205152.00	542678.1	46 49 6	119 40 50	295519	5188273	SMYRNA
GRC2035	NENE04	15N	25E	2204194.00	543817.5	46 49 18	119 41 3	295243	5188633	SMYRNA
GRC2036	SWSW34	16N	25E	2204905.00	545469.7	46 49 34	119 40 53	295482	5189127	SMYRNA
GRC2050	SWSW22	15N	24E	2173157.50	524129.4	46 46 6	119 48 32	285530	5183034	BEVERLY SE
GRC2051	SWSW22	15N	24E	2173549.00	523677.6	46 46 2	119 48 26	285653	5182906	BEVERLY SE
GRC2053	SESW22	15N	24E	2175797.00	524371.6	46 46 8	119 47 54	286338	5183067	BEVERLY SE
GRC2054	SWNE22	15N	24E	2176535.50	527217.0	46 46 37	119 47 43	286603	5183953	BEVERLY SE
GRC2055	SWNE22	15N	24E	2176101.00	527216.0	46 46 37	119 47 49	286476	5183958	BEVERLY SE
GRC2056	SWSE15	15N	24E	2175760.00	528952.5	46 46 54	119 47 54	286389	5184486	BEVERLY SE
GRC2057	SWSE10	15N	24E	2175586.00	535320.5	46 47 57	119 47 56	286416	5186432	BEVERLY SE
GRC2058	NENE09	15N	26E	2235750.00	538572.4	46 48 22	119 33 30	304782	5186608	SMYRNA
GRC2059	SENW10	15N	26E	2237508.50	537974.1	46 48 16	119 33 5	305309	5186402	SMYRNA
GRC2060	NWNW10	15N	26E	2235934.00	538043.5	46 48 17	119 33 28	304831	5186444	SMYRNA
GRC2061	NWNW10	15N	26E	2236418.00	537662.5	46 48 13	119 33 21	304973	5186321	SMYRNA
GRC2062	NWSW10	15N	26E	2236337.00	536755.2	46 48 4	119 33 22	304936	5186046	SMYRNA
GRC2063	NWSW10	15N	26E	2236140.50	536311.5	46 48 0	119 33 25	304870	5185914	SMYRNA
GRC2064	SENE11	15N	26E	2245696.50	537867.9	46 48 14	119 31 7	307801	5186258	SMYRNA
GRC2065	NENE11	15N	26E	2245371.50	538528.2	46 48 21	119 31 12	307711	5186464	SMYRNA
GRC2066	NESE02	15N	26E	2245638.00	542265.0	46 48 58	119 31 7	307843	5187598	SMYRNA
GRC2067	NWSE02	15N	26E	2244945.50	541479.6	46 48 50	119 31 18	307622	5187368	SMYRNA
GRC2068	NWNE11	15N	26E	2244388.50	539494.2	46 48 31	119 31 26	307425	5186771	SMYRNA
GRC2084	NWNE03	15N	24E	2175801.50	543683.0	46 49 19	119 47 51	286593	5188977	BEVERLY SE
GRC2085	NWNW03	15N	24E	2175502.00	544186.0	46 49 24	119 47 56	286509	5189135	BEVERLY SE
GRC2086	NWNW03	15N	24E	2175488.00	544294.2	46 49 25	119 47 56	286506	5189168	BEVERLY SE
GRC2087	NWNW03	15N	24E	2175341.00	544464.4	46 49 27	119 47 58	286464	5189222	BEVERLY SE
GRC2088	NWNW03	15N	24E	2175177.00	544644.2	46 49 29	119 48 0	286416	5189279	BEVERLY SE
GRC2089	NWNW03	15N	24E	2175085.50	544839.6	46 49 31	119 48 2	286391	5189339	BEVERLY SE
GRC2090	SWSW34	16N	24E	2174244.50	545252.0	46 49 35	119 48 14	286141	5189476	BEVERLY SE
MH81001	SWSE30	16N	23E	2127490.50	550700.2	46 50 32	119 59 25	271974	5191770	BEVERLY
MH81003	SWSE30	16N	23E	2127551.00	550801.7	46 50 33	119 59 25	271994	5191801	BEVERLY
MH81006	NWSE30	16N	23E	2127840.00	551391.4	46 50 39	119 59 20	272090	5191976	BEVERLY
MH81008	SWNE30	16N	23E	2128354.50	553114.6	46 50 56	119 59 13	272270	5192494	BEVERLY
SR85-01	NW03	16N	24E	2172814.00	543479.6	46 49 17	119 48 34	285681	5188956	BEVERLY

Table 2. Locations of geochemical samples in the Saddle Mountains area (continued).

SAMPLE	SEC.	TWN	RNG	STATE PLANE NORTH	STATE PLANE EAST	LATITUDE, NORTH	LONGITUDE, WEST	UTM NORTH	UTM EAST	QUAD.
SR85-02	NW16	15N	25E	2177484.50	530752.2	46 47 11	119 47 29	286931	5185016	SMYRNA
SR85-02A	SE08	15N	25E	2177174.50	529376.9	46 46 58	119 47 34	286818	5184602	SMYRNA
SR85-03	SE15	15N	24E	2177490.50	530554.1	46 47 9	119 47 29	286935	5184931	BEVERLY
SR85-04	NW07	15N	25E	2222396.00	538396.2	46 48 22	119 36 42	300713	5186735	SMYRNA
SR85-05	NW07	15N	25E	2222396.00	538396.2	46 48 22	119 36 42	300713	5186735	SMYRNA
SR85-06	NW07	15N	25E	2222396.00	538396.2	46 48 22	119 36 42	300713	5186735	SMYRNA
SR85-07	NW07	15N	25E	2222396.00	538396.2	46 48 22	119 36 42	300713	5186735	SMYRNA
SR85-08	NW07	15N	25E	2222396.00	538396.2	46 48 22	119 36 42	300713	5186735	SMYRNA
SR85-09	NW07	15N	25E	2222396.00	538396.2	46 48 22	119 36 42	300713	5186735	SMYRNA
SR85-10	NW07	15N	25E	2222396.00	538396.2	46 48 22	119 36 42	300713	5186735	SMYRNA
SR85-11	SESE33	16N	24E	2171231.00	545269.5	46 49 35	119 48 57	285223	5189523	BEVERLY
SR85-12	SESE33	16N	24E	2171231.00	545269.5	46 49 35	119 48 57	285223	5189523	BEVERLY
SR85-29	NENW18	15N	27E	2254417.00	534574.1	46 47 41	119 29 3	310412	5185137	CORFU
SR85-30	SWSW17	16N	29E	2316523.00	927900.2	47 52 13	119 12 38	334685	5304053	OTHELLO

WASHINGTON STATE DEPARTMENT OF
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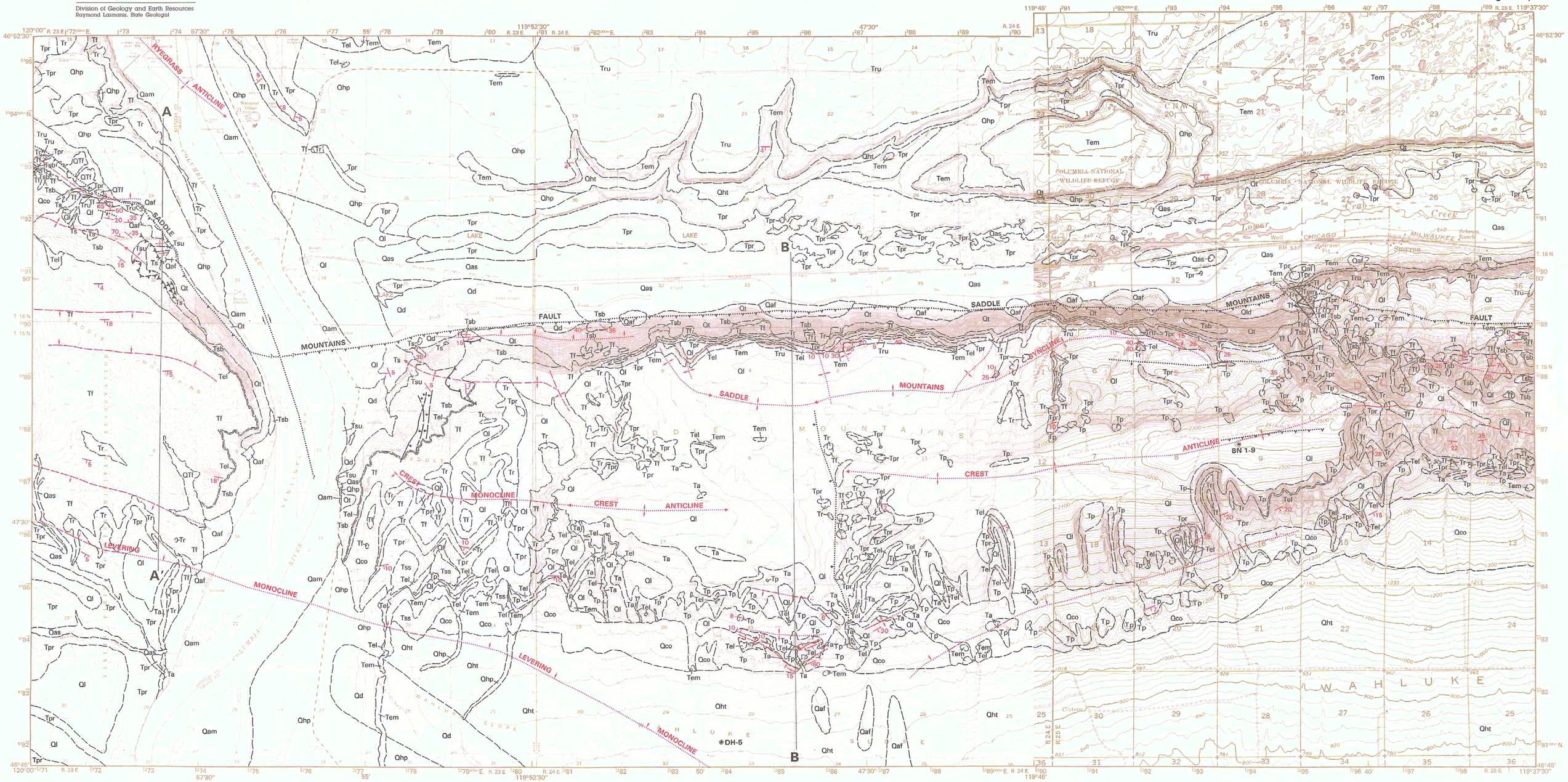
Art Stearns - Supervisor
Division of Geology and Earth Resources
Raymond Lasmanis, State Geologist



Base map from U.S. Geologic Survey Beverly 7½ minute (1965), Beverly SE 7½ minute (1965), and Smyrna 15 minute (1965) quadrangles, Washington

Scale 1:48,000

0 ½ 1 2 Miles

0 2000 4000 6000 8000 Feet

0 ½ 1 2 Kilometers

CONTOUR INTERVAL 20 FEET

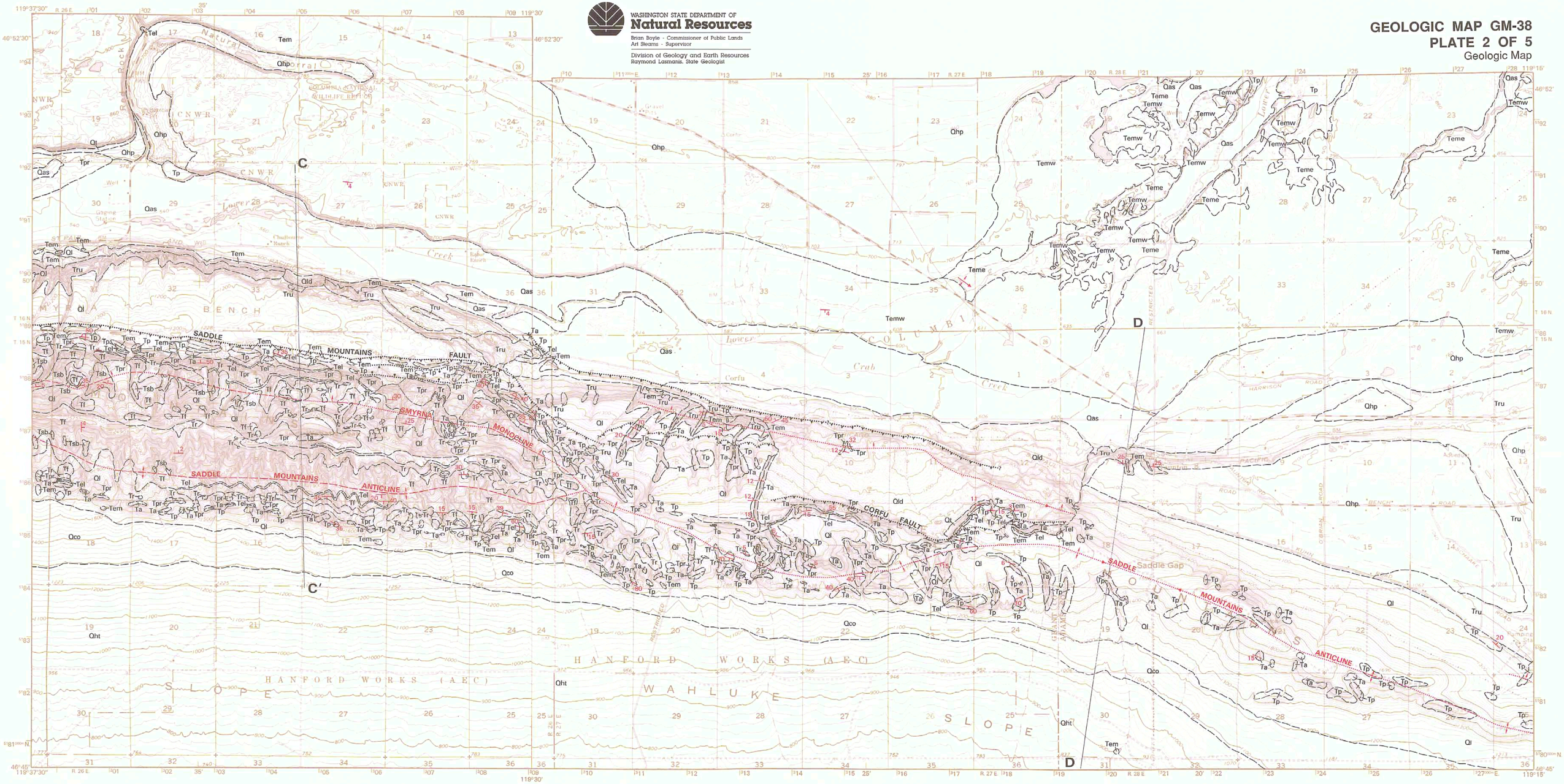
GEOLOGIC MAP OF THE SADDLE MOUNTAINS, WASHINGTON

BY
S.P. REIDEL
1988

N
MN
21°

WASHINGTON STATE DEPARTMENT OF
Natural Resources
Brian Boyle - Commissioner of Public Lands
Art Stearns - Supervisor

Division of Geology and Earth Resources
Raymond Lasmanis, State Geologist



Base map from U.S. Geologic Survey Smyrna 15 minute (1965), Corfu 15 minute (1965) quadrangles, Washington

Scale 1:48,000

0 ½ 1 2
Miles

0 2000 4000 6000 8000
Feet

0 ½ 1 2
Kilometers

CONTOUR INTERVAL 20 FEET

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N
MN
21°

Scale 1:48,000

0 ½ 1 2
Miles

0 2000 4000 6000 8000
Feet

0 ½ 1 2
Kilometers

CONTOUR INTERVAL 20 FEET

Base map from U.S. Geologic Survey
Othello 7½ minute (1954),
Mesa 15 minute (1965) quadrangles,
Washington

GEOLOGIC MAP OF THE SADDLE MOUNTAINS, WASHINGTON

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1988

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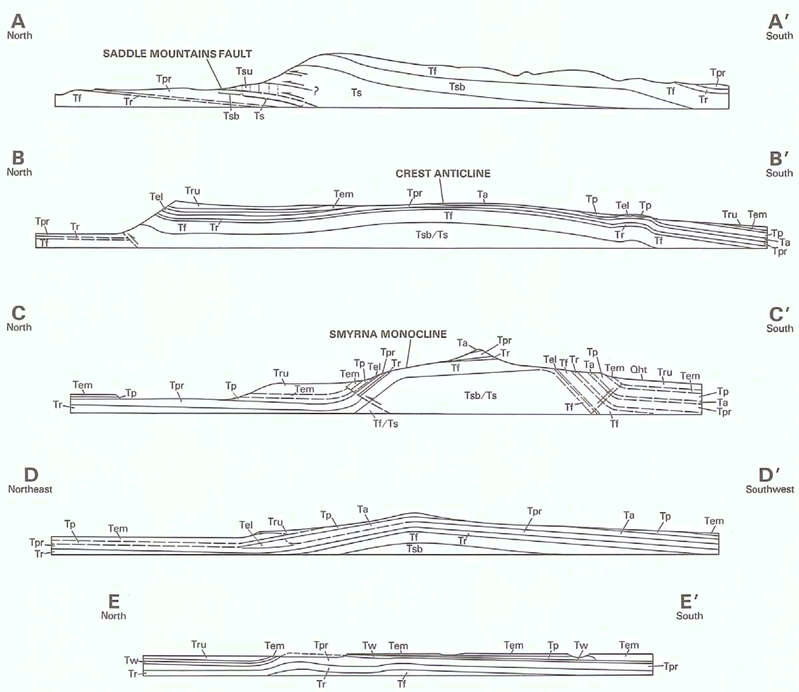
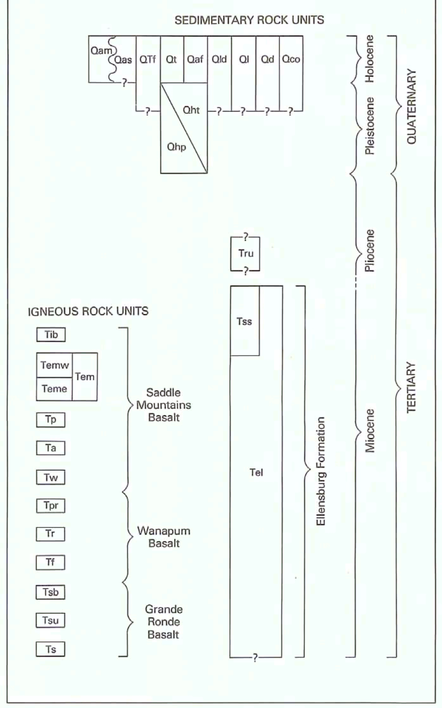
GEOLOGIC CROSS SECTIONS THROUGH THE SADDLE MOUNTAINS



CORRELATION OF MAP UNITS



EXPLANATION

Contact
Dashed where approximately located; dotted where concealed

Fault
High-angle; greater than 45 degrees. Bar and ball on downthrown side; dashed where approximately located; dotted where concealed

Thrust fault to high-angle reverse fault
45 degrees or less. Sawteeth on upper plate; dashed where approximately located; dotted where concealed

Strike-slip fault
Arrows show relative direction of movement; dashed where approximately located; dotted where concealed

Anticline
Trace of crest. Arrow indicates direction of plunge; dashed where approximately located; dotted where concealed

Syncline
Trace of trough. Arrow indicates direction of plunge; dashed where approximately located; dotted where concealed

Monocline
Trace of axis. Arrow on steeper dipping limb; dashed where approximately located; dotted where concealed

80 Strike and dip of inclined bedding

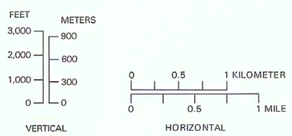
Strike and dip of vertical bedding

Horizontal bedding

85 Strike and dip of overturned bedding

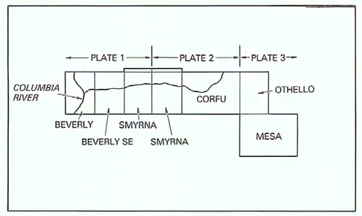
75 Approximate strike and dip of bedding

DH-5 Borehole symbol

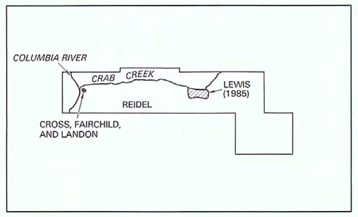


QUADRANGLE LOCATION

MAP INDEX



MAPPING RESPONSIBILITY



DESCRIPTION OF MAP UNITS

SURFICIAL DEPOSITS

Ql LOESS — Predominantly silt but includes fine sand. Thickness variable; thickest in stream valleys, usually a thin veneer on ridges

Qd SAND DUNES — Mainly medium to fine sand comprising basalt, quartz, and feldspar grains. Volcanic-ash horizons common. Both active and stabilized deposits. Principally at lower elevations

Qt TALUS — Angular rock debris at base of cliffs and steep rock slopes. Principally composed of basalt

Qht TOUCHET BEDS of Flint (1938) — Rhythmically bedded silt with stringers of coarse sand and gravel. Predominantly quartz and feldspar. Discrete ash horizons common. Deposited principally on south flank of Saddle Mountains in low-energy slack-water areas of Pleistocene floods

Qhp PASCO GRAVELS — Contains sand to boulders; grain size generally decreases away from Sentinel Gap and Eagle Lakes areas. Composed principally of basalt, granite, quartzite, diorite, and porphyries. Primarily deposits of last major Pleistocene flood (13,000 yr b.p.; Mullineaux and others, 1977). Includes older flood deposits with well-developed calcic horizons

Qco COLLUVIUM — Silt, sand, rock rubble, and gravel, generally poorly bedded overlying basalt. Generally <1 m thick. Includes slope wash and minor mass-wasting debris. Clasts generally angular basalt fragments. Mapping unit used where sediment cover is thin and polygenetic

Qaf ALLUVIAL FAN — Sand and gravel of diverse compositions; basalt clasts dominant. Principally below highest level of Pleistocene catastrophic floods

Qld LANDSLIDE DEPOSITS — Basalt and/or Ringold sediments displaced by gravity movement. Includes large slump blocks, block slides, and earth flows

QTf FANGLOMERATE — Sand and gravel of diverse compositions; basalt clasts dominant. Pleistocene or older; distinguished from Qaf by position above level of Pleistocene catastrophic floods; typically truncated at flood level

Qam ALLUVIUM, mainstream facies — Stream deposits of silt, sand, and gravel of mixed lithologies; largely confined to valley bottoms. Mainly deposited by Columbia River

Qas ALLUVIUM, sidestream facies — Stream deposits of silt, sand, and gravel of mainly basaltic lithology; confined to valley bottoms. Mainly deposited by tributaries of Columbia River, such as Lower Crab Creek

Tru RINGOLD FORMATION UNDIFFERENTIATED — Generally stream-channel conglomerates, point-bar sandstones, fine-grained overbank deposits, and lacustrine deposits at lower levels, as at Taunton Bench (Principe, 1977). Also contains basaltic fanglomerate facies (Grolier and Bingham, 1971) intercalated with finer grained fluvial sediments, as along the north flank of the Saddle Mountains near Smyrna Bench; sometimes indistinguishable from QTf. Eroded by catastrophic floods at lower elevations

ELLENSBURG FORMATION

Tel ELLENSBURG FORMATION UNDIFFERENTIATED — Primarily subarkosic sandstone, water-laid tuff, basaltic conglomerate, fine-grained siltstone and claystone, and soil zones (Schmincke, 1967). Includes Vantage Member, Beverly Member, and informal units penetrated by boreholes in the Pasco Basin (Reidel and Fecht, 1981). Deposited by streams flowing into Pasco Basin and along basalt-flow margins on the flanks of the Saddle Mountains. In some localities, basalt flows have invaded the sediments; in other places, sediments pinch out onto the flanks of ridges (Reidel, 1984)

Tss SNIPES MOUNTAIN CONGLOMERATE — Principally unconsolidated quartzite and lesser amounts of basalt conglomerate deposited by the ancestral Columbia River. Overlies eroded basalt near Sentinel Gap up to 2,000 ft elevation. Estimated by Reidel (1984) to be 8.5 m.y.b.p. and correlative with the Snipes Mountain conglomerate of Schmincke (1967)

COLUMBIA RIVER BASALT GROUP

YAKIMA BASALT SUBGROUP

SADDLE MOUNTAINS BASALT

Tib Basin City flow, Ice Harbor Member — Fresh exposures gray to black. Fine-grained, phyric (plagioclase and olivine phenocrysts with plagioclase glomerocrysts up to 2 cm). Poorly exposed; massive interior with poorly developed colonnade. Mainly occurs in map area as channel fill preserved in synclines. Northern extent of vent system occurs in southeast corner of mapped area; dikes are principally hyaloclastic material. Basin City chemical type of Swanson and others (1979). Normal polarity (Choiniere and Swanson, 1979); K-Ar age 8.5 m.y. (McKee and others, 1977)

Tem, Temw, Teme Elephant Mountain Member — Fresh surfaces black to gray; weathers reddish brown. Fine- to medium-grained, locally diktytaxitic. Aphyric, with abundant microphenocrysts of plagioclase. Two flows or cooling units; the younger flow (Temw) is the Ward Gap flow of Waters (1961), and the older flow (Teme) is the Elephant Mountain flow. Both have well-developed colonnades (diameters up to 2 m) and thin entablatures. Platy jointing; locally pillowed; vesicle cylinders common. Both flows thin and pinch out onto Saddle Mountains (Reidel, 1984). Elephant Mountain chemical type of Wright and others (1973). Transitional to reversed polarity (Choiniere and Swanson, 1979). K-Ar age 10.5 m.y. (McKee and others, 1977)

Tp Pomona Member — Fresh surfaces gray to black. Fine-grained, with abundant plagioclase phenocrysts and sparse olivine microphenocrysts; diktytaxitic. Well-developed colonnade and entablature with fanning columns. Locally invasive into sediments, as at Sentinel Gap; thins and pinches out onto the Saddle Mountains (Reidel, 1984). Pomona chemical type (Wright and others, 1973). Reversed polarity (Rietman, 1966; Choiniere and Swanson, 1979); declination rotated along ridges relative to less-deformed areas (Reidel and others, 1984). K-Ar age 12 m.y. (McKee and others, 1977)

Ta Huntzinger flow, Asotin Member — Fresh exposures gray to black. Fine- to medium-grained; aphyric, with olivine microphenocrysts and rare plagioclase phenocrysts. Glassy and sporadically ophimottled. Usually well-developed colonnade and entablature with fanning columns. Includes both Asotin and Lapwai chemical types (Reidel and Fecht, 1981), interpreted to represent mixing two of flows (Reidel and Fecht, in preparation). Flow locally thins and pinches out onto Saddle Mountains (Reidel, 1984). Normal polarity (Choiniere and Swanson, 1979). K-Ar age 13.6 m.y. (Ward, 1976)

Tw Wahluke flow, Wilbur Creek Member — Fresh surfaces gray to black. Fine- to medium-grained; aphyric, with rare plagioclase phenocrysts and microphenocrysts. Thin entablature and well-developed colonnade. Thin soil developed on flow top overlain by Huntzinger flow (Myers, 1973; Ward, 1976). Flow locally thins and pinches out onto Saddle Mountains (Reidel, 1984). Locally pillowed. Wilbur Creek chemical type (Swanson and others, 1979). Normal polarity

WANAPUM BASALT

Tpr Priest Rapids Member — Fresh exposures black to gray. Fine- to medium-grained locally, with diabasic texture in upper part of flow. Consists of two flows: Lolo and Rosalia. The younger, Lolo, has a well-developed entablature, is sparsely plagioclase-phyric and fine grained; the older, Rosalia, has a well-developed colonnade, is aphyric and medium grained. Thin interbed locally between the flows. Upper flow is of Lolo chemical type of Wright and others (1973) and lower flow is Rosalia chemical type of Swanson and others (1979). Reversed polarity. Both flows locally thin and pinch out onto the Saddle Mountains (Reidel, 1984). K-Ar age 14.5 m.y. (Watkins and Baksi, 1974)

Tr Roza Member — Fresh exposures gray-black; weathers reddish-brown. Fine- to medium-grained; phyric, with plagioclase phenocrysts and glomerocrysts 0.5-2.0 cm. Well-developed colonnade. Locally diktytaxitic. One or two cooling units that locally pinch out onto the Saddle Mountains (Reidel, 1984). Frenchman Springs chemical type (Wright and others, 1973). Transitional magnetic polarity (Rietman, 1966)

Tf Frenchman Springs Member — Fresh exposures black to gray; weathers gray to reddish brown. Medium- to coarse-grained, sparsely to abundantly phyric. Three to four flows in mapped area: basalt of Gingko, basalt of Sand Hollow, basalt of Sentinel Gap, and, locally, basalt of Palouse Falls (following nomenclature of Beeson and others, 1985). Frenchman Springs chemical type (Wright and others, 1973). Normal to excursional polarity (Rietman, 1966; Van Alstine and Gillett, 1981). $^{40}Ar/^{39}Ar$ age 15.5 m.y. (Long and Duncan, 1982)

GRANDE RONDE BASALT

Tsb Basalt of Sentinel Bluffs — Fresh exposures gray to black; weathers gray. Fine-grained, typically aphyric, occasionally sparsely phyric with rare orthopyroxene microphenocrysts. Well-developed colonnade and entablature with hackly jointing and fanning columns. Upper flow, basalt of Museum, characterized by vesicle cylinders. Flows locally thin and pinch out onto Saddle Mountains (Reidel, 1984). High-Mg chemical type (Wright and others, 1973). Normal polarity (N_2 of Swanson and others, 1979). $^{40}Ar/^{39}Ar$ age 15.5 m.y. (Long and Duncan, 1982)

Tsu Basalt of Umtanum — Fresh surfaces gray to black; weathers gray. Thin colonnade and very thick entablature. Occurs at top of basalt of Schwana. Low-Mg chemical type, Umtanum chemical subtype (Myers, Price and others, 1979). Normal polarity, with near horizontal inclination (Coe and others, 1978). $^{40}Ar/^{39}Ar$ age 15.5 m.y. (Long and Duncan, 1982)

Ts Basalt of Schwana — Fresh exposures gray-black; weathers gray. Fine-grained, typically aphyric, with rare plagioclase phenocrysts and orthopyroxene microphenocrysts (Reidel, 1983). Well-developed entablature and colonnade similar to basalt of Sentinel Bluffs. Predominantly low-Mg chemical type of Swanson and others (1979). Normal polarity (N_2 magnetostratigraphic unit of Swanson and others, 1979), but oldest exposed flow at Sentinel Gap has reversed polarity (R_2; Coe and others, 1978). Minimum $^{40}Ar/^{39}Ar$ 15.5 m.y. (Long and Duncan, 1982)

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Cartography by William C. Crowley, R.A. Hedges, and L.M. Lang
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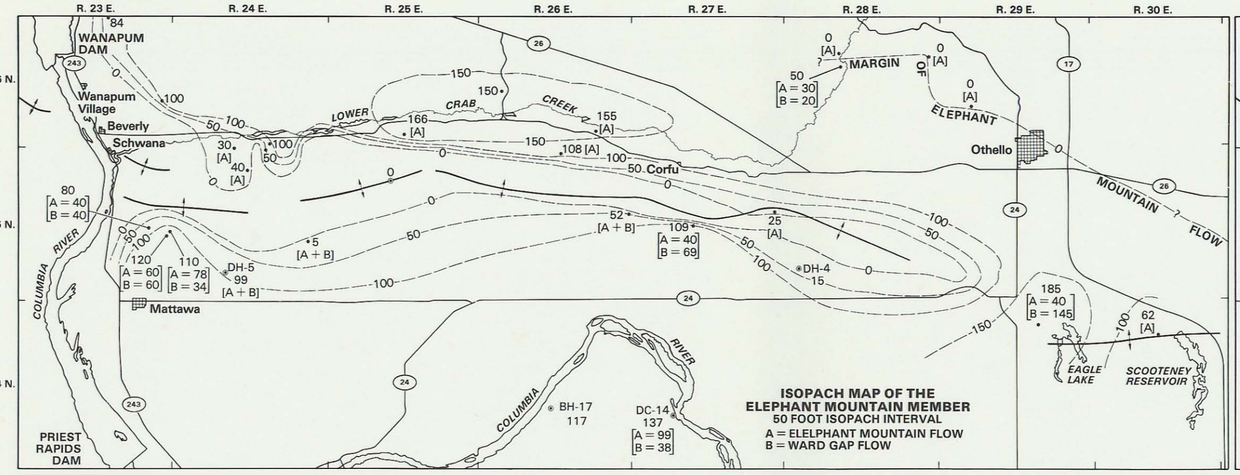
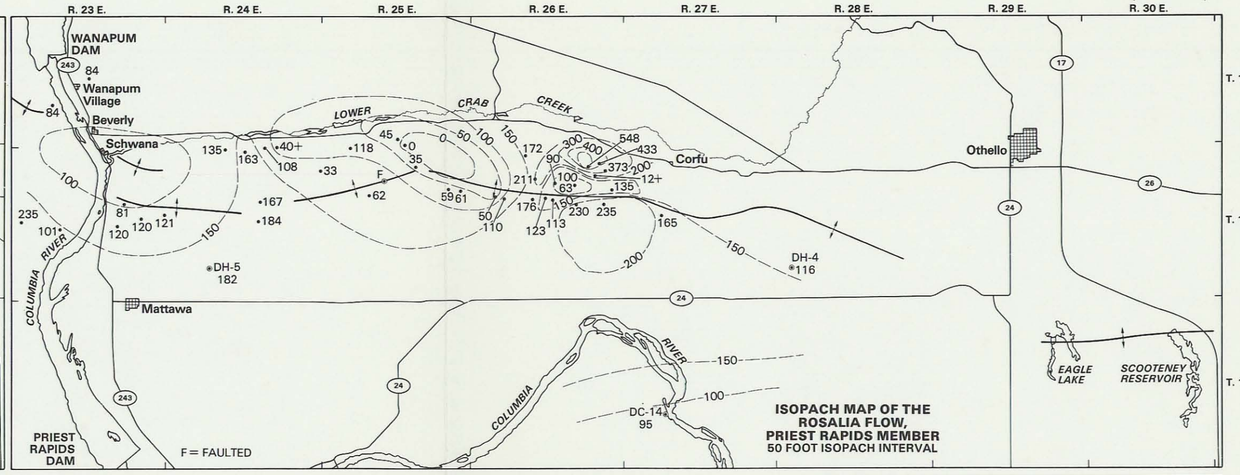
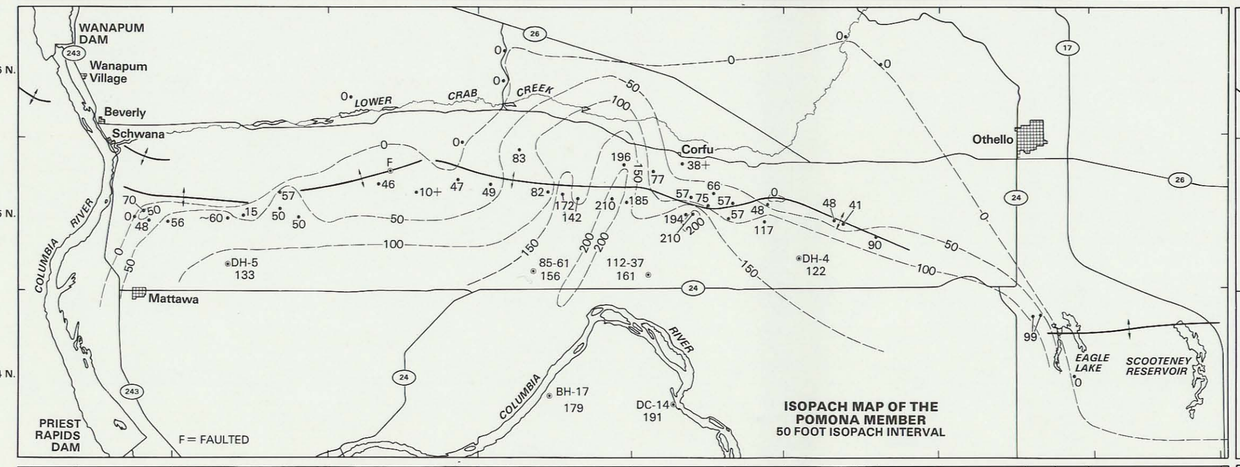
GEOLOGIC MAP OF THE SADDLE MOUNTAINS, WASHINGTON

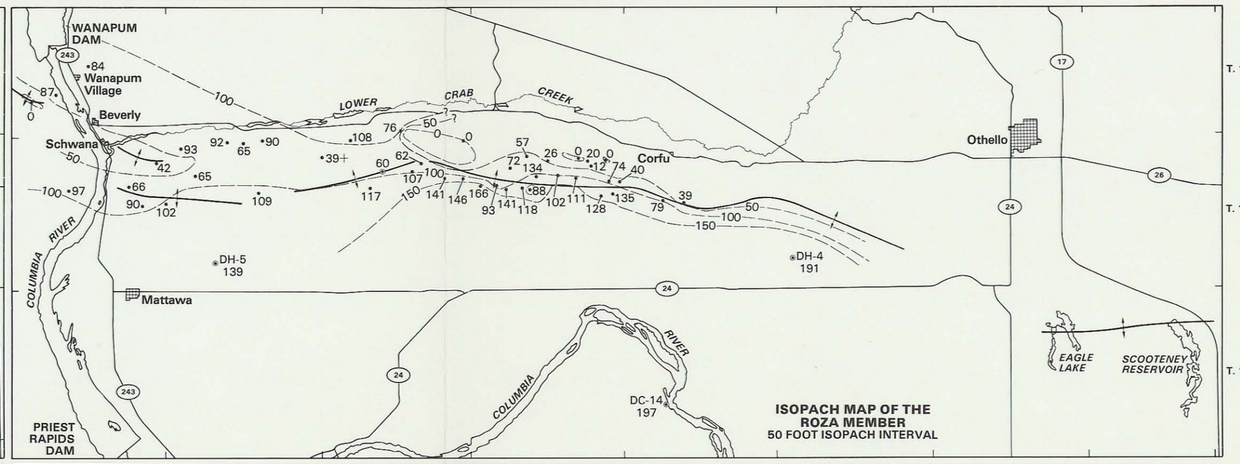
BY
S.P. REIDEL
1988

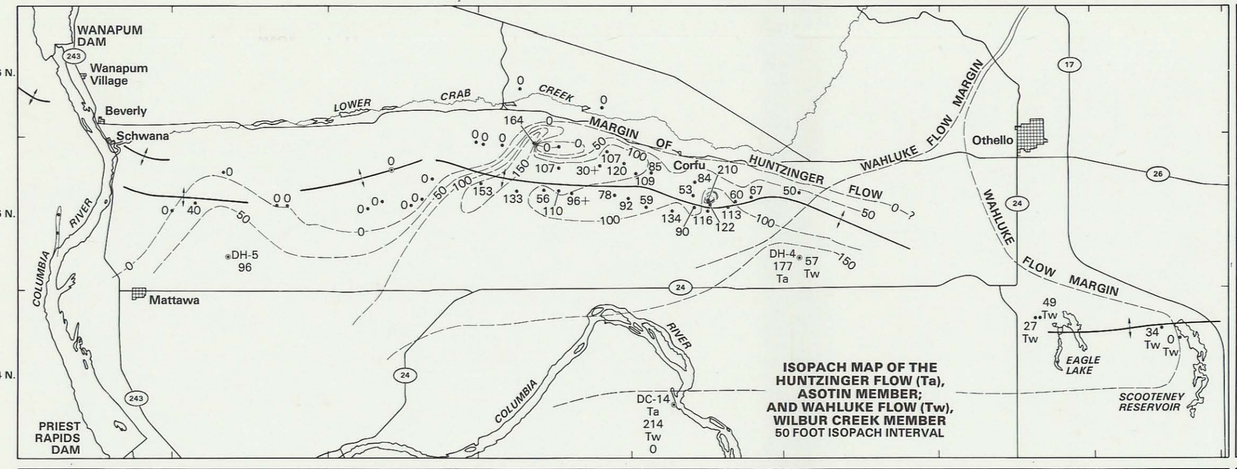
WASHINGTON STATE DEPARTMENT OF
Natural Resources
Brian Boyle - Commissioner of Public Lands
Art Stearns - Supervisor
Division of Geology and Earth Resources
Raymond Lasmanis, State Geologist

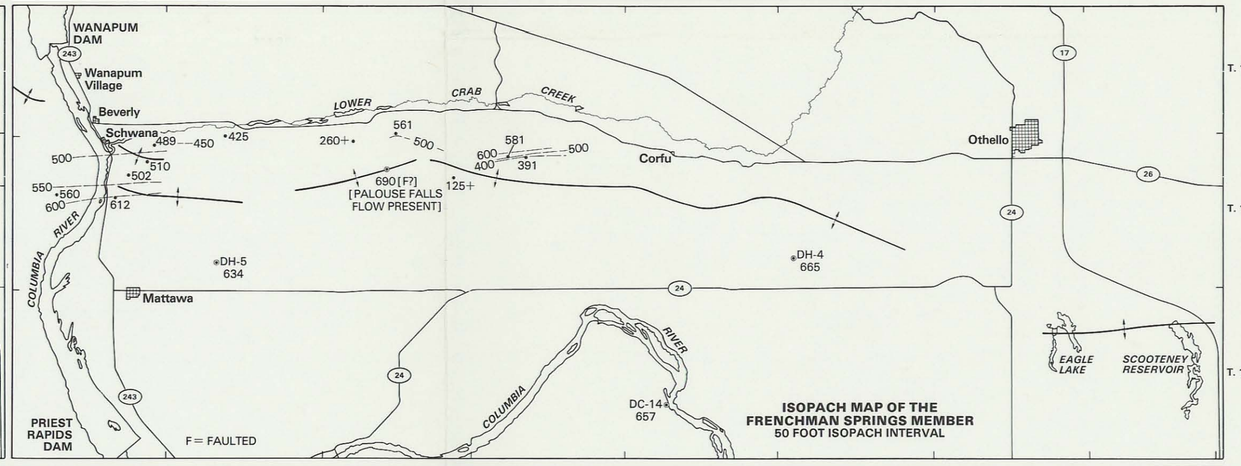


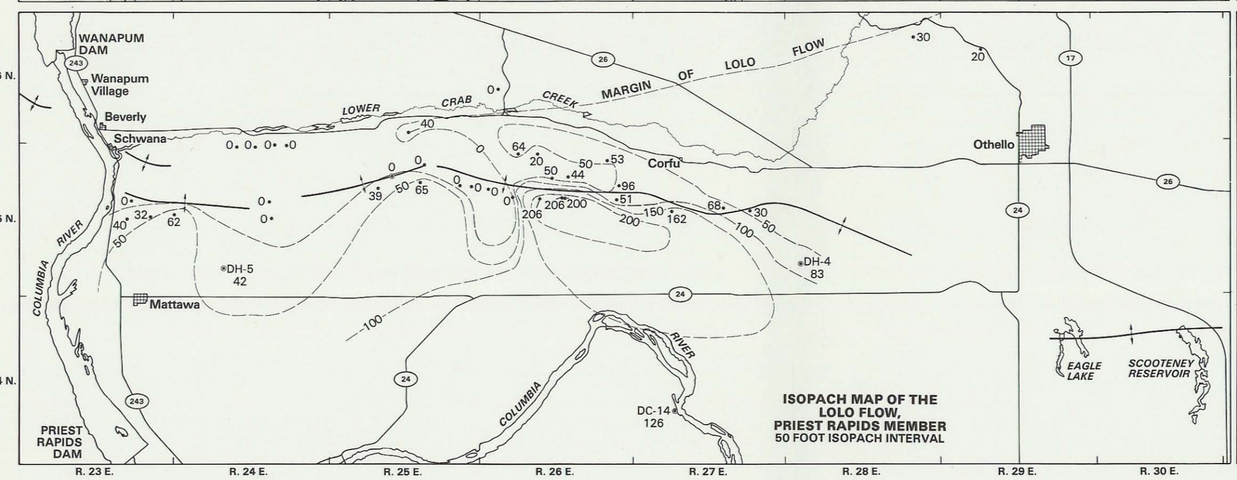


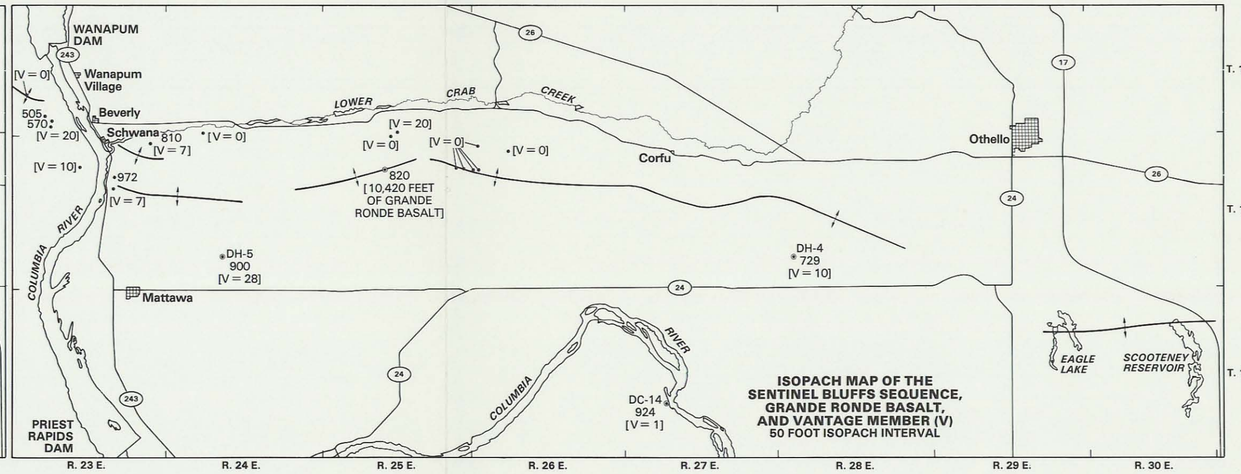












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