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MASTER

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Airborne Gamma-Ray Spectrometer and Magnetometer Survey

Victoria Quadrangle
(Washington)
Final Report
Volume II

C

prepared by

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LOCATION MAP

Victoria

VICTORIA QUADRANGLE

GEOLOGY

The geologic map of the Victoria quadrangle, which provided the geologic background for the interpretation of the radiometric data, was prepared for Bendix Field Engineering Corporation by Salisbury & Dietz, Inc. The explanation of the geologic legend, Appendix C, was taken from this map.

The Victoria quadrangle is in three physiographic provinces; the Olympic Mountains, the Puget Lowlands, and the northern portion of the Cascade Mountains.

The Olympic Mountains are chiefly of Tertiary age and are part of an eugeosynclinal accumulation of marine sedimentary and submarine volcanic rocks that total 50,000 feet as deposited. The earliest Tertiary rocks are a sequence of Eocene argillites and graywackes more than 30,000 feet thick that forms the core of the Olympic Mountains. This was followed by a thick sequence of submarine volcanic rocks. Near centers of volcanism, the accumulated thickness exceeds 20,000 feet, while away from these centers the basalt flows and breccias may exceed 10,000 feet in thickness. In the present Olympic Mountains, these volcanic rocks form many of the structural and topographic highs as they are more resistant to weathering. An uplift in late Eocene time raised the area of the Olympic Mountains above sea level and erosion provided much of the material which was deposited in nearby low areas. Further uplift near the close of the Miocene with intense deformation formed the present Olympic Mountains.

The Puget Lowlands lie nearly at sea level and much of the northern portion is occupied by Puget Sound and the San Juan Islands. The underlying formations are mostly part of the same eugeosynclinal accumulation which make up the Olympic Mountains. Pre-Devonian granitic rocks, Paleozoic sedimentary rocks, and Mesozoic sedi-

Figure 1

Radioactive Occurrences in Washington

Figure 2

mentary rocks crop out on the San Juan Islands. During the Pleistocene time, there was extensive glaciation and glacier cut troughs were formed in the greater Puget Sound area. Melting of the continental ice sheets including the lobe covering this area and the resultant rise in sea level, caused the glacier cut troughs of Puget Sound to be drowned by the Pacific Ocean. Extensive glaciofluvial deposits were accumulated during the Pleistocene in the lowlying Puget Lowlands.

The northern Cascade Mountains consist of a core of granitic rocks, metamorphosed sedimentary rocks, and metamorphosed volcanic rocks. This core is flanked to the east and west by less metamorphosed rocks and by late Paleozoic, Mesozoic, and Tertiary sedimentary and volcanic rocks. Superimposed on the preexisting topography are recent volcanic deposits, which have come from volcanic vents such as Mount St. Helens, Mount Adams, Mount Rainier, Glacier Peak, and Mount Baker.

Continental and marine sedimentary deposits crop out throughout the quadrangle. Metamorphic rocks crop out in the eastern half of the quadrangle. Quaternary eolian deposits, lacustrine deposits, glacial deposits, and alluvium are widespread.

RADIOACTIVE MINERAL OCCURRENCES IN WASHINGTON

Huntting, 1956; and Weissenborn, 1966 documented the radioactive occurrences in Washington (Figure 2). They did not record any in the Victoria quadrangle.

The following types of radioactive occurrence have been found in Washington (Huntting, 1956; Weissenborn, 1966):

- 1) Secondary uranium minerals along the contact between preCambrian metamorphosed sedimentary rocks and porphyritic quartz-monzonite of Cretaceous age -

Midnite mine, Stevens County.

- 2) Autunite filling fractures and open spaces in pegmatitic alaskite - Mount Spokane area, Spokane County; Lost Creek area, Pend Oreille County.
- 3) Secondary uranium minerals in interbedded tuffaceous sandstone, arkose, and carbonaceous shale - Midnite mine area, Stevens County.
- 4) Radioactivity in pegmatitic lenses in gneiss.
- 5) Strong radioactivity in soil and gravel around a radioactive spring - Bumping Lake, Yakima County.

The major uranium production from Washington state has been from the Midnite mine, Stevens County; and the Daybreak mine, Spokane County. Minor production has been reported from several other properties in the state (Weissenborn, 1966).

GEOPHYSICAL DATA INTERPETATION

Radiometric Data

A total of one (1) uranium anomaly meets the minimum statistical requirements as defined in Volume I. This anomaly is listed in Table 1 and is shown on the Uranium Anomaly Interpretation Map, Figure 3.

Potassium (%K), equivalent Uranium (ppm eU), equivalent Thorium (ppm eT), eU/eT, eU/K, eT/K, and magnetic pseudo-contour maps are presented in Appendix E. Stacked Profiles showing geologic strip maps along each flight-line, together with sensor data, and ancillary data are presented in Appendix F. All maps and profiles were prepared on a scale of 1:250,000, but have been reduced to

Figure 3

1:500,000 for presentation in Volume II.

Geologic unit designations given in Table 1 are those given on the Geology Map, Appendix B, and in the Explanation of the Geologic Legend, Appendix C.

TABLE 1 - URANIUM ANOMALIES IN THE VICTORIA QUADRANGLE

ANOMALY #	LINE #	GEOLOGIC UNIT	TYPE	STANDARD DEVIATIONS FROM MEAN * URANIUM									
				-2	-1	0	1	2	3	4	5	6	7
1	8	Trps	U	-	-	-	1	2	-	-	-	-	-

Anomaly #1 is over an exposure of the Permian Shuksan metamorphic suite which is predominantly phyllite (Trps).

REFERENCES

Huntting, M.T., (1956); Inventory of Washington Minerals, Part II: Metallic Minerals. Bulletin 37, Department of Natural Resources, State of Washington.

Weissenborn, A.E., (1966); Uranium IN Mineral and Water Resources of Washington. Prepared by the United States Geological Survey.

APPENDIX A - FLIGHT LINE MAP

APPENDIX B - GEOLOGY MAP

VICTORIA, B.C., CANADA

Compiled 1980

APPENDIX C - EXPLANATION OF GEOLOGIC LEGEND

SEDIMENTARY AND METASEDIMENTARY ROCKS

EXTRUSIVE IGNEOUS ROCKS

METAMORPHIC AND INTRUSIVE
IGNEOUS ROCKS

Cenozoic

- Qal Qls**
Surficial Deposits
- Qal- Unconsolidated clay, silt, sand and gravel; valley fill and beach deposits; includes low level terrace, marsh, peat and lacustrine deposits locally
- Qls- Landslide debris; slumped masses of bedrock and overburden

- Qg**
Glacial Deposits
- Qg- Unconsolidated deposits of glacial origin; includes moraine and stratified deposits of sand, gravel, silt and clay

- Ttru Ttrm Ttrl Ttrc Ttr**
Twin River Formation
- Ttru- Upper member; mudstone and siltstone; Lower Miocene
- Ttrm- Middle member; siltstone, mudstone and minor sandstone; Oligocene(?) to Lower Miocene
- Ttrl- Lower member; lithic sandstone and minor siltstone; channel deposits of conglomerate and pebbly sandstone occur locally at base; Upper Eocene to Oligocene(?)
- Ttrc- Massive conglomerate; Upper Eocene to Oligocene(?)
- Ttr- Sandstone, siltstone and mudstone undifferentiated; Upper Eocene to Lower Miocene

- Two Twoc Tb**
Western Olympic Lithic Assemblage
- Two- Sandstone and minor conglomerate with siltstone and argillite; Upper Eocene to Oligocene(?)
- Twoc- Conglomerate
- Tb- Basaltic rocks, greenstone and greenschist

- Tlc Tls**
Middle and Upper Eocene Lyre Formation
- Tlc- Pebble to cobble conglomerate
- Tls- Lithic sandstone and minor siltstone

- Tal Tav**
Middle to Upper Eocene Aldwell Formation
- Tal- Siltstone, and minor sandstone and conglomerate
- Tav- Pillow basalt, breccia and tuff in unit Tal

- Tcbc Tcs**
Lower to Middle Eocene Crescent Formation
- Tcbc- Basaltic conglomerate, breccia, and minor argillite
- Tcs- Isolated lenses of sedimentary rocks within the Crescent Formation; includes breccia, tuff, conglomerate, argillite, siltstone and lithic sandstone

- Tm Tn**
Marine and Nonmarine Sediments
- Tm- Interfingering marine and nonmarine conglomerate, sandstone, siltstone and shale
- Tn- Nonmarine conglomerate, sandstone, tuff beds and mudflow material

- Tq**
Qumiper Sandstone
- Tq- Feldspathic sandstone; layers of fossil debris and concretions common; Upper Eocene to Oligocene

- Tes**
Middle Eocene Elwha Lithic Assemblage
- Tes- Slate and phyllite; includes sandstone semischist and conglomerate

- Tnmu**
Eocene Needle-Gray Wolf Assemblage
- Tnmu- Micaceous sandstone with siltstone and slate

- Tbm Tbmc**
Blue Mountain Unit-Crescent Formation
- Tbm- Sandstone and argillite; sandstone contains coaly plant fragments
- Tbmc- Conglomerate and feldspatholithic sandstone

- Th**
Huntingdon Formation
- Th- Predominantly nonmarine arkosic sandstone and shale

- Tr**
Cavanaugh Rhyolite
- Tr- Porphyritic rhyolite flow or tuff

- Tlv**
Middle and Upper Eocene Lyre Formation
- Tlv- Hornblende andesite flows, tuffs and breccias

- Tv**
Tertiary Volcanics Undivided
- Tv- Includes andesite, basalt, and rhyolite flows and breccia; associated pyroclastic rocks and sediments locally

- Tcb Tcbb**
Lower to Middle Eocene Crescent Formation
- Tcb- Basalt flows, pillows, and breccia; minor diabase and gabbro
- Tcbb- Basalt flows and mudflow breccia; includes interbeds of sedimentary rocks

- Td**
Early Tertiary Twin Sisters Dunite
- Td- Partly serpentinized saxonite and dunite

Quaternary

Miocene Pleistocene Pleistocene and Recent

Oligocene

Eocene

Tertiary

Paleocene

APPENDIX D - FLIGHT LINE/GEOLOGY MAP

APPENDIX E - PSEUDO-CONTOUR MAPS

VICTORIA

Total Count

CONTOUR INTERVAL =
REFERENCE CONTOUR

100.00
400.00

eU

CONTOUR INTERVAL =
REFERENCE CONTOUR (00000) =

.20
n.nn

eTh

CONTOUR INTERVAL =
REFERENCE CONTOUR (00000) =

.50
0.00

K40

CONTOUR INTERVAL =
REFERENCE CONTOUR

(00000) =

.15
0.00

eU/eTH

CONTOUR INTERVAL = .05
REFERENCE CONTOUR (00000) = 0.00

VICTORIA

eU/K 40

CONTOUR INTERVAL =
REFERENCE CONTOUR (00000) =

.30
0.00

eTh/K₄₀

CONTOUR INTERVAL =
REFERENCE CONTOUR (00000) =

.75
0.00

APPENDIX F - STACKED PROFILES

LINE NO. TL1. VICTORIA, WA
MILES 0 4 8 12 16 MILES HIGH LIFE - QEB

LINE NO. TL2 VICTORIA, WA
MILES 0 4 8 12 16 MILES HIGH LIFE - QEB

APPENDIX G - ANOMALY MAPS

VICTORIA

EU

HIGH LIFE - QEB

0 4 8 12 16 MILES

VICTORIA

K

HIGH LIFE - QEB

VICTORIA

EU/K

HIGH LIFE - QEB

MILES 0 4 8 12 16

VICTORIA

ETH/K

HIGH LIFE - QEB

0 4 8 12 16 MILES

G-6

APPENDIX H - GEOLOGIC HISTOGRAMS

UNIT QAL

UNIT QLS

UNIT QG

UNIT TTRU

UNIT TIRL

VICTORIA.WA

UNIT TTR

UNIT TM

UNIT TQ

UNIT TLS

UNIT TLV

UNIT IAL
VICTORIA.WA

UNIT IO

UNIT IV
VICTORIA.WA

UNIT TCS

UNIT PIB

UNIT PID

UNIT PTU

UNIT KJN

UNIT PS

UNIT PDC

UNIT PDCV

UNIT PDT

APPENDIX I - SPEED AND ALTITUDE HISTOGRAMS

VICTORIA

APPENDIX J - STATISTICAL TABLES

UNIT	ETH			EU			K			EU/ETH			EU/K			ETH/K		
	MEAN	ST.DEV.	EVENTS	MEAN	ST.DEV.	EVENTS	MEAN	ST.DEV.	EVENTS	MEAN	ST.DEV.	EVENTS	MEAN	ST.DEV.	EVENTS	MEAN	ST.DEV.	EVENTS
			DIS.			DIS.			DIS.			DIS.			DIS.			DIS.
JTRC	1.95	.56	74 N	.76	.26	48 U	.77	.18	74 L	.44	.24	48 N	.92	.28	48 N	2.62	.85	74 N
JU	1.18	.57	90 L	.58	.12	12 U	.30	.16	178 L	.34	.12	9 U	1.54	1.14	12 U	3.51	1.56	89 U
KJN	1.71	.61	106 U	.59	.12	46 U	.63	.18	115 N	.51	.25	41 U	1.16	.48	46 N	2.80	1.13	106 U
KJNV	1.42	.50	22 U	.64	.10	11 U	.48	.12	29 L	.44	.15	11 U	1.18	.29	11 U	2.65	.83	22 U
PDC	2.18	.84	363 L	.81	.29	172 L	.65	.24	379 N	.40	.17	170 L	1.24	.59	172 L	3.46	1.39	362 N
PDCV	1.63	.52	156 L	.71	.28	56 N	.36	.10	179 L	.44	.22	47 N	1.96	.72	56 N	4.74	1.62	156 U
PDT	1.41	.66	157 L	.66	.17	39 L	.44	.19	208 N	.53	.27	29 U	1.51	.67	39 N	3.11	1.16	157 L
PS	1.89	.58	156 L	.68	.21	75 L	.52	.23	158 L	.39	.16	75 L	1.54	.82	75 U	3.99	1.25	156 U
PTB	1.28	.35	103 L	.55	.14	33 U	.24	.07	116 L	.46	.21	24 U	2.37	.75	33 U	5.85	2.28	103 N
PTD	1.41	.55	19 U	.73	.17	17 U	.46	.09	19 N	.58	.23	17 U	1.74	.68	17 U	3.28	1.51	19 U
PTU	1.64	.89	406 L	.69	.30	135 L	.39	.27	607 L	.38	.16	115 L	1.58	1.10	135 U	3.77	1.39	405 N
QAL	2.74	.86	2423 N	.90	.28	1651 L	.89	.23	2451 N	.35	.16	1646 L	.99	.36	1651 L	3.12	.87	2423 L
QG	2.20	.92	10084 L	.75	.25	4229 N	.62	.21	10646 N	.39	1.53	4119 N	1.22	.56	4229 N	3.55	1.28	10081 L
QLS	1.07	.32	66 L	.53	.15	10 U	.27	.11	116 L	.41	.10	5 U	2.29	1.12	10 U	4.12	1.48	66 N
TAL	1.55	.55	183 L	.51	.13	24 L	.49	.11	212 L	.37	.13	22 U	.99	.28	24 U	3.15	.90	183 N
TCB	1.54	.47	56 N	.56	.10	7 U	.55	.15	61 N	.30	.07	7 U	.83	.12	7 U	2.85	1.00	56 U
TCBB	1.38	.48	482 L	.51	.10	42 N	.44	.12	611 L	.44	.15	28 N	1.36	.45	42 N	3.16	1.07	482 N
TCS	.91	.05	2 U	.59	0.00	1 U	.42	.11	7 U	0.00	0.00	0 U	1.28	0.00	1 U	1.66	.24	2 U
TD	1.32	.47	11 U	.87	.30	9 U	.23	.09	26 L	.73	.15	3 U	3.57	.98	5 U	5.20	1.56	11 U
TH	1.94	.66	70 N	.63	.21	22 U	.56	.17	71 L	.40	.19	22 L	1.07	.33	22 U	3.58	1.18	70 U
TKC	2.62	1.28	2206 L	.79	.33	1189 L	.64	.28	2309 N	.30	.15	1165 L	1.17	.50	1189 L	4.10	1.36	2206 N
TLC	1.53	.53	97 U	.51	.10	18 L	.52	.13	104 L	.32	.13	17 U	.92	.27	18 U	2.97	.94	97 U
TLS	1.46	.51	39 U	.53	.11	11 U	.50	.14	39 L	.48	.13	11 U	1.45	.35	11 U	2.95	.75	39 U
TLV	1.98	.32	14 U	0.00	0.00	0 U	.64	.05	14 U	0.00	0.00	0 U	0.00	0.00	0 U	3.07	.44	14 U
TM	1.87	.64	18 U	.65	.17	14 U	.56	.10	18 U	.38	.18	14 U	1.27	.57	14 U	3.42	1.04	18 U
TQ	1.59	.48	57 L	.87	.24	12 U	.57	.16	67 N	.75	.38	12 U	1.46	.42	12 U	2.75	1.06	57 U
TRPS	1.99	.71	1294 L	.72	.25	728 L	.48	.15	1331 N	.40	.20	720 L	1.53	.66	728 L	4.22	1.36	1294 N
TRS	2.01	.59	95 U	.67	.20	36 L	.76	.18	92 L	.33	.12	36 N	.90	.25	36 L	2.88	1.49	92 N
TTR	1.28	.49	18 U	.52	.11	4 U	.48	.06	21 U	.48	.32	3 U	1.08	.19	4 U	2.68	.94	18 U
TTRC	1.42	.40	27 U	.59	0.00	1 U	.63	.12	27 L	.69	0.00	1 U	.91	0.00	1 U	2.41	.96	27 U
TTRL	1.80	.65	288 L	.59	.15	76 L	.58	.17	296 L	.37	.16	69 L	1.07	.32	76 U	3.17	1.08	288 N
TTRU	2.41	.41	12 U	.58	.03	2 U	.81	.05	12 L	.24	.00	2 U	.71	.06	2 U	2.97	.35	12 U
TV	1.32	.34	75 L	.78	.24	11 U	.50	.12	82 N	.60	.16	8 U	1.76	.68	11 U	2.78	1.10	75 L
UNK	1.75	.38	23 L	0.00	0.00	0 U	.46	.06	23 N	0.00	0.00	0 U	0.00	0.00	0 U	3.82	.91	23 U
WA	1.42	.64	629 L	.70	.20	147 L	.23	.22	2098 L	.48	.20	122 L	1.36	.78	136 N	3.46	1.97	560 L

N=NORMAL DISTRIBUTION
L=LOG-NORMAL DISTRIBUTION
U=UNKNOWN DISTRIBUTION

	JTRC	JU	KJN	KJNV	PDC	PDCV	PDT	PS	PTB	PTD	PTU	QAL	QG	QLS	TAL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78	1.53	0.00	1.39
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29	2.23	0.00	1.57
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.82	0.00	0.00	0.00	3.03	2.19	0.00	0.00
4	0.00	0.00	1.41	0.00	0.00	0.00	0.00	1.70	0.00	0.00	0.00	2.15	1.92	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	2.82	1.68	0.00	0.00
6	0.00	.99	1.91	1.42	0.00	0.00	1.06	0.00	0.00	0.00	0.00	2.47	1.69	1.07	0.00
7	0.00	0.00	1.75	0.00	2.23	0.00	1.06	2.43	0.00	1.41	1.51	3.40	2.08	0.00	0.00
8	1.95	0.00	1.64	0.00	2.76	0.00	2.01	0.00	0.00	0.00	1.74	1.39	2.04	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.41	2.61	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	2.81	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	2.89	2.82	0.00	0.00
12	0.00	0.00	0.00	0.00	2.06	1.63	0.00	0.00	0.00	0.00	0.00	2.98	2.74	0.00	0.00
501	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.33	0.00	0.00
502	0.00	1.87	0.00	0.00	1.92	0.00	0.00	0.00	1.30	0.00	2.82	2.45	2.05	0.00	0.00

	TCB	TCBB	TCS	TD	TH	TKC	TLC	TLS	TLV	TM	TQ	TRPS	TRS	TTR	TTRC
1	0.00	1.40	.91	0.00	0.00	0.00	0.00	0.00	1.98	0.00	1.59	0.00	0.00	1.28	0.00
2	1.54	0.00	0.00	0.00	0.00	0.00	1.53	1.46	0.00	0.00	0.00	0.00	0.00	0.00	1.42
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	2.03	0.00	0.00	0.00	0.00	0.00	2.13	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	3.47	0.00	0.00	0.00	0.00	0.00	1.84	2.01	0.00	0.00
9	0.00	0.00	0.00	1.32	0.00	2.67	0.00	0.00	0.00	0.00	0.00	2.30	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	2.44	3.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	1.71	2.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	2.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
501	0.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.00	2.02	0.00	2.03	0.00	0.00	0.00

	TTRL	TTRU	TV	UNK	WA
1	0.00	0.00	1.32	0.00	1.29
2	1.80	2.41	0.00	1.75	1.37
3	0.00	0.00	0.00	0.00	1.80
4	0.00	0.00	0.00	0.00	1.52
5	0.00	0.00	0.00	0.00	1.59
6	0.00	0.00	0.00	0.00	1.18
7	0.00	0.00	0.00	0.00	1.21
8	0.00	0.00	0.00	0.00	1.05
9	0.00	0.00	0.00	0.00	1.52
10	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	1.09
501	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	1.14

COMPUTER LINES 1 THRU 12 REFER TO PROFILE LINES 1 THRU 12.

COMPUTER LINES 501 THRU 502 REFER TO NORTH - SOUTH TIE LINES 1 THRU 2.

GEOLOGIC UNIT AVERAGE VALUE AS A
FUNCTION OF MAP LINE FOR PPM ETH

	JTRC	JU	KJN	KJNV	PDC	PDCV	PDT	PS	PTB	PTD	PTU	QAL	QG	QLS	TAL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.76	.65	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.70	.71	0.00	.51
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.77	0.00	0.00	0.00	1.01	.82	0.00	0.00
4	0.00	0.00	.60	0.00	0.00	0.00	0.00	.62	0.00	0.00	0.00	.90	.67	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.59	.93	.78	0.00	0.00
6	0.00	.53	.55	.64	0.00	0.00	.66	0.00	0.00	0.00	0.00	.85	.68	.53	0.00
7	0.00	0.00	0.00	0.00	.79	0.00	.61	.69	0.00	.73	.51	1.01	.75	0.00	0.00
8	.76	0.00	.62	0.00	1.13	0.00	.76	0.00	0.00	0.00	.66	.78	.74	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.97	.87	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.92	.78	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.44	0.00	0.00	.79	.75	0.00	0.00
12	0.00	0.00	0.00	0.00	.72	.71	0.00	0.00	0.00	0.00	0.00	.90	.83	0.00	0.00
501	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.83	.81	0.00	0.00
502	0.00	.60	0.00	0.00	.89	0.00	0.00	0.00	.56	0.00	.88	.80	.75	0.00	0.00

	TCB	TCBB	TCS	TD	TH	TKC	TLC	TLS	TLV	TM	TQ	TRPS	TRS	TTR	TTRC
1	0.00	.52	.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.87	0.00	0.00	.52	0.00
2	.56	0.00	0.00	0.00	0.00	0.00	.51	.53	0.00	0.00	0.00	0.00	0.00	0.00	.59
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	.62	0.00	0.00	0.00	.70	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	.61	0.00	0.00	0.00	0.00	0.00	.56	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	.73	0.00	0.00	0.00	0.00	0.00	.83	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	.77	0.00	0.00	0.00	0.00	0.00	.67	.67	0.00	0.00
9	0.00	0.00	0.00	.87	0.00	.77	0.00	0.00	0.00	0.00	0.00	.81	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	.82	.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	.48	.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
501	0.00	.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	0.00	.60	0.00	0.00	0.00	.62	0.00	.69	0.00	0.00	0.00

	TTRL	TTRU	TV	UNK	WA
1	0.00	0.00	.78	0.00	.54
2	.59	.58	0.00	0.00	.56
3	0.00	0.00	0.00	0.00	.78
4	0.00	0.00	0.00	0.00	.81
5	0.00	0.00	0.00	0.00	.70
6	0.00	0.00	0.00	0.00	.56
7	0.00	0.00	0.00	0.00	.54
8	0.00	0.00	0.00	0.00	.41
9	0.00	0.00	0.00	0.00	.62
10	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	.76
501	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	.55

COMPUTER LINES 1 THRU 12 REFER TO PROFILE LINES 1 THRU 12.

COMPUTER LINES 501 THRU 502 REFER TO NORTH - SOUTH TIE LINES 1 THRU 2.

GEOLOGIC UNIT AVERAGE VALUE AS A
FUNCTION OF MAP LINE FOR PPM EU

	JTRC	JU	KJN	KJNV	PDC	PDCV	PDT	PS	PTB	PTD	PTU	QAL	QG	QLS	TAL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.59	.54	0.00	.48
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.84	.65	0.00	.49
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.48	0.00	0.00	0.00	.91	.70	0.00	0.00
4	0.00	0.00	.43	0.00	0.00	0.00	0.00	.38	0.00	0.00	0.00	.66	.56	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.24	1.00	.54	0.00	0.00
6	0.00	.27	.75	.48	0.00	0.00	.43	0.00	0.00	0.00	0.00	.88	.55	.27	0.00
7	0.00	0.00	.52	0.00	.77	0.00	.35	.90	0.00	.46	.43	1.02	.58	0.00	0.00
8	.77	0.00	.63	0.00	.66	0.00	.58	0.00	0.00	0.00	.49	.30	.62	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.89	.73	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	.75	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.23	0.00	0.00	.88	.71	0.00	0.00
12	0.00	0.00	0.00	0.00	.60	.36	0.00	0.00	0.00	0.00	0.00	.95	.63	0.00	0.00
501	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.86	.86	0.00	0.00
502	0.00	.62	0.00	0.00	.58	0.00	0.00	0.00	.25	0.00	.86	.80	.56	0.00	0.00

	TCB	TCBB	TCS	TD	TH	TKC	TLC	TLS	TLV	TM	TQ	TRPS	TRS	TTR	TTRC
1	0.00	.44	.42	0.00	0.00	0.00	0.00	0.00	.64	0.00	.57	0.00	0.00	.48	0.00
2	.55	0.00	0.00	0.00	0.00	0.00	.52	.50	0.00	0.00	0.00	0.00	0.00	0.00	.63
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	.60	0.00	0.00	0.00	.40	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	.47	0.00	0.00	0.00	0.00	0.00	.32	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	.44	0.00	0.00	0.00	0.00	0.00	.47	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	.82	0.00	0.00	0.00	0.00	0.00	.47	.76	0.00	0.00
9	0.00	0.00	0.00	.23	0.00	.69	0.00	0.00	0.00	0.00	0.00	.52	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	.77	.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	.47	.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
501	0.00	.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	0.00	.46	0.00	0.00	0.00	.61	0.00	.49	0.00	0.00	0.00

	TTRL	TTRU	TV	UNK	WA
1	0.00	0.00	.50	0.00	.30
2	.58	.81	0.00	.46	.17
3	0.00	0.00	0.00	0.00	.39
4	0.00	0.00	0.00	0.00	.21
5	0.00	0.00	0.00	0.00	.43
6	0.00	0.00	0.00	0.00	.24
7	0.00	0.00	0.00	0.00	.16
8	0.00	0.00	0.00	0.00	.12
9	0.00	0.00	0.00	0.00	.17
10	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	.49
501	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	.22

COMPUTER LINES 1 THRU 12 REFER TO PROFILE LINES 1 THRU 12.

COMPUTER LINES 501 THRU 502 REFER TO NORTH - SOUTH TIE LINES 1 THRU 2.

GEOLOGIC UNIT AVERAGE VALUE AS A

FUNCTION OF MAP LINE FOR %K

	JTRC	JU	KJN	KJNV	PDC	PDCV	PDT	PS	PTB	PTD	PTU	QAL	QG	QLS	TAL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.47	.50	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.25	.35	0.00	.37
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.45	0.00	0.00	0.00	.35	.42	0.00	0.00
4	0.00	0.00	.61	0.00	0.00	0.00	0.00	.42	0.00	0.00	0.00	.38	.41	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.50	.36	.49	0.00	0.00
6	0.00	.55	.41	.44	0.00	0.00	.63	0.00	0.00	0.00	0.00	.38	.46	.41	0.00
7	0.00	0.00	0.00	0.00	.40	0.00	.64	.28	0.00	.58	.39	.31	.41	0.00	0.00
8	.44	0.00	.54	0.00	.36	0.00	.29	0.00	0.00	0.00	.40	.66	.41	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.30	.31	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.30	.29	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.26	0.00	0.00	.32	.50	0.00	0.00
12	0.00	0.00	0.00	0.00	.38	.44	0.00	0.00	0.00	0.00	0.00	.33	.33	0.00	0.00
501	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.52	.33	0.00	0.00
502	0.00	.31	0.00	0.00	.52	0.00	0.00	0.00	.47	0.00	.28	.36	.36	0.00	0.00

	TCB	TCBB	TCS	TD	TH	TKC	TLC	TLS	TLV	TM	TQ	TRPS	TRS	TTR	TTRC
1	0.00	.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.75	0.00	0.00	.48	0.00
2	.30	0.00	0.00	0.00	0.00	0.00	.32	.48	0.00	0.00	0.00	0.00	0.00	0.00	.69
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	.34	0.00	0.00	0.00	.49	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	.54	0.00	0.00	0.00	0.00	0.00	.56	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	.38	0.00	0.00	0.00	0.00	0.00	.45	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	.24	0.00	0.00	0.00	0.00	0.00	.41	.33	0.00	0.00
9	0.00	0.00	0.00	.73	0.00	.31	0.00	0.00	0.00	0.00	0.00	.37	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	.41	.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	.40	.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
501	0.00	.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	0.00	.35	0.00	0.00	0.00	.31	0.00	.42	0.00	0.00	0.00

	TTRL	TTRU	TV	UNK	WA
1	0.00	0.00	.60	0.00	.40
2	.37	.24	0.00	0.00	.28
3	0.00	0.00	0.00	0.00	.47
4	0.00	0.00	0.00	0.00	.45
5	0.00	0.00	0.00	0.00	.50
6	0.00	0.00	0.00	0.00	.51
7	0.00	0.00	0.00	0.00	.51
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	.33
10	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	.70
501	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	.33

COMPUTER LINES 1 THRU 12 REFER TO PROFILE LINES 1 THRU 12.

COMPUTER LINES 501 THRU 502 REFER TO NORTH - SOUTH TIE LINES 1 THRU 2.

GEOLOGIC UNIT AVERAGE VALUE AS A
FUNCTION OF MAP LINE FOR EU/ETH

	JTRC	JU	KJN	KJNV	PDC	PDCV	PDT	PS	PTB	PTD	PTU	QAL	QG	QLS	TAL			
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	1.27	0.00	0.00	00.0	00.0	1
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.87	1.09	0.00	.99	00.0	00.0	2
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64	0.00	0.00	0.00	1.12	1.21	0.00	0.00	00.0	00.0	3
4	0.00	0.00	1.74	0.00	0.00	0.00	0.00	1.95	0.00	0.00	0.00	1.18	1.34	0.00	0.00	00.0	00.0	4
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.78	.93	1.25	0.00	0.00	00.0	00.0	5
6	0.00	2.83	.85	1.18	0.00	0.00	1.75	0.00	0.00	0.00	0.00	.96	1.25	2.29	0.00	22.	00.0	6
7	0.00	0.00	0.00	0.00	.98	0.00	1.58	.80	0.00	1.74	1.19	1.00	1.46	0.00	0.00	00.0	00.0	7
8	.92	0.00	1.05	0.00	1.79	0.00	.97	0.00	0.00	0.00	1.33	2.57	1.33	0.00	0.00	00.0	00.0	8
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	1.03	0.00	0.00	00.0	00.0	9
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.87	1.00	0.00	0.00	00.0	00.0	10
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.00	0.00	.91	1.14	0.00	0.00	00.0	00.0	11
12	0.00	0.00	0.00	0.00	1.15	1.96	0.00	0.00	0.00	0.00	0.00	.99	1.41	0.00	0.00	00.0	00.0	12
501	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01	.85	0.00	0.00	00.0	00.0	501
502	0.00	.90	0.00	0.00	1.73	0.00	0.00	0.00	2.47	0.00	.90	1.00	1.21	0.00	0.00	00.0	00.0	502

	TCB	TCBB	TCS	TD	TH	TKC	TLC	TLS	TLV	TM	TO	TRPS	TRS	TTR	TTRC			
1	0.00	1.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	1.08	0.00	00.0	00.0	1
2	.83	0.00	0.00	0.00	0.00	0.00	.92	1.45	0.00	0.00	0.00	0.00	0.00	0.00	.91	00.0	00.0	2
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00.0	3
4	0.00	0.00	0.00	0.00	0.00	1.04	0.00	0.00	0.00	1.77	0.00	0.00	0.00	0.00	0.00	00.0	00.0	4
5	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00.0	5
6	0.00	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00	0.00	1.74	0.00	0.00	0.00	00.0	00.0	6
7	0.00	0.00	0.00	0.00	0.00	1.69	0.00	0.00	0.00	0.00	0.00	2.38	0.00	0.00	0.00	00.0	00.0	7
8	0.00	0.00	0.00	0.00	0.00	.96	0.00	0.00	0.00	0.00	0.00	1.50	.90	0.00	0.00	00.0	00.0	8
9	0.00	0.00	0.00	3.57	0.00	1.08	0.00	0.00	0.00	0.00	0.00	1.57	0.00	0.00	0.00	00.0	00.0	9
10	0.00	0.00	0.00	0.00	.96	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00.0	10
11	0.00	0.00	0.00	0.00	1.17	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00.0	11
12	0.00	0.00	0.00	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00.0	12
501	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00.0	501
502	0.00	0.00	0.00	0.00	0.00	1.28	0.00	0.00	0.00	.99	0.00	1.45	0.00	0.00	0.00	00.0	00.0	502

	TTRL	TTRU	TV	UNK	WA													
1	0.00	0.00	1.76	0.00	1.00													1
2	1.07	.71	0.00	0.00	.85													2
3	0.00	0.00	0.00	0.00	1.46													3
4	0.00	0.00	0.00	0.00	1.22													4
5	0.00	0.00	0.00	0.00	1.49													5
6	0.00	0.00	0.00	0.00	1.05													6
7	0.00	0.00	0.00	0.00	1.43													7
8	0.00	0.00	0.00	0.00	0.00													8
9	0.00	0.00	0.00	0.00	1.06													9
10	0.00	0.00	0.00	0.00	0.00													10
11	0.00	0.00	0.00	0.00	0.00													11
12	0.00	0.00	0.00	0.00	1.66													12
501	0.00	0.00	0.00	0.00	0.00													501
502	0.00	0.00	0.00	0.00	.83													502

COMPUTER LINES 1 THRU 12 REFER TO PROFILE LINES 1 THRU 12.

COMPUTER LINES 501 THRU 502 REFER TO NORTH - SOUTH TIE LINES 1 THRU 2.

GEOLOGIC UNIT AVERAGE VALUE AS A

FUNCTION OF MAP LINE FOR EU/2K

	JTRC	JU	KJN	KJNV	PDC	PDCV	PDT	PS	PTB	PTD	PTU	QAL	QG	QLS	TAL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.95	2.85	0.00	3.05
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.96	3.46	0.00	3.16
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.84	0.00	0.00	0.00	3.38	3.22	0.00	0.00
4	0.00	0.00	3.61	0.00	0.00	0.00	0.00	4.57	0.00	0.00	0.00	3.46	3.62	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.09	2.82	2.93	0.00	0.00
6	0.00	3.66	2.50	2.65	0.00	0.00	2.48	0.00	0.00	0.00	0.00	2.82	3.13	4.12	0.00
7	0.00	0.00	3.38	0.00	2.89	0.00	3.30	2.82	0.00	3.28	3.71	3.38	3.75	0.00	0.00
8	2.62	0.00	2.31	0.00	4.33	0.00	3.26	0.00	0.00	0.00	3.59	4.56	3.48	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.84	3.49	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.10	3.80	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.16	0.00	0.00	3.36	4.07	0.00	0.00
12	0.00	0.00	0.00	0.00	3.49	4.74	0.00	0.00	0.00	0.00	0.00	3.18	4.46	0.00	0.00
501	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	2.76	0.00	0.00
502	0.00	2.93	0.00	0.00	3.65	0.00	0.00	0.00	5.77	0.00	3.65	3.10	3.61	0.00	0.00

	TCB	TCBB	TCS	TD	TH	TKC	TLC	TLS	TLV	TM	TQ	TRPS	TRS	TTR	TTRC
1	0.00	3.17	1.66	0.00	0.00	0.00	0.00	0.00	3.07	0.00	2.75	0.00	0.00	2.68	0.00
2	2.85	0.00	0.00	0.00	0.00	0.00	2.97	2.95	0.00	0.00	0.00	0.00	0.00	0.00	2.41
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	3.44	0.00	0.00	0.00	3.68	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	2.58	0.00	0.00	0.00	0.00	0.00	3.14	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00	0.00	0.00	4.70	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	0.00	0.00	4.05	2.88	0.00	0.00
9	0.00	0.00	0.00	5.20	0.00	3.79	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	3.29	4.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	3.71	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
501	0.00	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	0.00	3.86	0.00	0.00	0.00	3.32	0.00	4.37	0.00	0.00	0.00

	TTRL	TTRU	TV	UNK	WA
1	0.00	0.00	2.78	0.00	2.62
2	3.17	2.97	0.00	3.82	3.54
3	0.00	0.00	0.00	0.00	3.16
4	0.00	0.00	0.00	0.00	4.63
5	0.00	0.00	0.00	0.00	2.74
6	0.00	0.00	0.00	0.00	3.01
7	0.00	0.00	0.00	0.00	4.94
8	0.00	0.00	0.00	0.00	5.95
9	0.00	0.00	0.00	0.00	3.88
10	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	2.12
501	0.00	0.00	0.00	0.00	0.00
502	0.00	0.00	0.00	0.00	32.06

COMPUTER LINES 1 THRU 12 REFER TO PROFILE LINES 1 THRU 12.

COMPUTER LINES 501 THRU 502 REFER TO NORTH - SOUTH TIE LINES 1 THRU 2.

GEOLOGIC UNIT AVERAGE VALUE AS A
FUNCTION OF MAP LINE FOR ETH/XK

APPENDIX K - MAGNETIC AND ANCILLARY PROFILES

APPENDIX L - TEST LINE DATA

PRE-FLIGHT AND POST-FLIGHT TEST LINE DATA

VICTORIA QUADRANGLE

	<u>8/5/80</u>	<u>8/6/80</u>	<u>8/7/80</u>
Pre TL	14.23	14.46	14.66
Post TL		14.83	14.59
Pre Bi	6.56	6.41	6.60
Post Bi		6.27	6.59
Pre K	66.37	68.73	72.99
Post K		64.48	67.34
Pre TC	622.49	617.80	613.30
Post TC		626.76	644.05

NOTE: NO PM TEST DUE TO WEATHER (8/5/80)