

82-#626-10676.
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1982 SOIL GEOCHEMICAL SURVEY
on
EMPIRE I CLAIM

N.T.S. 920/2W
LILLOOET MINING DIVISION
Latitude: 51°03' Longitude: 122°47'

for
WESTMIN RESOURCES LIMITED

by
DEL W. FERGUSON
JUNE 1982

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,676

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INTRODUCTION

Location and Access

The Empire I claim is located in the Chilcotin Range of the Coast Mountains straddling the junction between Tyaughton and Relay Creeks. Access to the claim is via gravel road for 21.5 kilometres north of Carpenter Lake. The town of Goldbridge lies 33 kilometres to the south.

Topography and Vegetation

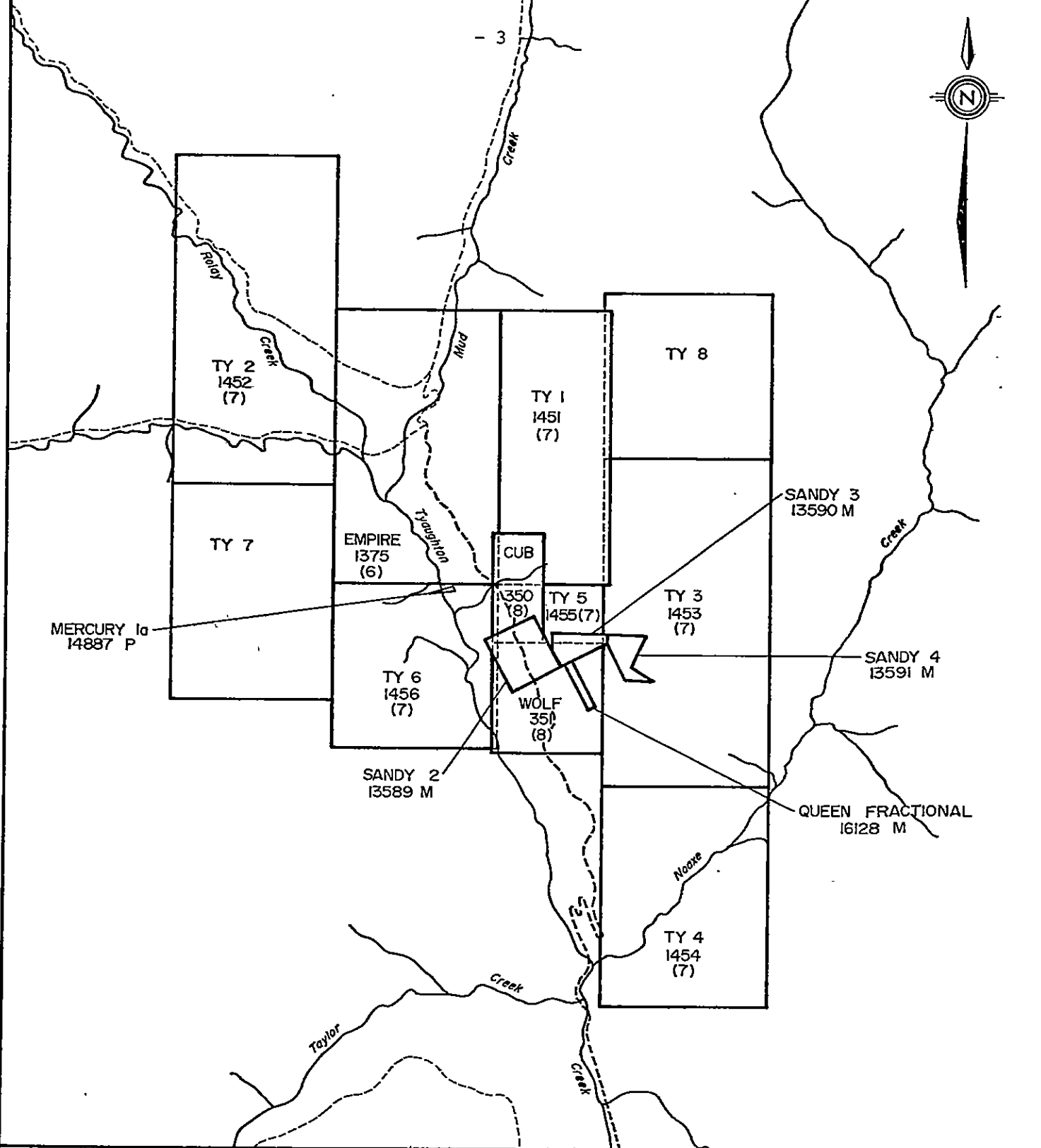
Elevation ranges between 1,190 and 1,400 metres. Slopes are moderate to steep along main creek drainages, with cliffs at several places on Mud, Tyaughton and Relay creeks.

Gentler slopes are generally forest-covered with pine, fir and occasional aspen groves. Sporadic alpine meadows are common above 1,675 metres.




History

The region has been explored for many mineral commodities -- mercury, stibnite, scheelite, gold, silver, lead and zinc. Approximately 1,500 pounds of mercury was produced by Empire Mercury Mines at Mud Creek in 1938. Between 1939 and 1942, about 19 tons of hand-cobbed ore was shipped from the Tungsten Queen and Tungsten King workings to the south of the present Empire I claim.

Interest in the area was renewed around the mid-sixties. Between 1964 and 1966, surface trenching, mine rehabilitation, percussion drilling and underground drilling was performed by Empire Mercury Corporation Ltd. on the old Empire Mercury Mines claims. A soil and stream sediment geochemical survey, magnetometer survey, prospecting, mapping and trenching were carried out in the area by Bethlehem Copper Corporation Ltd. in 1968. Chris Graf staked the property in 1980.



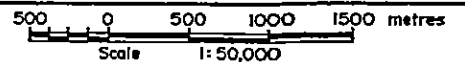
LEGEND

-  Creek
-  Road
-  Trail

TY 2
1452
(7) Claim Name
Record Number
Month

WESTMIN RESOURCES LTD.

*TYAUGHTON PROJECT
CLAIM LOCATION MAP*



Date Drawn: June 1982	Drawn By: R. Ivany	Date Revised:	N.T.S. Ref: 92 0/2	Figure No: 2
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Claim Statistics

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>Present Status</u>
Empire I	15	1375	June 23, 1980	June 23, 1985

Regional Geology

The Tyaughton Creek area is underlain by Triassic or older Bridge River Group volcanic and sedimentary rocks, Jurassic-Cretaceous Taylor Creek Group conglomerate, sandstone, shale, and feldspar porphyry intrusions, likely of Tertiary age. The Tyaughton-Relay Creek fault system is thought to be a deep seated structure branching off the major northwest Fraser-Yalakom fault trend (Armstrong, J.E., p. 343).

CLAIM GEOLOGY AND MINERALIZATION

The Empire I claim is underlain predominantly by rocks assigned by H.W. Tipper (O.F. 534) to Middle Triassic or older Bridge River Group, consisting of thick basalt-limestone-chert sequences, cherty and shaley argillites with intercalated limestone and thin ultramafic and quartz-carbonate assemblages. Conglomerate and arkose belonging to the unconformably overlying Taylor Creek Group occur in the extreme southwestern part of the claim. Cinnabar mineralization occurs in sheared and fractured basaltic rocks at the former Empire Mine on Mud Creek.

SOIL GEOCHEMICAL SURVEY

A 1,600 metre baseline was run on a bearing of 335° from the Empire I claim Legal Corner Post to Mud Creek. Stations are flagged and tagged at 25 metre intervals along the baseline. Crosslines are established perpendicular to this baseline and a total of 323 soil samples have been collected at 25 or 50 metre intervals where possible. Samples were delivered to Eco-Tech Laboratories Ltd., Kamloops, B.C. to be analyzed for W, Sb and Hg.

ANALYSES

Before analyses, all soils were dried at 60°C and sieved to a minus 80 mesh. Soils were analyzed for W using the fusion method. Sb values were detected by atomic absorption and Hg values were obtained by cold vapour atomic absorption. W and Sb values are reported in parts per million and Hg values in parts per billion. Results were contoured at intervals established from previous work done in the area, as follows:

- W 4-10 ppm, 11-50 ppm (Figure 4)
- Sb 16-39 ppm, 40-200 ppm (Figure 5)
- Hg 200-999 ppb, 1,000-1,999 ppb, > 2,000 ppb (Figure 6)

RESULTS

Tungsten soil values show a distinctive anomaly centred over 57+00N - 10+00E and extending southerly to 55+25N - 10+00E. Most soil values in this area are in the low anomalous category, between 4 and 11 ppm. Two other low anomalous tungsten zones occur at the northeast end of the grid along lines 63+00N and 64+00N. Several isolated low anomalous tungsten values occur sporadically throughout the grid.

Antimony soil values show broad low anomalous zones over most of the grid. The area covered can be divided into two broad low order anomalies, trending northwest. One zone blankets most of the grid west of the baseline, while the other lies uphill over the northeast part of the grid. Two areas, consisting of three or more sample location sites, exhibit antimony values between 40 and 200 ppm. One lies in the 10+00E vicinity between 56+00N and 57+00N. The other covers a larger area extending from 61+00N and 57+00 N. The other covers a larger area extending from 61+00N - 8+75E. This area remains undefined to the northwest across Mud Creek.

Anomalous mercury values are numerous and widespread across the Empire I grid. Similarly, they too show dominant northwest trends corresponding to the strike of underlying rock units in the area. At least three main zones of strong anomalous Hg values are present:

1. 50+00N to 50+75N - 10+00E and open to east
2. 53+00N to 53+75N - 9+00E to 10+00E
3. 62+00N - 9+25E to 64+00N - 8+50E and open to the northwest across Mud Creek.

CONCLUSIONS

Few anomalous tungsten zones in soils across the grid are generally weak (4 to 11 ppm) and of limited size. One such area, located along the baseline from 55+00N to 57+00N, also exhibits moderate anomalous antimony soil values (40 to 200 ppm). Two zones of low anomalous tungsten values in the northeast corner of the grid are roughly coincident with low anomalous antimony and mercury soil trends.

Broad zones of low anomalous antimony and mercury soil values are present across the grid. Moderate antimony values (40 to 200 ppm) are generally coincident with strong mercury values (> 2,000 ppb). Low anomalous values for these elements do not necessarily correspond.

EMPIRE I

ITEMIZED COST STATEMENT

<u>Analysis</u>	323 soil samples @ \$11.50/sample	\$3,714
<u>Labour</u>	2 men @ \$50/day/man x 10 days 1 supervisor @ \$100/day x 3 days	1,000 300
<u>Food</u>	10 days x \$50/day	500
<u>Transportation</u>	(fuel + truck & trailer rental) \$40/day x 10 days	400
<u>Camp & Field Supplies</u>		300
<u>Report Preparation & Typing</u>		300
		<u>\$6,514</u>
<u>Breakdown</u>	15 units @ \$100/unit x 2 years 15 units @ \$200/unit x 1 year	\$3,000 <u>3,000</u>
		<u>\$6,000</u>

Statement of Qualifications

I, DEL W. FERGUSON, P.O. Box 48593, Bentall Centre, Vancouver, B.C. do hereby certify that:

- a) I am a geologist with office address at #904 - 1055 Dunsmuir Street, Vancouver, B.C. V7X 1C4.
- b) I am a graduate of the University of Western Ontario with an Honours Bachelor of Science degree in Geology.
- c) I have had three years of geological experience in various phases of exploration in B.C.
- d) I have supervised the 1982 Soil Geochemical Survey over the Empire I mineral claim.

Respectfully submitted,



Del W. Ferguson
Project Geologist

June 30, 1982



APPENDIX

ENVIRONMENTAL TESTING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY

LABORATORIES LTD. 783 Notre Dame Drive, Kamloops, B.C. V2C 5N8 - Telephone (604) 372-9700

Telex: 048-8393

July 2, 1982

GEOCHEMICAL ANALYSES

CLIENT: Westmin Resources Limited
904 - 1055 Dunsmuir Street
P.O. Box 49066
The Bentall Centre
VANCOUVER, B. C. V7X 1C4

ATTENTION: Mr. Del Ferguson, Project Geologist

RE: Project No. 60122 ASSAY CERTIFICATE NUMBER: ET125

SAMPLE IDENTIFICATION: Soil and Rock samples received June 17, 1982.

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
DB 001	157	1	28
002	80	3	30
003	114	1	22
004	1890 [?]	3	36
005	246	3	13
006	94	2	10
007	614	3	23
008	654	3	23
009	117	3	18
010	69	3	7
011	191	2	24
012	80	2	8
013	5310	1	19
014	103	3	13
015	91	3	10
016	351	3	17
017	223	3	10
018	1410	2	23
019	232	3	37

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
DB 020	1210	4	49
021	130	1	15
022	298	3	22
023	1140	2	11
024	191	3	16
025	1540	2	17
026	101	1	10
027	1070	2	20
028	87	2	14
029	49	1	8
030	200	2	14
031	670	3	16
032	20,000	2	31
033	4680	2	39
034	10,300	3	26
035	719	2	16
036	1345	3	25
037	336	3	20
038	52	2	11
039	200	2	18
040	235	2	17
041	232	2	18
042 No Sample	-	-	-
043	67	1	10
044	32	1	8
045	43	3	9
046	235	1	17
047	96	3	10
048	295	1	17
049	1070	3	22

July 2, 1982

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
DB 050	542	3	16
051	212	3	16
052	551	3	22
053	38	3	9
054	1520	1	26
055	644	3	22
056	1780	2	25
057	1270	3	23
058	533	1	12
059	4490	3	105
060	3485	2	37
061	2380	1	64
062	4120	1	30
063	1490	1	19
064	3730	2	21
065	1760	2	22
066	170	1	9
067	2220	2	24
068	93	1	9
069	3750	4	39
070	2810	3	25
071	648	2	22
072	1950	3	23
073	126	1	18
074	174	3	20
075	394	2	21
076	1360	1	13
077	1290	1	17
078	67	1	11
079	67	1	12

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
DB 080	201	3	13
081	78	1	9
082	1210	1	21
083	281	3	18
084	367	3	19
085	122	2	15
086 No Sample	-	-	-
087 No Sample	-	-	-
088 No Sample	-	-	-
089	100	1	25
090	1220	1	20
091	285	1	17
092	996	3	16
093	98	3	12
094	151	2	15
095	158	3	22
096 No Sample	-	-	-
097	126	3	13
098	243	1	5
099	105	1	10
100	799	1	21
101	123	1	11
102	1300	1	21
103	98	1	8
104	70	1	7
105	63	1	8
106	105	1	14
107	309	1	38
108	104	1	11
109	95	1	14

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
DB 110	89	:1	11
111	1130	3	26
112	797	3	27
113	266	3	22
114	91	1	10
115	152	1	9
116	109	1	10
117	130	4	8
118	98	1	9
119	524	1	28
120	142	1	16
121	144	1	11
122	496	5	27
123	1000	4	27
124	1200	3	19
125	387	3	16
126	127	1	4
127	112	1	11
128	103	4	13
129	81	1	10
130	214	4	16
131	28	2	11
132	40	2	12
133	36	1	15
134	232	1	14
135	40	1	10
136	88	1	11
137	68	1	8
138	400	4	19
139	278	5	32

July 2, 1982

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
DB 140	216	4	17
141	56	4	12
142	68	3	15
143	436	5	32
144	38	3	19
145	50	4	12
146	106	4	23
147	142	4	24
148	52	3	12
149	78	4	11
150	80	2	10
BR 001	555	4	25
002	3840	4	31
003	849	2	31
004	43	2	10
005	83	2	12
006	920	2	18
007	190	2	11
008	126	2	33
009	90	4	26
010	200	3	18
011	81	1	7
012	26	1	11
013	45	1	11
014	28	1	10
015	313	18	42
016	220	3	3
017	1520	4	26
018	230	3	9
019	57	3	9
019A	235	3	16

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
BR 020	59	2	8.
021	130	4	13
022	121	2	8
023	76	2	11
024	121	2	8
025	24	4	7
026	429	2	15
027	180	2	28
028	1680	2	32
029	382	2	21
030	3685	2	24
031	906	2	21
032	224	2	16
033	953	2	22
034	219	2	13
035	103	2	20
036	G 20,000	2	60
037	262	2	20
038	583	2	30
039	123	2	23
040	50	2	15
041	31	2	12
042	168	2	31
043	83	2	25
044	26	2	16
045	36	2	19
046	980	2	35
047	150	2	29
048	192	2	24
049	31	2	21

G = greater than

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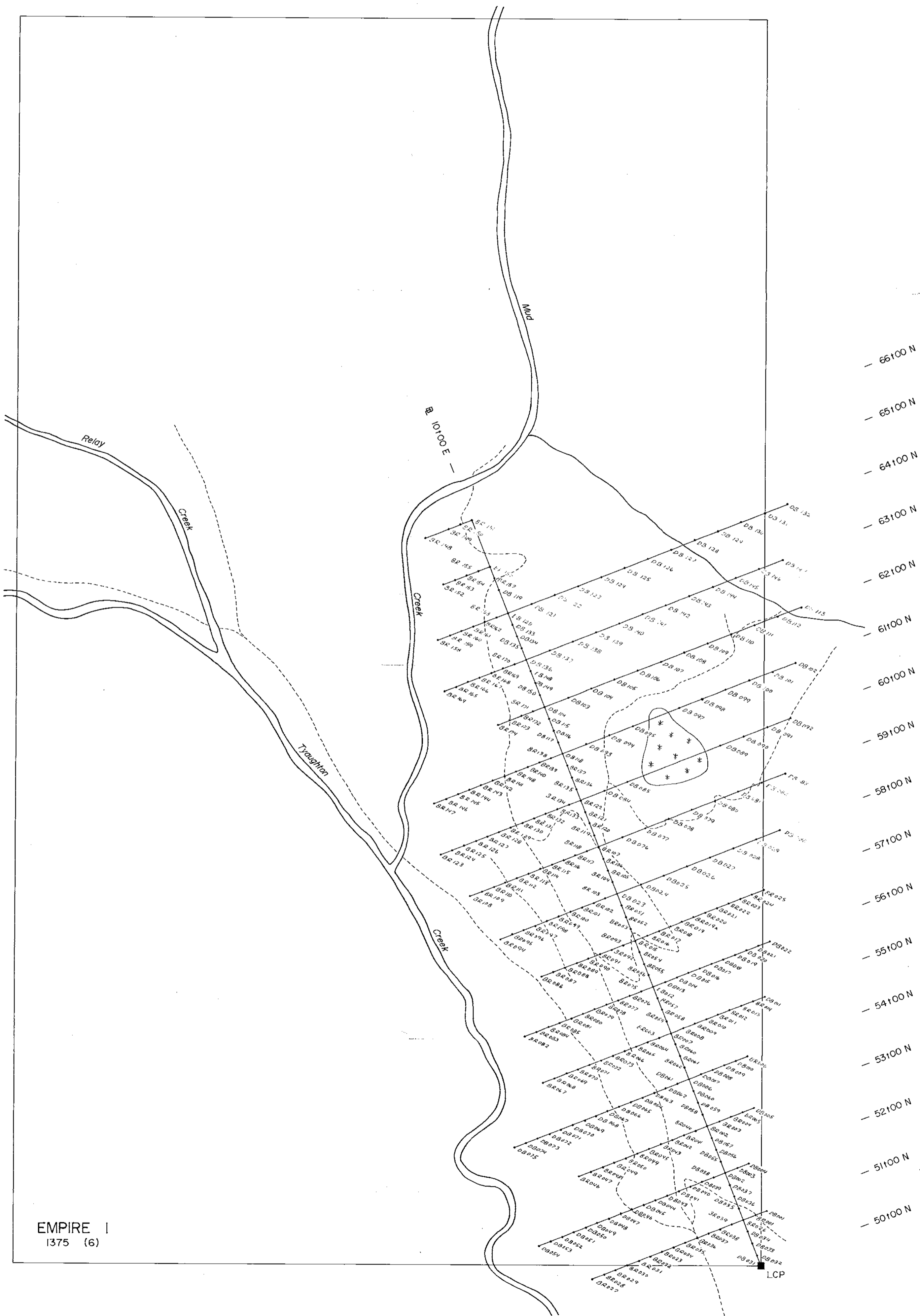
<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
BR 050	28	2	16
051	149	1	20
052	109	2	19
053	209	3	29
054	5	8	49
055	301	4	31
056	1985	4	49
057	1805	5	53
058	1006	5	29
059	147	4	14
060	8290	5	50
061	268	3	19
062	102	4	21
063	121	3	21
064	225	2	19
065	313	3	14
066	211	4	33
067	85	3	34
068	1425	4	38
069	85	3	10
070	31	4	38
071	50	4	39
072	36	3	24
073	249	3	17
074 No Sample	-	-	-
075	1842	5	97
076	355	4	36
077	17	3	33
078	36	2	31
079	180	2	23

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
BR 080	45	2	28
081	83	2	91
082	40	2	32
083	12	1	27
084	24	2	18
085	346	2	29
086	82	2	17
087	55	4	29
088	45	5	52
089	40	3	17
090	198	1	28
091	17	1	35
092	9	1	37
093	1170	4	48
094	17	1	29
095	107	1	31
096	284	1	35
097	5	1	15
098	55	1	30
099	12	1	9
100	275	1	38
101	141	1	21
102	297	1	18
103	12	1	22
104	677	1	17
105	116	1	11
106	76	1	14
107	7	1	11
108	1120	1	26
109	118	1	51

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
BR 110	220	1	23
111	794	1	26
112	92	1	12
113	120	1	26
114	200	1	19
115	80	1	14
116	1700	1	25
117	140	1	11
118	37	1	16
119	253	1	11
120	180	1	13
121	731	1	26
122	132	1	15
123	2260	1	29
124	4660	1	28
125	1060	1	28
126	228	1	13
127	88	1	14
128	1388	1	21
129	1030	1	26
130	68	1	12
131	56	1	12
132	60	1	12
133	104	1	14
134	92	1	17
135	62	1	10
136	158	1	68
137	176	1	16
138	65	1	11
139	90	1	22

July 2, 1982

<u>Description</u>	<u>Hg (ppb)</u>	<u>W (ppm)</u>	<u>Sb (ppm)</u>
BR 140	167	1	11
141	1860	4	46
142	560	1	21
143	102	1	12
144	1060	1	36
145	218	1	28
146	2380	1	37
147	701	1	48
148	94	1	16
149	899	1	39
150	1540	1	41
151	270	1	15
152	329	1	27
153	65	1	16
154	486	1	23
155	1550	1	33
156	128	1	14
157	163	1	20
158	4720	1	35
159	1600	1	25
160	110	1	33
161	73	1	17
162	139	1	23
163	53	1	16
164	5420	1	45
165	204	1	17
166	3905	1	44
167	5540	1	25
168	1370	1	33
169	1670	1	38
170	69	1	19
171	367	1	18
172	114	1	14
173	2370	1	27
174	3500	1	42



EMPIRE I
1375 (6)



LEGEND

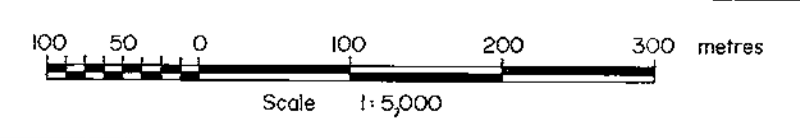
- DB 000 SAMPLE SITES
- ROADS
- ⊛ SWAMP

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,676

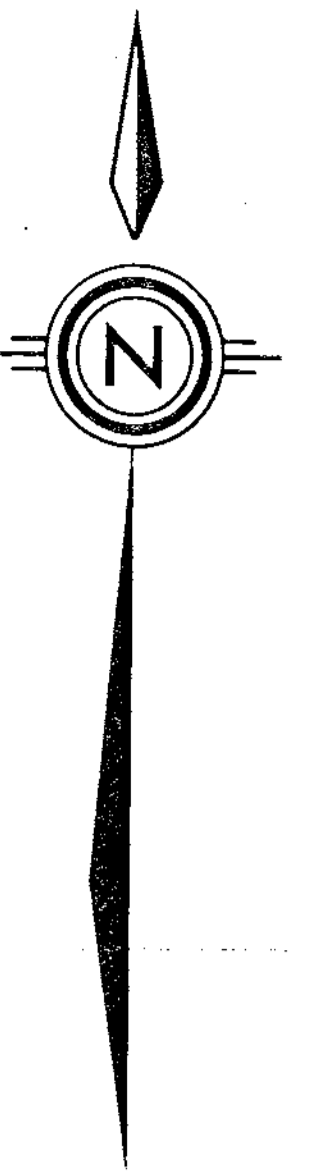
WESTMIN RESOURCES LTD.

TYAUGHTON PROJECT

SAMPLE LOCATION MAP



Date	Drawn By	Mapped By	Revised	NTS. No.	Figure
JUNE 1982	R. IVANY			92 0/2	3



EMPIRE I
1375 (6)

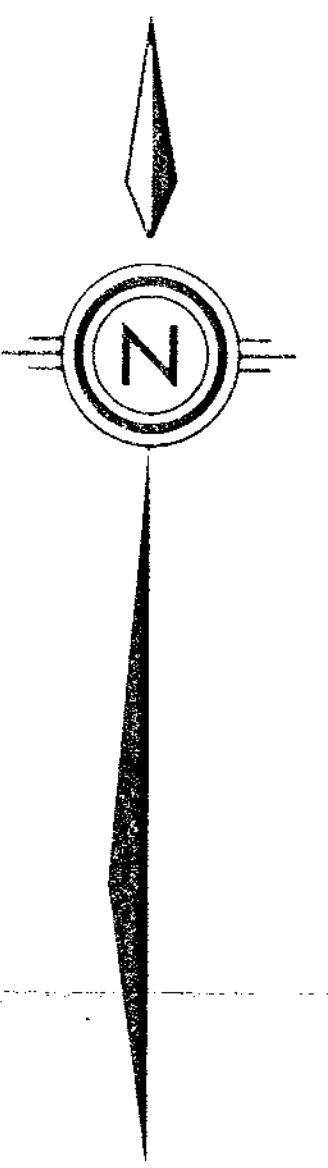
WUNGSTEN (W) CONTOURS
□ 4-10 ppm
□ 11-50 ppm

MINERAL RESOURCES REPORT
10/676

WESTMIN RESOURCES LTD.
TYAUGHTON PROJECT
SOIL GEOCHEMISTRY RESULTS
W, Sb (ppm), Hg (ppb)

Scale 1:2500

Date	Drawn By	Checked By	Revised	M/S No.	Figure
JUNE 1982	R. ROBY			28/02	4



66100 N
65100 N
64100 N
63100 N
62100 N
61100 N
60100 N
59100 N
58100 N
57100 N
56100 N
55100 N
54100 N
53100 N
52100 N
51150 N
50100 N

10100 E

EMPIRE I
1375 (6)

MERCURY (Hg) CONTOURS
□ 200-999 ppb
□ 1000-9999 ppb
□ >2000

MINERAL RESOURCES BRANCH
10676

WESTMIN RESOURCES LTD
TYAUGHTON PROJECT
SOIL GEOCHEMISTRY RESULTS
W, Sb (ppm), Hg (ppb)