Wigwam 1 Mineral Claim

2006 Geological and Geochemical

Assessment Report

Wigwam 1 Mineral Claim
Fort Steele Mining Division
NTS: 82G/3E and 6E
Lat.: 115º 06’ W
Long: 49º 15’ N
Owner/Operator: Morris Geological Co. Ltd.
Author: Robert J. Morris
January 18, 2007

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Introduction
This report presents the findings of prospecting and soil geochemical work completed on the Wigwam 1 claim during the period 11 February 2006 to 16 January 2007. The author carried out the prospecting and soil sampling.

Property Description
The Wigwam 1 claim was staked between the 18th and 21st of Oct. 1999 by the author. The claim represents a twenty-unit block immediately to the northwest of the mouth of the Wigwam River, south of the town of Elko, B.C.

Table 1: Wigwam 1
Claim Status

Claim Name	Tenure Number	Number of Units	Expiry Date*
Wigwam 1	372755	20	21 October 2007

**_Note:_ Mineral Claim Exploration and Development Work/Expiry Date Change, filed 18 October 2006, Event No. 4106948.*

Location
The claim is four kilometres south of the town of Elko, or one kilometre south of the Tembec saw mill, along the west bank of the Elk River, Figure 1.

Access
The claims can be accessed from Highway 93 by driving south 3.7km from the turnoff near Elko, and turning east onto the “Backroad” to the Tembec mill. One-half of a kilometre along the “Backroad” is the turnoff to a regional transfer station (disposal site). Approximately 100m east of this road, and 30m south of “Backroad” will take you close to the legal corner post of Wigwam 1, Figure 2.

History
There are several Minfile occurrences noted in the immediate area, although there is no sign, in the field, of any recent work having been done.

Höy and Carter (1988; Figure 3) show five occurrences, numbers 129 to 133, to be within or very close to the claim.

1. **#129 Silver King**, which is #28 in Minfile.
2. **#130 Ramshorn**, which is #10 in Minfile.
3. **#131 Leah**, which is #29 in Minfile.
4. **#132 Jennie**, which is #11 in Minfile.
5. **#133 Sweet May**, which is #12 in Minfile.

The revised mineral inventory map, 82G/SW (MI) shows five mineral occurrences within or near the claim, including:

1. **#10 Ramshorn**, is a copper occurrence. The location of this occurrence is known to be within 1,000 feet and 2 miles (BC 19?, the map shows no date). Chalcopyrite, azurite, pyrite occur within a 0.5m quartz vein. Along one margin of the vein a talcose (chlorite?) gouge seam about two centimeters thick contains

copper oxide minerals. Sills of Purcell diorite are reported in the vicinity and may have some relationship to the mineralization (Minfile, 1988).

2. **#11 Jennie**, is a copper occurrence. The location of this occurrence is known to be within 1,000 feet and 2 miles (BC 19?). The Sweet May and Jennie occurrences are within a few hundred metres of each other on Sheep Mountain, six kilometres south of Elko. Development took place at the turn of the century, but was not long lived. The showings occur in shear zones adjacent to both contacts of a ten metre thick K-feldspar porphyry sill. Bedding in Purcell-age Gateway Formation carbonates is vertical and trends north south. Both showings consist of scattered blebs of chalcopyrite in thin quartz veins. In general Sheep Mountain is host to many small quartz veins, some of which contain sulphide minerals (Grieve, 1979).
3. **#12 Sweet May**, is a copper occurrence. The location of this occurrence is know to be within 1,000 feet and 2 miles (BC 19?). The Sweet May and Jennie occurrences are within a few hundred metres of each other on Sheep Mountain, six kilometres south of Elko. Development took place at the turn of the century, but was not long lived. The showings occur in shear zones adjacent to both contacts of a ten metre thick K-feldspar porphyry sill. Bedding in Purcell-age Gateway Formation carbonates is vertical and trends north south. Both showings consist of scattered blebs of chalcopyrite in thin quartz veins. In general Sheep Mountain is host to many small quartz veins, some of which contain sulphide minerals (Grieve, 1979).
4. **#28 Silver King**, is a copper occurrence. The location of this occurrence is know to be within a radius of 1,000 feet (BC 19?). This property comprises two claims on the east bank of the Elk River, three miles south of Elko. The mineral occurrence consists of a few narrow scattered quartz stringers containing minor amounts of pyrrhotite and chalcopyrite in quartzite bands exposed below high-water level. The quartzite bands, which in places are well mineralized with fine disseminated pyrite, alternate with bands of highly sheared argillite. The formation is Precambrian in age. Insufficient ore mineralization is evident to warrant further work (Merrett, 1957).
5. **#29 Leah**, is a lead, silver occurrence. The location of this occurrence is known to be within a radius of 1,000 feet (BC 19?). Six mineral claims on the summit and south slope of Sheep Mountain on the west side of the Elk River, approximately three miles south of Elko. Surface stripping over a wide area has revealed the presence of a number of parallel quartz veins and has disclosed one narrow vein, up to 7cm wide, reportedly carrying good silver-lead values over an exposed length of 30m (Merrett, 1954). Several widely scattered open-cuts have disclosed narrow vertical quartz veins of east-west strike and undetermined length in quartzite, closely paralleling Purcell diorite sills. Rare patches of galena occur within the quartz veins (Merrett, 1957).

The most recent work is an assessment report by the author, dated 16 January 2006.

<u>Scope of Work in 2006</u>

Fieldwork on the claim during this period included five days of mapping, prospecting and sampling. Twenty soil samples were tested by geochemical analyses, bringing the total number of soil samples to sixty-four. As well as the fieldwork, five days were spent creating a database, reviewing the data and writing the assessment report.

Scope of Work between 1999 and 2005

Sampling between 1999 and 2004 includes twenty-eight (28) rock samples and forty-four (44) soil samples, which were tested using ICP geochemistry.

Fieldwork on the claim during this period includes 21.5 days of mapping, prospecting and sampling, and four days on a preliminary ground magnetic survey. As well as the fieldwork, 15.75 days have been spent reviewing and compiling data for the assessment reports.

Geology

Regional Geology

Many authors have summarized the geology of the area but it appears that very little actual field study has taken place. The first geological maps of the area are by Leech (1958) and (1960).

The stratigraphic section of the Proterozoic, for the east side of the Rocky Mountain Trench, as proposed by Höy and Carter (1988) is as follows:

> **Roosville Formation**, green siltstone and argillite, black laminate argillite; stromatolitic dolomite and dark brown oolitic dolomite, quartz arenite toward the top (as shown on Figure 3).
> **Phillips Formation**, maroon micaceous siltstone, quartz wacke and argillite (as shown on Figure 3).
> **Gateway Formation**, dolomite, quartz wacke, siltstone, argillite (as shown on Figure 3).
>> **Upper Gateway** is green siltstone, argillite, dolomite.
>> **Lower Gateway** is quartz wacke, dolomitic sandstone, stromatolitic dolomite, oolitic dolomite, green siltstone.
>
> **Sheppard Formation**, sandstone and conglomerate locally at base; dolomitic quartzite, sandstone, oolitic dolomite, stromatolitic dolomite at top (as shown on Figure 3).
> **Nicol Creek Formation**, massive to amygdaloidal basalt to andesitic lava flows, volcanic and feldspathic sandstone, siltite (as shown on Figure 3).
> **Van Creek Formation**, green, mauve laminated siltstone and quartz wacke; minor tuffaceous siltstone at top (as shown on Figure 3).
> **Kitchener Formation**, grey, black dolomite, limestone; green argillite, dolomitic siltstone (as shown on Figure 3).
>> **Upper Kitchener**, grey, black dolomite, limestone, molar tooth texture; siltstone, thin quartz.
>> **Lower Kitchener**, green, beige siltstone, argillite; dolomitic siltstone.
>
> **Creston Formation**, green, grey and mauve siltstone, argillite; white, green quartz arenite (not shown on Figure 3).
>> **Upper Creston**, siltstone, quartz arenite, argillite (not shown on Figure 3).

Middle Creston, white, green and mauve quartz arenite and siltstone (not shown on Figure 3).

Lower Creston, grey, black argillite-siltstone couplets, siltstone and siliceous argillite, green siltstone (not shown on Figure 3).

Aldridge Formation, quartzite, quartz wacke, siltstone, argillite, silty dolomite (not shown on Figure 3).

Upper Aldridge, rusty weathering argillite and siltstone, thinly laminated (not shown on Figure 3).

Middle Aldridge, grey quartzite, quartz wacke, siltstone; argillite, rusty weathering (not shown on Figure 3).

Lower Aldridge, rusty weathering siltstone and quartzite with interbeds of silty argillite; quartz wacke (not shown on Figure 3).

Fort Steele Formation, white quartzite, grey argillaceous quartzite, argillite, grey, black dolomitic and calcareous argillite (not shown on Figure 3).

Note: Within the map area, strata below the Kitchener Formation are not exposed.

The following discussion applies to the regional maps produced by Leech.

- The north end of the Galton Range, south of the mouth of the Wigwam River, appears to be a normal succession of formations, from the Siyeh Formation (equivalent to the Kitchener/Van Creek/Nicol Creek Formations of Höy and Carter?) near the bottom of the mountains to the Rooseville Formation at the top. The formations are shown to be folded into a major north trending syncline that is truncated by the Wigwam River.
- North of the Wigwam River, onto the Wigwam flats east of the claim, the syncline is continued with the east side of the Elk River underlain by strata of the Rooseville Formation dipping gently to the east.
- Strata of the Gateway Formation underlie the west side of the Elk River. The beds are steeply dipping to vertical along the canyon area.
- There are no major faults mapped in the area to explain the changes in attitudes and general structure.

Work by Höy and Carter (1988) is more detailed in that they mapped the maroon colored Phillips Formation trending north/south through the canyon area, Figure 3. They also show a normal fault across the north face of the Galton Range, just to the south of the Wigwam River. This fault is shown to be a splay off of the “Rocky Mountain Trench Fault” and is shown to dip to the southwest. It is my opinion that, considering the changes in elevation across the Wigwam, the fault should have a northeast dip.

Neither of the authors discuss the intense white “clay”(?) alteration along the Elk River canyon nor the changes in attitudes, from east to west, across the Elk River. As well, neither of the authors addresses the intrusive rocks on Sheep Mountain.

Soil Geochemistry

In total sixty-four soil samples have been collected on the property, twenty of them during 2005 and 2006 (the 2005 samples were collected and stored until the end of the 2006 field season, when all twenty were sent to the lab).

All of the soil samples are listed in Appendix 2. The listing includes the sample name, UTM coordinates, as well as the ICP results.

Table 2 shows some basic statistics for a selection of elements for the sixty-four soil samples. The final column in the table is an estimate of the threshold value, above which may be considered anomalous, for the element.

A description of the samples follows, including;

05-1; The sample was collected from the northwest portion of the claim, in an old trench. Soil development includes some C-horizon, some rounded material, and some organics. The sample is slightly anomalous in boron (B).

05-02; The sample was collected from the northwest portion of the claim, from an old trench. Very thin soil development on bedrock, abundant quartz veins. The sample is not anomalous in any of the elements tested.

05-03; The sample was collected from near the center of the claim, from an old trench. The sample is not anomalous in any of the elements tested.

05-04; The sample was collected from near the center of the claim, from an old trench. Debris from approximately one-meter depth (in old trench). The sample is slightly anomalous in arsenic (As).

05-05; The sample was collected from the southwest portion of the claim, along a steep hillside. Very thin soil development on scree. The sample is slightly anomalous in manganese (Mn), iron (Fe), gold (Au), lanthanum (La), and mercury (Hg).

05-06; The sample was collected from the southwest portion of the claim, along steep hillside. Poor soil development on rusty scree. The sample is slightly anomalous in zinc (Zn), and iron (Fe).

05-07; The sample was collected from the southwest portion of the claim, along an old road cut. Better soil development on bedrock, rusty brown. The sample is slightly anomalous in iron (Fe).

05-08; The sample was collected from the southwest portion of the claim, along an old road cut, in the windrow. Rusty brown soil development on bedrock, quartzite. The sample is slightly anomalous in silver (Ag), and iron (Fe).

05-09; The sample was collected from the southwest portion of the claim, from an old trench. Abundant quartz, rusty. The sample is slightly anomalous in iron (Fe).

05-10; The sample was collected from the southwest portion of the claim, along an old road cut. Rusty soil over white quartz veins. The sample is slightly anomalous in iron (Fe).

06-211; The sample was collected from the west central portion of the claim on a steep hillside. Poor soil development on bedrock, brown, high organic. The sample is not anomalous in any of the elements tested.

06-213; The sample was collected from near the west central portion of the claim, from an old trench. Grey-brown soil development. The sample is not anomalous in any of the elements tested.

06-214; The sample was collected from near the west central portion of the claim, along steep hillside. Poor soil development, mostly scree debris. The sample is slightly anomalous in boron (B).

06-291; The sample was collected from near the northwest portion of the claim, along an newer road cut. The soil is altered (?) to a white colour with a green tint, abundant quartz. The sample is slightly anomalous in strontium (Sr).

06-292; The sample was collected from the northwest side of Sheep Mountain, along an old road cut. Poor soil development on bedrock, brown, high organic. The sample is slightly anomalous in thorium (Th).

06-293; The sample was collected from the northwest side of Sheep Mountain, along an old road cut. Poor soil development on bedrock, brown, high organic. The sample is slightly anomalous in molybdenum (Mo), and gold (Au).

06-294; The sample was collected from the northwest side of Sheep Mountain, along an old road cut. Poor soil development on bedrock, brown, high organic. The sample is slightly anomalous in molybdenum (Mo), and manganese (Mn).

06-295; The sample was collected from the northwest side of Sheep Mountain, along an old road cut. Poor soil development on bedrock, brown, high organic. The sample is slightly anomalous in gold (Au).

06-296; The sample was collected from the northwest side of Sheep Mountain, along an old road cut. Poor soil development on bedrock, brown, high organic. The sample is not anomalous in any of the elements tested.

06-297; The sample was collected from the northwest side of Sheep Mountain, along an old road cut. Poor soil development on bedrock, brown, high organic. The sample is slightly anomalous in barium (Ba).

Table 2
Soil Geochemistry; Summary

Element	Population	Minimum	Maximum	Mean	Standard Dev.	CV[1]	Threshold
Cu (ppm)	64	3	355	28	50	1.79	100
Zn (ppm)	64	13	659	90	94	1.04	225
As (ppm)	64	1	22	4	3	0.75	10
Hg (ppb)	64	8	1517	77	198	2.57	350
Sb (ppm)	64	0.09	45	1.9	6.3	3.32	10
Ag (ppb)	64	14	1604	148	301	2.03	600
Au (ppb)	64	0.2	19	2.6	3.3	1.27	6
Pb (ppm)	64	2	744	51	119	2.33	225

Notes: 1 CV is the coefficient of variation, the standard deviation/mean).

Conclusions

To date no potentially economic mineralization has been located, but the project area is of interest because of the intersection of numerous major structural breaks, the major alteration zone along the Elk River, and the number and types of intrusives on Sheep Mountain. The limited fieldwork to date has shown:

- That the strata changes attitude across the Elk River from gentle east dips on the east side to near vertical dips along the west side, indicating a major fault system.
- That there is a major alteration zone, white clay(argillic/sericitic alteration), along some of the structural breaks. The altered zone is at least one kilometer long and 500m wide, following a portion of the Elk River canyon. This may indicate a hydrothermal source at depth.
- The outcrop is limited to the riverbanks along the Elk River and to scattered areas on Sheep Mountain.
- There are at least four varieties of intrusives on Sheep Mountain.
- The preliminary magnetic survey, from 2005, indicates minimal contrast. The west grid shows a difference of 416 gammas, with the highest readings in the extreme southwest corner and another in the west central part of the survey area. The east grid shows a difference of 291 gammas, with a high in the extreme south and a very small high in the north.
- There are slightly anomalous soil samples worth follow-up.

Recommendations

Further prospecting is warranted, especially around the anomalous soil samples.

Statement of Costs

	Total
Fieldwork	
R.J. Morris, 5.0 days @$600/day	$3,000.00
Soil Geochem	
37 element ICP	$ 450.00
Shipping	$ 50.00
Office work	
R.J. Morris, 5.0 days @$600/day	$3,000.00
Supplies	
Access permit	$ 55.00
Travel	
Truck rental, 5 days x $50/day	$ 250.00
ATV rental, 1 days x $50/day	$ 50.00

Total = $6,855.00

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Statement of Qualifications

I Robert J. Morris, President, Morris Geological Co. Ltd. do declare:

1. That I graduated as a geologist from the University of British Columbia, Vancouver, with a degree of Bachelor of Science in 1973.
2. That I graduated as a geologist from Queen's University, Kingston, Ontario, with a degree of Master of Science in 1978.
3. That I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia (registration #18,301).
4. That I have been involved in the mining and mineral industry with work on grassroots exploration projects through to mining projects since my graduation in 1978.
5. That I am familiar with the subject area from fieldwork since 1998 and that I personally wrote and supervised the preparation of this report.

Dated this 18th day of January 2007, in Fernie, British Columbia.

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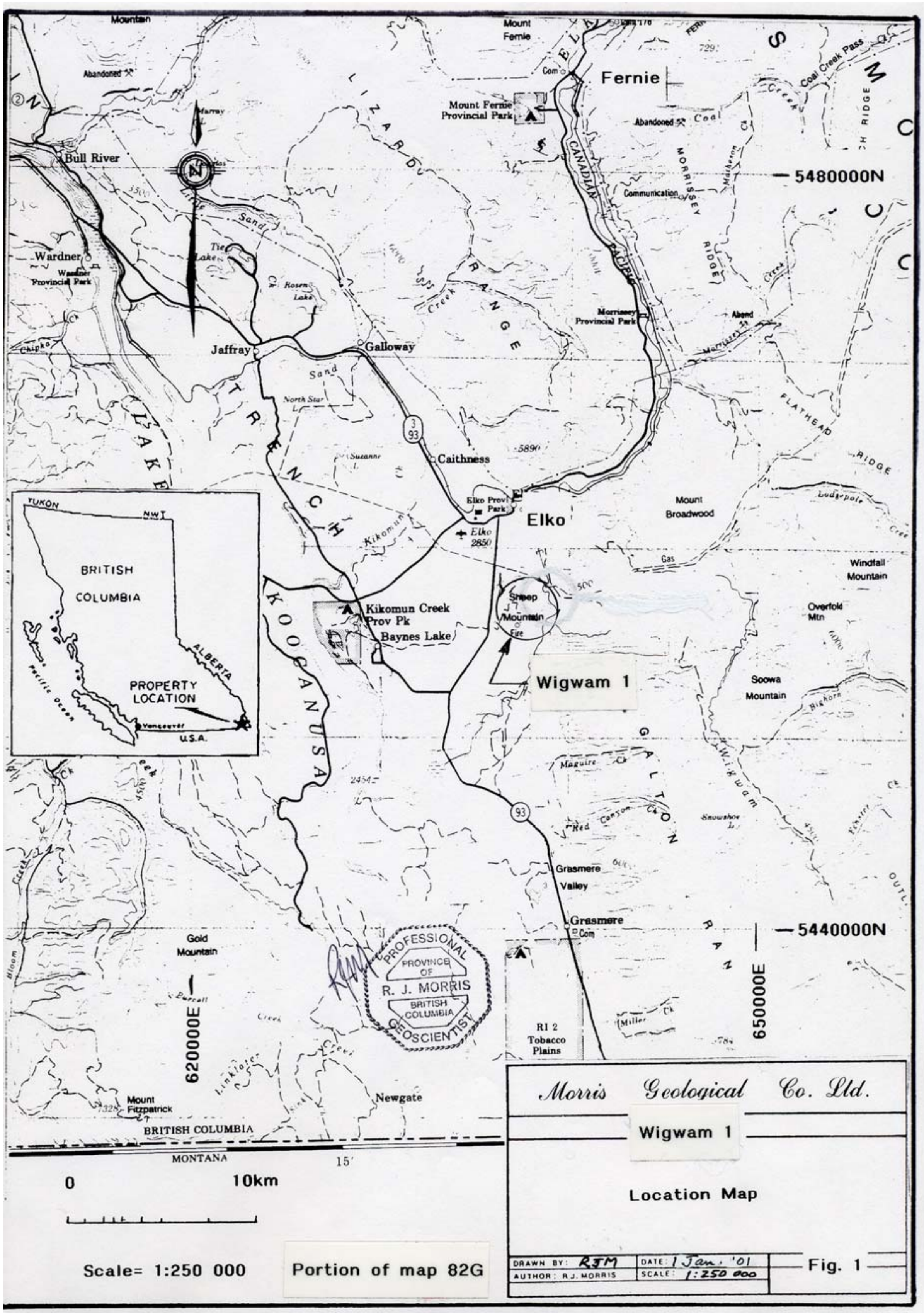
R.J. Morris, M.Sc., P.Geo.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Mount Fernie Provincial Park
Bull River
Wardner
Wardner Provincial Park
Jaffray
Galloway
Caithness
Elko
Mount Broadwood
Windfall Mountain
Overfold Mtn
Kikomun Creek Prov Pk
Baynes Lake
Sheep Mountain
Wigwam 1
Soowa Mountain
Grasmere
Gold Mountain
Mount Fitzpatrick
Newgate
Tobacco Plains
BRITISH COLUMBIA
MONTANA
5480000N
5440000N
620000E
650000E
BRITISH COLUMBIA
PROPERTY LOCATION
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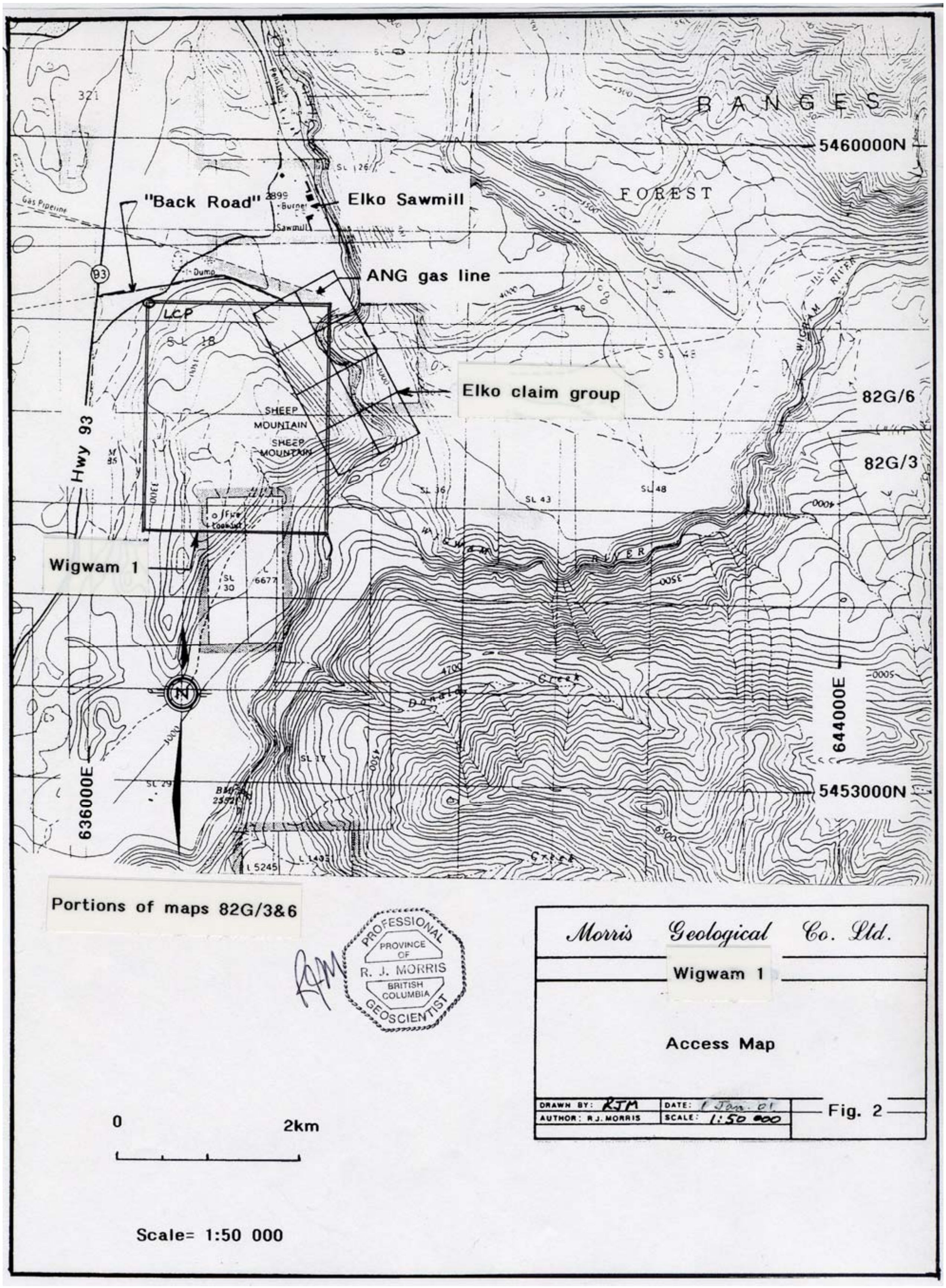
U.S.A.
0
10km
Scale= 1:250 000
Portion of map 82G
Morris Geological Co. Ltd.
Wigwam 1
Location Map
DRAWN BY: RJM
AUTHOR: R.J. MORRIS
DATE: 1 Jan. '01
SCALE: 1:250 000
Fig. 1
PROFESSIONAL
PROVINCE OF
R. J. MORRIS
BRITISH COLUMBIA
GEOSCIENTIST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"Back Road"
Elko Sawmill
FOREST
ANG gas line
LCP
Elko claim group
82G/6
82G/3
SHEEP MOUNTAIN
Hwy 93
Wigwam 1
WIGWAM RIVER
644000E
636000E
5453000N
Portions of maps 82G/3&6
PROFESSIONAL PROVINCE OF R. J. MORRIS BRITISH COLUMBIA GEOSCIENTIST
Morris Geological Co. Ltd.
Wigwam 1
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DRAWN BY: RJM
AUTHOR: R.J. MORRIS
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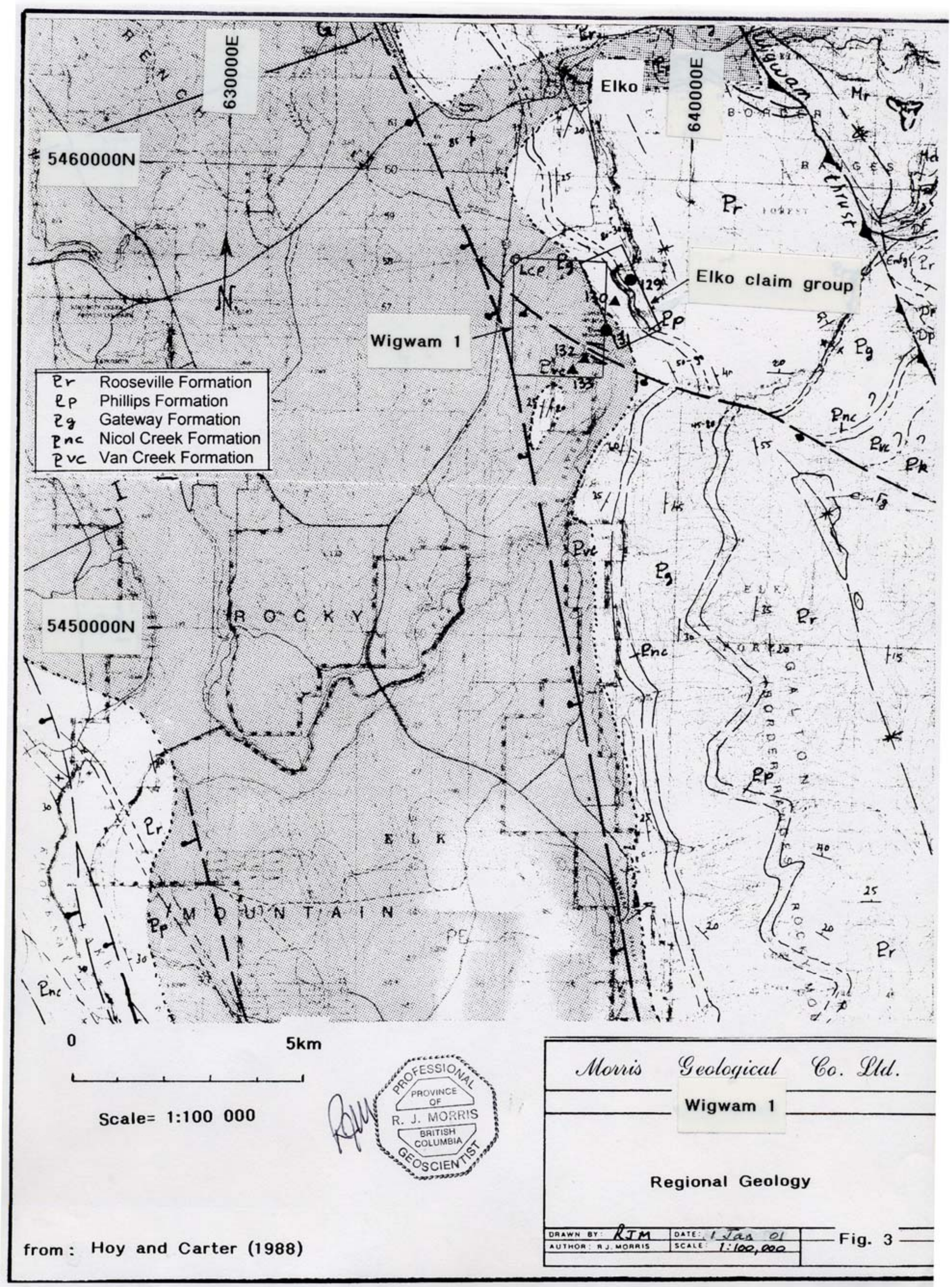
Fig. 2
0
2km
Scale= 1:50 000



630000E
640000E
Elko
5460000N
Elko claim group
Wigwam 1
Pr Rooseville Formation
Pp Phillips Formation
Pg Gateway Formation
Pnc Nicol Creek Formation
Pvc Van Creek Formation
5450000N
ROCKY
ELK
MOUNTAIN
0
5km
Scale= 1:100 000
PROFESSIONAL
PROVINCE OF
R. J. MORRIS
BRITISH COLUMBIA
GEOSCIENTIST
Morris Geological Co. Ltd.
Wigwam 1
Regional Geology
DRAWN BY: RJM
DATE: 1 Jan 01
AUTHOR: R.J. MORRIS
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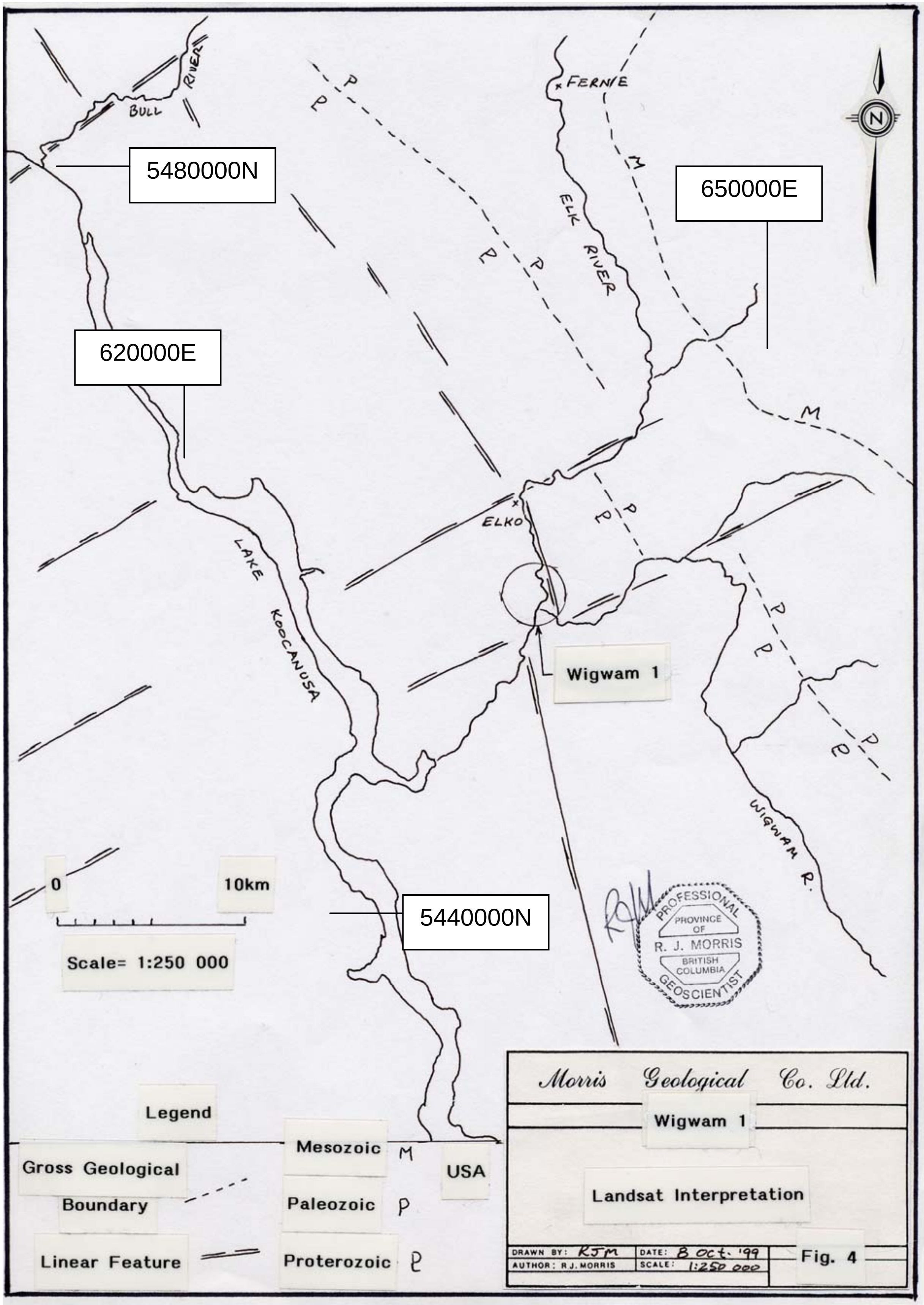
Fig. 3
from: Hoy and Carter (1988)



BULL RIVER
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FERNIE
ELK RIVER
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ELKO
LAKE KOOCANUSA
Wigwam 1
WIGWAM R.
0
10km
Scale= 1:250 000
5440000N
PROFESSIONAL
PROVINCE OF
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BRITISH COLUMBIA
GEOSCIENTIST
Morris Geological Co. Ltd.
Wigwam 1
Landsat Interpretation
DRAWN BY: RJM
AUTHOR: R.J. MORRIS
DATE: 8 Oct. '99
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Gross Geological Boundary
Linear Feature
Mesozoic M
Paleozoic P
Proterozoic
USA

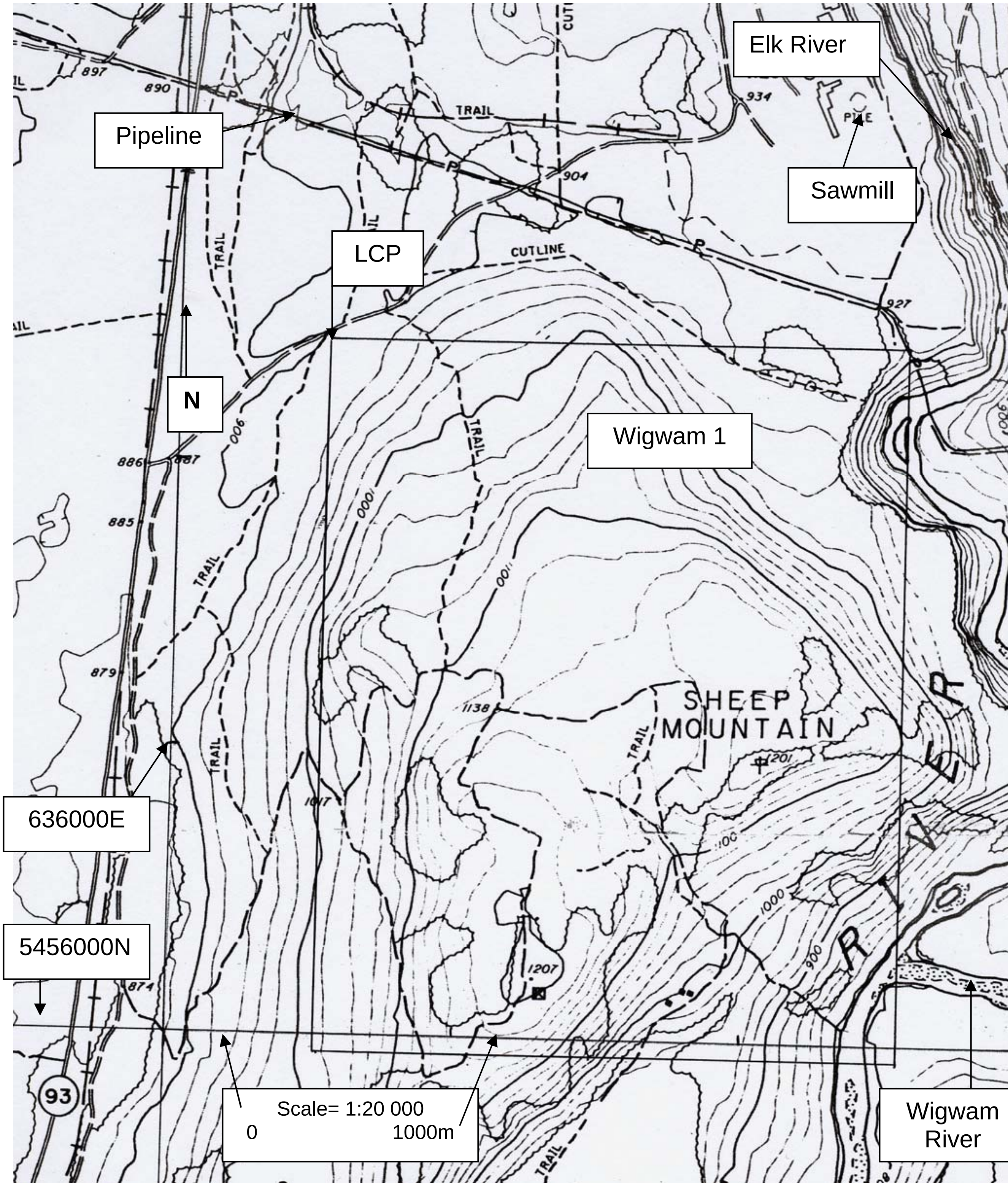

Figure 5 **Topographic Map** *(part of 82G.025)*

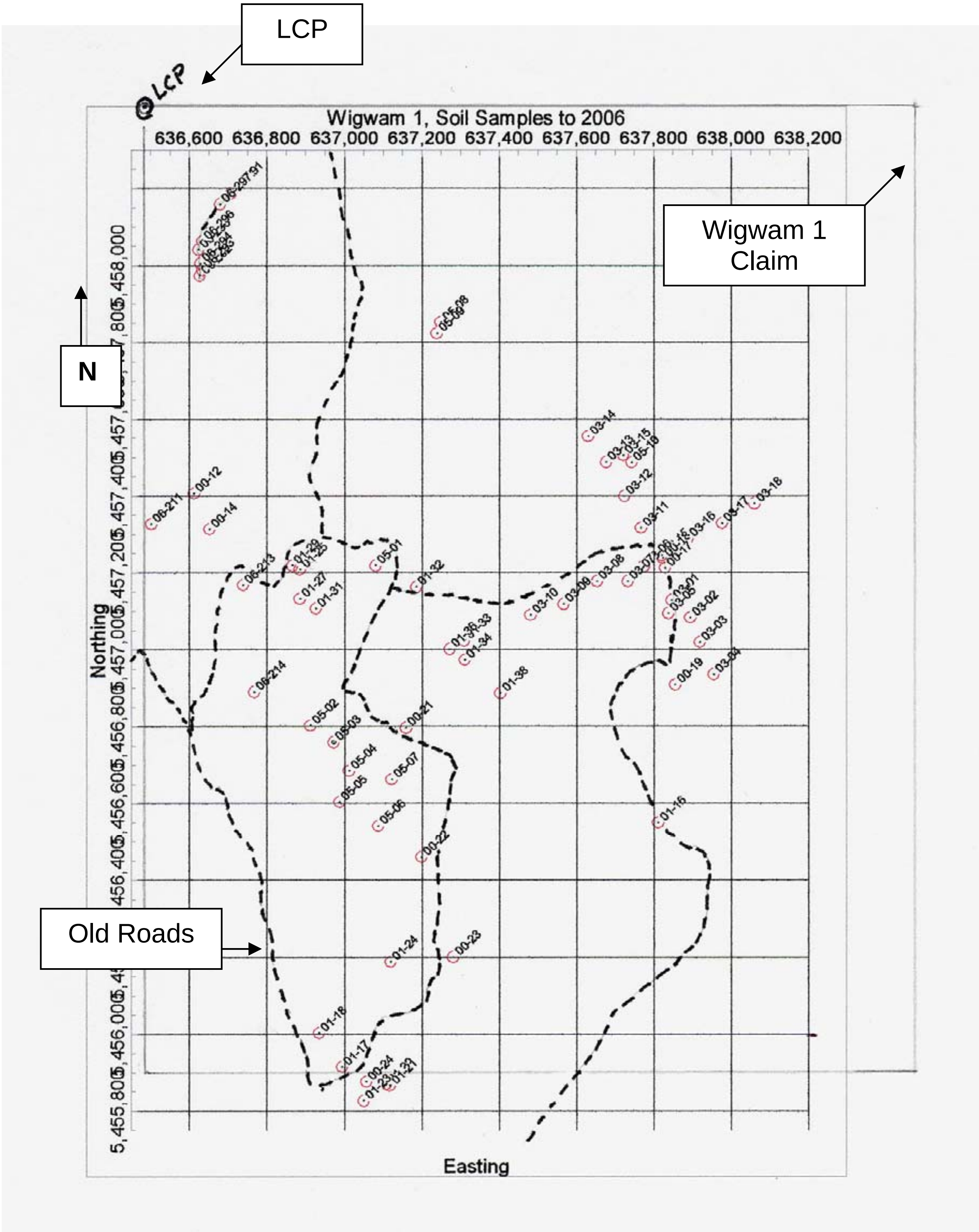

Figure 6: Soil Samples to 2006

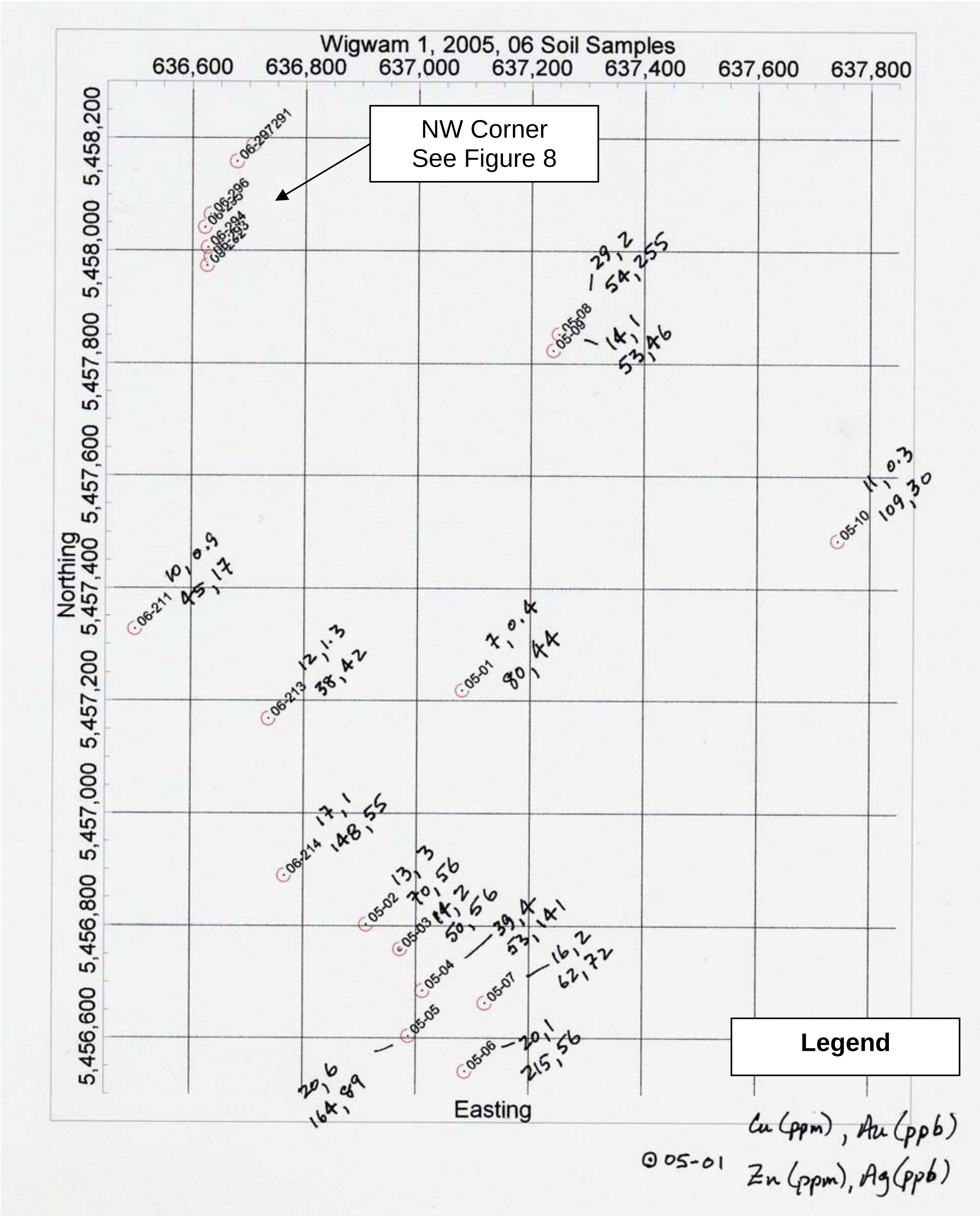

Figure 7: Soil Samples, 2005 and 2006

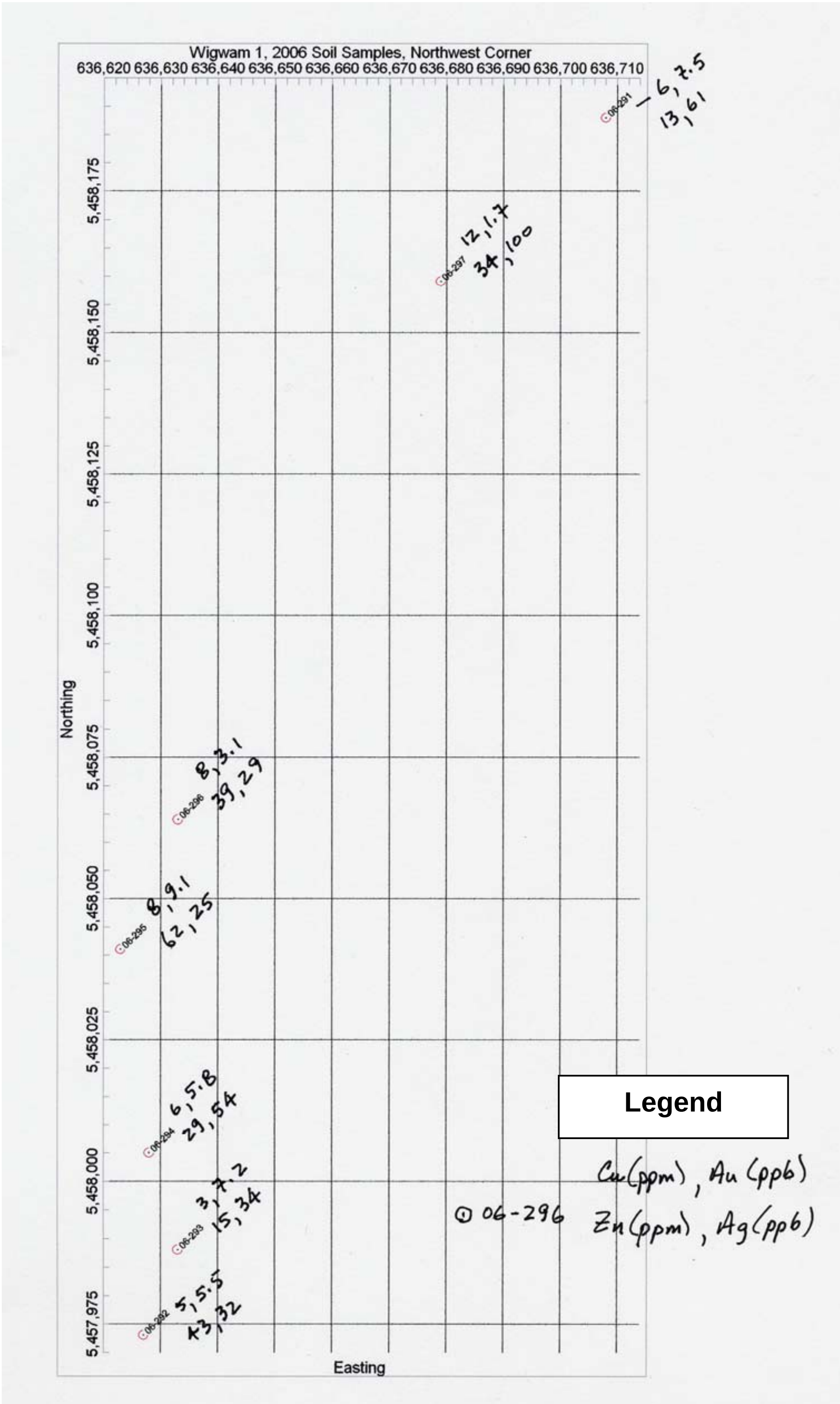

Figure 9: 2006 Soil Samples, Northwest Corner of Claim

Appendix 1

Time Sheet, R.J. Morris
2006

Date	Time (days)	Job (Elko Project)
11 Feb	1.0	Prospect west side
2 April	1.0	Prospect south and west sides
16 April	1.0	Prospect west and north sides
24 May	1.0	Database
25 May	1.0	Database
26 May	1.0	Database
9 June	1.0	Prospect central area
14 Oct	1.0	Soil sample northwest area
13 Jan ‘07	1.0	Report
15 Jan ‘07	1.0	Report
	10.0	**Total Days**

Appendix 2

Wigwam 1

Soil Sample Result

	Sample No.	Easting	Northing	Mo (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppb)	Ni (ppm)	Co (ppm)	Mn (ppm)	Fe (%)	As (ppm)	U (ppm)	Au (ppb)	Th (ppm)	Sr (ppm)	Cd (ppm)	Sb (ppm)	Bi (ppm)
1	01-16	637811	5456550	0.5	355.15	302.24	40.2	1604	9.4	7.1	503	1.12	7.9	0.3	5.9	3.7	57.1	0.45	45.11	0.64
2	01-17	636994	5455915	1.62	20.38	38.38	163.5	84	12.8	7.6	1506	4.11	7.4	0.3	0.7	3.8	26	0.45	0.92	0.26
3	01-18	636935	5456003	0.82	23.93	13.96	50.1	117	14.5	7.3	588	2.13	8.1	0.3	2	5	14.6	0.16	1.24	0.27
4	01-20	637108	5455869	3.84	44.58	743.9	658.8	607	4.2	4.6	2420	5.05	6.4	0.3	3.2	3.1	79.2	4.35	1.37	0.14
5	01-21	637117	5455866	4.51	141.39	476.88	410.9	1327	5	11.4	1290	5.98	22.2	0.3	5.9	4	48.2	2.16	1.32	0.53
6	01-23	637050	5455826	1.48	30.28	36.56	131.1	85	10.2	6.6	1950	3.2	5.8	0.4	0.8	3.8	21.1	0.58	0.66	0.22
7	01-24	637119	5456187	1.42	14.77	20.94	94.5	26	10	5.6	2201	3.03	4.6	0.4	0.7	4	28.5	0.28	0.55	0.26
8	01-25	636885	5457209	1.77	61.1	137.18	106.3	171	9.1	4.5	1304	3.54	4.5	0.5	< .2	4.2	26.5	0.33	0.47	0.32
9	01-27	636885	5457132	0.97	13.89	43.41	66.9	27	9.3	4.1	397	1.96	2.9	0.4	< .2	4.4	14.8	0.12	0.4	0.21
10	01-29	636865	5457218	1.5	47.71	39.26	179.4	59	8.7	4.5	1049	3.91	3.1	0.5	0.8	4	22.6	0.26	0.4	0.24
11	01-31	636926	5457107	0.86	13.95	20.24	55.3	40	10.3	4.8	708	1.9	2.7	0.5	1.1	4.1	23.7	0.14	0.41	0.22
12	01-32	637185	5457162	1.17	22.11	16.4	80.7	123	12.8	9	588	2.01	7.6	0.4	3.1	4.1	46.7	0.39	1.82	0.25
13	01-33	637309	5457023	1.55	28.69	47.05	70.9	44	6.9	3.5	1068	3.98	3.2	0.5	< .2	4.2	17.4	0.2	0.67	0.19
14	01-34	637311	5456973	3.91	64.83	67.77	106	275	17.6	5.7	1575	5.86	6.2	0.6	3.5	5.2	23.9	0.26	0.85	0.31
15	01-36	637272	5457001	0.98	13.08	22.41	84	44	8.5	3.5	1268	2.49	2.5	0.4	3	3.3	19.5	0.15	0.32	0.23
16	01-38	637403	5456886	0.79	20.4	45.52	95	35	12	7.9	702	3.51	5.4	0.7	0.5	6	12	0.11	0.92	0.46
17	00-12	636612	5457407	0.89	18.53	11.67	45.4	62	11.3	5.6	452	2.51	3.3	0.6	0.7	4.1	13	0.09	0.59	0.2
18	00-14	636652	5457313	0.51	18.61	12.2	51.1	64	14.6	6.3	435	1.96	3.9	0.4	0.4	4.9	8.5	0.13	0.42	0.21
19	00-15	637820	5457245	0.59	144.72	199.24	100.9	817	9.8	7.7	852	2.01	6.8	0.4	9.4	4.1	39.3	0.53	14.62	0.44
20	00-17	637829	5457212	0.89	65.74	33.92	54.1	785	23.3	54.3	1440	2.83	6.7	0.8	19	3.6	154.7	0.3	6.89	0.85
21	00-18	637823	5457237	0.82	92.44	314.26	194.9	856	18.2	15.5	1105	3.48	6.5	0.6	4.8	4.2	28.9	0.71	19.16	0.54
22	00-19	637855	5456908	0.46	16.57	31.23	80.3	25	10.9	6.1	700	2.46	2.2	0.6	< .2	4.4	22.3	0.14	0.4	0.25
23	00-21	637159	5456796	1.05	29.35	63.67	161.7	40	9.8	5	2548	3.24	3	0.5	< .2	3.1	22.6	0.29	0.36	0.21
24	00-22	637199	5456460	1.68	10.43	10.19	45.7	58	9.1	4.5	329	2.54	3.6	0.3	< .2	4.1	20.4	0.07	0.6	0.18
25	00-23	637281	5456200	0.96	15.78	13.84	47.6	86	11.4	6.5	691	2.54	5.8	0.3	2.4	4.6	11.1	0.23	1.23	0.25
26	00-24	637057	5455876	2.17	6.21	8.88	75.2	73	0.2	2.5	2371	4.19	1.2	0.3	1.3	0.6	68.9	0.67	0.49	0.04
27	03-01	637846	5457128	0.53	6.15	7.14	34.1	16	6.6	2.7	285	1.39	1.8	0.3	0.4	2.8	13.1	0.03	0.27	0.17
28	03-02	637894	5457083	0.55	5.09	5.43	63.9	18	5.5	2.2	467	1.27	2.1	0.2	0.3	1.4	9.7	0.06	0.26	0.15
29	03-03	637919	5457019	0.54	9.59	11.14	94.2	32	9.6	4.5	1905	1.81	2.6	0.5	0.3	2.5	21.3	0.25	0.3	0.24
30	03-04	637954	5456935	0.62	10.8	10.41	43.8	29	11.3	5.4	843	2.14	2.7	0.7	0.2	3.9	15.6	0.12	0.47	0.23
31	03-05	637837	5457094	0.71	11.71	7.31	23	22	4.6	2.3	299	1.1	1.8	0.3	1.6	3	93.4	0.09	0.66	0.16
32	03-06	637774	5457216	0.69	7.87	14.78	75.3	29	7.5	3.1	828	1.62	2.5	0.3	0.7	2.2	18.1	0.14	0.31	0.22
33	03-07	637732	5457177	0.66	8.27	11.06	64.1	32	7.4	3.5	805	1.68	2.5	0.3	0.2	2.9	14.9	0.13	0.29	0.2
34	03-08	637653	5457177	0.51	7.18	7.9	46.7	29	7.7	2.9	275	1.62	1.9	0.3	0.4	2.9	13.3	0.07	0.26	0.18
35	03-09	637566	5457118	0.56	12.48	9.2	59.4	182	11.1	5.3	794	2.12	5.3	0.4	< .2	3.2	17	0.13	2.37	0.24
36	03-10	637481	5457090	0.19	9.36	9.18	119.6	62	12.7	3.7	408	1.04	6.2	0.5	< .2	2.4	19.1	0.09	0.09	0.2
37	03-11	637767	5457317	0.68	10.4	19.79	73	26	8.5	3.8	740	2.18	3.8	0.3	2	3.5	12.9	0.15	0.63	0.22
38	03-12	637724	5457399	0.67	11.92	29.8	102.2	33	11.1	6	1471	2.34	3.7	0.9	1.1	4.2	21.8	0.31	0.51	0.28
39	03-13	637676	5457487	0.63	9.72	9.51	48.3	14	10.1	4.8	932	1.77	2.7	0.4	0.6	3.4	14.2	0.1	0.4	0.2
40	03-14	637630	5457554	0.62	8.68	11.42	62.5	25	10.8	5.4	831	2.03	3	0.4	0.8	3.7	11.9	0.15	0.4	0.21
41	03-15	637721	5457505	0.64	12.12	14.28	46.1	21	11.3	6.3	509	1.98	4.7	0.6	0.9	4.4	10.4	0.12	0.58	0.21
[redacted]	03-16	637888	5457289	0.66	7.03	8.82	72	18	8.2	4.3	1658	1.46	2.1	0.3	< .2	1.6	16	0.11	0.28	0.2

	V (ppm)	Ca (%)	P (%)	La (ppm)	Cr (ppm)	Mg (%)	Ba (ppm)	Ti (%)	B (ppm)	Al (%)	Na (%)	K (%)	W (ppm)	Sc (ppm)	Tl (ppm)	S (%)	Hg (ppb)	Se (ppm)	Te (ppm)	Ga (ppm)	Weight (gm)
1	9	2.98	0.063	11.7	6.7	0.84	701.5	0.006	3	0.41	0.003	0.11	0.3	1.7	0.06	0.04	465	< .1	0.03	1	15
2	18	0.68	0.084	20	11.9	0.34	219.2	0.022	5	1.19	0.004	0.28	0.2	4.1	0.11	0.03	42	0.1	0.03	3.6	15
3	14	1.05	0.047	20	10.8	0.4	176.8	0.023	2	1.24	0.004	0.16	0.1	2.5	0.09	0.01	38	0.2	0.03	3.5	15
4	5	4.18	0.066	33	4.6	0.25	173.6	0.003	1	0.72	0.002	0.13	< .1	7	0.07	0.03	1517	0.5	0.03	1.9	15
5	7	1.05	0.071	52.4	4	0.32	143.2	0.015	2	1.08	0.003	0.19	< .1	5.5	0.31	0.02	268	0.6	0.04	3.8	15
6	13	0.4	0.051	21.9	8.9	0.27	231.8	0.024	2	1.35	0.004	0.24	< .1	4.8	0.11	0.03	34	0.2	0.02	3.9	15
7	16	0.46	0.052	22.2	9.1	0.25	257.2	0.033	3	1.37	0.004	0.2	0.1	4.7	0.09	0.02	39	< .1	0.02	4	15
8	15	0.42	0.039	21.3	9.1	0.26	186.7	0.052	1	1.44	0.006	0.14	< .1	5.1	0.08	0.01	72	0.3	0.03	4.5	15
9	13	0.18	0.029	20.7	9.4	0.24	139.7	0.035	< 1	1.13	0.005	0.12	< .1	2.3	0.07	< .01	24	0.3	0.03	3.3	15
10	14	0.31	0.043	21.6	8.4	0.24	129.8	0.048	1	1.7	0.006	0.17	< .1	5.7	0.08	0.01	39	0.2	0.02	5.4	15
11	14	0.34	0.034	20.9	8.9	0.26	180.5	0.032	2	1.35	0.006	0.14	< .1	2.3	0.08	< .01	24	0.3	0.02	4	15
12	13	3.61	0.079	17.4	7.7	0.69	153	0.005	4	0.88	0.004	0.09	< .1	2.5	0.16	< .01	72	0.1	0.05	2.2	15
13	14	0.3	0.049	27.7	7.2	0.2	176.3	0.04	< 1	1.13	0.005	0.13	< .1	3.6	0.07	< .01	32	0.3	0.02	3.7	15
14	11	0.23	0.049	41.1	6.7	0.18	185.9	0.032	1	1.3	0.005	0.11	< .1	4.8	0.06	0.01	100	0.5	0.02	3.7	15
15	15	0.23	0.04	21.1	8.4	0.21	277.4	0.052	< 1	1.43	0.007	0.12	0.1	2.6	0.08	< .01	30	0.1	0.02	4.3	15
16	46	0.15	0.064	39.9	12.2	0.16	140.8	0.037	2	0.99	0.004	0.08	< .1	3.4	0.07	< .01	25	0.4	0.02	3.6	15
17	16	0.28	0.029	17.9	13.3	0.3	126.7	0.051	3	1.79	0.006	0.19	< .2	3.4	0.1	< .01	40	0.3	< .02	4.2	15
18	17	0.23	0.034	18.5	13	0.39	199	0.027	2	1.4	0.005	0.2	< .2	2.6	0.08	0.01	36	0.2	< .02	3.3	15
19	16	0.68	0.035	19.7	7.5	0.32	308.3	0.036	2	1.17	0.007	0.15	< .2	2.8	0.06	0.01	151	0.2	0.16	2.7	15
20	15	6.6	0.043	11.8	12	2.47	184.5	0.013	3	0.84	0.005	0.11	< .2	3.6	0.11	0.03	288	0.4	0.05	1.9	15
21	21	0.54	0.044	17.1	13.1	0.45	401.7	0.06	2	2.27	0.013	0.17	< .2	3.7	0.08	0.02	115	0.1	0.17	5.2	15
22	28	0.33	0.061	26	10.9	0.24	416.5	0.029	1	1.3	0.006	0.15	< .2	3	0.08	0.01	17	0.2	< .02	4.3	15
23	19	0.31	0.089	24	9.6	0.25	329.1	0.047	2	1.81	0.006	0.14	< .2	3.8	0.1	0.03	59	0.1	0.02	5	15
24	12	0.25	0.046	36.9	7.7	0.2	107.6	0.022	2	0.86	0.003	0.13	< .2	2.5	0.05	< .01	25	0.2	0.02	2.4	15
25	10	0.36	0.043	23.3	11.3	0.39	125.4	0.01	2	0.99	0.003	0.12	< .2	3	0.06	0.03	42	0.2	0.03	2.3	15
26	< 2	11.4	0.088	8.9	1	0.13	246.7	0.001	1	0.32	0.003	0.07	< .2	2.9	0.04	0.05	179	0.3	< .02	1	15
27	13	0.13	0.023	11.8	6.5	0.15	209.3	0.031	2	0.81	0.008	0.08	< .1	1.7	0.06	< .01	8	0.2	< .02	2.3	15
28	11	0.11	0.035	10.5	6.1	0.15	207.7	0.016	1	0.65	0.004	0.08	< .1	1.1	0.05	0.01	11	0.2	< .02	2	15
29	16	0.46	0.063	12.4	8.5	0.19	576.5	0.045	3	1.49	0.008	0.14	< .1	3	0.08	0.01	23	0.4	< .02	3.8	15
30	18	0.3	0.027	16.7	9.1	0.2	365	0.044	2	1.48	0.007	0.13	< .1	4.4	0.07	0.01	25	0.4	< .02	3.7	15
31	11	0.2	0.034	7.6	5.4	0.11	982.2	0.013	1	0.56	0.003	0.08	< .1	3.6	0.06	0.02	184	0.3	0.03	1.5	15
32	15	0.32	0.041	10.8	6.9	0.2	278.2	0.041	1	1.07	0.006	0.11	< .1	1.5	0.07	0.01	22	0.3	< .02	2.9	15
33	14	0.25	0.034	14.6	7	0.19	244.4	0.045	3	1.14	0.008	0.13	< .1	2.1	0.07	< .01	21	0.3	< .02	3.1	15
34	14	0.16	0.032	14.2	7.5	0.18	172.6	0.04	2	1.2	0.008	0.11	< .1	1.8	0.07	< .01	12	0.2	< .02	3.2	15
35	16	0.49	0.04	13.3	8.8	0.28	199.1	0.038	2	1.41	0.007	0.16	< .1	3.2	0.14	< .01	28	0.4	< .02	3.7	15
36	13	0.26	0.255	9	7.7	0.18	328.1	0.081	3	2.41	0.018	0.12	0.1	2.4	0.09	< .01	19	0.4	< .02	6.3	15
37	19	0.24	0.044	25.3	8.3	0.23	196.9	0.017	1	0.76	0.005	0.1	< .1	2.8	0.07	< .01	20	0.4	0.02	2.6	15
38	22	0.29	0.048	19.5	11	0.29	392.8	0.044	2	1.65	0.006	0.2	< .1	3.3	0.1	< .01	22	0.4	< .02	4.7	15
39	14	0.24	0.022	14.8	9.4	0.25	272.1	0.042	2	1.38	0.008	0.16	< .1	2.7	0.09	< .01	18	0.4	< .02	3.6	15
40	17	0.2	0.039	18.8	10.1	0.28	250.7	0.037	2	1.4	0.006	0.13	< .1	2.7	0.08	0.01	20	0.3	< .02	3.9	15
41	17	0.13	0.031	22.3	9.4	0.31	136.6	0.021	1	1.01	0.003	0.1	< .1	2.8	0.07	< .01	19	0.3	0.02	2.9	15
[redacted]	14	0.33	0.046	10.6	8.4	0.21	586.2	0.028	2	1.23	0.007	0.09	< .1	1.9	0.07	< .01	18	0.4	< .02	3.5	15

	Sample No.	Easting	Northing	Mo (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppb)	Ni (ppm)	Co (ppm)	Mn (ppm)	Fe (%)	As (ppm)	U (ppm)	Au (ppb)	Th (ppm)	Sr (ppm)	Cd (ppm)	Sb (ppm)	Bi (ppm)
42	03-16	637888	5457289	0.66	7.03	8.82	72	18	8.2	4.3	1658	1.46	2.1	0.3	< .2	1.6	16	0.11	0.28	0.2
43	03-17	637976	5457329	0.58	5.01	8.47	54	16	7.2	3.6	868	1.37	1.8	0.2	0.3	2.6	11.6	0.12	0.27	0.2
44	03-18	638060	5457380	0.55	6.31	12.18	79.4	24	18.6	6	620	1.85	2.7	0.4	1.7	3.1	19.6	0.08	0.24	0.24
45	05-01	637080	5457218	0.55	7.36	12.77	80.4	44	7.8	2.6	458	1.2	2.4	0.3	0.4	2	15.3	0.1	0.24	0.19
46	05-02	636912	5456802	2.52	12.9	19.54	69.7	56	10.7	4	716	4	3.9	0.6	3.3	3.5	15.4	0.14	0.61	0.23
47	05-03	636972	5456759	0.69	14	12.54	50	56	12.1	5.7	512	1.8	4.7	0.6	2.4	3.5	20.7	0.22	0.61	0.36
48	05-04	637012	5456685	3.26	38.79	14.34	52.9	141	12.3	8.1	396	1.94	6.9	0.4	3.7	4	26.3	0.15	0.82	0.49
49	05-05	636987	5456604	1.97	20.27	27.71	163.7	89	8	5.7	4522	4.14	3.8	0.5	5.5	2.3	31	1.18	0.47	0.24
50	05-06	637087	5456541	1.27	19.61	46.01	214.6	56	9.6	4.3	1286	3.93	3	0.6	1	2.4	31.5	0.73	0.36	0.19
51	05-07	637122	5456663	2.12	16.4	11.49	61.7	72	12	3.9	523	3.23	2.7	0.4	1.7	3.4	15.6	0.11	0.61	0.22
52	05-08	637249	5457852	1.73	29.3	21.77	53.8	255	15.2	8.4	1331	2.45	7	0.7	2.1	3.2	20.1	0.14	0.56	0.55
53	05-09	637239	5457823	1.19	14.13	10.81	52.6	46	13.4	4.5	362	2.27	4.3	0.6	0.9	3.1	14.1	0.1	0.56	0.23
54	05-10	637743	5457486	2.37	11.38	38.18	108.8	30	7.3	3.1	636	4.31	2.9	0.3	0.3	2.3	19	0.16	0.32	0.16
55	06-211	636502	5457327	0.78	9.58	13.43	44.5	17	11.2	5	1254	1.84	2.5	0.4	0.9	2.9	17.3	0.18	0.33	0.25
56	06-213	636738	5457168	0.57	12.25	10.61	38.1	42	11.7	5.3	218	1.64	3.5	0.5	1.3	3.8	6.8	0.07	0.41	0.21
57	06-214	636767	5456889	1.29	16.56	26.65	147.5	55	11	4.5	989	3.31	2.3	0.6	1	2.8	43.8	0.2	0.28	0.22
58	06-291	636708	5458188	1.11	5.72	3.81	13.3	61	8.5	7.7	876	1.31	3.5	0.3	7.5	2.2	143.7	0.1	0.5	0.33
59	06-292	636627	5457973	1.67	5.4	4.74	43	32	7.9	3.9	953	3.04	1.4	0.2	5.5	6.2	27	0.07	0.53	0.1
60	06-293	636633	5457988	10.56	3.02	2.36	15.4	34	7.7	5.1	1322	1.83	1.3	0.6	7.2	2	61.8	0.02	0.79	0.13
61	06-294	636628	5458005	6.18	5.81	4.12	28.5	54	11.7	5.5	1890	3.03	2.5	0.4	5.8	3.4	87.7	0.09	0.53	0.15
62	06-295	636623	5458041	1.41	7.79	8.92	62	25	9.1	4.3	795	2.95	2.4	0.4	9.1	4	10.6	0.12	0.52	0.2
63	06-296	636633	5458064	1.06	8.04	8.84	39.3	29	11.7	4.7	499	1.6	2.7	0.4	3.1	2.9	9.9	0.09	0.39	0.23
64	06-297	636679	5458159	2	12.48	9.4	34.3	100	13	9.4	1030	2.54	4.5	0.4	1.7	2.3	28.6	0.11	0.9	0.33

	V (ppm)	Ca (%)	P (%)	La (ppm)	Cr (ppm)	Mg (%)	Ba (ppm)	Ti (%)	B (ppm)	Al (%)	Na (%)	K (%)	W (ppm)	Sc (ppm)	Tl (ppm)	S (%)	Hg (ppb)	Se (ppm)	Te (ppm)	Ga (ppm)	Weight (gm)
42	14	0.33	0.046	10.6	8.4	0.21	586.2	0.028	2	1.23	0.007	0.09	< .1	1.9	0.07	< .01	18	0.4	< .02	3.5	15
43	12	0.2	0.03	12	6.8	0.21	254.3	0.033	1	1.06	0.007	0.11	< .1	1.6	0.06	< .01	14	0.3	< .02	3	15
44	17	0.21	0.088	10.4	9.6	0.23	695.6	0.049	2	2.1	0.009	0.13	< .1	2.3	0.09	< .01	18	0.3	< .02	6.1	15
45	10	0.25	0.039	10.6	8.6	0.17	212.1	0.031	4	0.97	0.007	0.17	<.1	1.5	0.07	<.01	15	0.1	<.02	2.8	15
46	14	0.28	0.047	20.2	10.5	0.25	155	0.031	2	1.38	0.005	0.17	<.1	5.5	0.08	0.02	37	0.2	<.02	3.8	15
47	14	0.31	0.052	16.6	11.9	0.25	268.6	0.031	1	1.19	0.005	0.13	<.1	2.5	0.1	0.02	24	0.2	0.04	3.3	15
48	12	0.34	0.061	45.3	8.9	0.2	196.1	0.016	3	0.85	0.006	0.14	<.1	2	0.09	0.01	36	0.3	0.02	2.3	15
49	13	0.47	0.088	229.9	8.8	0.19	174	0.026	1	1.19	0.004	0.13	<.1	8.1	0.14	0.04	118	0.4	0.02	4	15
50	13	0.64	0.059	59.1	10.6	0.21	158.7	0.028	3	1.57	0.006	0.23	<.1	8.6	0.12	0.04	30	0.2	<.02	5.3	15
51	9	0.2	0.038	31.2	14.6	0.22	130.1	0.025	1	1.25	0.006	0.19	<.1	5.9	0.06	<.01	32	0.2	<.02	3.1	15
52	14	0.35	0.036	19	11.8	0.23	170	0.031	1	1.45	0.005	0.12	0.1	3.3	0.09	0.01	25	0.3	0.02	3.7	7.5
53	14	0.16	0.054	17.5	12.5	0.21	131.8	0.027	<1	1.04	0.005	0.12	<.1	3.3	0.07	<.01	22	0.1	0.02	2.9	15
54	11	0.25	0.059	24	8	0.17	79.9	0.026	1	0.92	0.004	0.16	<.1	5	0.05	<.01	27	0.1	0.02	3	15
55	13	0.39	0.023	15.8	12.3	0.25	186.2	0.029	2	1.24	0.006	0.23	<.1	3	0.09	0.01	33	0.1	0.02	3.2	15
56	12	0.19	0.032	21.4	10.3	0.26	107.7	0.021	1	0.93	0.003	0.12	<.1	2.3	0.06	<.01	18	0.1	<.02	2.6	15
57	14	0.55	0.045	35.2	12.9	0.22	172.5	0.046	4	2.12	0.01	0.25	0.1	6.9	0.11	0.01	32	0.2	<.02	6.6	15
58	5	7.06	0.041	7.7	6.7	0.52	545.1	0.001	<1	0.33	0.003	0.05	<.1	1.2	0.07	0.01	27	0.3	0.04	0.9	15
59	5	2.3	0.021	16.4	8.7	0.46	196.1	0.005	<1	0.52	0.004	0.06	<.1	2	0.04	0.01	16	0.1	<.02	2.2	15
60	3	1.54	0.015	5	5.2	0.17	221.6	<.001	<1	0.19	0.003	0.04	<.1	1.4	0.15	<.01	30	<.1	0.02	0.9	15
61	5	3.93	0.028	6.9	8	0.39	306.2	0.003	1	0.39	0.005	0.06	<.1	1.7	0.07	0.01	25	0.1	<.02	1.4	15
62	10	0.22	0.034	24.7	7.7	0.31	364.5	0.016	1	1.01	0.003	0.12	0.1	1.9	0.07	0.03	28	0.2	<.02	3.8	15
63	13	0.16	0.023	15.1	11.4	0.25	266	0.018	1	0.84	0.003	0.09	<.1	1.7	0.07	<.01	18	0.2	<.02	2.6	15
64	12	0.97	0.027	12.4	10.5	0.29	681	0.011	1	0.97	0.003	0.1	<.1	2.7	0.08	0.01	45	0.3	0.05	2.6	15