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Extensive Gold in Decayed Vegetation in Murphy Township

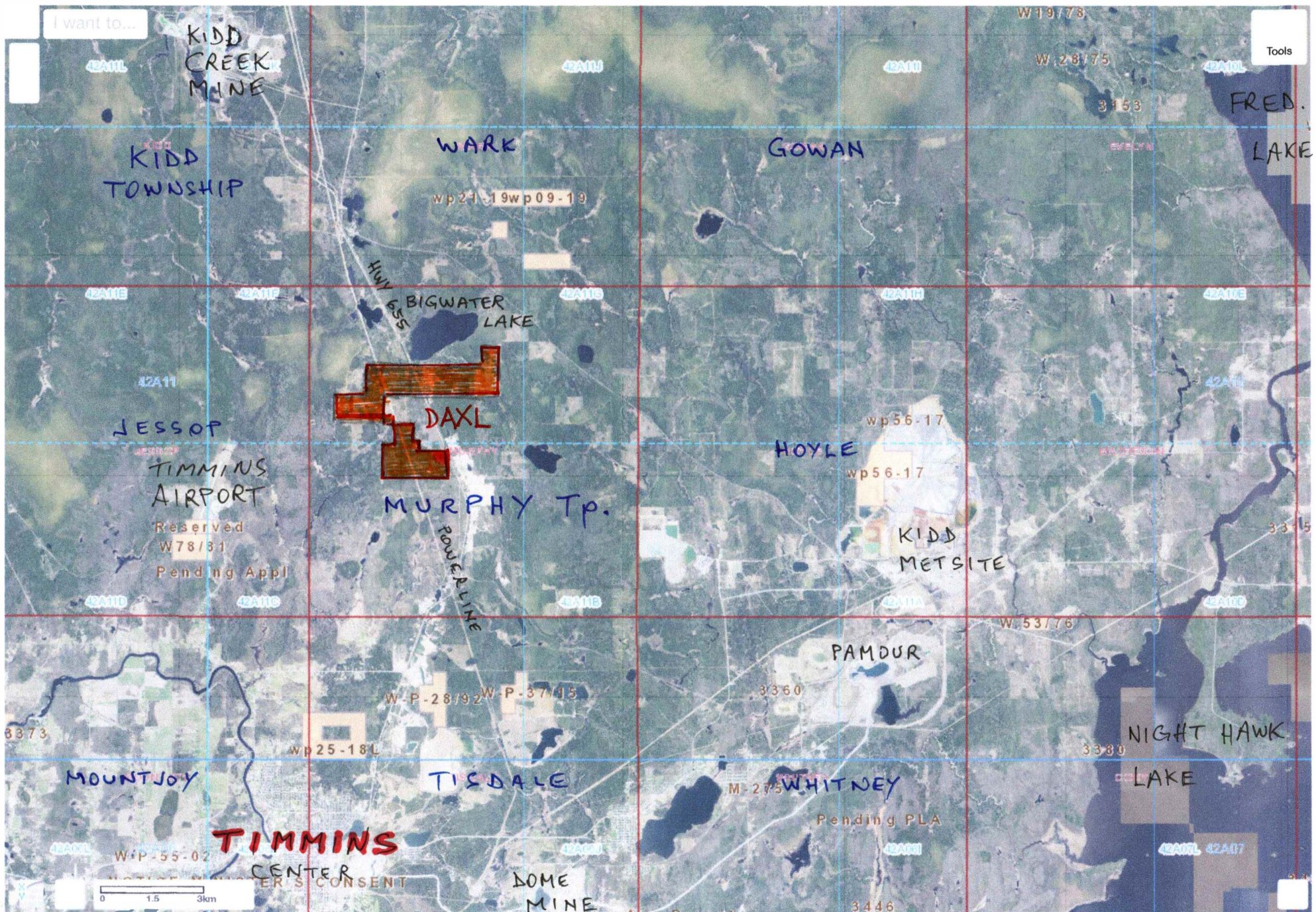
(Westward from Highway 655)

on unpatented mining claims
521621 - 623, 580596 - 600, 586362 - 363,
586365 - 368, 587401 - 402, 587477 - 478.

in cells
42A11C 013 - 015, 033 - 035, 054 - 055,
42A11F 312, 332 - 333, 350 - 352, 370 - 372, 393.

Report by Hermann Daxl, M.Sc.(Minex), Claim Holder

11 March 2021



Sample Spots

of Decayed Vegetation (K) or

Black Muck = M, Clay = C

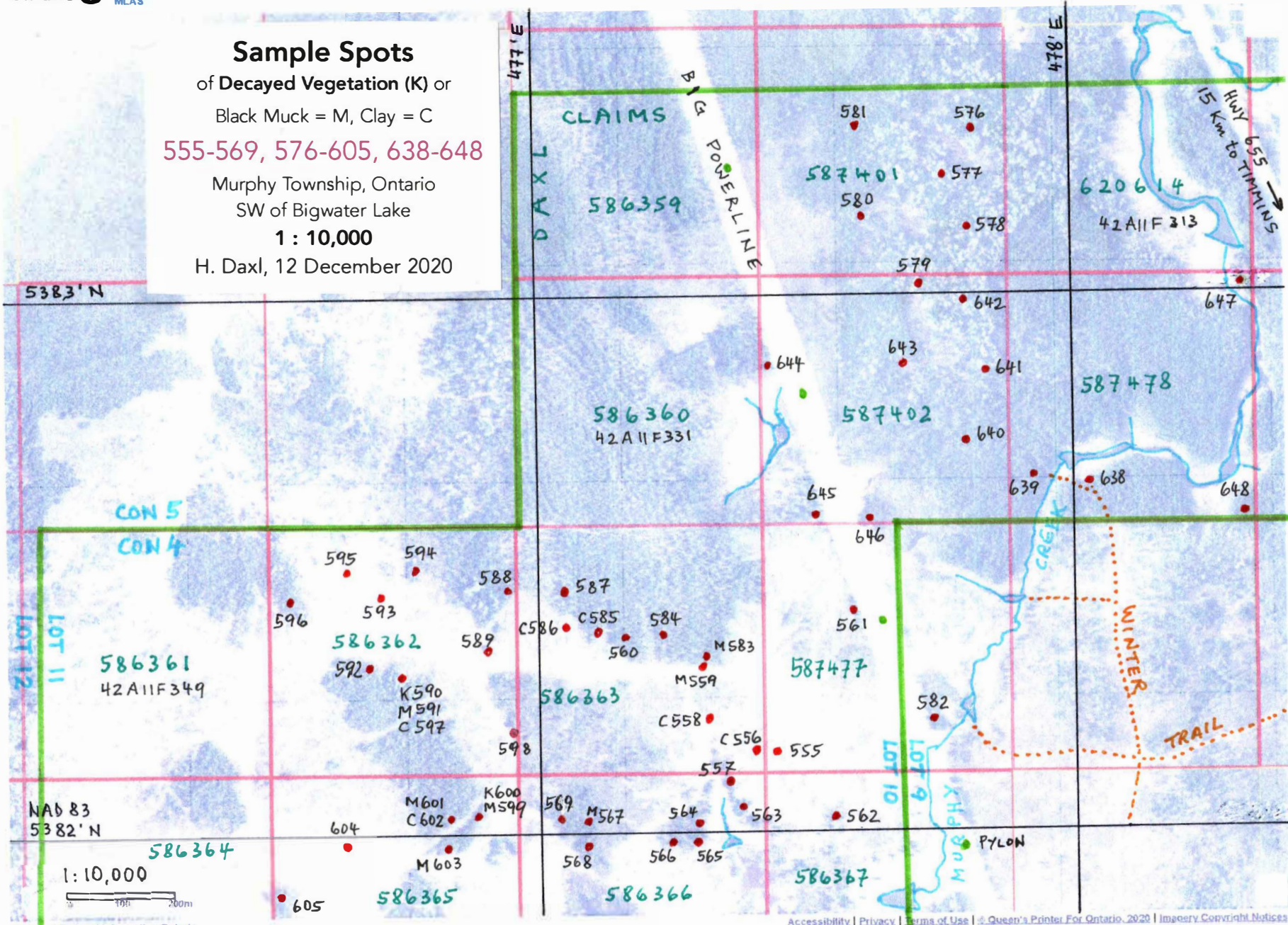
555-569, 576-605, 638-648

Murphy Township, Ontario

SW of Bigwater Lake

1 : 10,000

H. Daxl, 12 December 2020



MLAS
K553
M554
586367
552

Sample Spots

of Decayed Vegetation (K) or
Enriched-B = E, Black Muck = M

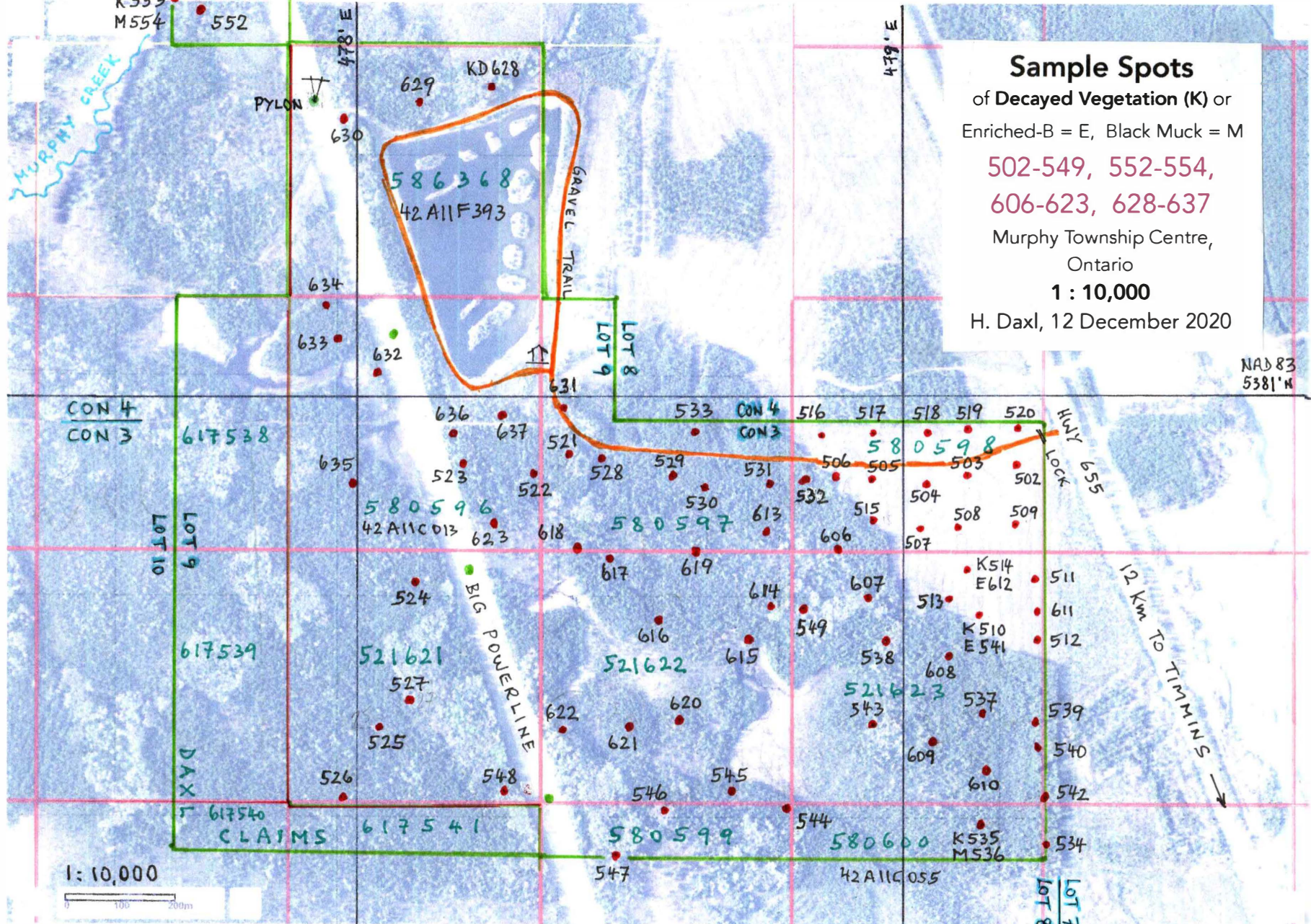
502-549, 552-554,
606-623, 628-637

Murphy Township Centre,
Ontario

1 : 10,000

H. Daxl, 12 December 2020

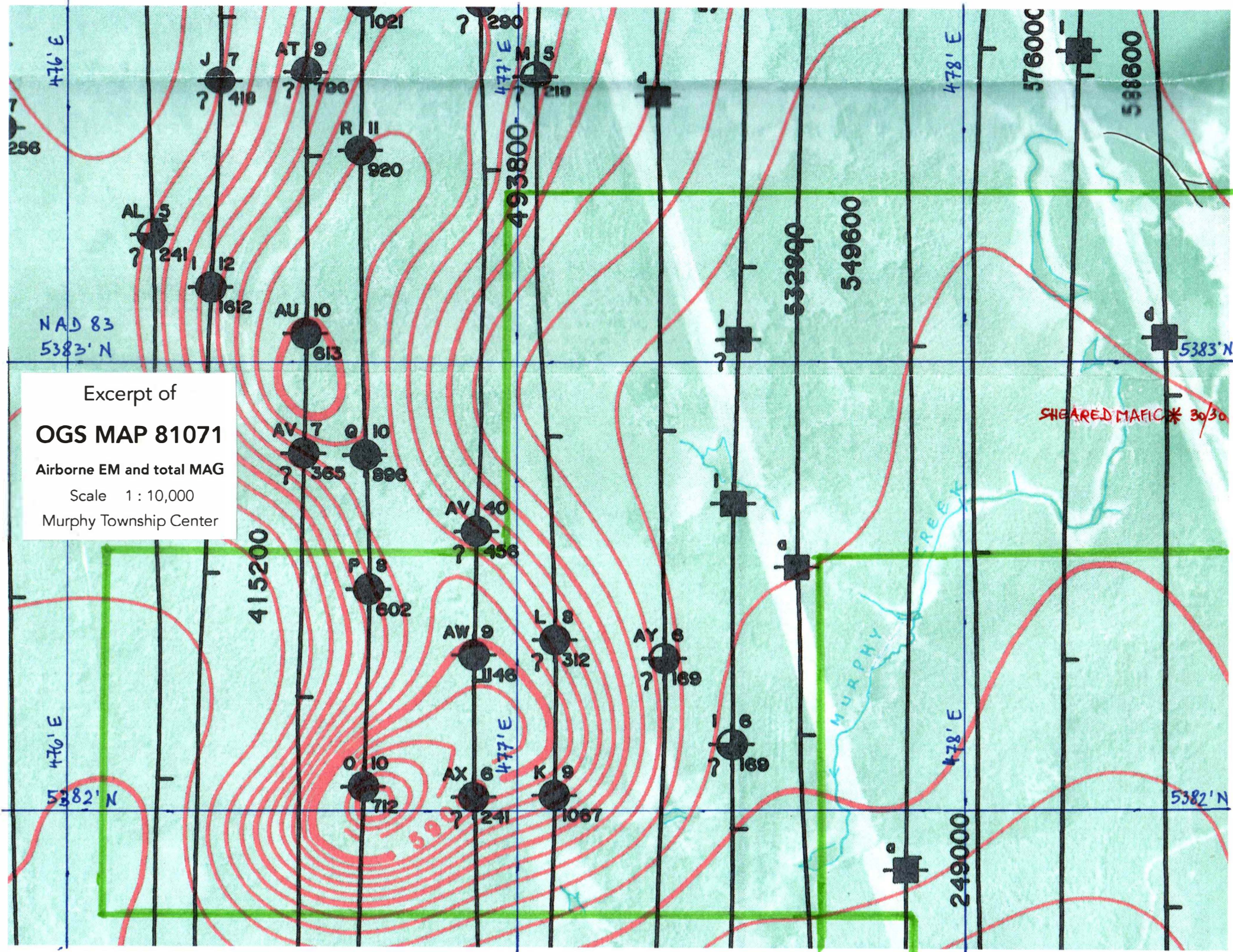
NAD 83
5381' N



1 : 10,000



Excerpt of
OGS MAP 81071
Airborne EM and total MAG
Scale 1:10,000
Murphy Township Center



SHEARED MAFIC * 30/30

493800

415200

532900

549600

576000

598600

478'E

249000

476'E

5382'N

NAD 83
5383'N

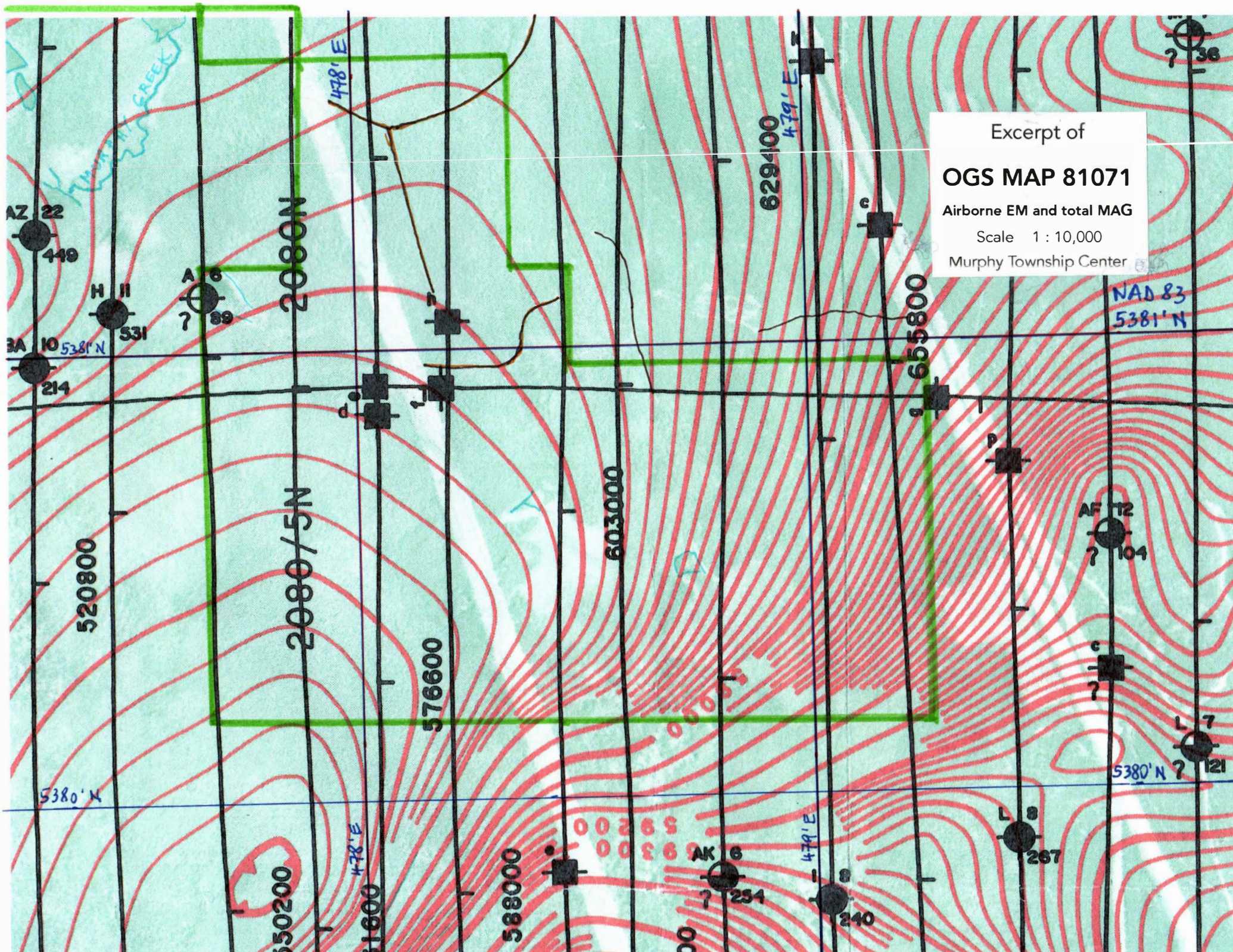
477'E

5382'N

5383'N

MURPHY CREEK

Excerpt of
OGS MAP 81071
Airborne EM and total MAG
Scale 1 : 10,000
Murphy Township Center



NAD 83
5381'N

5380'N

5380'N ?

550200

576600

588000

603000

629400

655800

2080N

2080/5N

576600

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240

267

AF T2

? 104

L 7

? 121

L 8

267

AK 6

? 234

AZ 22

449

H II

531

A 6

? 89

3A IO

538'N

214

478' E

479' E

478' E

479' E

? 38

Introduction

The discovery of much gold in decayed vegetation (my Assessment Work Report 3616) has now been extended northwestward over my 18 claims, 521621 - 623, 580596 - 600, 586362 - 363, 586365 - 368, 587401 - 402, 587477 - 478. The strongly anomalous gold values from 25 - 45 ppb Au, and associated silver from 200 - 729 ppb Ag, are common on the 1 km² area sampled at 60 m to 200 m spacing on and southwestward from claim 580598 (cell 42A11C015). Further prospecting returned persistent up to 24 ppb Au over all other claims, making this a newly discovered gold-silver region only 11 - 14 km north of Timmins, Ontario. If no gold was in the rock below, values would be zero like in the very thick local sand and clay. In addition 4 areas of somewhat anomalous zinc may indicate a SEDEX environment including the so far unexplored EM - MAG anomalies. Please refer to the attached 2 sets, NW and SE, of various maps.

Keys for the gates from Highway 655, at NAD83 479255 E - 5380928 N, and 478650 E - 5382350 N, can be obtained from the surface rights owners, but the swampy northwest claims are more difficult to access over beaver dams. They have been clearcut via swampy winter roads. But near sample 639 Murphy Creek is only 40 cm deep on solid sand.

Present Work

I collected the 135 samples during 19 traverses from 16 May to 9 August 2020. 118 of them are decayed vegetation (K) from 0 - 6 cm depth of suitable forest floor and around trees in swampy areas, namely decayed leaves, needles, and small rootlets, where ions of gold and other elements migrating from deposits are known to accumulate directly and through the plant cycle. To widen the scope, each heaped double-handful decayed vegetation sample had been composited from several spots over 30m wide areas. UTM was taken in the center (see list).

Of the other samples, 9 are deeper black swamp muck (M), 2 brown enriched B-horizon sand (E), and 6 of the top of clay (C), each 10 cm core taken with a 5cm Dutch auger at a single spot, to show that they do not collect nor contain gold. Values were not plotted. Leached sand-silt (DT) dregs swirled from dry sievings of decayed vegetation (K) also were barren as per diluted values. Fine panning of sand to 1 m depth from the richest area at samples 510 and 514 also revealed no gold.

After removing sticks, sand, charcoal, worms, cones, clay balls, etc. all samples were dried in the sun, then rubbed to loosen the fines (not macerated), and sieved to minus 250 micron. K and M samples were then dry-swirled in a plastic gold pan to remove most sand-silt-clay. Remaining inorganics were noted because they would dilute values, even if they could not contaminate the desired elements. However, no adjustments for dilution were made.

This prospecting method is fully described in the attached lecture handout. Please also refer to the 2 maps with the 19 traverses that help to locate the samples. My 6-minute video demonstrates the collection of decayed vegetation.
[www.youtube.com>watch>v=zHgkvo0wSI0](http://www.youtube.com/watch?v=zHgkvo0wSI0)

The minus 250 micron dry sievings were analyzed at ALS Canada Ltd., North Vancouver, by ME-VEG41 / HNO₃-HCl - ICP / AES-MS, 1 g aliquots, unashed. Gold by this method is rather erratic and low, as possibly carbon interferes. Therefore I compacted splits into 7cm³ medium vials for the further more reliable neutron activation analyses for vegetation with special double irradiation time, done by Activation Laboratories Ltd., Ancaster, Ontario, which I plotted on the gold maps.

The other elements of interest, silver, zinc, copper, indium, lead, were plotted from the ME-VEG41, which unfortunately missed 8 samples in the main gold area. Several reruns and cross-analyses between batches, with blanks and standards, mostly agreed, but some zinc values were taken from neutron activation. Please also refer to the annotated lab results of the seven sample batches.

In an attempt to have more material by using the 250 - 1000 micron sievings, gold results were significantly lower in the six samples 672 - 677 by the briquette method of neutron activation. It was expected that the coarser size would have lower values due to less concentration by decay. However, the less specialized irradiation of briquettes could also be the reason. Both sizes in vials 666 and 689 had similar results (lab report A20-15569). The long-used specialized proven method of <250 micron in medium vials with double irradiation time is therefore continued.

Results

The element maps illustrate the good general correlation between gold and silver, and to some extent zinc, in the main gold area. This and their uniform distribution could be due to an underlying polymetallic SEDEX deposit distal to the Kidd Creek Mine at 13.6 km towards az. 335. Values of copper, indium and lead are hardly anomalous but also correlate somewhat. Arsenic values are quite normal, suggesting free gold-silver or a clean deposit.

The continuous high values of gold <45 ppb here compare well with the 75 ppb Au across a hill with outcropping gold-bearing quartz-veins (sample 687 from my McEnaney claims). The present probable 20 m overburden of sand on clay would have spread out the gold, so that quite a number of such veins could be expected across the 1 km² area here if it is a gold-bearing shear zone, whereby rock types would hardly matter.

Gold in decayed vegetation over barren bedrock should be zero. The widespread gold values over all claims northwestward, with unexplored airborne conductors in a magnetic high, and three separate areas of somewhat anomalous zinc, further resemble a SEDEX region. The originally questioned rather high zinc of samples 119 - 120 southwest of the main gold area is now confirmed with more zinc values, and 330 ppm Zn in sample 622. The hydro towers are not zinc coated.

Overburden, Geology, and Anomalies

The claims area is quite flat and often water-logged with locally >1 m deep black swamp muck. Using a 1-m dutch auger I encountered clay at most sample spots, except for fine beach sand at the 5 m higher elevations along highway 655, grading to silt westward. Details are annotated on the list of analyses.

The 1971 logs of diamond drill holes TX-77 and 78 about 150 m SSE of my claims and from sample 534, describe the 10 m vertical overburden as swamp on clay cover, with fine sand at the base. Bedrock is dacite tuff and graphitic argillite. The drilled conductor in the 1.5 km magnetic area (2.23570) was explained by separate <1 m beds of < 40% massive pyrrhotite and <70 % massive pyrite at <40 m vertical depths. I found no analyses.

These could be sediment-hosted exhalites (SEDEX) that would probably be zoned and reach into my southeastern claims 580599 - 600, 521621 - 623, 580596 - 598, were I discovered abundant <45 ppb gold and <729 ppb silver in decayed vegetation. The wide area of similar gold-silver values, and the smaller area of <330 ppm zinc with <528 ppb silver around samples 622 and 548 would fit a zoned exhalite deposit. Please refer to the element maps.

Of course, the quite even distribution of gold-silver values could also come from a >1 km wide gold-bearing shear zone through the assumed sedimentary bedrock, as values from individual veins would be spread out locally by the thick clay-silt-sand overburden. Note that such mineralization need not make a geophysical anomaly like so far pursued by regional exploration. Please refer to the 2 excerpts of OGS Map 81071 attached.

The only two holes on my claims drilled conductors in a magnetic high at my northwest claims 586365, and 586362 - 363. At hole 1 near sample 604 the 18 m vertical overburden was clay with 1 m gravel on a basalt flow top. At hole 2 near sample 588 the 36 m vertical overburden was clay on 9 m sand and gravel, on graphitic tuff on pillowed andesite. Only 11 m of the total 213 m drill core were sampled yet poorly analyzed.

In the same trend at 400 m to az. 330 from my sample 595 north of my claims, Cominco intersected 90 cm of 1.2 g/t Au at 52 m vertical (T-3905). The hole intersected graphitic

argillite, basalt, and turbidite. Despite probably tens of meters of overburden, this sample 595 ran 20 ppb Au, 214 ppb Ag, 284 ppm Zn. Other samples of the trend were also anomalous in gold and zinc.

My northern claims 587401 - 402 and 587478 show no geophysical detail, however, gold is moderately anomalous along Murphy Creek, and zinc on claim 587401. Sample 648 returned 23 ppb Au and 246 ppb Ag. Note that gold and zinc do not make conductors, but show well in decayed vegetation, here again despite the probably deep overburden.

Yet the nearby 6-m wide hump of mafic rock sheared 30/30 near sample 647 at the west roadside of Highway 655 at 478462 E - 5382900 N may be an outcrop. It features 1 mm orange grains, hornblende slabs, chloritic streaks, and moderately magnetic inclusions.

Analyses

Clay (C) samples 556, 558, 585, 586, 597, 602, are uncontaminated, from just below their sharp surface under black muck (M) from the EM-MAG area on the northwestern claims. The six samples vary only little between them, averaging <1 ppb Au, 61 ppb Ag, 100 ppm Zn, 26 ppm Cu, 27 ppb In, 12 ppm Pb, by ME-VEG41. These are near usual background for decayed vegetation.

As usual in clay, dominant elements are Al, Ba, Be, Ce, Co, Cr, Cs, Fe, Ga, Hf, La, Li, Mg, Nd, Ni, Rb, Sc, Sm, Th, Ti, Tl, V, Y, Zr. Please refer to the annotated lab results. Where this element suite is excessive in decayed vegetation (K), it represents clay content that would dilute the sample, not anomalies. The <4 ppb platinum in clay may be false so near to detection limit. Clay is not a good medium regardless.

Enriched B-horizon (E) of fine beach sand 541 sieved <125 micron is from the ochre-yellow horizon below the 10-cm leached white sand layer under the 6-cm layer of decayed vegetation 510. The enrichment comes from the leached clay coating of sand above and therefore relates to clay, namely Al, Co, Cr, Fe, Ga, Li, Ni, V, Zr. Note also that the decayed vegetation 510 (K) there has the relatively high 82 ppm copper and 242 ppb indium, whereas 541 (E) has only 5 ppm Cu and 12 ppb In. Obviously the usually sampled B-horizon cannot be useful, especially not when grain size varies. It is common in drier areas where <15 cm humus rests on sand.

Results for such clay elements by neutron activation of this sample 541 (E) are much higher than by ME-VEG41, being totals independent of dissolution of grains, and better showing the similarity of clay and sand. The absence of gold in clay (C) 558, 586, 602, and sand (E) 541, 612, analyzed by neutron activation proves once more that there is no detrital gold nor gold-

bearing quartz sand. The 80% sand-silt dregs (624), basically white leached sand, from swirling of sample 622 with 12 ppb Au also had no gold.

Fine-panning of a 5-cm auger core of sand down to 110 cm at 541 rendered only rare traces of magnetite and phlogopite, 10 % non-magnetic black grains, 50% clear quartz, and 40% milky quartz and white feldspars. Some local <2mm sand was more angular and less mature, the fine sand mostly well rounded quartz.

Sand-silt (DT) dregs 571, 572, 573, 653, extracted from decayed vegetation (K) samples 509, 533, 544, 628, respectively during sample preparation but still containing variable decayed vegetation, were analyzed by only ME-VEG41 to test whether DT could contaminate, which is not the case for Au, Ag, Zn, Cu, In, Pb, as per their lower values.

Further such sand-silt (DT) dregs, 667, 668, 669, 678, 679, of samples (K) 503, 545, 614, 502, 517 respectively, confirmed this also for the gold and zinc analyzed by neutron activation. DT does not contaminate but needs to be extracted by swirling the dry sievings to avoid dilution. Any remaining DT is annotated on the lab results, but values were not adjusted.

Black swamp muck (M) like 536, 554, 559, 567, 583, 591, 599, 601, 603, usually has such Ca, S, Sr, U. Copper enrichment would be anomalous, but I have never seen gold, lead, zinc, enriched in M except for gold in a drained swamp. Also water flow in swamps would affect enrichment. The only anomalous sample here is 554 with 3.82 ppm molybdenum (3.15 by neutron activation), and 1.32 % sulfur.

Decayed vegetation (K) of the top 6-cm of all overburden is the most useful medium. Here it shows gold very clearly, somewhat coincident with minor silver, minor zinc, and less so indium and copper. The low arsenic is also reliable. In swampy areas or on black muck, decayed vegetation around trees is just as useful, even if the muck below is barren but the water stagnant. Other possibly anomalous values in decayed vegetation are the 17 and 27 ppm cobalt in 590 and 604, and maybe the 1.4 and 1.3 ppm niobium in 562 and 564, as they seem not due to clay.

Conclusions and Recommendations

These widespread and high confirmed up to 45 ppm gold in decayed vegetation can come only from the rock below, as contamination from sand-silt-clay has been ruled out by sampling. SEDEX or goldbearing shearzones can be expected. Although the claims had hardly been explored, the efficient method of discovering values by decayed vegetation sampling justifies drilling on claims 580598 and 521623. First holes need to be drilled in 3 directions to ascertain

the attitude of the bedding of the expected sedimentary and volcanic rocks, and any direction of shear or veins.

No other method can contribute. Gold-zinc deposits cannot be found by geophysics, and graphite or rock types cannot rule out the real values found. Magnetic dikes and rocks, or conductors, do not assure values. More infill sampling is recommended on all other claims, also to possibly find additional values in the known conductors and magnetic anomalies.

Respectfully submitted,

Timmins, 11 March 2021

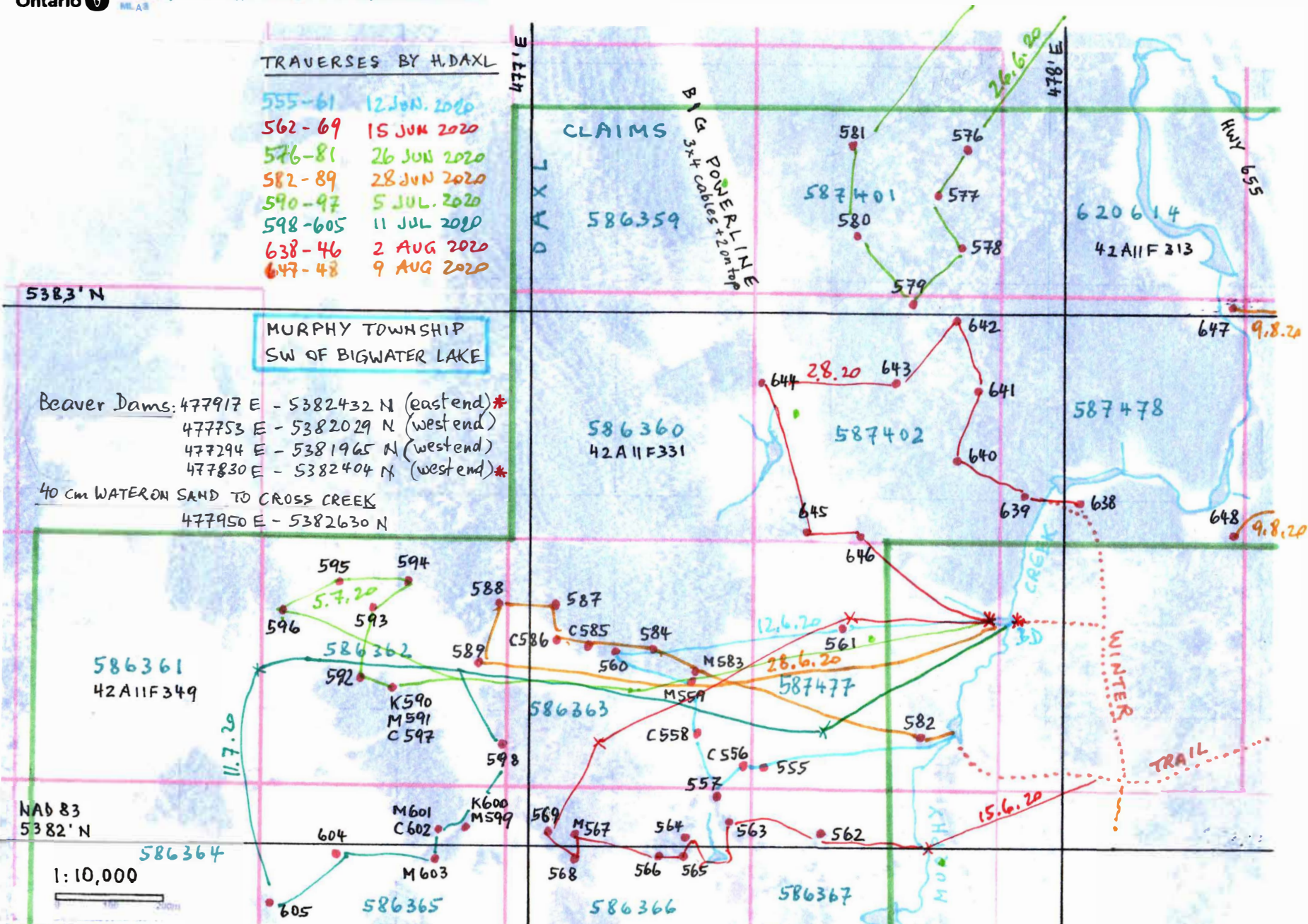
Hermann Daxl, M.Sc.(Minex), Claim Holder

TRAVERSES BY H.DAXL

- 555-61 12 JUN 2020
- 562-69 15 JUN 2020
- 576-81 26 JUN 2020
- 582-89 28 JUN 2020
- 590-97 5 JUL 2020
- 598-605 11 JUL 2020
- 638-46 2 AUG 2020
- 647-48 9 AUG 2020

MURPHY TOWNSHIP
SW OF BIGWATER LAKE

Beaver Dams: 477917 E - 5382432 N (eastend)*
 477753 E - 5382029 N (westend)
 477294 E - 5381965 N (westend)
 477830 E - 5382404 N (westend)*
 40 cm WATER ON SAND TO CROSS CREEK
 477950 E - 5382630 N



Ontario

Ministry of Energy, Northern Development and Mines

K553
M554

9.6.2020

478' E

MURPHY CREEK

629
KD628
586368
42A11F393

MURPHY
TOWNSHIP
CENTER

BEAVER DAM : 477585 E
5381700 N

634
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GRAVEL TRAIL

479' E

TRAVERSES BY H. DAXL

- 502-511 16 MAY 2020
- 512-520 18 MAY 2020
- 521-527 22 MAY 2020
- 528-533 25 MAY 2020
- 534-541 31 MAY 2020
- 542-549 5 JUN 2020
- 552-554 9 JUN 2020
- 606-612 16 JUL 2020
- 613-618 21 JUL 2020
- 619-623 24 JUL 2020
- 628-637 31 JUL 2020

NAD83
5381' M

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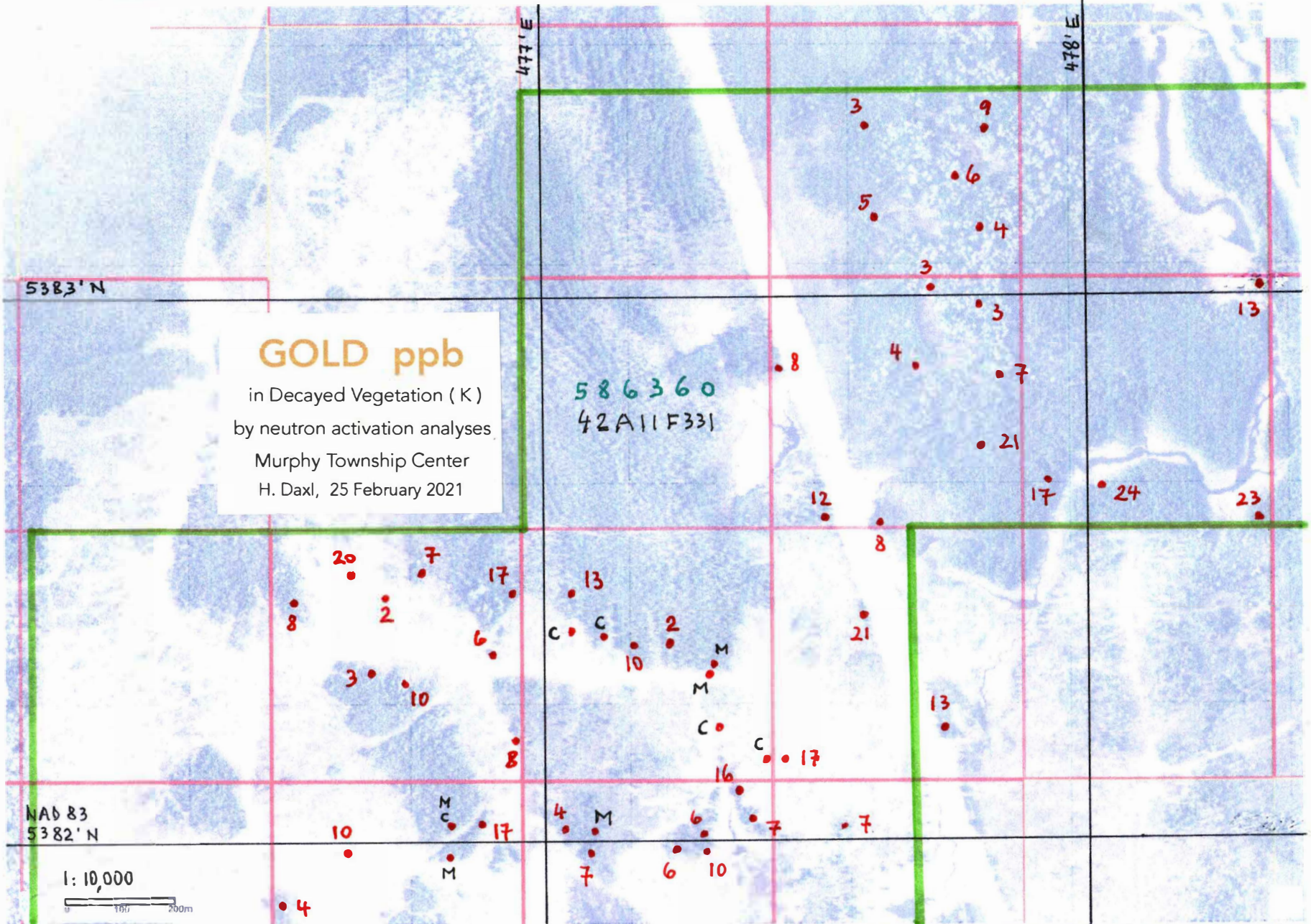
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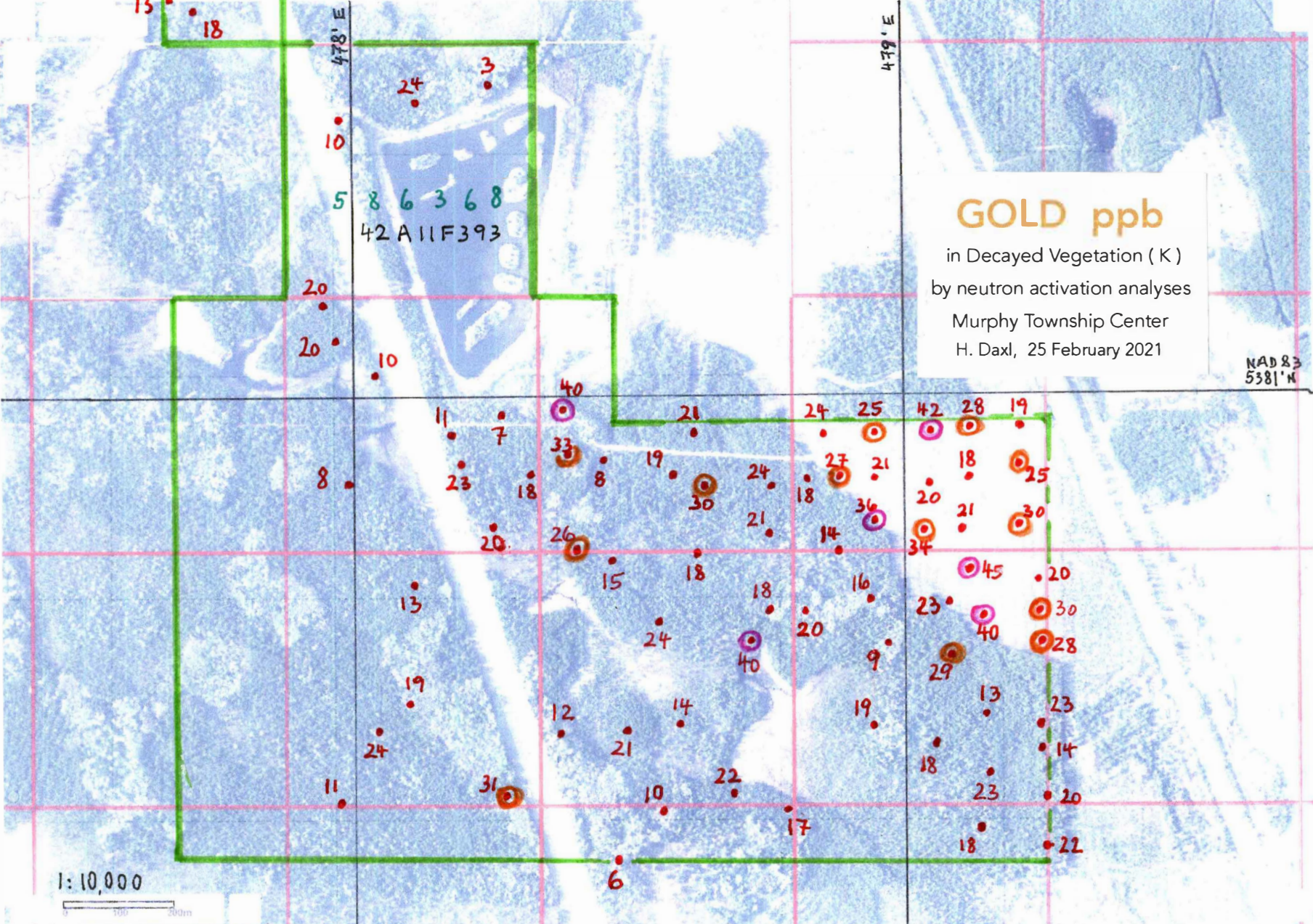
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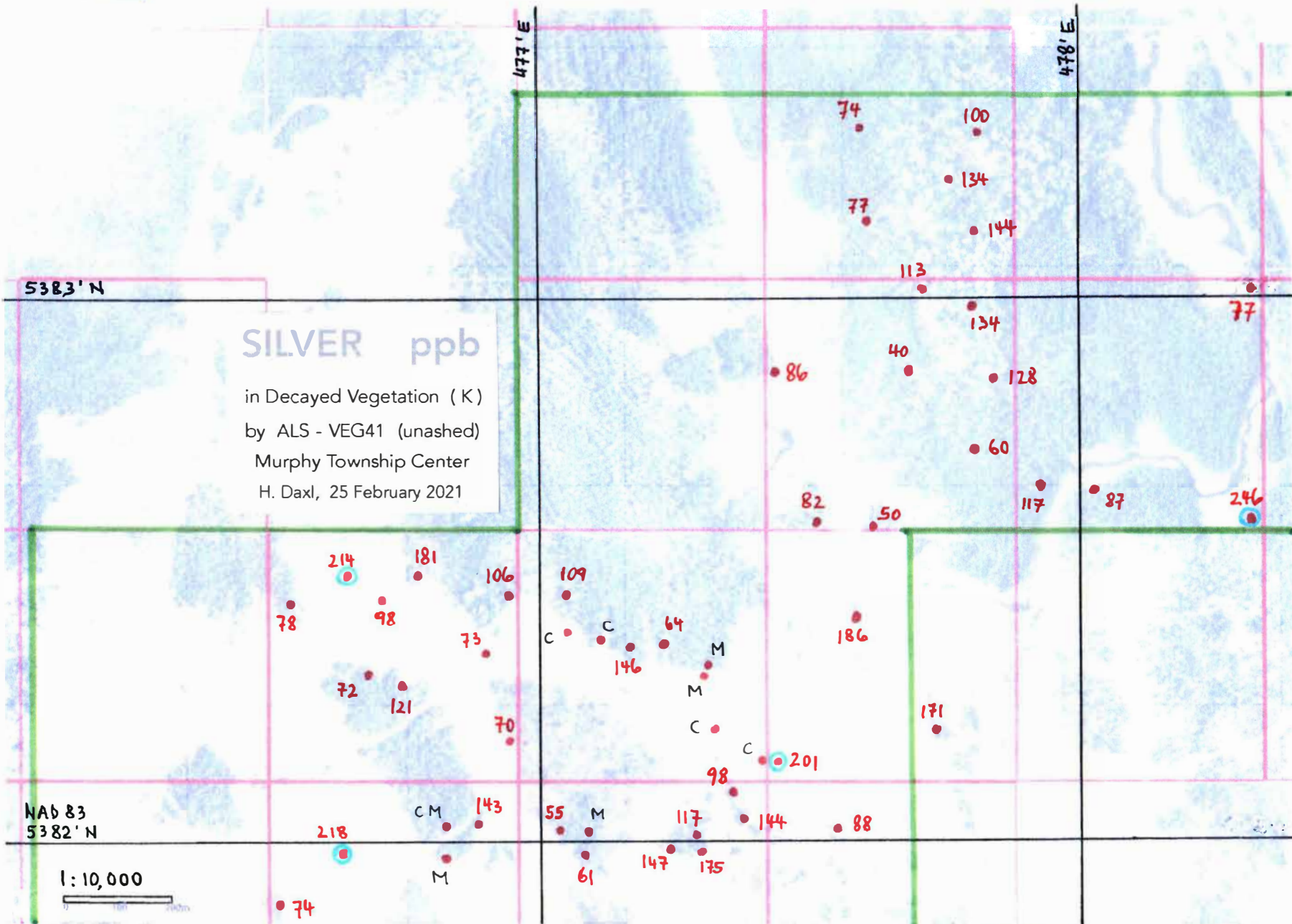
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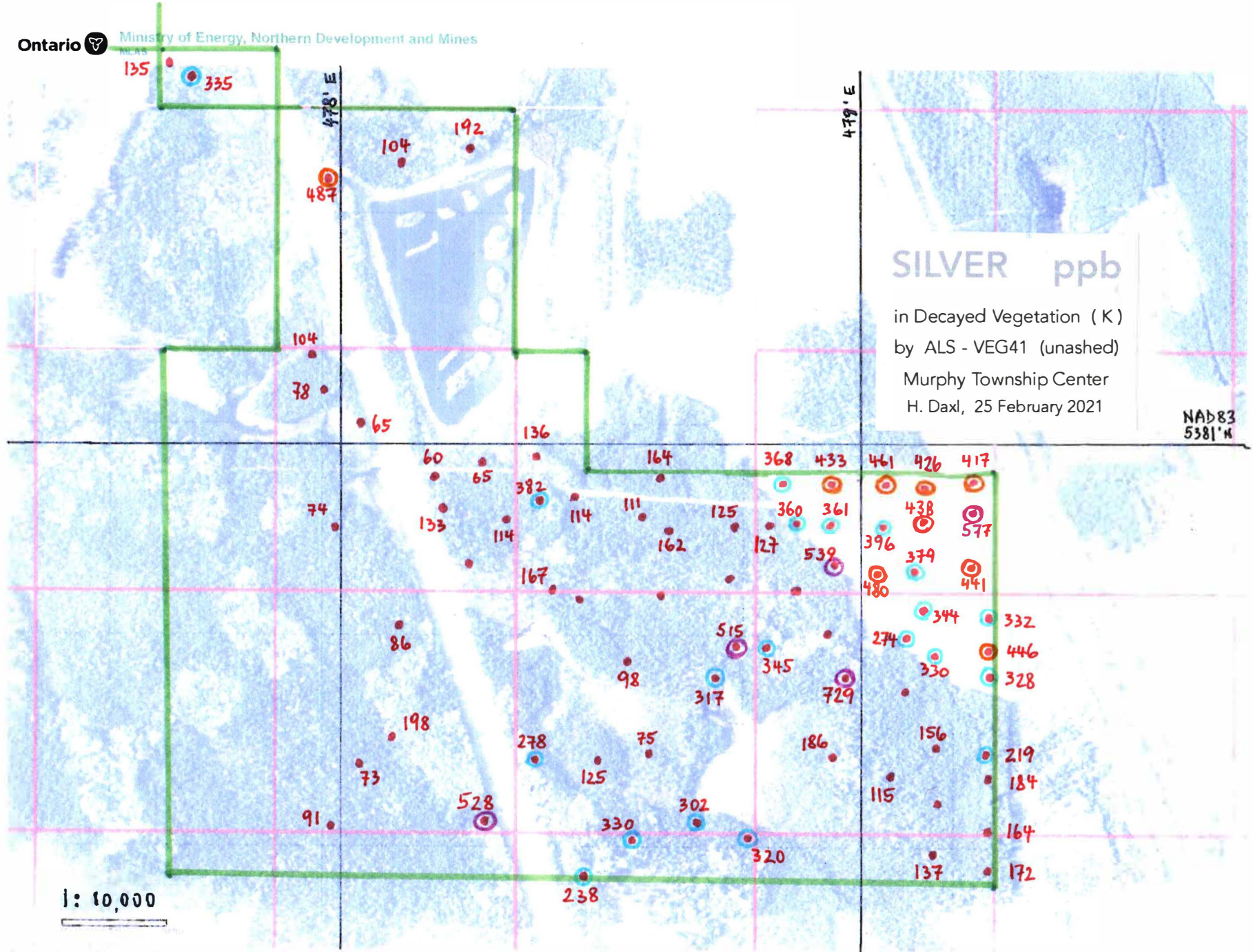
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MLAS







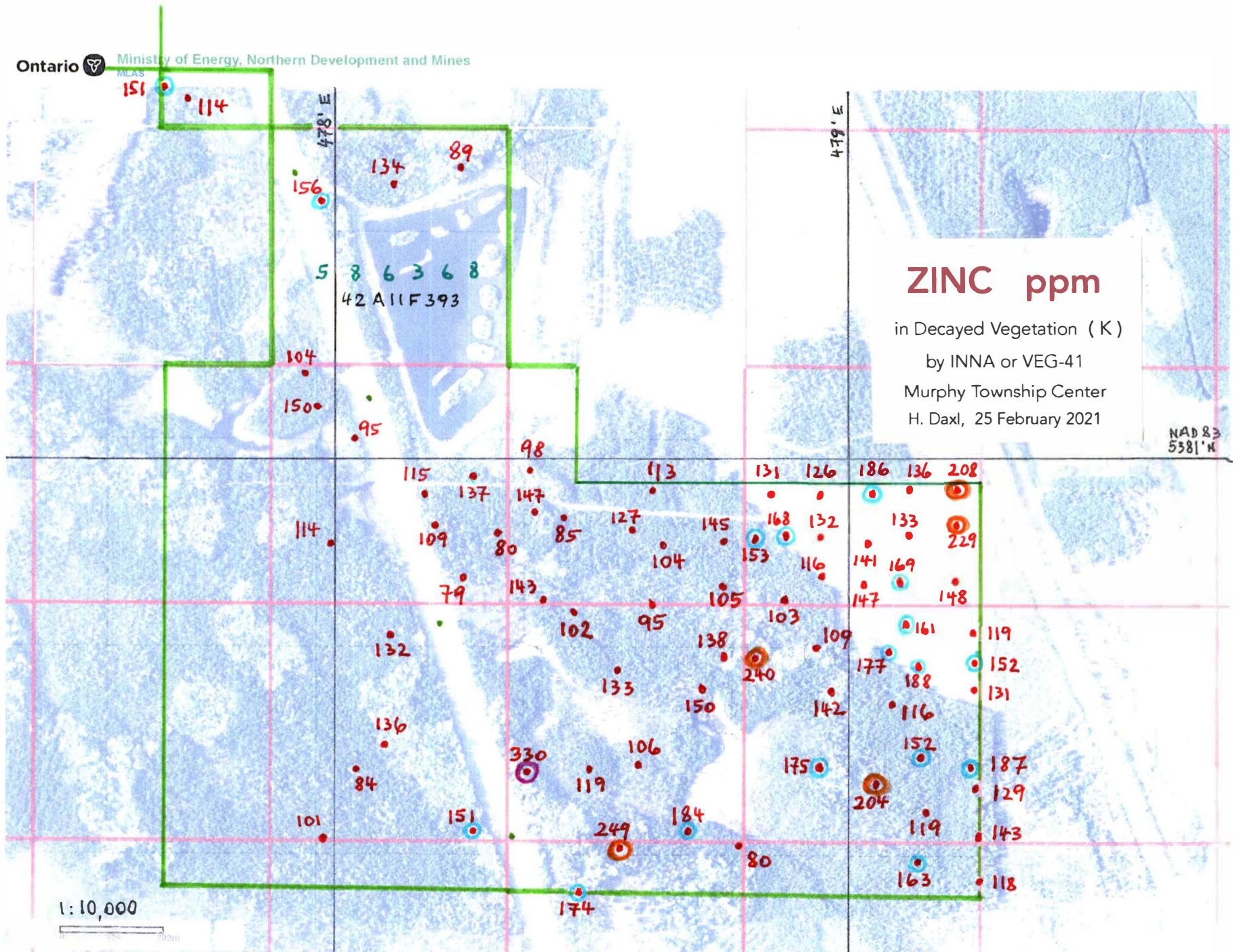
SILVER ppb

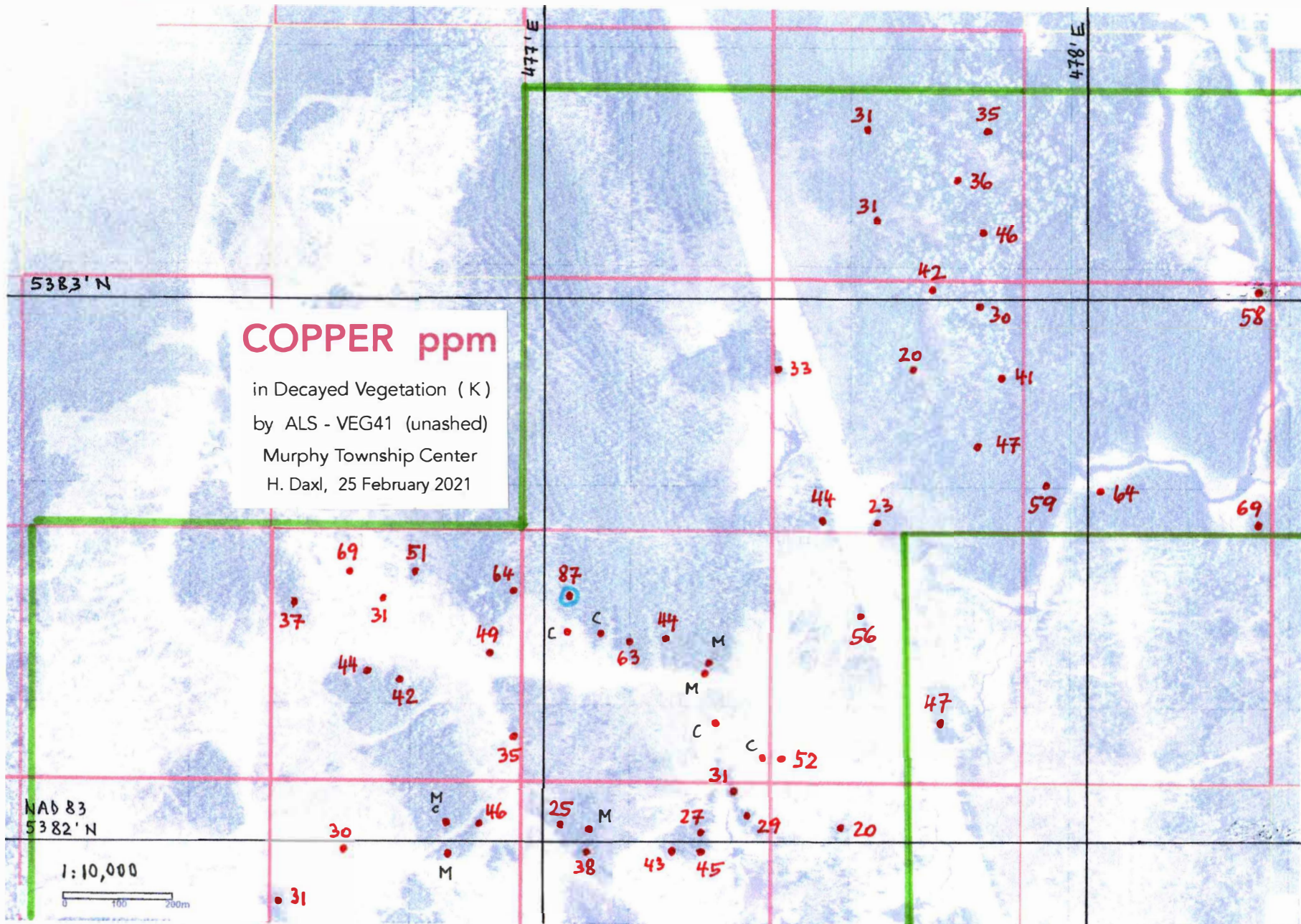
in Decayed Vegetation (K)
by ALS - VEG41 (unashed)
Murphy Township Center
H. Daxl, 25 February 2021

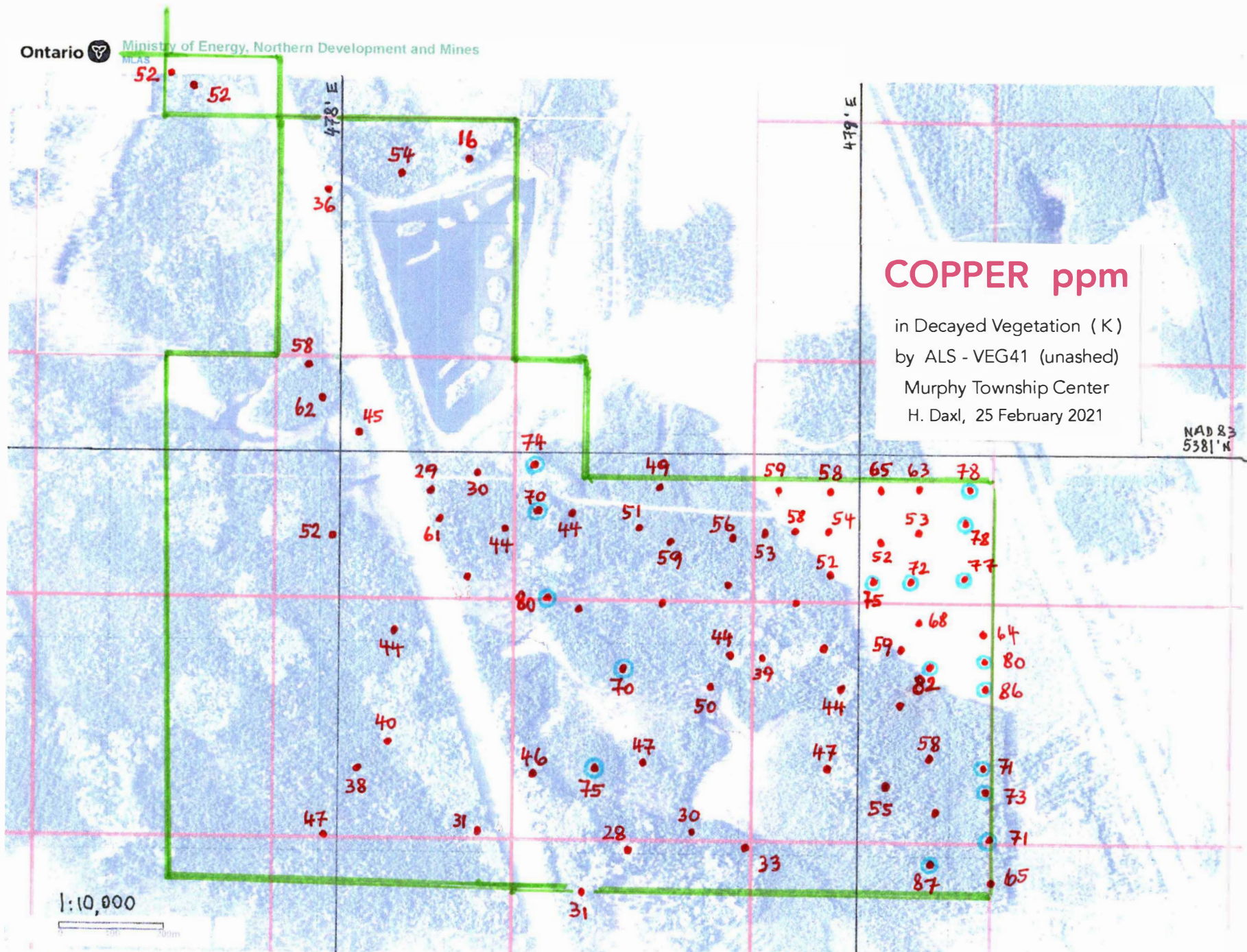
NAD83
5381' N

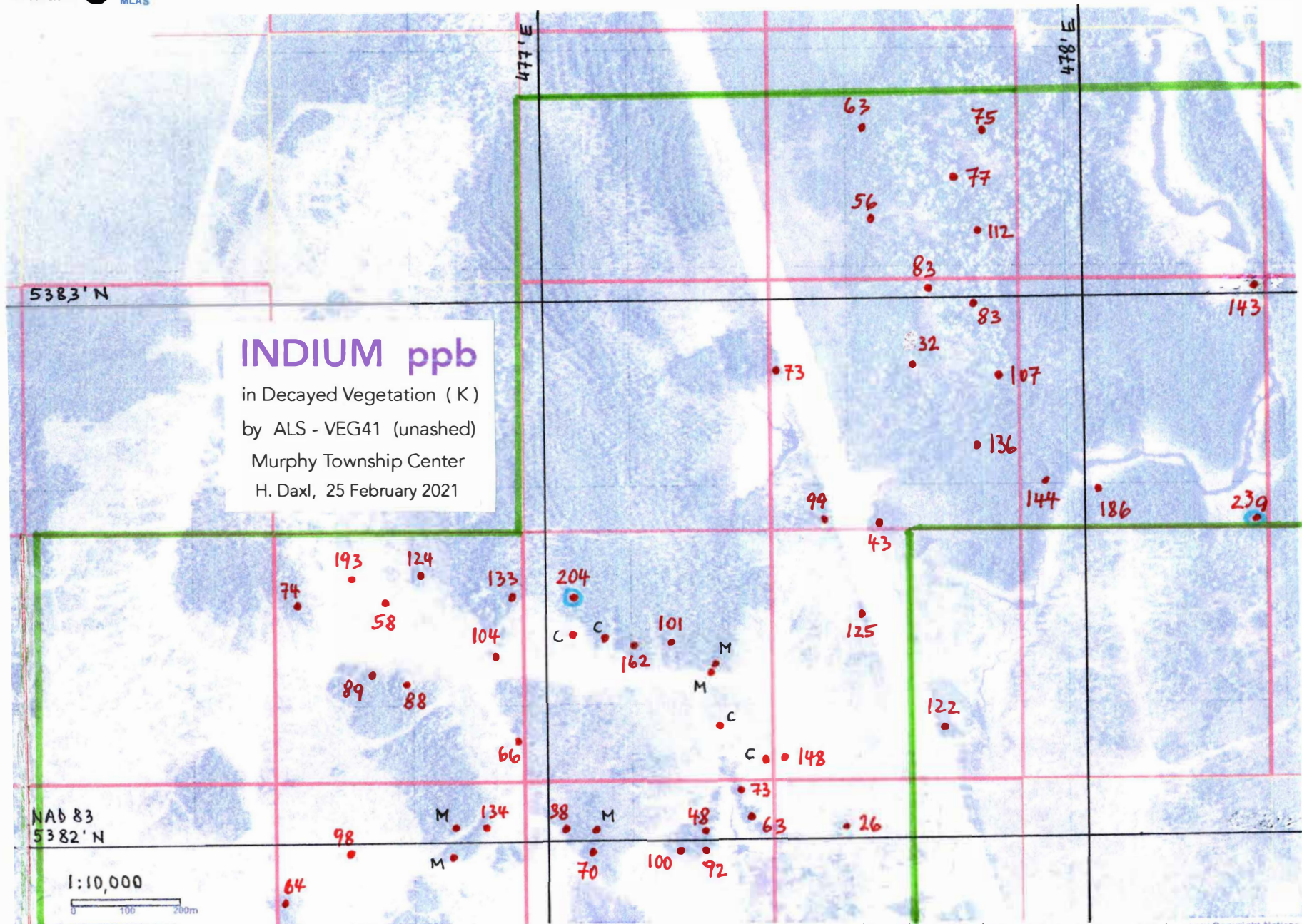
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MLAS

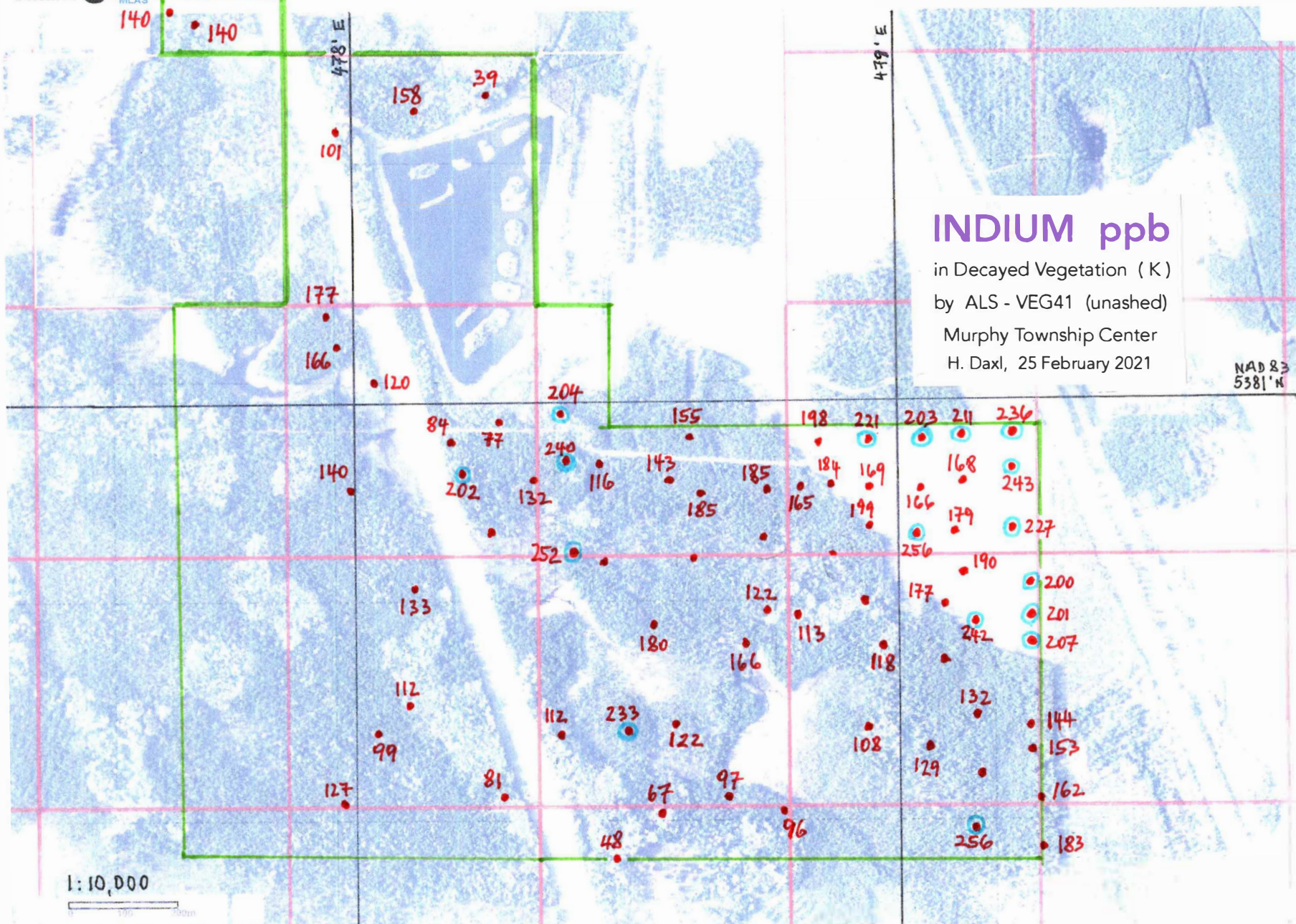




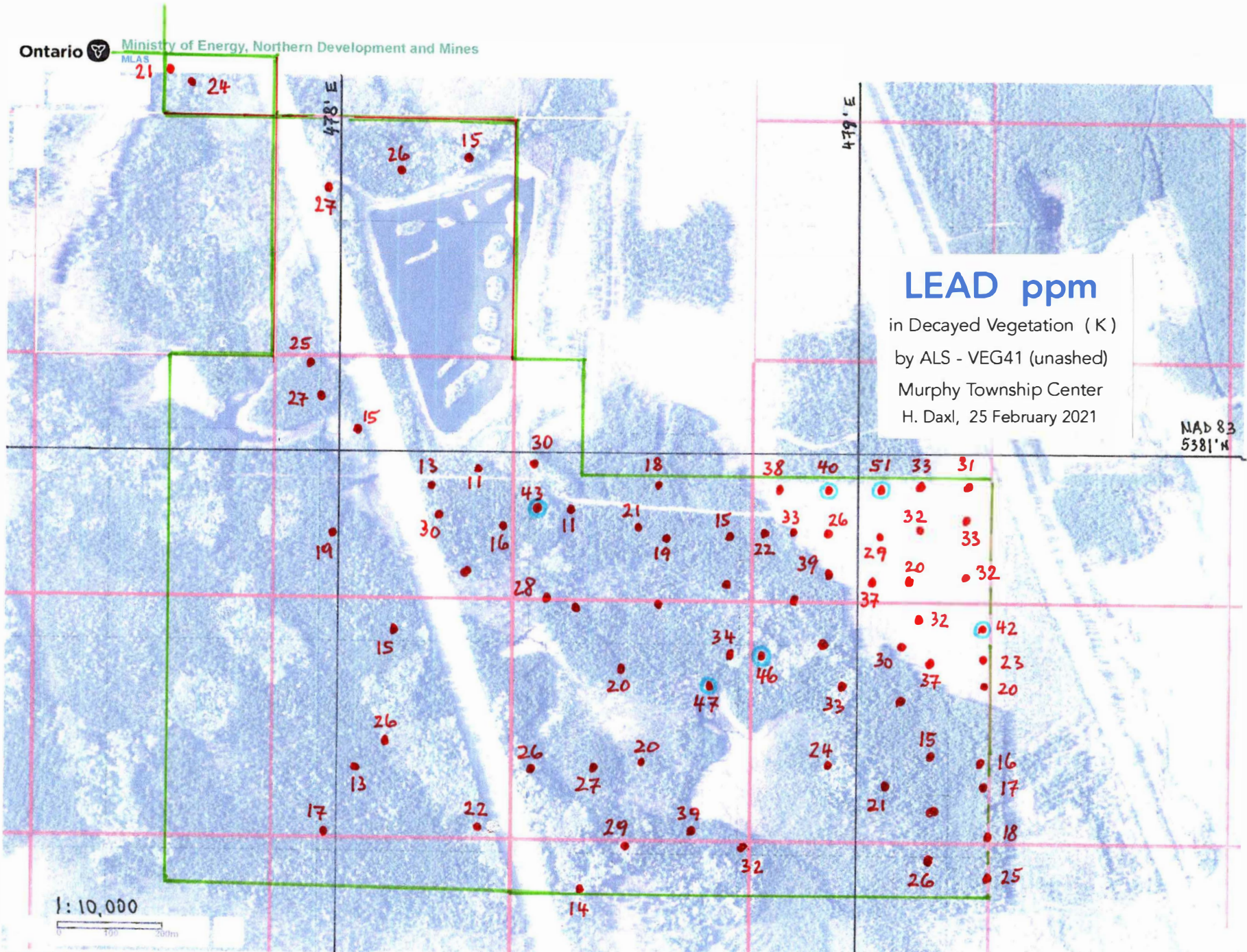




MLAS



MLAS



LEAD ppm

in Decayed Vegetation (K)
by ALS - VEG41 (unashed)
Murphy Township Center
H. Daxl, 25 February 2021

NAD 83
5381'N

1:10,000





ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 604 984 0221 Fax: +1 604 984 0218
www.alsglobal.com/geochemistry

To: HERMANN DAXL
39-630 RIVERPARK RD
TIMMINS ON P4P 1B4

Page: 1
Total # Pages: 3 (A - D)
Plus Appendix Pages
Finalized Date: 12-JUL-2020
Account: DAXHER

CERTIFICATE VA20135204

P.O. No.: MU-JUN2020
This report is for 75 *decayed vegetation* samples submitted to our lab in Vancouver, BC, Canada on 25-JUN-2020. *SIEVINGS < 250 µm*

The following have access to data associated with this certificate:

HERMANN DAXL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-219	Received Wet Sample Wt in grams
LOG-22	Sample login - Rcd w/o BarCode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME-VEG41	Vegetation - HNO ₃ /HCl ICPAES-ICPMS <i>UNASHED - AS IS - 1g aliquot (NOT-ASHED)</i>

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

**** See Appendix Page for comments regarding this certificate ****

Signature:

Saa Traxler, General Manager, North Vancouver

Decayed vegetation from 0-6 cm depth (K) sieved < 250 μm (except 544-546 are 125-250 μm)
 analyzed unashed by $\text{HNO}_3\text{-HCl-ICP/MS}$ - 1 gram aliquots - ALS Canada Ltd.

Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Description	Au	Au	Ag	Al	As	B	Ba	Be	Bi
still Vol. %	ppb	N.A.	ppm	%	ppm	ppm	ppm	ppm	ppm
0 501 M TEST	1.3	0.2	0.040 ✓	0.32 ✓	1.12 ✓	8 ✓	43.8 ✓	0.20 ✓	0.029 ✓
0 6D 502 K	11.6	24.8	0.577	0.22	2.92	4	32.2	0.05	0.363
0 5D 503 K	11.0	17.5	0.438	0.23	2.07	4	42.8	0.05	0.324
0 5D 504 K	24.8	19.5	0.396	0.17	2.39	4	35.0	0.03	0.330
0 4DT 505 K	7.2	21.3	0.361	0.16	2.27	4	26.4	0.03	0.295
0 4DT 506 K	10.4	26.6	0.360	0.21	2.78	4	41.0	0.05	0.353
0 3DT 507 K	19.3	33.6	0.480	0.22	3.35	3	32.5	0.04	0.413
0 1DT 508 K	14.1	20.5	0.379	0.17	2.69	4	31.7	0.04	0.286
0 4DT 509 K	12.7	30.3	0.441	0.22	3.16	3	34.4	0.04	0.362
0 1DT 510 K	24.1	39.7	0.330	0.23	3.91	4	27.9	0.05	0.384
0 5DT 511 K	13.3	20.1	0.332	0.21	3.24	3	52.6	0.04	0.381
0 1D 512 K	26.6	27.6	0.328	0.23	2.71	4	27.4	0.04	0.300
0 5D 513 K	15.7	23.1	0.274	0.15	2.94	4	60.4	0.03	0.348
0 5D 514 K	27.4	44.8	0.344	0.28	2.94	3	34.9	0.05	0.357
0 2DT 515 K	15.7	35.6	0.539	0.34	3.09	4	60.0	0.07	0.398
0 5T 516 K	9.9	24.4	0.368	0.15	2.50	4	58.6	0.04	0.365
0 4DT 517 K	18.8	25.2	0.433	0.27	2.95	3	30.5	0.05	0.402
0 1D 518 K	16.3	41.8	0.461	0.19	2.71	3	33.5	0.05	0.391
0 1D 519 K	15.5	27.7	0.426	0.25	3.09	3	36.1	0.05	0.373
0 3D 520 K	18.3	18.7	0.417	0.30	2.55	3	31.5	0.05	0.404
0 1D 521 K	22.5	32.7	0.382	0.15	3.73	4	77.0	0.06	0.480
0 522 K	7.2	17.6	0.114	0.09	1.92	4	29.9	0.02	0.242
0 523 K	19.0	22.7	0.133	0.11	2.46	6	65.5	0.03	0.345
0 524 K	4.8	12.8	0.086	0.07	1.78	4	41.4	0.02	0.207
0 525 K	8.2	23.8	0.073	0.07	2.29	5	18.0	0.02	0.178
0 526 K	8.1	11.1	0.091	0.09	2.22	4	35.1	0.02	0.209
0 527 K	5.8	19.1	0.198	0.10	2.45	10	46.1	0.04	0.236
0 528 K	4.5	8.4	0.114	0.10	1.97	4	33.7	0.02	0.185
0 529 K	12.2	18.6	0.111	0.10	2.51	4	43.8	0.03	0.262
0 530 K	8.2	30.1	0.162	0.11	2.40	3	28.5	0.03	0.298
0 531 K	6.2	24.1	0.125	0.11	1.82	2	34.9	0.02	0.286
0 532 K	11.7	17.9	0.127	0.13	2.66	4	38.3	0.03	0.327
0 1D 533 K	8.2	20.5	0.164	0.14	1.94	3	33.4	0.03	0.270
0 534 K	12.3	22.4	0.172	0.15	3.20	4	54.5	0.05	0.305
0 535 K	8.9	17.5	0.137	0.13	3.31	4	58.5	0.03	0.359
0 536 M 60	0.8	0	0.034	0.56	0.91	6	49.3	0.34	0.036
0 537 K	6.1	12.9	0.156	0.10	1.98	3	33.1	0.01	0.200
0 538 K - 2nd RUB	9.1	0	0.729	0.14	2.38	7	82.8	0.04	0.293
0 539 K	9.2	22.6	0.219	0.17	1.90	4	25.7	0.03	0.220
0 540 K	12.7	13.5	0.184	0.15	2.60	4	36.0	0.03	0.229
99 DT 541 E < 125	0.2	0	0.057	2.68	1.28	3	20.9	0.36	0.058
0 542 K	7.0	19.6	0.164	0.14	2.85	3	35.3	0.03	0.259
0 543 K	2.9	19.1	0.186	0.19	1.87	8	58.3	0.07	0.223

	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204
Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Description	Au	Au	Ag	Al	As	B	Ba	Be	Bi
Still Vol. %	ppb	N.A.	ppm	%	ppm	ppm	ppm	ppm	ppm
2D 544 K 125-250	12.9	17.4	0.320	0.23	1.53	3	114.5	0.06	0.257
5D 545 K 125-250	8.9	21.8	0.302	0.30	2.32	5	184.0	0.07	0.281
10D 546 K 125-250	11.1	10.3	0.330	0.17	1.50	6	135.0	0.05	0.202
0 547 K	4.4	6.3	0.238	0.54	1.65	11	132.5	0.20	0.130
2T 548 K	10.2	30.5	0.528	0.15	1.61	6	94.2	0.06	0.199
1D 549 K	9.2	19.7	0.345	0.26	2.23	8	231.0	0.12	0.298
550 OREAS 47	37.9	37.5	0.089 ~	0.73 ~	8.10 ~	2	58.5 ~	0.17 ✓	0.096 0.15
0 551 M TEST ✓	0.3 ✓		0.022 ✓	0.17 ✓	1.18 ✓	7 ✓	29.7 ✓	0.09 ✓	0.015 ✓
0 552 K	5.6	17.7	0.335	0.11	2.36	9	19.4	0.03	0.250
0 553 K	6.0	12.9	0.135	0.09	1.93	6	36.7	0.02	0.227
0 554 M	0.2	+	0.017	0.18	0.95	22	60.8	0.09	0.020
0 555 K	17.3		0.201	0.11	2.54	6	88.7	0.04	0.268
0 556 CLAY	1.3		0.052	2.68	2.49	9	144.0	0.94	0.146
0 557 K	5.3	15.7	0.098	0.49	1.82	9	84.0	0.16	0.176
0 558 CLAY	1.5	+	0.059	2.70	2.70	10	152.0	0.94	0.161
0 559 M 100	0.3	0.8	0.020	0.20	1.19	10	57.5	0.10	0.016
0 560 K	9.6		0.146	0.08	2.34	4	37.8	0.02	0.201
0 561 K	3.9	21.4	0.186	0.17	2.05	9	66.8	0.07	0.212
1D 562 K	1.9	6.6	0.088	0.81	1.93	10	81.7	0.28	0.113
0 563 K	3.4	7.0	0.144	0.49	1.82	10	140.0	0.16	0.125
0 564 K	3.2	5.6	0.117	0.95	2.24	9	86.3	0.28	0.167
0 565 K	5.7	9.5	0.175	0.16	1.92	8	73.4	0.05	0.142
0 566 K	3.6	6.3	0.147	0.51	2.51	9	77.1	0.15	0.197
0 567 M 50	0.6		0.051	0.51	0.69	7	87.5	0.34	0.040
0 568 K	4.0	7.3	0.061	0.06	1.36	6	41.5	0.02	0.120
0 569 K	2.0	3.8	0.055	0.08	1.21	5	34.2	0.05	0.084
10D 570 K = 109	15.1	26.0 AR. ACTV	0.078 ~	0.21	2.34 ✓	3	45.4 ~	0.04	0.260 ✓
65 DT 571 OF 509	8.2		0.121	0.10	0.95	2	10.1	0.02	0.125
50 DT 572 OF 533	3.1		0.029	0.17	0.63	2	8.3	0.02	0.065
70 TD 573 OF 544	1.9		0.048	0.07	0.32	2	24.8	0.02	0.065
0 574 K TEST JUN 30.4			0.103	0.53	43.60	9	133.5	0.08	0.168
575 OREAS 47	32.7 ✓		0.078 0.107	0.71 ~	6.82 9.53	2	56.8 62	0.15 ~	0.103 0.15

Au N.A. as redone by neutron activation - ACTLABS Cert. A20-08857, A20-13146, A21-00034.

DT Sand and silt dilute as proven by 571 - 573, and by 541 of the Enriched (E) B-horizon fine sand.

M60 Black swamp Muck at indicated cm depth, or CLAY top, carry no gold.

@ Swirled to remove most sand and silt, Vol. % remaining.

GOLD is significantly higher and more repeatable by neutron activation.

Only Ce La are low enough in K-samples to be contaminated by silt and especially clay (571-573).

	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204
Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Description	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	
Still Vol. %	%	ppm	ppm	ppm	ppm	ppm	ppm	%	
0 501	M TEST ✓ 3.13 ✓	0.684 ~	6.290 ~	1.045 ✓	4.11 ~	0.121 ✓	9.98 ✓	0.326 ✓	
Ⓟ 6 D 502	K	0.46	1.640	4.360	1.450	6.22	0.276	78.40	0.316
Ⓟ 5 D 503	K	0.47	1.880	4.490	1.145	4.82	0.186	52.70	0.255
5 D 504	K	0.42	1.140	3.200	0.799	3.52	0.189	52.10	0.210
Ⓟ 4 DT 505	K	0.37	1.425	3.260	0.889	3.51	0.149	54.30	0.199
Ⓟ 4 DT 506	K	0.36	1.560	4.540	1.140	4.74	0.258	58.50	0.269
Ⓟ 3 DT 507	K	0.38	1.645	3.210	1.085	4.43	0.213	74.60	0.282
Ⓟ 1 DT 508	K	0.35	1.845	2.660	1.090	3.86	0.219	72.30	0.220
Ⓟ 4 DT 509	K	0.32	1.670	4.090	1.300	4.86	0.239	76.90	0.282
Ⓟ 1 DT 510	K	0.33	1.805	3.940	1.345	4.55	0.204	81.80	0.286
Ⓟ 5 DT 511	K	0.39	1.335	4.270	1.125	4.01	0.198	63.50	0.257
1 D 512	K	0.35	1.450	5.110	1.335	5.84	0.216	86.10	0.291
Ⓟ 5 D 513	K	0.44	2.160	2.860	1.350	3.77	0.239	58.70	0.232
Ⓟ 5 D 514	K	0.34	1.605	4.000	1.140	5.01	0.236	67.60	0.310
Ⓟ 2 DT 515	K	0.44	1.670	4.970	1.370	6.37	0.380	52.10	0.419
Ⓟ 5 T 516	K	0.43	1.245	2.880	0.893	3.33	0.218	58.50	0.216
Ⓟ 4 DT 517	K	0.33	1.310	4.470	0.971	5.50	0.255	57.50	0.323
Ⓟ 1 D 518	K	0.40	1.560	3.420	0.977	4.04	0.222	65.20	0.233
Ⓟ 1 D 519	K	0.36	1.495	4.170	1.215	5.68	0.263	63.30	0.308
Ⓟ 3 D 520	K	0.33	1.235	4.980	1.430	8.21	0.317	78.30	0.424
1 D 521	K	0.46	1.050	3.820	1.225	3.71	0.193	70.40	0.252
0 522	K	0.33	0.794	2.030	0.598	2.68	0.144	43.80	0.165
0 523	K	0.69	0.867	2.450	0.734	3.32	0.136	60.90	0.255
0 524	K	0.70	0.605	1.360	0.481	2.33	0.084	44.20	0.128
0 525	K	0.69	0.661	1.380	0.447	2.07	0.109	37.80	0.118
0 526	K	0.54	0.744	1.810	0.510	2.66	0.100	46.90	0.193
0 527	K	1.55	1.095	2.720	1.540	2.38	0.113	39.90	0.159
0 528	K	0.80	0.637	2.170	0.841	3.78	0.118	43.80	0.186
0 529	K	0.54	0.888	2.290	0.702	3.42	0.130	50.60	0.191
0 530	K	0.19	1.155	2.210	0.824	3.41	0.243	58.60	0.185
0 531	K	0.27	1.200	2.060	0.673	2.76	0.198	56.20	0.184
2 D 532	K	0.53	1.100	2.440	0.772	3.97	0.141	53.30	0.223
Ⓟ 1 D 533	K	0.30	0.887	2.290	0.889	3.58	0.179	48.50	0.192
0 534	K	0.59	1.140	4.860	3.560	5.21	0.180	64.70	0.298
0 535	K	0.49	1.200	2.850	0.946	4.26	0.269	87.40	0.249
0 536	M 60	3.52	0.392	28.100	1.310	15.30	0.198	11.45	0.362
0 537	K	0.29	0.864	2.200	0.756	3.75	0.152	57.80	0.191
Ⓟ 0 538	K-2 nd Run	0.93	0.885	3.330	1.980	3.48	0.320	43.60	0.215
0 539	K	0.31	1.360	3.350	1.135	4.91	0.232	71.30	0.239
0 540	K	0.31	1.375	2.830	1.065	4.97	0.220	73.40	0.241
Ⓟ 99 DT 541	E 4125	0.07	0.132	7.710	3.870	32.00	0.485	4.60	1.500
0 542	K	0.27	1.030	3.320	1.050	5.23	0.226	70.70	0.244
0 543	K	1.40	1.145	6.260	2.790	4.26	0.265	46.90	0.265

	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204
	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Sample	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	
Description	%	ppm	ppm	ppm	ppm	ppm	ppm	%	
Still VOL. %									
2D 544 K 125-250	0.46	0.735	7.170	2.090	4.44	0.495	33.00	0.261	
5D 545 K 125-250	0.65	1.305	7.130	3.090	6.51	0.520	30.20	0.374	
10D 546 K 125-250	0.85	1.130	6.160	2.050	3.48	0.394	28.40	0.197	
0 547 K	1.76	1.355	22.600	4.350	8.97	0.411	31.40	0.551	
2T 548 K	0.70	0.811	3.830	2.870	2.87	0.299	30.70	0.186	
1D 549 K	1.39	2.080	11.850	4.550	4.90	0.413	38.70	0.320	
550 OREAS 47	0.52 ✓	0.445 ✓	38.800 44.7	43.200 49.9	24.10 30.4	0.992 ~	142.00 160	1.310 1.65	
0 551 M TEST	2.49 ✓	0.288 ✓	2.880 ✓	0.592 ✓	1.84 ✓	0.113 ✓	5.31 ✓	0.226 ✓	
0 552 K	1.55	1.135	1.895	0.857	3.11	0.138	52.10	0.176	
0 553 K	0.99	1.005	2.010	0.671	2.89	0.107	52.30	0.168	
0 554 M 90	4.41	0.413	3.860	0.653	2.80	0.155	6.11	0.180	
0 555 K	0.92	1.020	3.180	4.300	2.33	0.114	52.00	0.230	
0 556 CLAY	0.73	0.087	61.200	15.350	64.50	2.240	23.70	3.550	
0 557 K	1.31	0.872	9.960	4.650	9.76	0.493	30.70	0.636	
0 558 CLAY	0.94	0.063	64.600	16.300	67.30	2.320	28.50	3.680	
0 559 M 100	3.28	0.432	3.570	0.801	2.55	0.067	12.00	0.354	
0 560 K	0.37	0.782	1.880	0.708	2.94	0.305	62.90	0.169	
0 561 K	1.38	1.400	7.130	2.000	3.46	0.157	55.80	0.221	
1D 562 K	1.22	0.950	20.600	6.200	18.20	0.780	19.75	1.055	
0 563 K	1.41	1.130	11.050	3.870	10.35	0.506	28.80	0.587	
0 564 K	1.10	0.861	18.850	5.830	20.10	0.831	27.30	1.215	
0 565 K	1.24	0.704	3.050	1.485	3.78	0.221	44.70	0.258	
0 566 K	1.18	0.973	10.600	2.940	10.85	0.530	43.00	0.670	
0 567 M 50	3.47	0.798	17.650	2.590	6.48	0.142	29.50	0.643	
0 568 K	0.78	0.757	1.745	0.793	1.95	0.097	38.30	0.121	
0 569 K	1.12	0.772	4.590	1.310	1.52	0.061	24.90	0.154	
10D 570 K = 109	0.37 ✓	0.604 0.700	4.400 5.280	1.075 ✓	4.29 5.42	0.317 -	35.10 40.4	0.343 ✓	
65 DT 571 OF 509	0.10	0.467	10.850	0.610	2.86	0.145	29.90	0.147	
50 DT 572 DF 533	0.08	0.211	5.940	0.551	3.38	0.148	18.25	0.203	
70 DT 573 DF 544	0.11	0.143	9.300	0.472	1.25	0.214	8.78	0.078	
0 574 K TEST	1.72	0.742	5.260	15.400	14.75	0.475	39.90	1.515	
575 OREAS 47	0.52 ✓	0.400 ~	36.500 44.7	40.300 49.9	21.10 30.4	1.020 ~	134.00 160	1.270 1.65	

	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204
	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
still	Description	Ga	Ge	Hf	Hg	In	K	La	Li
Vol. %		ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	0 501 M TEST	0.673~	0.060 ✓	0.156~	0.151 ✓	<0.005 ✓	0.01 ✓	3.490 ✓	0.3 ✓
⊙	6D 502 K	0.948	0.081	0.038	0.265	0.243	0.07	2.160	0.8
⊙	5D 503 K	0.890	0.076	0.027	0.190	0.168	0.08	2.490	0.7
	5D 504 K	0.760	0.080	0.022	0.258	0.166	0.06	1.600	0.5
⊙	4DT 505 K	0.608	0.085	0.025	0.229	0.169	0.05	1.640	0.5
⊙	4DT 506 K	0.784	0.112	0.030	0.301	0.184	0.08	2.300	0.7
⊙	3DT 507 K	0.849	0.128	0.030	0.317	0.256	0.07	1.575	0.6
⊙	1DT 508 K	0.591	0.060	0.024	0.175	0.179	0.08	1.270	0.5
⊙	4DT 509 K	0.888	0.058	0.031	0.203	0.227	0.07	1.970	0.6
⊙	1DT 510 K	0.789	0.100	0.030	0.208	0.242	0.06	1.920	0.6
⊙	5DT 511 K	0.769	0.090	0.021	0.163	0.200	0.06	2.520	0.5
	1D 512 K	0.751	0.048	0.028	0.166	0.207	0.06	2.460	0.8
⊙	5D 513 K	0.619	0.105	0.026	0.215	0.177	0.09	1.465	0.4
⊙	5D 514 K	0.998	0.073	0.027	0.173	0.190	0.07	1.975	0.7
⊙	2DT 515 K	1.570	0.087	0.050	0.334	0.199	0.09	2.480	1.3
⊙	5T 516 K	0.662	0.137	0.027	0.283	0.198	0.06	1.580	0.4
⊙	4DT 517 K	1.150	0.086	0.036	0.248	0.221	0.06	2.260	1.0
⊙	1D 518 K	0.720	0.109	0.024	0.269	0.203	0.09	1.885	0.5
⊙	1D 519 K	1.125	0.095	0.034	0.239	0.211	0.08	2.150	0.8
⊙	3D 520 K	1.205	0.079	0.040	0.260	0.236	0.08	2.420	1.3
	1D 521 K	0.691	0.197	0.029	0.379	0.240	0.11	2.530	0.5
	0 522 K	0.372	0.076	0.021	0.347	0.132	0.09	0.979	0.3
	0 523 K	0.500	0.121	0.029	0.396	0.202	0.09	1.175	0.4
	0 524 K	0.290	0.067	0.020	0.259	0.133	0.07	0.670	0.3
	0 525 K	0.284	0.081	0.018	0.259	0.099	0.07	0.688	0.2
	0 526 K	0.354	0.077	0.022	0.285	0.127	0.08	0.875	0.3
	0 527 K	0.448	0.156	0.033	0.221	0.112	0.09	1.530	0.6
	0 528 K	0.401	0.065	0.022	0.244	0.116	0.08	1.065	0.4
	0 529 K	0.442	0.087	0.031	0.365	0.143	0.08	1.120	0.4
	0 530 K	0.428	0.088	0.025	0.327	0.185	0.09	1.065	0.4
	0 531 K	0.509	0.100	0.024	0.257	0.185	0.10	1.000	0.3
⊙	2D 532 K	0.600	0.100	0.028	0.272	0.165	0.12	1.180	0.5
⊙	1D 533 K	0.565	0.085	0.026	0.308	0.155	0.10	1.285	0.5
	0 534 K	0.598	0.130	0.030	0.356	0.183	0.08	2.070	0.6
	0 535 K	0.575	0.115	0.037	0.426	0.256	0.08	1.370	0.5
	0 536 M 60	1.110	0.136	0.183	0.127	0.007	0.01	13.700	0.6
	0 537 K	0.355	0.056	0.020	0.240	0.132	0.07	1.010	0.4
⊙	0 538 K-2 nd RUB	0.708	0.118	0.021	0.314	0.118	0.12	1.855	0.7
	0 539 K	0.465	0.063	0.024	0.213	0.144	0.08	1.550	0.6
	0 540 K	0.427	0.069	0.021	0.253	0.153	0.09	1.310	0.6
99DT	541 E 125	4.860	0.010	0.151	0.054	0.012	0.02	3.610	10.1
	0 542 K	0.473	0.072	0.031	0.307	0.162	0.07	1.540	0.5
	0 543 K	0.714	0.091	0.049	0.202	0.108	0.12	3.040	1.1

	Sample	Description	VA20135204 ME-VEG41 Ga ppm	VA20135204 ME-VEG41 Ge ppm	VA20135204 ME-VEG41 Hf ppm	VA20135204 ME-VEG41 Hg ppm	VA20135204 ME-VEG41 In ppm	VA20135204 ME-VEG41 K %	VA20135204 ME-VEG41 La ppm	VA20135204 ME-VEG41 Li ppm
Still Vol. %	Q 2D	544 K 125-250	1.250	0.030	0.016	0.189	0.096	0.09	3.380	1.1
	Q 5D	545 K 125-250	1.685	0.021	0.021	0.194	0.097	0.10	3.260	1.7
	Q 10D	546 K 125-250	0.974	0.020	0.019	0.165	0.067	0.07	3.280	0.8
	0	547 K	1.655	0.049	0.074	0.144	0.048	0.13	10.350	3.6
	Q 2T	548 K	0.876	0.044	0.021	0.226	0.081	0.09	2.180	0.7
	Q 1D	549 K	1.035	0.035	0.021	0.219	0.113	0.11	5.270	1.5
		550 OREAS 47 ✓	2.130 3.2b	0.018 0.075	0.165	0.012	0.023 0.037	0.11 ✓	21.500 25.2	6.7 8.8
	0	551 M TEST ✓	0.340 ✓	0.042 ✓	0.066 ✓	0.086 ✓	<0.005 ✓	<0.01 ✓	1.540 ✓	0.1 ✓
	0	552 K	0.412	0.109	0.025	0.230	0.140	0.08	0.885	0.5
	0	553 K	0.326	0.072	0.022	0.336	0.140	0.07	0.947	0.4
	0	554 M 90	0.474	0.073	0.068	0.091	<0.005	0.01	1.865	0.4
	0	555 K	0.420	0.134	0.023	0.271	0.148	0.07	1.475	0.3
	0	556 CLAY	8.420	0.028	0.733	0.035	0.025	0.34	28.500	37.4
	0	557 K	1.785	0.067	0.125	0.174	0.073	0.13	4.850	4.2
	0	558 CLAY	8.020	0.023	0.757	0.024	0.028	0.36	30.700	38.9
	0	559 M 100	0.368	0.045	0.091	0.089	<0.005	<0.01	1.920	0.2
	0	560 K	0.302	0.052	0.021	0.327	0.162	0.09	0.882	0.3
	0	561 K	0.507	0.127	0.040	0.180	0.125	0.09	3.490	0.9
	1D	562 K	2.820	0.039	0.218	0.079	0.026	0.19	8.680	9.0
	0	563 K	1.590	0.048	0.145	0.146	0.063	0.15	5.280	4.8
	0	564 K	3.100	0.038	0.252	0.136	0.048	0.19	8.950	9.7
	0	565 K	0.549	0.050	0.043	0.177	0.092	0.08	1.505	1.1
	0	566 K	1.815	0.081	0.161	0.189	0.100	0.12	5.270	4.3
	0	567 M 50	0.886	0.096	0.215	0.130	0.005	0.01	9.060	0.4
	0	568 K	0.197	0.036	0.016	0.173	0.070	0.08	0.840	0.2
	0	569 K	0.187	0.043	0.015	0.113	0.038	0.07	2.440	0.2
	Q 10D	570 K=109	0.766	0.085 ~	0.033	0.221 ~	0.103	0.06 0.07	2.070 2.6b	0.8 1.4b
	65DT	571 OF 509	0.415	0.011	0.022	0.070	0.076	0.02	5.050	0.6
	50DT	572 OF 533	0.687	0.006	0.025	0.054	0.042	0.02	2.830	0.9
	70DT	573 OF 544	0.351	0.005	0.011	0.034	0.031	0.02	4.520	0.4
	0	574 K TEST ✓	1.640	0.017	0.038	0.393	0.051	0.08	2.420	3.8
		575 OREAS 47 ✓	1.770 3.2b	0.014 0.075	0.156	0.015	0.025 0.037	0.11 ✓	21.100 25.2	6.3 8.8

	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
	Description	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	
still Vol. %		%	ppm	ppm	%	ppm	ppm	%	ppm	
	0 501 M TEST	0.167 ✓	89.6 ✓	0.50 ✓	0.015 ~	0.302 ~	4.46 ✓	0.035 ✓	1.22 ✓	
⊙	6D 502 K	0.091	469.0	0.55	0.009	0.277	7.74	0.084	32.70	
⊙	5D 503 K	0.077	342.0	0.42	0.010	0.216	5.99	0.086	32.40	
	5D 504 K	0.062	348.0	0.41	0.009	0.205	5.08	0.074	28.80	
⊙	4DT 505 K	0.060	313.0	0.60	0.004	0.186	5.14	0.065	25.50	
⊙	4DT 506 K	0.068	133.0	0.46	0.010	0.205	6.80	0.078	32.70	
⊙	3DT 507 K	0.065	307.0	0.65	0.007	0.213	6.95	0.079	36.60	
⊙	1DT 508 K	0.059	338.0	0.41	0.009	0.143	5.71	0.082	20.40	
⊙	4DT 509 K	0.069	308.0	0.47	0.007	0.226	6.44	0.074	32.40	
⊙	1DT 510 K	0.069	152.5	0.55	0.003	0.180	7.54	0.076	37.40	
⊙	5DT 511 K	0.060	247.0	0.43	0.005	0.202	5.60	0.069	41.70	
	1D 512 K	0.072	429.0	0.48	0.008	0.226	6.61	0.069	19.85	
⊙	5D 513 K	0.077	190.0	0.40	0.014	0.152	5.91	0.078	30.20	
⊙	5D 514 K	0.067	229.0	0.47	0.006	0.234	6.43	0.079	31.70	
⊙	2DT 515 K	0.079	362.0	0.57	0.009	0.415	6.80	0.094	38.70	
⊙	5T 516 K	0.055	329.0	0.46	0.008	0.164	5.33	0.075	37.50	
⊙	4DT 517 K	0.060	265.0	0.50	0.009	0.382	6.19	0.072	39.90	
⊙	1D 518 K	0.063	397.0	0.51	0.009	0.183	6.62	0.093	51.30	
⊙	1D 519 K	0.070	282.0	0.55	0.008	0.359	6.76	0.088	33.10	
⊙	3D 520 K	0.083	309.0	0.60	0.015	0.373	7.94	0.089	31.20	
	1D 521 K	0.068	258.0	0.58	0.010	0.163	6.15	0.102	42.90	
	0 522 K	0.057	169.5	0.37	0.009	0.112	3.07	0.071	16.45	
	0 523 K	0.097	390.0	0.44	0.017	0.130	3.73	0.086	30.30	
	0 524 K	0.066	99.7	0.73	0.009	0.077	2.48	0.083	15.05	
	0 525 K	0.081	77.5	0.46	0.008	0.081	2.40	0.070	13.45	
	0 526 K	0.071	117.0	0.38	0.012	0.106	2.75	0.063	17.05	
	0 527 K	0.129	131.0	0.60	0.008	0.123	3.79	0.078	25.60	
	0 528 K	0.092	342.0	0.44	0.016	0.147	3.89	0.067	11.15	
	0 529 K	0.068	116.0	0.50	0.016	0.128	3.66	0.071	20.60	
	0 530 K	0.053	121.0	0.54	0.013	0.112	5.19	0.070	19.20	
	0 531 K	0.058	178.0	0.37	0.013	0.116	3.77	0.068	15.45	
	2D 532 K	0.076	294.0	0.41	0.011	0.151	4.31	0.081	22.10	
⊙	1D 533 K	0.050	122.5	0.38	0.010	0.150	4.62	0.079	17.55	
	0 534 K	0.085	516.0	0.60	0.011	0.183	5.56	0.076	24.90	
	0 535 K	0.075	216.0	0.56	0.012	0.148	4.60	0.067	26.30	
	0 536 M60	0.152	75.2	0.36	0.018	0.508	5.91	0.040	2.07	
	0 537 K	0.062	126.0	0.32	0.017	0.112	3.67	0.064	15.40	
⊙	0 538 K-2nd run	0.086	834.0	0.45	<0.001	0.171	4.61	0.110	33.40	
	0 539 K	0.067	160.5	0.50	0.016	0.170	5.28	0.080	15.65	
	0 540 K	0.068	141.0	0.41	0.015	0.166	4.91	0.069	17.05	
	99DT 541 E<125	0.165	90.6	0.18	0.008	0.295	12.25	0.123	5.12	
	0 542 K	0.070	144.0	0.50	0.016	0.162	5.53	0.068	17.95	
	0 543 K	0.123	464.0	0.37	0.015	0.261	4.63	0.083	23.50	

		VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204
	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Still	Description	Mg	Mn	Mo	Na	Nb	Ni	P	Pb
Vol. %		%	ppm	ppm	%	ppm	ppm	%	ppm
⊙	2D 544 K 125-250	0.059	1215.0	0.36	0.014	0.453	4.00	0.086	31.60
⊙	5D 545 K 125-250	0.099	2710.0	0.42	0.013	0.583	5.41	0.093	39.20
⊙	10D 546 K 125-250	0.085	1585.0	0.33	0.014	0.275	3.54	0.079	29.30
	0 547 K	0.208	846.0	0.26	0.017	0.687	10.15	0.114	14.25
⊙	2T 548 K	0.069	903.0	0.31	0.010	0.277	4.00	0.093	22.00
⊙	1D 549 K	0.114	3330.0	0.47	0.015	0.393	7.02	0.111	46.00
	550 OREAS 47	0.427 ~	244.0 ~	9.67 12.7	0.084 ✓	0.168	67.50 80	0.052 ✓	267.00 ~
0	551 M TEST	0.137 ✓	75.2 68.8	0.50 ✓	0.020 0.009	0.136 ✓	2.28 ✓	0.030 ✓	0.98 ✓
0	552 K	0.157	203.0	0.52	0.016	0.117	3.04	0.086	24.40
0	553 K	0.101	212.0	0.28	0.016	0.111	2.94	0.083	20.60
0	554 M 90	0.269	209.0	3.82	0.021	0.195	3.15	0.047	1.07
0	555 K	0.105	1985.0	0.71	0.018	0.101	3.28	0.099	29.30
0	556 CLAY	1.025	325.0	0.11	0.021	0.248	36.50	0.050	11.10
0	557 K	0.202	903.0	0.51	0.019	0.642	6.40	0.094	18.10
0	558 CLAY	1.310	322.0	0.10	0.028	0.205	40.90	0.049	11.30
0	559 M 100	0.128	98.0	0.63	0.019	0.180	4.87	0.027	0.83
0	560 K	0.055	73.1	0.37	0.015	0.102	2.93	0.077	17.05
0	561 K	0.159	552.0	0.40	0.010	0.161	3.91	0.089	19.00
1D	562 K	0.337	470.0	0.26	0.008	1.400	11.00	0.078	10.30
0	563 K	0.200	919.0	0.35	0.010	0.665	7.35	0.091	11.55
0	564 K	0.330	755.0	0.52	0.011	1.290	11.20	0.088	18.40
0	565 K	0.096	1095.0	0.40	0.015	0.209	3.85	0.087	11.85
0	566 K	0.173	593.0	0.54	0.018	0.720	7.33	0.095	19.40
0	567 M 50	0.197	162.0	0.37	0.019	0.507	8.04	0.048	2.35
0	568 K	0.090	279.0	0.32	0.016	0.062	2.23	0.080	7.91
0	569 K	0.129	330.0	0.43	0.016	0.058	2.35	0.079	5.30
⊙ 10D	570 K = 109	0.059	369.0 48	0.46 ✓	0.016	0.244 ✓	3.32 530	0.069 ✓	28.60 38.4
65 DT	571 OF 509	0.031	96.1	0.20	0.008	0.259	2.51	0.023	10.60
50 DT	572 OF 533	0.033	30.2	0.08	0.006	0.273	2.22	0.018	4.32
70 DT	573 OF 544	0.018	326.0	0.07	0.007	0.147	1.05	0.019	6.86
0	574 K TEST	0.293	1240.0	0.29	0.009	0.352	20.70	0.107	45.70
	575 OREAS 47	0.426 ~	242.0 ~	8.52 12.7	0.077 0.091	0.143	65.60 80	0.052 ✓	259.00 28.4

	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204
	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Still	Description	Pd	Pt	Rb	Re	S	Sb	Sc	Se
Vol. %		ppb	ppb	ppm	ppm	%	ppm	ppm	ppm
0	501 M TEST	<1 ✓	2 ✓	0.57 ✓	0.002 ✓	0.24 ✓	0.10 ✓	0.57 ✓	1.475 ✓
Ⓟ	6D 502 K	1	1	3.80	<0.001	0.14	0.27	0.34	4.190
Ⓟ	5D 503 K	1	1	3.55	<0.001	0.12	0.24	0.20	4.340
	5D 504 K	1	1	2.81	0.001	0.12	0.26	0.23	3.870
Ⓟ	4DT 505 K	<1	<1	2.67	0.001	0.12	0.22	0.24	3.510
Ⓟ	4DT 506 K	2	<1	3.68	<0.001	0.14	0.34	0.30	4.080
Ⓟ	3DT 507 K	1	<1	3.67	0.001	0.15	0.35	0.32	5.640
Ⓟ	1DT 508 K	1	2	4.66	<0.001	0.16	0.24	0.34	1.450
Ⓟ	4DT 509 K	1	2	3.52	<0.001	0.15	0.25	0.41	1.500
Ⓟ	1DT 510 K	1	1	2.87	<0.001	0.16	0.29	0.42	1.605
Ⓟ	5DT 511 K	1	1	3.04	<0.001	0.13	0.31	0.34	1.260
	1D 512 K	1	1	3.96	<0.001	0.15	0.22	0.43	1.390
Ⓟ	5D 513 K	1	1	3.79	<0.001	0.16	0.34	0.35	1.155
Ⓟ	5D 514 K	<1	1	3.73	<0.001	0.15	0.26	0.33	1.355
Ⓟ	2DT 515 K	<1	<1	5.32	<0.001	0.14	0.31	0.38	4.970
Ⓟ	5T 516 K	<1	<1	2.77	0.001	0.13	0.34	0.27	4.310
Ⓟ	4DT 517 K	1	<1	3.38	<0.001	0.11	0.30	0.32	4.880
Ⓟ	1D 518 K	<1	<1	4.90	0.001	0.14	0.37	0.26	5.550
Ⓟ	1D 519 K	<1	<1	4.18	0.001	0.13	0.31	0.31	5.450
Ⓟ	3D 520 K	1	<1	5.65	<0.001	0.13	0.28	0.38	4.010
	1D 521 K	<1	<1	4.34	0.001	0.15	0.44	0.31	5.570
0	522 K	1	<1	3.33	0.001	0.14	0.23	0.29	3.130
0	523 K	1	<1	2.96	0.001	0.17	0.31	0.28	3.170
0	524 K	2	<1	2.21	<0.001	0.19	0.22	0.21	2.210
0	525 K	1	<1	2.09	0.001	0.18	0.19	0.26	1.720
0	526 K	1	<1	2.39	0.001	0.17	0.22	0.27	2.460
0	527 K	<1	<1	2.00	0.001	0.20	0.26	0.24	2.180
0	528 K	1	<1	2.98	0.001	0.16	0.20	0.32	2.410
0	529 K	<1	<1	2.26	0.001	0.19	0.26	0.33	2.890
0	530 K	1	<1	3.88	0.001	0.15	0.27	0.30	4.010
0	531 K	1	<1	3.56	0.001	0.14	0.28	0.29	4.860
2D	532 K	<1	<1	3.71	<0.001	0.14	0.29	0.29	4.290
Ⓟ	1D 533 K	<1	<1	4.61	0.001	0.14	0.24	0.30	3.220
0	534 K	1	<1	3.75	0.001	0.18	0.30	0.36	3.180
0	535 K	<1	<1	3.63	0.001	0.18	0.31	0.44	4.010
0	536 M 60	<1	2	1.35	0.002	0.34	0.05	1.54	1.135
0	537 K	<1	2	2.57	<0.001	0.14	0.21	0.28	2.540
Ⓟ	0 538 K-2nd RUB	<1	1	10.75	<0.001	0.15	0.30	0.24	4.720
0	539 K	1	2	5.01	<0.001	0.15	0.24	0.28	3.300
0	540 K	1	1	5.57	<0.001	0.15	0.23	0.36	2.680
99DT	541 E <125	<1	<1	4.50	<0.001	0.04	<0.01	1.71	1.200
0	542 K	1	1	5.13	0.001	0.15	0.28	0.33	3.870
0	543 K	<1	1	5.25	<0.001	0.18	0.24	0.40	2.120

		VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204
	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Still	Description	Pd	Pt	Rb	Re	S	Sb	Sc	Se
Vol. %		ppb	ppb	ppm	ppm	%	ppm	ppm	ppm
P	2D 544 K 125-250	<1	1	10.05	<0.001	0.10	0.17	0.23	2.630
P	5D 545 K 125-250	<1	<1	11.20	<0.001	0.11	0.17	0.37	2.520
P	10D 546 K 125-250	<1	<1	5.70	<0.001	0.11	0.15	0.21	1.690
	0 547 K	<1	<1	11.45	<0.001	0.17	0.13	0.50	0.826
P	2T 548 K	<1	1	7.03	<0.001	0.14	0.20	0.20	2.330
P	1D 549 K	1	<1	10.25	<0.001	0.16	0.26	0.30	3.120
	550 OREAS 47	32 43.1	15 25.7	6.42 ✓	<0.001 ✓	0.04 ✓	0.01 0.2	2.34 3.17	0.067
	0 551 M TEST ✓	<1 ✓	<1 ✓	0.33 ✓	0.001 ✓	0.20 ~	0.05 ~	0.34 ✓	0.910 ~
	0 552 K	1	1	2.03	0.001	0.18	0.28	0.21	2.140
	0 553 K	<1	1	1.52	<0.001	0.17	0.25	0.25	2.070
	0 554 M 90	1	1	1.07	0.002	1.32	0.04	0.31	0.903
	0 555 K	<1	<1	2.54	<0.001	0.20	0.32	0.23	2.840
	0 556 CLAY	<1	3	38.20	<0.001	0.01	0.02	7.22	0.263
	0 557 K	<1	1	8.07	<0.001	0.20	0.20	0.74	1.325
	0 558 CLAY	<1	2	36.10	<0.001	<0.01	0.02	7.21	0.087
	0 559 M 100	<1	1	0.35	0.002	0.33	0.11	0.39	1.025
	0 560 K	<1	1	3.94	0.001	0.16	0.21	0.24	1.910
	0 561 K	<1	1	2.46	<0.001	0.20	0.23	0.28	1.810
	1D 562 K	<1	1	18.30	<0.001	0.09	0.08	1.56	0.604
	0 563 K	<1	1	10.20	<0.001	0.16	0.13	0.88	1.095
	0 564 K	<1	2	15.70	<0.001	0.16	0.13	1.79	1.065
	0 565 K	<1	1	3.70	<0.001	0.24	0.16	0.32	1.185
	0 566 K	<1	1	8.17	<0.001	0.25	0.17	0.83	1.915
	0 567 M 50	<1	2	1.24	0.002	0.29	0.13	0.74	1.240
	0 568 K	<1	<1	2.78	<0.001	0.22	0.12	0.17	0.894
	0 569 K	<1	1	2.26	<0.001	0.22	0.15	0.14	0.597
P	10D 570 K = 109	<1	<1	5.06	0.001	0.15	0.21	0.28	2.600
	65D 571 OF 509	<1	<1	1.41	0.001	0.04	0.06	0.25	1.305
	50DT 572 OF 533	<1	<1	1.46	<0.001	0.03	0.02	0.25	0.590
	70DT 573 OF 544	<1	<1	2.98	<0.001	0.02	0.02	0.17	0.468
	0 574 K TEST	2	1	7.42	<0.001	0.12	0.24	2.21	1.205
	575 OREAS 47	29 43.1	13 25.7	5.92 7.15	<0.001 ✓	0.04 ✓	0.01 0.2	2.17 3.17	0.065

	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
still	Description	Sn	Sr	Ta	Te	Th	Ti	Tl	U
Vol. %		ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	0 501 M TEST	0.07 ~	94.70 ~	0.016 ~	<0.02 ✓	0.594 ✓	0.005 ✓	0.023 ✓	0.847 ~
⊙	6D 502 K	0.70	15.15	0.005	0.03	0.169	0.008	0.164	0.106
⊙	5D 503 K	0.44	14.90	0.005	<0.02	0.082	0.005	0.098	0.103
	5D 504 K	0.56	12.35	0.004	0.02	0.128	0.005	0.099	0.084
⊙	4DT 505 K	0.57	12.15	0.004	<0.02	0.167	0.005	0.099	0.083
⊙	4DT 506 K	0.64	16.60	0.005	0.03	0.220	0.006	0.080	0.102
⊙	3DT 507 K	0.80	14.80	0.004	0.03	0.122	0.005	0.114	0.090
⊙	1DT 508 K	0.63	15.35	0.005	0.02	0.113	0.004	0.182	0.065
⊙	4DT 509 K	0.81	13.00	0.004	0.02	0.232	0.007	0.137	0.097
⊙	1DT 510 K	0.97	17.10	0.005	0.02	0.231	0.005	0.076	0.094
⊙	5DT 511 K	0.68	22.10	0.004	<0.02	0.148	0.006	0.078	0.105
	1D 512 K	0.70	11.95	0.003	<0.02	0.352	0.008	0.119	0.105
⊙	5D 513 K	0.77	25.70	0.005	<0.02	0.137	0.005	0.097	0.066
⊙	5D 514 K	0.77	13.35	0.003	<0.02	0.145	0.007	0.098	0.097
⊙	2DT 515 K	0.70	14.45	0.004	0.02	0.169	0.010	0.118	0.121
⊙	5T 516 K	0.73	16.85	0.004	0.02	0.096	0.004	0.134	0.078
⊙	4DT 517 K	0.74	12.00	0.004	0.02	0.181	0.009	0.125	0.112
⊙	1D 518 K	0.65	14.30	0.004	<0.02	0.097	0.005	0.172	0.093
⊙	1D 519 K	0.70	13.90	0.004	<0.02	0.143	0.009	0.120	0.110
⊙	3D 520 K	0.65	11.15	0.004	<0.02	0.145	0.010	0.134	0.113
	1D 521 K	0.97	24.60	0.004	0.03	0.108	0.005	0.089	0.100
	0 522 K	0.57	13.05	0.004	<0.02	0.139	0.003	0.064	0.052
	0 523 K	0.79	36.20	0.004	0.02	0.131	0.003	0.041	0.066
	0 524 K	0.46	24.30	0.005	0.02	0.083	0.002	0.029	0.040
	0 525 K	0.46	19.90	0.004	<0.02	0.118	0.002	0.039	0.041
	0 526 K	0.46	18.85	0.005	0.03	0.136	0.003	0.030	0.049
	0 527 K	0.61	30.30	0.005	0.02	0.139	0.003	0.036	0.075
	0 528 K	0.37	18.70	0.005	<0.02	0.142	0.005	0.047	0.051
	0 529 K	0.56	15.80	0.006	<0.02	0.173	0.004	0.053	0.065
	0 530 K	0.62	11.55	0.004	<0.02	0.110	0.003	0.096	0.058
	0 531 K	0.79	8.81	0.004	<0.02	0.143	0.004	0.071	0.049
	2D 532 K	0.63	14.20	0.005	<0.02	0.101	0.005	0.063	0.059
⊙	1D 533 K	0.54	15.80	0.005	<0.02	0.108	0.004	0.064	0.053
	0 534 K	0.61	21.00	0.006	<0.02	0.182	0.006	0.065	0.101
	0 535 K	0.88	20.40	0.005	<0.02	0.251	0.005	0.079	0.072
	0 536 M60	0.08	53.80	0.015	<0.02	0.742	0.007	0.034	1.255
	0 537 K	0.43	6.48	0.005	<0.02	0.131	0.004	0.060	0.049
⊙	0 538 K-2 nd RUB	0.63	26.70	0.003	<0.02	0.101	0.005	0.104	0.069
	0 539 K	0.67	11.60	0.004	<0.02	0.124	0.005	0.074	0.069
	0 540 K	0.52	12.20	0.004	<0.02	0.157	0.006	0.045	0.060
	99DT 541 E < 125	0.19	3.26	0.001	0.03	1.915	0.031	0.037	0.186
	0 542 K	0.54	12.45	0.005	<0.02	0.163	0.006	0.052	0.070
	0 543 K	0.59	27.60	0.004	<0.02	0.266	0.008	0.046	0.088

		VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204	VA20135204
	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Still	Description	Sn	Sr	Ta	Te	Th	Ti	Tl	U
Vol. %		ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
⊙ 2 D	544 K 125-250	0.43	19.40	0.003	<0.02	0.125	0.009	0.089	0.119
⊙ 5 D	545 K 125-250	0.44	22.30	0.002	<0.02	0.168	0.014	0.138	0.122
⊙ 10 D	546 K 125-250	0.37	32.30	0.001	0.04	0.158	0.007	0.103	0.109
0	547 K	0.23	40.80	0.003	0.03	0.209	0.017	0.057	0.158
⊙ 2 T	548 K	0.42	31.10	0.003	<0.02	0.093	0.007	0.093	0.071
⊙ 1 D	549 K	0.44	33.00	0.002	<0.02	0.104	0.010	0.140	0.116
0	550 OREAS 47	0.78 2.5*	24.90 31.4*	<0.001	0.03	2.430 3.25	0.053 ~	0.061 0.083	0.338 0.47
0	551 M TEST	0.05 ✓	85.20 ✓	0.008 ✓	<0.02 ✓	0.254 ~	0.003 ✓	0.016 ✓	0.165 ✓
0	552 K	0.66	25.40	0.004	<0.02	0.086	0.003	0.038	0.050
0	553 K	0.58	21.50	0.004	<0.02	0.111	0.003	0.041	0.048
0	554 M 90	0.04	74.00	0.010	<0.02	0.210	0.005	0.028	1.780
0	555 K	0.64	32.30	0.003	<0.02	0.062	0.003	0.068	0.076
0	556 CLAY	0.26	32.60	0.001	<0.02	9.970	0.074	0.199	0.796
0	557 K	0.43	46.10	0.003	<0.02	0.328	0.016	0.057	0.287
0	558 CLAY	0.30	33.20	0.001	<0.02	10.900	0.076	0.204	0.862
0	559 M 100	0.06	106.50	0.010	<0.02	0.413	0.004	0.014	1.360
0	560 K	0.49	15.30	0.005	<0.02	0.093	0.003	0.044	0.047
0	561 K	0.44	46.80	0.003	<0.02	0.130	0.004	0.047	0.195
1 D	562 K	0.31	33.60	0.002	<0.02	1.490	0.033	0.067	0.287
0	563 K	0.30	49.60	0.002	0.03	0.644	0.015	0.061	0.401
0	564 K	0.40	39.70	0.002	0.05	1.165	0.029	0.086	0.599
0	565 K	0.32	35.70	0.004	<0.02	0.145	0.006	0.047	0.091
0	566 K	0.43	40.20	0.005	0.05	0.422	0.016	0.063	0.482
0	567 M 50	0.09	117.50	0.018	<0.02	0.774	0.011	0.031	3.960
0	568 K	0.26	29.60	0.004	0.02	0.067	0.002	0.027	0.046
0	569 K	0.18	32.50	0.004	<0.02	0.053	0.002	0.024	0.076
⊙ 10 D	570 K = 109	0.63	13.40	0.003	<0.02	0.144	0.007	0.047	0.094
65 DT	571 OF 509	0.20	4.58	0.001	<0.02	2.010	0.006	0.046	0.166
50 DT	572 OF 533	0.14	4.32	0.001	<0.02	0.946	0.009	0.019	0.104
70 DT	573 OF 544	0.08	4.77	0.001	<0.02	1.390	0.005	0.029	0.199
0	574 K TEST	1.02	35.30	0.002	0.06	0.260	0.010	0.051	0.131
0	575 OREAS 47	0.65 2.5*	24.80 31.4*	0.001	<0.02	2.620 3.25	0.050 ~	0.066 0.083	0.360 0.47

		VA20135204	VA20135204	VA20135204	VA20135204	VA20135204		
	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	Zn	Zr
still	Description	V	W	Y	Zn	Zr	Zn	INORGANIC TOP
Vol. %		ppm	ppm	ppm	ppm	ppm	N.A.	at om depth
0	501 M TEST	7.48 ✓	0.02 ✓	2.130 ✓	16.3 ✓	6.20 ~		
Ⓟ	6D 502 K	5.11	0.33	0.743	149.5	229	1.27	
Ⓟ	5D 503 K	3.77	0.17	0.789	130.0	133 ✓	0.92	5 fine sand
	5D 504 K	3.25	0.19	0.535	123.5	141	0.88	5 fine sand
Ⓟ	4DT 505 K	2.99	0.14	0.479	124.0 ✓	132	0.86	8 fine sand
Ⓟ	4DT 506 K	3.92	0.25	0.691	118.0	168	1.08	5 sand
Ⓟ	3DT 507 K	3.96	0.27	0.595	142.5	147	1.14	
Ⓟ	1DT 508 K	3.04	0.16	0.448	123.0	169	0.81	5 sand
Ⓟ	4DT 509 K	3.97	0.19	0.659	129.0	148	1.01	
Ⓟ	1DT 510 K	3.98	0.29	0.613	135.5	188	1.11	5 sand, 10 enriched #541
Ⓟ	5DT 511 K	3.56	0.19	0.783	114.5	119	0.85	6 sand
	1D 512 K	4.14	0.26	0.700	131.0	131	1.07	
Ⓟ	5D 513 K	2.82	0.20	0.505	128.5	177	0.82	6 sand
Ⓟ	5D 514 K	4.20	0.27	0.560	124.0	161	0.97	
Ⓟ	2DT 515 K	6.80	0.23	0.824	115.0	116	1.68	6 sand
Ⓟ	5T 516 K	3.00	0.18	0.550	132.0	131	0.89	
Ⓟ	4DT 517 K	5.16	0.20	0.706	107.5	126	1.20	
Ⓟ	1D 518 K	3.49	0.22	0.639	129.5	186	0.93	6 sand
Ⓟ	1D 519 K	5.36	0.23	0.685	120.0	136	1.24	
Ⓟ	3D 520 K	6.09	0.54	0.864	121.0	208	1.39	6 sand
	1D 521 K	3.47	0.29	0.986	120.5	147	1.04	6 sand, 10 enriched brownish
0	522 K	2.16	0.18	0.395	95.7	80	0.73	> 100
0	523 K	2.73	0.21	0.513	98.6	109	0.94	90 olive sand
0	524 K	1.72	0.14	0.296	98.7	132	0.58	70 green silt
0	525 K	1.78	0.14	0.324	87.9	84	0.61	60 green-gray clay
0	526 K	2.22	0.23	0.399	86.9	101	0.75	> 100
0	527 K	2.41	0.28	0.584	137.0	136	1.02	40 beige clay
0	528 K	2.72	0.11	0.439	95.0	85	0.78	20 fine sand
0	529 K	2.66	0.19	0.450	104.0	127	0.90	50 greenish-gray fine sand
0	530 K	2.47	0.24	0.436	88.2	104	0.79	5 leached, 10 variable sand
0	531 K	2.25	0.26	0.387	114.5	145	0.80	30 very brown sand
2D	532 K	2.95	0.21	0.453	115.0	153	0.82	> 100
Ⓟ	1D 533 K	2.69	0.17	0.452	107.0	113	0.84	5 leached, 20 brown sand
0	534 K	4.16	0.24	0.800	141.0	118	1.15	10 brown med. grain sand
0	535 K	3.22	0.28	0.547	134.0	163	1.12	70 beige sand
0	536 M6D	27.10	0.17	6.100	16.5	< 2	7.74	
0	537 K	2.16	0.17	0.389	116.5	152	0.68	> 100
Ⓟ	0 538 K-2 nd RUB	3.09	0.21	0.556	142.5		0.71	10 leached silt, 20 beige clay
0	539 K	2.99	0.22	0.518	117.5	187	0.80	5 sand
0	540 K	2.81	0.28	0.506	102.0	129	0.87	5 leached, 10 enriched, 40 ^{gray sand} coarse
99DT	541 E<125	20.00	0.02	1.625	47.6	41	4.38	at samples 122 and 510
0	542 K	3.04	0.26	0.542	102.5	143	0.93	10 sand
0	543 K	4.14	0.14	1.120	159.0	175	1.52	

Still	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	Zn	Zn	Zr	INORGANIC TDP at cm depth
Vol. %	Description	V	W	Y	Zn	Zn	N.A.			
		ppm	ppm	ppm	ppm	ppm			ppm	
⊙	2D 544 K 125-250	5.02	0.11	0.843	98.9	80		0.82		10 sand
⊙	5D 545 K 125-250	7.26	0.16	0.786	169.0	184		0.90		5 sand
⊙	10D 546 K 125-250	4.17	0.07	0.689	179.0	249		0.59		10 sand
⊙	0 547 K	8.79	0.08	3.480	204.0	174		2.89		5 clay-silt
⊙	2T 548 K	4.00	0.12	0.551	112.5	151		0.77		10 silt
⊙	1D 549 K	5.47	0.14	1.965	255.0	240		0.87		10 silt
	550 OREAS 47	17.60 ^{24.7}	0.02 0.11	4.850 ^{5.75}	200.0 ²¹³			5.40		- STANDARD (TILL + ORES)
0	551 M TEST	2.41 ~	0.02 ~	0.880 ~	13.6 ~			2.39 ~		
0	552 K	2.30	0.12	0.420	106.5	114		0.94		> 110
0	553 K	2.09	0.13	0.429	126.0	151		0.68		
0	554 M 90	3.77	0.21	1.170	19.1	19		2.81		> 110
0	555 K	2.90	0.14	0.670	119.5			0.73		20 beige clay
0	556 CLAY	45.70	0.02	11.550	86.0	29.90				15 blue-green, 20 beige clay, NF.
0	557 K	9.58	0.17	1.665	124.5	115		4.42		10 beige clay
0	558 CLAY	48.00	0.01	12.350	83.6	111		32.20		50 blue-green clay, NF.
0	559 M 100	7.02	0.02	1.240	23.3	47		4.10		> 110
0	560 K	2.01	0.16	0.425	89.2			0.65		50 greenish clay
0	561 K	2.91	0.11	1.210	189.0	214		1.44		20 beige clay
1D	562 K	18.90	0.10	2.890	135.5	187		7.70		10 beige clay
0	563 K	9.38	0.10	1.745	167.5	205		4.99		
0	564 K	16.95	0.10	3.200	137.5	137		8.82		10 beige clay
0	565 K	3.05	0.11	0.552	139.5	154		1.50		
0	566 K	9.29	0.13	1.730	144.0	160		5.42		20 beige clay
0	567 M 50	12.80	0.08	4.720	28.7	10.65				65 greenish beige clay
0	568 K	1.52	0.08	0.380	110.5	150		0.53		30 beige clay
0	569 K	2.54	0.07	0.807	73.2	102		0.55		
⊙	10D 570 K=109	3.73 ~	0.15	0.730	65.4 ^{69.7}			1.15		- compared to ACTLABS 2G
65 BT	571 OF 509	2.92	0.14	0.783	48.5			0.70		
50 BT	572 OF 533	3.88	0.02	0.504	31.2			0.80		
70 TD	573 OF 544	1.87	0.02	0.692	22.4			0.43		
0	574 K TEST	19.55	0.22	1.310	187	233.0		1.35		- average across a gold zone. 50m
	575 OREAS 47	18.25 ^{24.7}	0.01 0.11	4.660 ^{5.75}	199.5 ²¹³			4.69		- STANDARD (TILL + ORES)

Zn-N.A. neutron activation A20-13146, A20-08857, A21-00034, is variably higher.



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To: HERMANN DAXL
 39-630 RIVERPARK RD
 TIMMINS ON P4P 1B4

Page: 1
 Total # Pages: 3 (A - D)
 Plus Appendix Pages
 Finalized Date: 8-SEP-2020
 Account: DAXHER

CERTIFICATE VA20175957

P.O. No.: MU-AUG. 2020 *Decayed Vegetation sievings, as is.*
 This report is for 62 Vegetation samples submitted to our lab in Vancouver, BC, Canada on 15-AUG-2020.
 The following have access to data associated with this certificate:
 HERMANN DAXL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21g	Received Wet Sample Wt in grams
LOG-22	Sample login - Rcd w/o BarCode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME-VEG41	Vegetation - HNO3/HCl ICPAES-ICPMS <i>1g aliquots</i>

*Duplicates 587 and 628, as well as 3 blanks agreed well.
 BUT as per OREAS 47 most elements' values should be here
 15-40% higher, also as per the few reruns. None adjusted.
 Cu seems little affected, Zn and Au are plotted per neutron activation
 which is more reliable for gold.*

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
 Saa Traxler, General Manager, North Vancouver

Decayed vegetation 0-6 cm depth (K) or blackswamp muck (M), sieved < 250 µm (except 628), analyzed unashed by HNO₃-HCl-ICP-AES/MS - 1 g aliquots - ALS Canada Ltd.

Still Vol.% Sand D, silt	Sample Description	ME-VEG41 Au ppb	ME-VEG41 Au N.A	ME-VEG41 Ag ppm	ME-VEG41 Al %	ME-VEG41 As ppm	ME-VEG41 B ppm	ME-VEG41 Ba ppm	ME-VEG41 Be ppm	ME-VEG41 Bi ppm
0	576 K	4.8	8.6	0.100	0.21	1.91	9	54.5	0.10	0.167
0	577 K	3.6	6.4	0.134	0.14	1.41	12	66.9	0.06	0.146
0	578 K	5.3	3.7	0.144	0.16	2.05	10	87.5	0.06	0.205
0	579 K	5.0	2.5	0.113	0.17	1.85	10	28.7	0.10	0.159
0	580 K	2.3	4.6	0.077	0.07	1.17	11	23.2	0.03	0.101
0	581 K	1.8	2.6	0.074	0.08	0.98	8	39.7	0.03	0.098
0	582 K 10% Clay	4.1	13.3	0.171	0.77	2.73	8	108.5	0.25	0.212
0	583 M 90	0.3		0.015	0.15	1.30	15	53.4	0.09	0.011
0	584 K	5.4	1.5	0.064	0.06	1.11	5	43.8	0.02	0.122
0	585 Clay < 125	1.4	0.3	0.074	3.09	1.99	9	163.5	1.22	0.161
0	586 Clay < 125	1.4	0	0.058	3.20	1.98	12	170.0	1.28	0.158
0	587 K	14.2	8.9 dup. 12.8	0.109 ✓ 0.131	0.10	2.43 ✓ 2.72	6	82.7	0.03	0.245
0	588 K	15.9	17.2	0.106	0.08	2.01	4	29.5	0.02	0.176
0	589 K mossy	3.8	5.7	0.073	0.07	2.05	4	50.0	0.03	0.156
0	590 K	5.2	9.9	0.121	0.14	3.31	8	78.0	0.10	0.161
0	591 M 60	0.5		0.074	0.59	0.86	6	53.2	0.40	0.041
0	592 K	3.7	2.9	0.072	0.07	1.47	6	32.3	0.03	0.131
0	593 K	1.9	0	0.098	0.06	0.98	13	46.9	0.03	0.087
0	594 K	6.7	7.1	0.181	0.07	1.81	7	53.9	0.03	0.185
0	595 K	7.1	19.8	0.214 0.230	0.10	2.29 2.58	12	126.5	0.05	0.235
0	596 K	5.7	8.1	0.078	0.07	1.10	11	43.4	0.04	0.110
0	597 Clay < 125	1.1		0.058	3.45	2.75	13	189.5	1.23	0.179
0	598 K	2.6	8.0	0.070	0.10	1.63	6	38.0	0.06	0.104
0	599 M 100	<0.2	0	0.028	0.20	1.27	15	52.0	0.12	0.016
0	600 K	11.4	17.0	0.143	0.08	2.35	3	25.1	0.02	0.218
0	601 M 60	0.4		0.104	0.71	1.30	7	71.0	0.40	0.042
0	602 Clay < 125	1.3	0.9	0.067	3.39	2.81	13	174.0	1.28	0.186
0	603 M 50	0.5		0.068	0.75	0.62	5	55.7	0.41	0.039
0	604 K	1.9	10.4	0.218	0.37	4.71 ✓	7	61.2	0.16	0.268
0	605 K	1.3	4.4	0.074	0.13	2.16	7	50.2	0.07	0.119
0	627 BLANK	<0.2 ✓		0.016	0.18	1.46	13	41.8	0.08	0.013
0	628 K 125-250	2.7	3.2 dup. 0	0.192 ✓	0.84	1.90 ✓	5	86.3	0.20	0.140
0	629 K	8.8	23.6	0.104	0.12	2.67	5	32.0	0.03	0.238
0	630 K	3.4	10.0	0.487	0.40	1.98	6	86.6	0.12	0.210
0	631 K	14.0	39.7	0.136 ✓	0.16	2.89 ✓ 3.11	3	47.8	0.04	0.286
0	632 K	3.4	9.5	0.065	0.07	1.92	5	18.4	0.02	0.198
0	633 K	4.5	19.8	0.078	0.09	3.09	4	33.5	0.02	0.282
0	634 K	5.4	20.4	0.104	0.08	1.98	3	32.0	0.02	0.294
0	635 K	4.7	8.3	0.074	0.08	2.41	4	38.3	0.02	0.202
0	636 K	1.7	10.5	0.060	0.05	1.19	7	30.2	0.01	0.139
0	637 K	2.1	6.9	0.065	0.07	2.03	7	24.4	0.03	0.132
0	638 K	4.2	24.2	0.087	0.11	2.61	3	66.6	0.03	0.298
0	639 K	3.7	17.1	0.117	0.06	1.88	4	47.0	0.02	0.222

Still	Sample	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41
Vol. %	Description	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	
Sand, silt	T	%	ppm	ppm	ppm	ppm	ppm	ppm	%	
0	576 K	1.27	0.792	6.930	2.120	3.94	0.180	35.00	0.217	
0	577 K	1.61	0.889	3.550	2.090	2.80	0.131	36.10	0.171	
0	578 K	1.36	1.065	5.520	1.585	3.36	0.181	45.80	0.199	
0	579 K	1.67	0.864	10.200	3.000	3.22	0.132	41.60	0.194	
0	580 K	1.58	0.988	1.810	1.720	1.84	0.070	31.00	0.108	
0	581 K	1.34	0.744	1.625	0.901	2.11	0.075	31.10	0.108	
ⓐ	0 582 K 10% clay	0.97	1.155	12.950	3.280	15.00	0.787	47.10	0.878	
0	583 M 90	3.58	0.247	2.320	0.916	1.94	0.066	11.00	0.396	
0	584 K	0.48	1.055	1.260	0.522	2.26	0.122	44.40	0.123	
0	585 Clay < 125	1.09	0.140	75.300	15.600	80.20	2.500	24.90	3.650	
0	586 Clay < 125	1.06	0.121	70.000	15.700	83.00	2.630	27.00	3.800	
0	587 K	0.61	0.820	2.140	0.783 0.296	3.39 4.37	0.174 ✓	86.90 77	0.195 0.203	
0	588 K	0.43	0.796	1.610	0.677	3.18	0.115	63.60	0.159	
0	589 K mossy	0.52	0.753	1.640	0.944	2.45	0.084	49.20	0.138	
0	590 K	1.83	0.927	10.750	16.700	2.84	0.100	41.50	0.619	
0	591 M 60	3.37	0.761	19.050	1.695	8.11	0.202	27.00	0.455	
0	592 K	0.87	0.552	1.895	0.696	2.20	0.073	44.40	0.138	
0	593 K	2.04	0.969	2.020	0.806	1.66	0.062	31.20	0.105	
0	594 K	1.12	0.740	2.040	0.799	2.21	0.110	50.70	0.135	
0	595 K	2.33	1.355	3.620	3.110 3.51	2.50 3.13	0.109 ✓	68.80 61	0.204 0.209	
0	596 K	1.70	0.996	3.190	1.265	1.99	0.072	37.30	0.131	
at 580	0 597 Clay < 125	0.87	0.217	72.600	16.850	87.30	3.040	25.20	4.010	
0	598 K	0.92	0.579	4.490	2.130	2.24	0.096	34.80	0.229	
0	599 M 100	3.49	0.462	4.300	0.786	2.56	0.089	16.50	0.405	
0	600 K	0.33	0.905	1.510	0.570	2.35	0.112	45.80	0.165	
0	601 M 60	3.64	0.615	20.100	1.780	12.65	0.455	22.60	0.627	
0	602 Clay < 125	1.01	0.101	77.600	18.950	89.20	3.190	24.60	4.290	
0	603 M 50	2.50	0.489	23.300	1.110	9.99	0.363	15.70	0.302	
0	604 K	1.35	1.085	14.250	27.000	5.17	0.260	30.40	1.110	
0	605 K	1.46	0.966	6.230	6.770	2.60	0.107	31.40	0.340	
0	627 BLANK	3.70	0.182	2.590	0.709	2.34	0.098	5.31	0.337	
ⓐ	20 DT 628 K 125-250	0.55	0.401	17.550	4.200	19.50	0.840	15.70	0.931	
0	629 K	0.76	0.845	2.870	0.936	4.01	0.111	54.10	0.226	
ⓐ	5 DT 630 K	0.86	0.819	7.760	2.810	7.14	0.507	36.30	0.416	
2 DT	631 K	0.23	0.979	4.200	1.030 1.18	4.94 6.24	0.261 ✓	73.90 63	0.260 0.262	
0	632 K	1.14	0.680	1.210	0.547	2.16	0.068	45.30	0.128	
0	633 K	0.67	0.741	1.715	0.734	2.92	0.135	61.70	0.175	
0	634 K	0.33	0.664	1.730	0.511	2.57	0.125	58.40	0.159	
0	635 K	0.48	0.688	1.490	0.584	2.25	0.134	51.60	0.139	
0	636 K	1.17	0.558	0.898	0.457	1.38	0.074	28.80	0.142	
1 DT	637 K	1.91	0.748	1.580	0.685	2.24	0.077	29.70	0.320	
0	638 K	0.33	0.755	2.010	0.563	2.44	0.172	63.80	0.171	
0	639 K	0.52	0.652	1.205	0.494	2.14	0.089	59.20	0.134	

Still	Sample	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957
Vol %	Description	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
sand	D, silt T	Ga	Ge	Hf	Hg	In	K	La	Li
		ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
0	576 K	0.698	0.101	0.059	0.172	0.075	0.09	3.300	1.2
0	577 K	0.471	0.085	0.034	0.155	0.077	0.09	1.710	0.8
0	578 K	0.593	0.098	0.035	0.236	0.112	0.12	2.890	0.9
0	579 K	0.516	0.116	0.053	0.172	0.083	0.08	4.600	0.9
0	580 K	0.224	0.052	0.019	0.115	0.056	0.08	0.859	0.4
0	581 K	0.269	0.053	0.024	0.120	0.063	0.09	0.788	0.5
@ 0	582 K 10% Clay	2.850	0.098	0.227	0.188	0.122	0.19	5.660	8.5
0	583 M 90	0.355	0.046	0.070	0.057	<0.005	<0.01	1.320	0.2
0	584 K	0.260	0.046	0.014	0.176	0.101	0.12	0.590	0.3
0	585 Clay < 125	11.050	0.038	1.180	0.060	0.034	0.35	35.100	57.3
0	586 Clay < 125	11.350	0.037	1.250	0.045	0.034	0.44	32.000	54.9
0	587 K	0.392	0.068	0.028	0.336	0.204 ✓	0.10	0.995	0.5
0	588 K	0.310	0.048	0.022	0.259	0.133	0.09	0.737	0.4
0	589 K mossy	0.245	0.049	0.020	0.208	0.104	0.09	0.751	0.3
0	590 K	0.419	0.083	0.028	0.199	0.088	0.08	4.090	0.5
0	591 M 60	1.500	0.108	0.235	0.141	0.007	0.02	9.310	0.9
0	592 K	0.240	0.048	0.019	0.172	0.089	0.10	0.939	0.3
0	593 K	0.184	0.056	0.013	0.104	0.058	0.05	1.250	0.3
0	594 K	0.311	0.093	0.021	0.201	0.124	0.07	1.060	0.3
0	595 K	0.377	0.115	0.024	0.250	0.193	0.07	1.595	0.5
0	596 K	0.221	0.042	0.013	0.136	0.074	0.08	1.805	0.3
at 590 0	597 Clay < 125	12.150	0.046	1.100	0.035	0.034	0.51	32.700	55.4
0	598 K	0.282	0.069	0.022	0.149	0.066	0.08	2.170	0.3
0	599 M 100	0.429	0.049	0.106	0.083	<0.005	<0.01	2.050	0.2
0	600 K	0.322	0.076	0.016	0.280	0.134	0.11	0.699	0.2
0	601 M 60	2.000	0.058	0.347	0.135	0.010	0.03	9.750	2.2
0	602 Clay < 125	12.100	0.045	1.005	0.031	0.034	0.54	34.300	55.2
0	603 M 50	1.600	0.050	0.222	0.209	0.009	0.03	12.000	1.2
0	604 K	1.340	0.087	0.062	0.203	0.098	0.08	5.910	1.4
0	605 K	0.401	0.068	0.027	0.175	0.064	0.07	2.860	0.5
0	627 BLANK	0.443	0.045	0.081	0.069	<0.005	<0.01	1.205	0.1
@ 20 DT	628 K 125-250	4.370	0.011	0.066	0.093	0.039 ✓	0.11	7.010	7.3
0	629 K	0.503	0.086	0.027	0.308	0.158	0.09	1.330	0.5
@ 5 DT	630 K	1.750	0.057	0.060	0.215	0.101	0.12	3.690	2.5
2 DT	631 K	0.648	0.091	0.034	0.370	0.204	0.06	1.895	0.6
0	632 K	0.251	0.068	0.017	0.208	0.120	0.06	0.590	0.4
0	633 K	0.354	0.089	0.018	0.376	0.166	0.05	0.824	0.4
0	634 K	0.363	0.093	0.018	0.365	0.177	0.07	0.827	0.4
0	635 K	0.286	0.062	0.019	0.275	0.140	0.04	0.728	0.4
0	636 K	0.184	0.040	0.008	0.163	0.084	0.04	0.426	0.3
1 D	637 K	0.245	0.042	0.015	0.155	0.077	0.04	0.725	0.5
0	638 K	0.429	0.114	0.022	0.346	0.186	0.04	0.982	0.4
0	639 K	0.244	0.061	0.015	0.222	0.144	0.05	0.595	0.3

Still Vol % sand, silt	Sample Description D, silt T	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957
		ME-VEG41 Mg %	ME-VEG41 Mn ppm	ME-VEG41 Mo ppm	ME-VEG41 Na %	ME-VEG41 Nb ppm	ME-VEG41 Ni ppm	ME-VEG41 P %	ME-VEG41 Pb ppm
0	576 K	0.117	288.0	0.31	0.011	0.191	4.29	0.084	14.90
0	577 K	0.124	339.0	0.30	0.012	0.126	3.82	0.094	13.55
0	578 K	0.121	509.0	0.31	0.012	0.151	4.38	0.092	19.70
0	579 K	0.188	211.0	0.40	0.011	0.145	5.96	0.090	13.60
0	580 K	0.139	227.0	0.34	0.012	0.069	2.35	0.081	6.48
0	581 K	0.104	159.0	0.26	0.007	0.084	2.66	0.087	5.79
(@) 0	582 K 10% clay	0.277	233.0	0.40	0.015	0.865	9.72	0.082	25.10
0	583 M 90	0.142	125.0	0.51	0.014	0.137	4.90	0.024	0.53
0	584 K	0.069	128.5	0.28	0.011	0.074	2.10	0.082	8.50
0	585 Clay < 125	1.175	302.0	0.08	0.029	1.130	44.10	0.053	12.50
0	586 Clay < 125	1.275	304.0	0.10	0.034	1.040	46.80	0.059	12.20
0	587 K	0.069 ✓	163.0 ✓	0.45 ✓	0.009	0.118	3.65 ✓	0.069	21.70 ✓
0	588 K	0.074	55.0	0.38	0.008	0.116	3.12	0.071	13.40
0	589 K mossy	0.073	208.0	0.43	0.011	0.068	2.91	0.068	9.38
0	590 K	0.183	2300.0	0.67	0.011	0.111	4.44	0.090	17.10
0	591 M 60	0.210	239.0	0.15	0.013	0.538	8.92	0.039	2.87
0	592 K	0.115	79.7	0.43	0.007	0.063	2.64	0.072	8.34
0	593 K	0.218	264.0	0.62	0.005	0.057	2.64	0.092	6.33
0	594 K	0.118	479.0	0.39	0.007	0.093	3.01	0.086	15.80
0	595 K	0.185 ✓	498.0 ✓	0.48 ✓	0.007	0.103	4.23 ✓	0.097	27.40
0	596 K	0.162	248.0	0.50	0.007	0.065	2.89	0.092	6.62
at 590 0	597 Clay < 125	1.390	356.0	0.12	0.034	0.507	50.50	0.058	13.55
0	598 K	0.098	475.0	0.47	0.010	0.078	3.29	0.091	7.91
0	599 M 100	0.146	82.8	0.49	0.011	0.167	5.65	0.026	0.82
0	600 K	0.062	45.8	0.31	0.011	0.075	2.74	0.070	19.40
0	601 M 60	0.228	174.0	0.36	0.013	0.815	8.63	0.030	2.72
0	602 Clay < 125	1.560	368.0	0.13	0.038	0.382	53.70	0.058	13.85
0	603 M 50	0.195	59.2	0.20	0.012	0.616	6.35	0.062	2.52
0	604 K	0.167	1835.0	0.92	0.010	0.326	5.73	0.116	38.40
0	605 K	0.146	1115.0	0.51	0.006	0.119	3.82	0.095	10.70
0	627 BLANK	0.203	116.5	0.58	0.011	0.141	4.32	0.021	0.76
(@) 20 DT 0	628 K 125-250	0.226	743.0	0.29 ✓	0.008	1.180	11.05 ✓	0.071	15.00 ✓
0	629 K	0.083	91.5	0.44	0.007	0.150	3.82	0.076	26.40
(@) 5 DT 0	630 K	0.136	734.0	0.36	0.007	0.509	6.87	0.099	26.90
2 DT 0	631 K	0.058 ✓	84.9 ✓	0.38 ✓	0.007	0.207	5.82 ✓	0.072	29.60 26.1
0	632 K	0.107	246.0	0.30	0.014	0.070	2.49	0.068	15.00
0	633 K	0.078	533.0	0.49	0.016	0.083	3.52	0.060	26.80
0	634 K	0.049	107.0	0.35	0.012	0.090	3.45	0.056	25.30
0	635 K	0.046	402.0	0.26	0.008	0.077	2.77	0.046	19.25
0	636 K	0.102	905.0	0.19	<0.001	0.047	1.63	0.048	12.75
1 D 0	637 K	0.121	545.0	0.27	0.005	0.085	2.20	0.058	11.45
0	638 K	0.043	208.0	0.40	0.008	0.100	3.30	0.053	30.40
0	639 K	0.047	97.0	0.32	0.001	0.067	2.54	0.048	19.70

Still	Sample	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41
Vol %	Description	Pd	Pt	Rb	Re	S	Sb	Sc	Se
sand	D, silt	ppb	ppb	ppm	ppm	%	ppm	ppm	ppm
0	576 K	<1	1	2.51	<0.001	0.21	0.22	0.40	1.760
0	577 K	<1	1	2.16	<0.001	0.23	0.19	0.26	1.600
0	578 K	<1	1	2.81	<0.001	0.20	0.24	0.28	2.490
0	579 K	<1	1	1.71	<0.001	0.25	0.23	0.31	1.630
0	580 K	<1	1	1.21	<0.001	0.22	0.14	0.16	1.030
0	581 K	<1	1	1.33	0.001	0.21	0.13	0.19	1.030
0	582 K 10% clay	<1	1	11.50	<0.001	0.15	0.16	1.28	3.300
0	583 M 90	<1	1	0.40	0.002	0.30	0.08	0.32	1.140
0	584 K	1	1	2.79	<0.001	0.15	0.18	0.27	1.950
0	585 clay < 125	1	4	39.60	<0.001	0.05	0.02	9.15	0.690
0	586 clay < 125	2	4	44.00	0.001	0.04	0.02	9.46	0.400
0	587 K	<1 ✓	1 ✓	2.95	0.001	0.20 ✓	0.24	0.33	2.880
0	588 K	<1	1	2.85	0.001	0.18	0.22	0.29	2.130
0	589 K mossy	1	1	3.42	0.001	0.19	0.20	0.25	1.900
0	590 K	<1	1	1.55	<0.001	0.21	0.23	0.27	1.530
0	591 M 60	1	2	1.23	0.002	0.26	0.15	0.92	2.530
0	592 K	1	<1	2.02	<0.001	0.20	0.18	0.25	1.450
0	593 K	<1	1	0.85	0.001	0.24	0.16	0.13	0.720
0	594 K	<1	1	1.55	<0.001	0.24	0.24	0.20	2.130
0	595 K	<1	<1	1.75	<0.001	0.25	0.22	0.20	2.050
0	596 K	<1	<1	1.48	0.001	0.24	0.13	0.16	1.070
at 590	597 clay < 125	1	4	48.60	<0.001	0.02	0.01	9.75	0.310
0	598 K	<1	<1	3.03	0.001	0.22	0.19	0.20	1.170
0	599 M 100	<1	1	0.41	0.002	0.29	0.10	0.42	1.330
0	600 K	<1	1	2.20	<0.001	0.14	0.24	0.27	2.790
0	601 M 60	<1	2	3.30	0.003	0.27	0.10	1.48	2.170
0	602 clay < 125	1	3	52.90	<0.001	0.01	0.01	9.95	0.160
0	603 M 50	1	1	1.96	0.001	0.25	0.11	0.93	1.780
0	604 K	1	1	4.10	<0.001	0.25	0.33	0.52	2.400
0	605 K	<1	<1	2.31	<0.001	0.23	0.19	0.22	1.100
0	627 BLANK	<1	1	0.32	0.002	0.22	0.06	0.40	1.410
20 DT	628 K 125-250	1 ✓	<1 ✓	15.60	<0.001	0.07 ✓	0.04	0.90	0.760
0	629 K	1	1	2.47	0.001	0.16	0.26	0.33	3.460
5 DT	630 K	<1	<1	11.00	0.001	0.14	0.20	0.46	3.000
2 DT	631 K	<1	1	3.52	<0.001	0.14	0.28	0.36	2.770
0	632 K	<1	2	1.59	<0.001	0.14	0.22	0.20	2.460
0	633 K	<1	2	1.82	0.001	0.14	0.25	0.29	4.080
0	634 K	1	2	1.83	<0.001	0.10	0.25	0.28	5.190
0	635 K	<1	1	2.38	<0.001	0.12	0.18	0.25	2.880
0	636 K	<1	1	2.02	<0.001	0.07	0.13	0.13	1.730
1 DT	637 K	<1	<1	1.90	<0.001	0.09	0.12	0.20	1.290
0	638 K	<1	1	1.52	0.001	0.12	0.27	0.30	4.430
0	639 K	<1	1	0.98	<0.001	0.11	0.16	0.21	2.470

Still	Sample	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41	VA20175957 ME-VEG41
Vol %	Description	Sn	Sr	Ta	Te	Th	Ti	Tl	U
Sand D, silt T		ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
0	576 K	0.42	38.40	0.003	<0.02	0.204	0.005	0.033	0.188
0	577 K	0.36	45.50	0.003	<0.02	0.101	0.004	0.027	0.086
0	578 K	0.44	42.00	0.003	<0.02	0.120	0.005	0.043	0.096
0	579 K	0.40	51.80	0.004	<0.02	0.152	0.004	0.025	0.205
0	580 K	0.23	45.70	0.003	<0.02	0.059	0.002	0.016	0.060
0	581 K	0.26	46.90	0.004	<0.02	0.062	0.002	0.015	0.045
0	582 K 10% clay	0.62	32.40	0.002	<0.02	0.773	0.022	0.071	0.296
0	583 M 90	0.04	119.00	0.007	<0.02	0.261	0.003	0.012	0.663
0	584 K	0.31	30.50	0.003	<0.02	0.080	0.002	0.024	0.044
0	585 Clay < 125	0.59	49.40	0.001	0.02	12.250	0.100	0.219	3.320
0	586 Clay < 125	0.62	49.30	0.001	0.02	12.550	0.106	0.224	1.615
0	587 K	0.57	41.70 ✓	0.005	<0.02	0.135	0.003	0.032	0.056
0	588 K	0.38	29.70	0.004	<0.02	0.097	0.002	0.021	0.039
0	589 K mossy	0.35	26.70	0.004	<0.02	0.085	0.002	0.023	0.045
0	590 K	0.33	65.80	0.004	<0.02	0.132	0.003	0.075	0.223
0	591 M 60	0.08	114.00	0.017	<0.02	0.731	0.011	0.029	4.420
0	592 K	0.30	39.80	0.004	<0.02	0.083	0.002	0.018	0.052
0	593 K	0.20	58.70	0.003	<0.02	0.035	0.001	0.021	0.050
0	594 K	0.48	35.90	0.005	0.03	0.070	0.002	0.055	0.063
0	595 K	0.55	79.50 ✓	0.004	0.02	0.072	0.003	0.037	0.099
0	596 K	0.27	50.20	0.004	<0.02	0.044	0.002	0.021	0.056
at 590	597 Clay < 125	0.59	43.90	0.001	0.03	13.500	0.111	0.247	1.225
0	598 K	0.26	31.50	0.003	<0.02	0.060	0.002	0.029	0.106
0	599 M 100	0.04	128.00	0.009	<0.02	0.428	0.004	0.016	0.871
0	600 K	0.52	11.85	0.004	<0.02	0.114	0.002	0.038	0.042
0	601 M 60	0.14	129.00	0.013	<0.02	1.640	0.016	0.048	7.900
0	602 Clay < 125	0.56	42.80	0.002	0.04	13.900	0.112	0.248	1.200
0	603 M 50	0.08	82.00	0.010	<0.02	0.423	0.012	0.037	2.210
0	604 K	0.42	47.10	0.002	0.02	0.184	0.013	0.060	0.617
0	605 K	0.22	45.30	0.004	0.02	0.078	0.003	0.049	0.225
0	627 BLANK	0.05	126.50	0.008	<0.02	0.360	0.004	0.017	0.261
20 DT	628 M 125-250	0.31	21.20	0.001	<0.02	0.404	0.041	0.078	0.252
0	629 K	0.55	16.45	0.005	<0.02	0.165	0.005	0.033	0.083
5 DT	630 K	0.41	24.30	0.003	<0.02	0.189	0.016	0.081	0.128
2 DT	631 K	0.64	13.25 ✓	0.004	<0.02	0.172	0.007	0.044	0.083
0	632 K	0.41	16.60	0.003	<0.02	0.054	0.002	0.022	0.037
0	633 K	0.57	14.75	0.003	<0.02	0.115	0.003	0.060	0.047
0	634 K	0.57	7.86	0.003	<0.02	0.095	0.003	0.049	0.044
0	635 K	0.48	20.40	0.003	<0.02	0.120	0.002	0.055	0.040
0	636 K	0.23	14.60	0.001	<0.02	0.044	0.001	0.032	0.027
1 D	637 K	0.25	20.80	0.002	<0.02	0.103	0.003	0.032	0.047
0	638 K	0.65	11.00	0.003	<0.02	0.165	0.003	0.049	0.068
0	639 K	0.44	39.40	0.002	<0.02	0.098	0.002	0.027	0.039

Still	Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	INORGANIC TOP at cm depth	
Vol. %	Description	V	W	Y	Zn	Zn	Zr	
sand	D, silt T	ppm	ppm	ppm	ppm	N.A.	ppm	
0	576 K	3.28	0.11	1.375	154.0	149	2.33	10 beige clay
0	577 K	2.50	0.11	0.761	198.5	218	1.33	10 beige clay
0	578 K	3.00	0.13	1.050	211.0	223	1.44	10 beige clay
0	579 K	3.08	0.10	1.935	135.0	169	1.91	10 beige clay
0	580 K	1.62	0.07	0.420	241.0	231	0.77	10 beige clay
0	581 K	1.65	0.09	0.380	156.0	157	0.86	10 beige clay
0	582 K 10% clay	14.45	0.12	2.080	128.0	97	7.49	10 black clay to beige
0	583 M 90	6.90	0.02	0.912	22.5		2.96	>100
0	584 K	1.58	0.10	0.285	141.5	160	0.46	60 black clay, 70 gray clay
0	585 Clay < 125	58.80	0.05	15.200	110.5	149	49.10	60 green-gray clay, NF, NM
0	586 Clay < 125	61.50	0.04	13.600	101.0	117	52.10	50 greenish, 60 beige clay
0	587 K	2.69	0.13	0.521	140 138.0	170	0.89	50 greenish, 60 beige clay
0	588 K	2.12	0.13	0.382	100.0	89	0.69	
0	589 K mossy	1.98	0.10	0.384	99.4	123	0.68	30 gray clay
0	590 K	6.27	0.10	1.680	111.0	119	1.16	
0	591 M 60	12.40	0.04	4.880	18.1		11.75	70 blue-green clay
0	592 K	2.08	0.11	0.460	93.8	107	0.58	60 beige clay
0	593 K	1.90	0.10	0.489	191.0	214	0.59	20 beige clay
0	594 K	2.06	0.10	0.482	135.0	150	0.72	20 beige clay
0	595 K	3.06	0.13	0.766	284 276.0	284	0.96	20 beige clay
0	596 K	2.06	0.09	0.647	182.5	184	0.61	20 beige clay
at 590	597 Clay < 125	63.90	0.03	13.600	114.0		48.50	70 blue-green under 590-591 no Pitt, non-magn.
0	598 K	2.88	0.07	1.005	90.2	101	0.78	
0	599 M 100	9.11	0.02	1.385	19.0	30	4.83	>100
0	600 K	1.67	0.11	0.355	92.7	105	0.61	thick moss
0	601 M 60	16.15	0.05	5.160	28.8		15.60	70 green-blue clay 602
0	602 Clay < 125	66.20	0.02	14.650	106.0	151	47.30	
0	603 M 50	7.55	0.03	5.290	16.0		10.50	60 green-blue clay
0	604 K	18.30	0.12	2.230	75.7	94	2.49	10 beige clay
0	605 K	6.33	0.10	1.200	116.0	129	1.18	30 beige clay
0	627 BLANK	3.55	0.02	0.958	17.7		3.47	= 20% of work 1-2-2
20 DT	628 K 125-250	18.60	0.04	2.320	98.2	89	3.04	6 white silt, 25 brown DT
0	629 K	3.09	0.22	0.591	117.5	134	0.96	>100
5 DT	630 K	7.07	0.14	1.240	131.0	156	2.26	6 white sand-silt
2 DT	631 K	3.63	0.22	0.694	116 115.5	98	1.12	10 leached silt, 30 enriched T
0	632 K	1.77	0.21	0.277	71.2	95	0.50	70 silt
0	633 K	2.31	0.15	0.381	105.5	150	0.67	
0	634 K	2.04	0.20	0.351	81.4	104	0.58	
0	635 K	1.97	0.27	0.306	97.7	114	0.56	30 beige-green gray clay
0	636 K	1.18	0.07	0.209	72.7	115	0.32	>100
1 DT	637 K	1.77	0.08	0.339	76.6	137	0.61	>110
0	638 K	2.45	0.15	0.426	103.5	114	0.74	110 greenish-gray fine sand
0	639 K	1.68	0.12	0.273	100.0	142	0.50	

Decayed vegetation 0-6 cm depth (K) sieved < 250 μm (except 628)
 analyzed unashed by HNO₃-HCl-ICP-AES/MS - 1g aliquots - ALS Canada Ltd.

Still Vol. % sand	Sample Description D, silt T	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957				
		ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41			
		ALS VEG41 ppb	Au N.A.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm				
0	640 K	4.8	21.1	0.060	0.07	1.96	3	43.4	0.02	0.222				
0	641 K	3.0	7.3	0.128	0.28	2.07	9	40.5	0.16	0.187				
0	642 K	3.0	2.8	0.134	0.28	1.42	6	48.9	0.14	0.171				
0	643 K	1.6	4.0	0.040	0.03	0.71	6	14.9	0.01	0.059				
0	644 K	2.6	8.4	0.086	0.42	2.05	6	38.3	0.12	0.139				
0	645 K	3.5	11.7	0.082	0.05	1.33	3	32.6	0.01	0.151				
0	646 K	1.1	7.5-4	0.050	0.26	1.70	3.19 N.A.	5	32.0	0.08	0.112			
0	647 K	5.9	13.3	0.077	0.09	2.01	3	22.8	0.02	0.215				
0	648 K	6.9	22.8	0.185	0.246	2.35	3.66	3	19.9	0.02	0.341			
	649 = 503 11	9.3	17.5	0.286	0.438	1.45	2.07	3	30.1	0.04	0.209			
	650 = 514 27	13.9	44.8	0.273	0.344	2.20	2.94	3	25.9	0.03	0.279			
	651 = 555 17	3.9		0.151	0.201	1.74	2.54	5	70.2	0.03	0.219			
	652 = 560 10	12.1		0.108	0.146	1.87	2.34	4	31.6	0.02	0.175			
<125 μm	653 98% BT of 628	0.5		0.024	0.15	0.25		1	11.5	0.03	0.028			
?	654 TEST SHAFT JN 4.5			0.096	0.44	40.00 ✓		8	114.0	0.07	0.137			
	655 OREAS 47	28.8	35.2	0.071	0.107	0.59	6.13	9.53	2	47.7 62	0.13	0.19	0.086	0.15

	Sample Description	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957							
		ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41						
		Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %								
0	640 K	0.30	0.668	1.605	0.495	2.11	0.092	46.50	0.141								
0	641 K	1.62	0.918	18.350	5.870	4.88	0.196	41.40	0.310								
0	642 K	1.12	0.778	12.700	2.690	4.11	0.232	30.10	0.264								
0	643 K	0.76	0.416	0.787	0.395	0.98	0.032	20.10	0.053								
0	644 K	0.75	0.450	5.810	2.960	8.28	0.473	32.50	0.516								
0	645 K	0.36	0.713	1.005	0.491	1.76	0.061	43.70	0.098								
0	646 K	0.78	0.458	4.700	2.940	5.14	0.283	22.50	0.459								
0	647 K	0.32	0.854	2.100	0.752	2.95	0.090	58.20	0.171								
0	648 K	0.40	1.100	2.160	0.648	0.945	3.21	5.25	0.101	0.137	62.40	69	0.193				
	649 = 503	0.32	0.47	1.320	1.88	3.020	4.49	0.817	1.145	3.41	4.82	0.152	0.186	42.50	53	0.173	0.255
	650 = 514	0.26	0.34	1.335	1.60	2.510	4.1	0.859	1.14	3.74	5.1	0.197	0.24	53.20	68	0.219	0.31
	651 = 555	0.76	0.92	0.758	1.02	2.210	3.180	3.180	4.3	1.77	2.33	0.094	0.114	43.50	52	0.177	0.23
	652 = 560	0.32	0.37	0.649	0.782	1.385	1.88	0.572	0.71	2.37	2.94	0.274	0.30	56.50	63	0.137	0.17
<125 μm	653 98% BT of 628	0.10	0.050	14.600	0.684	3.75	0.158	2.15	0.170								
?	654 TEST SHAFT JN 1.44		0.677	4.280	12.450 ✓	13.50 ✓	0.427	35.20 ✓	1.250 ✓								
	655 OREAS 47	0.46	0.57	0.361	0.5	29.300	45	34.400	50	19.80	30	0.859	1.19	116.50	160	1.060	1.65

	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957							
Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41							
Description	Ga	Ge	Hf	Hg	In	K	La	Li								
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm								
0 640 K	0.312	0.097	0.019	0.212	0.136	0.06	0.787	0.3								
0 641 K	0.758	0.129	0.083	0.202	0.107	0.09	8.190	1.4								
0 642 K	0.790	0.088	0.064	0.140	0.083	0.08	6.250	2.0								
0 643 K	0.098	0.025	0.011	0.071	0.032	0.05	0.411	0.2								
0 644 K	1.470	0.049	0.094	0.147	0.073	0.10	2.840	4.4								
0 645 K	0.199	0.046	0.013	0.174	0.099	0.06	0.509	0.3								
0 646 K	0.837	0.055	0.064	0.114	0.043	0.08	2.270	2.5								
0 647 K	0.356	0.070	0.022	0.305	0.143	0.06	1.020	0.3								
0 648 K	0.462	0.122	0.022	0.334	0.200	0.239	1.045	0.4								
649 = 503	0.550	0.89	0.041	0.076	0.010	0.077	0.117	0.190	0.107	0.168	0.05	0.08	1.660	2.49	0.5	0.7
650 = 514	0.709	1.1	0.069	0.13	0.019	0.027	0.186	0.173	0.150	0.19	0.05	0.07	1.250	1.98	0.6	0.7
651 = 555	0.342	0.42	0.094	0.13	0.013	0.023	0.209	0.271	0.122	0.148	0.05	0.07	1.085	1.48	0.3	0.3
652 = 560	0.263	0.30	0.049	0.05	0.015	0.021	0.262	0.327	0.139	0.162	0.07	0.09	0.678	0.882	0.3	0.3
<125µm 653 98% DTd 628	0.693		0.009		0.016		0.010		0.006		0.02		7.110		1.3	
? 654 TEST SHAFT JN	1.670		0.009		0.027		0.365		0.034		0.07		1.985		3.8	
655 OREAS 47	1.935	3.28	0.018	0.07	0.132		0.010		0.022	0.037	0.09		17.450	25.2	6.6	6.8

	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957							
Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41							
Description	Mg	Mn	Mo	Na	Nb	Ni	P	Pb								
	%	ppm	ppm	%	ppm	ppm	%	ppm								
0 640 K	0.053	29.9	0.33	0.002	0.079	2.74	0.043	21.70								
0 641 K	0.171	381.0	0.38	0.007	0.233	6.81	0.084	17.00								
0 642 K	0.131	235.0	0.29	0.007	0.217	5.36	0.064	18.20								
0 643 K	0.063	57.3	0.17	<0.001	0.035	1.20	0.046	3.37								
0 644 K	0.147	319.0	0.38	0.008	0.434	5.34	0.071	10.20								
0 645 K	0.051	60.5	0.31	0.006	0.056	2.07	0.049	10.50								
0 646 K	0.122	473.0	0.32	0.007	0.286	3.50	0.061	7.39								
0 647 K	0.065	33.8	0.44	0.019	0.106	3.42	0.050	26.60								
0 648 K	0.061	0.076	94.1	122.0	0.40	0.60	0.014	0.110	3.91	4.79	0.063	30.60	38.3			
649 = 503	0.055	0.077	224.0	342	0.28	0.42	0.006	0.01	0.138	0.216	4.09	6.1	0.056	0.086	21.90	32.4
650 = 514	0.051	0.067	165.5	229	0.37	0.47	0.008	0.006	0.249	0.249	5.09	6.43	0.057	0.079	26.50	31.7
651 = 555	0.086	0.105	1520.0	1985	0.55	0.71	0.014	0.018	0.074	0.101	2.72	3.28	0.077	0.1	22.10	29.3
652 = 560	0.048	0.055	58.5	73.1	0.27	0.37	0.015	0.015	0.078	0.10	2.54	2.93	0.065	0.077	13.25	17.05
<125µm 653 98% DTd 628	0.043		90.3		0.04		0.013		0.158		2.08		0.016		2.59	
? 654 TEST SHAFT JN	0.248		994.0		0.29		0.017		0.300		17.85	17.85	0.087		37.70	37.70
655 OREAS 47	0.365	0.484	194.0	270	7.56	12.7	0.071	0.091	0.104		58.10	80	0.041	0.055	203.00	284

	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957
Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Description	Pd	Pt	Rb	Re	S	Sb	Sc	Se
	ppb	ppb	ppm	ppm	%	ppm	ppm	ppm
0 640 K	<1	1	1.13	<0.001	0.09	0.21	0.23	3.250
0 641 K	1	1	2.73	<0.001	0.22	0.26	0.53	2.530
0 642 K	<1	1	3.84	<0.001	0.14	0.19	0.51	1.370
0 643 K	<1	1	0.73	<0.001	0.13	0.08	0.10	0.670
0 644 K	<1	1	7.19	<0.001	0.14	0.12	0.74	1.920
0 645 K	<1	1	1.35	<0.001	0.11	0.16	0.18	2.430
0 646 K	<1	1	4.60	<0.001	0.13	0.10	0.47	1.130
0 647 K	1	2	2.09	<0.001	0.12	0.21	0.31	3.240
0 648 K	<1	1	2.49	<0.001	0.11 0.15	0.32	0.30	6.220
649 = 503	<1	<1	2.80 3.55	<0.001	0.07 0.12	0.15 0.24	0.17 0.2	3.520 4.34
650 = 514	<1	1	2.99 3.73	<0.001	0.09 0.15	0.22 0.26	0.26 0.33	4.810 1.35
651 = 555	<1	<1	1.94 2.54	<0.001	0.15 0.20	0.24 0.32	0.19 0.22	3.130 2.84
652 = 560	1	1	3.49 3.94	<0.001	0.13 0.16	0.16 0.21	0.21 0.24	2.200 1.91
<125 μm ? 653 98% BT of 628	1	<1	2.88	<0.001	<0.01	<0.01	0.34	0.110
654 TEST SHAFT IN	<1	1	7.09	<0.001	0.10	0.20	2.54	1.490
655 OREAS 47	24 43	10 26	5.61 7.15	<0.001	0.03 0.046	<0.01	2.07 3.17	0.060

	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957
Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
Description	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
0 640 K	0.47	27.60	0.003	0.02	0.096	0.002	0.017	0.043
0 641 K	0.42	49.40	0.003	<0.02	0.316	0.006	0.037	0.318
0 642 K	0.34	34.80	0.002	0.02	0.294	0.006	0.038	0.188
0 643 K	0.14	22.50	0.002	<0.02	0.037	0.001	0.012	0.028
0 644 K	0.25	26.90	0.002	<0.02	0.415	0.011	0.044	0.251
0 645 K	0.33	18.15	0.003	<0.02	0.066	0.002	0.024	0.034
0 646 K	0.17	26.90	0.002	0.02	0.249	0.008	0.033	0.239
0 647 K	0.51	14.20	0.004	<0.02	0.175	0.004	0.025	0.050
0 648 K	0.64	7.68 9.70	0.004	<0.02	0.089	0.004	0.048	0.060
649 = 503	0.21 0.44	11.25 14.9	0.002	<0.02	0.061 0.08	0.004	0.065 0.1	0.063 0.1
650 = 514	0.45 0.77	10.70 13.3	0.002	<0.02	0.100 0.145	0.005	0.074 0.1	0.068 0.1
651 = 555	0.34 0.64	26.30 32.3	0.002	<0.02	0.073 0.06	0.003	0.055 0.068	0.062 0.076
652 = 560	0.33 0.49	13.30 15.3	0.004	<0.02	0.081 0.093	0.002	0.038 0.044	0.039 0.047
<125 μm ? 653 98% BT of 628	0.03	4.09	<0.001	<0.02	2.720	0.014	0.015	0.267
654 TEST SHAFT IN	0.73	31.20	0.001	0.03	0.284	0.010	0.045	0.091
655 OREAS 47	0.57 2.54	23.40 31.4	<0.001	<0.02	2.020 3.15	0.045 0.07	0.056	0.280 0.47

	VA20175957	VA20175957	VA20175957	VA20175957	VA20175957							
Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	Zn	Zn	Zr				
Description	V	W	Y			N.A.						
	ppm	ppm	ppm			ppm	ppm	ppm				
0 640 K	1.88	0.18	0.340			64.7	119	0.54	60 greenish-gray clay			
0 641 K	5.49	0.13	3.520			125.5	119	3.06	10 black, 20 beige-blue clay			
0 642 K	4.10	0.09	2.240			91.9	169	2.21	10 beige clay			
0 643 K	0.75	0.04	0.159			97.5	158	0.34	10 beige clay			
0 644 K	9.18	0.08	0.936			77.4	102	3.27	15 dark clay, 40 beige clay			
0 645 K	1.33	0.09	0.210			83.4	159	0.43	20 beige dense clay			
0 646 K	6.14	0.05	0.791			85.0	138	2.22	10 beige clay			
0 647 K	2.13	0.16	0.403			88.9	96	0.72	100 green sand			
0 648 K	2.40	0.22	0.423	128	99.1	115	115	0.71	>100			
649 = 503	2.54	3.77	0.12	0.17	0.497	0.789	130	87.9	133	0.44	0.92	
650 = 514	3.15	4.20	0.15	0.27	0.400	0.56	124	90.0	161	0.69	0.97	
651 = 555	2.39	2.90	0.12	0.14	0.445	0.67	120	93.3		0.54	0.73	
652 = 560	1.78	2.01	0.15	0.16	0.289	0.42	89	72.5		0.51	0.65	
<125µm 653 98% DT of 628	3.87		<0.01		1.260			11.3		0.90		2% mt, 4% mafic, 80% clear quartz
? 654 TEST SHAFT IN	16.50		0.21		1.000	2.33		187.5		1.07		poor test due to sand content.
655 OREAS 47	16.20	24.7	0.01		3.680	5.75	123	155.5		4.23		STANDARD - all much too low.

INORGANIC TOP
at cm depth



ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 604 984 0221 Fax: +1 604 984 0218
www.alsglobal.com/geochemistry

To: **HERMANN DAXL**
39-630 RIVERPARK RD
TIMMINS ON P4P 1B4

Page: 1
Total # Pages: 2 (A - D)
Plus Appendix Pages
Finalized Date: 22-NOV-2020
Account: DAXHER

CERTIFICATE VA20241009

P.O. No.: MU-SH-20 *Decayed vegetation sievings as is*
This report is for 31 Vegetation samples submitted to our lab in Vancouver, BC,
Canada on 21-OCT-2020.

The following have access to data associated with this certificate:

HERMANN DAXL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21g	Received Wet Sample Wt in grams
LOG-22	Sample login - Rcd w/o BarCode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	UNWASHED
ME-VEG41	Vegetation - HNO3/HCl ICPAES-ICPMS	- 1 g aliquots

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver

Decayed vegetation (K) sieved < 250 μm, by ALS - unashed - HNO₃-HCl - ICP/MS - 1g aliquots.
ICP/AES

Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41					
Description	Au VEG 41	Au *	Ag	Al	As	B	Ba	Be	Bi					
Vol. % sand-silt	ppb	N.A.	ppm	%	ppm	ppm	ppm	ppm	ppm					
113 BLANK M	0.8 ✓	0.069	0.34	1.22	7	79.8	0.19	0.039						
0 609 K	17.5	18.1	0.115	0.10	2.85	7	44.9	0.04	0.247					
3 TD 611 K ⊙	16.4	26-30	0.446	0.23	3.52	4	34.7	0.05	0.306					
1 T 614 K ⊙	7.2	18-13	0.515	0.24	2.98	7	86.0	0.08	0.306					
1 DT 615 K ⊙	15.7	40.3	0.317	0.28	4.63	6	133.0	0.08	0.429					
0 616 K	10.0	24.4	0.098	0.12	4.28	5	52.5	0.03	0.288					
0 618 K	10.8	25.8	0.167	0.12	3.92	4	62.9	0.03	0.389					
0 620 K	13.0	13.6	0.075	0.09	3.35	5	36.1	0.03	0.226					
0 621 K	15.8	21-19	0.125	0.11	4.03	3	39.7	0.03	0.354					
3 DT 622 K ⊙	5.0	12.1	0.278	0.27	2.00	13	198.5	0.09	0.245					
0 659 = 587	14.2	6.3	12.8	0.131	0.109	0.11	2.72	2.43	5	84.7	0.03	0.276		
0 660 = 595	7.1	3.7	19.8	0.230	✓	0.10	2.58	2.29	12	130.0	0.05	0.273		
2 DT 661 = 631	14.0	8.4	39.7	0.144	✓	0.16	3.11	2.89	3	48.0	0.05	0.294		
0 662 = 648	6.9	9.1	22.8	0.246	0.185	0.14	3.66	2.35	4	26.0	0.03	0.452		
671 OREAS-47	35.0	✓	0.089	0.107	0.74	✓	8.69	✓	2	57.0	✓	0.17	✓	0.111

* Gold by neutron activation (N.A.) is usually much higher and more reliable than VEG 41, where carbon may interfere??

x Missing samples done only by neutron activation A20-08857.

Sample	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41				
Description	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe					
	%	ppm	ppm	ppm	ppm	ppm	ppm	%					
113 BLANK M	4.15	1.065 ✓	7.120	1.180	6.22	0.117	18.80 ✓	0.592 ✓					
0 609 K	1.10	0.972	1.995	1.290	3.77	0.122	55.60	0.165					
3 TD 611 K ⊙	0.48	1.630	3.720	1.535	7.28	0.237	79.50	0.308					
1 T 614 K ⊙	1.05	1.040	4.890	2.490	5.74	0.357	43.50	0.276					
1 DT 615 K ⊙	0.90	1.070	5.750	2.280	7.58	0.482	50.00	0.429					
0 616 K	0.64	0.888	2.470	0.931	5.60	0.217	70.20	0.237					
0 618 K	0.54	0.968	2.350	0.822	4.22	0.274	80.40	0.222					
0 620 K	0.81	0.873	1.875	0.899	3.58	0.108	46.50	0.173					
0 621 K	0.51	1.010	2.520	0.851	4.41	0.210	75.10	0.224					
3 DT 622 K ⊙	1.88	1.960	5.670	3.950	6.12	0.519	45.50	0.308					
0 659 = 587 K	0.63	0.893	2.450	0.896	0.783	4.37	3.39	0.180 ✓	76.50	87	0.203 ✓		
0 660 = 595 K	2.42	1.500	4.120	3.510	3.11	3.13	2.50	0.119 ✓	61.00	69	0.209 ✓		
2 DT 661 = 631 K	0.24	1.025	4.290	1.180	1.03	6.24	4.94	0.254 ✓	63.40	74	0.262 ✓		
0 662 = 648 K	0.50	1.355	2.990	0.945	0.648	5.25	3.21	0.137	0.101	69.20	62	0.260	0.193
671 OREAS-47	0.55 ✓	0.462 ✓	39.100 ✓	44.600 ✓	26.70 ✓	1.210 ✓	139.00	160	1.340	1.65			

Still Vol. % DT	Sample Description	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	
		ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
		Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	
	113 BLANK M	0.877	0.062	0.237	0.163	0.007	0.01	3.860	0.4	
0	609 K	0.401	0.108	0.026	0.228	0.129	0.10	0.985	0.5	
3 DT	611 K ⊕	0.770	0.070	0.038	0.259	0.201	0.06	1.775	0.8	
1 T	614 K ⊕	1.380	0.065	0.039	0.307	0.122	0.10	2.570	1.5	
1 DT	615 K ⊕	1.260	0.097	0.054	0.390	0.166	0.10	2.880	1.7	
0	616 K	0.510	0.088	0.033	0.350	0.180	0.08	1.215	0.6	
0	618 K	0.547	0.146	0.028	0.406	0.252	0.08	1.145	0.5	
0	620 K	0.381	0.080	0.021	0.308	0.122	0.07	0.901	0.4	
0	621 K	0.529	0.118	0.030	0.439	0.233	0.09	1.220	0.5	
3 DT	622 K ⊕	1.475	0.022	0.028	0.227	0.112	0.12	2.800	2.1	
0	659 = 587 K	0.450	0.078	0.033	0.343	0.194 ✓	0.10	1.210	0.6	
0	660 = 595 K	0.407	0.122	0.031	0.291	0.184 ✓	0.07	1.930	0.6	
2 DT	661 = 631 K	0.707	0.095	0.038	0.409	0.193 ✓	0.06	2.020	0.8	
0	662 = 648 K	0.697	0.171	0.037	0.473	0.239 0.200	0.10	1.450	0.6	
	671 OREAS 47	2.730 3.18	0.019	0.213	0.046	0.035 ✓	0.11 ✓	23.100 ✓	8.4 ✓	

	Sample Description	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	
		ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
		Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P %	Pb ppm	
	113 BLANK M	0.194	126.5 ✓	0.40	0.008	0.411	6.28 ✓	0.034	1.84 ✓	
0	609 K	0.079	596.0	0.35	0.006	0.115	3.60	0.077	20.70	
3 DT	611 K ⊕	0.086	576.0	0.51	0.005	0.273	6.75	0.084	23.20	
1 T	614 K ⊕	0.115	896.0	0.46	0.006	0.435	4.91	0.093	33.50	
1 DT	615 K ⊕	0.087	1155.0	0.68	0.006	0.365	5.98	0.099	46.70	
0	616 K	0.073	362.0	0.51	0.005	0.151	4.30	0.075	19.50	
0	618 K	0.063	233.0	0.51	0.006	0.143	4.19	0.083	27.60	
0	620 K	0.087	660.0	0.53	0.003	0.107	2.93	0.067	19.55	
0	621 K	0.076	123.5	0.74	0.006	0.142	3.72	0.076	27.20	
3 DT	622 K ⊕	0.150	2160.0	0.38	0.004	0.415	5.81	0.117	26.40	
0	659 = 587 K	0.071 ✓	164.0 ✓	0.53 0.45	0.007	0.154	3.72 ✓	0.070	21.00 ✓	
0	660 = 595 K	0.189 ✓	515.0 ✓	0.49 ✓	0.005	0.139	4.26 ✓	0.099	26.20 ✓	
2 DT	661 = 631 K	0.059 ✓	88.9 ✓	0.41 ✓	0.006	0.276	5.61 ✓	0.072	26.10 29.6	
0	662 = 648 K	0.076 0.061	122.0 94.1	0.60 0.40	0.006	0.193	4.79 3.91	0.085	38.30 30.6	
	671 OREAS 47	0.446 ✓	239.0 ✓	11.15 ✓	0.071 0.091	0.195	70.10 80	0.050 ✓	260.00 ✓	

Still Vol. % DT	Sample Description	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	
		ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
		Pd ppb	Pt ppb	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	
	113 BLANK M	<1	1	0.70	0.001	0.32	0.10	0.89	2.120	
0	609 K	1	3	3.63	0.001	0.22	0.26	0.27	3.050	
3 TD	611 K @	1	3	3.47	0.001	0.16	0.26	0.37	4.770	
1 T	614 K @	<1	1	6.79	<0.001	0.17	0.29	0.30	3.960	
1 DT	615 K @	1	<1	6.88	0.001	0.17	0.39	0.40	5.470	
0	616 K	1	1	3.26	0.001	0.20	0.30	0.35	3.880	
0	618 K	<1	<1	3.68	0.001	0.19	0.37	0.31	5.920	
0	620 K	<1	<1	2.97	<0.001	0.18	0.24	0.22	3.510	
0	621 K	1	<1	3.39	0.001	0.18	0.33	0.32	5.760	
3 DT	622 K @	<1	<1	12.55	<0.001	0.18	0.19	0.27	2.380	
0	659 = 587 K	<1	<1	3.09	0.001	0.20 ✓	0.27	0.33	3.270	
0	660 = 595 K	<1	<1	1.98	<0.001	0.25 ✓	0.27	0.20	2.080	
2 DT	661 = 631 K	<1	1	3.66	0.001	0.14 ✓	0.28	0.34	3.790	
0	662 = 648 K	<1	1	3.23	0.001	0.15 0.11	0.46	0.33	7.890	
	671 OREAS 47	26 43	12 25	7.13 ✓	<0.001	0.04 ✓	0.01	2.85 ✓	0.057	

	Sample Description	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	
		ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41	ME-VEG41
		Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	
	113 BLANK M	0.10 ✓	72.50 ✓	0.020	0.01	1.235	0.007	0.030	0.779	
0	609 K	0.59	18.65	0.004	0.02	0.127	0.003	0.040	0.053	
3 TD	611 K @	0.68	15.40	0.005	0.02	0.164	0.008	0.128	0.096	
1 T	614 K @	0.47	28.80	0.004	0.01	0.129	0.012	0.081	0.109	
1 DT	615 K @	0.76	22.00	0.003	0.02	0.159	0.008	0.118	0.138	
0	616 K	0.67	20.50	0.006	0.01	0.171	0.004	0.057	0.069	
0	618 K	0.89	15.40	0.005	0.02	0.133	0.004	0.084	0.066	
0	620 K	0.46	24.90	0.005	0.02	0.077	0.003	0.035	0.052	
0	621 K	0.81	13.75	0.006	0.02	0.140	0.004	0.054	0.067	
3 DT	622 K @	0.31	41.10	0.002	0.02	0.105	0.010	0.132	0.105	
0	659 = 587 K	0.62	43.00 ✓	0.007	0.02	0.196	0.004	0.036	0.069	
0	660 = 595 K	0.55	78.20 ✓	0.005	0.02	0.093	0.003	0.040	0.119	
2 DT	661 = 631 K	0.61	13.50 ✓	0.006	0.02	0.194	0.008	0.048	0.099	
0	662 = 648 K	0.95	9.70 7.68	0.006	0.02	0.109	0.005	0.062	0.083	
	671 OREAS 47	0.77 2.54	28.10 ✓	0.001	0.01	2.940 ✓	0.055 ~	0.073 ~	0.416 ~	

Sill Vol% DT	Sample Description	VA20241009	VA20241009	VA20241009	VA20241009	VA20241009	INORGANIC TOP at cm depth
		ME-VEG41 V ppm	ME-VEG41 W ppm	ME-VEG41 Y ppm	ME-VEG41 Zn ppm	ME-VEG41 Zr ppm	
	113 BLANK M	7.51	0.02	2.580	29.9 ✓	9.77	
0	609 K	2.36	0.16	0.404	204.0	0.91	10 clay
3 DT	611 K ⊙	3.92	0.22	0.619	152.5	1.29	5 gray beige sand
1 T	614 K ⊙	4.93	0.16	0.688	151.5	1.48	10 beige clay
1 DT	615 K ⊙	6.22	0.27	0.991	149.5	2.19	5 sand, 15 beige clay
0	616 K	3.18	0.31	0.505	133.5	1.11	80 gray very fine sand
0	618 K	2.70	0.24	0.474	143.0	1.00	5 fine sand
0	620 K	2.13	0.15	0.424	106.0	0.76	> 100 muck (M)
0	621 K	2.73	0.27	0.504	119.0	1.01	~10 fine sand
3 DT	622 K ⊙	5.48	0.10	0.828	330.0	1.26	5 silty beige clay
0	659 = 587 K	2.74	0.16	0.550	140.0 ✓ 138	1.08	
0	660 = 595 K	3.14	0.14	0.804	284.0, 276	1.16	
2 DT	661 = 631 K	3.66	0.17	0.728	116.0, 115	1.29	
0	662 = 648 K	3.17	0.35	0.600	128.0 99	1.19	
	671 OREAS 47	22.70 ✓	0.02 0.11	5.740 ✓	191.5 ✓	6.69 ✓	- standard

A lab duplicate of 622 agreed well. The lab blank was correct.

Gold is too variable and usually much lower than by neutron activation.

It seems this ME-VEG 41 does not extract the gold well from decayed vegetation, because inorganic standards agree.

K Decayed vegetation 0-6 cm depth, see also A20-08857 for 609...622.

⊙ Swirled to remove excessive sand (D) or silt (T).

659....662 are re-analyses by same method, see VA 20175957 - ALS.



Report No.: A20-08857
Report Date: 24-Aug-20
Date Submitted: 05-Aug-20
Your Reference: MUSOGOLD

Hermann Daxl
39-630 Riverpark Road
Timmins Ontario P4P 1B4
Canada

ATTN: Hermann Daxl

CERTIFICATE OF ANALYSIS

30 Vial samples were submitted for analysis. *Decayed vegetation sieved < 250 µm, in medium vials.*

The following analytical package(s) were requested:		Testing Date:
2B-150 <i>see mass net</i>	QOP INAAGEO (Vegetation INAA)	2020-08-18 11:38:29

neutron activation - double irradiation time

REPORT A20-08857

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

CERTIFIED BY:

Emmanuel Esemé, Ph.D.
Quality Control
Coordinator

ACTIVATION LABORATORIES LTD.
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Decayed vegetation (k) sieved < 250 μ m, by neutron activation - 2B Vegetation - double irr. time - medium vials (see mass)

Results

Activation Laboratories Ltd.

Report: A20-08857

Stil	Analyte Symbol	Au	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	K	Mo	Na	Ni	Rb	Sb	Sc
Vol. %	Unit Symbol	VEG	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm
D=sand	Detection Limit	41	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01
T=silt	Analysis Method	↓	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
0	1 207 M	BLANK	<0.1	<0.3	0.57	35	10.60	1.36	2.1	11.6	<0.05	0.430	0.10	0.57	<0.1	7.07	<0.05	384	<2	<1	0.130	1.66
5D	2 503 K	11.0	17.5	<0.3	2.16	154	7.78	<0.01	3.1	18.3	<0.05	0.440	<0.05	1.23	<0.1	6.66	0.95	4700	<2	<1	0.290	1.87
4DT	3 505 K	7.2	21.3 ³²	<0.3	2.22	135	8.22	0.86	1.3	15.6	<0.05	0.410	0.29	1.31	<0.1	7.37	<0.05	4460	<2	8	0.300	1.66
5D	4 514 K	27.4	44.8	<0.3	2.84	84	9.99	<0.01	2.7	19.4	<0.05	0.550	0.41	1.11	<0.1	8.54	0.44	4020	<2	<1	0.370	1.97
0	5 522 K	7.2	17.6	<0.3	1.75	51	9.16	0.09	0.7	11.1	<0.05	0.260	0.36	0.62	<0.1	8.51	<0.05	1180	<2	5	0.270	0.97
0	6 527 K	5.8	19.0 ⁹	<0.3	1.83	30	10.30	0.71	2.7	8.8	<0.05	0.190	0.31	0.21	<0.1	7.20	<0.05	536	<2	<1	0.250	0.74
0	7 528 K	4.5	8.4	<0.3	1.69	37	9.81	0.34	1.4	13.0	<0.05	0.280	0.40	0.21	<0.1	6.28	0.34	1820	<2	6	0.180	1.14
0	8 536 M	0.8	<0.1	<0.3	0.89	114	12.70	2.01	2.4	21.4	1.03	0.480	<0.05	0.80	<0.1	6.73	<0.05	1490	<2	<1	<0.005	2.53
5D	9 545 K	8.9	21.8	<0.3	2.68	327	5.74	0.39	5.7	30.8	2.92	0.750	<0.05	2.71	<0.1	6.21	<0.05	6290	<2	34	0.400	3.47
0	10 606 K		13.7	<0.3	2.46	32	10.60	0.19	1.2	11.3	<0.05	0.270	0.40	0.49	<0.1	7.82	<0.05	932	<2	<1	0.330	0.87
1	11 607 K		16.2	<0.3	2.13	87	8.06	<0.01	3.4	14.5	<0.05	0.410	0.41	1.13	<0.1	6.22	<0.05	2920	<2	20	0.250	1.46
0	12 608 K		28.7	<0.3	3.20	44	11.20	0.21	1.7	11.9	<0.05	0.330	0.46	0.85	<0.1	8.09	<0.05	1110	<2	5	0.240	1.03
0	13 609 K	17.5	18.1	<0.3	2.35	<5	8.85	0.64	2.8	9.6	<0.05	0.230	0.32	0.25	<0.1	7.96	<0.05	688	<2	<1	0.250	0.76
0	14 610 K		22.6	<0.3	2.79	68	10.70	<0.01	1.2	13.3	<0.05	0.360	0.36	0.72	<0.1	7.79	<0.05	1310	<2	<1	0.280	1.25
3TD	15 611 K	16.4	25.7 ³⁰	<0.3	2.82	156	9.52	<0.01	3.2	19.3	<0.05	0.550	0.37	1.41	<0.1	7.89	<0.05	3520	<2	6	0.310	2.03
100.5T	16 612 E	<125	<0.1	<0.3	2.03	361	3.51	<0.01	10.8	117.0	<0.05	2.480	<0.05	7.41	<0.1	1.62	<0.05	16400	<2	44	0.070	8.03
0	17 613 K		20.9	<0.3	2.54	85	10.80	0.16	1.9	10.8	<0.05	0.300	0.43	0.56	<0.1	8.70	0.55	1080	<2	6	0.260	1.02
1T	18 614 K	7.2	18.0 ¹²⁶	<0.3	2.08	117	9.04	0.19	3.2	16.1	2.47	0.420	0.41	1.48	<0.1	7.14	<0.05	2780	<2	10	0.290	1.82
1DT	19 615 K	15.7	40.3	<0.3	3.65	142	8.75	0.16	3.4	16.7	1.77	0.540	0.13	0.88	<0.1	7.20	<0.05	1680	<2	<1	0.410	1.75
0	20 616 K	10.0	24.4	<0.3	2.74	<5	12.00	0.11	1.3	15.1	0.38	0.320	0.24	0.66	<0.1	8.26	<0.05	1040	<2	<1	0.200	1.17
0	21 617 K		14.7	<0.3	2.18	52	10.60	<0.01	1.8	10.4	<0.05	0.270	0.41	0.45	<0.1	8.73	1.39	953	<2	9	0.230	0.88
0	22 618 K	10.8	25.8	<0.3	2.94	98	10.40	<0.01	1.9	11.4	1.43	0.300	0.34	0.65	<0.1	7.42	0.35	1140	<2	<1	0.310	1.17
0	23 619 K		18.0	<0.3	3.11	46	14.60	0.91	2.4	12.3	<0.05	0.360	0.39	0.79	<0.1	8.15	<0.05	1100	<2	<1	0.240	1.02
0	24 620 K	13.0	13.6	<0.3	2.48	48	11.70	0.29	1.6	10.7	<0.05	0.230	0.42	0.52	<0.1	7.60	<0.05	748	<2	<1	0.210	0.84
0	25 621 K	15.8	20.8 ⁴⁹	<0.3	3.08	44	9.77	0.41	1.7	10.9	<0.05	0.310	0.41	0.69	<0.1	7.57	0.52	1020	<2	<1	0.300	1.06
3DT	26 622 K	5.0	12.1	<0.3	1.83	223	7.44	0.35	5.7	16.3	1.76	0.490	<0.05	1.45	<0.1	6.65	<0.05	3750	<2	28	0.200	1.93
0	27 623 K		20.0	0.6	3.03	40	13.00	0.57	1.3	9.7	<0.05	0.260	0.32	0.18	<0.1	6.92	<0.05	674	<2	<1	0.240	0.78
80DT	28 624 DT of 622	<0.1	<0.3	0.86	360	2.72	0.25	3.0	29.6	<0.05	0.570	<0.05	4.35	<0.1	2.11	<0.05	13100	<2	29	0.100	2.89	
	29 625 = 611	✓	30.5	<0.3	2.64	104	9.18	<0.01	2.6	20.3	<0.05	0.520	0.18	1.36	<0.1	8.12	0.42	3330	<2	4	0.270	1.95
	30 626 OREAS	47	39.8	<0.3	6.70	356	<0.01	1.15	55.8	105.0	3.03	2.570	<0.05	4.23	<0.1	3.01	6.09	20000	<2	39	0.180	8.43

Note: Samples 503...545 are reruns after ALS-VEG #1 Cert. VA 20135204 as noted for comparison. Neutron activation is more reliable. First reading of 621 by INAA was 20.8 ppb Au, new submission as 666 was 18.9 ppb Au (memo), done with 505, 527, 614 (663-665) cert. A20-13146.

Results

Activation Laboratories Ltd.

Report: A20-08857

SK#	Analyte	Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass Net	INORGANIC TOP at cm depth:
Vol. %	Unit	Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	
D=sand	Detection	Limit	0.1	100	0.05	0.1	0.01	0.05	2	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005	✓	
T=silt	Analysis	Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	
0	1	207 M BLANK	<0.1	<100	<0.05	2.5	1.27	<0.05	<2	12.30	17.0	15.9	1.270	0.24	<0.1	0.030	0.520	2.87	
5D	2	503 K	<0.1	<100	<0.05	1.9	<0.01	<0.05	133	6.91	9.7	<0.3	0.790	0.18	<0.1	0.040	0.440	3.00	
4DT	3	505 K	<0.1	<100	<0.05	1.5	<0.01	<0.05	124 ¹³¹	5.12	6.5	<0.3	0.630	0.14	<0.1	0.030	0.350	2.91	
5D	4	514 K	1.4	<100	<0.05	1.5	<0.01	<0.05	161	5.77	9.1	8.9	0.720	0.18	<0.1	0.040	0.460	2.75	
0	5	522 K	<0.1	<100	<0.05	0.6	<0.01	<0.05	80	2.95	4.8	<0.3	0.390	0.06	<0.1	0.040	0.180	2.55	
0	6	527 K	0.6	<100	<0.05	0.8	<0.01	<0.05	111 ¹³²	3.14	4.7	4.9	0.390	0.11	<0.1	<0.001	0.190	2.83	
0	7	528 K	1.0	<100	<0.05	0.8	<0.01	<0.05	85	3.20	4.4	<0.3	0.420	0.09	<0.1	0.010	0.170	2.69	
0	8	536 M	<0.1	<100	<0.05	3.1	1.34	<0.05	<2	19.30	28.3	22.5	2.090	0.41	<0.1	0.050	0.740	3.10	
5D	9	545 K	<0.1	<100	<0.05	2.6	0.51	<0.05	184	10.10	15.5	8.9	1.190	0.30	<0.1	0.060	0.610	3.43	
0	10	606 K	<0.1	<100	<0.05	0.7	<0.01	<0.05	103	2.66	4.3	<0.3	0.370	0.08	<0.1	0.020	0.260	2.53	>110 black swamp muck(M)
1T	11	607 K 6	<0.1	<100	<0.05	1.1	<0.01	<0.05	109	4.80	8.3	3.8	0.550	0.13	<0.1	0.010	0.300	3.13	5 sand, 20 silt, 40 clay
0	12	608 K	0.6	<100	<0.05	1.0	<0.01	<0.05	116	2.99	4.4	7.9	0.420	0.11	<0.1	0.030	0.280	2.65	100 gray sand under M
0	13	609 K	0.7	<100	<0.05	0.4	<0.01	<0.05 ²⁰⁴	174	2.21	4.3	<0.3	0.300	<0.05	<0.1	0.010	<0.005	2.58	10 clay
0	14	610 K	<0.1	<100	<0.05	0.8	<0.01	<0.05	119	3.22	4.8	<0.3	0.480	0.10	<0.1	0.020	0.260	2.60	80 gray sand under M
3TD	15	611 K 6	0.9	<100	<0.05	1.5	0.31	<0.05	152 136 ¹³⁷	5.44	10.3	7.8 [?]	0.770	0.16	<0.1	0.050	0.480	2.61	5 gray beige sand
100DT	16	612 E <125	<0.1	<100	<0.05	9.6	0.95	<0.05	<2	26.30	39.5	21.3	3.170	0.71	<0.1	0.110	1.620	9.30	5 sand
0	17	613 K	<0.1	<100	<0.05	0.7	<0.01	<0.05	105	2.84	5.2	<0.3	0.390	0.06	<0.1	0.040	0.210	2.51	50 very fine gray sand
1T	18	614 K 6	<0.1	<100	<0.05	1.6	0.36	<0.05	151 121 ¹³⁸	5.77	9.6	4.4	0.670	0.11	<0.1	0.040	0.340	3.00	10 beige clay
1DT	19	615 K 6	<0.1	<100	<0.05	1.6	<0.01	<0.05 ¹⁴⁹	117	5.33	8.5	7.4	0.680	0.14	<0.1	0.020	0.240	3.02	5 sand, 15 beige clay
0	20	616 K	1.1	<100	<0.05	0.8	<0.01	<0.05	133 111	2.76	5.6	<0.3	0.430	0.09	<0.1	0.030	0.250	2.68	80 gray very fine sand
0	21	617 K	<0.1	<100	<0.05	0.5	<0.01	<0.05	102	2.34	4.0	9.2	0.350	0.08	<0.1	0.020	0.250	2.67	5 sand
0	22	618 K	0.9	<100	<0.05	1.0	<0.01	<0.05	143 145	2.89	6.3	5.3	0.430	0.16	<0.1	0.020	0.350	2.74	5 fine sand
0	23	619 K	<0.1	<100	<0.05	0.7	<0.01	<0.05	95	2.58	4.8	<0.3	0.400	0.11	<0.1	<0.001	0.230	2.69	>100 muck (M)
0	24	620 K	<0.1	<100	<0.05	0.8	<0.01	<0.05	106 82	2.10	3.6	<0.3	0.310	0.07	<0.1	0.020	0.250	2.59	>100 muck (M)
0	25	621 K	<0.1	<100	0.12	0.6	<0.01	<0.05	119 109 ⁸⁷	2.63	4.8	2.5	0.400	<0.05	<0.1	0.030	0.200	2.65	~10 fine sand
3DT	26	622 K 6	<0.1	<100	<0.05	1.5	0.29	<0.05	330 261	5.54	10.4	11.9	0.690	0.19	<0.1	0.030	0.460	3.24	5 silty beige clay
0	27	623 K	<0.1	<100	0.16	0.5	<0.01	<0.05	79	2.02	3.7	<0.3	0.310	0.10	<0.1	0.010	0.100	2.84	60 fine gray sand under M
80DT	28	624 DT of 622	<0.1	<100	<0.05	3.0	0.73	<0.05	63	9.47	15.7	6.7	1.110	0.33	<0.1	0.050	0.570	7.63	
0	29	625 = 611	<0.1	<100	<0.05	1.6	<0.01	<0.05	127	4.81	8.2	<0.3 [?]	0.730	<0.05	<0.1	0.030	0.400	2.68	
0	30	626 OREAS 47	<0.1	<100	<0.05	4.2	0.99	<0.05	177 ²⁰⁰	32.40	45.8	29.6	3.590	0.93	<0.1	0.060	1.250	9.58	

Zn ALS by ME-VEG 41 unashed - aqua regia Cert. VA 20241009, is more reliable at these values, above Zn is too low also per OREAS 47.

6 Swirled to remove most sand-silt (DT).

612 E <125µm Enriched B-horizon 10-30 cm at 514, is 1/8 of total rounded sand <1500µm.

Quality Control

Activation Laboratories Ltd.

Report: A20-08857

Analyte Symbol	Au	Ba	Ca	Co	Cr	Cs	Fe	Hf	K	Mo	Na	Ni	Rb	Sc	Sr	Ta	Th	U	W	La
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	5	0.01	0.1	0.3	0.05	0.005	0.05	0.01	0.05	1	2	1	0.01	100	0.05	0.1	0.01	0.05	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
OREAS 45e (INAA) Meas	49.9 ✓	273	< 0.01	63.5	1060.0	1.27	22.100 ✓	5.97	2.88	< 0.05	522	489 ✓	> 1	87.40 ✓	< 100	< 0.05	13.4 ✓	2.75	< 0.05	11.70
OREAS 45e (INAA) Cert	53.0	246	0.06	59.0	1070.0	1.20	24.200	6.31	0.34	2.95	580	459	21	91.00	16	0.63	13.0	2.54	1.06	11.10

Quality Control

Activation Laboratories Ltd.

Report: A20-08857

Analyte Symbol	Ce	Nd	Sm	Eu	Tb	Lu	Yb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.3	0.001	0.05	0.1	0.001	0.005
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA
OREAS 45e (INAA) Meas	22.5 ✓	9.1 ✓	1.960 ✓	0.22	< 0.1	0.230	1.590
OREAS 45e (INAA) Cert	23.5	9.5	2.130	0.55	0.4	0.230	1.480



Hermann Daxl
 39-630 Riverpark Road
 Timmins Ontario P4P 1B4
 Canada

Report No.: A20-13146
 Report Date: 13-Nov-20
 Date Submitted: 21-Oct-20
 Your Reference: MU GOLD-2

ATTN: Hermann Daxl

CERTIFICATE OF ANALYSIS

51 Vial samples were submitted for analysis.

Re-analyses by
 neutron activation (more reliable for gold)
 double irradiation time (not briquettes)

The following analytical package(s) were requested:		Testing Date:
2B-136 VIALS - see mass	QOP INAA GEO (Vegetation INAA)	2020-11-10 09:39:25

REPORT **A20-13146**

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Notes:

CERTIFIED BY:

Emmanuel Esemé, Ph.D.
 Quality Control
 Coordinator

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Re-Analyses of decayed vegetation (K), by neutron activation - 2B vegetation - double irr. time - medium vials

Results

Activation Laboratories Ltd.

Report: A20-13146

Analyte Symbol	Au	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	? K	Mo	Na	Ni	Rb	Sb	Sc	
Unit Symbol	VEG	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	41	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01	
Analysis Method	↓	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	
202	BLANK Au	<0.1✓	<0.3	1.65	20	32.30	2.27	2.0	7.4	<0.05	0.160	<0.05	0.39	<0.1	1.39	<0.05	317	<2	2	0.130	0.92	
509		12.7	30.3	<0.3	3.66	131	12.70	<0.01	1.9	18.9	0.33	0.530	0.30	1.26	<0.1	1.50	<0.05	6450	<2	15	0.490	2.13
511		13.3	20.1	<0.3	3.54	135	12.20	0.65	2.4	15.6	<0.05	0.520	0.42	1.36	<0.1	1.40	0.61	6200	<2	18	0.490	1.96
512		26.6	27.6	<0.3	2.98	103	12.00	<0.01	2.8	22.8	<0.05	0.610	0.37	1.48	<0.1	0.79	<0.05	5740	<2	11	0.370	2.31
516		9.9	24.4	<0.3	2.88	111	12.40	0.29	2.4	11.9	<0.05	0.380	0.19	0.86	<0.1	0.61	<0.05	4170	<2	<1	0.550	1.48
519		15.5	27.7	<0.3	3.47	107	11.90	0.38	2.8	15.9	<0.05	0.580	<0.05	1.21	<0.1	1.38	<0.05	5450	<2	6	0.480	2.06
523		19.1	22.7	<0.3	2.84	73	16.20	0.61	1.8	10.7	<0.05	0.330	0.45	0.39	<0.1	1.41	<0.05	1310	<2	<1	0.410	1.04
525		8.2	23.8	<0.3	2.37	<5	14.10	0.32	1.1	5.8	<0.05	0.180	0.50	0.16	<0.1	1.45	0.43	705	<2	<1	0.280	0.66
526		8.1	11.1	<0.3	2.04	65	16.40	0.49	1.4	8.0	0.18	0.270	0.35	0.33	<0.1	1.58	0.64	1040	<2	10	0.290	0.88
531		6.2	24.0	<0.3	2.06	57	8.02	0.47	1.4	8.2	<0.05	0.300	0.25	0.21	<0.1	1.48	<0.05	1830	<2	7	0.370	1.10
533		8.2	20.5	<0.3	2.04	69	11.90	0.28	2.0	10.1	<0.05	0.310	0.42	0.44	<0.1	0.65	1.03	2490	<2	21	0.380	1.09
534		12.3	22.4	<0.3	3.04	83	13.00	0.90	5.3	14.4	<0.05	0.400	0.61	0.46	<0.1	0.81	<0.05	2050	<2	<1	0.380	1.29
99DT 541	E - <125	0.2 <0.1✓	<0.3	1.31	300	4.82	1.34	7.8	92.6	1.32	2.280	<0.05	3.50	<0.1	<0.01	<0.05	20200	<2	27	0.140	7.19	
544		12.9	17.4	<0.3	2.14	261	7.85	0.62	3.1	28.8	1.42	0.650	0.74	2.85	<0.1	1.99	<0.05	9670	<2	39	0.480	2.96
547		4.4	6.3	<0.3	1.93	169	13.10	0.80	5.8	21.1	1.49	0.820	<0.05	0.97	<0.1	0.81	<0.05	3230	<2	41	0.260	2.70
548		10.2	30.5	<0.3	2.01	198	11.70	1.33	5.5	12.7	1.21	0.440	0.57	1.36	<0.1	1.11	0.45	5860	<2	33	0.320	1.76
549		9.2	19.7	<0.3	2.89	286	12.30	1.06	6.5	16.6	1.09	0.590	0.34	1.07	<0.1	0.54	<0.05	4570	<2	31	0.440	2.27
552		5.6	17.7	<0.3	2.26	40	13.00	0.92	1.5	8.6	<0.05	0.250	0.47	0.24	<0.1	1.43	<0.05	952	<2	<1	0.310	0.84
557		5.3	15.7	<0.3	1.91	107	10.20	0.79	5.1	16.9	0.39	0.730	0.33	0.59	<0.1	1.36	1.45	1710	<2	7	0.350	2.14
561		3.9	21.4	<0.3	2.04	81	17.40	2.06	2.8	9.2	<0.05	0.300	0.21	0.27	<0.1	1.22	<0.05	667	<2	5	0.310	0.94
563		3.4	7.0	<0.3	1.85	150	10.60	0.95	5.6	18.1	1.37	0.830	0.33	0.79	<0.1	1.38	<0.05	2100	<2	33	0.190	2.41
566		3.6	6.3	<0.3	2.98	118	11.80	1.94	4.5	19.8	1.64	0.890	0.25	0.57	<0.1	1.21	0.96	1830	<2	19	0.270	2.51
577		3.6	6.4	<0.3	1.69	54	14.40	1.49	2.9	6.7	<0.05	0.210	0.37	0.29	<0.1	1.37	1.09	540	<2	3	0.250	0.77
580		2.3	4.6	<0.3	1.29	<5	14.60	1.68	2.5	5.8	<0.05	0.140	0.39	<0.05	<0.1	1.38	<0.05	377	<2	<1	0.150	0.49
99DT 585	CLAY <125	1.4 0.3✓	<0.3	2.31	355	2.72	0.87	17.9	96.4	4.83	4.080	0.75	3.62	<0.1	<0.01	3.93	11500	<2	98	0.350	12.80	
588		15.9	17.2	<0.3	1.93	<5	14.50	0.22	1.4	8.1	0.12	0.240	0.44	0.33	<0.1	1.44	<0.05	856	<2	7	0.270	0.82
596		5.7	8.1	<0.3	1.24	48	15.40	2.04	2.5	5.8	<0.05	0.180	0.26	<0.05	<0.1	1.45	0.97	450	<2	3	0.190	0.53
600		11.4	17.0	<0.3	2.24	54	14.10	<0.01	1.4	8.7	<0.05	0.240	0.27	0.26	<0.1	0.71	<0.05	765	<2	<1	0.280	0.74
604		1.9	10.4	<0.3	4.66✓	76	22.60	0.89	31.0✓	9.3	0.56	1.180	0.33	0.14	<0.1	1.55	1.09	668	<2	<1	0.430	1.48
630		3.4	10.0	<0.3	2.35	181	12.00	1.92	4.3	17.3	1.05	0.630	0.34	1.55	<0.1	1.38	<0.05	5640	<2	28	0.460	2.49
631		14.1	39.7	<0.3	2.98✓	157	12.60	<0.01	2.5	20.8	<0.05	0.500	0.17	1.69	<0.1	3.99	<0.05	4820	<2	<1	0.370	2.05

Results

Activation Laboratories Ltd.

Report: A20-13146

Analyte Symbol	Au	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	K	Mo	Na	Ni	Rb	Sb	Sc
Unit Symbol	VEG	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	41	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01
Analysis Method	↓	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
632	3.4	9.5	<0.3	2.65	32	15.20	1.84	1.2	8.3	<0.05	0.220	0.26	0.15	<0.1	4.71	<0.05	714	<2	<1	0.340	0.80
634	5.4	20.4	<0.3	2.68	55	11.90	0.12	1.9	11.4	0.21	0.310	0.37	0.48	<0.1	6.05	<0.05	1090	<2	5	0.480	1.15
635	4.7	8.3	<0.3	2.94	64	15.10	1.40	1.5	9.4	<0.05	0.330	0.36	0.41	<0.1	3.26	<0.05	830	<2	<1	0.340	0.91
636	1.7	10.5	<0.3	2.74	52	17.60	1.98	<0.1	8.7	<0.05	0.320	0.25	0.34	<0.1	5.33	<0.05	735	<2	<1	0.350	0.80
638	4.2	24.2	<0.3	3.95	127	13.90	<0.01	2.0	11.0	<0.05	0.320	0.46	0.45	<0.1	4.05	<0.05	1030	<2	<1	0.550	1.20
639	3.7	17.1	<0.3	3.34	69	14.60	0.83	1.8	8.8	<0.05	0.290	0.28	0.34	<0.1	3.82	<0.05	749	<2	<1	0.420	0.93
641	3.0	7.3	<0.3	2.51	72	14.00	1.94	6.7	9.0	<0.05	0.360	<0.05	0.16	<0.1	4.58	<0.05	538	<2	<1	0.370	1.26
644	2.6	8.4	<0.3	2.93	109	11.70	0.94	5.9	19.9	1.72	0.910	0.08	0.68	<0.1	4.68	<0.05	1160	<2	22	0.230	2.39
646	1.1	7.5	<0.3	2.77	96	14.10	1.21	6.1	15.0	0.94	0.780	0.09	0.49	<0.1	3.65	1.55	1070	<2	6	0.250	1.66
647	5.9	13.3	<0.3	3.09	62	14.00	<0.01	2.1	11.9	<0.05	0.330	0.41	0.42	<0.1	4.58	<0.05	1390	<2	<1	0.410	1.15
648	6.9	22.8	<0.3	2.55	68	12.30	0.31	1.9	11.6	0.14	0.350	0.34	0.38	<0.1	5.81	<0.05	1270	<2	<1	0.550	1.35
655	OREAS 47-28.8	35.2 ⁴⁴	<0.3	7.25✓	367	0.59	1.70	49.3✓	97.7✓	2.01✓	2.490✓	<0.05	4.08	<0.1	<0.01	12.80✓	22000	<2 ⁹⁰	48	0.130	8.56 ⁹¹
663 = 505	7.2	23.2 ¹³	<0.3	2.59	162	10.70	0.39	2.8	14.9	<0.05	0.420	0.14	1.38	<0.1	4.77	<0.05	4620	<2	<1	0.410	1.76
664 = 527	5.8	9.6 ¹⁹	<0.3	2.80	73	13.20	1.62	2.5	9.6	0.18	0.230	0.16	0.18	<0.1	4.65	<0.05	631	<2	6	0.350	0.84
665 = 614		12.6 ¹⁸	<0.3	3.30	187	11.90	1.33	3.6	16.8	0.92	0.480	0.36	1.36	<0.1	3.02	<0.05	3250	<2	22	0.500	2.08
666 = 621		18.9 ¹⁰	<0.3	3.31	73	12.50	0.88	1.5	11.6	<0.05	0.300	0.39	0.35	<0.1	4.03	<0.05	1120	<2	<1	0.370	1.12
70 D 667	Sand <250 of 503	6.2	<0.3	0.55	346	3.06	0.69	1.7	34.7	0.58	0.550	<0.05	3.04	<0.1	1.92	<0.05	13100	<2	35	0.110	2.64
40 T 668	Silt <125 of 545	13.4	<0.3	2.13	418	5.18	0.87	4.1	38.7	1.23	0.730	<0.05	4.46	<0.1	2.08	<0.05	11000	<2	46	0.300	3.72
80 D 669	sand <250 of 614	7.8	<0.3	0.54	366	2.74	0.77	2.4	33.2	0.36	0.610	<0.05	3.99	<0.1	<0.01	<0.05	15800	<2	40	0.110	3.29
φ 670	K TEST SHAFT 18.6.20	125.0	<0.3	48.00✓	223	7.23	2.08	18.8	66.5	1.52	1.770	0.26	1.41	<0.1	3.89	<0.05	4920	<2	24	0.600	11.10

Au VEG 41 done by HNO₃-HCl-ICP/MS - unashed - ALS certificates VA20175957 and VA20135204. Neutron activation is more reliable. Samples 505, 527, 614, 621 redone again by neutron activation after Actlabs certificate A20-08857.

As per gold in 503, 545, 614 versus 667-669, sand and silt dilute. Clean K are 17, 22, 18 ppb Au respectively (A20-08857). Also the enriched B-horizon sand 541, and clay top 585, are barren.

Results

Activation Laboratories Ltd.

Report: A20-13146

Analyte Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Detection Limit	0.1	100	0.05	0.1	0.01	0.05	2 ²⁶ 2 ⁶⁵	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005	✓
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
202 BLANK Au	<0.1	<100	<0.05	1.5	0.29	<0.05	<2 ¹⁶	3.82	6.3	4.7	0.390	0.14	<0.1	0.010	0.180	2.66
509	1.3	<100	<0.05	1.7	<0.01	<0.05	148 ¹²⁹	5.04	10.4	4.3	0.580	0.30	<0.1	0.050	0.320	2.78
511	<0.1	<100	<0.05	1.4	0.12	<0.05	119 ¹¹⁴	5.60	9.3	3.4	0.580	0.29	<0.1	0.050	0.340	2.86
512	<0.1	<100	<0.05	1.3	0.12	<0.05	131 ¹³¹	5.06	9.2	6.4	0.560	0.31	<0.1	0.060	0.250	2.72
516	<0.1	<100	<0.05	1.1	<0.01	<0.05	131 ¹³²	4.04	7.4	4.3	0.440	0.12	<0.1	0.050	0.250	2.64
519	<0.1	200	<0.05	1.4	<0.01	<0.05	136 ¹²⁰	4.99	9.5	6.3	0.590	0.27	<0.1	0.050	0.350	2.68
523	<0.1	<100	0.17	0.8	<0.01	<0.05	109 ⁹⁹	2.58	4.9	3.8	0.310	0.18	<0.1	0.030	0.180	2.60
525	<0.1	<100	<0.05	0.6	<0.01	<0.05	84 ⁸⁸	1.58	3.5	4.5	0.190	<0.05	<0.1	<0.001	0.100	2.54
526	<0.1	<100	<0.05	0.7	0.33	<0.05	101 ⁸⁷	2.06	3.4	4.8	0.240	0.09	<0.1	0.010	0.180	2.42
531	<0.1	<100	<0.05	0.8	<0.01	0.36	145 ¹¹⁵	2.37	4.6	<0.3	0.310	0.06	<0.1	0.030	0.190	2.50
533	<0.1	<100	<0.05	0.9	<0.01	<0.05	113 ¹⁰⁷	2.76	5.4	2.6	0.310	<0.05	<0.1	0.020	0.180	2.67
534	<0.1	<100	<0.05	1.0	<0.01	0.28	118 ¹⁴¹	3.36	6.8	3.8	0.400	0.08	<0.1	0.020	0.190	2.79
99DT 541 E <125 μm	<0.1	<100	<0.05	6.1	0.72	<0.05	41 ⁴⁸	13.40	25.6	12.4	1.590	0.80	<0.1	0.150	0.850	8.38
544	<0.1	<100	<0.05	2.8	0.37	<0.05	80 ⁹⁹	8.67	17.6	8.0	0.920	0.46	<0.1	0.110	0.450	2.16
547	<0.1	<100	<0.05	2.6	0.41	<0.05	174 ¹⁰⁹	14.60	28.3	13.6	1.400	0.56	0.2	0.030	0.450	3.23
548	<0.1	<100	<0.05	1.5	0.12	<0.05	151 ¹¹²	5.22	9.1	4.8	0.500	0.22	<0.1	0.030	0.240	2.91
549	<0.1	<100	<0.05	1.7	<0.01	<0.05	240 ²⁵⁵	8.39	16.7	8.3	0.940	0.41	<0.1	0.040	0.390	3.03
552	0.8	<100	<0.05	0.6	<0.01	<0.05	114 ¹⁰⁶	1.91	3.8	2.9	0.240	0.05	<0.1	<0.001	0.130	2.78
557	<0.1	<100	<0.05	2.0	0.33	<0.05	115 ¹²⁵	6.51	12.4	4.6	0.660	0.30	<0.1	0.030	0.260	2.96
561	0.8	<100	<0.05	1.0	0.11	<0.05	214 ¹⁸⁹	4.85	9.7	6.9	0.490	0.18	<0.1	<0.001	0.180	2.82
563	<0.1	<100	<0.05	2.8	0.48	<0.05	205 ¹⁶⁸	7.61	15.0	8.4	0.780	0.34	<0.1	0.050	0.320	3.06
566	<0.1	<100	<0.05	2.6	0.52	<0.05	160 ¹⁴⁴	7.20	13.4	6.2	0.740	0.22	<0.1	0.030	0.290	3.12
577	<0.1	<100	<0.05	0.8	<0.01	<0.05	218 ¹⁹⁹	3.00	5.9	2.5	0.330	0.12	<0.1	0.010	0.140	2.73
580	<0.1	100	<0.05	0.6	<0.01	<0.05	231 ²⁴¹	1.71	3.9	4.3	0.200	<0.05	<0.1	<0.001	0.090	2.69
99DT 585 CLAY <125 μm	<0.1	<100	<0.05	15.7	2.86	<0.05	149 ¹⁴¹	40.10	79.1	33.3	4.340	1.66	0.4	0.400	1.540	7.74
588	<0.1	<100	<0.05	0.7	<0.01	<0.05	89 ¹⁰⁰	1.80	3.7	2.0	0.230	0.06	<0.1	0.030	0.120	2.58
596	<0.1	<100	<0.05	0.6	<0.01	<0.05	184 ¹⁸²	2.92	4.9	<0.3	0.270	<0.05	<0.1	0.010	0.110	2.73
600	1.7	<100	<0.05	0.6	<0.01	<0.05	105 ⁹³	1.75	4.2	3.4	0.240	<0.05	<0.1	0.020	0.140	2.70
604	<0.1	<100	<0.05	1.7	0.64	<0.05	94 ⁷⁶	7.96	16.8	10.8	0.770	0.17	<0.1	0.030	0.280	2.67
630	<0.1	<100	<0.05	2.0	0.54	<0.05	156 ¹³¹	6.62	13.3	6.7	0.700	0.33	<0.1	0.060	0.350	3.41
631	0.6	<100	<0.05	1.1	<0.01	<0.05	98 ¹¹⁶	5.03	9.6	3.4	0.710	0.18	<0.1	0.050	0.330	3.02

Results

Activation Laboratories Ltd.

Report: A20-13146

Analyte Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Detection Limit	0.1	100	0.05	0.1	0.01	0.05	2	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005	✓
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
632	0.9	< 100	< 0.05	0.6	0.49	< 0.05	95	2.04	3.7	1.1	0.260	< 0.05	< 0.1	0.010	0.210	2.76
634	< 0.1	< 100	< 0.05	0.6	< 0.01	< 0.05	104	2.74	5.6	2.5	0.400	0.07	< 0.1	0.040	0.230	2.53
635	0.7	< 100	< 0.05	0.6	< 0.01	< 0.05	114	2.38	4.5	0.9	0.330	0.08	< 0.1	0.010	0.220	2.74
636	0.6	< 100	< 0.05	0.8	< 0.01	< 0.05	115	2.21	5.5	1.2	0.310	< 0.05	< 0.1	0.010	0.170	2.63
638	0.9	< 100	< 0.05	1.0	< 0.01	< 0.05	114	3.25	6.0	5.9	0.480	0.05	< 0.1	0.060	0.300	2.69
639	0.1	< 100	< 0.05	0.7	< 0.01	< 0.05	142	2.31	4.5	3.9	0.350	< 0.05	< 0.1	0.030	0.190	2.71
641	< 0.1	< 100	< 0.05	1.3	0.41	< 0.05	119	11.10	19.2	8.5	1.280	0.26	< 0.1	0.040	0.370	2.89
644	< 0.1	< 100	< 0.05	2.1	0.70	< 0.05	102	6.52	10.9	5.3	0.740	0.22	< 0.1	0.040	0.270	3.11
646	< 0.1	< 100	< 0.05	1.4	0.53	< 0.05	138	5.47	9.7	5.9	0.660	0.16	< 0.1	0.040	0.250	2.97
647	< 0.1	< 100	< 0.05	0.6	< 0.01	< 0.05	96	2.82	5.5	4.4	0.440	< 0.05	< 0.1	0.020	0.200	2.74
648	0.2	< 100	< 0.05	0.8	0.29	< 0.05	115	3.11	5.8	2.0	0.450	0.06	< 0.1	0.050	0.270	2.30
655 OREAS 47	< 0.1	< 100	< 0.05	2.9	0.50	< 0.05	155	30.40	50.5	15.9	3.320	1.02	< 0.1	0.100	1.010	9.75
663 = 505	< 0.1	< 100	< 0.05	1.2	0.34	< 0.05	132	4.20	9.1	2.9	0.570	0.18	< 0.1	0.050	0.350	2.79
664 = 527	< 0.1	< 100	< 0.05	0.6	< 0.01	< 0.05	136	2.84	4.7	4.1	0.370	< 0.05	< 0.1	0.010	0.170	2.86
665 = 614	< 0.1	< 100	0.21	1.5	< 0.01	< 0.05	138	5.59	11.6	7.9	0.710	0.13	< 0.1	0.040	0.290	2.95
666 = 621	1.1	< 100	< 0.05	0.9	< 0.01	< 0.05	109	2.47	5.5	< 0.3	0.380	0.08	< 0.1	0.030	0.170	2.64
703 667 70% sand 503	< 0.1	< 100	< 0.05	2.1	0.18	< 0.05	< 2	7.05	11.7	5.7	0.900	0.29	< 0.1	0.050	0.480	7.44
407 668 40% silt of 545	< 0.1	100	< 0.05	2.4	0.15	< 0.05	112	8.95	17.1	11.3	1.250	0.36	< 0.1	0.090	0.590	4.87
803 669 80% sand of 614	< 0.1	< 100	< 0.05	2.3	0.12	< 0.05	< 2	8.17	15.1	8.6	1.120	0.21	< 0.1	0.060	0.490	8.08
⊕ 670 K SHAFT TEST 18.6.20	< 0.1	< 100	< 0.05	1.2	0.14	0.76	234	5.53	11.4	2.3	1.100	0.37	< 0.1	0.120	0.830	3.55

✓ < 250, swirled 18.6.20 batch, to test when much gold.

Mass net crosschecked, all correct, therefore no sample mix-up detected.

Zn ALS by ME-VEG41 unashed-aquaregia - VA 2013 5204⁽⁵⁰¹⁻⁵⁷⁵⁾ or VA 2017 5957 (576-658)

655 OREAS 47 Standard should be 44 ppb Au, 90 ppm Ni, 226 ppm Zn, Nickel not reliable at these levels.

Quality Control

Activation Laboratories Ltd.

Report: A20-13146

Analyte Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Detection Limit	0.1	100	0.05	0.1	0.01	0.05	2	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005	
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
OREAS 45e (INAA) Meas		< 100	< 0.05	13.8	1.57			10.20	23.9	9.4		0.51	< 0.1			
OREAS 45e (INAA) Cert		16	0.63	13.0	2.54			11.10	23.5	9.5		0.55	0.4			
Method Blank	< 0.1	< 100	< 0.05	0.1	< 0.01	< 0.05	< 2	0.14	0.3	< 0.3	0.020	< 0.05	< 0.1	< 0.001	< 0.005	10.00

Quality Control

Activation Laboratories Ltd.

Report: A20-13146

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	K	Mo	Na	Ni	Rb	Sb	Sc
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
OREAS 45e (INAA) Meas	52.6 ✓			251		< 0.01	59.5	947.0	1.19	23.800		6.21		0.33	3.06	686	561	< 1		91.60
OREAS 45e (INAA) Cert	53.0 ✓			246		0.06	59.0	1070.0	1.20	24.200		6.31		0.34	2.95	580	459	21		91.00
Method Blank	< 0.1	< 0.3	< 0.01	< 5	0.63	< 0.01	< 0.1	5.5	< 0.05	< 0.005	< 0.05	< 0.05	< 0.1	1.22	< 0.05	15	22	< 1	< 0.005	0.05



Report No.: A21-00034
Report Date: 26-Jan-21
Date Submitted: 04-Jan-21
Your Reference: MUGOLD-3

Hermann Daxl

Timmins Ontario P4P 1B4
Canada

ATTN: Hermann Daxl

CERTIFICATE OF ANALYSIS

75 Vial samples were submitted for analysis. *Decayed vegetation sieved < 250 micron in med. vials*

The following analytical package(s) were requested:		Testing Date:
2B-18g <i>see mass (net)</i>	QOP INAAGEO (Vegetation INAA)	2021-01-22 11:36:11

by neutron activation, double irradiation time, Code 2 B-Vegetation
REPORT **A21-00034**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Footnote: INAA data may be suppressed due to high concentrations of some analytes.

CERTIFIED BY:

Emmanuel Esemé, Ph.D.
Quality Control
Coordinator

ACTIVATION LABORATORIES LTD.
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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Sievings < 250 micron (except 546, 586, 602, 628) of decayed vegetation (K), black swamp muck (M), or clay (C), pressed into medium vials, RE-ANALYSES by neutron activation, 2 B for Activation Laboratories Ltd. Report: A21-00034
 vegetation, double irradiation time, 7 cm³ vials.

Shil Vol %	Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	K	Mo	Na	Ni	Rb	Sb	Sc											
↓	Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm											
↓	Detection Limit	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01											
↓	Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA											
0	105 M 30-80	< 0.1	< 0.3	1.50	0.9%	53	21.10	4.37	< 0.1	8.8	0.19	0.480	0.17	0.36	< 0.1	0.67	< 0.05	380	< 2	2	0.130	1.27										
0	118 M 60-80	< 0.1	< 0.3	3.57	2.4%	74	28.00	6.28	< 0.1	10.3	< 0.05	0.990	0.36	0.44	< 0.1	0.53	17.40	489	< 2	< 1	< 0.005	1.45										
0	127 M 50-80	1.7	< 0.3	1.67	1.12	< 5	45.40	3.62	1.7	6.9	< 0.05	0.300	0.22	0.35	< 0.1	0.55	1.21	321	< 2	< 1	< 0.005	0.97										
6D	127 DREAS 45e	43.9	53	< 0.3	15.10	✓	277	✓	3.63	< 0.01	57.5	✓	1030.0	✓	< 0.05	26.500	✓	< 0.05	6.23	311	< 0.1	0.16	< 0.05	2 ³	618	✓	397	454	< 1	0.710	103.00	93
5D	502 K @	24.8	< 0.3	3.78	137	13.60	< 0.01	2.9	21.5	< 0.05	0.660	0.20	1.16	< 0.1	0.71	1.75	4390	< 2	< 1	0.470	2.45											
4DT	504 K	19.5	< 0.3	2.33	191	12.40	0.33	2.5	23.0	< 0.05	0.590	0.13	2.09	< 0.1	0.66	1.46	6340	< 2	< 1	0.370	2.26											
3DT	506 K @	26.6	< 0.3	3.42	104	14.30	0.30	2.6	18.4	0.63	0.530	0.45	1.06	< 0.1	0.60	< 0.05	4080	< 2	< 1	0.520	2.05											
1DT	507 K @	33.6	< 0.3	3.84	93	15.50	< 0.01	< 0.1	20.5	< 0.05	0.540	0.43	0.79	< 0.1	0.56	1.24	3400	< 2	9	0.510	1.94											
1DT	508 K @	20.5	< 0.3	3.17	118	16.80	< 0.01	2.6	16.1	0.25	0.460	< 0.05	0.72	< 0.1	0.79	< 0.05	2890	< 2	7	0.410	1.69											
5D	510 K @	39.7	< 0.3	4.07	117	17.70	< 0.01	< 0.1	16.1	< 0.05	0.540	0.41	0.72	< 0.1	0.60	< 0.05	2750	< 2	< 1	0.520	1.97											
2DT	513 K @	23.1	< 0.3	3.12	140	14.40	0.58	1.8	14.6	0.48	0.440	0.72	0.72	< 0.1	0.63	< 0.05	2980	< 2	7	0.590	1.52											
4DT	515 K @	35.6	< 0.3	3.54	174	12.40	< 0.01	2.5	23.7	< 0.05	0.750	0.15	1.40	< 0.1	0.61	1.23	5030	< 2	5	0.540	2.50											
1D	517 K @	25.2	< 0.3	3.09	209	12.80	< 0.01	< 0.1	20.7	< 0.05	0.700	< 0.05	1.72	< 0.1	0.76	< 0.05	6150	< 2	< 1	0.510	2.44											
3D	518 K @	41.8	< 0.3	2.88	107	14.70	< 0.01	2.1	15.6	0.20	0.470	0.22	0.85	< 0.1	0.59	< 0.05	3150	< 2	8	0.590	1.82											
1D	520 K @	18.7	< 0.3	3.40	155	10.90	< 0.01	3.2	29.7	0.63	0.830	0.20	1.18	< 0.1	0.58	< 0.05	6380	< 2	4	0.410	3.04											
0	521 K	32.7	< 0.3	4.76	181	17.50	1.10	3.1	16.9	< 0.05	0.550	0.50	0.98	< 0.1	0.65	< 0.05	2550	15	< 1	0.740	1.79											
0	524 K	12.8	< 0.3	1.49	58	14.60	0.80	< 0.1	8.7	< 0.05	0.220	0.22	< 0.05	< 0.1	0.57	1.09	668	< 2	4	0.270	0.77											
0	529 K = 682 dupl.	18.6	< 0.3	2.56	59	15.70	0.11	1.7	11.8	< 0.05	0.290	✓	0.36	0.37	< 0.1	0.82	< 0.05	1340	✓	< 2	< 1	0.330	~	1.16	✓							
0	530 K	30.1	< 0.3	2.37	< 5	12.40	< 0.01	1.7	11.3	< 0.05	0.300	0.25	0.44	< 0.1	0.68	< 0.05	1360	< 2	< 1	0.370	1.16											
0	532 K	17.9	< 0.3	2.94	81	12.10	< 0.01	1.7	14.2	< 0.05	0.430	0.23	0.89	< 0.1	0.59	< 0.05	3070	< 2	< 1	0.450	1.57											
0	535 K	17.5	< 0.3	4.03	102	16.30	1.20	< 0.1	15.6	< 0.05	0.440	0.57	0.36	< 0.1	0.62	< 0.05	2180	< 2	9	0.510	1.65											
0	537 K	12.9	< 0.3	2.39	< 5	15.50	< 0.01	2.1	13.1	< 0.05	0.370	0.11	0.50	< 0.1	0.72	< 0.05	2020	< 2	7	0.430	1.45											
0	539 K	22.6	< 0.3	2.62	87	14.80	0.60	2.2	18.2	< 0.05	0.550	0.20	0.80	< 0.1	0.72	1.22	3640	< 2	16	0.380	2.10											
0	540 K	13.5	< 0.3	2.88	95	13.80	< 0.01	2.0	17.3	0.41	0.490	0.15	1.05	< 0.1	0.67	0.77	2820	< 2	7	0.390	1.79											
0	542 K	19.6	< 0.3	3.19	79	14.50	< 0.01	1.9	14.4	< 0.05	0.480	0.40	0.68	< 0.1	0.74	< 0.05	2640	< 2	< 1	0.430	1.71											
0	543 K	19.1	< 0.3	1.91	164	13.60	1.80	3.6	13.3	0.58	0.500	0.13	0.71	< 0.1	0.29	< 0.05	2150	24	20	0.300	1.68											
10D	546 K 125-250 @	10.3	< 0.3	2.07	396	8.21	0.90	3.7	23.7	< 0.05	0.640	< 0.05	3.14	< 0.1	0.53	1.07	9790	< 2	10	0.420	2.82											
0	553 K	12.9	< 0.3	2.50	31	19.00	1.11	< 0.1	10.7	< 0.05	0.270	0.61	0.27	< 0.1	0.62	< 0.05	989	< 2	13	0.410	0.98											
0	554 M 90	< 0.1	< 0.3	1.35	38	26.90	5.40	1.1	6.3	< 0.05	0.310	< 0.05	0.44	< 0.1	0.47	3.15	565	< 2	< 1	0.170	0.98											
0	558 Clay	< 0.1	< 0.3	4.02	566	1.68	0.38	20.6	113.0	6.43	5.500	< 0.05	3.83	< 0.1	0.18	1.65	11600	38	41	117	0.440	16.00										
0	559 M 100	0.8	< 0.3	1.52	60	32.60	4.93	2.6	6.7	< 0.05	0.490	< 0.05	0.29	< 0.1	0.52	1.50	326	< 2	< 1	0.120	0.97											

Results

Activation Laboratories Ltd.

Report: A21-00034

Still Vol%	Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	K	Mo	Na	Ni	Rb	Sb	Sc
	Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm
	Detection Limit	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01
	Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
1 D	562 K	6.6	< 0.3	2.61	289	11.60	1.56	10.4	41.6	2.57	1.820	< 0.05	1.86	< 0.1	0.35	1.30	3960	< 2	69	0.280	5.20
0	564 K	5.6	< 0.3	2.97	248	11.80	1.77	8.9	43.6	3.51	1.880	< 0.05	1.54	< 0.1	0.52	0.41	3430	< 2	72	0.350	5.27
0	565 K	9.5	< 0.3	2.40	93	12.10	1.83	2.8	11.7	< 0.05	0.400	0.22	0.24	< 0.1	0.66	< 0.05	1110	< 2	< 1	0.230	1.24
0	568 K	7.3	< 0.3	1.98	59	14.80	1.41	1.6	7.2	< 0.05	0.230	0.39	< 0.05	< 0.1	0.69	< 0.05	495	< 2	< 1	0.250	0.73
0	569 K	3.8	< 0.3	1.33	87	16.20	1.70	2.6	6.3	< 0.05	0.250	< 0.05	< 0.05	< 0.1	0.76	0.40	385	< 2	< 1	0.240	0.64
0	576 K	8.6	< 0.3	1.88	90	14.70	3.30	3.3	9.6	< 0.05	0.350	0.28	0.34	< 0.1	0.54	< 0.05	556	< 2	< 1	0.280	1.24
0	578 K	3.7	< 0.3	1.63	80	15.00	1.79	2.6	11.4	< 0.05	0.330	0.56	0.37	< 0.1	0.78	< 0.05	592	< 2	< 1	0.340	1.08
0	579 K	2.5	< 0.3	2.32	< 5	20.30	2.96	4.6	10.1	0.37	0.330	0.36	< 0.05	< 0.1	0.54	0.45	536	< 2	< 1	0.360	1.14
0	581 K	2.6	< 0.3	0.67	< 5	14.40	2.09	2.3	8.3	< 0.05	0.190	0.11	< 0.05	< 0.1	0.69	< 0.05	426	< 2	2	0.140	0.71
10 C	582 K	13.3	< 0.3	3.48	211	13.70	< 0.01	4.4	29.6	1.67	1.210	< 0.05	0.93	< 0.1	0.63	< 0.05	1800	< 2	33	0.390	3.50
0	584 K	1.5	< 0.3	1.20	84	10.60	< 0.01	1.1	8.4	< 0.05	0.210	0.26	< 0.05	< 0.1	0.63	< 0.05	662	< 2	< 1	0.270	0.80
0	586 Clay < 125	< 0.1	< 0.3	2.47	542	2.40	< 0.01	19.8	112.0	6.57	4.670	< 0.05	4.19	< 0.1	0.05	1.40	9850	< 2	123	0.440	15.00
0	587 K = 659	12.8	< 0.3	2.42	92	17.00	0.94	2.1	14.1	< 0.05	0.320	0.27	0.29	< 0.1	0.64	< 0.05	901	< 2	11	0.310	1.17
0	589 K mossy	5.7	< 0.3	2.43	< 5	19.50	0.27	2.6	7.3	< 0.05	0.220	0.27	< 0.05	< 0.1	0.56	0.61	548	< 2	< 1	0.330	0.78
0	590 K	9.9	< 0.3	4.09	69	21.30	2.08	23.5	11.0	< 0.05	0.790	0.18	< 0.05	< 0.1	0.80	< 0.05	566	< 2	< 1	0.410	1.02
0	592 K	2.9	< 0.3	1.62	< 5	17.90	1.11	1.3	8.0	< 0.05	0.240	0.43	< 0.05	< 0.1	0.69	< 0.05	519	< 2	< 1	0.290	0.77
0	593 K	< 0.1	< 0.3	0.74	87	18.10	2.88	2.1	5.0	< 0.05	0.180	< 0.05	< 0.05	< 0.1	0.55	0.65	387	< 2	< 1	0.210	0.57
0	594 K	7.1	< 0.3	1.68	82	13.30	1.37	1.9	7.9	< 0.05	0.230	< 0.05	0.30	< 0.1	0.68	0.50	480	< 2	14	0.360	0.76
0	595 K = 660	19.8	< 0.3	2.60	204	18.10	2.34	4.8	7.7	< 0.05	0.290	0.29	0.28	< 0.1	0.56	< 0.05	554	< 2	< 1	0.320	0.89
0	598 K	8.0	< 0.3	1.94	< 5	16.10	0.98	3.4	8.7	< 0.05	0.320	< 0.05	< 0.05	< 0.1	0.63	< 0.05	477	< 2	< 1	0.320	0.83
0	599 M100	< 0.1	< 0.3	2.26	< 5	30.50	3.84	2.1	7.2	< 0.05	0.560	< 0.05	< 0.05	< 0.1	0.66	1.22	338	< 2	< 1	0.070	0.92
0	602 Clay < 125	0.9	< 0.3	4.41	683	0.68	0.32	23.9	130.0	7.46	5.330	< 0.05	4.60	< 0.1	0.03	0.28	11900	< 2	147	0.380	17.20
0	605 K	4.4	< 0.3	2.32	74	17.80	2.10	9.5	9.7	< 0.05	0.490	< 0.05	0.32	< 0.1	0.76	< 0.05	498	< 2	< 1	0.270	0.94
20 BT	628 K 125-250	< 0.1	< 0.3	3.12	467	8.22	< 0.01	6.1	58.1	< 0.05	1.710	< 0.05	6.40	< 0.1	0.47	< 0.05	13500	< 2	67	0.320	6.66
0	629 K	23.6	< 0.3	3.53	80	13.80	< 0.01	2.4	12.8	< 0.05	0.380	0.52	0.72	< 0.1	0.65	< 0.05	2020	< 2	< 1	0.350	1.49
0	633 K	19.8	< 0.3	4.81	137	18.10	0.68	2.3	11.0	< 0.05	0.360	0.58	0.33	< 0.1	0.66	< 0.05	1030	< 2	6	0.490	1.24
1 D	637 K	6.9	< 0.3	3.93	73	23.20	2.91	2.3	10.8	< 0.05	0.740	0.60	0.47	< 0.1	0.63	0.57	1700	< 2	< 1	0.260	1.22
0	640 K	21.1	< 0.3	4.20	107	14.00	0.57	1.8	13.0	< 0.05	0.420	0.58	0.81	< 0.1	0.49	< 0.05	1390	< 2	< 1	0.580	1.50
0	642 K	2.8	< 0.3	2.63	96	15.10	1.74	5.8	22.6	< 0.05	0.600	0.19	0.37	< 0.1	0.63	< 0.05	791	31	10	0.450	2.02
0	643 K	4.0	< 0.3	1.72	< 5	15.80	1.85	1.4	5.0	< 0.05	0.150	< 0.05	< 0.05	< 0.1	0.89	< 0.05	448	< 2	< 1	0.240	0.61

Note: 578, 579, 584, 592, 642 - Au per 2nd reading.

Results

Activation Laboratories Ltd.

Report: A21-00034

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	K	Mo	Na	Ni	Rb	Sb	Sc		
Unit Symbol	Au	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm		
Detection Limit	N.A.	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01		
Analysis Method	↓ INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA		
645 K	11.7	<0.3	2.10	49	14.50	<0.01	0.2	6.2	<0.05	0.220	0.49	0.25	<0.1	1.20	<0.05	662	<2	<1	0.190	0.86		
678 50% D of 502	13.6	<0.3	1.52	186	7.60	0.32	3.5	53.3	<0.05	1.170	<0.05	4.67	<0.1	1.56	<0.05	12800	<2	41	0.280	4.63		
679 80% D of 517	11.6	<0.3	0.93	281	4.62	1.59	1.5	40.2	<0.05	0.980	<0.05	6.16	<0.1	<0.01	<0.05	18600	<2	31	0.130	4.48		
680 = 519	28	22.0 ✓	<0.3	3.90	347	61	13.50	<0.01	0.3	19.9	<0.05	0.600	0.25	1.90	<0.1	1.33	<0.05	5260	<2 ⁷	<1	0.390	2.48
681 = 527	19-20	21.5 ✓	<0.3	2.74	280	47	15.60	2.45	2.3	5.4	<0.05	0.260	0.32	0.44	<0.1	1.07	<0.05	608	<2 ⁴	5	0.320	0.87
682 = 529	Dupl.	20.6 ✓	<0.3	2.76	256	49	15.80	<0.01	1.3 ✓	10.5 ✓	<0.05	0.310 ✓	0.44	0.12	<0.1	1.01	<0.05	1330 ✓	<2 ⁴	9	0.270 ✓	1.19 ✓
683 = 614	18-13	17.7 ✓	<0.3	2.85	208	83	13.60	0.92	2.9	17.9	<0.05	0.480	<0.05	1.29	<0.1	0.95	<0.05	3540	<2 ⁵	<1	0.380	2.16
684 = 646	7.5	4.0 ✓	<0.3	3.19	330	47	15.90	1.53	5.3	12.9	<0.05	0.890	0.26	1.19	<0.1	0.72	<0.05	1200	<2 ⁴	<1	0.280	1.82
685 DREAS 45e	50.0 ✓	<0.3	15.10 ✓	54	252	3.02	<0.01	52.7	1090.0 ⁹¹⁹	<0.05	25.800 ✓	<0.05	6.62 ^{3.11}	<0.1	<0.01	1.69 ^{2.4}	625 ✓	443 ✓	<1	0.920 ✓	101.00 ✓	
686	11.6	<0.3	2.52	119	10.80	2.01	2.5	14.7	<0.05	0.380	0.17	1.29	<0.1	0.50	0.05	6800	<2	20	0.430	1.91		
687 SHAFT NOV	64.9 ⁸⁴	<0.3	53.80 ✓	175	8.66	3.66	18.0 ✓	59.8 ✓	<0.05	2.060 ✓	0.69	1.45	<0.1	1.09	<0.05	5690 ✓	<2	25	0.650	12.50 ✓		
688 HIGH TEST	1610.0 ⁷⁶	<0.3	170.00 ✓	66	8.04	2.84	22.6	70.9	0.65	4.030	<0.05	0.18	<0.1	0.61	<0.05	4620	<2	38	0.710	20.80		
689 = 675 BRIQ.	23.6	<0.3	3.76	<5	14.80	<0.01	1.3	8.3	<0.05	0.240	0.50	<0.05	<0.1	1.26	<0.05	686	<2	<1	0.440	0.95		
690 TEST DALTON	283.0 ✓	<0.3	9.93 ✓	274	8.58	2.33 ^{2.3}	7.7 ✓	67.7 ✓	1.35 ^{1.0}	1.870 ✓	<0.05	5.79 ✓	<0.1	<0.01	<0.05	12200 ✓	<2	71 ✓	0.390 ✓	7.29 ✓		

689: The lower gold of briquettes 672-676 may be due to briquette process, not to sieve size?? The <250 μm 621+666 had 20.8+18.9 ppb Au in vials. As per 678 - 679, sand dilutes, versus 502 (6% D) and 517 (4% DT), Au and Zn, BUT Cr Ce Hf Na Nd Sc Sm La Th U Yb are due to sand. 680-684 and Standard 685, gold repeated well across other certificates by neutron activation.

DTC Remaining volume % of sand, silt, clay. M 100 Muck from 100 cm depth

© Dry-swirled in gold pan to remove most sand, silt, heavies, from sievings.

Only Zn, As, Sb, are comparable with ALS-ME-VEG 41 at these levels. Fe Co Cr are higher here.

Results

Activation Laboratories Ltd.

Report: A21-00034

Still Vol. % ↓	Analyte Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass
	Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	NET g
	Detection Limit	0.1	100	0.05	0.1	0.01	0.05	2	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005	✓
	Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
	105 M 30-80	<0.1	<100	<0.05	1.9	0.63	<0.05	<2	9.15	11.4	9.3	1.000	0.37	<0.1	<0.001	0.350	2.77
	118 M 60-80	0.6	<100	<0.05	2.1	18.20 ¹⁴⁷	<0.05	11	4.81	10.0	4.7	0.420	0.22	<0.1	<0.001	0.230	3.24
	127 M 50-80	<0.1	<100	<0.05	1.6	<0.01	<0.05	55	3.77	6.9	2.7	0.510	<0.05	<0.1	<0.001	0.170	3.05
	OREAS 45e	<0.1	<100	<0.05	14.0 [✓]	2.13 [✓]	<0.05	30 ¹⁴⁷	13.80 ¹¹	22.9 [✓]	6.1 ⁹	2.190 [✓]	0.45	<0.1	0.260	1.450 ^{1.19}	7.76
6D	502 K ⊙	<0.1	<100	<0.05	1.5	<0.01	<0.05	229	5.56	10.0	7.4	0.760	0.18	<0.1	0.050	0.290	2.68
5D	504 K	<0.1	<100	<0.05	1.8	<0.01	<0.05	141	5.70	9.6	2.4	0.780	0.29	<0.1	0.040	0.320	3.21
4DT	506 K ⊙	2.8	<100	<0.05	1.4	<0.01	<0.05	168	4.89	7.9	4.6	0.680	0.12	<0.1	0.020	0.330	2.79
3DT	507 K ⊙	<0.1	<100	<0.05	1.2	<0.01	<0.05	147	4.59	7.4	6.6	0.640	0.12	<0.1	0.030	0.320	2.83
1DT	508 K ⊙	<0.1	<100	<0.05	1.5	<0.01	<0.05	169	4.07	9.2	<0.3	0.600	0.12	<0.1	0.040	0.340	1.98
1DT	510 K ⊙	2.2	<100	<0.05	1.4	<0.01	<0.05	188	4.67	9.3	6.3	0.680	0.23	<0.1	0.020	0.260	2.69
5D	513 K ⊙	<0.1	<100	<0.05	1.2	<0.01	<0.05	177	4.14	7.5	5.9	0.580	<0.05	<0.1	0.040	0.250	2.63
2DT	515 K ⊙	<0.1	<100	<0.05	1.7	0.65	<0.05	116	6.90	11.6	<0.3	0.890	0.29	<0.1	0.020	0.470	2.78
4DT	517 K ⊙	<0.1	<100	<0.05	1.6	<0.01	<0.05	126	6.27	11.4	6.0	0.870	0.35	<0.1	0.060	0.390	3.04
1D	518 K ⊙	<0.1	<100	<0.05	1.1	<0.01	<0.05	186	4.51	7.6	4.3	0.620	0.11	<0.1	0.030	0.190	2.64
3D	520 K ⊙	<0.1	<100	<0.05	2.1	0.57	<0.05	208	7.39	11.6	4.6	0.960	0.41	<0.1	0.070	0.360	2.94
1D	521 K	<0.1	<100	<0.05	1.1	<0.01	<0.05	147	5.74	8.8	5.6	0.740	<0.05	<0.1	0.020	0.270	2.75
	524 K	<0.1	<100	<0.05	0.7	<0.01	<0.05	132	1.86	3.9	2.7	0.280	<0.05	<0.1	<0.001	<0.005	2.57
	529 K = 682 Dupl.	<0.1	<100	<0.05	1.2	<0.01	<0.05	127 ¹⁰¹	2.93 [✓]	5.4 [~]	<0.3	0.420 [✓]	0.13	<0.1	0.010	0.240 [✓]	2.48
	530 K	<0.1	<100	<0.05	0.7	<0.01	<0.05	104	2.51	4.8	<0.3	0.390	<0.05	<0.1	0.020	0.150	2.65
2D	532 K	<0.1	<100	<0.05	1.2	<0.01	<0.05	153	3.94	7.0	<0.3	0.540	0.10	<0.1	0.010	0.180	2.91
	535 K	1.6	<100	<0.05	1.1	<0.01	<0.05	163	3.49	6.7	2.0	0.570	<0.05	<0.1	0.020	0.260	2.59
	537 K	<0.1	<100	<0.05	0.7	<0.01	<0.05	152	3.21	5.7	<0.3	0.460	<0.05	<0.1	0.040	0.180	2.54
	539 K	<0.1	<100	<0.05	2.2	<0.01	<0.05	187	5.48	11.3	3.9	0.760	0.16	<0.1	0.020	0.310	2.60
	540 K	<0.1	<100	<0.05	1.0	<0.01	<0.05	129	3.71	6.7	5.3	0.610	0.10	<0.1	0.040	0.260	2.62
	542 K	<0.1	<100	<0.05	1.4	<0.01	<0.05	143	3.68	7.5	4.4	0.560	0.13	<0.1	0.030	0.210	2.35
	543 K	<0.1	<100	<0.05	1.0	0.30	<0.05	175	5.50	9.9	5.4	0.750	0.19	<0.1	0.010	0.240	3.02
10D	546 K 125-250 ⊙	<0.1	300	<0.05	2.5	0.48	<0.05	249	8.70	16.1	4.4	1.080	0.35	<0.1	0.050	0.580	3.77
	553 K	1.8	<100	<0.05	0.7	<0.01	<0.05	151	2.39	5.4	<0.3	0.390	0.08	<0.1	0.010	0.150	2.70
	554 M 90	<0.1	<100	<0.05	1.1	2.72	<0.05	19	3.53	7.2	<0.3	0.470	0.06	<0.1	<0.001	0.240	3.07
	558 Clay	<0.1	<100	<0.05	18.9	1.57	<0.05	111	47.00	87.1	32.0	6.240	1.76	<0.1	0.210	1.840	7.83
	559 M 100	<0.1	<100	<0.05	1.3	1.68	<0.05	47	4.28	9.4	11.1	0.480	0.12	<0.1	<0.001	0.280	2.80

Mo affected by Uranium

Standard, Auto be more.

Results

Activation Laboratories Ltd.

Report: A21-00034

Still Vol %	Analyte Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass NET g
	Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	NET g
	Detection Limit	0.1	100	0.05	0.1	0.01	0.05	2	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005	✓
	Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
1 D	562 K	<0.1	<100	<0.05	4.6	<0.01	<0.05	187	18.00	35.0	15.0	1.830	0.58	<0.1	0.030	0.550	3.32
	564 K	<0.1	<100	<0.05	4.9	0.84	<0.05	137	17.30	29.7	16.6	1.810	0.56	<0.1	0.030	0.660	3.36
	565 K	<0.1	<100	<0.05	1.1	0.24	<0.05	154	3.53	6.6	<0.3	0.380	0.15	<0.1	<0.001	0.290	2.85
	568 K	<0.1	<100	<0.05	0.6	<0.01	<0.05	150	2.49	4.0	<0.3	0.290	<0.05	<0.1	<0.001	0.140	2.66
	569 K	<0.1	<100	<0.05	0.6	<0.01	<0.05	102	5.03	7.7	2.9	0.470	0.10	<0.1	0.010	0.120	2.45
	576 K	<0.1	<100	<0.05	1.1	0.39	<0.05	149	6.46	11.3	12.7	0.670	0.21	<0.1	<0.001	0.290	2.60
	578 K	<0.1	<100	<0.05	1.1	<0.01	<0.05	223 ✓	5.49	9.4	2.9	0.570	0.07	<0.1	<0.001	0.140	2.65
	579 K	<0.1	100	<0.05	1.3	<0.01	<0.05	169	8.53	15.4	10.4	0.870	0.25	<0.1	0.020	0.210	2.69
	581 K	<0.1	<100	<0.05	0.8	0.21	<0.05	157	2.10	3.6	<0.3	0.260	<0.05	<0.1	<0.001	0.080	2.64
10 C	582 K (C)	<0.1	<100	<0.05	3.0	<0.01	<0.05	97	11.30	18.1	10.1	1.170	0.31	<0.1	0.020	0.430	2.67
	584 K	<0.1	<100	<0.05	0.3	<0.01	<0.05	160	1.88	3.0	<0.3	0.270	<0.05	<0.1	0.010	0.050	2.64
	586 Clay < 125 µm	<0.1	<100	<0.05	15.1	2.31	<0.05	117	46.40	81.8	40.9	5.170	1.62	<0.1	0.140	1.790	7.39
	587 K = 659	<0.1	<100	<0.05	0.6	<0.01	<0.05	170	2.88	5.4	<0.3	0.400	0.08	<0.1	0.010	0.170	2.59
	589 K mossy	<0.1	<100	<0.05	0.8	<0.01	<0.05	123	2.27	5.1	<0.3	0.290	<0.05	<0.1	<0.001	0.120	2.47
	590 K	<0.1	200	<0.05	0.7	<0.01	<0.05	119	7.86	15.2	7.9	0.780	0.17	<0.1	0.010	0.300	2.65
	592 K	<0.1	<100	<0.05	0.4	<0.01	<0.05	107	2.47	5.7	5.9	0.300	<0.05	<0.1	<0.001	0.120	2.62
	593 K	<0.1	<100	<0.05	0.4	<0.01	0.26	214 ✓	2.66	5.7	<0.3	0.270	<0.05	<0.1	<0.001	<0.005	2.77
	594 K	<0.1	<100	<0.05	0.7	<0.01	<0.05	150	2.62	5.6	<0.3	0.310	0.10	<0.1	<0.001	<0.005	2.67
	595 K = 660	<0.1	<100	<0.05	0.8	0.26	<0.05	284 ✓	3.44	7.7	<0.3	0.400	0.11	<0.1	0.010	0.150	2.91
	598 K	<0.1	<100	<0.05	0.9	<0.01	<0.05	101	4.31	8.3	<0.3	0.500	0.10	<0.1	0.020	0.230	2.54
	599 M 100 cm	<0.1	<100	<0.05	1.0	1.42	<0.05	30	4.50	9.7	<0.3	0.530	<0.05	<0.1	<0.001	0.200	2.83
	602 Clay < 125 µm	<0.1	<100	<0.05	17.6	1.69	<0.05	151	50.10	92.9	41.0	5.960	1.76	0.2	0.160	2.000	8.28
	605 K	<0.1	<100	<0.05	0.7	0.12	<0.05	129	5.20	10.1	4.9	0.570	0.10	<0.1	0.010	0.140	2.58
20 DT	628 K 125-250 (C)	<0.1	<100	<0.05	4.9	<0.01	<0.05	89 ✓	17.60	35.2	17.6	2.230	0.81	<0.1	0.090	0.980	3.19 - vial 3/4 full only
	629 K	<0.1	<100	<0.05	0.9	<0.01	<0.05	134	3.73	6.8	<0.3	0.520	0.10	<0.1	0.020	0.190	2.69
	633 K	<0.1	<100	<0.05	0.7	0.78	<0.05	150	2.69	6.7	<0.3	0.370	<0.05	<0.1	0.010	0.210	2.66
1 D	637 K	<0.1	<100	<0.05	1.1	<0.01	<0.05	137	3.17	8.7	<0.3	0.460	<0.05	<0.1	<0.001	0.210	2.80
	640 K	2.4	300	<0.05	0.9	<0.01	<0.05	119	3.44	6.7	8.4	0.500	0.18	<0.1	0.020	0.270	2.58
	642 K	<0.1	<100	<0.05	1.9	<0.01	<0.05	169	13.90	25.3	19.3	1.650	0.58	<0.1	0.020	0.520	2.74
	643 K	<0.1	<100	<0.05	0.7	<0.01	<0.05	158	2.08	3.3	3.5	0.260	<0.05	<0.1	0.010	<0.005	2.54

Results

Activation Laboratories Ltd.

Report: A21-00034

Analyte Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	NET g
Detection Limit	0.1	100	0.05	0.1	0.01	0.05	2	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005	✓
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
φ 645 K	<0.1	<100	<0.05	0.4	<0.01	<0.05	159	2.33	4.3	<0.3	0.300	<0.05	<0.1	<0.001	0.110	2.50
678 50% D of 502	<0.1	<100	<0.05	4.2	0.50	<0.05	66	13.10	16.5	10.6	1.570	0.07	<0.1	0.060	0.970	4.71
679 80% D of 517	<0.1	<100	<0.05	3.6	0.15	<0.05	<2	13.60	19.5	10.9	1.620	0.08	<0.1	0.070	0.700	7.71
680 = 519	<0.1	<100	<0.05	1.2	0.66	<0.05	152 ¹³⁶	5.67	8.6	<0.3	0.740	0.09	<0.1	0.030	0.490	2.68
681 = 527	<0.1	<100	<0.05	0.8	<0.01	<0.05	135 147 ¹¹¹	3.23	3.8	4.4	0.400	0.06	<0.1	0.020	0.160	2.57
682 = 529	<0.1	<100	<0.05	0.7	0.11	<0.05	101 ¹²⁷	2.99	4.4	3.2	0.390	<0.05	<0.1	0.020	0.220	2.59
683 = 614	<0.1	<100	<0.05	1.6	<0.01	<0.05	138 111 ¹²¹	6.05	9.9	<0.3	0.750	<0.05	<0.1	0.030	0.330	2.90
684 = 646	<0.1	<100	<0.05	1.7	<0.01	<0.05	173 ¹³⁸	6.10	8.6	<0.3	0.720	0.10	<0.1	0.030	0.290	2.90
685 OREAS 45e	0.8 ³⁰	<100	0.15	12.5	1.36 ²⁴	<0.05	<2 ⁴⁷	13.00 ¹¹	24.3	13.1	2.230	0.26	<0.1	0.250	1.510 ¹²	7.51
686	<0.1	260	<0.05	1.2	0.58	<0.05	52	4.47	7.5	4.5	0.610	<0.05	<0.1	0.030	0.310	3.61
687 TEST SHAFT NOV	<0.1	<100	<0.05	1.5	<0.01	<0.05	293 ¹⁵⁰	6.55	9.5 ¹⁵	<0.3	1.200	<0.05	<0.1	0.090	0.920	3.28
688 HIGH TEST	<0.1	<100	<0.05	1.2	<0.01	8.52	167 ²²⁴	4.44	8.0	<0.3	1.340	0.24	<0.1	0.100	1.270	3.73
689 = 675 BRIQ.	<0.1	<100	<0.05	0.8	<0.01	<0.05	114	2.47	6.1	<0.3	0.340	<0.05	<0.1	0.010	0.170	2.25
690 TEST DALTON	<0.1	<100	<0.05	4.2	1.39 ^{0.62}	2.07	190	15.10	19.1 ²⁷	7.5	1.920	0.45	<0.1	0.060	1.140 ⁹⁸⁰	4.29

- Standard OK.
 - not suitable
 - TEST - bit low Au Zn
 - HIGH TEST for gold approx.
 - 250-1000 μm of 621+666
 - TEST 8062 High gold ✓

Quality Control

Activation Laboratories Ltd.

Report: A21-00034

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	K	Mo	Na	Ni	Rb	Sb	Sc
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
OREAS 45e (INAA) Meas	50.9 ✓			224		< 0.01	54.6	978.0	< 0.05	25.200		5.87		0.34	< 0.05	592	511	< 1		96.20
OREAS 45e (INAA) Cert	53.0 ✓			246		0.06	59.0	1070.0	1.20	24.200		6.31		0.34	2.95	580	459	21		91.00
Method Blank	< 0.1	< 0.3	< 0.01	< 5	0.75	< 0.01	< 0.1	0.3	< 0.05	0.010	< 0.05	< 0.05	< 0.1	0.24	< 0.05	24	< 2	< 1	< 0.005	0.06

Quality Control

Activation Laboratories Ltd.

Report: A21-00034

Analyte Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Detection Limit	0.1	100	0.05	0.1	0.01	0.05	2	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005	
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
OREAS 45e (INAA) Meas		< 100	< 0.05	14.2	2.60	< 0.05		11.70	23.6	9.9	2.110	0.53	< 0.1	0.230	1.480	
OREAS 45e (INAA) Cert		16	0.63	13.0	2.54	1.06		11.10	23.5	9.5	2.130	0.55	0.4	0.230	1.480	
Method Blank	< 0.1	< 100	< 0.05	0.1	< 0.01	< 0.05	< 2	0.17	0.4	< 0.3	0.020	< 0.05	< 0.1	< 0.001	< 0.005	10.00



Report No.: A20-15569
Report Date: 18-Dec-20
Date Submitted: 03-Dec-20
Your Reference: MU-BRIQ

Hermann Daxl
39-630 Riverpark Road
Timmins Ontario P4P 1B4
Canada

ATTN: Hermann Daxl

CERTIFICATE OF ANALYSIS

Decayed vegetation sievings 250-1000 micron - NOT VIALS NOW
6 Soil samples were submitted for analysis.

Table with 2 columns: The following analytical package(s) were requested: and Testing Date:
28-15g ✓ BRIQUETTES QOP INAA GEO (Vegetation INAA) 2020-12-16 12:32:08

NEUTRON ACTIVATION, FOR VEGETATION, BY NORMAL IRRADIATION NOW.

REPORT A20-15569

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Footnote: INAA data may be suppressed due to high concentrations of some analytes

CERTIFIED BY:

[Handwritten signature]

Emmanuel Esemé, Ph.D.
Quality Control
Coordinator

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Decayed vegetation sieved 250-1000 μm pressed as 15g briquettes by neutron activation, normal irradiation.
 Murphy Center

	Results										Activation Laboratories Ltd.					Report: A20-15569				
Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hg	Hf	Ir	K	Mo	Na	Ni	Rb	Sb	Sc
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.3	0.01	5	0.01	0.01	0.1	0.3	0.05	0.005	0.05	0.05	0.1	0.01	0.05	1	2	1	0.005	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
672	17.3	<0.3	3.42	175	10.70	0.50	2.5	14.6	0.23	0.450	0.17	0.77	<0.1	<0.01	0.28	2530	<2	13	0.450	1.54
673	14.1	<0.3	3.25	169	9.76	0.61	3.0	14.9	<0.05	0.380	0.14	0.64	<0.1	<0.01	0.41	2330	<2	14	0.370	1.34
674	24.0	<0.3	4.79	328	10.30	1.04	4.9	18.6	0.99	0.750	0.17	0.95	<0.1	<0.01	0.62	2230	<2	28	0.580	2.29
675	7.6	<0.3	3.10	101	10.70	0.50	1.6	6.8	0.27	0.240	0.23	0.24	<0.1	0.74	0.33	575	<2	12	0.320	0.71
676	10.4	<0.3	3.04	156	12.20	0.20	2.5	11.5	0.49	0.350	0.21	0.55	<0.1	0.26	1.08	1540	<2	14	0.380	1.09
677	<0.1	<0.3	1.54	73	16.80	3.89	1.6	5.3	0.10	0.380	0.06	0.30	<0.1	0.59	0.49	289	<2	2	0.090	0.70

This 675 read 7.6 and 8.7 for briquettes here, BUT same 250-1000 μm in med. vial 689 had 23.6 and 17.0 ppb Au (A21-00034).
 Maybe sieve size does not matter but briquettes different irradiation reads less??
 The <250 size read 18.9 and 20.8 as 666 and 621 (A20-13146 and 08857) in medium vials ($\sim 7 \text{ cm}^3$), double irradiation time.
DO NOT USE THIS COARSE NOR BRIQUETTES.

	Results										Activation Laboratories Ltd.					Report: A20-15569		
Analyte Symbol	Se	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Lu	Yb	Mass		
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g		
Detection Limit	0.1	100	0.05	0.1	0.01	0.05	2	0.01	0.1	0.3	0.001	0.05	0.1	0.001	0.005			
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA		
672	0.9	<100	<0.05	0.9	0.07	<0.05	121	3.52	6.3	5.4	0.490	0.11	<0.1	0.020	0.270	15.10	COMPARE ppb Au < 250 μm fraction in medium vials as done previously	
673	0.8	<100	<0.05	0.6	0.16	<0.05	140	2.79	5.5	5.8	0.410	0.07	<0.1	0.010	0.240	15.10	45 ppb Au in 514	
674	0.6	<100	<0.05	1.4	0.12	0.51	131	5.72	10.1	5.9	0.740	0.16	<0.1	0.040	0.350	15.10	26 ppb Au in 611	
675	0.9	<100	<0.05	0.4	<0.01	0.22	99	1.54	2.7	2.5	0.240	0.07	<0.1	0.010	0.150	15.00	40 ppb Au in 615	
676	0.6	<100	<0.05	0.6	0.10	<0.05	123	2.50	4.4	5.3	0.360	0.07	<0.1	0.020	0.240	15.00	20 ppb Au in 621	
677	0.6	<100	<0.05	0.8	0.64	<0.05	15	2.79	4.8	2.7	0.380	0.10	<0.1	0.010	0.190	15.00	40 ppb Au in 631	
																	BLANK	

NAD 83 UTM Zone 17 Decayed Vegetation (K), some M, C, E, D

(K-Samples are composites of 6 spots in 15 m radius plotted in the center)

Sample #	Easting 47	Northing 538		Sample #	Easting 47	Northing 538
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Southern Claims :

502	9208	0877		535	9142	0218
503	9118	0859		536 M	"	"
504	9041	0841		537	9142	0424
505	8942	0851		538	8967	0554
506	8878	0854		539	9246	0397
507	9036	0760		540	9246	0357
508	9104	0761		541 E	9140	0596
509	9202	0762		542	9265	0262
510	9138	0600		543	8944	0395
511	9232	0664		544	8783	0243
512	9244	0553		545	8690	0273
513	9088	0621		546	8565	0237
514	9115	0679		547	8474	0153
515	8947	0776		548	8264	0275
516	8850	0930		549	8816	0611
517	8950	0932				
518	9047	0938		552	7712	1717
519	9118	0940		553	7668	1735
520	9208	0941		554 M	"	"
521	8384	0889				
522	8335	0860		606	8880	0718
523	8193	0882		607	8934	0624
524	8105	0658		608	9080	0522
525	8031	0393		609	9046	0364
526	7972	0268		610	9155	0313
527	8096	0441		611	9243	0603
528	8450	0890		612 E	9115	0680
529	8572	0853		613	8743	0754
530	8626	0834		614	8757	0617
531	8756	0839		615	8717	0561
532	8825	0847		616	8551	0581
533	8619	0936		617	8460	0700
534	9257	0175		618	8405	0722

Sample #	Easting 47	Northing 538
619	8622	0715
620	8589	0407
621	8500	0396
622	8376	0384
623	8250	0776
628 KD	8243	1571
629	8111	1543
630	7986	1510
631	8381	0986
632	8034	1047
633	7963	1104
634	7945	1169
635	7997	0839
636	8176	0937
637	8267	0962

Legend:

- K Decayed vegetation from 0 - 6 cm depth
- KD K with much sand
- M Black swamp muck from depth of < 1 m
- C Clay top
- E Enriched B horizon, being brown sand

Sample #	Easting 47	Northing 538
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Sample #	Easting 47	Northing 538
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Northern Claims :

555	7450	2130
556 C	7403	2155
557	7353	2094
558 C	7313	2218
559 M	7299	2312
560	7153	2362
561	7586	2417
562	7554	2026
563	7376	2052
564	7296	2011
565	7289	1985
566	7244	1985
567 M	7088	2017
568	7083	1985
569	7036	2030
576	7811	3309
577	7760	3228
578	7807	3136
579	7713	3019
580	7610	3149
581	7593	3313
582	7732	2211
583 M	7305	2329
584	7222	2374
585 C	7107	2385
586 C	7044	2386
587	7049	2452
588	6942	2456
589	6904	2351
590	6737	2300
591 M	"	"
592	6675	2313

593	6709	2450
594	6765	2500
595	6642	2494
596	6540	2446
597 C	6737	2300
598	6947	2202
599 M	6886	2036
600	"	"
601 M	6825	2022
602 C	"	"
603 M	6822	1978
604	6639	1987
605	6511	1892
638	8031	2640
639	7928	2656
640	7805	2732
641	7845	2857
642	7801	2990
643	7692	2880
644	7434	2867
645	7515	2591
646	7613	2588
647	8320	3020
648	8316	2580

Grab some dirt - find a mine

Yes, you can find a mine on one claim unit in a few days work, if there is one !

You can also qualify and prioritize your drill targets.

This lecture is about the very specific method of **decayed vegetation (K) sampling** proven to find gold and base metals in the Timmins region. I would not completely rule out gold if there is none in a sample, but if there really is, it can only be from rock within 50 m. Therefore 30 chosen samples can adequately cover a claim unit in just two days. I have tested the method, which I learned during my M.Sc. studies at Queen's University, over six gold occurrences, also zinc, copper, molybdenum, and perfected it to work extremely well. However, to convince yourself, try it yourself over your known zones, gold or base metals, whereby you can also test your work. If it does not work for you, I would like to hear about it.

The scientific name of the decayed vegetation I sample is mor, which I had never heard before. I call it the decay horizon or K, because that is where most decay of organics happens. It is quite apparent in the forests around Timmins, where the humus usually rests on fine sand. On clay it may be very thin, so greater care is necessary, because all inorganic material needs to be removed during the lengthy sample preparation and sieving. Brush away the loose debris, then just grab and rip up the interwoven carpet of rootlets, mold, decayed leaves and needles, from 0 to 6 cm depth. One such handful from each of 5 - 10 selected dry spots within a 10 - 20 m radius make a good-size sample. Avoid sand, silt, clay, charcoal, sticks, bark, or greens. There usually are no insects nor worms. Rings, watches, bracelets, or necklaces must never be worn when handling any samples. View the 6-minute video: <https://youtu.be/zHgkvo0wSI0>

This therefore is not a so-called humus sample, because humus has two more parts below it, moder and mull. Also true humus is jelly-like, amorphous organics that cannot decay further, e.g. lake bottom sludge. But let's not get complicated. I have never had gold in the usually underlying enriched brown B-horizon below the white leached sand. As this is what other methods usually sample, I am not surprised of any ill repute.

Metal ions from deposits migrate to surface and get concentrated in that decayed vegetation, as water evaporates or is taken up by rootlets. Some elements also are taken up by rootlets and end up in leaves or needles, which again accumulate in that decay horizon. So far I have proven this for gold, zinc, cadmium, copper, molybdenum, bismuth, cesium, and silver. I had repeated

samples of 85 ppb gold over 70 m across a 40 cm thick outcropping quartz-vein that ran 17 g/t gold. Another vein system had a halo of 25m of <100 ppb Au, but the thin underlying swamp muck had no gold; therefore look for decayed vegetation around big trees in swampy ground. Gold <61 ppb was found over two extensive areas with about 50 m clay and sand overburden which would have spread values.

Favourable sample spots are where water can evaporate, even some 2m wide humps, or higher ground around trees in swampy areas. Possibly small valley floors may be better than ridges, however, flowing groundwater can flush out migrating metal ions from swamp muck, and not allow later concentration. The sampling center is plotted with GPS, as selected sites are preferable to systematic sampling at line pickets. No statistical treatment is required; gold is where you find it. Notes can be limited to peculiarities, as discoveries need further work anyway.

Sample preparation requires special care and is best done inhouse. Even if a lab follows special instructions, you will have to live with short-cuts. So here is my method. I spread the samples without delay on paper towels on 10-inch square paper plates, which I change whenever they are getting too damp. The lower towels can be dried and re-used. This takes two days, which is less than in open paper envelopes even in a car in the sun, as air circulation is necessary. An oven would have to be less than 50 degrees Celsius, and likely is too small. The dried sample needs to be rubbed or rolled with a glass bottle in a glass bowl to loosen enough fine organics for sieving <250 micron with a 1/4 mm plastic coffee filter. This work is fine-dusty and needs to be done outside or with a good exhaust fan. A 3M N95 respirator mask will keep your nose and lungs clean. Any obvious sand or charcoal must not be crushed but removed before by swirling the bowl. Coarser material would be less decayed, and elements therefore much less concentrated. Therefore I advise against maceration and ashing.

After sieving, if still some sand is visible, further dry swirling in a plastic gold pan will bring the wanted organics to the top like scum which can be skimmed off clean. Bracket sieving to 125-250 micron may also help to remove silt or clay, but clay dries very hard and even finely crushed it may not release the wanted organics. The homogenized sievings need to be checked with a hand lens to estimate final sand and also silt content. Clay may show only as color and weight, but may not be so critical because its much higher surface area also may adsorb ions. Sandy-silty samples often contain more Ba, Ce, Co, Cr, Fe, La, Ni, Sc, Sm, but the main problem is that sand-silt-clay (D-T-C) with their higher density dilute values significantly. I therefore annotate such content, but do not adjust the values.

It is important to homogenize the sievings by rolling and overlapping using a bent sheet of paper, like labs used to do with pulps on a mat. Tightly packed samples stay homogenized. Keep left-overs in sachets, just do not shake them. Collecting a compact heaped double-handful of such decayed vegetation will yield the necessary 5 - 10 g of sievings.

The only reliable analysis for gold in such samples is by neutron activation, which however is not suitable for base metals, except Zn and As. As samples are basically organics, I send them to Actlabs, Attn: Neutron Activation Department, Ancaster, for INAA, code 2B, vegetation, but fill their medium vials (7cm³ like a pinkie finger) myself to press as much as possible into them. The lab also needs the weight of the empty vials, stopper and label, which varies. I also weigh the full vials so I can check for mix-up. They report the net weight (mass) from which one also can estimate roughly, whether a sample is diluted by silt or clay. The method is usually for 15-g briquettes, so that special double irradiation time has to be ordered for vials, for which they charge extra. Sandy samples or low inorganic standards are recognized and tolerated by the lab. Remind the lab that gold from rock pulp could cling to the outside of vials by static, and to damp-wipe and re-read vials of >10 ppb Au. No other sparse particle effects have occurred, as pristine sand-silt-clay carries no gold here, unless there is an outcrop nearby.

For base metals in such samples I send 3.5 g densely packed in a sachet to ALS, Attn: Vegetation Department, North Vancouver, for ME-VEG41 (not ashed) HNO₃/HCl ICPAES-ICPMS, but any values for gold thereby are admittedly vague for various reasons. I weigh the full sachets to compare with their full weight received, to check for sample mix-up.

Prospecting must include swamps and swampy areas where the described decayed vegetation may only occur around trees, if any. I therefore bring a 1-m Dutch auger in the bush, also useful as a walking stick, a weapon against bears, and to at least occasionally probe the deeper overburden. Bedrock often is surprisingly near and should then be scanned with a Beep Mat. If decayed vegetation cannot be found, I take a 15 cm long auger core of the deepest dense **black swamp muck (M)**, staying clear of sediments below and noting the sample depth. I wrap this with paper towels and squeeze out the water, before letting it dry with the decay samples. Such muck apparently works well for copper, nickel, chromium, but not so well for gold, zinc, manganese. I use it as blanks for gold. However, I had gold values in one such dried-up swamp, diminishing downward in dry muck from the 57 ppb in decayed vegetation. Too much water movement through swamp muck may flush out elements, but proper K-samples above the muck are valid. In deeper swamps I try for the deepest and densest muck.

Sampling the **lake bottom sludge (L)** may be the only way to explore lakes, from a canoe or best on the ice in late March - early April in just above freezing weather. A 16 cm (6 inch) diameter hand ice auger will do. A bomb will not penetrate the dense sludge which works well for sulfur and base metals, but I had no occasion to test it for gold yet. A soil auger with extensions may be necessary, but the water is often shallow, so a dry 5m wooden pole makes it easier with less than 4 m of water. I use a strong plastic bottle with the bottom cut off and a strong electric cable tied around near the bottom to pull on one side. I push it 1 m into the sludge, then remove the pole before pulling. The bottle will tilt and scoop up a good lump. I remove the stopper from the bottle to drain the water, then dump the lump on the snow to drain further and collect it on my return. Sludge can be 10 m thick, but I got similar values throughout.

Decay, muck, and sludge, have different concentration levels, and must be plotted as such. I suggest to add K, M, L to the values. Sample preparation and analyses are the same for all three. Notes of consistency (woody, fibrous, grainy, sticky, smeary), crushability, colour, of M and L may be revealing.

So before you drill, do your shareholders a favour. Or before you lose a claim, grab some dirt. It takes a week to get a batch to the lab, then it takes at least 3-4 weeks to get the results for gold. A follow up again takes as much time, but a report for assessment credit can be filed as simply prospecting and sampling. The best time to sample is May and October-November, like any work in the bush. In summer you raise clouds of flies from humus, and visibility for choosing sample spots may be difficult. Allow for some drying after a rain, but I doubt that seasons affects the metals. The gardening claw is in your hand now, but you can still phone me for help or advice, for set-up, organizing, or training, including field work.

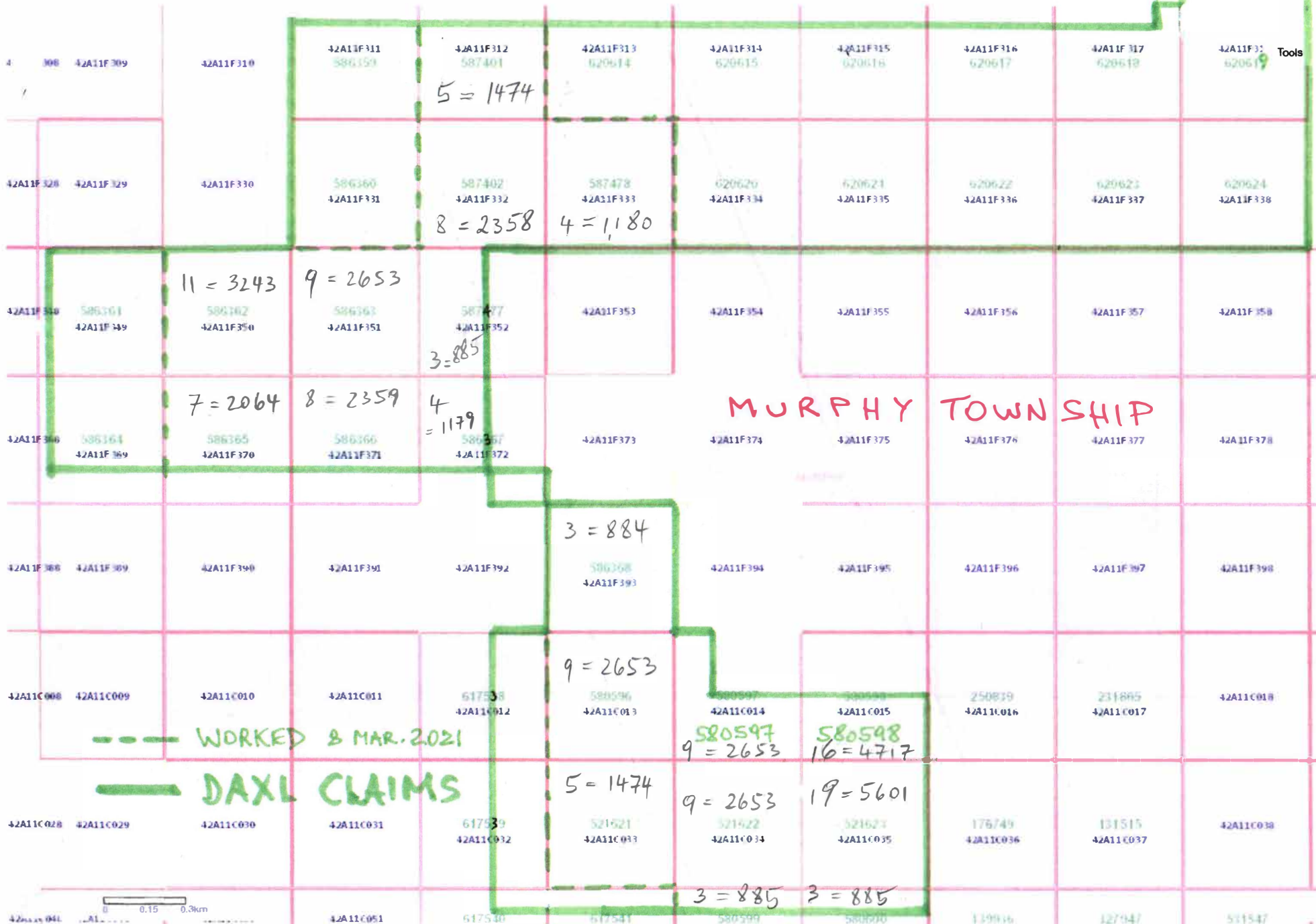
Hermann Daxl, M.Sc. (Minex), Timmins, 705-264-4929.

H. DAXL - WORK LOG - GOLD IN MURPHY TP.

2020/21

		FIELD WORK	SAMPLE PREP	REPORT
16	MAY	Sample 502-511	1	
18	"	Sample 512-520	1	
21	"	Prep (Clean, dry, sieve, pack)	1	
22	"	Sample 521-527	1	
23	"	Prep	1	
25	"	Sample 528-533	1	
26	"	Prep	1	
27	"	Prep	1	
31	"	Sample 534-541	1	
4	JUNE	Prep	1	
5	"	Sample 542-549	1	
9	"	Sample 552-554	1	
12	"	Sample 555-561	1	
14	"	Prep	1	
15	"	Sample 562-569	1	
17	"	Prep	1	
18	"	Prep	1	
22	"	Ship, pack, P.O. 501-575, weigh, ALS 20135204	1	
26	JUN	Sample 576-581	1	
28	"	Sample 582-589	1	
2	JULY	Prep	1	
5	"	Sample 590-597	1	
7	"	Prep	1	
11	"	Sample 598-605	1	
15	"	Prep	1	
16	"	Sample 606-612	1	
17	"	Prep	1	
18	"	Grill sand to pan	1	
19	"	Washing sand	1	
21	"	Sample 613-618	1	
22	"	Annotate lab results VA20135204		1
23	"	Prep	1	
24	"	Sample 619-623	1	

620613



MURPHY TOWNSHIP

--- WORKED 8 MAR. 2021
 — DAXL CLAIMS

