Ontario

We are committed to providing accessible customer service.
If you need accessible formats or communications supports, please contact us.

Nous tenons à améliorer l'accessibilité des services à la clientèle.
Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez nous contacter.

`

ASSESSMENT WORK REPORT

RJK Explorations Ltd. 2019 Overburden Sampling Activities:

LORRAIN TOWNSHIP
LARDER LAKE MINING DIVISION

TENURE ID:

(BISHOP): 254147, 106280, 158049, 144502, 144503, 240537, 158050, 203194, 247266, 155683, 336683, 172334, 143090, 283212, 175091, 343852, 237309, 126017, 105615, 247076, 330989, 199568, 151798, 343734, 219399, 210724, 222764, 230056, 326048, 203195, 144504, 241581, 124604, 241582, 140959, 296727, 337054, 241583, 199542, 235751, 234633, 252459, 341583, 139060, 329881, 131127, 258850, 317177, 277042, 269300, 150827, 186844, 302829, 155684, 199567, 150826, (569262 - RJK. Ex. Ltd)
(CAMILLERI): 100292, 100293, 238289, 157190, 312362, 189654, 251980
(COBALT INDUST.): 133843, 196494, 265306, 265306, 245678, 214477, 299835, 301841, 214520, 300383, 131742, 187190
(COBALT POWER): 159145, 191647, 211151, 277043, 307616
(CRUZ COBALT): 139941, 260102, 145839

"Lorrain Chain"

LORRAIN HIGHLANDS KIM SURVEY

Part of the RJK Explorations Ltd. 2019 'Bishop Nipissing Diamond Project'

Report by Graeme Bishop,
for RJK Explorations Ltd., Kirkland Lake, Ontario

April 15, 2021

INDEX:

LIST OF FIGURES:

APPENDIX ITEMS:

Previous sampling locations:

Item 1 - 2014-2018 Traverse Sample Maps for Bishop claims in Lorrain Chain: Paradis Pond

Item 2 - 2014-2018 Traverse Sample Maps for Bishop claims in Lorrain Chain: Cedar Pond

Item 3 - 2014-2018 Traverse Sample Maps for Bishop claims in Lorrain Chain: Little Grassy Lake

Item 4 - 2014-2018 Traverse Sample Maps for Bishop claims in Lorrain Chain: Lightning Lake

Item 5 - 2014-2018 Traverse Sample Maps for Bishop claims in Lorrain Chain: Peanut Lake

Item 6 - 2014-2018 Traverse Sample Maps for Bishop claims in Lorrain Chain: Paradis area Trench.

Item 7 – ODM Excel Sheet for KIMs/Gold Batch 6064 – 2012 Lorrain sampling by Peter Hubacheck

ODM Reports and excel sheets for 2019 Lorrain Chain KIM samples:

Item 8 – ODM Report for Batch 8213 – Units 13–25, 27–33

Item 9 – ODM Excel Sheet for Batch 8213– Units 13–25, 27–33

Item 10 – ODM Report for Batch 8214– Units 34–53

Item 11 – ODM Excel Sheet for Batch 8214– Units 34–53

Item 12 – ODM Report for Batch 8215– Units 54–73

Item 13 – ODM Excel Sheet for Batch 8215– Units 54–73

Item 14 – ODM Report for Batch 8216– Units 74–108

Item 15 – ODM Excel Sheet for Batch 8216– Units 74–108

Item 16 – ODM Report for Batch 8314– Units 1–12

Item 17 – ODM Excel Sheet for Batch 8314 – Units 1–12

Sampling Concept for 2019 KIM Results Contextualization

Item 18 – Map Sheets proposed to RJK Explorations Ltd. by the author

Item 29 – New sample Coordinates List proposed to RJK Explorations Ltd. by the author

Miscellaneous

Item 20 – 2019 Bishop article on Nipissing Diamond published on InsideExploration website

Item 21 – Summary of the life of Charles Paradis

ABSTRACT

A total of 84 claims in Lorrain Township, Ontario, were sampled for kimberlite indicator minerals (KIMs) by RJK Explorations Ltd. personnel during 2019. The 84 claims belong(ed) to five parties: Bishop (/RJK), Camilleri, Cruz Cobalt, Cobalt Power, and Cobalt Industries. The sampling took place between June 15, 2019 and October 4, 2019. The 2019 Lorrain Chain overburden survey required 26 days of field work to collect the samples. (Figure 16–18, pages 30-32.) RJK Explorations Ltd. created option agreements for much of this claim block, and at the time of publication of this report, RJK has taken ownership of many of the optioned claims, and is looking seriously at the diamond, and other mineral potentials of Lorrain Township and Gillies Limit.

256 soil samples were collected during fieldwork (Figure 16, page 30) and combined into 108 numbered units from Unit 1 -Unit 108 for lab analysis (Figure17, page 31). In total, 107 samples from till and bedrock drift complexes in the Lorrain Chain were sent to ODM and processed in five batches during late 2019 and early 2020. (Figure 20–24, pages 20-24.) Unit 26 was the only creek sample taken in the survey, and was processed, concentrated, and picked for KIMs by Tony Bishop. Units 1 - 12 were at first processed and concentrated by Graeme and Tony Bishop, (Figure 11–13, page 27) but in the end, the samples were recombined with their rejects and sent to ODM for analysis to ensure contiguous reporting of data set within the survey.

107 of 108 Sample Units tested contained KIMs and other heavy minerals. (Figure 18, page 32.) The only barren sample was a 2.0kg sample Unit 61, which was most likely taken too close to road-building aggregate deposited near the logging road. Gold counts are also high across the survey area, and so far, unexplained.

In the 108 samples of the 2019 Lorrain Chain Survey, there were 43 KIMs recovered in the 1–2mm size range, including seven Pyrope Garnets, four Orange Garnets, thirty-one Ilmenites, and one Chrome Diopside, from 15 samples of 108. (The 2000-2003 OGS Regional heavy mineral surveys did not report a single Chrome Diopside in the +1.0mm range.)

Preservation of large KIM grains generally indicate close proximity to a kimberlite source. In the Lorrain Chain 2019 survey, 13.8% of samples contained +1.0mm KIMs. (Figure 4, page 22.) The 2020 drilling program conducted by RJK Explorations Ltd. in Lorrain Township discovered a field of kimberlites in-situ directly beneath the overburden, sometimes within two meters of the ground surface. (Figure 25, page 39.) The Lorrain Kimberlites help explain the abundant KIMs and many large KIMs found in the 2019 Lorrain Chain survey. (Figure 26–33, pages 40-47.)

In the first 35 potential KIM grains picked in creek Unit 26 and sent to be tested at CF Minerals Research Inc. in Kelowna, British Columbia, there were four Pyrope Garnets and four Orange Garnets in the 1–2mm range, and eleven Pyrope Garnets and two Orange Garnets in the 0.5–1.0mm range. It is most probable that these large grains have recently disintegrated into Paradis creek from their in-situ host material, the Paradis Kimberlite. Lab results for Unit 26 creek KIMs indicate the kimberlitic grains exhibit high-pressure geochemical signatures (deep formation) and probable low-resorption of diamonds.

Lorrain township KIM grain geochemistry plots and discussion of KIM grain EMP results from the 2019 Lorrain samples and 2020 RJK kimberlite samples is not included in this report, but can be researched via RJK Explorations Ltd. news releases accessible online.

PURPOSE

The purpose of this report is to provide information on a program of overburden exploration for the presence of diamonds in Lorrain Township during 2019. The sampling work was done by RJK Explorations Ltd, and the concentration and lab analysis was done by Overburden Drilling Management.

This report includes an outline of the work done, the lab results for samples collected, and some basic reading of the results.

PREVIOUS WORK

The first reported reconnaissance for Kimberlite Indicator Minerals (KIMs) via till sampling in the study area was conducted by the Ontario Geological Survey in the early 2000s. As part of a regional sampling program, four samples were collected by the OGS in or near the 2019 study area and are discussed later in this report. The first published KIM sampling by a private company or prospector for the study area was a set of Assessment Reports submitted to the Ministry by prospector Tony Bishop and his family, starting 2014 (Figure 6, page 25). Unpublished assessment work had been conducted earlier by other parties, including geologist Peter Hubacheck, who now works with RJK Explorations Ltd in their search for diamonds in the claims and wider region.

Grassroots prospecting and KIM reconnaissance groundwork in the study area was conducted by the Bishop family from 2014 to 2019. In 2019, RJK Explorations optioned the study area from Tony Bishop, and also optioned surrounding claims from other companies and prospectors. To date, RJK Explorations Ltd, with the help of lead geologist Peter Hubacheck, have identified multiple Kimberlite bodies in the study area (Figure 25, page 40). These kimberlite sources discovered by RJK Explorations Ltd. shed light on the provenance of KIMs found in Lorrain Township.

Geological Setting

Structurally, the study area is located between two deep-seated faults, the Cross Lake Fault and the Temiskaming West Shore Fault, in the trend of the Lake Temiskaming Graben/deformation zone. Perpendicular structures affect the area, including the Schumann Lake Arch, Kerr Lake Fault, Gleeson Lake Fault, and the Latour Deformation Zone (see Figure 15, page 30). The claims which were sampled in 2019 lie above the proglacial freshwater inundation of Lake Ojibway Barlow. (Figure 19, page 34). The Quaternary geology consists primarily of non-wave washed till deposits and bedrock drift complex, with small areas of swampy muskeg and several small lakes. (Figure 1, page 20). Kimberlites discovered in the region have generally been age-determined as Jurassic emplacements, and their deposit/eruption locations seem predisposed to deep seated structural breaks in the craton along the Rift System. Historically, the Archean and Paleoproterozoic geology has been intensely studied in the region due to the economic metal deposits around the town of Cobalt. Regarding practical exploration and prospecting for diamonds, however, a greater attention can be given to the Quaternary characteristics of the land surface, including glaciation patterns, (Figure 5, page 23) deglaciation phases, and bedding of regolith deposits. For more information on the Quaternary and structural geology of the area, see various publications of the Ontario Geological Survey from authors such as Sage, Lovell, Caine, Gao, Veillette, and more. The OGS has done incredible work researching Quaternary Ontario, and their work is publicly accessible as Open File Reports. Local Assessment Reports by Tony (Brian) Bishop area also a useful source of information and bibliographic sources.

Activities

A total of 84 claims were sampled during the 2019 Lorrain Chain overburden survey. The 84 claims belong to five parties: Bishop (RJK), Camilleri, Cruz Cobalt, Cobalt Power, and Cobalt Industries. The sampling took place between June 15, 2019 and October 4, 2019, totalling 26 days of field work (figure 8-10, page 26). Approximately 250 soil samples were collected during fieldwork and combined into numbered units from Unit 1 -Unit 108 for lab analysis. Unit 1 – Unit 12, and Unit 26 were processed by Bishop Lab. Units 13-25, 27-108 were processed by ODM in four Batch's; Units 1-12 were later processed by ODM in a fifth Batch.

Personnel in the field: Graeme Bishop, Patrick Harrington, Kevin Schraeder. Lab work was done by Overburden Drilling Management, and by the Bishop Lab. Planning, management, and paperwork was done by Graeme Bishop. Some data modelling was done by Terry Link.

FAQ: A Minute for the 2019 RJK Explorations Ltd. Lorrain Chain *Kimberlite Indicator Minerals* Definition Program

Some of the items featured below are also discussed later in this report but have been briefly overviewed here because they are frequently asked questions.

1. What is the 'Lorrain Chain'?

The Lorrain Chain is a name used to describe an approximately 12-kilometer-long series of potential kimberlite diamond targets oriented in a north-north-west trend on mining claims paralleling the Cross Lake Fault in the highlands of Lorrain Township immediately south of the town of Cobalt and staked by prospector Tony Bishop between 2014 and 2019.
The Bishop targets in east Lorrain Township from north-to-south included Little Grassy Lake, Nicol-Lightning Lake, Cedar Pond, Paradis Pond, Gleeson Lake, Horseshoe Lake, and Peanut Lake. In early 2019, RJK Explorations Ltd. optioned the claims from Bishop and began conducting selected geophysics, drilling, and surface till sampling. RJK Explorations Ltd. continues actively to explore the nature of the geology in Lorrain Township, in addition to investigating targets extending west toward the Montreal River Fault along the trends of the Schumann Lake Arch and Gleeson Lake Fault which are structurally related to the deep-tectonic Cross Lake Fault, investigating for the presence of diamonds and other resources. In 2020 RJK discovered the presence of diamonds in their 2019 drill core from the Paradis Pond target in the centre of the Lorrain Chain.

2. Why a Lorrain Chain 'definition program'?

Previous sampling for kimberlite indicator minerals in the surface till of the Lorrain Chain conducted by the Bishop family showed high counts in kimberlite indicator minerals (KIMs) of interest at every target tested. Because the chain of kimberlite targets is roughly in line with the last / most recent glacial advancement (170-160 degrees) and are relatively close together, none more than 2 kilometers from the next, it was possible that KIMs from targets at the northern end of the chain were responsible for the KIM results further south along the chain of possible targets. Early in 2019, RJK Explorations Ltd. optioned Bishop's diamond prospects in Lorrain and determined that additional till sampling for KIMs could better isolate and define the apparently proximal source of KIMs in the till and help define drill targets for diamond-bearing kimberlite pipes in the chain. Field reconnaissance began in May, and sampling began in June 2019.

3. What is 'kimberlite'?

Kimberlite is the most common host rock for diamonds, and the only geological source known to produce large diamonds. Diamonds are formed and exist primarily at depth beneath the lithosphere, in the mantle of our planet's core. Diamonds occur on the surface of the earth when they have been transported into the lithosphere and to the surface by eruptions of kimberlite, encouraged through the path of least resistance in the rocks in part because of the energy from decompression of gasses at depth during eruption. The Lake Temiskaming Structural Zone hosts many known clusters of kimberlite pipes. See: Reports of the Ontario Geological Survey, esp. “Kimberlites of the Lake Timiskaming Structural Zone” by R.P Sage, OFR 5937 [1996], and its “Supplement” by R.P. Sage, OFR 6018 [2000], and regional heavy mineral survey OFRs 6043, 6088, 6119, 6124 [2001-2005].

4. What are ‘kimberlite indicator minerals’ - KIMs?

Kimberlite, as a host-rock which transports diamonds to surface, carries with it not only diamonds but also a panoply of distinct minerals which inhabit the same formation-zone as diamonds in the mantle, with kimberlite also incorporating minerals from the horizons between the mantle and the surface of the lithosphere during eruption. Because distinct minerals from depth are carried with the diamonds, when these distinct minerals are found, they indicate the potential for diamonds. Kimberlite indicator minerals often occur as grains smaller than 2mm, most often smaller than 0.5mm, but they occur in far greater abundance than diamonds within the kimberlite host-rock. Indicator minerals are by nature more dense and usually have higher specific gravity than most of the Archean, Huronian, Proterozoic and younger geological fabric which is the source-rock of the rest of the overburden- since they are heavier, KIMs can be isolated from the background stereo of glaciated grains of current surface-sourced minerals by means of various concentration methods. The chemistry of individual grains of certain types of indicator minerals sometimes directly associate with inclusions found in diamonds, so some KIMs are also attributed to be Diamond Indicator Minerals. Tony Bishop and RJK Explorations Ltd. have tested and found Diamond Indicator Minerals in the samples from Lorrain claims. The Ontario Geological Survey conducted overburden sampling surveys across several regions of north eastern Ontario, covering immense surface area, and published an impressive dataset in a series of Open File Reports, finding numerous occurrences of KIMs in till associated with bedrock within the Lake Temiskaming Structural trend. This report contains some comparisons between OGS and RJK KIM data.

5. What is a ‘kimberlite target’?

A ‘kimberlite target’ is a drill target for kimberlite.
A kimberlite is conceptualized as a ‘target’ in the already-mapped geological stereo because it is a very tiny and localized formation, compared to the other rock formations in the Cobalt Embayment and southern Archean province which make up the rest of the ground. Following glaciation, kimberlitic material was left deposited and mixed-in with the surface-sourced till down-ice from the bedrock kimberlite source. The process of finding a kimberlite body by means of till sampling is akin to ‘hunting’ the kimberlite source by ‘tracking’ the KIMs present in till. A ‘train’ of indicators will in theory point to a deposit; however, Quaternary natural history has created many obfuscations of mineral trains, and the exploration and interpretation of data in the geological investigation for diamonds in Ontario is constantly being improved upon.
On surface, kimberlite pipes sometimes look like small kettle lakes, or a small topographic depression, often round, sometimes with vegetative anomalies on top of

them; however, much of the bedrock where kimberlite pipes have been discovered between Lake Abitibi and Lake Temiskaming along the Temiskaming structural system have been overlain by Quaternary age deposits and sedimentary materials and were discovered only through the myriad drilling activities of the OGS and exploration companies. Unlike the pro- and post-glacial lake sediments to the west, north, and east, in the Lorrain highlands, there is a high incidence of bedrock exposure, and the Quaternary material does not in general obscure the nature of the bedrock. Kimberlite eruptions often occur in clusters. The Lorrain targets of Paradis Pond, Lightning Lake, Mozart Lake, and others, share striking resemblance to each other as small round lakes clustered around the Cross Lake fault and occur close to each other near the Schumann Lake arch. It is possible the Lorrain Chain targets represent a cluster of kimberlite pipes.

Because the overburden in the Lorrain highlands survey area contains materials glacially transported from bedrock sources up-ice, but no sediments from Lake Ojibway-Barlow, (See: OGS Quaternary Geology Map 2685) sampling of the surface till to investigate for the presence of KIMs was done at first without the need for drilling. Sampling for KIMs was conducted manually by professionals with their boots on the ground, on site. For the 2019 RJK Lorrain sampling program, Graeme Bishop was supervisor, Mike “Mookie” Harrington was lead sampler.

6. What was the methodology of selecting the till sample locations?

Some surveys sample wide ranging areas and enact a regular grid system of sampling to gain an understanding of the presence of KIMs over multiple townships of interest and regionally. When KIMs are found, a company can analyse the grains and distribution and narrow in on a target. The Lorrain Chain Definition Survey was conducted with targets already presumed and known high-counts of KIMs. Instead of a wide area survey which later narrows inward, the LCDP tight-sampled a small corridor of land forensically to better clarify previous findings.

The previous results from Bishop sampling efforts guided the RJK sampling activities in 2019, but the 2014-2019 Bishop data is not plotted on the RJK Lorrain Chain results maps. Traverse maps for initial Bishop sampling work, taken from assessment reports submitted to ENDM, can be viewed in the Appendix of this report. The work assessment reports for the Lorrain Chain claims submitted by the Bishop family between 2014 and 2019 (see: Figure 6, on page 24) can be accessed via RJK’s website: https://www.rjkexplorations.com/

The results from the 2014-2019 Bishop sampling work provided two main insights: the string of small lakes east of the Cross Lake Fault in Lorrain Township all contained high KIM concentrations in their surface till sample sets, taken down-ice from each lake. The 2019 RJK sampling efforts were conducted to fill in gaps in the Bishop sampling and gain better definition of any mineral trains present.

7. Who collected the samples?

While consulting with Glenn Kasner and Tony Bishop, Graeme Bishop directed the Lorrain Chain sampling activities in 2019. G. Bishop has almost seven years’ experience with boots on the ground in the Lorrain highlands prospecting for diamonds, with nearly 200 days in the field on claim, collecting till samples, creek samples and doing ground study. Mike Harrington is an experienced prospector who staked some of the original Lorrain claims for Tony Bishop and accompanied Bishop on several till sampling expeditions prior to 2019. During the initial 2019 RJK sampling for the Lorrain Chain, Graeme Bishop and Mike Harrington worked together in the field, establishing best practices, and collecting samples from the Little Grassy Lake area and the Horseshoe/Peanut Lake area. As Mike Harrington was competent and experienced to lead sampling activities in the field, he took on Kevin Schraeder as helper for the rest of the sampling program while Graeme Bishop shifted to other field activities and heavies-concentration.

8. How were samples collected?

Samples were collected manually using a small clean shovel to make shallow holes where 2-5kg of till was collected into sample bags and labelled. Dry materials were screened to 6mm mesh with a clean screen in the field to eliminate pebbles. Sample material was collected from near surface, just beneath the more recent Holocene horizons. Most of the sample units sent to ODM were composed of groups of two or more samples collected in the same vicinity and combined for analysis. The program targeted near-surface material in part because the overburden was often very shallow, and also to sample the most recent push of the Wisconsin glaciation.
Logging roads built after 2004 allowed access into the Lorrain highlands and a pickup truck can still traverse most of the highlands through these roads. The sampling methodology employed during collection of samples for the 2019 Lorrain Chain program followed best practices established for the specific region. Glaciated terrain in Temiskaming District does present diverse surface environments and depositional circumstances; however, the study area was relatively straightforward and undisturbed by Pleistocene lake sediments or proglacial lake wave action. 99 percent of the survey was located on high elevation bedrock-drift complex and till deposits located above the level of highest freshwater inundation during the Lake Ojibway-Barlow phases. (Figure 19, page 33.)

9. What was the process of separation?

All sample units in the LCDP survey, except the creek sample unit 26, from Paradis pond to Gleeson Lake, were processed by Overburden Drilling Management, in Nepean Ontario during 2019 and early 2020. The full ODM reports, including descriptions of their concentration methods, can be found in the Appendix of this report. Unit 26 was processed and picked by Bishop, and results discussed in an as yet unpublished report. See figure no. 7, on page 25, for a diagram describing the processing and reduction of samples into concentrates for analysis used by Tony Bishop. This process was employed, and gradually improved upon, by Bishop from 2014-2019. The same concentration process was employed at first on RJK's LCDP units 1-12 collected in the Little Grassy Lake area during the 2019 survey, before the concentrates were recombined with their rejects and these twelve sample units were sent to ODM for analysis.

10. What is the relationship of the historic Nipissing Diamond to the Lorrain Chain exploration efforts of the Bishops, and RJK Explorations Ltd.?

The Nipissing Diamond was apparently found somewhere west of Lake Temiskaming around 1903-1905, brought to public attention by local prospector Charles Paradis, and sold by Mr. Paradis to Mr. Aubin, the MPP for the Nipissing District which encompassed Lake Temiskaming at that time. Aubin showed the diamond in parliament and had it examined by experts before sending it to New York to be cut and polished into smaller stones by Tiffany and Co. A November 1906 newspaper article related that Tiffany and Co. was sending a team of geologists and diamond experts to the Temiskaming area to search for the source of the Nipissing diamond.

Archival research by RJK consultants in 2019 and 2020 discovered that numerous claims were staked early in 1907, in the middle of winter, by the Baruch brothers and their friends, who had arrived from New York some time in the new year. There is a possible connection between the news stories of the Nipissing Diamond, and the claims staked by the Baruchs of New York; the Baruch claims were not staked in the more lucrative silver prospects of Cobalt to the north, or in the soon-to-boom Silvercentre claims to the south, but instead were clustered in the Lorrain highlands near the Cross Lake Fault.

There is no accessible record of the activities or findings of the Tiffany expedition. However, during the Bishop's 2016 field sampling activities, a hand-dug trench which sampled only till (it was not created to reach bedrock) was discovered immediately down-ice of the Paradis pond target. There is no accessible historic document recording trenching for diamond exploration in the Cobalt camp; trenching at that time was associated with exploration for metals. The trench is down-ice of the Baruch claims and appears to coincide in age with the period of the so-called Tiffany expedition. More importantly, the trench is located near a wagon road which had, in 1905, only recently been cut from Paradis Bay into the Lorrain highlands to reach Cobalt. After compiling and normalizing the 2019 KIM results provided by ODM, RJK personnel plotted the KIM train data from 107 sample units in the Lorrain Chain into a density contour map and found that the trench was dug where the corridor of highest KIM concentration transected the 1905 wagon road, immediately south-east of Paradis pond and the Paradis Kimberlite discovered by RJK during 2019 drilling, and positively identified as diamond bearing kimberlite in 2020. (See figure no. 25, on page 39)

The 1905 wagon road also transected the creek which flows west from Paradis pond into Goodwin Lake; the Paradis creek samples contain examples of some large and pristine KIM grains which are now known to be breaking down and entering the creek from the layer of kimberlite discovered by RJK. At its head, the creek is wholly underlain by the Paradis Kimberlite, and by the time it enters Goodwin Lake, the creek has cut and sampled the kimberlite horizon. It is possible that the Nipissing Diamond was found during examination of the creek during the construction of the wagon road.

In summary, there is an apparent temporal relationship including Charles Paradis and the Nipissing Diamond, a wagon road built from Paradis Bay to Cobalt between 1904 and 1905, a connection between Charles Paradis and the Paradis Bay settlement which built the road, the news reports of the Nipissing diamond in 1906, and claim-staking in the Lorrain Chain in early 1907.

Additionally, there is a potential relationship between the placement of the early trench discovered by the Bishops in 2016 and the now-known presence of a kimberlite indicator mineral train and diamond bearing kimberlite body in the same place. *The trench could very well be the first material evidence for diamond exploration in Canada.* Following the discovery of the Nipissing diamond sometime around 1905, no diamond was found again in Canada until 1920, when one was discovered by accident during railway construction efforts near Peterborough, Ontario.

11. Is there a relationship between the 2019 Lorrain Chain KIM data and the Kimberlites discovered by RJK Explorations Ltd. in 2020?

The drilling program which was conducted by RJK in the Lorrain Chain through 2020 was directed by company Geologist Peter Hubacheck. RJK discovered multiple bodies of kimberlitic origin, some very massive, like the Paradis-Goodwin Kimberlite, Gleeson Kimberlite, and the 'Haileybury School of Mines' HSM Kimberlite. These kimberlite bodies exhibit unique characteristics and exist directly beneath the 2019 Lorrain Chain till sampling survey area, sometimes overlain by less than two meters of generic till. (See figure no. 25, on page 39.) The kimberlites discovered by RJK in the Lorrain highlands are almost certainly the source-rock for the KIMs found during the 2019 Lorrain Chain program. The nature of the kimberlite emplacement remains unclear, but its expression over wide areas and close to surface, literally beneath the 2019 surface till survey, indicates that the KIMs found in 99 percent of sample units are almost certainly derived from the kimberlite horizon discovered by drilling. Discovery of the Lorrain Kimberlites sheds some light, at least, on the density and high counts of KIMs found so far; the KIMs were spread out from kimberlite bedrock very near surface. Follow RJK's news items on their website for ongoing updates.

Note on KIM grains in the 1–2mm range:
Ontario Geological Survey Open File Reports:

OFR 6043 - OFR 6119 - OFR 6088 - OFR 6124

These four Open File Reports include data from regional-scale overburden sampling surveys conducted by the OGS between 2000 and 2003, which covered approximately 15,794 square kilometers, and included analysis of 1075 samples taken in the field. (See figure no. 3, on page 21.) The reports were published between 2001 and 2005 and contain a tremendous amount of data. Thank you OGS.

Only 24 samples out of the 1075 collected contained KIM grains larger than 1mm. i.e., only 2% of samples contained +1.0mm KIMs.

In total, only 47 KIMs in the 1–2mm size range were recovered, including eight Pyrope Garnets, four Orange Garnets, twenty-nine Ilmenites, five Chromites, one Forsterite Olivine, and zero Chrome Diopside.

Some data from the OFRs

Regional Modern Alluvium Sampling of the **Temagami–Martin River Area**, Northeastern Ontario, 2001
OGS OFR 6043 - (258 samples analysed, approx. 3619 km²)

This survey recovered 25 KIMs in the 1–2mm range, including three Pyrope Garnets, one Orange Garnet, and twenty Ilmenites, from 11 samples of 357.

Sample:	**KIM grain: 1–2mm**
7–MA-00SA	Ilmenite
11–MA-00SA	Pyrope Garnet , Ilmenite
27–MA-00SA	Ilmenite
33–MA-00SA	Pyrope Garnet , Orange Garnet , Ilmenite (x5)
53–MA-00SA	Ilmenite
79–MA-00SA	Ilmenite (x2)
87–MA-00SA	Ilmenite
103–MA-00SA	Pyrope Garnet
409–MA-00SA	Ilmenite
441–MA-00SA	Orange Garnet
443–MA-00SA	Ilmenite (x7)

Regional Modern Alluvium Sampling Survey of the **Cobalt–Elk Lake Area**, Northeastern Ontario, 2004
OGS OFR 6119 **-** (183 samples analysed, approx. 2850 km²)

This survey recovered no KIMs in the 1–2mm range, from 183 samples.

Regional Modern Alluvium Sampling of the **Mattawa–Cobalt Corridor**, Northeastern Ontario, 2002
OGS OFR 6088 **-** (277 samples analysed, approx. 3825 km²)

This survey recovered 15 KIMs in the 1–2mm range, including four Pyrope Garnets, one Orange Garnet, nine Ilmenites, and one Forsterite Olivine, from 8 samples of 277.

Sample:	**KIM grain: 1–2mm**
01-JR-MA-155	Ilmenite
01-JR-MA-169	Ilmenite (x2)
01-JR-MA-173	Pyrope Garnet
01-JR-MA-180	Pyrope Garnet
01-JR-MA-213	Orange Garnet , Ilmenite
01-JR-MA-228	Ilmenite
01-JR-MA-253	Forsterite Olivine
01-JR-SG-001	Pyrope Garnet (x2), Ilmenite (x4)

Regional Modern Alluvium Sampling of the **Kirkland Lake–Matachewan Area**, Northeastern Ontario, 2005
OGS OFR 6124 - (357 samples analysed, approx. 5500 km²)

This survey recovered 7 KIMs in the 1–2mm range, including one Pyrope Garnets, one Orange Garnet, and five Chromites, from 5 samples of 357.

Sample:	**KIM grain: 1–2mm**
03-JR-MA-054	Pyrope Garnet , Orange Garnet
03-JR-MA-148	Chromite
03-JR-MA-185	Chromite (x2)
03-JR-MA-275	Chromite
03-JR-SG-019	Chromite

CONTEXT

Large KIM grains generally indicate close proximity to a kimberlite source. The OGS used wide grid spacing in some of their survey, and creek sampling in their survey, and their aim was to illustrate a regional scale distribution of heavy mineral grains. **The low count of +1.0mm KIM grains in the OGS surveys represents the rarity of large KIM grains regionally.**

By contrast, the high count of +1.0mm KIM grains found by RJK in their 2019 Lorrain Township Survey is represented by a different methodological approach to sampling: the Lorrain Chain Definition Program was a tight-spaced/high-density survey in an area with already-known KIM trains, as the entire survey area is underlain by KIM trains discovered by prospector Tony Bishop. Where the OGS sought regional scale patterns, RJK sought definition in a known area of high KIM concentration. In the Lorrain Chain 2019 survey, 13.8% of samples contained +1.0mm KIMs.

In the five ODM Batches from the RJK Lorrain Claims, there were **35 KIMs in the 1–2mm** size range, including three Pyrope Garnets, thirty-one Ilmenites, and one Chrome Diopside, from 14 samples of 107. The ODM results for Lorrain Chain samples also included forty-one Pyrope Garnets, two Chrome Diopsides, eleven Orange Garnets, and eighty-seven Ilmenites in the 0.5–1.0mm range.
In Unit 26, after lab testing, there at least **8 KIMs in the 1–2mm** size range, including four Pyrope Garnets, and four Orange Garnets. In the 0.5-1.0mm size there were eleven Pyrope Garnets, and two Orange Garnets.

	1-2mm	0.5-1.0mm
2019 Till Samples:	**KIMs:**	
Unit 3 -	IM	
Unit 8 -	IM(19),GP(2), DC	GP(18), GO(10), IM(50)
Unit 12 -	IM	
Unit 14 -	IM	GP IM(3)
Unit 18 -		GP
Unit 27 -	IM	
Unit 28 -	IM	
Unit 29 -	IM	
Unit 31 -	IM	
Unit 34 -		GP(2), IM, CR,FO(5)
Unit 40 -	IM	
Unit 45 -		GP
Unit 50 -		GP
Unit 55 -	IM	GP(2)
Unit 57 -		GP(3), IM(21)
Unit 64 -		GP
Unit 65 -	IM	GP(2)
Unit 72 -		GP
Unit 75 -		GP
Unit 76 -		GP(2), IM(3)

Unit 77 -		GP	
Unit 80 -		GO	
Unit 85 -	IM		
Unit 94 -	GP		
Unit 96 -		DC	
Unit 97 -		GP	IM(2)
Unit 99 -		GP	IM(2)
Unit 100 -		GP	IM(2)
Unit 104 -	IM		
Unit 107 -		DC	
Unit 108 -		GP	IM(2)
2019 Creek Sample:			
Unit 26 -	GP(4), GO(4)	GP(11), GO(2)	

OGS sampling near the Lorrain Chain

OFR 6088 [2002] contains four samples collected by the OGS near the Lorrain Chain survey area. See figure no. 2, on page 20.

The samples were:

01-JR-MA-179 – collected immediately down-ice from Lorrain Chain and downhill in creek flowing from Latour Lake area: one Ilmenite, two Forsterites in 0.5-1.0mm size: four Pyrope Garnets, two Illmenites, one Chromite, one Forsterite in 0.25-0.5mm size.

01-JR-MA-180 – collected downhill in creek flowing from Gleeson Lake area: one +1.0mm Pyrope Garnet: one Pyrope Garnet, two Chrome Diopsides, one Ilmenite in the 0.5-1.0mm size: twenty-six Pyrope Garnets, one Orange Garnet, two Chrome Diopsides, seven Ilmenites, nine Chromites in the 0.25-0.5mm size.

01-JR-MA-181 – collected downhill in creek flowing from Little Grassy Lake: four Pyrope Garnets, one Ilmenite in the 0.5-1.0mm size: seventeen Pyrope Garnets, one Chrome Diopside, six Ilmenites, three Chromites in the 0.25-0.5mm size.

01-JR-MA-208 – collected in sand and gravel at the south-west corner of Goodwin Lake: No KIMs.

The KIMs found in OGS samples 179, 180, and 181 almost certainly originated in and travelled downgrade from the Lorrain Kimberlites discovered by RJK Explorations Ltd. along the Little Grassy Lake, Gleeson, and Latour drainage systems. (See figure no. 25, on page 39.)

The 2019 RJK survey contained 108 sample units; 107 samples were sent to ODM. Unit 26 was the only creek sample taken in the survey, and was processed, concentrated and picked for KIMs by Tony Bishop. The creek was sampled by Graeme Bishop, following best practices for heavies-collection, and runs from

Paradis pond to Goodwin Lake; the creek sample contained high counts of KIMs, and also many large KIMs. The creek literally cuts through an in-situ kimberlite horizon, meaning KIMs are entering the creek directly from their kimberlite source, leading to a positive preservation bias of large grains, compared to the till samples taken in the rest of the 2019 survey.

The geochemistry of the Lorrain Kimberlites are unusual, and separate reports will be produced at a later date, dealing with the geochemistry and EMP data for Lorrain Chain KIMs, and with the data from the Unit 26 creek in particular. RJK Explorations Ltd. has discovered a unique and exciting kimberlite field, and ongoing study is called for.

The following is an excerpt from the forthcoming report by Tony Bishop on KIM grains in Unit 26:

-Start of Excerpt-

"The following results are from the Paradis Creek samples obtained by Graeme Bishop and Patrick Harrington, and consequently concentrated by Tony Bishop, who then picked and mounted specific grains for shipping to be micro-probed at CF Minerals Research Inc.

The following results are from May 2020, the first 35 of 79 grains sent to be micro-probed.

FINDINGS:

Eclogitic Garnets

- 3 E G9 HPM*: PCR 02 (1.7mm), PCR 12 (1.6mm), PCR 19 (1.2mm); high pressure eclogitic garnet – classifies as such in every field; Orange → Orange-Red colour

- 1 E G9 HPM: PCR 22 (1.2mm); high pressure eclogitic garnet – commonly from kimberlite and lamproite but also from other peridotitic, lherzolitic, and volcanic rocks; Purple, frosted with Black inclusions

- 1 E G9 LPM*: PCR 15 (0.9mm); low pressure megacrystic eclogitic garnet – classifies such in every field; Purple

- 1 E G5: PCR46 (0.5mm); Frosted Orange

Peridotitic Garnets

- 3 P G9: PCR 20 - 0.8mm, orange peel texture, Purple; PCR 28 – 0.8mm, frosted Purple; PCR 34 – 0.5mm, Purple

- 4 P G9-1 (Gurney 1 score [C2] category of G9 garnet): PCR 03 – 1.5mm, frosted Purple; PCR 25 – 0.9mm, frosted Purple; PCR 35 – 0.6mm, Purple; PCR 43 – 0.5mm, Purple

- 1 P G11: PCR 38 – 0.4mm, frosted Purple

- 8 P G11-1 (Gurney 1 score [C2] category of G11 garnet): PCR 04 – 1.3mm, frosted Purple; PCR 05 – 1.4mm, frosted Purple; PCR 18 – 0.8mm, partial kelyphyite coat and frosted Purple; PCR 24 – 1.0mm, frosted Purple; PCR 29 – 0.8mm, frosted Purple; PCR 30 – 0.8mm, Purple; PCR 32 – 0.9mm, Purple; PCR 52 – 0.6mm, Purple

---

The following is from the 2nd batch micro-probed in August 2020.

- Grain PCR 01 – A 3.5mm orange grain micro-probed as an ALM-Mn. Almandine garnets have been found as inclusions in diamonds. This grain is unusual in that it is a large size for a KIM, a part of one side displayed a rounded frosted surface, the remainder formed a sharp-edged shard which should have worn smooth in a short time in a creek, unless it had very recently worn out of the kimberlite itself. The overall shape appeared to have broken out of a much larger xenocrystic grain.

- Grain PCR 36 – A 0.6mm orange ALM (Almandine garnet), that has several features that I attributed to kimberlitic origin. The most obvious is a frosted surface texture, and it's rounded. The microprobe shows noticeably less FeO and enhanced CaO and Ni than the other ALM micro-probed. Specifically, 6.7-7.5x more Ca0 and a Ni content of 0.03% compared to 0--.01% for other ALM tested. Comparing to ALM-Mn (Almandine with high manganese) there is from 4-8.3x the CaO and 0.03% Ni in Grain PCR 36 compared to 0% in all but one ALM-Mn with 0.01% Ni. The crystal formula for Almandine is $Fe_3\ Al_2\ (SiO_4)_3$. If nickel is now incorporated into this structure, the most likely cause is being subducted to the Ni-Fe rich deep mantle zone.
- Interestingly, Grain PCR 36 has an almost identical microprobe result except for Ni, as Grain PCR 41, a G5 garnet. Grain PCR 36 has .03% Ni, whereas grain PCR 41 has 0% Ni.

- I chose Grain PCR 37 due to garnet-like appearance but had it micro-probed due to a unique 'peach' colour. After picking and photographing thousands of kimberlitic grains, I'd never seen this colour previously. The grain is labelled by CFM as an ALM (Almandine garnet). I then (again) searched among various gemological and mineralogy sites and found reference to peach-coloured garnets.

From the IGS (International Gem Society): the rarest colour for garnets is peach, green, and colourless. Malaia (the only peach-coloured garnet) is very rare and only found in Tanzania, specifically the Umba Valley bordering Tanzania and Kenya.

Malaia garnets are orange, red-orange, peach, and pink, and have a highly variable composition, including 2-94% Spessartine, 0-83% Pyrope, 2-78% Almandine (ALM), 0-24% Grossular, and 0-4% Andradite.

So, a micro-probe that had the highest percent being Almandine would label the grain ALM, when perhaps it's actually a Malaia subspecies. Being a crustal garnet of extreme rarity and unusual colour, its presence in Paradis Creek concentrates is most easily explained if this garnet had been subducted and brought to surface in a kimberlite.

Typically, peridotitic clinopyroxene or chromium diopside is bright emerald green and eclogitic clinopyroxene is mossy green.

Grain PCR 68 was chosen to be tested as a possible ilmenite or chromite - the grain is round, black in colour, with frosted surface texture; however, the micro-probed grain is CE* CP8 or a "High Pressure Clinopyroxene of Eclogitic paragenesis". It should be noted that "Group 8 clinopyroxenes… are found in diamonds as inclusions" (Erlich, E.I., Hausel, W.D. (2002). *Diamond Deposits: Origin, Exploration, and History of Discovery*. Society for Mining, Metallurgy, and Exploration, Inc. (SME). Littleton, CO, USA pp 302), however CFM lab indicated no diamond inclusion fields of interest for this grain using Dawson (modified by CFM) Group 8.

All the literature I've seen relates to a bright emerald green or mossy green kimberlitic pyroxene. This black colouration in itself suggests a non-typical genesis, i.e. a deep (high-pressure) origin for this unique eclogitic grain, and if so, would not have typical microprobe results for known diamond fields.

Grain PCR 72 is a CE CPx (Eclogitic Clinopyroxene), green in colour with a frosted surface texture"

-END OF EXCERPT-

COMMENTS:

In the results for the first 35 potential KIM grains picked from Unit 26 and sent to be micro-probed at CF Minerals Research Inc., there were four Pyrope Garnets and four Orange Garnets in the 1–2mm range, and eleven Pyrope Garnets and two Orange Garnets in the 0.5–1.0mm range. Their measurements are:

GO- 1.7mm, 1.6mm, 1.2mm, 1.2mm, 0.9mm, 0.6mm
GP- 1.5mm, 1.3mm, 1.4mm, 1.0mm, 0.8mm, 0.8mm, 0.5mm, 0.9mm, 0.6mm, 0.5mm, 0.8mm, 0.8mm, 0.8mm, 0.9mm, 0.6mm

(Another 44 selected grains from Unit 26 were sent in a second batch to be micro-probed at CF Minerals Research Inc., which also included large KIM grains; further discussion of these grains will occur in later reports).

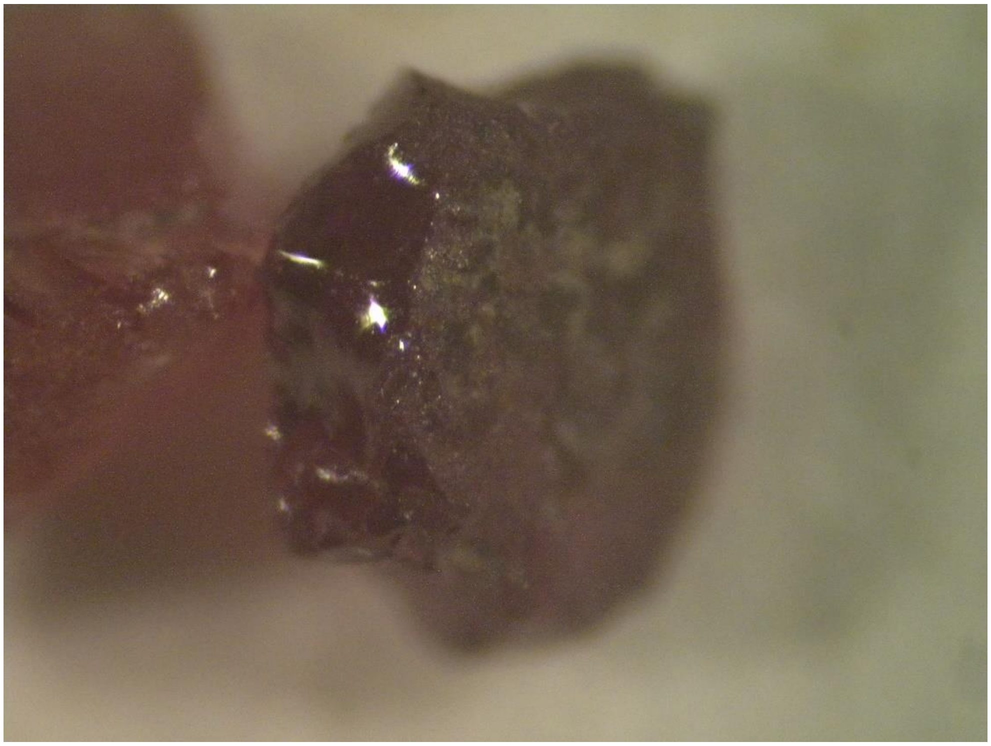
In the 108 units of the 2019 Lorrain Chain KIM Survey, there were **43 KIMs in the 1–2mm** size range, including seven Pyrope Garnets, four Orange Garnets, thirty-one Ilmenites, and one Chrome Diopside, from 15 samples of 108.

See figure no. 4, on page 22 for a site sketch of large grains from 2019 sample results.

Pictures of grains –including a 4mm GP– from unpublished report: “Paradis Creek Sampling Results: Analysis by Tony Bishop”

DSCN 6445 – GO-4.0mm_red garnet-1.8mm_purple CrPyrope – 1.7mm

DSCN 6446 – Red-purple garnet see dscn 6445 – 1.8mm frosted orange peel texture with a GO thin layer attached



DSCN 6447 – CrP deep purple freshly fractured one edge with some kelyphite rim – 1.7mm see dscn 6445

DSCN 6448 – olivine & GO, 3 grains-1.6mm_1.8mm_2.1mm

Some grains sent to CFM:

Grain PCR 72 is a CE CPx (Eclogitic Clinopyroxene), green in colour with a frosted surface texture

Grain PCR 37 due to garnet-like appearance but had it micro-probed due to a unique ‘peach’ colour.

Grain PCR 36 – A 0.6mm orange ALM (Almandine garnet)

Grain PCR 01 – A 3.5mm orange grain micro-probed as an ALM-Mn.

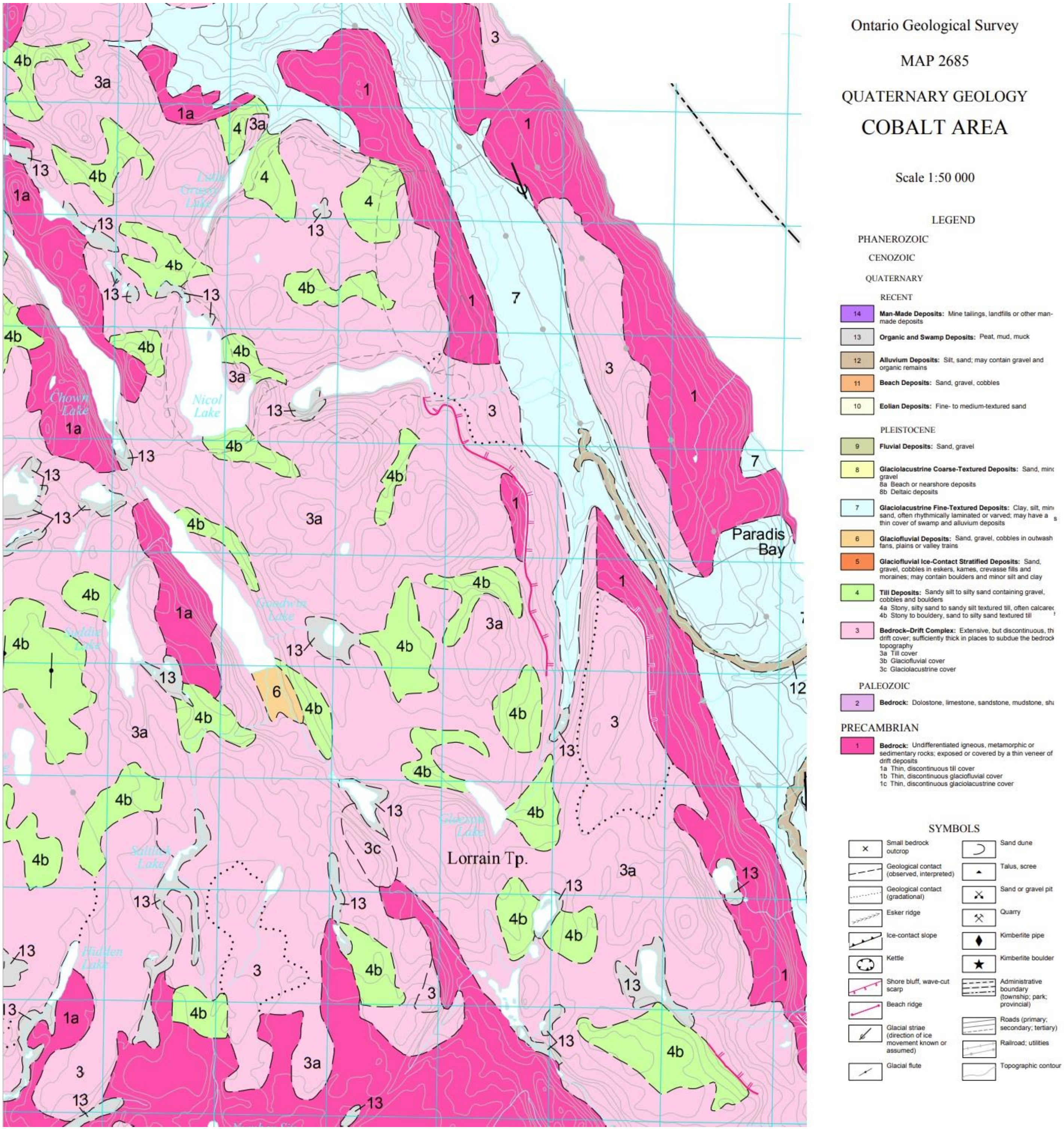


Figure 1 - Section of O.G.S. Map 2685 showing Quaternary geology of 'Lorrain Chain' section of Lorrain Twp.

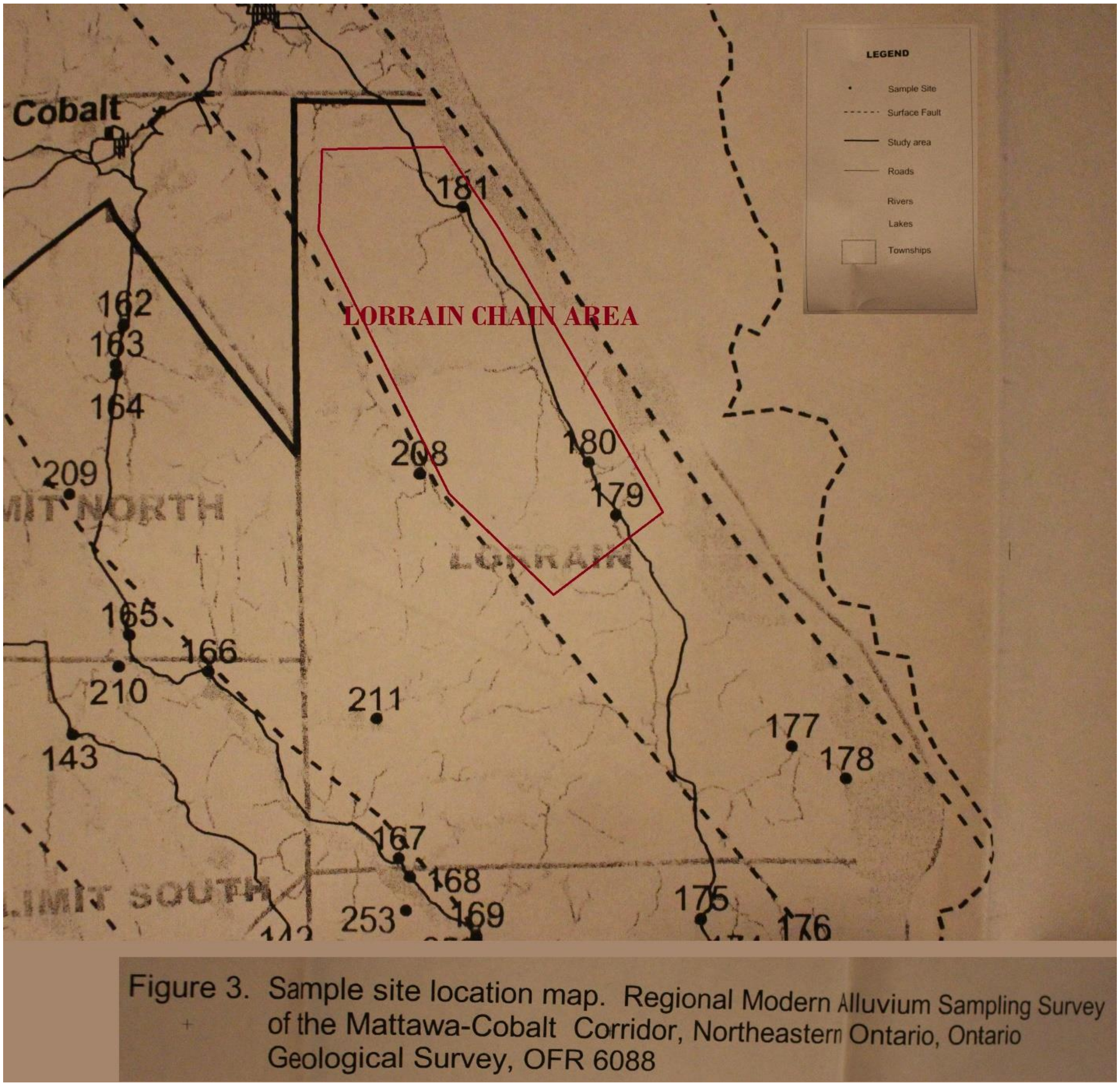


Figure 2 - Section of O.G.S. Open File Report 6088 Map with <u>Lorrain Chain area shown in O.G.S. KIM Survey</u> near the town of Cobalt, Ontario.

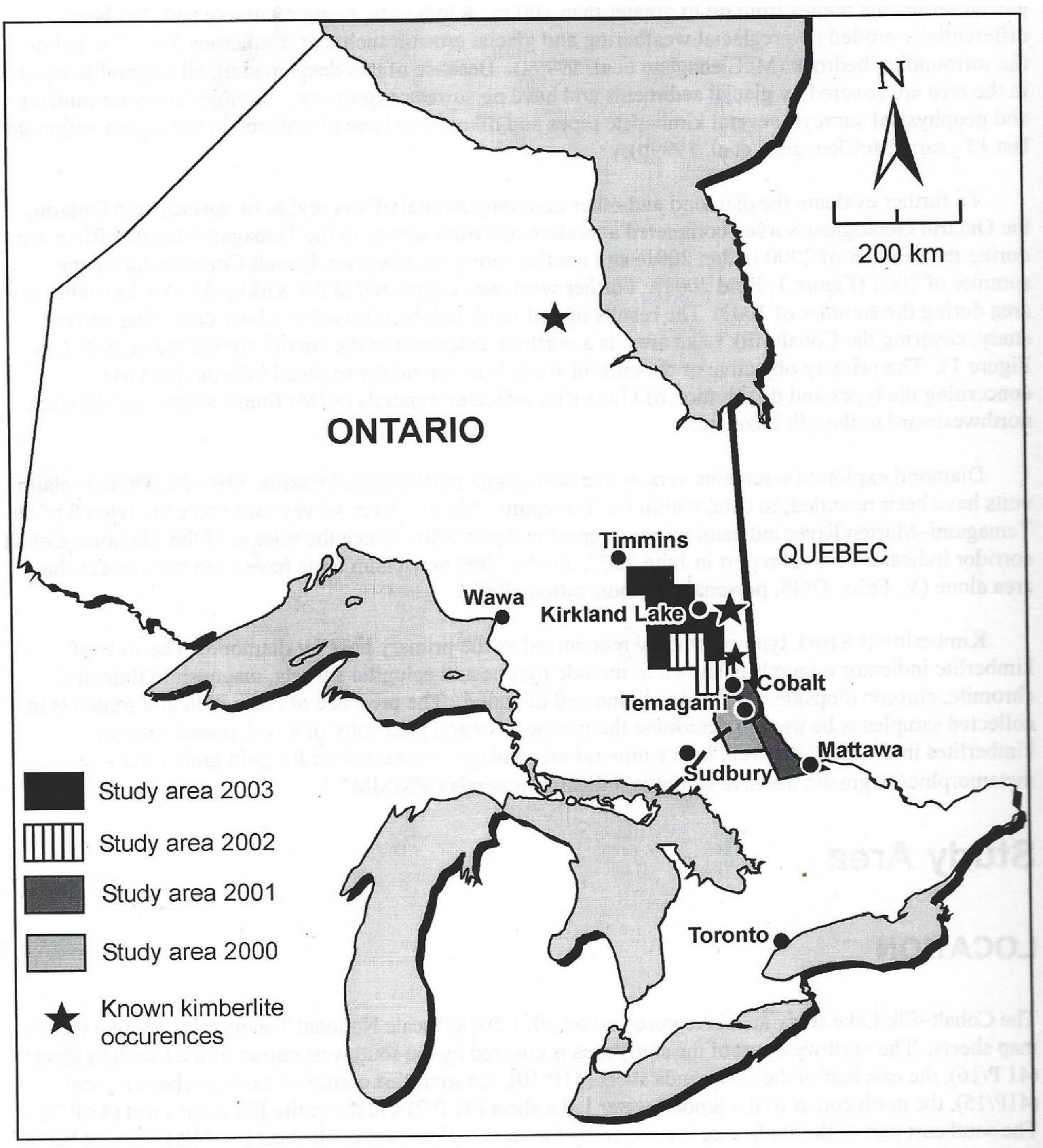
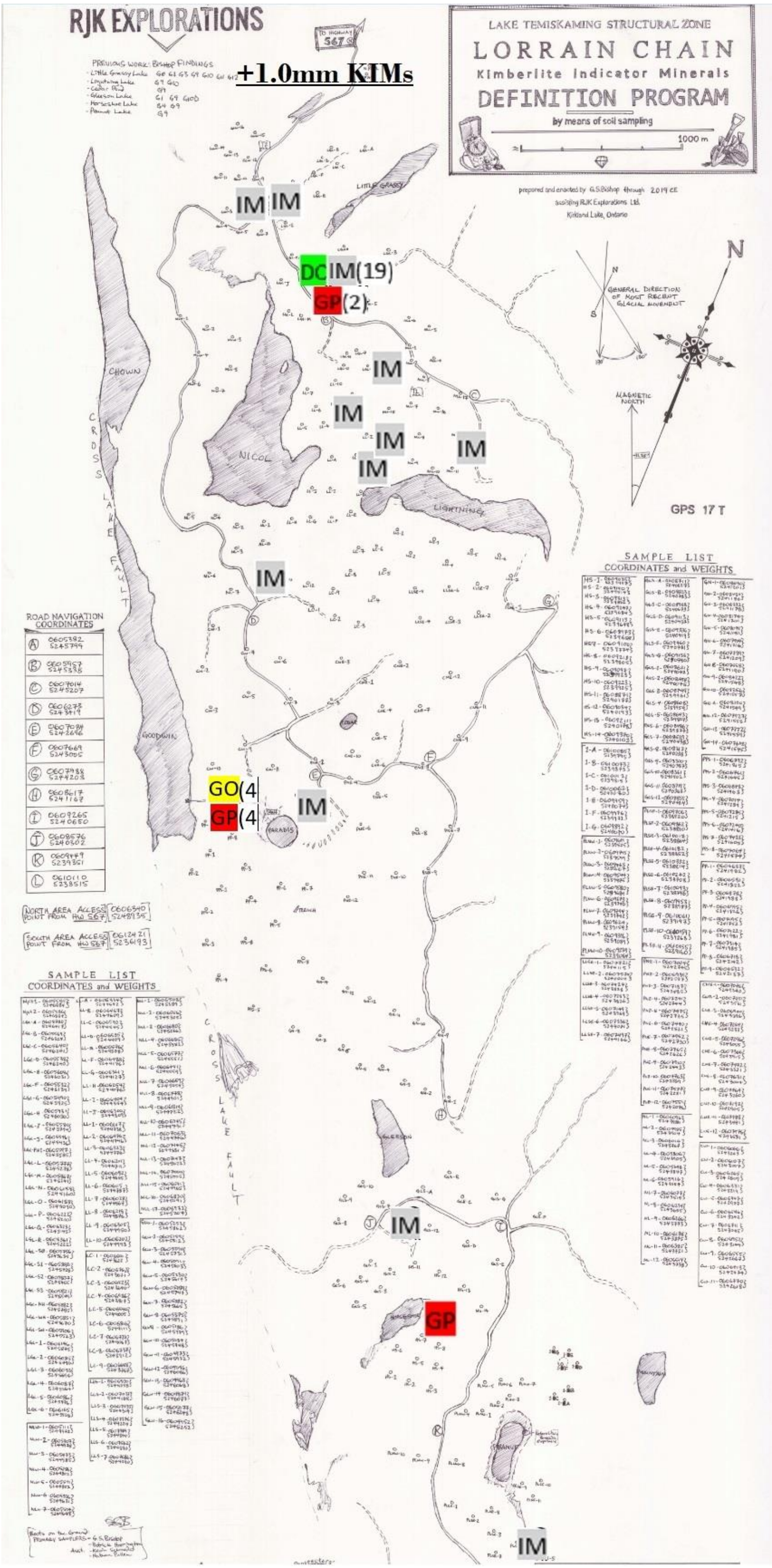


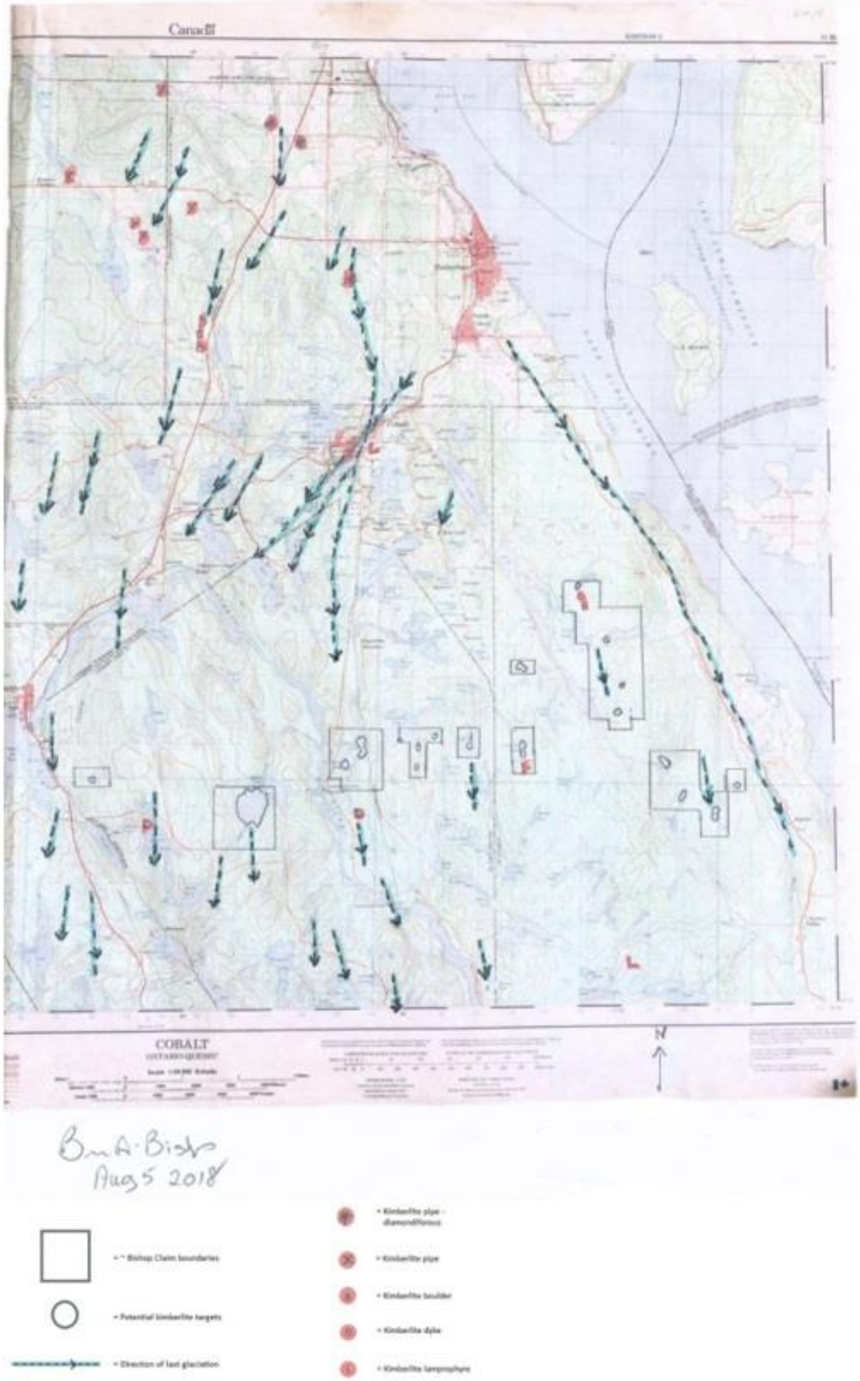
Figure 3 - Map: showing position of early 2000s OGS Regional sampling surveys. Courtesy of OGS OFR



RJK EXPLORATIONS
+1.0mm KIMs
LAKE TEMISKAMING STRUCTURAL ZONE
LORRAIN CHAIN
Kimberlite Indicator Minerals
DEFINITION PROGRAM
by means of soil sampling
1000 m
IM
IM
DC
IM(19)
GP(2)
IM
IM
IM
IM
IM
N
GPS 17 T
IM
SAMPLE LIST
COORDINATES and WEIGHTS
ROAD NAVIGATION COORDINATES
GO(4
GP(4
IM
SAMPLE LIST
COORDINATES and WEIGHTS
IM
GP
IM

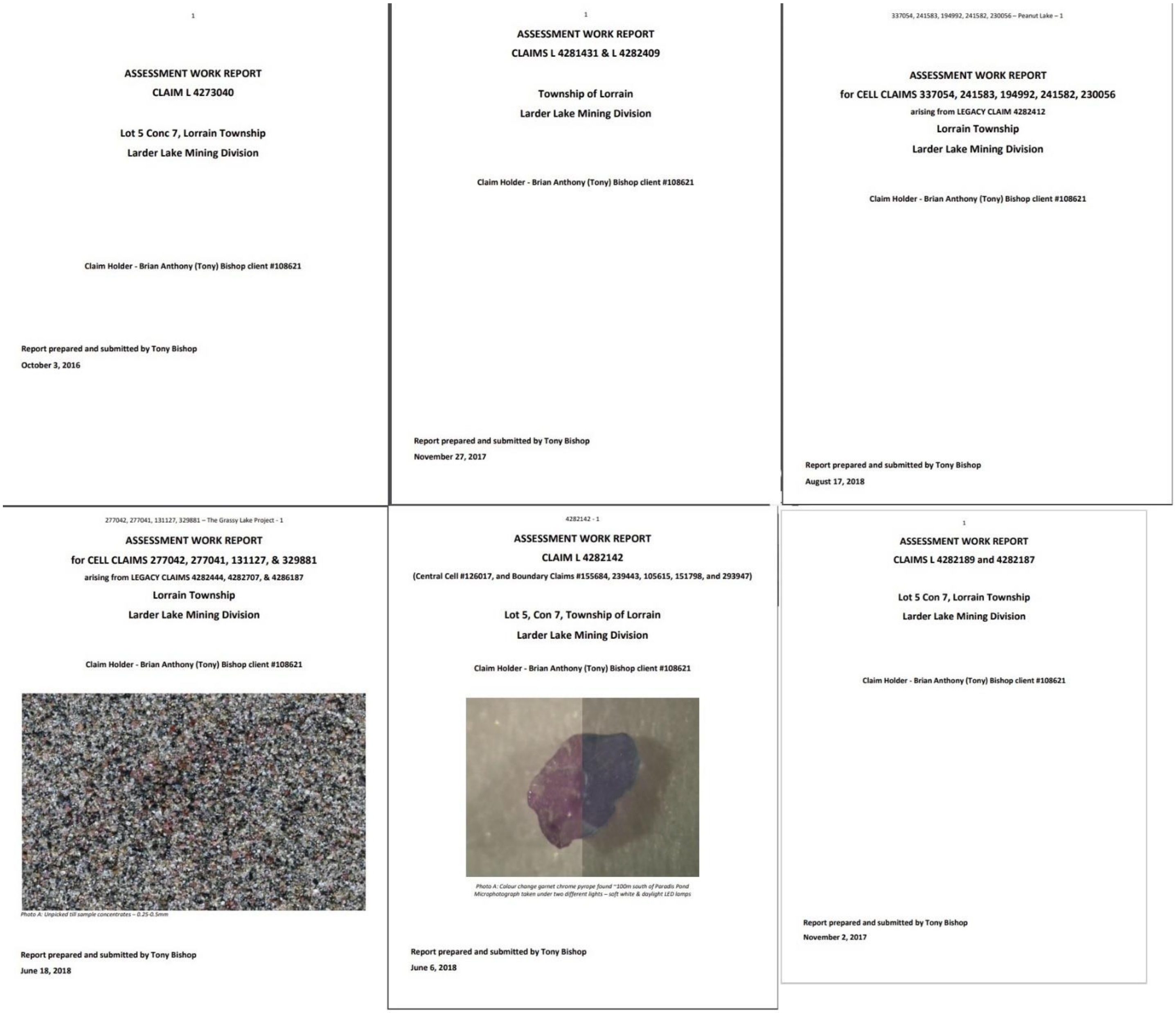
Figure 4

6 – Technical Report on the Bishop Property (Gillies Limit & Lorrain Twp) – August 6, 2018



Map 3: Local Glacial Flow Direction (original by Department of Energy, Mines, & Resources, Map 31 M5, 1983)

Figure 5 - Local glacial flow direction over Topographic Map 31 M5 section, showing Lorrain Chain area



1

ASSESSMENT WORK REPORT
CLAIM L 4273040

Lot 5 Conc 7, Lorrain Township
Larder Lake Mining Division

Claim Holder - Brian Anthony (Tony) Bishop client #108621

Report prepared and submitted by Tony Bishop
October 3, 2016

1

ASSESSMENT WORK REPORT
CLAIMS L 4281431 & L 4282409

Township of Lorrain
Larder Lake Mining Division

Claim Holder - Brian Anthony (Tony) Bishop client #108621

Report prepared and submitted by Tony Bishop
November 27, 2017

337054, 241583, 194992, 241582, 230056 – Peanut Lake – 1

ASSESSMENT WORK REPORT
for CELL CLAIMS 337054, 241583, 194992, 241582, 230056
arising from LEGACY CLAIM 4282412
Lorrain Township
Larder Lake Mining Division

Claim Holder - Brian Anthony (Tony) Bishop client #108621

Report prepared and submitted by Tony Bishop
August 17, 2018

277042, 277041, 131127, 329881 – The Grassy Lake Project - 1

ASSESSMENT WORK REPORT
for CELL CLAIMS 277042, 277041, 131127, & 329881
arising from LEGACY CLAIMS 4282444, 4282707, & 4286187
Lorrain Township
Larder Lake Mining Division

Claim Holder - Brian Anthony (Tony) Bishop client #108621

Photo A: Unpicked till sample concentrates – 0.25-0.5mm

Report prepared and submitted by Tony Bishop
June 18, 2018

4282142 - 1

ASSESSMENT WORK REPORT
CLAIM L 4282142
(Central Cell #126017, and Boundary Claims #155684, 239443, 105615, 151798, and 293947)

Lot 5, Con 7, Township of Lorrain
Larder Lake Mining Division

Claim Holder - Brian Anthony (Tony) Bishop client #108621

Photo A: Colour change garnet chrome pyrope found ~100m south of Paradis Pond
Microphotograph taken under two different lights – soft white & daylight LED lamps

Report prepared and submitted by Tony Bishop
June 6, 2018

1

ASSESSMENT WORK REPORT
CLAIMS L 4282189 and 4282187

Lot 5 Con 7, Lorrain Township
Larder Lake Mining Division

Claim Holder - Brian Anthony (Tony) Bishop client #108621

Report prepared and submitted by Tony Bishop
November 2, 2017

Figure 6 - Cover pages for Tony Bishop's submitted Work Assessment Reports for Lorrain Chain claims

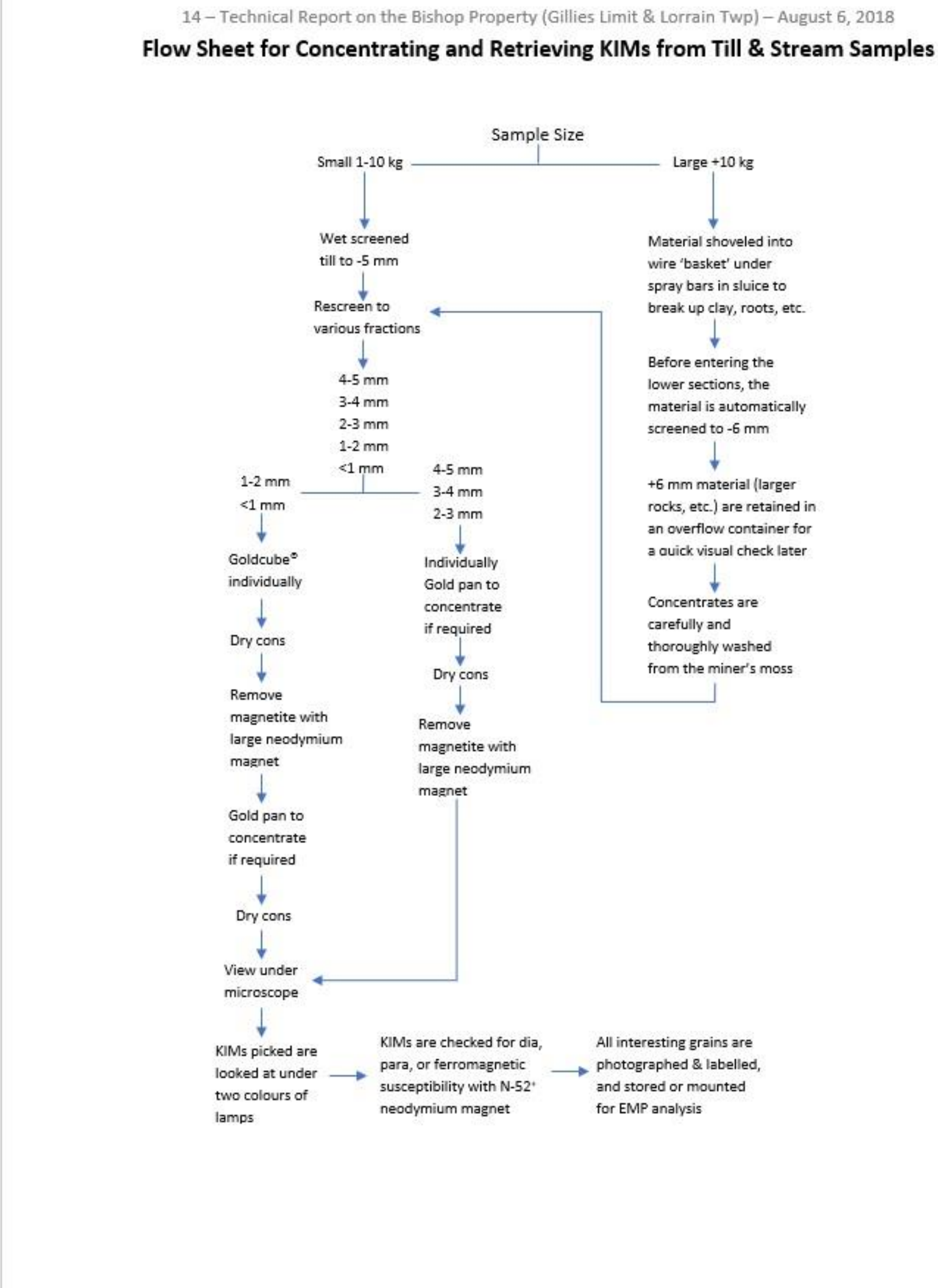


Figure 7 - Flow sheet: concentrating and retrieving KIMs from till and stream samples [Technical Report]

Figure 8 – typical sample site, east of Horseshoe Lake 2019

Figure 9 – 'Mookie' traversing a beaver dam southeast of Peanut Lake 2019

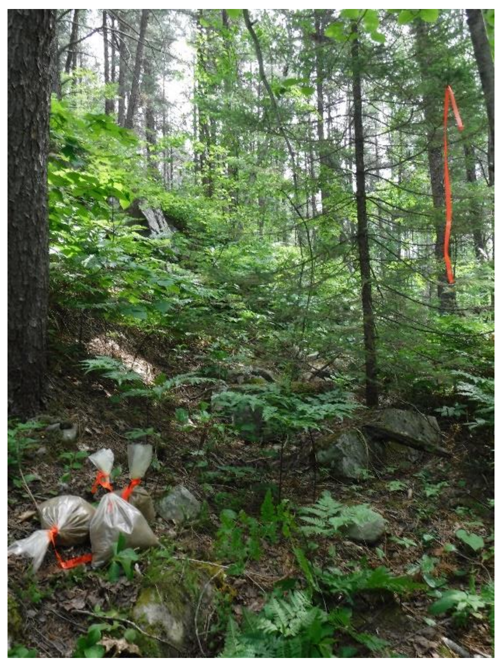


Figure 10 – samples ready to be picked up northeast of Peanut Lake 2019

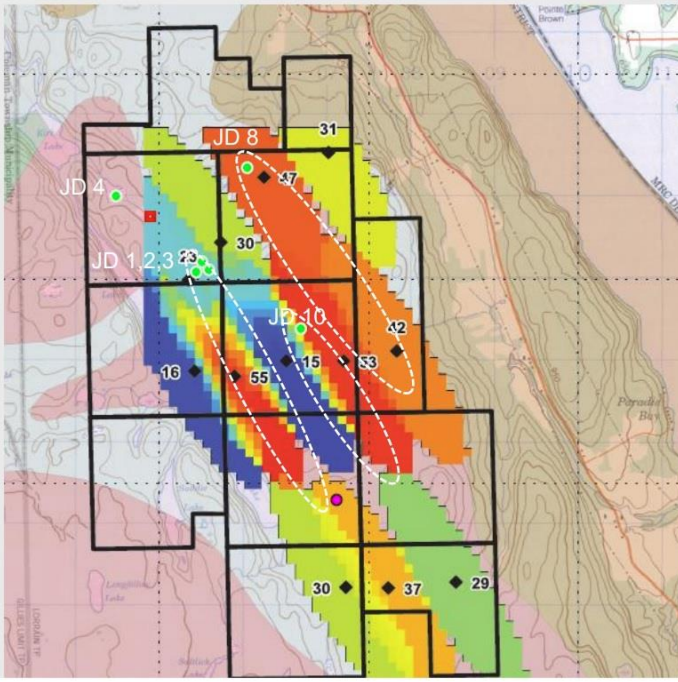
Figure 11 – some of the collected Lorrain Chain samples prior to shipment to ODM

Figure 12 – sluicing Little Grassy Lake samples

Figure 13 – concentrated and fractionated samples (foreground)

KIMS IN TILLS INTERPRETATION LORRAIN NICOLE LAKE BASIN

HUBACHECK CONSULTING GEOLOGISTS



- 3 up-ice KIM targets: dispersion train closed off [white ellipsoids] NICOLE LAKE : JD 1 / JD 2 / JD 3

NIPISSING DIAMOND TRAIN?

- 1 up-ice KIM target: dispersion train closed off at LIGHTNING LAKE co-incident with JD 10

NIPISSING DIAMOND TRAIN?

- 1 up-ice target: coalescing dispersion trains? partially closed off at LITTLE GRASSY LAKE: JD8
- JD 4 TARGET: located upstream of alluvial sample [red square] reporting 49 KIM's.
- * PARADIS POND SHOWN AS PURPLE DOT
- * GREEN DOTS: BISHOP AND HCG KIM TARGETS

TILL / ALLUVIUM SAMPLING RESULTS

HUBACHECK CONSULTING GEOLOGISTS

2012 LORRAIN SILVER BUFFALO PROJECT
Au in Tills and Modern Alluvial Sampling Data

Sample ID	Sample Type	Easting	Northing	Table Feed	Total Au in tills(contours)	Total KIM'S in tills(contours)
30980	till	605733	5245445	14.2	0	30
30981	till	608537	5241294	11.6	1	29
30982	till	607832	5244117	13.4	3	42
30983	till	605896	5243809	16.9	18	55
30984	till	605420	5243872	12.8	2	16
30985	till	605347	5244986	13	3	23
30986	till	607224	5241230	10.5	23	30
30987	till	607730	5241222	17.8	19	37
30988	till	607198	5243996	11.5	4	53
30989	till	606513	5243999	13.7	0	15
30990	alluvium	604908	5245579	10.7	6	49
30991	till	606247	5246242	13.7	2	47
30992	till	607016	5246542	12.6	15	31
49351	till	608747	5229251	10	8	92
49352	till	609193	5229537	13	3	13
49353	till	612874	5231191	11.6	1	36
49354	till	612341	5230842	14.2	1	22
49355	till	613458	5231991	14.9	10	19
49356	till	611040	5229552	13.9	4	28
49357	till	611824	5230157	16.7	2	23
49358	alluvium	611716	5230469	18.8	6	43
49359	alluvium	612281	5231812	21	2	2
49360	alluvium	612291	5231498	21.1	1	6
49361	till	610293	5229325	11.4	9	19
49362	till	610175	5228952	9.7	4	17
49363	alluvium	609016	5229484	15.9	3	2
49364	till	609165	5229238	13.5	4	25
49365	alluvium	611105	5230064	17.6	2	136

- **22 till samples and 6 alluvial**
- **Samples were processed by**
- **Overburden Drilling Management**
- **Basal tills collected from till pits (.75 to 1m depths) varying from 16 kg to 22 kg**
- **Sample weights to lab**
- **Screening >2mm clasts for final table feed**

.

Figure 14 – Map and Results: unpublished results Lorrain Silver Buffalo Project [2012] courtesy of Peter Hubacheck Consulting Geologists.

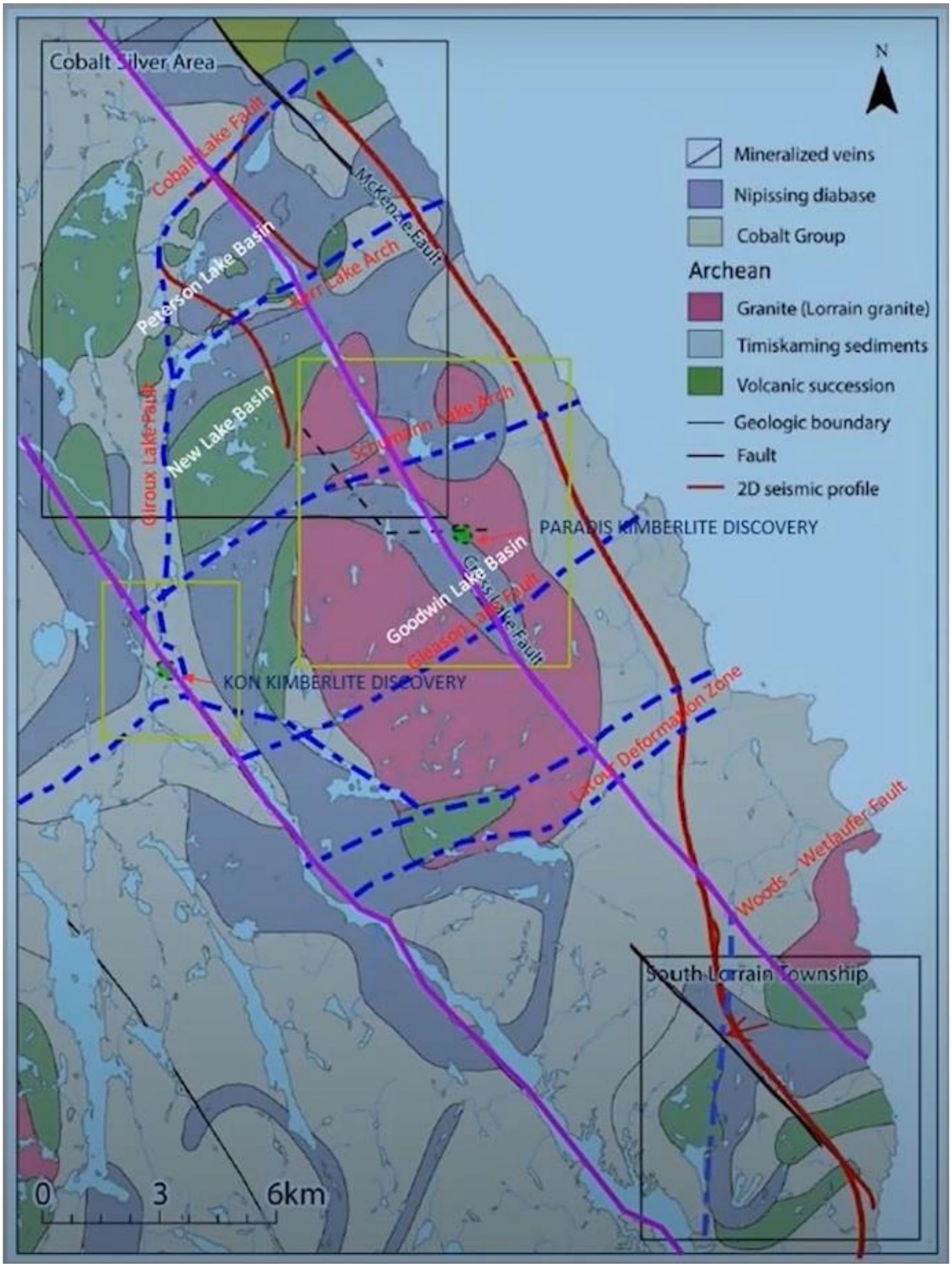


Figure 15 - Map of local Faults in the Lorrain Chain area, courtesy of Peter Hubacheck and RJK

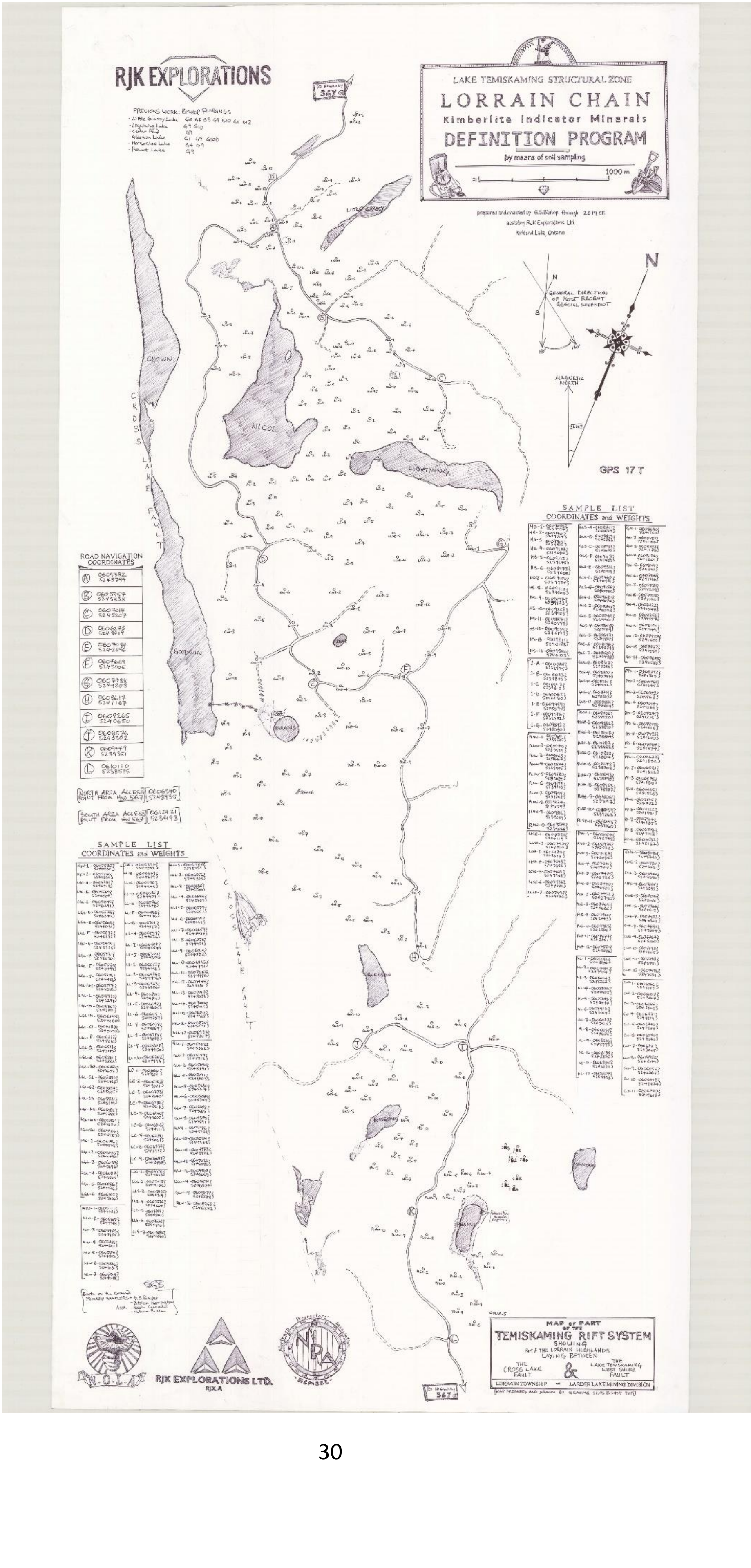

RJK EXPLORATIONS
LAKE TEMISKAMING STRUCTURAL ZONE
LORRAIN CHAIN
Kimberlite Indicator Minerals
DEFINITION PROGRAM
by means of soil sampling
1000 m
N
GPS 17 T
SAMPLE LIST
COORDINATES and WEIGHTS
ROAD NAVIGATION COORDINATES
SAMPLE LIST
COORDINATES and WEIGHTS
MAP of PART of THE
TEMISKAMING RIFT SYSTEM
RJK EXPLORATIONS LTD.

Figure 16

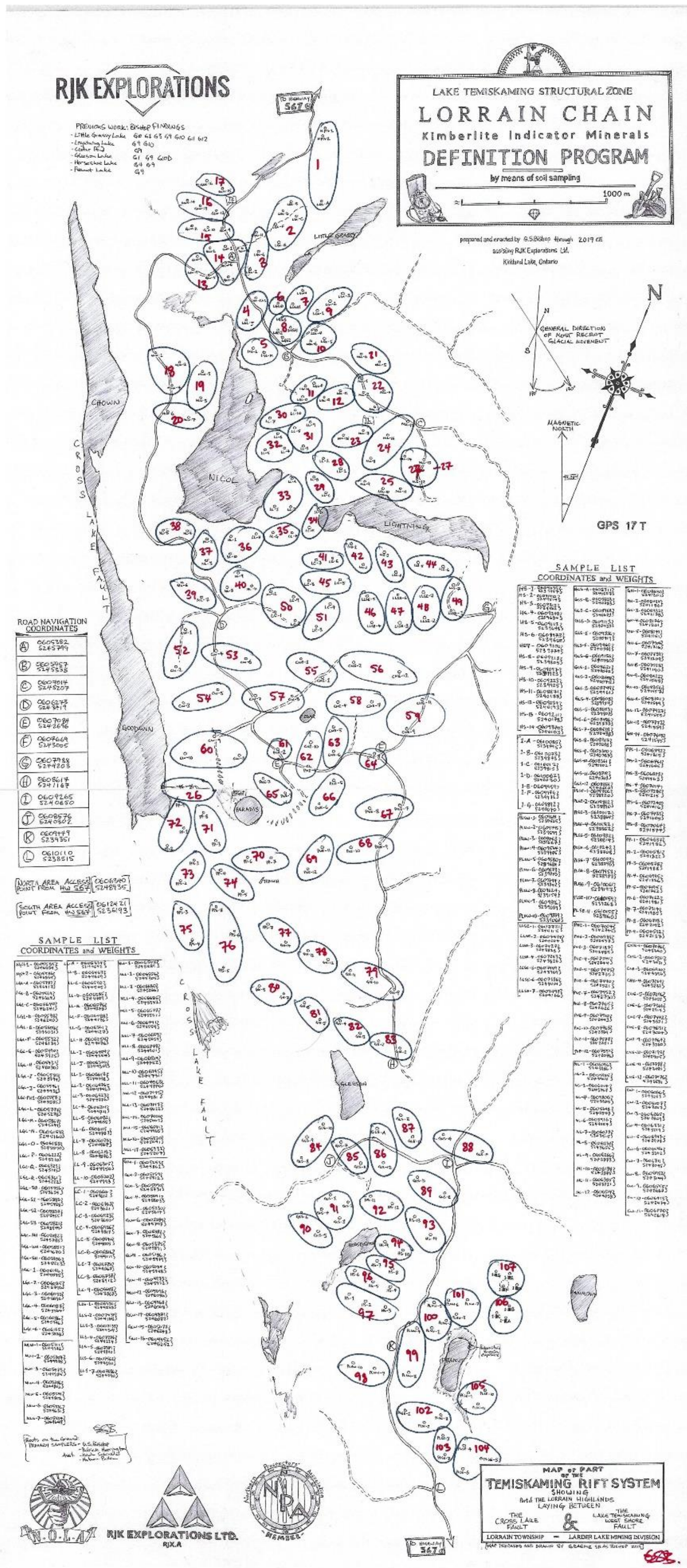

RJK EXPLORATIONS
LAKE TEMISKAMING STRUCTURAL ZONE
LORRAIN CHAIN
Kimberlite Indicator Minerals
DEFINITION PROGRAM
by means of soil sampling
1000 m
N
GPS 17 T
CHOWN
NICOL
LIGHTNING
GOODWIN
CROSS LAKE FAULT
ROAD NAVIGATION COORDINATES
SAMPLE LIST
COORDINATES and WEIGHTS
MAP of PART of the TEMISKAMING RIFT SYSTEM
THE CROSS LAKE FAULT
LORRAIN TOWNSHIP — LARDER LAKE MINING DIVISION
RJK EXPLORATIONS LTD.

Figure 17

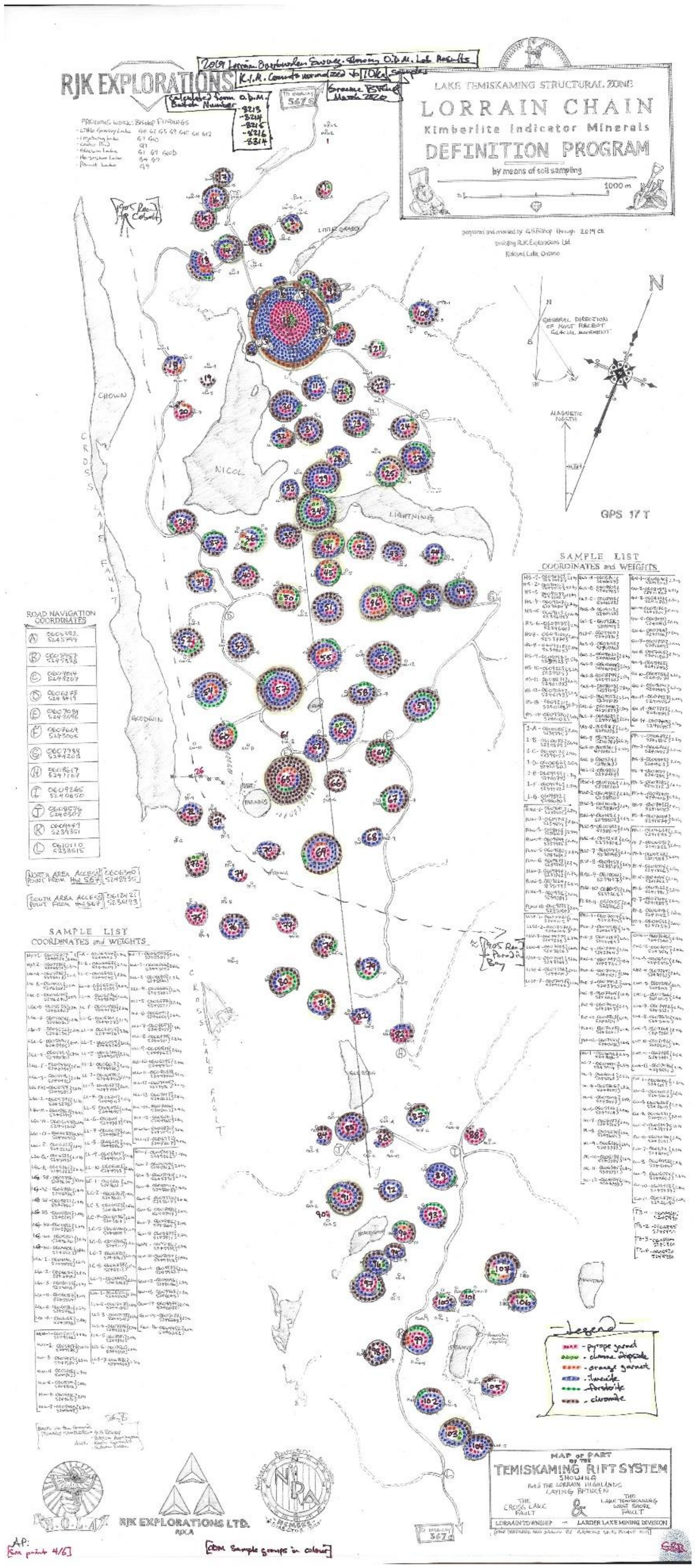

RJK EXPLORATIONS
LAKE TEMISKAMING STRUCTURAL ZONE
LORRAIN CHAIN
Kimberlite Indicator Minerals
DEFINITION PROGRAM
by means of soil sampling
1000 m
N
GPS 17 T
SAMPLE LIST
COORDINATES and WEIGHTS
ROAD NAVIGATION COORDINATES
SAMPLE LIST
COORDINATES and WEIGHTS
Legend
pyrope garnet
chrome diopside
orange garnet
ilmenite
forsterite
chromite
MAP of PART of THE
TEMISKAMING RIFT SYSTEM
LORRAIN TOWNSHIP
LARDER LAKE MINING DIVISION
RJK EXPLORATIONS LTD.

Figure 18

Figure 19 – artistic representation of Lorrain Peninsula, Temiskaming: 8500-8200 BP

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpx T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpx T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpx T	P	Gh T	P
Unit 13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 14	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs, 1.0 to 2.0 mm

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 13	0	0	0	0	0	0	0	0	0	0	0	0
Unit 14	0	0	0	0	0	0	1	1	0	0	0	0
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0
Unit 27	0	0	0	0	0	0	1	1	0	0	0	0
Unit 28	0	0	0	0	0	0	1	1	0	0	0	0
Unit 29	0	0	0	0	0	0	1	1	0	0	0	0
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0
Unit 31	0	0	0	0	0	0	1	1	0	0	0	0
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs, 0.5 to 1.0 mm

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 13	0	0	0	0	0	0	2	2	1	1	2	2
Unit 14	1	1	0	0	0	0	3	3	0	0	1	1
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	1	1	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	1	1	0	0
Unit 18	1	1	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	1	1
Unit 22	1	1	0	0	0	0	0	0	1	1	0	0
Unit 23	0	0	0	0	0	0	1	1	0	0	0	0
Unit 24	0	0	0	0	0	0	1	1	0	0	0	0
Unit 25	0	0	1	1	0	0	1	1	0	0	1	1
Unit 27	0	0	1	1	0	0	2	2	0	0	3	3
Unit 28	0	0	0	0	0	0	1	1	0	0	0	0
Unit 29	1	1	0	0	0	0	5	5	0	0	1	1
Unit 30	0	0	0	0	0	0	2	2	0	0	0	0
Unit 31	0	0	0	0	0	0	2	2	0	0	0	0
Unit 32	1	1	0	0	0	0	0	0	0	0	1	1
Unit 33	0	0	0	0	0	0	2	2	0	0	0	0

Number of Grains — KIMs, 0.25 to 0.5 mm, and Total (KIMs)

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
Unit 13	6	6	2	2	0	0	12	12	4	4	0	0	29	29
Unit 14	5	5	1	1	2	2	11	11	10	10	1	1	36	36
Unit 15	6	6	0	0	0	0	1	1	11	11	0	0	18	18
Unit 16	4	4	1	1	0	0	8	8	10	10	1	1	25	25
Unit 17	0	0	0	0	0	0	1	1	3	3	0	0	5	5
Unit 18	1	1	1	1	0	0	5	5	2	2	0	0	10	10
Unit 19	0	0	0	0	0	0	0	0	3	3	0	0	3	3
Unit 20	3	3	1	1	0	0	0	0	1	1	0	0	5	5
Unit 21	2	2	0	0	0	0	0	0	3	3	2	2	8	8
Unit 22	0	0	0	0	0	0	1	1	7	7	0	0	10	10
Unit 23	2	2	0	0	0	0	4	4	6	6	1	1	14	14
Unit 24	1	1	1	1	0	0	4	4	11	11	1	1	19	19
Unit 25	6	6	0	0	1	1	4	4	6	6	6	6	26	26
Unit 27	3	3	1	1	0	0	15	15	12	12	4	4	42	42
Unit 28	1	1	1	1	1	1	4	4	0	0	0	0	9	9
Unit 29	3	3	0	0	0	0	10	10	12	12	2	2	35	35
Unit 30	2	2	0	0	0	0	8	8	8	8	1	1	21	21
Unit 31	2	2	0	0	0	0	6	6	16	16	0	0	27	27
Unit 32	0	0	1	1	0	0	5	5	3	3	1	1	12	12
Unit 33	1	1	0	0	0	0	6	6	3	3	0	0	12	12

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Figure 20

Page 7 of 9 Overburden Drilling Management Limited 2020-01-06

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs, 1.0 to 2.0 mm

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	1	1	0	0	0	0
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	0	0	0	0
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs, 0.5 to 1.0 mm

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 34	2	2	0	0	0	0	1	1	1	1	5	5
Unit 35	0	0	0	0	0	0	1	1	0	0	0	0
Unit 36	0	0	0	0	0	0	1	1	0	0	2	2
Unit 37	0	0	0	0	0	0	2	2	0	0	1	1
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	0	0	2	2	0	0
Unit 41	0	0	0	0	0	0	0	0	1	1	0	0
Unit 42	0	0	0	0	0	0	0	0	1	1	1	1
Unit 43	0	0	0	0	0	0	2	2	0	0	0	0
Unit 44	0	0	0	0	0	0	1	1	0	0	0	0
Unit 45	1	1	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	1	1
Unit 47	0	0	0	0	0	0	0	0	0	0	2	2
Unit 48	0	0	0	0	0	0	3	3	0	0	0	0
Unit 49	0	0	0	0	0	0	1	1	0	0	0	0
Unit 50	1	1	0	0	0	0	0	0	0	0	2	2
Unit 51	0	0	0	0	0	0	1	1	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	0	0	1	1
Unit 53	0	0	0	0	0	0	1	1	0	0	0	0

Number of Grains — KIMs, 0.25 to 0.5 mm, and Total (KIMs)

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
Unit 34	4	4	1	1	1	1	12	12	15	15	10	10	52	52
Unit 35	1	1	0	0	0	0	2	2	9	9	0	0	13	13
Unit 36	1	1	1	1	1	1	3	3	3	3	5	5	17	17
Unit 37	1	1	0	0	0	0	5	5	3	3	1	1	13	13
Unit 38	3	3	0	0	0	0	3	3	8	8	1	1	15	15
Unit 39	1	1	1	1	0	0	4	4	4	4	1	1	11	11
Unit 40	4	4	0	0	0	0	3	3	8	8	1	1	19	19
Unit 41	2	2	2	2	1	1	5	5	5	5	1	1	17	17
Unit 42	2	2	1	1	0	0	2	2	5	5	2	2	14	14
Unit 43	1	1	0	0	0	0	1	1	5	5	0	0	9	9
Unit 44	1	1	0	0	0	0	3	3	2	2	1	1	8	8
Unit 45	3	3	1	1	1	1	3	3	1	1	2	2	12	12
Unit 46	4	4	2	2	2	2	4	4	3	3	2	2	18	18
Unit 47	5	5	0	0	0	0	6	6	4	4	3	3	20	20
Unit 48	0	0	0	0	1	1	4	4	4	4	0	0	12	12
Unit 49	1	1	0	0	0	0	6	6	7	7	2	2	17	17
Unit 50	1	1	3	3	1	1	0	0	10	10	1	1	19	19
Unit 51	1	1	0	0	0	0	7	7	10	10	0	0	19	19
Unit 52	1	1	0	0	0	0	4	4	8	8	1	1	15	15
Unit 53	0	0	0	0	0	0	5	5	7	7	0	0	13	13

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Figure 21

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
Unit 54	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
Unit 55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 57	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 64	0	0	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0
Unit 65	0	0	0	0	0	0	0	0	0	0	0	0	9	9	0	0	0	0
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0

Number of Grains — KIMs, 1.0 to 2.0 mm

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 54	0	0	0	0	0	0	0	0	0	0	0	0
Unit 55	0	0	0	0	0	0	1	1	0	0	0	0
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0
Unit 57	0	0	0	0	0	0	0	0	0	0	0	0
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0
Unit 64	0	0	0	0	0	0	0	0	0	0	0	0
Unit 65	0	0	0	0	0	0	1	1	0	0	0	0
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs, 0.5 to 1.0 mm

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 54	0	0	0	0	0	0	1	1	0	0	3	3
Unit 55	2	2	0	0	0	0	0	0	0	0	0	0
Unit 56	0	0	0	0	0	0	1	1	1	1	0	0
Unit 57	3	3	0	0	0	0	2	2	0	0	0	0
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0
Unit 59	0	0	0	0	0	0	0	0	0	0	1	1
Unit 60	0	0	0	0	0	0	0	0	0	0	1	1
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0
Unit 62	0	0	0	0	0	0	1	1	0	0	0	0
Unit 63	0	0	0	0	0	0	1	1	0	0	0	0
Unit 64	1	1	0	0	0	0	0	0	0	0	1	1
Unit 65	2	2	0	0	0	0	0	0	0	0	0	0
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0
Unit 67	0	0	0	0	0	0	1	1	1	1	1	1
Unit 68	0	0	0	0	0	0	1	1	0	0	0	0
Unit 69	0	0	0	0	0	0	3	3	0	0	0	0
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0
Unit 72	1	1	0	0	0	0	0	0	0	0	0	0
Unit 73	0	0	0	0	1	1	0	0	1	1	0	0

Number of Grains — KIMs, 0.25 to 0.5 mm, and Total (KIMs)

Sample Number	GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
Unit 54	1	1	2	2	0	0	11	11	6	6	2	2	26	26
Unit 55	2	2	2	2	0	0	8	8	3	3	3	3	21	21
Unit 56	2	2	0	0	0	0	6	6	11	11	1	1	22	22
Unit 57	2	2	0	0	0	0	14	14	13	13	2	2	36	36
Unit 58	0	0	0	0	0	0	5	5	6	6	2	2	13	13
Unit 59	2	2	0	0	0	0	7	7	7	7	5	5	22	22
Unit 60	4	4	1	1	0	0	2	2	9	9	3	3	20	20
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 62	1	1	0	0	0	0	5	5	3	3	0	0	10	10
Unit 63	3	3	0	0	1	1	7	7	3	3	0	0	15	15
Unit 64	0	0	0	0	0	0	0	0	6	6	1	1	9	9
Unit 65	2	2	2	2	0	0	1	1	40	21	2	2	50	31
Unit 66	0	0	0	0	0	0	0	0	7	7	0	0	7	7
Unit 67	1	1	0	0	0	0	2	2	6	6	1	1	13	13
Unit 68	0	0	0	0	0	0	3	3	2	2	0	0	6	6
Unit 69	4	4	1	1	0	0	10	10	11	11	1	1	30	30
Unit 70	1	1	0	0	0	0	3	3	3	3	0	0	7	7
Unit 71	0	0	0	0	0	0	1	1	3	3	0	0	4	4
Unit 72	2	2	0	0	0	0	5	5	7	7	0	0	15	15
Unit 73	2	2	0	0	0	0	0	0	4	4	0	0	8	8

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Figure 22

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Number of Grains – Selected MMSIMs

	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm					
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 74	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 76	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 78	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 83	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 88	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 91	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 93	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 94	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 96	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 97	0	0	0	0	0	0	1	1	0	0	0	0	5	5	0	0	0	0
Unit 98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 100	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0
Unit 101	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 102	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 103	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 104	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 107	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 108	0	0	0	0	0	0	1	1	0	0	0	0	8	8	0	0	0	0

Number of Grains – KIMs – 1.0 to 2.0 mm

	GP		GO		DC		IM		CR		FO	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P
Unit 74	0	0	0	0	0	0	0	0	0	0	0	0
Unit 75	0	0	0	0	0	0	0	0	0	0	0	0
Unit 76	0	0	0	0	0	0	0	0	0	0	0	0
Unit 77	0	0	0	0	0	0	0	0	0	0	0	0
Unit 78	0	0	0	0	0	0	0	0	0	0	0	0
Unit 79	0	0	0	0	0	0	0	0	0	0	0	0
Unit 80	0	0	0	0	0	0	0	0	0	0	0	0
Unit 81	0	0	0	0	0	0	0	0	0	0	0	0
Unit 82	0	0	0	0	0	0	0	0	0	0	0	0
Unit 83	0	0	0	0	0	0	0	0	0	0	0	0
Unit 84	0	0	0	0	0	0	0	0	0	0	0	0
Unit 85	0	0	0	0	0	0	1	1	0	0	0	0
Unit 86	0	0	0	0	0	0	0	0	0	0	0	0
Unit 87	0	0	0	0	0	0	0	0	0	0	0	0
Unit 88	0	0	0	0	0	0	0	0	0	0	0	0
Unit 89	0	0	0	0	0	0	0	0	0	0	0	0
Unit 90	0	0	0	0	0	0	0	0	0	0	0	0
Unit 91	0	0	0	0	0	0	0	0	0	0	0	0
Unit 92	0	0	0	0	0	0	0	0	0	0	0	0
Unit 93	0	0	0	0	0	0	0	0	0	0	0	0
Unit 94	1	1	0	0	0	0	0	0	0	0	0	0
Unit 95	0	0	0	0	0	0	0	0	0	0	0	0
Unit 96	0	0	0	0	0	0	0	0	0	0	0	0
Unit 97	0	0	0	0	0	0	0	0	0	0	0	0
Unit 98	0	0	0	0	0	0	0	0	0	0	0	0
Unit 99	0	0	0	0	0	0	0	0	0	0	0	0
Unit 100	0	0	0	0	0	0	0	0	0	0	0	0
Unit 101	0	0	0	0	0	0	0	0	0	0	0	0
Unit 102	0	0	0	0	0	0	0	0	0	0	0	0
Unit 103	0	0	0	0	0	0	0	0	0	0	0	0
Unit 104	0	0	0	0	0	0	1	1	0	0	0	0
Unit 105	0	0	0	0	0	0	0	0	0	0	0	0
Unit 106	0	0	0	0	0	0	0	0	0	0	0	0
Unit 107	0	0	0	0	0	0	0	0	0	0	0	0
Unit 108	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains – KIMs – 0.5 to 1.0 mm

	GP		GO		DC		IM		CR		FO	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P
Unit 74	0	0	0	0	0	0	1	1	0	0	0	0
Unit 75	1	1	0	0	0	0	0	0	0	0	0	0
Unit 76	2	2	0	0	0	0	3	3	0	0	0	0
Unit 77	1	1	0	0	0	0	0	0	0	0	0	0
Unit 78	0	0	0	0	0	0	0	0	0	0	0	0
Unit 79	0	0	0	0	0	0	1	1	0	0	1	1
Unit 80	0	0	1	1	0	0	2	2	0	0	0	0
Unit 81	0	0	0	0	0	0	0	0	0	0	0	0
Unit 82	0	0	0	0	0	0	0	0	0	0	0	0
Unit 83	0	0	0	0	0	0	0	0	0	0	0	0
Unit 84	0	0	0	0	0	0	0	0	0	0	0	0
Unit 85	0	0	0	0	0	0	1	1	0	0	0	0
Unit 86	0	0	0	0	0	0	0	0	0	0	0	0
Unit 87	0	0	0	0	0	0	1	1	0	0	0	0
Unit 88	0	0	0	0	0	0	0	0	0	0	0	0
Unit 89	0	0	0	0	0	0	3	3	0	0	0	0
Unit 90	0	0	0	0	0	0	0	0	0	0	0	0
Unit 91	0	0	0	0	0	0	3	3	0	0	0	0
Unit 92	0	0	0	0	0	0	2	2	0	0	0	0
Unit 93	0	0	0	0	0	0	1	1	0	0	1	1
Unit 94	0	0	0	0	0	0	0	0	0	0	1	1
Unit 95	0	0	0	0	0	0	2	2	0	0	0	0
Unit 96	0	0	0	0	1	1	0	0	0	0	0	0
Unit 97	1	1	0	0	0	0	2	2	0	0	0	0
Unit 98	0	0	0	0	0	0	0	0	1	1	0	0
Unit 99	1	1	0	0	0	0	2	2	0	0	1	1
Unit 100	1	1	0	0	0	0	2	2	0	0	0	0
Unit 101	0	0	0	0	0	0	0	0	0	0	0	0
Unit 102	0	0	0	0	0	0	0	0	0	0	1	1
Unit 103	0	0	0	0	0	0	1	1	0	0	0	0
Unit 104	0	0	0	0	0	0	1	1	0	0	0	0
Unit 105	0	0	0	0	0	0	0	0	0	0	0	0
Unit 106	0	0	0	0	0	0	1	1	0	0	0	0
Unit 107	0	0	0	0	1	1	0	0	0	0	0	0
Unit 108	1	1	0	0	0	0	2	2	0	0	2	2

Number of Grains – KIMs – 0.25 to 0.5 mm, and Total (KIMs)

	GP		GO		DC		IM		CR		FO		Total (KIMs)	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 74	1	1	0	0	0	0	1	1	0	0	0	0	3	3
Unit 75	5	5	0	0	0	0	1	1	1	1	0	0	8	8
Unit 76	2	2	0	0	0	0	5	5	6	6	0	0	18	18
Unit 77	2	2	0	0	0	0	1	1	2	2	0	0	6	6
Unit 78	1	1	0	0	0	0	1	1	5	5	1	1	8	8
Unit 79	1	1	0	0	0	0	3	3	1	1	2	2	9	9
Unit 80	1	1	0	0	0	0	0	0	7	7	4	4	15	15
Unit 81	2	2	1	1	1	1	3	3	4	4	1	1	12	12
Unit 82	1	1	0	0	0	0	3	3	0	0	0	0	4	4
Unit 83	4	4	0	0	0	0	2	2	1	1	0	0	7	7
Unit 84	2	2	0	0	0	0	2	2	2	2	0	0	6	6
Unit 85	2	2	0	0	0	0	1	1	3	3	0	0	8	8
Unit 86	2	2	0	0	0	0	1	1	3	3	0	0	6	6
Unit 87	0	0	0	0	0	0	2	2	3	3	2	2	8	8
Unit 88	4	4	0	0	0	0	0	0	1	1	0	0	5	5
Unit 89	2	2	0	0	0	0	7	7	0	0	1	1	13	13
Unit 90	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Unit 91	10	10	1	1	1	1	15	15	14	14	1	1	45	45
Unit 92	1	1	0	0	0	0	6	6	2	2	0	0	11	11
Unit 93	7	7	0	0	0	0	4	4	2	2	3	3	18	18
Unit 94	2	2	1	1	0	0	1	1	2	2	1	1	9	9
Unit 95	0	0	0	0	0	0	2	2	2	2	0	0	6	6
Unit 96	0	0	0	0	0	0	12	12	7	7	0	0	20	20
Unit 97	10	10	0	0	0	0	12	12	18	18	3	3	46	46
Unit 98	1	1	0	0	0	0	1	1	6	6	0	0	9	9
Unit 99	5	5	1	1	0	0	2	2	2	2	2	2	16	16
Unit 100	1	1	0	0	0	0	2	2	1	1	1	1	8	8
Unit 101	1	1	0	0	0	0	1	1	0	0	2	2	4	4
Unit 102	3	3	0	0	0	0	10	10	2	2	1	1	17	17
Unit 103	0	0	1	1	1	1	5	5	4	4	0	0	12	12
Unit 104	2	2	0	0	0	0	9	9	6	6	0	0	19	19
Unit 105	4	4	0	0	0	0	2	2	2	2	0	0	8	8
Unit 106	2	2	0	0	1	1	4	4	4	4	1	1	13	13
Unit 107	1	1	1	1	1	1	7	7	8	8	1	1	20	20
Unit 108	6	6	0	0	0	0	10	10	11	11	1	1	33	33

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Figure 23

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
Unit 01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 03	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 06	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 08	0	0	0	0	0	0	4	4	0	0	0	0	20	10	2	2	0	0
Unit 09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 10	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	0	0	0
Unit 11	0	0	0	0	0	0	1	1	0	0	0	0	8	8	0	0	0	0
Unit 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs

Sample Number	1.0 to 2.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.5 to 1.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 03	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3
Unit 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Unit 08	2	2	0	0	1	1	19	19	0	0	0	0	18	18	10	10	0	0	50	20	0	0	0	0
Unit 09	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
Unit 10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2
Unit 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	0	0
Unit 12	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0

Sample Number	0.25 to 0.5 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
Unit 01	2	2	0	0	1	1	0	0	3	3	0	0	6	6
Unit 02	1	1	0	0	1	1	5	5	7	7	0	0	15	15
Unit 03	3	3	0	0	1	1	5	5	11	11	0	0	25	25
Unit 04	0	0	0	0	0	0	2	2	0	0	0	0	2	2
Unit 05	0	0	0	0	0	0	1	1	3	3	0	0	4	4
Unit 06	0	0	0	0	0	0	1	1	1	1	0	0	2	2
Unit 07	0	0	0	0	0	0	3	3	5	5	0	0	10	10
Unit 08	80	20	30	20	3	3	120	20	8	8	0	0	341	141
Unit 09	2	2	1	1	0	0	2	2	7	7	1	1	15	15
Unit 10	6	6	2	2	0	0	5	5	8	8	0	0	24	24
Unit 11	2	2	0	0	0	0	9	9	3	3	0	0	18	18
Unit 12	1	1	0	0	1	1	0	0	6	6	0	0	10	10

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Figure 24

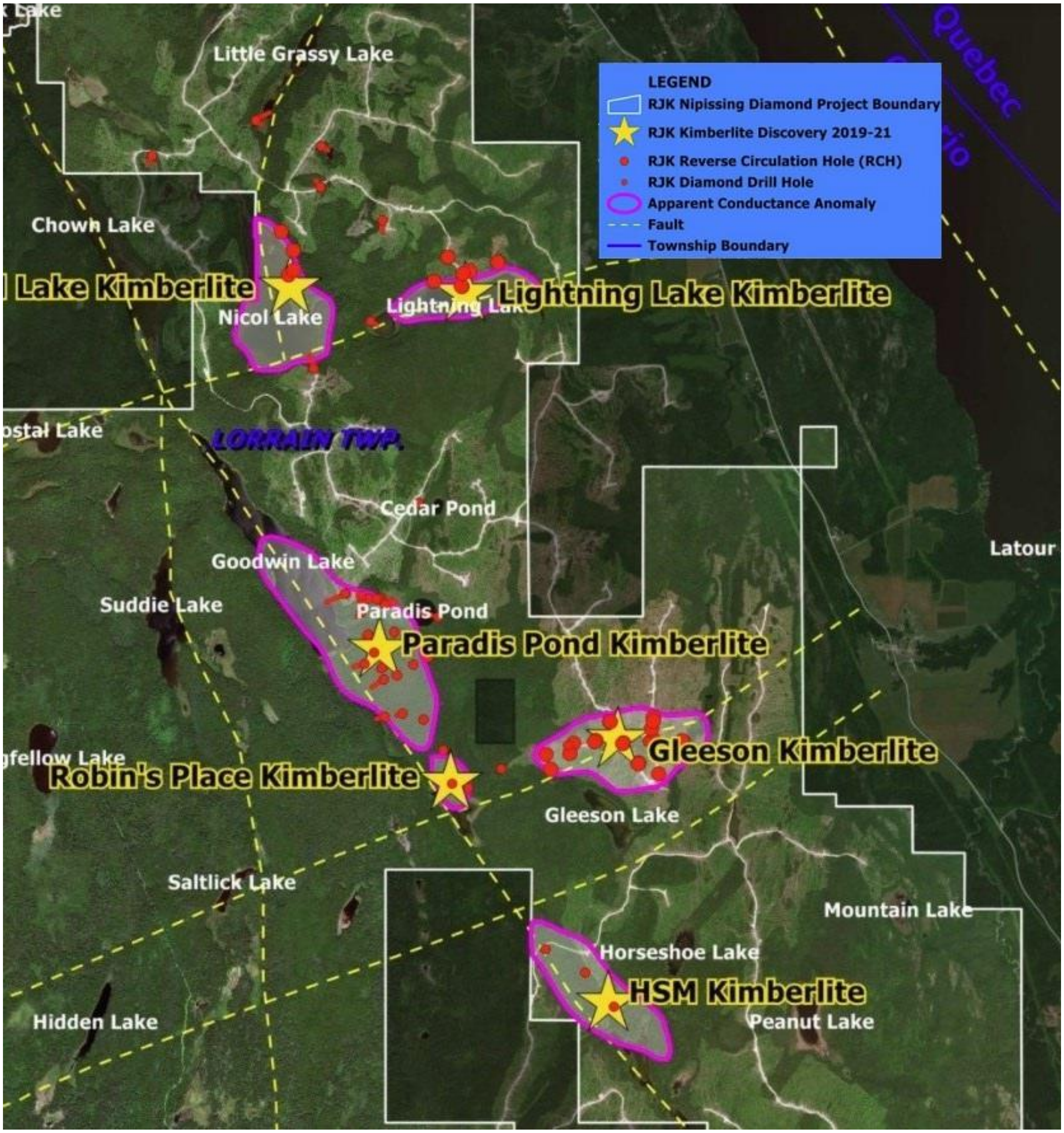


Figure 25 - Map: showing Kimberlites in Lorrain Chain discovered by RJK Explorations Ltd. in 2020

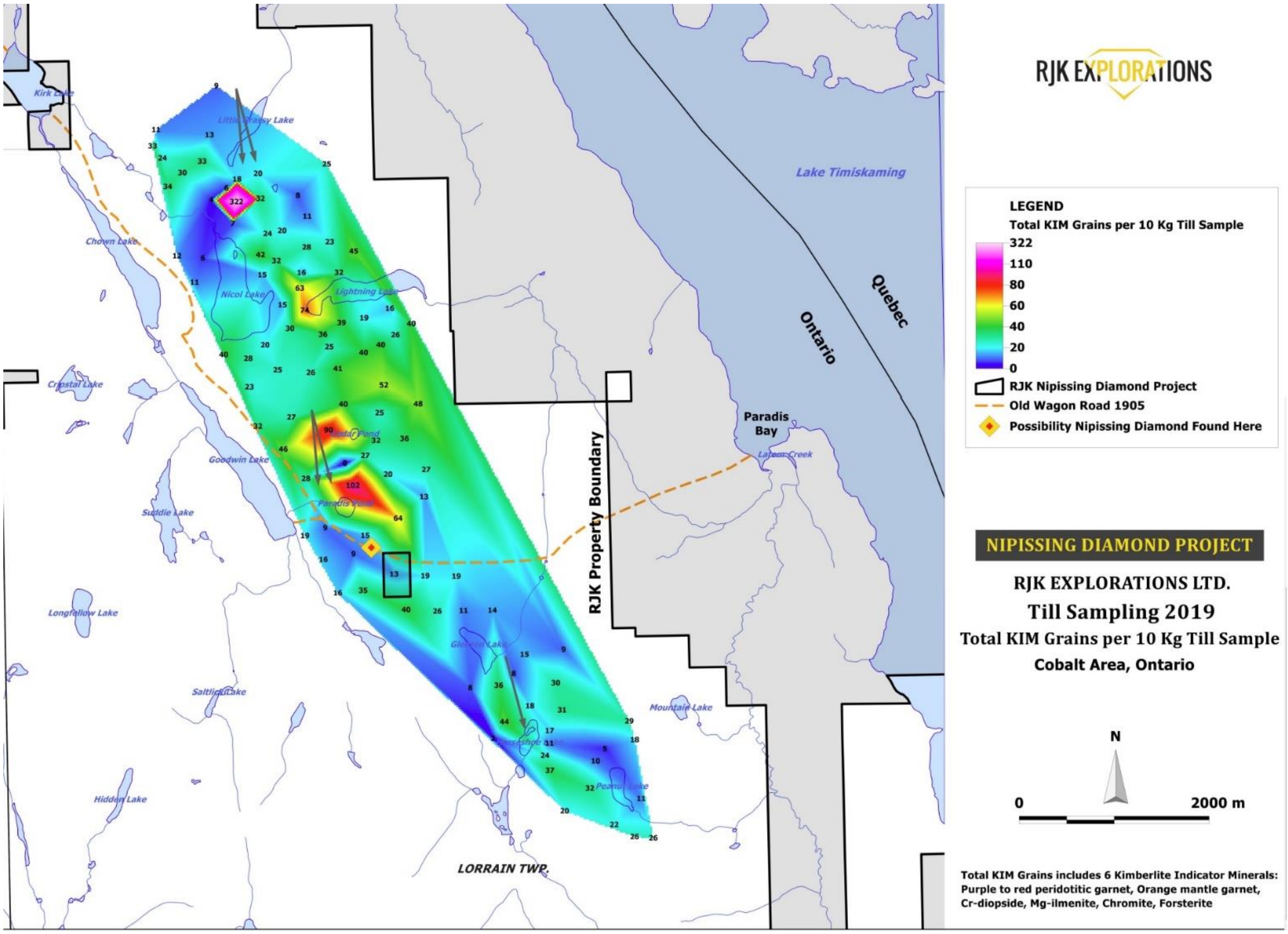
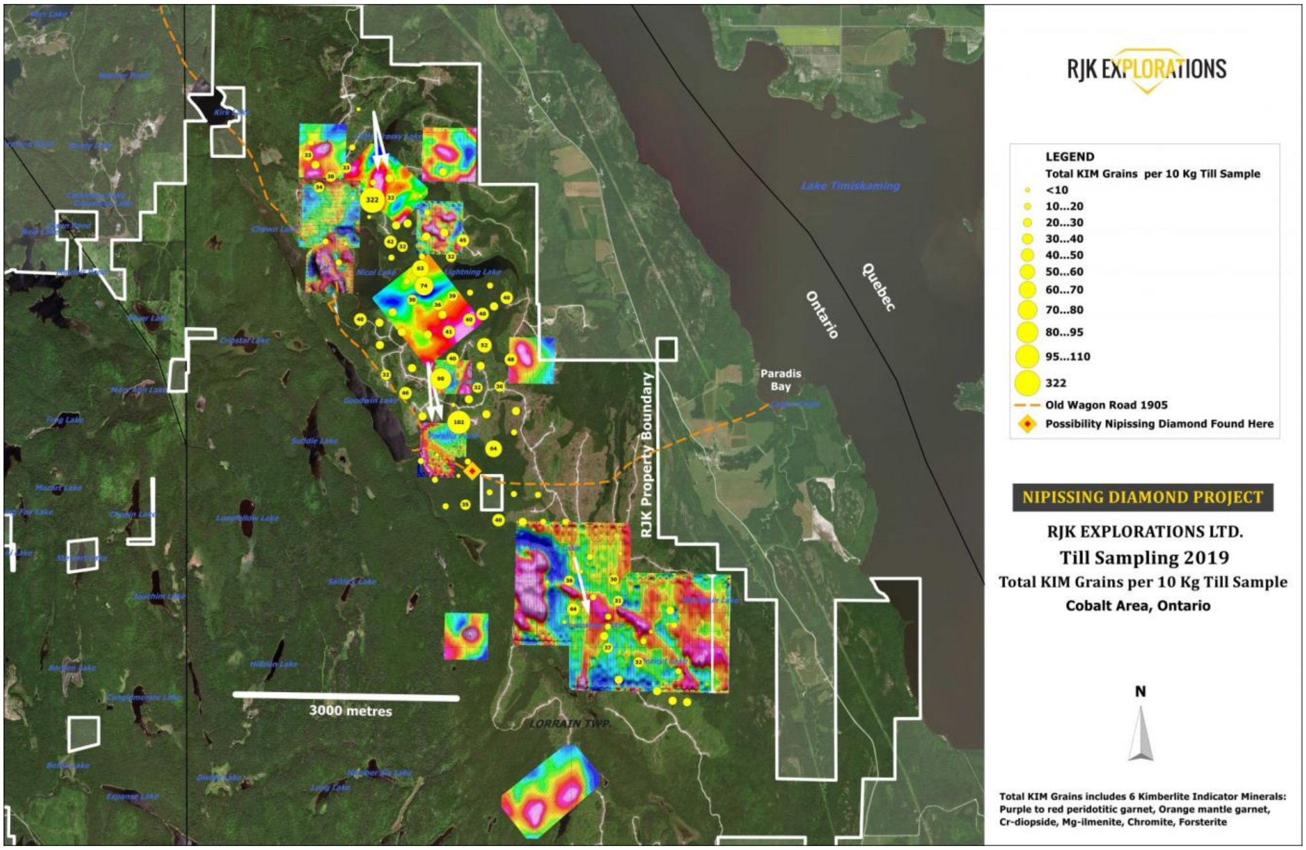


Figure 26 - Normalized KIM Results Density Map of the Lorrain Chain, courtesy of RJK Explorations Ltd.

Bishop North Lorrain KIM Maps

By RJK Explorations|March 26th, 2020
Accessible on RJK's Website @: https://www.rjkexplorations.com/bishop-north-lorrain-kim-maps/

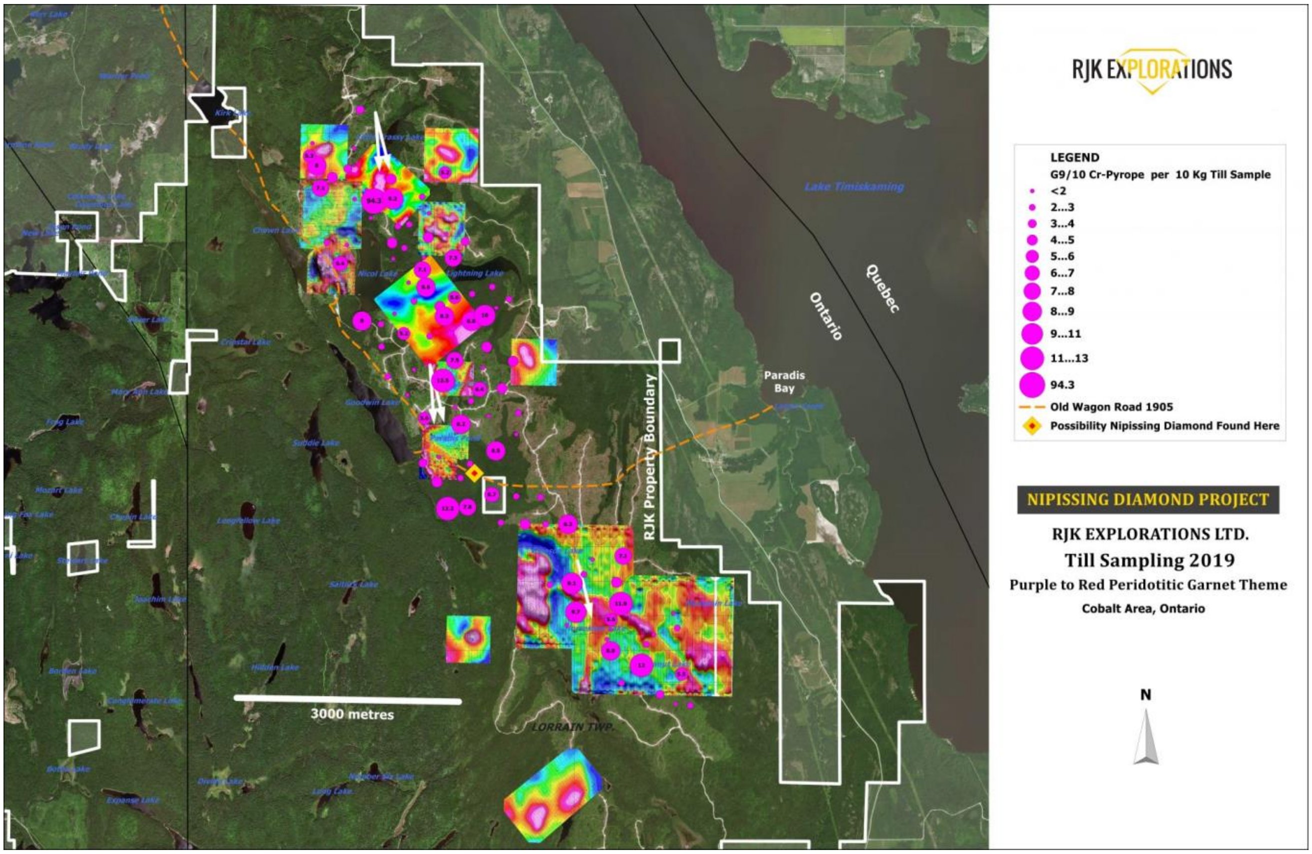


Notes:

1. This map includes results from the 2019 KIM sampling program only. The results confirmed the sampling reports completed by the Bishop family south of Grassy Lake between 2014 and 2018, which returned abnormally high amounts of KIMs in concentrate. Select grains from that concentrate confirmed presence of KIMs in probing.
2. Two kimberlite boulder samples were discovered down-ice from the Grassy Lake target, both nearby the KIM sample locations.

Figure 27 - Map: distribution of Total KIMs - Lorrain Till Sampling 2019, courtesy of RJK Explorations Ltd.

G9 & G10 Garnets

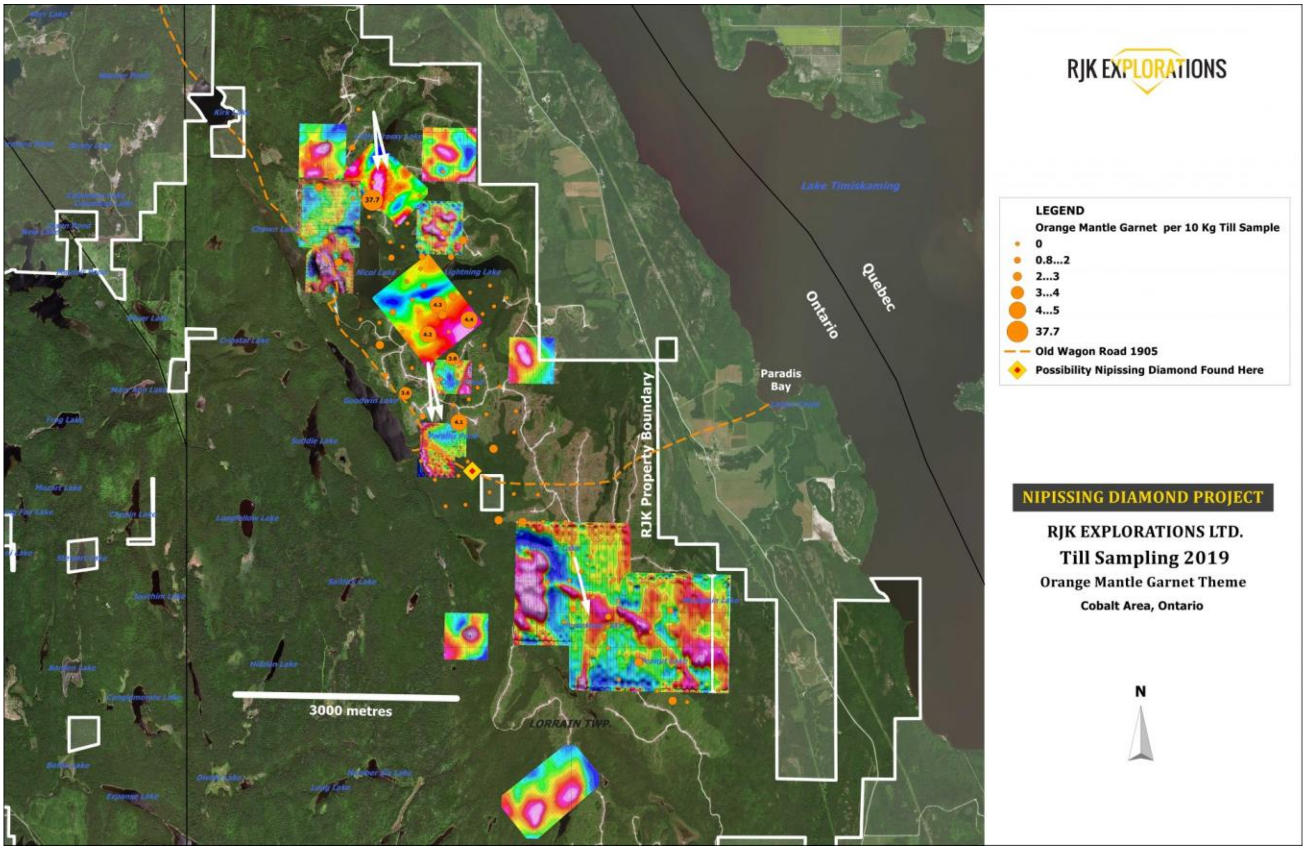


Notes:

1. Traditionally, G9 and G10 garnets have been used to determine the potential for diamonds in their kimberlite sources. Like Ilmenites, their chemistry is very important, as specific types are generally correlated with diamondiferous pipes.

Figure 28 – Map: <u>distribution of **G9 and G10 Garnets**</u> - Till Sampling 2019, courtesy of RJK Explorations Ltd.

Eclogitic Garnets

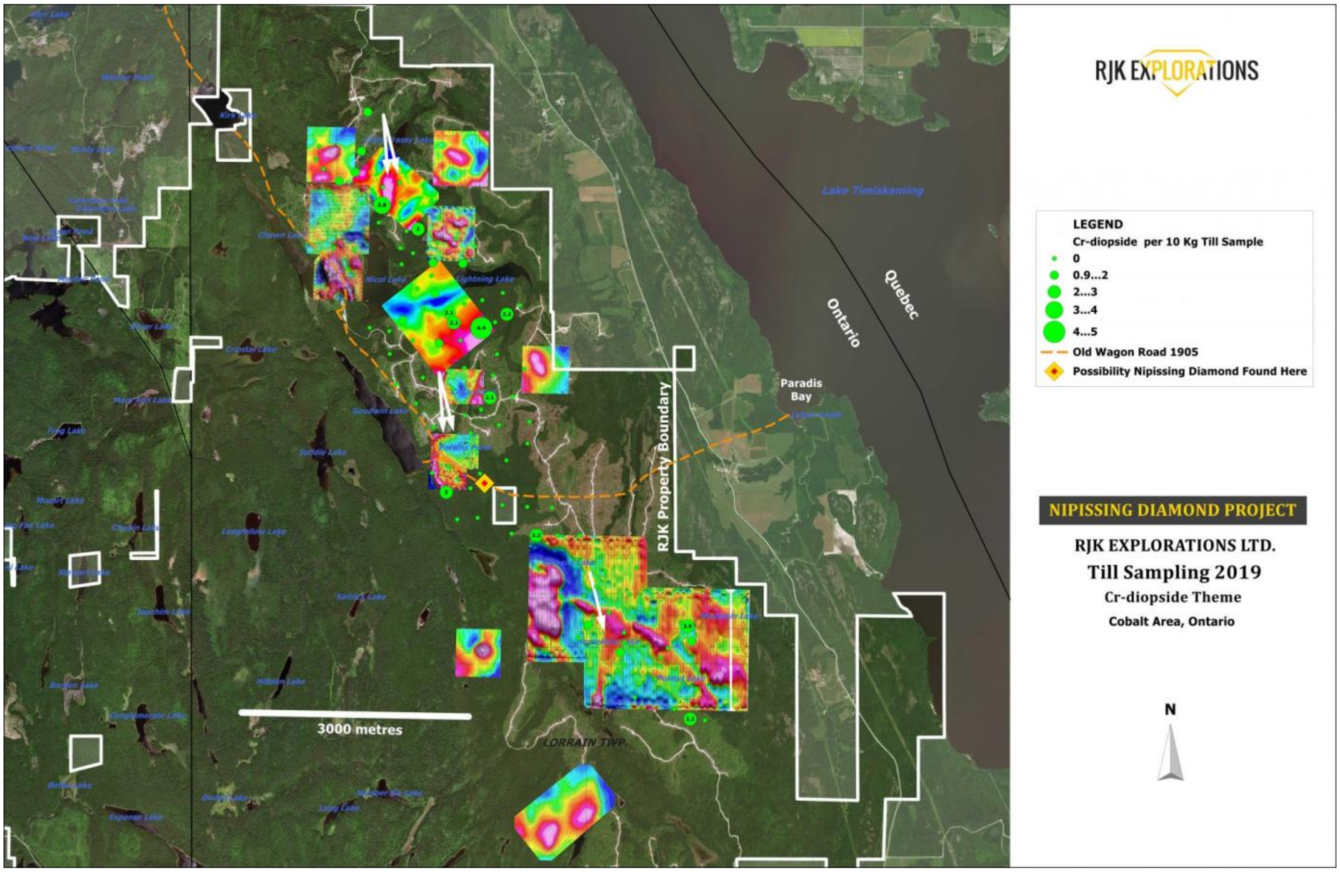


Notes:

1. Discovery of Eclogitic Garnets was an important step in determining that De Beers' Victor kimberlite pipe contained economic diamonds. Eclogitic garnets are believed to originate very deep within the earth's mantle, where larger diamonds are believed to be formed.
2. The Victor Mine won a "Mine of the Year" award in 2008, paying back its entire $1 Billion Capex in year one. It was previously in production for 12 years, producing very high quality diamonds.

Figure 29 - Map: <u>distribution of **Eclogitic Garnets**</u> - Till Sampling 2019, courtesy of RJK Explorations Ltd.

Chrome Diopsides

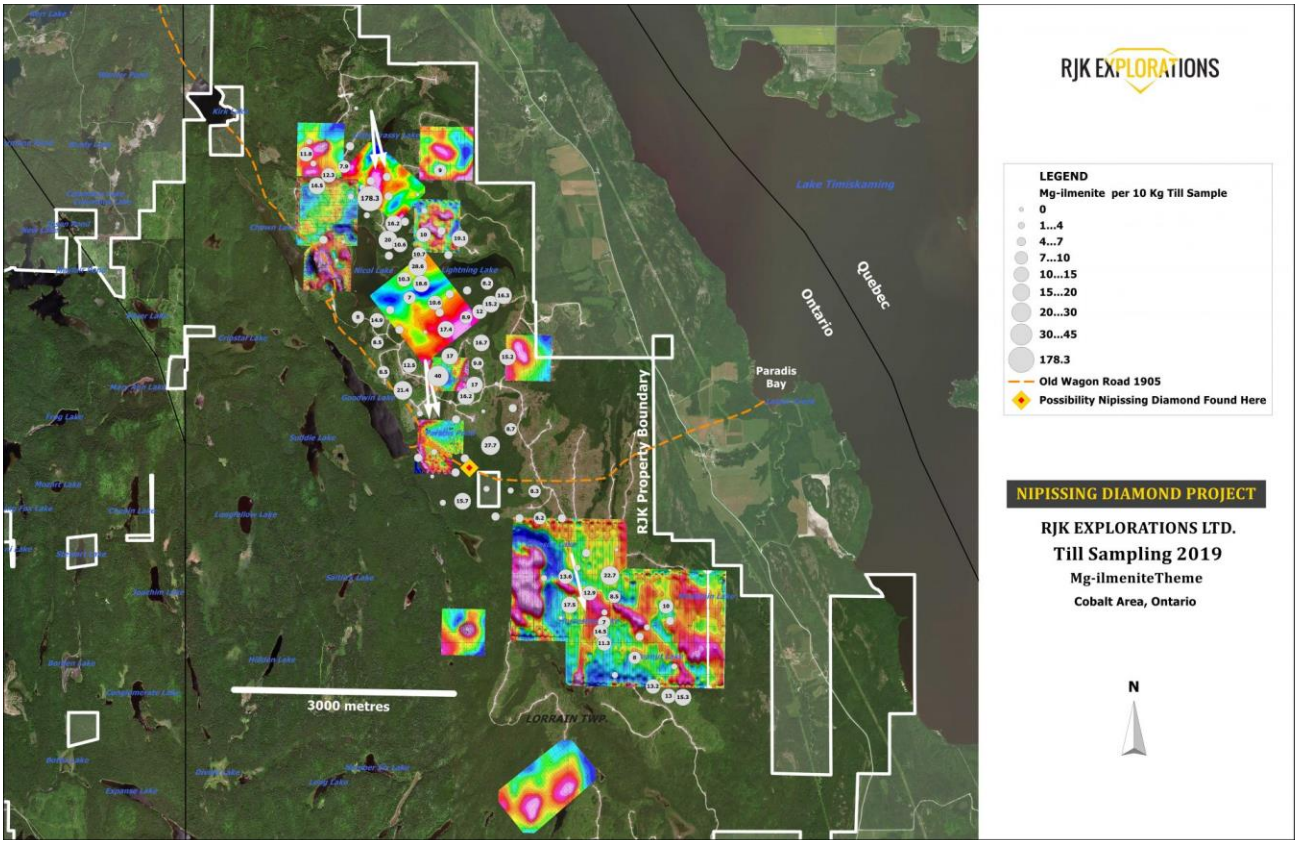


Notes:

1. Chrome Diopsides generally disintegrate the fastest of all KIMs, and therefore historically tend to indicate proximity to a kimberlite source.

Figure 30 - Map: distribution of **Chrome Diopsides** - Till Sampling 2019, courtesy of RJK Explorations Ltd.

Ilmenites



Notes:

1. Ilmenite chemistry is very important when determining the odds of diamonds in the kimberlite origin, as specific chemistry types are highly correlated world-wide with diamondiferous kimberlite pipes.

Figure 31 - Map: distribution of **Ilmenites** - Till Sampling 2019, courtesy of RJK Explorations Ltd.

Chromites

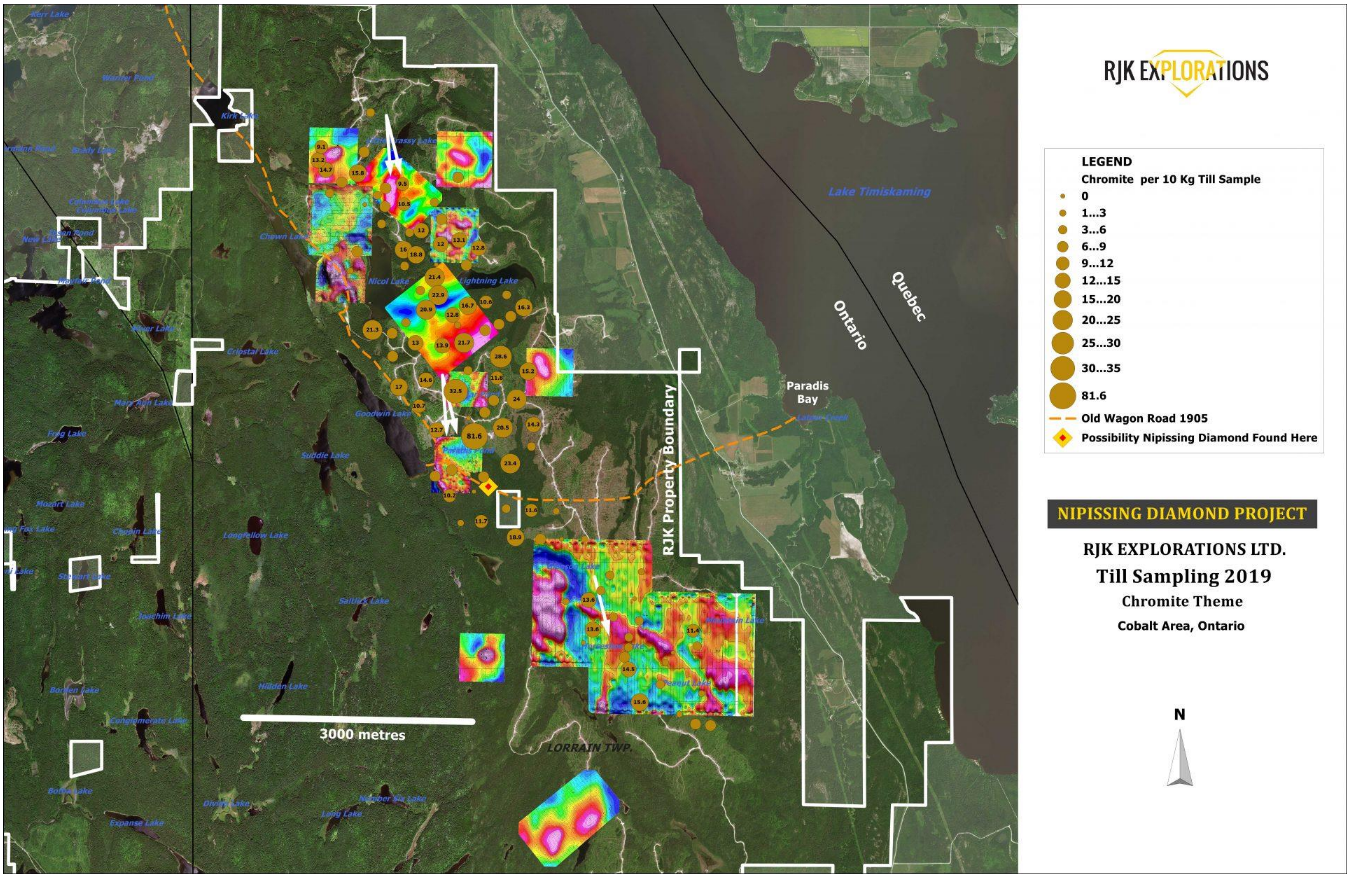


Figure 32 - Map: distribution of **Chromites** - Till Sampling 2019, courtesy of RJK Explorations Ltd.

Forsterite

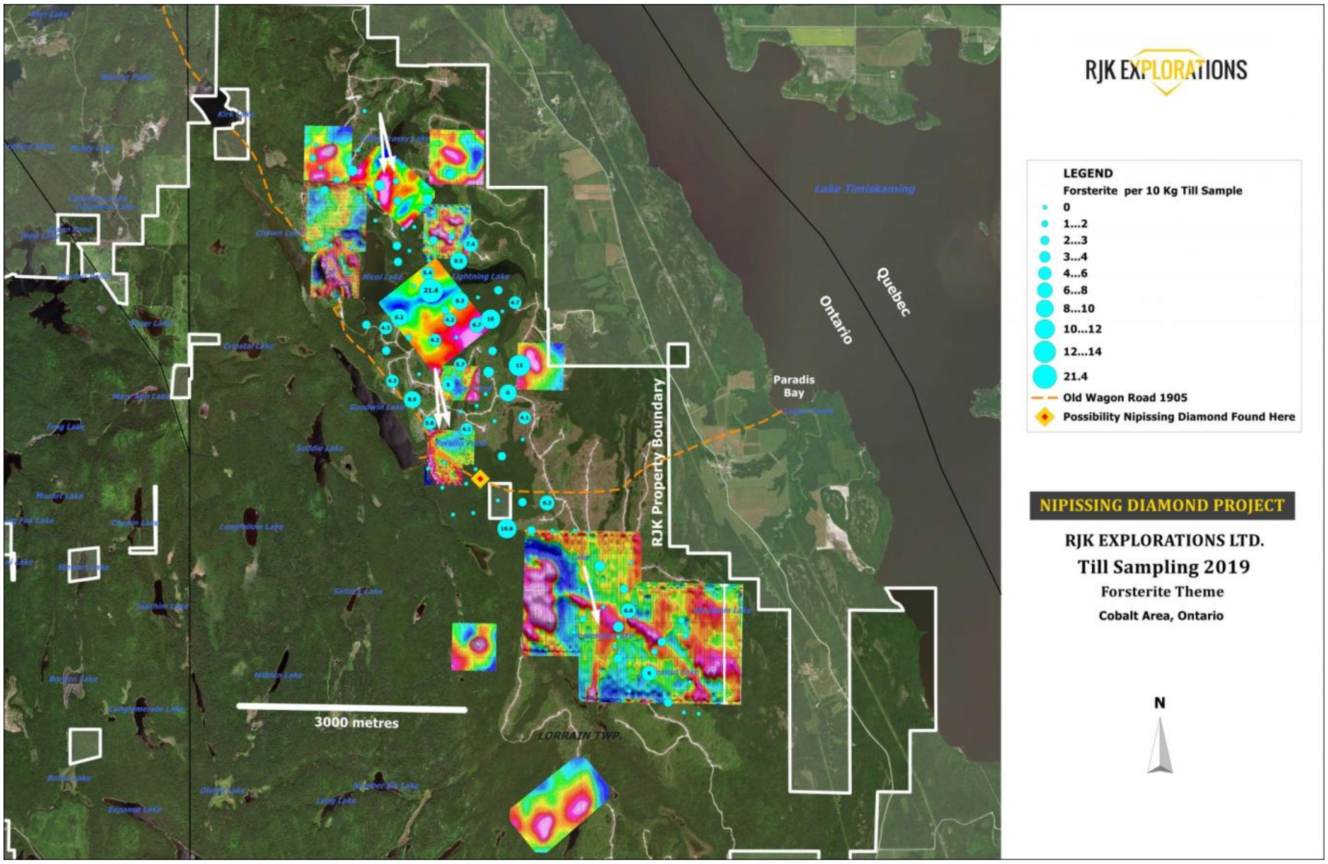


Figure 33 - Map: distribution of **Forsterites** - Till Sampling 2019, courtesy of RJK Explorations Ltd.

2019 LORRAIN CHAIN SURVEY: ODM KIM Results for Units 13-108 (sans 26) with Remarks

Showing: Normalized KIM grain counts calculated from ODM results, Batch number 8213, 8214, 8215, 8216, by Graeme Bishop, Feb.13, 2020. Followed by the assemblage remarks for each unit, provided by Overburden Drilling Management: see full Reports in the appendix of this report. Coordinates for till samples composing each Sample Unit included. Because units do not all weigh the same amount, ODM table weights were used for grain count normalization conversions to a value of 10kg to standardize results.

Unit 13: Samples

GLW-3	0605090 E	5245731 N
GLW-4	0605091 E	5245603 N
GLW-5	0605230 E	5245614 N

ODM Table Weight	Normalized to 10kg	sample composition		
Unit 13: 8.5kg	**Normalized: 34.104 KIMs/10kg**			
ODM KIM count:29	**GP: 7.056**	**20.69**	**percent**	**Pyrope Garnet**
	GO: 2.352	**6.897**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 16.464	**48.276**	**percent**	**Ilmenite**
	CR: 5.88	**17.241**	**percent**	**Chromite**
	FO: 2.352	**6.897**	**percent**	**Forsterite**

ODM Batch No. 8213

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 14: Samples

GLW-1	0605253 E	5245862 N
GLW-2	0605159 E	5245812 N
GLW-6	0605289 E	5245747 N
GLW-7	0605382 E	5245665 N
GLW-8	0605375 E	5245891 N

Unit 14: 12.2kg	**Normalized: 29.484 KIMs/10kg**			
ODM KIM count:36	**GP: 4.914**	**16.667**	**percent**	**Pyrope Garnet**
	GO: 0.819	**2.778**	**percent**	**Orange Garnet**
	DC: 1.638	**5.556**	**percent**	**Chrome Diopside**
	IM: 12.285	**41.667**	**percent**	**Ilmenite**
	CR: 8.19	**27.778**	**percent**	**Chromite**
	FO: 1.638	**5.556**	**percent**	**Forsterite**

ODM Batch No. 8213

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.

Unit 15: Samples

GLW-9	0605186 E	5245979 N
GLW-10	0605084 E	5245948 N
GLW-11	0604973 E	5245922 N

Unit 15: 7.5kg	**Normalized: 23.994 KIMs/10kg**			
ODM KIM count:18	**GP: 7.998**	**33.333**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 1.333	**5.556**	**percent**	**Ilmenite**
	CR: 14.663	**61.111**	**percent**	**Chromite**
FO: 0				

ODM Batch No. 8213

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.

Unit 16: Samples

GLW-12	0605096 E	5246086 N
GLW-13	0604968 E	5246068 N
GLW-14	0604871 E	5246077 N

Unit 16: 7.6kg	**Normalized: 32.875 KIMs/10kg**			
ODM KIM count:25	**GP: 5.26**	**16**	**percent**	**Pyrope Garnet**
	GO: 1.315	**4**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 11.835	**36**	**percent**	**Ilmenite**
	CR: 13.15	**40**	**percent**	**Chromite**
	FO: 1.315	**4**	**percent**	**Forsterite**

ODM Batch No. 8213

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 17: Samples

GLW-15	0605077 E	5246248 N
GLW-16	0604952 E	5246252 N

Unit 17: 4.4kg	**Normalized: 11.36 KIMs/10kg**			
ODM KIM count:5	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 2.272	**20**	**percent**	**Ilmenite**
	CR: 9.088	**80**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8213

ODM remarks: Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.

Unit 18: **Samples**

NLW-1	0605111 E	5244972 N
NLW-2	0605307 E	5244978 N
NLW-4	0605286 E	5244803 N

Unit 18: 8.6kg **Normalized: 11.62 KIMs/10kg**

ODM KIM count:10	**GP: 2.324**	**20**	**percent**	**Pyrope Garnet**
	GO: 1.162	**10**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 5.81	**50**	**percent**	**Ilmenite**
	CR: 2.324	**20**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8213

ODM remarks: Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.

Unit 19: **Samples**

NLW-3	0605473 E	5244985 N
NLW-5	0605541 E	5244802 N

Unit 19: 4.9kg **Normalized: 6.12 KIMs/10kg**

ODM KIM count:3	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 0			
	CR: 6.12	**100**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8213

ODM remarks: Almandine/epidote-diopside assemblage.

Unit 20: **Samples**

NLW-6	0605336 E	5244631 N
NLW-7	0605504 E	5244648 N

Unit 20: 4.7kg **Normalized: 10.635 KIMs/10kg**

ODM KIM count:5	**GP: 6.381**	**60**	**percent**	**Pyrope Garnet**
	GO: 2.127	**20**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 0			
	CR: 2.127	**20**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8213

ODM remarks: Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).

Unit 21: **Samples**

NLL-5	0606577 E	5245551 N
NLL-6	0606441 E	5245559 N

Unit 21: 9.5kg	**Normalized: 8.416 KIMs/10kg**			
ODM KIM count:8	**GP: 2.104**	**25**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 0			
	CR: 3.156	**37.5**	**percent**	**Chromite**
	FO: 3.156	**37.5**	**percent**	**Forsterite**

ODM Batch No. 8213
ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.

Unit 22: Samples

NLL-1	0606508 E	5245389 N
NLL-2	0606556 E	5245305 N
NLL-3	0606680 E	5245266 N
NLL-4	0606685 E	5245382 N

Unit 22: 9.5kg	**Normalized: 10.52 KIMs/10kg**			
ODM KIM count:10	**GP: 1.052**	**10**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 1.052	**10**	**percent**	**Ilmenite**
	CR: 8.416	**80**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8213
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.

Unit 23: Samples

NLL-7	0606659 E	5245054 N
NLL-15	0606541 E	5244965 N

Unit 23: 5.0kg	**Normalized: 28 KIMs/10kg**			
ODM KIM count:14	**GP: 4**	**14.286**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 10	**35.714**	**percent**	**Ilmenite**
	CR: 12	**42.857**	**percent**	**Chromite**
	FO: 2	**7.143**	**percent**	**Forsterite**

ODM Batch No. 8213
ODM remarks: Amandine-hornblende/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has partial alteration mantle.

Unit 24: Samples

NLL-8	0606778 E	5244901 N
NLL-16	0606820 E	5245091 N
NLL-17	0607000 E	5245005 N

Unit 24: 8.4kg	**Normalized: 22.61 KIMs/10kg**			
ODM KIM count:19	**GP: 1.19**	**5.263**	**percent**	**Pyrope Garnet**
	GO: 1.19	**5.263**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 5.95	**26.316**	**percent**	**Ilmenite**
	CR: 13.09	**57.895**	**percent**	**Chromite**
	FO: 1.19	**5.263**	**percent**	**Forsterite**

ODM Batch No. 8213
ODM remarks: Almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 25: Samples

NLL-9	0606814 E	5244722 N
NLL-10	0606945 E	5244731 N
NLL-11	0607063 E	5244776 N

Unit 25: 8.2kg	**Normalized: 31.694 KIMs/10kg:**			
ODM KIM count:26	**GP: 7.314**	**23.077**	**percent**	**Pyrope Garnet**
	GO: 1.219	**3.846**	**percent**	**Orange Garnet**
	DC: 1.219	**3.846**	**percent**	**Chrome Diopside**
	IM: 6.095	**19.231**	**percent**	**Ilmenite**
	CR: 7.314	**23.077**	**percent**	**Chromite**
	FO: 8.533	**26.923**	**percent**	**Forsterite**

ODM Batch No. 8213
ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.

Unit 26: **22 kg**
Paradis-Goodwin Creek group six samples blended. Not covered in this report.

Unit 27: Samples

NLL-12	0607145 E	5244881 N
NLL-13	0607147 E	5245022 N
NLL-14	0607000 E	5245005 N

Unit 27: 9.4kg	**Normalized: 44.52 KIMs/10kg**			
ODM KIM count:42	**GP: 3.18**	**7.143**	**percent**	**Pyrope Garnet**
	GO: 2.12	**4.762**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 19.08	**42.857**	**percent**	**Ilmenite**
	CR: 12.72	**28.571**	**percent**	**Chromite**
	FO: 7.42	**16.667**	**percent**	**Forsterite**

ODM Batch No. 8213
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-

poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.

Unit 28: Samples

LL-1	0606617 E	5244738 N
LL-2	0606476 E	5244746 N

Unit 28: 5.6kg	**Normalized: 16.065 KIMs/10kg**			
ODM KIM count:9	**GP: 1.785**	**11.111**	**percent**	**Pyrope Garnet**
	GO: 1.785	**11.111**	**percent**	**Orange Garnet**
	DC: 1.785	**11.111**	**percent**	**Chrome Diopside**
	IM: 10.71	**66.666**	**percent**	**Ilmenite**
	CR: 0			
	FO: 0			

ODM Batch No. 8213
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 29: Samples

LL-B	0606467 E	5244609 N
LL-C	0606590 E	5244545 N

Unit 29: 5.6kg	**Normalized: 62.475 KIMs/10kg**			
ODM KIM count:35	**GP: 7.14**	**11.429**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 28.56	**45.714**	**percent**	**Ilmenite**
	CR: 21.42	**34.286**	**percent**	**Chromite**
	FO: 5.355	**8.571**	**percent**	**Forsterite**

ODM Batch No. 8213
ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 30: Samples

LL-7	0606028 E	5244867 N
LL-10	0606202 E	5244993 N

Unit 30: 5.0kg	**Normalized: 42 KIMs/10kg**			
ODM KIM count:21	**GP: 4**	**9.524**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 20	**47.619**	**percent**	**Ilmenite**
	CR: 16	**38.095**	**percent**	**Chromite**
	FO: 2	**4.762**	**percent**	**Forsterite**

ODM Batch No. 8213
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 31: **Samples**

LL-3	0606323 E	5244776 N
LL-8	0606218 E	5244876 N
LL-9	0606305 E	5244950 N

Unit 31: 8.5kg **Normalized: 31.752 KIMs/10kg**

ODM KIM count:27	**GP: 2.352**	**7.407**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 10.584	**33.333**	**percent**	**Ilmenite**
	CR: 18.816	**59.259**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8213

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 32: **Samples**

LL-4	0606201 E	5244711 N
LL-5	0606082 E	5244655 N
LL-6	0606115 E	5244787 N

Unit 32: 7.8kg **Normalized: 15.384 KIMs/10kg**

ODM KIM count:12	**GP: 1.282**	**8.333**	**percent**	**Pyrope Garnet**
	GO: 1.282	**8.333**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 6.41	**41.667**	**percent**	**Ilmenite**
	CR: 3.846	**25**	**percent**	**Chromite**
	FO: 2.564	**16.667**	**percent**	**Forsterite**

ODM Batch No. 8213

ODM remarks: Hornblende-almandine/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 33: **Samples**

LL-A	0606334 E	5244542 N
LL-I	0606404 E	5244354 N
LL-J	0606300 E	5244309 N

Unit 33: 7.8kg **Normalized: 15.384 KIMs/10kg**

ODM KIM count:12	**GP: 1.282**	**8.333**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 10.256	**66.666**	**percent**	**Ilmenite**
	CR: 3.846	**25**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8213

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 34: Samples

LL-D	0606585 E	5244409 N
LL-E	0606576 E	5244278 N

Unit 34: 7.3kg **Normalized: 71 KIMs/10kg**

ODM KIM count:52	**GP: 8.214**	**11.538**	**percent**	**Pyrope Garnet**
	GO: 1.369	**1.923**	**percent**	**Orange Garnet**
	DC: 1.369	**1.923**	**percent**	**Chrome Diopside**
	IM: 17.797	**25**	**percent**	**Ilmenite**
	CR: 21.904	**30.769**	**percent**	**Chromite**
	FO: 20.535	**28.846**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 35: Samples

LL-G	0606361 E	5244127 N
LL-F	0606488 E	5244176 N

Unit 35: 4.3kg **Normalized: 30.225 KIMs/10kg**

ODM KIM count:13	**GP: 2.325**	**7.692**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 6.975	**23.077**	**percent**	**Ilmenite**
	CR: 20.925	**69.231**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8214

ODM remarks: Almandine-hornblende/epidote-diopside assemblage.

Unit 36: Samples

LL-H	0606254 E	5244076 N
NL-1	0606096 E	5243986 N
NL-10	0606138 E	5243875 N

Unit 36: 8.5kg **Normalized: 19.992 KIMs/10kg**

ODM KIM count:17	**GP: 1.176**	**5.882**	**percent**	**Pyrope Garnet**
	GO: 1.176	**5.882**	**percent**	**Orange Garnet**
	DC: 1.176	**5.882**	**percent**	**Chrome Diopside**
	IM: 4.704	**23.529**	**percent**	**Ilmenite**
	CR: 3.528	**17.647**	**percent**	**Chromite**
	FO: 8.232	**41.176**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 37: Samples

NL-2	0605955 E	5243904 N
NL-3	0606014 E	5243767 N

Unit 37: 4.7kg **Normalized: 27.651 KIMs/10kg**

ODM KIM count:13	**GP: 2.127**	**7.692**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 14.889	**53.846**	**percent**	**Ilmenite**
	CR: 6.381	**23.077**	**percent**	**Chromite**
	FO: 4.254	**15.385**	**percent**	**Forsterite**

ODM Batch No. 8214
ODM remarks: Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.

Unit 38: Samples

NL-4	0605806 E	5243905 N	not ideal– est.80% black muck
NL-5	0605648 E	5243847 N	

Unit 38: 5.0kg **Normalized: 30 KIMs/10kg** VALUES SHOULD BE multiplied **133%** **(See end note)**

ODM KIM count:15	**GP: 6**	**20**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 6	**20**	**percent**	**Ilmenite**
	CR: 16	**53.33**	**percent**	**Chromite**
	FO: 2	**6.667**	**percent**	**Forsterite**

ODM Batch No. 8214
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 39: Samples

NL-6	0605916 E	5243554 N
NL-7	0606077 E	5243515 N

Unit 39: 4.7kg **Normalized: 23.397 KIMs/10kg**

ODM KIM count:11	**GP: 2.127**	**9.091**	**percent**	**Pyrope Garnet**
	GO: 2.127	**9.091**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 8.508	**36.364**	**percent**	**Ilmenite**
	CR: 8.508	**36.364**	**percent**	**Chromite**
	FO: 2.127	**9.091**	**percent**	**Forsterite**

ODM Batch No. 8214
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 40: Samples

NL-8	0606234 E	5243655 N
NL-9	0606266 E	5243773 N
NL-11	0606385 E	5243721 N

Unit 40: 7.7kg	**Normalized: 24.662 KIMs/10kg**			
ODM KIM count:19	**GP: 5.192**	**21.053**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 5.192	**21.053**	**percent**	**Ilmenite**
	CR: 12.98	**52.632**	**percent**	**Chromite**
	FO: 1.298	**5.263**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-augite-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.

Unit 41: Samples

LC-6	0606816 E	5244111 N
LC-7	0606729 E	5244067 N

Unit 41: 4.7kg	**Normalized: 36.159 KIMs/10kg**			
ODM KIM count:17	**GP: 4.254**	**11.765**	**percent**	**Pyrope Garnet**
	GO: 4.254	**11.765**	**percent**	**Orange Garnet**
	DC: 2.127	**5.882**	**percent**	**Chrome Diopside**
	IM: 10.635	**29.412**	**percent**	**Ilmenite**
	CR: 12.762	**35.294**	**percent**	**Chromite**
	FO: 2.127	**5.882**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende/epidote-diopside assemblage.

Unit 42: Samples

LLS-1	0606900 E	5244258 N	not ideal– est.50% black muck
LLS-2	0607037 E	5244168 N	

Unit 42: 4.5kg **Normalized: 31.108 KIMs/10kg** VALUES SHOULD BE multiplied **125% (See end note)**

ODM KIM count:14	**GP: 4.444**	**14.286**	**percent**	**Pyrope Garnet**
	GO: 2.222	**7.143**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 4.444	**14.286**	**percent**	**Ilmenite**
	CR: 13.332	**42.857**	**percent**	**Chromite**
	FO: 6.666	**21.429**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.

Unit 43: Samples

LLS-3	0607135 E	5244304 N
LLS-4	0607276 E	5244224 N

Unit 43: 4.7kg	**Normalized: 19.143 KIMs/10kg**			
ODM KIM count:9	**GP: 2.127**	**11.111**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 6.381	**33.333**	**percent**	**Ilmenite**
	CR: 10.635	**55.555**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8214

ODM remarks: Almandine-fayalite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.

Unit 44: Samples

LLS-5	0607389 E	5244340 N
LLS-6	0607562 E	5244390 N

Unit 44: 4.9kg	**Normalized: 16.32 KIMs/10kg**			
ODM KIM count:8	**GP: 2.04**	**12.5**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 8.16	**50**	**percent**	**Ilmenite**
	CR: 4.08	**25**	**percent**	**Chromite**
	FO: 2.04	**12.5**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.

Unit 45: Samples

LC-5	0606940 E	5244005 N
LC-8	0606737 E	5243912 N

Unit 45: 4.8kg	**Normalized: 24.996 KIMs/10kg**			
ODM KIM count:12	**GP: 8.332**	**33.333**	**percent**	**Pyrope Garnet**
	GO: 2.083	**8.333**	**percent**	**Orange Garnet**
	DC: 2.083	**8.333**	**percent**	**Chrome Diopside**
	IM: 6.249	**25**	**percent**	**Ilmenite**
	CR: 2.083	**8.333**	**percent**	**Chromite**
	FO: 4.166	**16.667**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.

Unit 46: Samples

LLSE-4	0607253 E	5243826 N
LLSE-5	0607149 E	5243969 N

Unit 46: 4.5kg **Normalized: 39.996 KIMs/10kg**

ODM KIM count:18	**GP: 8.888**	**22.222**	**percent**	**Pyrope Garnet**
	GO: 4.444	**11.111**	**percent**	**Orange Garnet**
	DC: 4.444	**11.111**	**percent**	**Chrome Diopside**
	IM: 8.888	**22.222**	**percent**	**Ilmenite**
	CR: 6.666	**16.667**	**percent**	**Chromite**
	FO: 6.666	**16.667**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 47: Samples

LLSE-3	0607427 E	5243888 N
LLSE-6	0607336 E	5244071 N

Unit 47: 5.0kg **Normalized: 40 KIMs/10kg**

ODM KIM count:20	**GP: 10**	**25**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 12	**30**	**percent**	**Ilmenite**
	CR: 8	**20**	**percent**	**Chromite**
	FO: 10	**25**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 48: Samples

LLSE-2	0607574 E	5244004 N
LLSE-7	0607497 E	5244166 N

Unit 48: 4.6kg **Normalized: 26.076 KIMs/10kg**

ODM KIM count:12	**GP: 0**			
	GO: 0			
	DC: 2.173	**8.333**	**percent**	**Chrome Diopside**
	IM: 15.211	**58.333**	**percent**	**Ilmenite**
	CR: 8.692	**33.333**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8214

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.

Unit 49: Samples

LLSE-1	0607721 E	5244115 N
LLS-7	0607686 E	5244290 N

Unit 49: 4.3kg	**Normalized: 39.525 KIMs/10kg**			
ODM KIM count:17	**GP: 2.325**	**5.882**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 16.275	**41.176**	**percent**	**Ilmenite**
	CR: 16.275	**41.176**	**percent**	**Chromite**
	FO: 4.65	**11.765**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 50: Samples

NL-12	0606514 E	5243738 N	not ideal– est.50% black muck
LC-1	0606610 E	5243622 N	
LC-2	0606762 E	5243621 N	
LC-9	0606688 E	5243767 N	

Unit 50: 7.9kg	**Normalized: 24.035 KIMs/10kg** VALUES SHOULD BE multiplied **110% (See end note)**			
ODM KIM count:19	**GP: 2.53**	**10.526**	**percent**	**Pyrope Garnet**
	GO: 3.795	**15.789**	**percent**	**Orange Garnet**
	DC: 1.265	**5.263**	**percent**	**Chrome Diopside**
	IM: 0			
	CR: 12.65	**52.632**	**percent**	**Chromite**
	FO: 3.795	**15.789**	**percent**	**Forsterite**

ODM Batch No. 8214

ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.

Unit 51: Samples

LC-3	0606923 E	5243640 N
LC-4	0606936 E	5243817 N

Unit 51: 4.6kg	**Normalized: 41.287 KIMs/10kg**			
ODM KIM count:19	**GP: 2.173**	**5.263**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 17.384	**42.105**	**percent**	**Ilmenite**
	CR: 21.73	**52.632**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8214

ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 52: Samples

CW-1	0606066 E	5243263 N
CW-2	0606107 E	5243007 N

Unit 52: 4.7kg	**Normalized: 31.905 KIMs/10kg**			
ODM KIM count:15	**GP: 2.127**	**6.667**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 8.508	**26.667**	**percent**	**Ilmenite**
	CR: 17.016	**53.333**	**percent**	**Chromite**
	FO: 4.254	**13.333**	**percent**	**Forsterite**

ODM Batch No. 8214
ODM remarks: Almandine-hornblende/epidote-diopside assemblage.

Unit 53: Samples

CW-4	0606331 E	5243219 N
CW-6	0606546 E	5243242 N

Unit 53: 4.8kg	**Normalized: 27.079 KIMs/10kg**			
ODM KIM count:13	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 12.498	**46.154**	**percent**	**Ilmenite**
	CR: 14.581	**53.846**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8214
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 54: Samples

CW-3	0606265 E	5242809 N
CW-5	0606447 E	5242977 N

Unit 54: 5.6kg	**Normalized: 46.41 KIMs/10kg**			
ODM KIM count:26	**GP: 1.785**	**3.846**	**percent**	**Pyrope Garnet**
	GO: 3.57	**7.692**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 21.42	**46.154**	**percent**	**Ilmenite**
	CR: 10.71	**23.077**	**percent**	**Chromite**
	FO: 8.925	**19.231**	**percent**	**Forsterite**

ODM Batch No. 8215
ODM remarks: Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 FO versus diopside candidates = 3 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine = 1 GO (Cr-poor pyrope); and 4 IM versus crustal ilmenite candidates = 4 IM. 1 GO and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 55: Samples

CNE-1	0607076 E	5243340 N
CNE-3	0606900 E	5243396 N

Unit 55: 5.3kg	**Normalized: 39.606 KIMs/10kg**			
ODM KIM count:21	**GP: 7.544**	**19.048**	**percent**	**Pyrope Garnet**
	GO: 3.772	**9.524**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 16.974	**42.857**	**percent**	**Ilmenite**

CR: 5.658	**14.286**	**percent**	**Chromite**
FO: 5.658	**14.286**	**percent**	**Forsterite**

ODM Batch No. 8215

ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 1 IM versus crustal ilmenite candidate = 1 IM. One GP from 0.5-1.0 mm and both GP, 1 GO, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 56: Samples

CNE-2	0607251 E	5243531 N
CNE-12	0607576 E	5243581 N

Unit 56: 4.2kg **Normalized: 52.36 KIMs/10kg**

ODM KIM count:22	**GP: 4.76**	**9.091**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 16.66	**31.818**	**percent**	**Ilmenite**
	CR: 28.56	**54.545**	**percent**	**Chromite**
	FO: 2.38	**4.545**	**percent**	**Forsterite**

ODM Batch No. 8215

ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 ruby corundum; and 1 FO versus zoisite candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 GP, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 57: Samples

CW-7	0606711 E	5243045 N
CW-8	0606952 E	5243144 N

Unit 57: 4.0kg **Normalized: 90 KIMs/10kg**

ODM KIM count:36	**GP: 12.5**	**13.889**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 40	**44.444**	**percent**	**Ilmenite**
	CR: 32.5	**36.111**	**percent**	**Chromite**
	FO: 5	**5.556**	**percent**	**Forsterite**

ODM Batch No. 8215

ODM remarks: Almandine-hornblende/epidote-diopside assemblage. All 3 GP and 1 IM from 0.5-1.0 mm and 1 GP and 6 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 58: Samples

CNE-4	0607264 E	5243233 N
CNE-7	0607472 E	5243321 N

Unit 58: 5.1kg **Normalized: 25.48 KIMs/10kg**

ODM KIM count:13	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 9.8	**38.462**	**percent**	**Ilmenite**
	CR: 11.76	**46.154**	**percent**	**Chromite**
	FO: 3.92	**15.355**	**percent**	**Forsterite**

ODM Batch No. 8215
ODM remarks: Almandine-hornblende-augite/epidote-diopside-titanite assemblage.

Unit 59: Samples

CNE-9	0607764 E	5243260 N
CNE-11	0607788 E	5243481 N

Unit 59: 4.6kg **Normalized: 47.806 KIMs/10kg**

ODM KIM count:22	**GP: 4.346**	**9.091**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 15.211	**31.818**	**percent**	**Ilmenite**
	CR: 15.211	**31.818**	**percent**	**Chromite**
	FO: 13.038	**27.273**	**percent**	**Forsterite**

ODM Batch No. 8215
ODM remarks: Almandine-hornblende/epidote-diopside assemblage.

Unit 60: Samples

CW-9	0606555 E	5242667 N
CW-10	0606454 E	5242465 N
CW-11	0606770 E	5242618 N

Unit 60: 7.1kg **Normalized: 28.16 KIMs/10kg**

ODM KIM count:20	**GP: 5.632**	**20**	**percent**	**Pyrope Garnet**
	GO: 1.408	**5**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 2.816	**10**	**percent**	**Ilmenite**
	CR: 12.672	**45**	**percent**	**Chromite**
	FO: 5.632	**20**	**percent**	**Forsterite**

ODM Batch No. 8215
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 2 IM.

Unit 61: Sample

PNE-1	0607004 E	5242745 N

Unit 61: 2.0kg **Normalized: 0 KIMs/10kg**

ODM KIM count:0	**GP: 0**
	GO: 0
	DC: 0
	IM: 0
	CR: 0
	FO: 0

ODM Batch No. 8215
ODM remarks: Hornblende-hematite/epidote-zircon assemblage. SEM checks from 0.25-0.5 mm fraction: 5 titanite versus zircon candidates = 5 zircons.

Unit 62: Samples

PNE-4	0607241 E	5242744 N
CNE-10	0607193 E	5242905 N

Unit 62: 3.7kg **Normalized: 27.02 KIMs/10kg**

ODM KIM count:10	**GP: 2.702**	**10**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 16.212	**60**	**percent**	**Ilmenite**
	CR: 8.106	**30**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8215
ODM remarks: Hornblende-almandine/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and sole GP and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 63: Samples

CNE-5	0607296 E	5243055 N
CNE-6	0607366 E	5242915 N

Unit 63: 4.7kg **Normalized: 31.905 KIMs/10kg**

ODM KIM count:15	**GP: 6.381**	**20**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 2.127	**6.666**	**percent**	**Chrome Diopside**
	IM: 17.016	**53.33**	**percent**	**Ilmenite**
	CR: 6.381	**20**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8215
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.

Unit 64: Samples

CNE-8	0607631 E	5243004 N

Unit 64: 2.5kg **Normalized: 36 KIMs/10kg**

ODM KIM count:9	**GP: 4**	**11.111**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 0			
	CR: 24	**66.666**	**percent**	**Chromite**
	FO: 8	**22.222**	**percent**	**Forsterite**

ODM Batch No. 8215
ODM remarks: Hornblende-almandine/epidote-diopside assemblage.

Unit 65: Samples

PNE-2	0606989 E	5242537 N
PNE-3	0607187 E	5242485 N

Unit 65: 4.9kg **Normalized: 102 KIMs/10kg**

ODM KIM count:50	**GP: 8.16**	**8**	**percent**	**Pyrope Garnet**
	GO: 4.08	**4**	**percent**	**Orange Garnet**

DC: 0			
IM: 4.08	**4**	**percent**	**Ilmenite**
CR: 81.6	**80**	**percent**	**Chromite**
FO: 4.08	**4**	**percent**	**Forsterite**

ODM Batch No. 8215

ODM remarks: Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 3 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite and 1 CR.

Unit 66: Samples

PNE-5	0607475 E	5242735 N	not ideal– est.25% black muck
PNE-6	0607440 E	5242521 N	

Unit 66: 3.8kg **Normalized: 18.417 KIMs/10kg** VALUES SHOULD BE multiplied **111.25% (See end note)**

ODM KIM count:7	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 0			
	CR: 18.417	**100**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8215

ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 CR.

Unit 67: Samples

PNE-7	0607952 E	5242730 N
PNE-8	0607765 E	5242626 N

Unit 67: 4.9kg **Normalized: 26.52 KIMs/10kg**

ODM KIM count:13	**GP: 2.04**	**7.692**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 6.12	**23.077**	**percent**	**Ilmenite**
	CR: 14.28	**53.846**	**percent**	**Chromite**
	FO: 4.08	**15.385**	**percent**	**Forsterite**

ODM Batch No. 8215

ODM remarks: Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 FO versus diopside candidate = 1 FO. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 68: Samples

PNE-9	0607910 E	5242443 N
PNE-10	0607763 E	5242339 N

Unit 68: 4.6kg **Normalized: 13.038 KIMs/10kg**

ODM KIM count:6	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 8.692	**66.666**	**percent**	**Ilmenite**
	CR: 4.346	**33.333**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8215

ODM remarks: Almandine-hornblende/epidote-staurolite-diopside assemblage. Sole IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 69: Samples

PNE-11	0607577 E	5242251 N
PNE-12	0607551 E	5242076 N

Unit 69: 4.7kg **Normalized: 63.81 KIMs/10kg**

ODM KIM count:30	**GP: 8.508**	**13.333**	**percent**	**Pyrope Garnet**
	GO: 2.127	**3.333**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 27.651	**43.333**	**percent**	**Ilmenite**
	CR: 23.397	**36.666**	**percent**	**Chromite**
	FO: 2.127	**3.333**	**percent**	**Forsterite**

ODM Batch No. 8215
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. 2 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 70: Samples

PP-6	0607122 E	5241981 N
PP-7	0607314 E	5241985 N

Unit 70: 4.6kg **Normalized: 15.211 KIMs/10kg**

ODM KIM count:7	**GP: 2.173**	**14.285**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 6.519	**42.857**	**percent**	**Ilmenite**
	CR: 6.519	**42.857**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8215
ODM remarks: Almandine/epidote-diopside assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 71: Samples

PP-3	0606878 E	5241988 N
PP-8	0606718 E	5242142 N

Unit 71: 4.6kg **Normalized: 8.692 KIMs/10kg**

ODM KIM count:4	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 2.173	**25**	**percent**	**Ilmenite**
	CR: 6.519	**75**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8215
ODM remarks: Almandine-hornblende/epidote-staurolite assemblage.

Unit 72: Samples

PP-1	0606637 E	5241982 N
PP-2	0606581 E	5241822 N
PP-9	0606532 E	5242137 N

Unit 72: 7.9kg **Normalized: 18.975 KIMs/10kg**

ODM KIM count:15	**GP: 3.795**	**20**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 6.325	**33.333**	**percent**	**Ilmenite**
	CR: 8.855	**46.667**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8215
ODM remarks: Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 73: Samples

PPS-1	0606792 E	5241815 N
PPS-2	0606761 E	5241645 N

Unit 73: 4.9kg **Normalized: 16.23 KIMs/10kg**

ODM KIM count:8	**GP: 4.08**	**25**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 2.04	**12.5**	**percent**	**Chrome Diopside**
	IM: 0			
	CR: 10.2	**62.5**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8215
ODM remarks: Almandine-hornblende/epidote-diopside assemblage.

Unit 74: Samples

PP-4	0606995 E	5241826 N	
PP-5	0607195 E	5241752 N	not ideal– est.50% black muck

Unit 74: 4.3kg **Normalized: 6.975 KIMs/10kg** VALUES SHOULD BE multiplied **122.8%** **(See end note)**

ODM KIM count:3	**GP: 2.325**	**33.333**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 4.65	**66.666**	**percent**	**Ilmenite**
	CR: 0			
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hematite-hornblende/epidote-staurolite assemblage. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.

Unit 75: Samples

PPS-3	0606843 E	5241463 N
PPS-4	0607014 E	5241289 N

Unit 75: 4.9kg	**Normalized: 16.32 KIMs/10kg**			
ODM KIM count:8	**GP: 12.24**	**75**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 2.04	**12.5**	**percent**	**Ilmenite**
	CR: 2.04	**12.5**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hematite/epidote-staurolite assemblage. Sole GP from 0.5-1.0 mm; and 2 GP and sole IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 76: Samples

PPS-5	0607285 E	5241215 N	
PPS-6	0607240 E	5241416 N	not ideal– est.50% black muck
PPS-8	0607064 E	5241574 N	

Unit 76: 6.9kg	**Normalized: 26.082 KIMs/10kg** VALUES SHOULD BE multiplied **135% (See end note)**			
ODM KIM count:18	**GP: 5.796**	**22.222**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 11.592	**44.444**	**percent**	**Ilmenite**
	CR: 8.694	**33.333**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 77: Samples

PPS-7	0607433 E	5241605 N
GN-14	0607608 E	5241545 N

Unit 77: 4.5kg	**Normalized: 13.332 KIMs/10kg**			
ODM KIM count:6	**GP: 6.666**	**50**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 2.222	**16.666**	**percent**	**Ilmenite**
	CR: 4.444	**33.333**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine/epidote-diopside-staurolite assemblage. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 78: Samples

GN-12	0607927 E	5241555 N
GN-13	0607772 E	5241559 N

Unit 78: 4.3kg	**Normalized: 18.6 KIMs/10kg**			
ODM KIM count:8	**GP: 2.325**	**12.5**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 2.325	**12.5**	**percent**	**Ilmenite**

	CR: 11.625	**62.5**	**percent**	**Chromite**
	FO: 2.325	**12.5**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage.

Unit 79: Samples

GN-10	0608256 E	5241557 N	
GN-11	0608100 E	5241549 N	

Unit 79: 4.8kg **Normalized: 18.747 KIMs/10kg**

ODM KIM count:9	**GP: 2.083**	**11.111**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 8.332	**44.444**	**percent**	**Ilmenite**
	CR: 2.083	**11.111**	**percent**	**Chromite**
	FO: 6.249	**33.333**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 80: Samples

GN-7	0607739 E	5241209 N	
GN-8	0607558 E	5241190 N	not ideal– est.50% black muck

Unit 80: 4.6kg **Normalized: 32.595 KIMs/10kg** VALUES SHOULD BE multiplied **123.9%** **(See end note)**

ODM KIM count:15	**GP: 2.173**	**6.666**	**percent**	**Pyrope Garnet**
	GO: 2.173	**6.666**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 4.346	**13.333**	**percent**	**Ilmenite**
	CR: 15.211	**46.666**	**percent**	**Chromite**
	FO: 8.692	**26.666**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 6 crustal ilmenite and 1 FO candidate = 1 FO. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.

Unit 81: Samples

GN-5	0608049 E	5241151 N	
GN-6	0607904 E	5241216 N	

Unit 81: 4.6kg **Normalized: 26.076 KIMs/10kg**

ODM KIM count:12	**GP: 4.346**	**16.667**	**percent**	**Pyrope Garnet**
	GO: 2.173	**8.333**	**percent**	**Orange Garnet**
	DC: 2.173	**8.333**	**percent**	**Chrome Diopside**
	IM: 6.519	**25**	**percent**	**Ilmenite**
	CR: 8.692	**33.333**	**percent**	**Chromite**
	FO: 2.137	**8.333**	**percent**	**Forsterite**

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 82: Samples

GN-3	0608332 E	5241178 N	
GN-4	0608176 E	5241201 N	not ideal– est.25% black muck

Unit 82: 4.1kg **Normalized: 9.756 KIMs/10kg** VALUES SHOULD BE multiplied **111.6% (See end note)**

ODM KIM count:4	**GP: 2.439**	**25**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 7.317	**75**	**percent**	**Ilmenite**
	CR: 0			
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-augite/diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 83: Samples

GN-1	0608630 E	5241201 N
GN-2	0608484 E	5241186 N

Unit 83: 4.9kg **Normalized: 14.28 KIMs/10kg**

ODM KIM count:7	**GP: 8.16**	**57.143**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 4.08	**28.571**	**percent**	**Ilmenite**
	CR: 2.04	**14.286**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM.

Unit 84: Samples

GLS-8	0608317 E	5240238 N	
GLS-9	0608300 E	5240387 N	not ideal – est.25% black muck
GLS-10	0608361 E	5240502 N	

Unit 84: 8.0kg **Normalized: 7.5 KIMs/10kg** VALUES SHOULD BE multiplied **108% (See end note)**

ODM KIM count:6	**GP: 2.5**	**33.333**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 2.5	**33.333**	**percent**	**Ilmenite**
	CR: 2.5	**33.333**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine/epidote-staurolite assemblage. Both IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 85: Samples

GLS-7	0608529 E	5240438 N
GLS-11	0608719 E	5240363 N

Unit 85: 2.2kg **Normalized: 36.36 KIMs/10kg**

ODM KIM count:8	**GP: 9.09**	**25**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 13.635	**37.5**	**percent**	**Ilmenite**
	CR: 13.635	**37.5**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-staurolite assemblage. Sole IM from 1.0-2.0 mm fraction has a partial alteration mantle.

Unit 86: Samples

GLS-A	0608711 E	5240627 N
GLS-12	0608855 E	5240424 N

Unit 86: 7.6kg **Normalized: 7.89 KIMs/10kg**

ODM KIM count:6	**GP: 2.63**	**33.333**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 1.315	**16.666**	**percent**	**Ilmenite**
	CR: 3.945	**50**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-staurolite assemblage.

Unit 87: Samples

GLS-B	0608823 E	5240783 N
GLS-C	0608968 E	5240673 N

Unit 87: 5.3kg **Normalized: 15.088 KIMs/10kg**

ODM KIM count:8	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 5.658	**37.5**	**percent**	**Ilmenite**
	CR: 5.658	**37.5**	**percent**	**Chromite**
	FO: 3.772	**25**	**percent**	**Forsterite**

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus zoisite candidates = 2 FO. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.

Unit 88: Samples

GLS-F	0609460 E	5240781 N
GLS-G	0609156 E	5240780 N

Unit 88: 5.6kg	**Normalized: 8.925 KIMs/10kg**			
ODM KIM count:5	**GP: 7.14**	**80**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 0			
	CR: 1.785	**20**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. 3 GP from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 89: Samples

GLS-D	0609113 E	5240437 N
GLS-E	0609336 E	5240419 N

Unit 89: 4.4kg	**Normalized: 29.536 KIMs/10kg**			
ODM KIM count:13	**GP: 4.544**	**15.385**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 22.72	**76.923**	**percent**	**Ilmenite**
	CR: 0			
	FO: 2.272	**7.692**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. 1 IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 90: Samples

GLS-5	0608643 E	5239807 N
GLS-6	0608486 E	5239877 N

Unit 90: 5.3kg	**Normalized: 1.886 KIMs/10kg**			
ODM KIM count:1	**GP: 1.886**	**100**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 0			
	CR: 0			
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage.

Unit 91: Samples

GLS-1	0608621 E	5240072 N
GLS-2	0608758 E	5240075 N
GLS-3	0608749 E	5239961 N
GLS-4	0608608 E	5239959 N

Unit 91: 10.3kg	**Normalized: 43.65 KIMs/10kg**			
ODM KIM count:45	**GP: 9.7**	**22.222**	**percent**	**Pyrope Garnet**
	GO: 0.97	**2.222**	**percent**	**Orange Garnet**

	DC: 0.97	**2.222**	**percent**	**Chrome Diopside**
	IM: 17.46	**40**	**percent**	**Ilmenite**
	CR: 13.58	**31.111**	**percent**	**Chromite**
	FO: 0.97	**2.222**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-staurolite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); 1 FO versus zoisite candidate = 1 FO. 4 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 92: Samples

HS-11	0608871 E	5240177 N
HS-12	0609034 E	5240193 N

Unit 92: 6.2kg	**Normalized: 17.732 KIMs/10kg**			
ODM KIM count:11	**GP: 1.612**	**9.091**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 12.896	**72.727**	**percent**	**Ilmenite**
	CR: 3.224	**18.182**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-staurolite assemblage. 1 IM from 0.5-1.0 mm; and sole GP and 4IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 93: Samples

HS-13	0609211 E	5240178 N
HS-14	0609370 E	5240103 N

Unit 93: 5.9kg	**Normalized: 30.492 KIMs/10kg**			
ODM KIM count:18	**GP: 11.858**	**38.889**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 8.47	**27.778**	**percent**	**Ilmenite**
	CR: 3.388	**11.111**	**percent**	**Chromite**
	FO: 6.776	**22.222**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-staurolite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 forsterite versus epidote candidates = 2 FO. 2 GP and 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 94: Samples

HS-9	0609097 E	5239923 N
HS-10	0609223 E	5239925 N

Unit 94: 5.4kg	**Normalized: 16.659 KIMs/10kg**			
ODM KIM count:9	**GP: 5.553**	**33.333**	**percent**	**Pyrope Garnet**
	GO: 1.851	**11.111**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 1.851	**11.111**	**percent**	**Ilmenite**
	CR: 3.702	**22.222**	**percent**	**Chromite**
	FO: 3.702	**22.222**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 2 FO versus epidote candidates = 1 FO and 1 epidote. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 95: Samples

HS-7	0609100 E	5239774 N	
HS-8	0609218 E	5239805 N	

Unit 95: 5.7kg **Normalized: 10.524 KIMs/10kg**

ODM KIM count:6	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 7.016	**66.666**	**percent**	**Ilmenite**
	CR: 3.508	**33.333**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 96: Samples

HS-4	0609247 E	5239684 N	
HS-5	0609113 E	5239648 N	
HS-6	0608973 E	5239655 N	

Unit 96: 8.3kg **Normalized: 24.08 KIMs/10kg**

ODM KIM count:20	**GP: 0**			
	GO: 0			
	DC: 1.204	**5**	**percent**	**Chrome Diopside**
	IM: 14.448	**60**	**percent**	**Ilmenite**
	CR: 8.428	**35**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 97: Samples

HS-1	0609035 E	5239497 N	
HS-2	0609140 E	5239514 N	
HS-3	0609313 E	5239502 N	not screened

Unit 97: 12.4kg **Normalized: 37.076 KIMs/10kg**

ODM KIM count:46	**GP: 8.866**	**23.913**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 11.284	**30.435**	**percent**	**Ilmenite**
	CR: 14.508	**39.13**	**percent**	**Chromite**
	FO: 2.418	**6.522**	**percent**	**Forsterite**

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 grossular. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular; and 2 FO versus enstatite candidates = 2 epidote. 1 IM from 0.5-1.0 mm; and 2 GP and 5 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 98: Samples

PLNW-9	0609396 E	5239089 N
PLNW-10	0609239 E	5239064 N

Unit 98: 4.5kg	**Normalized: 19.998 KIMs/10kg**			
ODM KIM count:9	**GP: 2.222**	**11.111**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 2.222	**11.111**	**percent**	**Ilmenite**
	CR: 15.554	**77.777**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-staurolite assemblage.

Unit 99: Samples

PLNW-4	0609544 E	5239475 N
PLNW-8	0609624 E	5239159 N

Unit 99: 5.0kg	**Normalized: 32 KIMs/10kg**			
ODM KIM count:16	**GP: 12**	**37.5**	**percent**	**Pyrope Garnet**
	GO: 2	**6.25**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 8	**25**	**percent**	**Ilmenite**
	CR: 4	**12.5**	**percent**	**Chromite**
	FO: 6	**18.75**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epdiote assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).

Unit 100: Samples

PLNW-1	0609641 E	5239525 N
PLNW-2	0609715 E	5239599 N
PLNW-5	0609580 E	5239684 N

Unit 100: 8.1kg	**Normalized: 9.872 KIMs/10kg**			
ODM KIM count:8	**GP: 2.468**	**25**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 4.936	**50**	**percent**	**Ilmenite**
	CR: 1.234	**12.5**	**percent**	**Chromite**
	FO: 1.234	**12.5**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.

Unit 101: Samples

PLNW-3	0609763 E	5239667 N
PLNW-6	0609673 E	5239740 N
PLNW-7	0609794 E	5239792 N

Unit 101: 7.8kg **Normalized: 5.128 KIMs/10kg**

ODM KIM count:4	**GP: 1.282**	**25**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 1.282	**25**	**percent**	**Ilmenite**
	CR: 0			
	FO: 2.564	**50**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO. Sole GP from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 102: Samples

PLSE-1	0609706 E	5238920 N
PLSE-2	0609862 E	5238890 N
PLSE-8	0609953 E	5238987 N

Unit 102: 7.6kg **Normalized: 22.355 KIMs/10kg**

ODM KIM count:17	**GP: 3.945**	**17.647**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 13.15	**58.824**	**percent**	**Ilmenite**
	CR: 2.63	**11.765**	**percent**	**Chromite**
	FO: 2.63	**11.765**	**percent**	**Forsterite**

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM; 1 FO versus diopside candidate = 1 FO; and 1 enstatite versus FO candidate = 1 enstatite. 2 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 103: Samples

PLSE-3	0610017 E	5238864 N
PLSE-7	0610093 E	5238746 N

Unit 103: 4.6kg **Normalized: 26.088 KIMs/10kg**

ODM KIM count:12	**GP: 0**			
	GO: 2.174	**8.333**	**percent**	**Orange Garnet**
	DC: 2.174	**8.333**	**percent**	**Chrome Diopside**
	IM: 13.044	**50**	**percent**	**Ilmenite**
	CR: 8.696	**33.333**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216
ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 104: Samples

PLSE-4	0610182 E	5238852 N
PLSE-5	0610332 E	5238814 N
PLSE-6	0610242 E	5238708 N

Unit 104: 7.2kg	**Normalized: 26.372 KIMs/10kg**			
ODM KIM count:19	**GP: 2.776**	**10.526**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 15.268	**57.895**	**percent**	**Ilmenite**
	CR: 8.328	**31.579**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 105: Samples

PLSE-9	0610061 E	5239197 N
PLSE-10	0610159 E	5239268 N
PLSE-11	0610155 E	5239160 N

Unit 105: 7.3kg	**Normalized: 10.96 KIMs/10kg**			
ODM KIM count:8	**GP: 5.48**	**50**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 2.74	**25**	**percent**	**Ilmenite**
	CR: 2.74	**25**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage.

Unit 106: Samples

1-A	0610085 E	5239795 N
1-B	0610073 E	5239873 N
1-C	0610012 E	5239815 N

Unit 106: 7.3kg	**Normalized: 17.81 KIMs/10kg**			
ODM KIM count:13	**GP: 2.74**	**15.385**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 1.37	**7.692**	**percent**	**Chrome Diopside**
	IM: 6.85	**38.462**	**percent**	**Ilmenite**
	CR: 5.48	**30.769**	**percent**	**Chromite**
	FO: 1.37	**7.692**	**percent**	**Forsterite**

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 107: Samples

1-D	0610062 E	5240030 N
1-E	0609959 E	5240074 N
1-F	0609976 E	5239972 N

Unit 107: 7.0kg **Normalized: 28.56 KIMs/10kg**

ODM KIM count:20	**GP: 1.428**	**5**	**percent**	**Pyrope Garnet**
	GO: 1.428	**5**	**percent**	**Orange Garnet**
	DC: 2.856	**10**	**percent**	**Chrome Diopside**
	IM: 9.996	**35**	**percent**	**Ilmenite**
	CR: 11.424	**40**	**percent**	**Chromite**
	FO: 1.428	**5**	**percent**	**Forsterite**

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 1 spessartine; and 1 FO versus epidote candidate = 1 FO (lost in transfer to vial). One CR has attached gangue material. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 108: Samples

T1 -	606835 E	5245990 N
T2 -	606785 E	5245950 N
T3 -	606800 E	5245880 N
T4 -	606765 E	5245822 N
T5 -	606875 E	5245795 N

Unit 108: 13.4kg **Normalized: 24.09 KIMs/10kg**

ODM KIM count:33	**GP: 5.11**	**21.212**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 8.76	**36.364**	**percent**	**Ilmenite**
	CR: 8.03	**33.333**	**percent**	**Chromite**
	FO: 2.19	**90.091**	**percent**	**Forsterite**

ODM Batch No. 8216

ODM remarks: Almandine-hornblende/epidote-diopside-staurolite assemblage. Sole GP and both IM from 0.5-1.0 mm; and 2 GP and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.

ODM KIM Results for Units 1 – 12, with Remarks: 2019 LORRAIN CHAIN SURVEY

Calculated from ODM results, Batch number 8314, by Graeme Bishop. March 17, 2020. Followed by the assemblage remarks for each unit, provided by Overburden Drilling Management. (see each full Report in the appendix of this report for ODM legend etc.)

ODM Table Weight — Normalized to 10kg — sample composition .

Unit 1: Samples

LGL-A	0605780 E	5246417 N
North Pit 1	0605585 E	5246884 N
North Pit 2	0605586 E	5246834 N

Unit 1: 6.7kg — **Normalized: 8.95524 KIMs/10kg**
(ship.con. 2.5kg)

ODM KIM count: 6	**GP: 2.98508**	**33.333**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 1.49254	**16.66**	**percent**	**Chrome Diopside**
	IM: 0			
	CR: 4.47762	**50**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8314
ODM remarks: Almandine-augite-hornblende/epidote-staurolite-diopside assemblage.

Unit 2: Samples

LGL-B	0605569 E	5246324 N
LGL-C	0605640 E	5246241 N
LGL-D	0605538 E	5246240 N
LGL-E	0605608 E	5246031 N
LGL-F	0605532 E	5246139 N

Unit 2: 11.7kg — **Normalized: 12.8205 KIMs/10kg**
(ship.con. 3.2kg)

ODM KIM count:15	**GP: 0.8547**	**6.667**	**percent**	**Pyrope Garnet**
	GO: 0.8547	**6.667**	**percent**	**Orange Garnet**
	DC: 0.8547	**6.667**	**percent**	**Chrome Diopside**
	IM: 4.2735	**33.333**	**percent**	**Ilmenite**
	CR: 5.9829	**46.667**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8314
ODM remarks: Almandine-augite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 bronz sulfide candidate = 1 niccolite (NiAs); and 1 arsenopyrite versus loellingite candidate = 1 loellingite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 3: Samples

LGL-H	0605431 E	5246030 N
LGL-G	0605490 E	5245925 N
LGL-I	0605580 E	5245794 N

Unit 3: 7.6kg **Normalized: 32.89475 KIMs/10kg**
(ship.con. 3.3kg)

ODM KIM count:25	**GP: 3.94737**	**12**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 1.31579	**4**	**percent**	**Chrome Diopside**
	IM: 7.89474	**24**	**percent**	**Ilmenite**
	CR: 15.78948	**48**	**percent**	**Chromite**
	FO: 3.94737	**12**	**percent**	**Forsterite**

ODM Batch No. 8314
ODM remarks: Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Unit 4: Samples

LGL-Pit 1	0605597 E	5245585 N
LGL-J	0605596 E	5245436 N

Unit 4: 5.2kg **Normalized: 3.84616 KIMs/10kg**
(ship.con. 1.9kg)

ODM KIM count:2	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 3.84616	**100**	**percent**	**Ilmenite**
	CR: 0			
	FO: 0			

ODM Batch No. 8314
ODM remarks: Augite-almandine/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.

Unit 5: Samples

LGL-M	0605867 E	5245241 N
LGL-L	0605777 E	5245278 N

Unit 5: 5.9kg **Normalized: 6.77968 KIMs/10kg**
(ship.con. 1.8kg)

ODM KIM count:4	**GP: 0**			
	GO: 0			
	DC: 0			
	IM: 1.69492	**25**	**percent**	**Ilmenite**
	CR: 5.08476	**75**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8314
ODM remarks: Augite-almandine-hornblende/epidote-diopside assemblage.

Unit 6: Samples

LGL-S0	0605756 E	5245635 N

Unit 6: 3.3kg **Normalized: 6.0606 KIMs/10kg**
(ship.con. 0.8kg)
ODM KIM count:2

GP: 0			
GO: 0			
DC: 0			
IM: 3.0303	**50**	**percent**	**Ilmenite**
CR: 3.0303	**50**	**percent**	**Chromite**
FO: 0			

ODM Batch No. 8314
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 grossular; and 1 IM versus crustal ilminite candidate = 1 IM.

Unit 7: Samples

LGL-NH	0605882 E	5245785 N
LGL-WH	0605851 E	5245670 N

Unit 7: 5.6kg **Normalized: 17.8571 KIMs/10kg**
(ship.con. 2.3kg)
ODM KIM count:10

GP: 0			
GO: 0			
DC: 0			
IM: 5.35713	**30**	**percent**	**Ilmenite**
CR: 8.92855	**50**	**percent**	**Chromite**
FO: 3.57142	**20**	**percent**	**Forsterite**

ODM Batch No. 8314
ODM remarks: Almandine-augie-hornblende/epidote-diopside assemblage.

Unit 8: Samples

LGL-S3	0605821 E	5245549 N
LGL-S2	0605837 E	5245455 N
LGL-S1	0605880 E	5245428 N
LGL-SH	0605906 E	5245523 N

Unit 8: 10.6kg **Normalized: 321.6994 KIMs/10kg**
(ship.con. 3.3kg)
ODM KIM count:341

GP: 94.34	**29.325**	**percent**	**Pyrope Garnet**
GO: 37.736	**11.73**	**percent**	**Orange Garnet**
DC: 3.7736	**1.173**	**percent**	**Chrome Diopside**
IM: 178.3026	**55.425**	**percent**	**Ilmenite**
CR: 7.5472	**2.436**	**percent**	**Chromite**
FO: 0			

ODM Batch No. 8314
ODM remarks: Almandine-augite/epidote-diopside assemblage. 20% IM from 0.5-1.0 mm and 20% IM from 0.25-0.5 mm fractions have partial alteration mantles.

<u>Unit 9:</u> Samples

LGL-1	0606146 E	5245875 N
LGL-2	0606085 E	5245790 N
LGL-3	0606033 E	5245696 N

<u>Unit 9:</u> 7.4kg **<u>Normalized: 20.27025 KIMs/10kg</u>**
(ship.con. 1.5kg)

ODM KIM count:15	**GP: 4.05405**	**20**	**percent**	**Pyrope Garnet**
	GO: 1.35135	**6.667**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 4.05405	**20**	**percent**	**Ilmenite**
	CR: 9.45945	**46.66**	**percent**	**Chromite**
	FO: 1.35135	**6.667**	**percent**	**Forsterite**

<u>ODM Batch No. 8314</u>
<u>ODM remarks:</u> Almandine-augite-hematite/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.

<u>Unit 10:</u> Samples

LGL-4	0606087 E	5245564 N
LGL-5	0606086 E	5245476 N
LGL-6	0606165 E	5245528 N

<u>Unit 10:</u> 7.6kg **<u>Normalized: 31.57896 KIMs/10kg</u>**
(ship.con. 3.0kg)

ODM KIM count:24	**GP: 9.21053**	**29.167**	**percent**	**Pyrope Garnet**
	GO: 2.63158	**8.333**	**percent**	**Orange Garnet**
	DC: 0			
	IM: 6.57895	**20.827**	**percent**	**Ilmenite**
	CR: 10.52632	**33.333**	**percent**	**Chromite**
	FO: 2.63158	**8.333**	**percent**	**Forsterite**

<u>ODM Batch No. 8314</u>
<u>ODM remarks:</u> Almandine-hornblende-augite/epidote-diopside-staurolite assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.

<u>Unit 11:</u> Samples

LGL-P	0606222 E	5245210 N
LGL-N	0606158 E	5245160 N
LGL-O	0606188 E	5245090 N

<u>Unit 11:</u> 7.4kg **<u>Normalized: 24.3243 KIMs/10kg</u>**
(ship.con. 2.0kg)

ODM KIM count:18	**GP: 2.7027**	**11.111**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 0			
	IM: 16.2162	**66.667**	**percent**	**Ilmenite**
	CR: 5.4054	**22.222**	**percent**	**Chromite**
	FO: 0			

<u>ODM Batch No. 8314</u>
<u>ODM remarks:</u> Almandine-hornblende-augite/epidote-diopside assemblage. 1 IM from 0.5-1.0 mm and 4 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Unit 12: Samples

LGL-R	0606361 E	5245222 N
LGL-Q	0606323 E	5245145 N

Unit 12: 5.0kg **Normalized: 20 KIMs/10kg**
(ship.con. 1.4kg)

ODM KIM count:10	**GP: 2**	**10**	**percent**	**Pyrope Garnet**
	GO: 0			
	DC: 2	**10**	**percent**	**Chrome Diopside**
	IM: 4	**20**	**percent**	**Ilmenite**
	CR: 12	**60**	**percent**	**Chromite**
	FO: 0			

ODM Batch No. 8314
ODM remarks: Almandine-hornblende/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm and sole IM from 0.5-1.0 mm fractions have partial alteration mantles.

END NOTE:

Sample adjustment consideration for black muck compensation

During logging and checking of samples, prior to shipment to ODM, the following samples NL-4, LLS-1, NL-12, PNE-5, PP-5, PPS-6, GN-8, GN-4, and GLS-9 were remarked due to their high content of black muck (cedar swamp wet organic soil mixture). Black muck is Holocene material and does not represent ideal content for indicator mineral sampling. In the field, sometimes it is difficult to obtain a good sample, due to swampy conditions; care was taken during sampling to collect samples of good data quality. Sometimes it was necessary to attempt a hole multiple times at one site to collect a usable and representative sample. The following nine samples, each only a fraction of one Unit, exhibited less than ideal content of black muck; therefore, to represent normalized KIM count data extrapolated from ODM reporting, the following nine units have had a corrective adjustment accounting for loss from black muck content, according to logging remarks.

Unit 38: (5kg total from 2 units)
NL-4 (1.7kg) est.80% black muck
multiply unit KIM values 133%.

Unit 42: (4.5kg total from 2 units)
LLS-1 (2.6kg) est.50% black muck
multiply unit KIM values 125 %

Unit 50: (7.9kg from 4 units)
NL-12 (1.6kg) est.50% black muck
multiply unit KIM values 110%

Unit 66: (3.8kg total from 2 units)
PNE-5 (1.8kg) est, 25% black muck
multiply unit KIM values 111.25%

Unit 74: (4.3kg total from 2 units)
PP-5 (2.1kg) est. 50% black muck
multiply unit KIM value 122.8%

Unit 76: (6.9kg total from 3 units)
PPS-6 (1.9kg) est.50% black muck
multiply unit KIM values 135%

Unit 80: (4.6kg total from 2 units)
GN-8 (2.3kg) est. 50% black muck
multiply unit KIM values 123.9%

Unit 82: (4.1kg total from 2 units)
GN-4 (2.0kg) est.25% black muck
multiply unit KIM values 111.6%

Unit 84: (8kg total from 3 units)
GLS-9 (2.6kg) est.25% black muck
multiply unit KIM values 108%

NOTES CONCERNING THE PROCESSING OF UNITS 1 – 12 [Little Grassy Lake area]

Initially, RJK planned to have the Lorrain Chain samples processed and picked in the Bishop family lab near Kirkland Lake. The samples collected from the Little Grassy Lake (LGL) area by the Bishops during earlier sampling produced the highest KIM results, and the LGL area was the northernmost of the original Bishop targets, so the LGL samples were the first of the 2019 Lorrain RJK units to be concentrated for picking.

Thus, samples 1 through 12 and 26 were run twice through a custom sluice to remove light material and save the heavier concentrates After the second run, the sluice rejects were discarded (based on methodological efficiency testing, there is no presence of KIMs in second run sluice rejects). The samples were then screened into four fraction sizes (minus .25 mm, .25-.49 mm, .5-1.0 mm, 1+mm). The .25-.49 mm fraction was then concentrated again via a device called a GoldCube, and the rejects were saved separately.

Concentrating samples and picking KIMs to send for micro-probing is time consuming work, and when timeliness became important, RJK decided to ship Units 13 to 108 (minus 26) to ODM for analysis, instead of doing it locally. Due to the importance of continuity in reporting within the survey results, RJK was advised by the Bishop family that ODM, if possible, should process and pick the Lorrain Chain units 1 through 12 to produce a contiguous data set consistent with the overall data set produced through their analysis. i.e., the same pickers should be used for all samples.

Graeme Bishop spoke with Mike Crawford at ODM to discuss RJK units 1-12 being shipped and processed/picked in 2020 as part of the Lorrain Chain sampling project.

The various fractions, concentrates, and rejects from LCkimDP units 1 through 12 were then carefully recombined into 12 sample bags.

“INFORMATION on the enclosed samples

TO**: Mike Crawford, Overburden Drilling Management Ltd.**

January 21, 2020

RJK Exploration Ltd.
4 Al Wende Ave.
Kirkland Lake, ON

IT IS OF THE GREATEST IMPORTANCE THAT THESE 12 UNITS – PRIOR TO ASSESSMENT – ARE WELL BLENDED to ensure that the stratified material from their recombined fractions properly represent the KIM content upon further processing. The samples have been reduced by between 50-75 percent of their original weight by the removal of lighter materials, thus, during results reporting, the original weights (listed in the LCkimDP master list, and in this letter) should be used for calculations of KIMs per kg etc.”

Data File: Lorrain Chain project (gold/KIMs)
CONCENTRATION UNITs No. 1 through 12.

Weight in the field	Weight after concentration then recombination with rejects
Unit 1: (6.7 kg)	– Shipped weight: 2.61 kg
Unit 2: (11.7 kg)	– Shipped weight: 3.24 kg
Unit 3: (7.6 kg)	– Shipped weight: 3.41 kg
Unit 4: (5.2 kg)	– Shipped weight: 1.94 kg
Unit 5: (5.9 kg)	– Shipped weight: 1.87 kg
Unit 6: (3.3 kg)	– Shipped weight: 0.85 kg
Unit 7: (5.6 kg)	– Shipped weight: 2.38 kg
Unit 8: (10.6 kg)	– Shipped weight: 3.4 kg
Unit 9: (7.4 kg)	– Shipped weight: 1.58 kg
Unit 10: (7.6 kg)	– Shipped weight: 3.04 kg
Unit 11: (7.4 kg)	– Shipped weight: 2.05 kg
Unit 12: (5.0 kg)	– Shipped weight: 1.51 kg

Some Speculation on Geological Provenance of KIM grains: Context For Future Sampling Methodology

During the initial drilling program by RJK Explorations Ltd. in early 2019 at Paradis Pond, an unexplainable deposit was found, hosting compact material which at that time was theorized by some to be a unique basal till; samples were sent to various labs, examined by geologists locally, and also shown at the Quaternary office of the Ministry in Sudbury, but RJK's material from Paradis Pond could not be positively identified. It was proposed that the material was kimberlite, but it had unique characteristics if so. The most interesting quality of the unknown 'basal till' was its high concentration of large KIM grains, as evinced by the material recovered from creek samples taken within the deposit. It was theorized by the author that the deposit was rich in KIMs because it was an indurated cache of glacially sequestered kimberlitic material which had not travelled far from its source and had been affected by atypical glaciation caused by sheering of the Wisconsin Ice Sheet by the severe features of the West Temiskaming Shore Fault, de-pressuring the benthic force of the ice at the height of land on the west side of Lake Temiskaming (Cedar Pond, in the Lorrain Chain). Prospector Tony Bishop suggested a theory that the deep Lake Temiskaming Structural Zone features were stressed and activated by the energy of isostatic depression of the lithosphere during heavy continental glacial loading during the Quaternary period, in turn flexing the entry points in the craton roots and encouraging the potential for ice-aged kimberlite eruptions between the Cross Lake Fault and Temiskaming Shore Faults. Geologist Peter Hubacheck directed a drilling program for RJK during 2020 which involved both reverse circulation and diamond drilling across the Lorrain Chain targets, discovering multiple massive deposits of the same material RJK drilled at Paradis Pond in early 2019. Hubacheck had RJK send core samples to Charles Fipke's lab in Kelowna for analysis, where it was found to host microdiamonds and KIM grains with excellent geochemistry for diamond potential.

With continued study of the Lorrain Township kimberlite beds discovered by RJK Explorations Ltd., Geologist Peter Hubacheck has suggested the possibility that the Lorrain Kimberlites might have erupted during the Pleistocene Glaciations. It is now known that the Lorrain Kimberlites are the geological source of the KIM grains found during the 2019 Lorrain Chain KIM survey.

Traditional conceptions of tracing mineral trains back to their bedrock sources in glaciated terrain would not necessarily apply when considering data of mineral trains from kimberlites which erupted underneath glacial loading.

Interpretation of the surface till survey and the findings by RJK drilling through 2020

As Terry Link put it: “Due to the vagaries of glaciation - possible several cycles of wastage, advance, retreat, glacier thickness, glacier direction, glacier having to remove glacial deposits before reaching bedrock through maybe several cycles, not completely reaching bedrock in some areas, sampling bedrock in other areas – following KIM dispersal trains back to source can be challenging.” (personal correspondence, 2020)

The quote refers to traditional ideas of sampling to discover mineral trains distributed by glacial action and following the train back to its bedrock source. This was the M.O. from 2014-2019 Bishop work, which proved that several apparent trains of KIMs existed in the Lorrain Chain of targets. The 2019 LCDP survey was conducted to provide greater definition of those trains and offer clarity about the situation of possible bedrock sources for those trains. However, the LCDP found KIMs in ninety-nine percent of the 108 units analysed, illustrating that the surface till in the Lorrain Chain area was populated by high numbers of KIMS.

Concurrent with the final Batch report from ODM, the drilling program began to uncover kimberlite nearly at surface, sometimes under two meters of till, and distributed over a wide area of the claims.

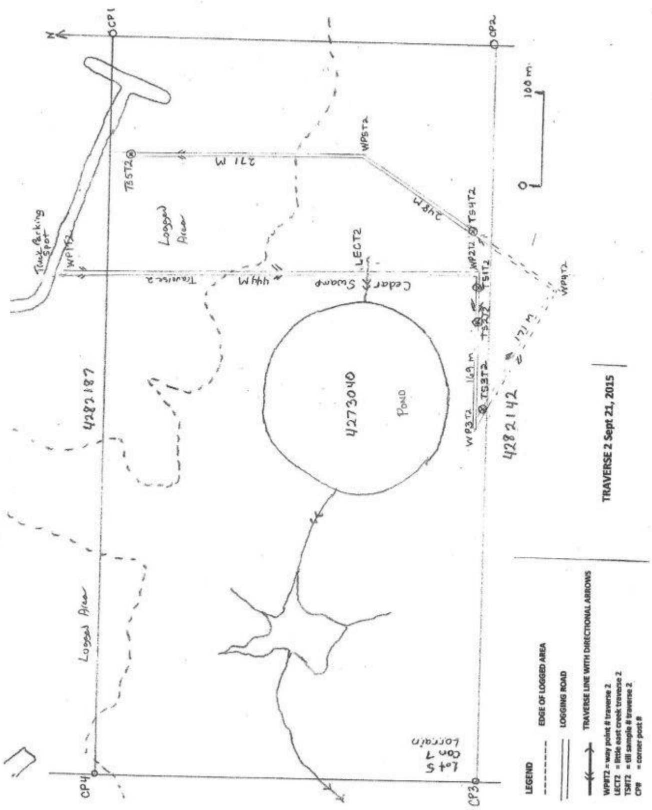
The nature of the kimberlite emplacement remains unclear, but its expression over wide areas and close to surface, literally beneath the 2019 surface till survey, indicates that the KIMs found in 99 percent of sample units are almost certainly derived from the kimberlite horizon discovered by drilling.

Modelling of the kinetic energy and displacement force of kimberlite ascent and eruption from the bedrock ‘surface’ at the benthic horizon of a glacier has not been done and would be difficult to estimate with so many physical unknowns. However, it is possible to imagine a cavity of disruption created by kimberlite eruption in the glacial ice strata, under pressure, which would likely infill with collapsing weight. This scenario is purely speculative but illustrates that the eruptive material and any potential flow material could be emplaced in a wide area around the eruption pipe beneath the glacier.

If it erupted beneath a glacier, kimberlite could emplace ‘up-ice’ proximal to its source, and the distribution of KIMs could not be examined/interpreted through strictly traditional understanding of mineral trains in glaciated terrain. Glacial action could have still disturbed and distributed KIMs into trains but did not entirely displace the in-situ eruptive deposit.

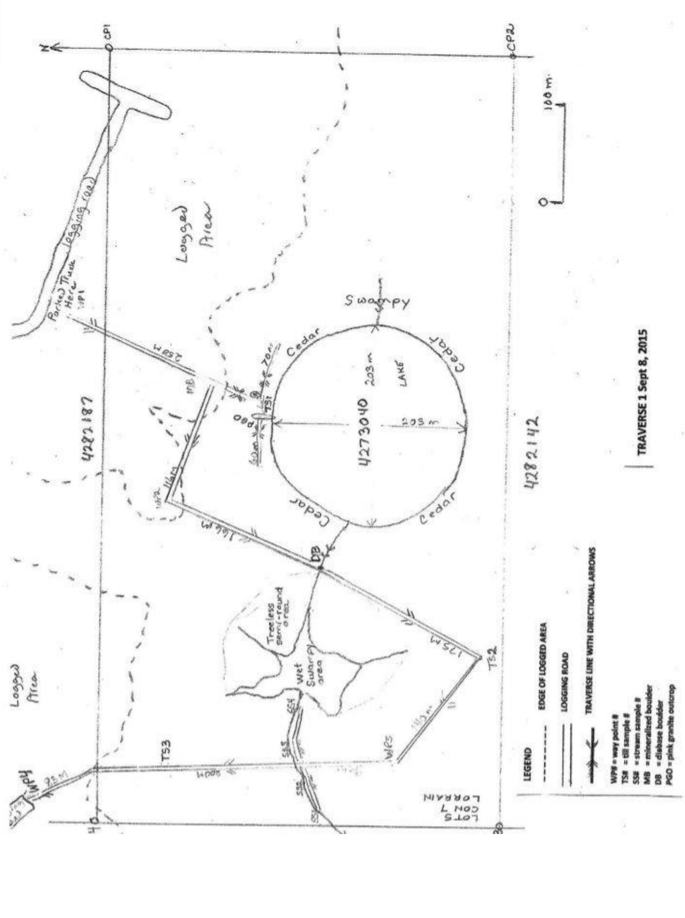
RJK Explorations Ltd. is exploring possibly the most interesting kimberlite deposit in the world.

Appendix



Traverse 2: field notes SEPTEMBER 21, 2015 Brian A. (Tony) Bishop, Graeme Bishop

Sample #		Time/hrs worked	Coordinates 17T UTM	Elevation m	Activity / Description
WP1T2		8:15 am	0607135_E/5242601_N	353	Parked truck; Headed south; Graeme saw a bear ahead; after logged area is a cedar swamp, very tough and slow walking; slow decline 1st half of the claim
LECT2		9:58 am	0607149_E/5242294_N	343	Small creek, barely any measurable flow E to W, ~1-2'wide, ~1'deep
WP2T2		10:18 am	0607147_E/5242164_N	343	Somewhat drier ground; will now head west to collect samples
TS1T2		10:23 am	0607119_E/5242154_N	343	Dug down through mucky ground to some gravel/sand/muck. Took ~6lb sample
TS2T2		10:40 am	0607089_E/5242153_N	345	Same as TS1T2
WP3T2		11:17 am	0606980_E/5242161_N	345	Changing direction to South-East
TS3T2		11:45 am	0606999_E/5242150_N	346	Took till sample near claim line; still a bit mucky
WP4T2		12:07 pm	0607131_E/5242080_N	345	Wandered down to firmer ground and more open forest. Ate lunch; changing to NE heading
TS4T2		12:37 pm	0607190_E/5242167_N	342	Took a good screened -4 mesh sample at the north end of a hillock of gravel/sand under a downed tree root
WP5T2		1:04 pm	0607267_E/5242284_N	344	Still heading NE – switching to North heading
TS5T2		2:30 pm	0607263_E/5242528_N	350	Took screened -4 mesh till sample a bit south of the logging road
		2:50 pm			Back on logging road. Headed back to truck (WP1T2). Organized samples and notes and headed for home 3:25pm



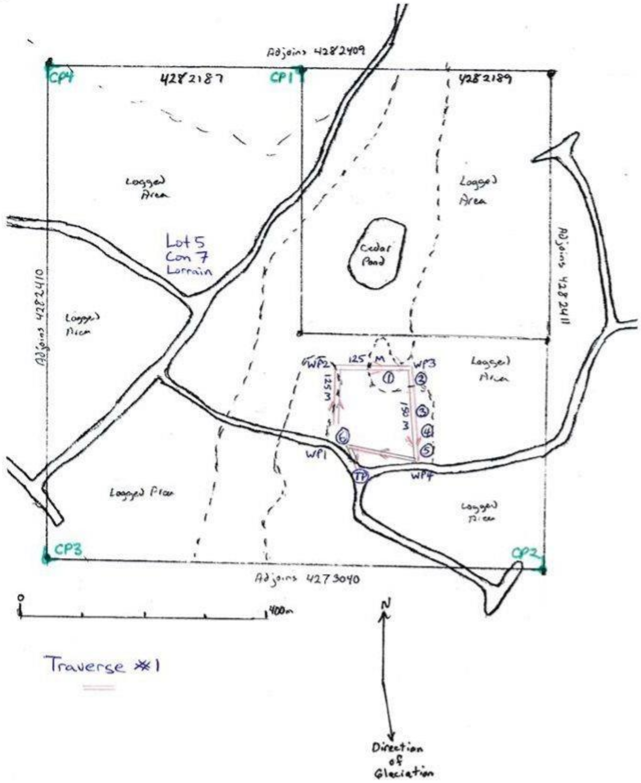
L4273040

Traverse 1: field notes SEPTEMBER 8, 2015 Brian A. (Tony) Bishop, Graeme Bishop

Sample # / feature		Time/hrs worked	Coordinates 17T UTM	Elevation m	Activity / Description
WP1		7:30 am	0607135_E/5242601_N	352	Parked truck beside logging road, then followed flagged trail to lake
MB		8:04 am	0607041_E/5242456_N	347	Found a large mineralized/rusty boulder ~6' west of trail; took chip sample mineralized with sulphides for assay
TS1		8:49 am	0607023_E/5242394_N	344	Took ~ 6 lb till sample under fallen tree root. Medium brown sandy/rocky till
PGO		8:59 – 10:00 am	0607016_E/5242391_N	344	Pink granite outcrop, North/South orientation ~2m w x 1m h x 5m l. Boulders of same extending ~3m into lake. Checked shoreline E & W – cedar & spruce forest. Headed back towards MB
WP2		10:51 am	0606919_E/5242483_N	348	Heading ~NW to edge of logged area; sandy/rocky glacial till exposed; boulders ~90% pink granite, 10% diabase
DB		11:45 am	0606864_E/5242328_N	345	After WP2 headed ~SW to the water flow outlet of the lake; noted diabase boulder; opposite on the west is what more or less appears as a roundish semi-dry lake of nearly the same size as main lake. Ate lunch; continued SW
TS2		1:00 pm	0606771_E/5242164_N	345	Dug through 0.3m humus then ~1/2 m through sandy/rocky till, took ~2.5 kg sample. Mixed spruce etc.
WP3		1:32 pm	0606656_E/5242247_N	339	Changing direction to due N to stream.
SS1		1:48 pm	0606615_E/5242329_N	337	Deep valley ~25m wide and 15m deep; pretty little brook; sampled a ~2m x 1m gravel bar; screened to -4 mesh ~2.5 kg
SS2		↓	0606638_E/5242336_N	338	Dug under boulder downstream side. SS1 & SS2 collected by Tony
SS3		↓	0606671_E/5242352_N	340	Dug under boulder downstream side
SS4		2:48 pm	0606696_E/5242351_N	342	Stream is slow & a bit mucky. So-so sample. SS3 & SS4 collected by Graeme
TS3		3:20 pm	0606646_E/5242480_N	343	Met & headed north. Took till sample at large exposed tree root, dug down ~1/2 m; similar till of glacial sand/gravel boulders
WP4		3:45 pm	0606605_E/5242621_N	350	Back on logging road just north of Claim post 4. Headed back to truck (WP1). Organized samples and notes and headed for home 4:35pm

L 4282187 – down-ice and off-ice of Cedar Pond

Traverse 1: map December 13, 2015 Brian A. (Tony) Bishop, Douglas Robinson (PEng)



L 4282187 – down-ice and off-ice of Cedar Pond

Traverse 1: field notes December 13, 2015 Brian A. (Tony) Bishop, Douglas Robinson (PEng)

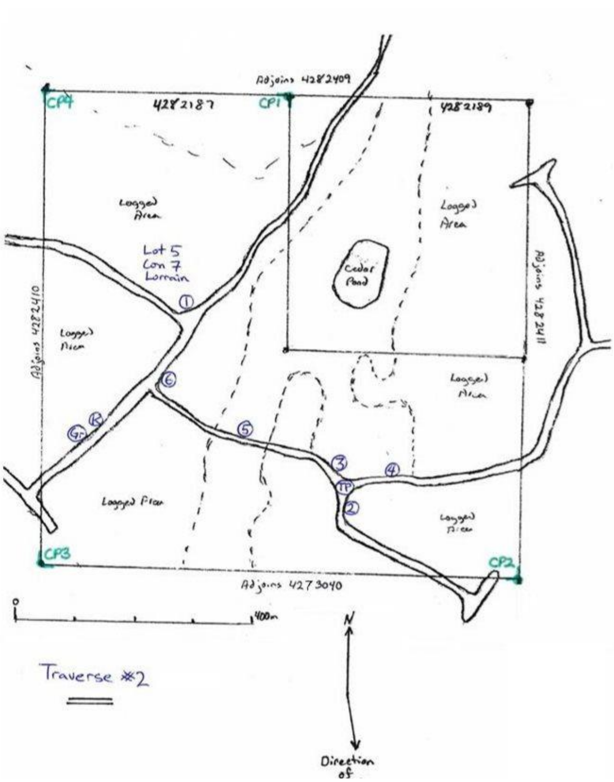
Sample #	Coordinates 17T UTM	Activity/Description
S1	0607133_E 5242862_N	On a raised hillock ~50' x 20' x 8' high sandy/gravel
S2	0607174_E 5242854_N	In a lower ~N-S trough of lower land – soil/sand/gravel
S3	0607193_E 5242809_N	Wet ground/poor sample overturned in water under tree root
S4	0607202_E 5242767_N	Dug under boulder for sample sand/gravel
S5	0607198_E 5242721_N	Till in large boulders sandy/gravel
S6	0607052_E 5242741_N	Took a chip from a boulder (diabase) and soil sample from road edge

Location #	Coordinates 17T UTM
Truck Park	0607089_E / 5242687_N
WP1	0607024_E / 5242757_N
WP2	0607041_E / 5242888_N
WP3	0607123_E / 5242884_N
WP4	0607208_E / 5242723_N

Location #	Coordinates 17T UTM
Corner post #1	0606970_E / 5243352_N
Corner post #2	0607386_E / 5242548_N
Corner post #3	0606588_E / 5242548_N
Corner post #4	0606568_E / 5243348_N

L 4282187 – down-ice and off-ice of Cedar Pond

Traverse 2: map May 26, 2016 Brian A. (Tony) Bishop, Graeme Bishop



L 4282187 – down-ice and off-ice of Cedar Pond

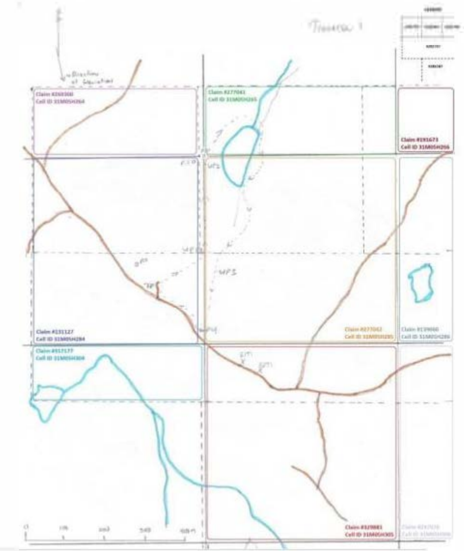
Traverse 2: field notes May 26, 2016 Brian A. (Tony) Bishop, Graeme Bishop

Sample #	Coordinates 17T UTM	Activity/Description
S1	0606829_E 5242964_N	Sampled in a hole dug by a machine during building of logging road. Very few potential KIMs found. From ① drove to TP
S2	0607091_E 5242669_N	Wet sample in small flow of water beside road
S3	0607087_E 5242703_N	Wet unscreened at claim road turnoff north side of road. Dug from little creek under boulder at road
S4	0607205_E 5242730_N	In a ~4' deep bouldery till created by hoe when building road
S5	0606910_E 5242766_N	In a damp till in a depressed trough leading downhill from Cedar Pond
S6	0606788_E 5242862_N	Off-ice sample
K	0606677_E 5242787_N	Possible large boulder of kimberlite? Took photo [see Photos 3 & 4, page 5] and later observed a sample of kimberlite at mine's office very similar
Gr	0606692_E 5244201_N	Large granite outcrop

Location #	Coordinates 17T UTM
Truck Park	0607080_E / 5242692_N
Corner post #1	0606970_E / 5243352_N
Corner post #2	0607386_E / 5242548_N
Corner post #3	0606588_E / 5242548_N
Corner post #4	0606568_E / 5243348_N

L 4282444

Traverse 1: map October 30, 2016 Brian A. (Tony) Bishop, Mike Harrington



L 4282444

Traverse 1: field notes October 30, 2016 Brian A. (Tony) Bishop, Mike Harrington

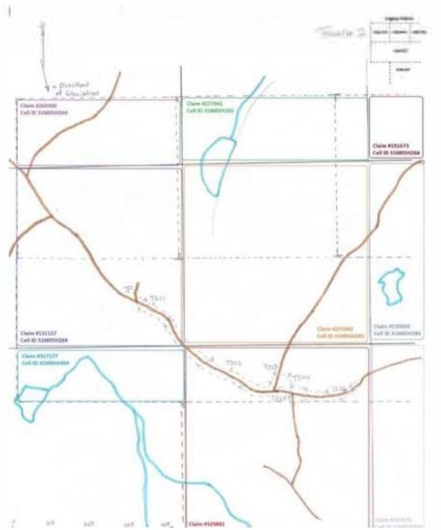
Sample #	Coordinates 17T UTM	Weight	Activity/Description
T1S1	0605827_E 5245382_N	~3kg	Brown, sandy till
T1S2	0605875_E 5245382N	~2.5kg	Brown, sandy till

Location #	Coordinates 17T UTM
Truck Park	0605607_E/5245598_N
WP1	0605712_E/5245692N
WP2	0605717_E/5245911_N
WP3	0605752_E/5245642_N
WP4	0605736_E/5245471_N

Claim #	Cell ID
277041	31M05H265
277042	31M05H285
329881	31M05H305
131127	31M05H284

L 4282444, L 4282707

Traverse 2: map November 16, 2016 Brian A. (Tony) Bishop



277042, 277041, 131127, 325881 – The Grassy Lake Project

L 4282444, L 4282707

Traverse 2: field notes November 16, 2016 Brian A. (Tony) Bishop

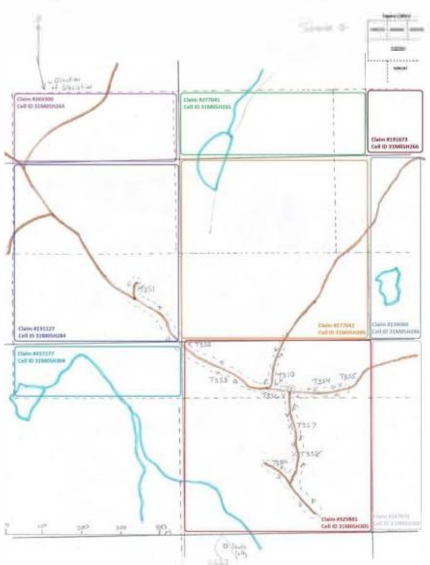
Sample #	Coordinates 17T UTM	Weight	Activity/Description
T2S1	0605675_E 52455365_N	4.1kg	Brown sand/gravel
T2S2	0605845_E 5245392_N	3.0kg	Brown sandy gravel
T2S3	0605955_E 5245392_N	3.6kg	Brown sandy gravel from deep pit by road
T2S4	0606000_E 5245380_N	3.9kg	Fairly deep pit, 10-12' deep, ~15' across; sample taken from near the bottom; brownish sand/gravel
T2S5	0606006_E 5245332N	3.4kg	From a ~10' deep, fairly large pit dug beside the road' brown till – sand/gravel/rocks
T2S6	0606113E 5245339N	2.7kg	Dark brown clay, sand, gravel from low-lying gully oriented towards Grassy Lake

Location #	Coordinates 17T UTM
Truck Park	0605607_E/5245598N

Claim #	Cell ID
131127	31M05H284
329881	31M05H305

L 4282444, L 4282707, L 4286187

Traverse 3: map June 3, 2017 Brian A. (Tony) Bishop, Graeme Bishop



277042, 277041, 131127, 329881 – The Grassy Lake Project

L 4282444, L 4282707, L 4286187

Traverse 3: field notes June 3, 2017 Brian A. (Tony) Bishop, Graeme Bishop

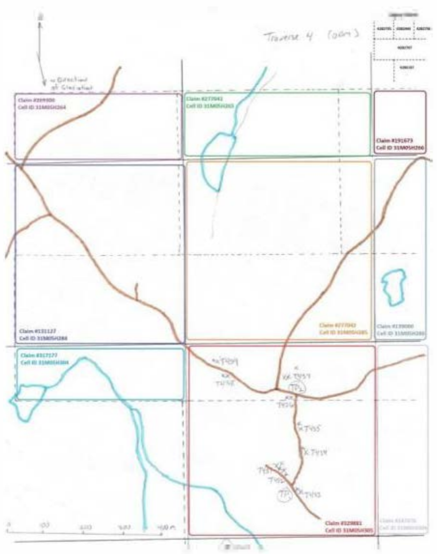
Sample #	Coordinates 17T UTM	Elevation	Weight	Activity/Description
T3S1	0605611_E 5245604_N	316m	5.5kg	Brown, sandy, gravelly
T3S2	0605759_E 5245459_N	315m	4.1kg	Brown, sandy, gravelly till
T3S3	0605837_E 5245387N	317m	3.9kg	Brown, sandy, gravelly
T3S4	0606089_E 5245354_N	328m	3.8kg	Medium brown, sandy, gravelly, with bits of clay from a dug out area beside road, tightly packed big boulders, hard to sample; old creek bed?
T3S5	0606148_E 5245365_N	331m	5.4kg	Darker brown, clay sand/gravel from nearby where T256 was taken from
T3S6	0606000_E 5245328N	325m	4.1kg	Darker brown, sand/gravel
T3S7	0606027E 5245257_N	325m	3.8kg	Darker brown, clay sand/gravel
T3S8	0606033_E 5245183_N	326m	5.9kg	Sand/gravel till, grayish brown
T3S9	0606006_E 5245135_N	323m	4.3kg	Wet blue/grey clay/rocks
T3S10	0605992_E 5245390_N	328m	3kg	From pit where 1254 was taken from

Location #	Coordinates 17T UTM
Truck Park	0606006_E/5245339_N

Claim #	Cell ID

L 4282444, L 4286187

Traverse 4: map July 20, 2017 OOM Collection Brian A. (Tony) Bishop, David Crouch (P.Eng)



277042, 277041, 131127, 329881 – The Grassy Lake Project

L 4282444, 4286187

Traverse 4: field notes July 20, 2017 OOM Collection Brian A. (Tony) Bishop, David Crouch (P.Eng)

All samples were doubled up close to each other by David Crouch (for OOM samples) and a control by me.

Sample #	Coordinates 17T UTM	Tony's Sample Weights	David's Sample Weights	Activity/Description
T4S1	0605978_E 5245157N	3.9kg	4.1kg	Light brown clay
T4S2	[illegible]_E 5245148_N	4.1kg (kimberlite)	2.7kg	Wet blue/grey clay/rocks
T4S3	0606044_E 5245101_N	2.3kg	2.9kg	Brown sandy gravel
T4S4	0606045_E 5245200N	2.5kg	3.2kg	Grey/brown sand/gravel
T4S5	[illegible]_E 5245255N	2.7kg	3.3kg	Brownish sand/gravel
T4S6	0606005_E 5245331N	2.9kg	3.6kg	Brown sandy gravel pit ~10' deep for road fill beside road
T4S7	0605995_E 5245389_N	4.1kg (kimberlite)	3.2kg	Brown till, pit ~12' deep for road fill
T4S8	0605847_E 5245386_N	2.5kg	2.7	Brown sand/gravel
T4S9	0605820_E 5245419_N	2.3kg	2.8kg	Brown sand/gravel

Location #	Coordinates 17T UTM
Truck Park 1	0606021E/5245120N
Truck Park 2	0606011E/5245337N

Claim #	Cell ID
329881	31M05H305

L 4281431 & L 4282409 – Lightning Lake

Traverse 2: field notes

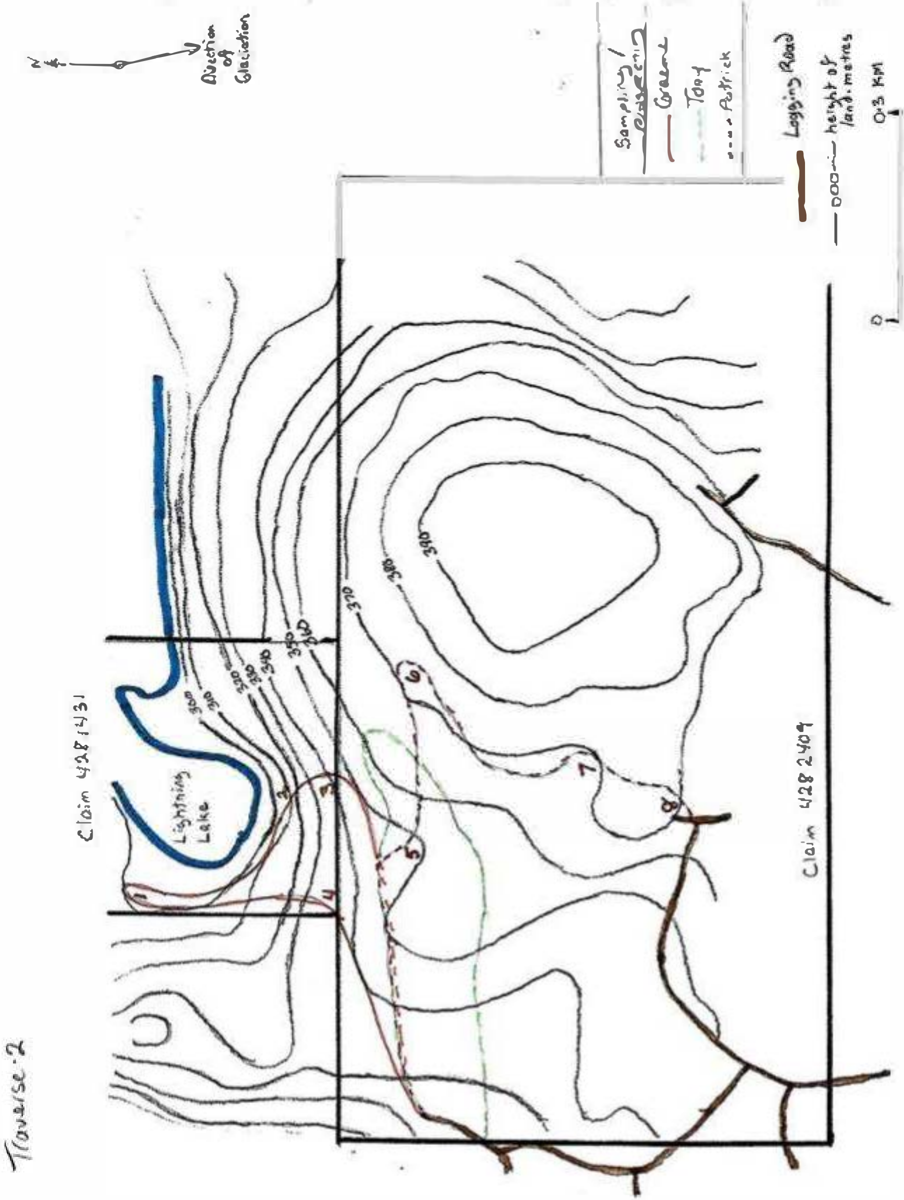
October 29, 2016 Brian A. (Tony) Bishop, Graeme Bishop, Patrick Harrington

Sample #	Coordinates 17T UTM	Activity/Description
S1	0606542_E 5244477_N	Fairly dry. 4lb 5oz; medium brown
S2	0606710_E 5244249_N	Dry. 2lb 4oz; medium brown
S3	0606774_E 5244179_N	Fairly dry. On/inside the claim line. 4¼lb; dark brown. Loamy/sandy
S4	0606553_E 5244171_N	Approximately at claim post. Dry. 3lb 6oz; medium brown. Loamy/sandy
S5	0606635_E 5244052_N	Fairly dry. 31lb 8oz; dark brown/black. Loamy/sandy
S6	0606859_E 5244080_N	Dry. 4½lb; brown. Loamy/sandy
S7	0606789_E 5243800_N	4½lb; dark brown. Loamy/sandy
S8	0606679_E 5243618_N	3lb 5oz; medium brown. Loamy/sandy

Claim #	Location #	Coordinates 17T UTM
4281431	Corner Post #1	0606925_E / 5244600_N
4281431	Corner Post #2	0606936_E / 5244178_N
4281431	Corner Post #3	0606549_E / 5244171_N
4281431	Corner Post #4	0606538_E / 5244580_N
4282409	Corner post #1	0607764_E / 5244156_N
4282409	Corner Post #2	0607758_E / 5244156_N
4282409	Corner Post #3	0606158_E / 5243340_N
4282409	Corner Post #4	0606130_E / 5244170_N

Traverse 2: map

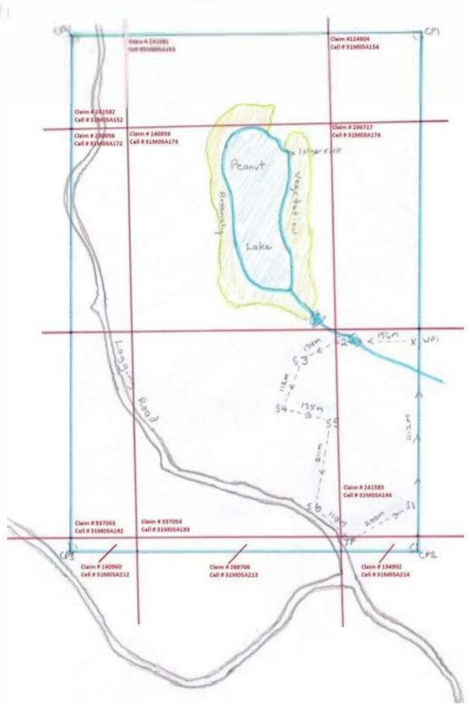
October 29, 2016 Brian A. (Tony) Bishop, Graeme Bishop, Patrick Harrington



Traverse 2: Map

L 4282412

Traverse 1: map May 28, 2017 Brian A. (Tony) Bishop, Graeme Bishop



L 4282412

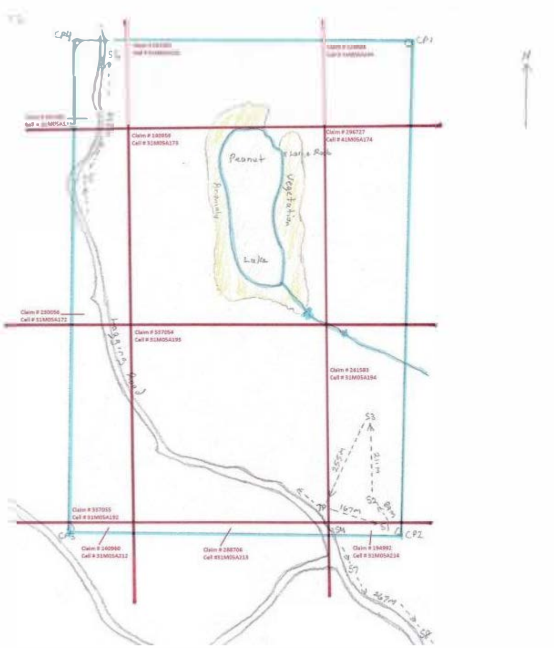
Traverse 1: field notes May 28, 2017 Brian A. (Tony) Bishop, Graeme Bishop

Sample #	Coordinates 17T UTM	Weight (kg)	Elevation (m)	Activity/Description
T1S1	0610254_E 5238668_N	4.1	347	Sand, gravelly rocks
T1S2	0610113_E 5239049_N	3.6 (wet)	324	Not screened, small, low-flow creek, sample taken downflow of large rock.
T1S3	0610022_E 5239002_N	2.5	336	At edge of boulder field, sand/gravel/boulders
T1S4	0609958_E 5238888_N	3.2	348	Large boulder field, rising elevation to the west
T1S5	0610080_E 5238856_N	3.4	341	Similar to T1S4
T1S6	0610046_E 5238648_N	2.7	356	Till, gravel-sand

Location #	Coordinates 17T UTM	Claim #	Grid Cell ID
Truck Park	0610130_E x 5238573_N	337054	31M05A193
WP1	0610273_E x 5239053_N	241583	31M05A194
CP1	0610270_E x 5239760_N		
CP2	0610270_E x 5238560_N		
CP3	0609470_E x 5238560_N		
CP4	0609470_E x 5239760_N		

L 4282412

Traverse 2: map June 7, 2017 Brian A. (Tony) Bishop, Graeme Bishop



L 4282412

Traverse 2: field notes June 7, 2017 Brian A. (Tony) Bishop, Graeme Bishop

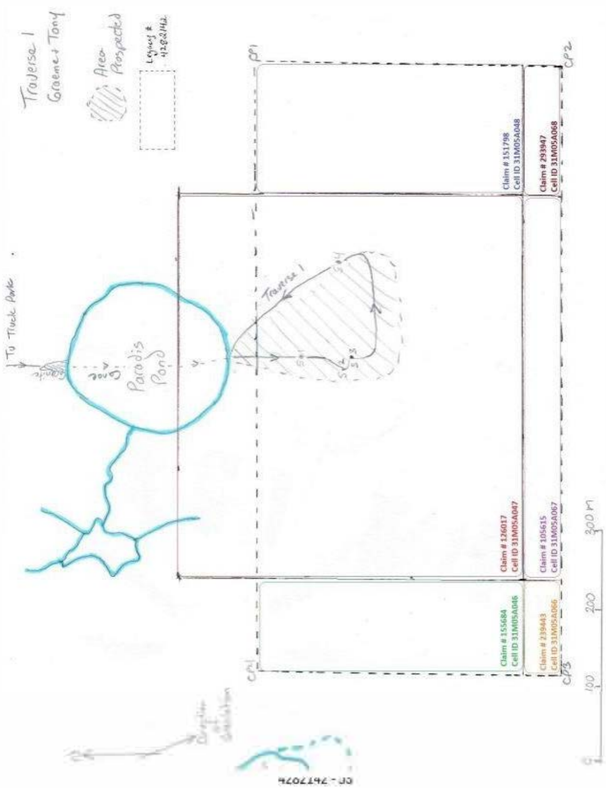
Sample #	Coordinates 17T UTM	Weight (kg)	Elevation (m)	Activity/Description
T1S1	0610259_E 5238570_N	1.1	352	Sandy/rocky till
T1S2	0610210_E 5238647_N	2.9	352	Under a blown down tree root
T1S3	0610196_E 5238848_N	3.6	332	Somewhat boulder-covered, dug on south end of large boulder
T1S4	0610125_E 5238558_N	4.1	360	Sandy, gravel till
T1S5	0609488_E 5239397_N	2.7	332	Sandy, gravel till
T1S6	060952 7_E 5239717_N	2.9	342	Sandy gravel till
T1S7	0610171_E 523846 5_N	3.6	363	Sandy, gravel till
T1S8	0610355_E 5238313_N	3.2	353	Lower trough east-west, sand, gravel
T1S9	0610486_E 5238125_N	4.1	352	Dug out area, sandy, gravel till

Location #	Coordinates 17T UTM	Claim #	Grid Cell ID
Truck Park	0610130_E x 5238573_N	241583	31M05A194
CP1	0610270_E x 5239760_N	194992	31M05A214
CP2	0610270_E x 5238560_N	230056	31M05A172
CP3	0609470_E x 5238560_N	241582	31M05A152
CP4	0609470_E x 5239760_N		

4282142

L 4282142 (below Paradis Pond L 4273040)

Traverse 1: map June 15, 2016 Brian A. (Tony) Bishop, Graeme Bishop



4282142

L 4282142 (below Paradis Pond L 4273040)

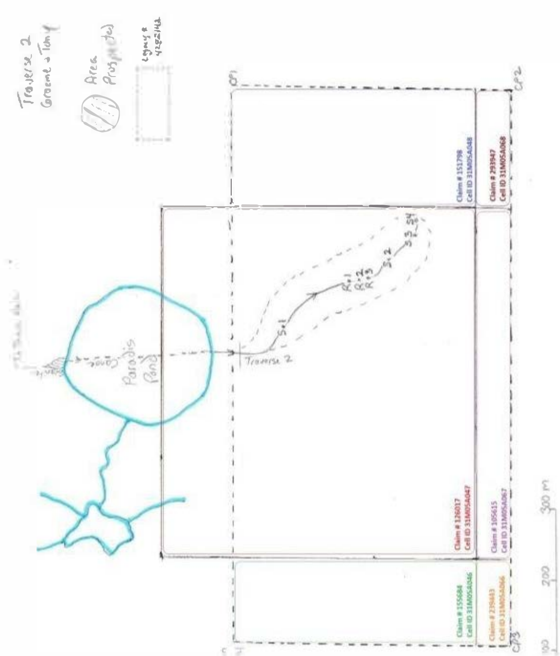
Traverse 1: field notes June 15, 2016 Brian A. (Tony) Bishop, Graeme Bishop

Sample #	Coordinates 17T UTM	Elevation	Activity/Description
S1	0607001_E 5242085_N	1144'	Dug ~2' deep hole from raised area 50x15x6' high (good results obtained) in a ~NS direction
S2	0606993_E 5242024_N	1206'	Sample taken on a hillock
S3	0607024_E 5242021_N	1219'	Shallow sample ~20' east of S2
S4	0607126_E 5242036_N	1132'	Dug 2-3' deep between boulders

Location #	Coordinates 17T UTM	Claim #	Cell ID
Truck Park	0607135_E/5242601_N	126017	31M0SA047
Corner post #1	0607401_E/5242148_N	155684	31M0SA046
Corner post #2	0607416_E/5241790_N	239443	31M0SA066
Corner post #3	0606609_E/5241756_N	105615	31M0SA067
Corner post #4	0606606_E/5242150_N	151798	31M0SA048
		293947	31M0SA068

L 4282187 (below Paradis Pond L 4273040)

Traverse 2: map June 23, 2016 Brian A. (Tony) Bishop, Graeme Bishop



4282142

L 4282142 (below Paradis Pond L 4273040)

Traverse 2: field notes June 23, 2016 Brian A. (Tony) Bishop, Graeme Bishop

Sample #	Coordinates 17T UTM	Elevation	Activity/Description
S1	0607040_E 5242083_N	1166'	Upended tree root
R1	0607100_E 5241986_N	1153'	Removed moss from boulder, fine-grained diabase magnetic, ~150' S/SE from S1
R2	0607104_E 5241977_N	1164'	Boulder with irregular magnetic points ~1-3" apart, too dirty to identify rock
R3	0607106_E 5241979_N	1177'	Rock breaking apart
S2	0607137_E 5241931_N	1173'	Dug under diabase boulder
S3	0607166_E 5241891_N	1152'	Dug under boulder 1½' deep, mostly clay south side
S4	0607198_E 5241891_N	1147'	Dug under boulder, south side

Location #	Coordinates 17T UTM	Claim #	Cell ID
Truck Park	0607135_E/5242601_N	126017	31M0SA047
Corner post #1	0607401_E/5242148_N	155684	31M0SA046
Corner post #2	0607416_E/5241790_N	239443	31M0SA066
Corner post #3	0606609_E/5241756_N	105615	31M0SA067
Corner post #4	0606606_E/5242150_N	151798	31M0SA048
		293947	31M0SA068

OVERBURDEN DRILLING MANAGEMENT LIMITED
107-15 CAPELLA COURT, NEPEAN, ONTARIO, K2E 7X1
TELEPHONE: (613) 226-1771
FAX NO.: (613) 226-8753
EMAIL: odm@storm.ca

D A T A T R A N S M I T T A L R E P O R T

DATE: 41292.66159

ATTENTION: **Mr. Peter Hubacheck**

CLIENT: **W.A. Hubacheck Consultants Ltd**
2854 Constable Rd
Mississauga, Ontario
L5J 1W8

E-Mail: **cetera7@yahoo.com** **cyber.bob@cogeco.ca**

NO. OF PAGES:

PROJECT: **Silver Buffalo**

FILE NAME: **20136064 - Hubacheck Consulting - SB - January**

SAMPLE NUMBERS: **30980 to 30992 and 49351 to 49365**

BATCH NUMBER: **6064**

NO. OF SAMPLES: **28**

THESE SAMPLES WERE PROCESSED FOR: **KIMBERLITE INDICATORS**
MMSIMs
GOLD

SPECIFICATIONS:
1. Submitted by client: ±15 to 20 kg till and alluvial sand/gravel samples.
2. All samples micropanned for gold and metallic mineral grains.
3. Heavy liquid separation specific gravity: 3.20.
4. 0.25-2.0 mm nonferromagnetic heavy mineral fraction picked for indicator minerals.

REMARKS: ______________________________

Remy Huneault, P.Geo.
Laboratory Manager

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY

Project: Silver Buffalo
Filename: 20136064 - Hubacheck Consulting - SB - January
Total Number of Samples in this Report = 28 Batch Number: 6064

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine	(g) *	Total	Reshaped	Modified	Pristine
30980	0	0	0	0	56.8	0	0	0	0
30981	1	1	0	0	46.4	8	8	0	0
30982	3	2	1	0	53.6	13	13	<1	0
30983	18	15	2	1	67.6	129	117	8	3
30984	2	2	0	0	51.2	15	15	0	0
30985	3	0	2	1	52.0	2	0	2	<1
30986	23	18	4	1	42.0	141	125	16	<1
30987	19	16	2	1	71.2	156	152	3	1
30988	4	3	1	0	46.0	425	417	8	0
30989	0	0	0	0	54.8	0	0	0	0
30990	6	5	0	1	42.8	106	56	0	50
30991	2	2	0	0	54.8	13	13	0	0
30992	15	13	2	0	50.4	193	149	44	0
49351	8	6	1	1	41.2	84	79	5	<1
49352	3	3	0	0	52.4	16	16	0	0
49353	1	1	0	0	46.4	4	4	0	0
49354	1	1	0	0	56.8	1	1	0	0
49355	10	7	2	1	59.6	34	12	18	3
49356	4	3	1	0	55.6	22	15	7	0
49357	2	2	0	0	66.8	8	8	0	0
49358	6	5	1	0	75.2	15	10	5	0
49359	2	2	0	0	84.0	61	61	0	0
49360	1	1	0	0	84.4	4	4	0	0
49361	9	9	0	0	45.6	25	25	0	0
49362	4	3	1	0	38.8	8	7	1	0
49363	3	1	2	0	63.6	<1	<1	<1	0
49364	4	3	1	0	54.0	117	110	7	0
49365	2	2	0	0	70.4	4	4	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
DETAILED GOLD GRAIN DATA

Project: Silver Buffalo
Filename: 20136064 - Hubacheck Consulting - SB - January
Total Number of Samples in this Report = 28

Batch Number: 6064

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
30980	Yes	NO VISIBLE GOLD									No sulphides.
30981	Yes	13 C	50	75	1			1			No sulphides.
								1	46.4	8	
30982	Yes	5 C	25	25		1		1			No sulphides.
		8 C	25	50	1			1			
		15 C	75	75	1			1			
								3	53.6	14	
30983	Yes	3 C	15	15	2			2			No sulphides.
		5 C	25	25	1			1			
		8 C	25	50	2			2			
		10 C	25	75	2			2			
		10 C	50	50	4	1	1	6			
		13 C	50	75	1	1		2			
		15 C	75	75	2			2			
		29 C	75	225	1			1			
								18	67.6	129	
30984	Yes	13 C	50	75	2			2			No sulphides.
								2	51.2	15	
30985	Yes	5 C	25	25		1	1	2			No sulphides.
		8 C	25	50		1		1			
								3	52.0	3	
30986	Yes	3 C	15	15	5		1	6			No sulphides.
		5 C	25	25	2	1		3			
		8 C	25	50	3	1		4			
		10 C	25	75	1	1		2			
		10 C	50	50	1			1			
		13 C	50	75	2	1		3			
		15 C	75	75	2			2			
		18 C	75	100	1			1			
		20 C	75	125	1			1			
								23	42.0	141	
30987	Yes	3 C	15	15	1			1			1 grain pyrite (50µm).
		5 C	25	25	4	1		5			
		8 C	25	50	3		1	4			
		10 C	50	50	5	1		6			
		13 C	50	75	2			2			
		75 M	125	125	1			1			
								19	71.2	156	
30988	Yes	8 C	25	50	1			1			No sulphides.
		13 C	50	75	1	1		2			
		44 C	225	250	1			1			
								4	46.0	425	
30989	Yes	NO VISIBLE GOLD									No sulphides.
30990	Yes	10 C	50	50	2			2			1 grain pyrite (50µm).
		13 C	50	75	1			1			
		15 C	50	100	1			1			
		18 C	75	100	1			1			
		22 C	75	150			1	1			
								6	42.8	106	

30991	Yes	8 C	25	50	1			1			1 grain pyrite (50µm).
		15 C	75	75	1			1			
								2	54.8	13	
30992	Yes	3 C	15	15	1			1			No sulphides.
		5 C	25	25	5			5			
		8 C	25	50	4	1		5			
		10 C	50	50	1			1			
		18 C	50	125	1			1			
		22 C	100	125		1		1			
		50 M	100	150	1			1			
								15	50.4	193	
49351	Yes	3 C	15	15			1	1			No sulphides.
		10 C	50	50	2	1		3			
		13 C	50	75	2			2			
		15 C	50	100	1			1			
		20 C	75	125	1			1			
								8	41.2	84	
49352	Yes	5 C	25	25	1			1			No sulphides.
		10 C	25	75	1			1			
		15 C	75	75	1			1			
								3	52.4	16	
49353	Yes	10 C	50	50	1			1			No sulphides.
								1	46.4	4	
49354	Yes	8 C	25	50	1			1			No sulphides.
								1	56.8	1	
49355	Yes	5 C	25	25	3			3			No sulphides.
		8 C	25	50	1	1		2			
		10 C	50	50	3		1	4			
		18 C	50	125		1		1			
								10	59.6	34	
49356	Yes	8 C	25	50	1			1			No sulphides.
		13 C	50	75	2	1		3			
								4	55.6	22	
49357	Yes	13 C	25	100	1			1			No sulphides.
		10 C	50	50	1			1			
								2	66.8	8	
49358	Yes	8 C	25	50	2			2			No sulphides.
		10 C	25	75	1			1			
		10 C	50	50	2			2			
		13 C	50	75		1		1			
								6	75.2	15	
49359	Yes	13 C	50	75	1			1			~400 grains marcasite (25µm).
		50 M	100	125	1			1			
								2	84.0	61	
49360	Yes	13 C	50	75	1			1			~80 grains marcasite (25µm).
								1	84.4	4	
49361	Yes	5 C	25	25	3			3			No sulphides.
		8 C	25	50	4			4			
		13 C	50	75	2			2			
								9	45.6	25	
49362	Yes	3 C	15	15	1			1			No sulphides.
		5 C	25	25		1		1			
		8 C	25	50	1			1			
		10 C	50	50	1			1			
								4	38.8	8	
49363	Yes	3 C	15	15		2		2			No sulphides.
		5 C	25	25	1			1			
								3	63.6	1	

49364	Yes	5 C	25	25	1		1			No sulphides.
		8 C	25	50	1		1			
		13 C	50	75		1	1			
		50 M	100	150	1		1			
							4	54.0	117	
49365	Yes	8 C	25	50	1		1			~2000 grains marcasite (15-50µm).
		10 C	50	50	1		1			~20 grains pyrite (25-75µm).
							2	70.4	4	
0	Yes	0 C					0			No sulphides.
		0 C					0			
		0 C					0			
		0 C					0			
		0 C					0			
		0 C					0			
		0 C					0			
		0 C					0			
		0 C					0			
		0 C					0			
							0	0.0	#VALUE!	
0		0 C					0			
		0 C					0			
							0	0.0	#VALUE!	
0	** Appen	0 C					0			
		0 C					0			
							0	0.0	#VALUE!	

Hubacheck

OVERBURDEN DRILLING MANAGEMENT LIMITED
RAW SAMPLE DESCRIPTIONS AND PROCESSING WEIGHTS

Project: Silver Buffalo
Filename: 20136064 - Hubacheck Consulting - SB - January
Total Number of Samples in this Report = 28

Batch Number: 6064

Sample Number	Weight (kg)				Clasts >2.0 mm					Matrix <2.0 mm							Class	
						Percentage				Distribution					Colour			
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	Org	Sand	Clay		
30980	18.1	17.6	3.4	14.2	P	100	0	0	0	U	+	Y	-	N	OC	OC	TILL	
30981	15.2	14.7	3.1	11.6	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL	
30982	16.4	15.9	2.5	13.4	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL	
30983	21.0	20.5	3.6	16.9	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL	
30984	16.4	15.9	3.1	12.8	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL	
30985	16.1	15.6	2.6	13.0	P	100	0	0	0	U	+	Y	-	N	OC	OC	TILL	
30986	15.0	14.5	4.0	10.5	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL	
30987	22.0	21.5	3.7	17.8	P	80	20	0	0	U	+	Y	-	N	OC	OC	TILL	
30988	15.8	15.3	3.8	11.5	P	100	0	0	0	U	+	Y	-	N	OC	OC	TILL	
30989	16.3	15.8	2.1	13.7	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL	
30990	16.6	16.1	5.4	10.7	P	80	20	0	0	S	FMC	Y	N	N	OC	NA	SAND + GRAVEL	ALLUVIUM
30991	16.7	16.2	2.5	13.7	P	95	5	0	0	U	+	Y	-	N	OC	OC	TILL	
30992	15.1	14.6	2.0	12.6	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL	
49351	15.8	15.3	5.0	10.3	P	70	30	0	0	U	+	Y	-	N	OC	OC	TILL	
49352	17.7	17.2	4.1	13.1	P	80	20	0	0	U	+	Y	-	N	OC	OC	TILL	
49353	18.6	18.1	6.5	11.6	P	80	20	0	0	U	Y	Y	Y	N	OC	OC	TILL	
49354	17.7	17.2	3.0	14.2	P	80	20	0	0	U	+	Y	-	N	OC	OC	TILL	
49355	17.8	17.3	2.4	14.9	P	95	5	0	0	U	+	Y	-	N	OC	OC	TILL	
49356	18.4	17.9	4.0	13.9	P	80	20	0	0	U	+	Y	-	N	DOC	DOC	TILL	
49357	19.5	19.0	2.3	16.7	P	80	20	0	0	U	+	Y	-	N	BE	BE	TILL	
49358	25.7	25.2	6.4	18.8	P	80	20	0	0	U	+	Y	-	N	BE	BE	TILL	
49359	21.5	21.0	0.0	21.0		No Clasts				S	FM	-	N	+	BK	NA	SAND + SOIL	ALLUVIUM
49360	21.6	21.1	0.0	21.1		No Clasts				S	FM	-	N	+	BK	NA	SAND + SOIL	ALLUVIUM
49361	13.0	12.5	1.1	11.4	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL	
49362	13.2	12.7	3.0	9.7	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL	
49363	16.4	15.9	0.0	15.9		No Clasts				S	FM	-	N	+	BK	NA	SAND + SOIL	ALLUVIUM
49364	17.3	16.8	3.3	13.5	P	70	30	0	0	U	+	Y	-	N	OC	OC	TILL	
49365	22.4	21.9	4.3	17.6	P	80	20	0	0	S	FMC	-	N	N	GY	NA	SAND + GRAVEL	ALLUVIUM

14.15 AVG

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
HEAVY MINERAL PROCESSING WEIGHTS AND KIMBERLITE INDICATOR MINERAL DATA

Project: Silver Buffalo
Filename: 20136064 - Hubacheck Consulting - SB - January
Total Number of Samples in this Report = 28

	Weight (g)											Number of Grains																						
	<2.0 mm Table Concentrate											Selected Pseudo KIMs			KIMs																			
			0.25-2.0 mm Heavy Liquid Separation S.G 3.20												1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						
					Nonferromagnetic HMC							1.0 to 2.0 mm	0.5 to 1.0 mm	0.25 to 0.5 mm																				
						Processed Split																												
Sample Number	Total	-0.25 mm	Heavy Liquid Lights	Mag	H Total	%	Weight	<0.25 mm	0.25 to 0.5	0.5 to 1.0	1.0 to 2.0 *	Low-Cr diopside	Low-Cr diopside	Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO **	Total KIMs **
30980	799.7	484.2	298.5	1.40	15.6	100	15.6	5	7.1	2.8	0.70	0	1	16	0	0	0	0	0	0	0	0	0	2	0	0	5	0	0	10	12	1	30
30981	1,120.8	665.2	440.7	1.50	13.4	100	13.4	3.1	6.5	2.7	1.10	0	0	0	1	0	0	0	0	0	0	0	0	1	3	2	5	0	0	10	6	1	29
30982	722.7	443.3	264.4	1.00	14	100	14	4.8	5.9	2.6	0.70	0	0	8	0	0	0	0	0	0	1	0	0	3	3	3	5	2	1	4	19	1	42
30983	1,322.3	883.0	416.1	3.40	19.8	100	19.8	6.8	8.5	3.4	1.10	0	0	0	0	0	0	0	0	1	1	0	0	3	0	3	6	2	0	11	18	10	55
30984	514.3	381.5	123.9	1.00	7.9	100	7.9	3.3	3.2	1.2	0.20	0	0	10	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	5	6	0	16
30985	775.3	498.9	269	1.00	6.4	100	6.4	2.3	2.7	1.1	0.30	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	5	0	0	9	5	0	23
30986	801.9	465.1	311.6	3.20	22	100	22	5.2	10.4	4.8	1.60	0	1	5	0	0	0	0	0	0	1	0	0	3	1	5	5	0	0	4	1	10	30
30987	1,383.2	869.0	492.3	2.50	19.4	100	19.4	7.5	7.4	3.4	1.10	0	0	25	0	0	0	0	0	0	0	1	0	3	0	3	7	3	0	6	8	6	37
30988	630.2	403.8	216.4	1.30	8.7	100	8.7	3.7	3.5	1.2	0.30	0	0	9	0	0	0	0	0	0	0	0	0	2	0	0	5	0	0	22	24	0	53
30989	671.9	421.6	238.1	1.00	11.2	100	11.2	3.9	5.5	1.6	0.20	0	0	6	0	0	0	0	0	1	0	0	0	0	0	1	2	0	0	4	7	0	15
30990	1,351.2	742.3	589.9	3.80	15.2	100	15.2	3.6	7	3.4	1.20	0	0	8	0	0	0	0	0	0	2	0	0	5	0	0	5	2	0	12	16	7	49
30991	1,309.0	852.0	439.7	2.20	15.1	100	15.1	6.3	6.3	2.2	0.30	0	1	16	0	0	0	0	0	1	1	0	0	3	1	1	10	1	0	9	17	3	47
30992	1,407.4	950.8	444.1	1.40	11.1	100	11.1	3.2	5.1	2.1	0.70	0	0	0	0	0	0	1	0	2	1	0	0	1	0	3	3	0	0	5	11	4	31
49351	1,614.5	987.2	605.4	5.20	16.7	100	16.7	4.4	7.4	3.5	1.40	0	1	14	0	0	0	0	0	0	0	0	0	1	0	4	13	2	1	13	18	20(40)	(92)
49352	997.5	650.3	332.5	3.30	11.4	100	11.4	2.2	6.6	2	0.60	0	0	5	0	0	0	0	0	1	0	0	0	1	0	2	5	0	0	3	0	1	13
49353	1,127.9	735.2	387.3	0.80	4.6	100	4.6	1.2	2.4	0.7	0.30	0	0	3	0	0	0	1	0	0	1	0	0	1	0	2	7	0	1	5	12	6	36
49354	955.8	767.1	181.3	1.90	5.5	100	5.5	1.6	3.1	0.7	0.10	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	5	0	1	9	3	0	22
49355	1,163.6	983.5	175.5	1.20	3.4	100	3.4	1	1.9	0.4	0.10	0	0	4	0	0	0	0	0	0	0	0	0	3	0	2	4	0	0	6	3	1	19
49356	904.1	667.7	232.4	0.70	3.3	100	3.3	0.9	1.7	0.5	0.20	0	1	2	0	0	0	0	0	0	0	0	0	0	1	1	4	1	0	11	10	0	28
49357	1,111.3	743.9	359.6	1.00	6.8	100	6.8	1.5	4	1	0.30	0	0	0	0	0	0	1	0	0	2	0	0	3	0	0	6	0	1	7	1	2	23
49358	1,145.0	804.9	330.7	0.04	9.4	100	9.4	1.8	5.7	1.4	0.50	0	0	1	0	0	0	0	0	0	2	0	0	5	1	0	16	2	0	15	2	0	43
49359	925.9	554.7	356.6	2.60	12	100	12	2.7	6.1	3.1	0.10	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
49360	684.8	405.5	261.6	2.80	14.9	100	14.9	3	8.3	3.5	0.10	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	3	0	6
49361	898.7	668.1	228.1	0.40	2.1	100	2.1	0.7	1	0.3	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	6	2	2	19
49362	688.1	474.3	211.4	0.50	1.9	100	1.9	1.51	0.09	0.2	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	5	4	5	17
49363	819.8	556.2	260.5	0.30	2.8	100	2.8	0.87	1.7	0.2	0.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
49364	1,207.4	869.7	328.1	1.80	7.8	100	7.8	2.2	3.9	1.3	0.40	0	0	1	0	0	0	0	0	0	2	0	1	3	0	2	4	0	2	5	4	2	25
49365	1,629.5	814.2	781	0.04	34.3	100	34.3	6.2	24.9	1.9	1.30	0	0	11	0	0	0	0	0	0	5	0	0	3	0	0	53	12	0	43	19	1	136

* Values greater than 0.1 g were weighed only to one decimal place; the zero was added in the second decimal position to facilitate column alignment.
** Numbers in brackets are estimated total indicator grains present in samples where not all of the grains were picked.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

Hubacheck

OVERBURDEN DRILLING MANAGEMENT LIMITED
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES

Project: Silver Buffalo
Filename: 20136064 - Hubacheck Consulting - SB - January
Total Number of Samples in this Report = 28
Batch Number: 6064

Sample No.	REMARKS:
30980	Also picked 1 enstatite (KIM) from 0.25-0.5 mm fraction. Both IM from 0.5-1.0 mm fraction and 2 GP and 8 IM from 0.25-0.5 mm fraction have partial alteration mantles.
30981	3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
30982	2 IM from each of 0.5-1.0 mm and 0.25-0.5 mm fractions have partial alteration mantles.
30983	SEM checks from 0.5-1.0 mm fraction: 3 IM candidates = 3 IM. SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 GO (1 Cr-poor pyrope and 1 pyrope-almandine); and 5 IM candidates = 1 IM, 3 CR and 1 ilmenite. 2 IM from 0.5-1.0 mm fraction and all 6 GP from 0.25-0.5 mm fraction have partial alteration mantles.
30984	2 IM from each of 0.5-1.0 mm and 0.25-0.5 mm fractions have partial alteration mantles.
30985	1 GP and 1 IM from 0.5-1.0 mm fraction and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
30986	SEM checks from 0.5-1.0 mm fraction: 4 IM candidates = 3 IM and 1 CR. SEM checks from 0.25-0.5 mm fraction: 2 IM candidates = 2 IM. All 3 IM from 0.5-1.0 mm fraction and 3 GP and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
30987	1 IM from 0.5-1.0 mm fraction and 3 from 0.25-0.5 mm fraction have partial alteration mantles.
30988	Both IM from 0.5-1.0 mm fraction and 5 from 0.25-0.5 mm fraction have partial alteration mantles.
30989	1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
30990	2 IM from 0.5-1.0 mm fraction have partial alteration mantles.
30991	1 IM from 0.5-1.0 mm fraction and sole GO and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
30992	SEM checks from 0.25-0.5 mm fraction: 7 IM versus CR candidates = 4 IM and 3 CR. Sole IM from 1.0-2.0 mm fraction, sole GP and sole IM from 0.5-1.0 mm fraction and 2 GP and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
49351	Sole IM from 0.5-1.0 mm fraction and 2 GP, 1 GO and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
49352	1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
49353	SEM checks from 0.25-0.5 mm fraction: 6 IM versus CR candidates = 5 IM and 1 CR. Sole IM from 1.0-2.0 mm fraction, sole GP and sole IM from 0.5-1.0 mm fraction and 2 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
49354	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM check from 0.25-0.5 mm fraction: 1 DC versus Cr-garnet candidate = 1 DC. 1 IM from 0.5-1.0 mm fraction and 3 from 0.25-0.5 mm fraction have partial alteration mantles.
49355	2 IM from 0.5-1.0 mm fraction and 1 from 0.25-0.5 mm fraction have partial alteration mantles.
49356	4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
49357	Sole IM from 1.0-2.0 mm fraction, 1 GP and all 3 IM from 0.5-1.0 mm fraction and 3 GP and 6 IM from 0.25-0.5 mm fraction have partial alteration mantles.
49358	2 IM from 0.5-1.0 mm fraction and 5 from 0.25-0.5 mm fraction have partial alteration mantles.
49359	No KIM remarks.
49360	No KIM remarks.
49361	4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
49362	2 GP and 4 IM from 0.25-0.25 mm fraction have partial alteration mantles.
49363	No KIM remarks.
49364	1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
49365	2 IM from 0.5-1.0 mm fraction and 5 GP, 1 GO and 12 IM from 0.25-0.5 mm fraction have partial alteration mantles.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Project: Silver Buffalo
Filename: 20136064 - Hubacheck Consulting - SB - January
Total Number of Samples in this Report = 28

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm >1 amp % Cpy	Misc. Prime MMSIMs	% Py	<1.0 amp % Gth	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm >1.0 amp # Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	<0.8 amp % Sps	% Fay	% Opx	% Cr	Phosphates >1.0 amp % Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
30980	0	0	0	Tr	0	Tr ruby corundum (1 gr) Tr low-Cr diopside (16 gr)	Tr (1 gr)	0	0	Tr	5	Tr	0	Tr	Tr (12 gr; see KIM data)	0	Tr	Almandine-augite-hornblende/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 ruby corundum versus almandine candidate = 1 ruby corundum; 3 representative spessartine versus almandine candidates = 3 spessartine; and 3 orthopyroxene versus clinopyroxene candidates = 3 bronzite.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 ruby corundum 16 low-Cr diopside 1 red rutile 3 representative spessartine 3 representative bronzite 12 chromite (picked as KIMs) 1 forsterite (see KIM data; picked as KIM)	Almandine-augite-hornblende/epidote	SEM checks from 0.25-0.5 mm fraction: 1 ruby corundum versus almandine candidate = 1 ruby corundum; 3 representative spessartine versus almandine candidates = 3 spessartine; and 3 orthopyroxene versus clinopyroxene candidates = 3 bronzite.
30981	0	0	Tr (10 gr)	2	0	0	0	0	0	0	3	Tr	0	Tr	Tr (6 gr; see KIM data)	2	0	Almandine-hornblende-hematite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 7 barite candidates = 1 apatite and 6 zoisite.	0.5-1.0 mm fraction: 3 chromite (see KIM data; picked as KIMs) 2 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 1 apatite resembling barite 6 zoisite resembling barite 6 chromite (picked as KIMs) 1 forsterite (see KIM data; picked as KIM)	Almandine-hornblende-hematite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 7 barite candidates = 1 apatite and 6 zoisite.
30982	0	0	0	Tr	0	Tr low-Cr diopside (8 gr)	Tr (2 gr)	0	0	Tr	5	Tr	0	Tr	Tr (19 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite (see KIM data; picked as KIMs) 3 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 8 low-Cr diopside 2 red rutile 19 chromite (picked as KIMs) 1 forsterite (see KIM data; picked as KIMs)	Almandine-hornblende/epidote	
30983	0	0	0	Tr	0	0	0	0	0	Tr	8	Tr	0	Tr	Tr (18 gr; see KIM data)	Tr	0	Almandine-augite-hornblende/epidote-diopside assemblage.	1.0-2.0 mm fraction: 1 forsterite (see KIM data; picked as KIM) 0.5-1.0 mm fraction: 3 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 18 chromite (picked as KIMs) 10 forsterite (see KIM data; picked as KIMs)	Almandine-augite-hornblende/epidote-diopside	
30984	0	0	0	Tr	0	Tr low-Cr diopside (10 gr)	0	0	0	Tr	3	Tr	0	Tr	Tr (6 gr; see KIM data)	Tr	0	Almandine-hornblende-augite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 10 low-Cr diopside 6 chromite (picked as KIMs)	Almandine-hornblende-augite/epidote-diopside	
30985	0	0	Tr (3 gr)	Tr	0	Tr low-Cr diopside (3 gr)	0	0	0	Tr	10	Tr	0	Tr	Tr (5 gr; see KIM data)	0	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 5 chromite (picked as KIMs)	Almandine-hornblende/epidote	
30986	0	0	0	Tr	0	Tr ruby corundum (1 gr) Tr low-Cr diopside (5 gr)	0	0	0	Tr	5	Tr	0	Tr	Tr (1 gr; see KIM data)	0	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite (see KIM data; picked as KIM) 5 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 1 ruby corundum 5 low-Cr diopside 1 chromite (picked as KIM) 10 forsterite (see KIM data; picked as KIMs)	Almandine-hornblende/epidote	

30987	0	0	Tr (1 gr)	Tr	1 blue-grey	Tr Mn-epidote (2 gr) Tr low-Cr diopside (25 gr)	0	0	0	Tr	5	Tr	0	Tr	Tr (8 gr; see KIM data)	0	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 chalcopyrite 3 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 1 spinel 2 Mn-epidote 25 low-Cr diopside 8 chromite (picked as KIMs) 6 forsterite (see KIM data; picked as KIMs)	Almandine-hornblende/epidote
30988	0	0	Tr (~15 gr)	Tr	0	Tr low-Cr diopside (9 gr)	Tr (1 gr)	Tr	0	Tr	15	Tr	0	Tr	Tr (24 gr; see KIM data)	0	0	Almandine-hornblende-hematite/epidote-staurolite assemblage.	0.25-0.5 mm fraction: 9 low-Cr diopside 1 red rutile 24 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote-staurolite
30989	0	0	Tr (5 gr)	Tr	0	Tr low-Cr diopside (6 gr)	0	0	0	Tr	3	Tr	0	Tr	Tr (7 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	1.0-2.0 mm fraction: 1 forsterite (see KIM data; picked as KIM) 0.5-1.0 mm fraction: 1 forsterite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 6 low-Cr diopside 7 chromite (picked as KIMs)	Almandine-hornblende/epidote
30990	0	0	Tr (~15 gr)	Tr	0	Tr low-Cr diopside (8 gr)	Tr (1 gr)	Tr	Tr	0	12	Tr	Tr	Tr	Tr (16 gr; see KIM data)	Tr	0	Almandine-augite-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 8 low-Cr diopside 1 red rutile 16 chromite (picked as KIMs) 7 forsterite (see KIM data; picked as KIMs)	Almandine-augite-hornblende/epidote
30991	0	0	0	Tr	0	Tr low-Cr diopside (16 gr)	Tr (2 gr)	Tr	0	Tr	7	Tr	0	3	Tr (17 gr; see KIM data)	Tr	0	Almandine-hornblende-augite/epidote-diopside assemblage.	1.0-2.0 mm fraction: 1 forsterite (see KIM data; picked as KIM) 0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite (see KIM data; picked as KIM) 1 forsterite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 16 low-Cr diopside 2 red rutile 17 chromite (picked as KIMs) 3 forsterite (see KIM data; picked as KIMs)	Almandine-hornblende-augite/epidote-diopside
30992	0	0	0	Tr	0	0	0	0	0	Tr	5	1	0	Tr	Tr (11 gr; see KIM data)	Tr	0	Almandine-augite-hornblende/epidote assemblage.	1.0-2.0 mm fraction: 2 forsterite (see KIM data; picked as KIMs) 0.5-1.0 mm fraction: 3 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 11 chromite (picked as KIMs) 4 forsterite (see KIM data; picked as KIMs)	Almandine-augite-hornblende/epidote
49351	Tr (1 gr)	0	Tr (~50 gr)	1	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (14 gr)	Tr (5 gr)	Tr	0	Tr	5	Tr	Tr	5	Tr (18 gr; see KIM data)	Tr	Tr	Augite-almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 4 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 1 chalcopyrite 1 Mn-epidote 14 low-Cr diopside 5 red rutile 18 chromite (picked as KIMs) 20 representative forsterite (see KIM data; picked as KIMs)	Augite-almandine-hornblende/epidote

49352	0	0	Tr (5 gr)	Tr	0	Tr low-Cr diopside (5 gr)	Tr (3 gr)	0	Tr	0	3	Tr	0	Tr	0	Tr	0	Almandine-hornblende-augite/epidote assemblage.	1.0-2.0 mm fraction: 1 forsterite (see KIM data; picked as KIM) 0.5-1.0 mm fraction: 2 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 5 low-Cr diopside 3 red rutile	Almandine-hornblende-augite/epidote
49353	0	0	0	Tr	0	Tr low-Cr diopside (3 gr)	Tr (2 gr)	0	0	Tr	6	Tr	0	Tr	Tr (12 gr; see KIM data)	Tr	0	Almandine-hornblende-augite/epidote assemblage.	1 forsterite (see KIM data; picked as KIM) 0.5-1.0 mm fraction: 2 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 3 low-Cr diopside 2 red rutile 12 chromite (picked as KIMs)	Almandine-hornblende-augite/epidote
49354	0	0	0	5	0	Tr low-Cr diopside (1 gr)	Tr (3 gr)	0	0	Tr	10	Tr	0	Tr	Tr (3 gr; see KIM data)	Tr	0	Hornblende-almandine/epidote assemblage.	6 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 1 low-Cr diopside 3 red rutile 3 chromite (picked as KIMs)	Hornblende-almandine/epidote
49355	0	0	0	1	0	Tr low-Cr diopside (4 gr)	Tr (3 gr)	0	0	0	15	Tr	Tr	0	Tr (3 gr; see KIM data)	Tr	0	Almandine-hornblende-ilmenite/epidote-staurolite assemblage.	0.5-1.0 mm fraction: 2 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 4 low-Cr diopside 3 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende-ilmenite/epidote-staurolite
49356	0	0	0	1	0	Tr low-Cr diopside (2 gr)	Tr (7 gr)	0	0	0	5	Tr	0	Tr	Tr (10 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	1 forsterite (see KIM data; picked as KIM) 0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite (see KIM data; picked as KIM) 1 forsterite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 2 low-Cr diopside 7 red rutile 10 chromite (picked as KIMs)	Almandine-hornblende/epidote
49357	0	0	0	Tr	0	0	0	0	0	Tr	5	Tr	0	Tr	Tr (1 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 chromite (picked as KIM)	Almandine-hornblende/epidote
49358	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	0	0	Tr	0	4	Tr	0	Tr	Tr (2 gr; see KIM data)	Tr	0	Almandine-hornblende-augite/epidote-diopside assemblage.	2 forsterite (see KIM data; picked as KIMs) 0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende-augite/epidote-diopside
49359	Tr (1 gr)	0	0	Tr	0	Tr low-Cr diopside (3 gr)	0	0	0	0	1	Tr	0	Tr	0	Tr	0	Augite-hornblende/diopside assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 3 low-Cr diopside	Augite-hornblende/diopside
49360	0	0	0	Tr	0	0	0	0	0	0	2	0	0	Tr	Tr (3 gr; see KIM data)	Tr	0	Augite-hornblende/diopside-titanite assemblage.	2 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 3 chromite (picked as KIMs)	Augite-hornblende/diopside-titanite
49361	0	0	0	Tr	0	0	Tr (1 gr)	0	0	0	2	Tr	0	Tr	Tr (2 gr; see KIM data)	Tr	0	Almandine-augite-hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 red rutile 2 chromite (picked as KIMs)	Almandine-augite-hematite/epidote
49362	0	0	Tr (10 gr)	Tr	0	0	0	0	0	Tr	3	Tr	0	Tr	Tr (4 gr; see KIM data)	Tr	0	Almandine-augite-hornblende/epidote assemblage.	2 forsterite (see KIM data; picked as KIMs) 0.5-1.0 mm fraction: 1 chalcopyrite 0.25-0.5 mm fraction: 4 chromite (picked as KIMs) 5 forsterite (see KIM data; picked as KIMs)	Almandine-augite-hornblende/epidote

49363	Tr (1 gr)	0	0	0	0	0	0	0	0	0	3	0	0	Tr	Tr (1 gr; see KIM data)	Tr	0	Augite-hornblende/diopside-epidote assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 1 chromite (picked as KIM)	Augite-hornblende/diopside-epidote
49364	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	0	Tr	0	5	Tr	0	Tr	Tr (4 gr; see KIM data)	Tr	0	Almandine-hornblende-augite/diopside-epidote assemblage.	0.5-1.0 mm fraction: 2 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile 4 chromite (picked as KIMs) 2 forsterite (see KIM data; picked as KIMs)	Almandine-hornblende-augite/diopside-epidote
49365	Tr (5 gr)	0	Tr (1 gr)	Tr	0	Tr low-Cr diopside (11 gr)	Tr (1 gr)	0	Tr	0	8	Tr	0	Tr	Tr (19 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 5 chalcopyrite 11 low-Cr diopside 1 red rutile 19 chromite (picked as KIMs) 1 forsterite (see KIM data; picked as KIM)	Almandine-hornblende/epidote-diopside

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY ABBREVIATIONS

SEDIMENT LOG

Largest Clasts Present:
G: Granules
P: Pebbles
C: Cobbles

Clast Composition:
V/S: Volcanics and/or sediments
GR: Granitics
LS: Limestone, carbonates
OT: Other Lithologies (refer to footnotes)
TR: Only trace present
NA: Not applicable
OX: Very oxidized, undifferentiated

Matrix Grain Size Distribution:
S/U: Sorted or Unsorted
SD: Sand (F: Fine; M: Medium; C: Coarse)
ST: Silt
CY: Clay
Y: Fraction present
+: Fraction more abundant than normal
-: Fraction less abundant than normal
N: Fraction not present

Matrix Organics:
ORG: Y: Organics present in matrix
N: Organics absent or negligible in matrix
+: Matrix is mainly organic

Matrix Colour:
Primary:
BE: Beige
GY: Grey
GB: Grey-beige
GN: Green
GG: Grey-green
PP: Purple
PK: Pink
PB: Pink-Beige
Secondary (soil):
OC: Ochre
BN: Brown
BK: Black

Secondary Colour Modifier:
L: Light
M: Medium
D: Dark

GOLD GRAIN LOG

Thickness:
VG: Visible gold grains
M: Actual measured thickness of grain (microns)
C: Thickness of grain (microns) calculated from measured width and length

KIM (kimberlite indicator mineral) LOG

GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
CR: Chromite
FO: Forsterite

MMSIM (metamorphosed or magmatic massive sulphide indicator mineral) and PCIM (porphyry Cu indicator mineral) LOGS

Adr: Andradite	Cr: Chromite	Ky: Kyanite	Sil: Sillimanite	Ttn: Titanite
Ap: Apatite	Fay: Fayalite	Mz: Monazite	Spi: Spinel	
Ase: Anatase	Gh: Gahnite	Ol: Olivine	Sps: Spessartine	
Ax: Axinite	Gr: Grossular	Opx: Orthopyroxene	St: Staurolite	
Cpy: Chalcopyrite	Gth: Goethite	Py: Pyrite	Tm: Tourmaline	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
SAMPLE RECEPTION LOG

Project: Silver Buffalo
Filename: 20136064 - Hubacheck Consulting - SB - January
Total Number of Samples in this Report = 28

Sample Number	Number of bags per Sample	Security Seal No.	Date Received	Comments
30980	1	NA	October 23, 2012	
30981	1	NA	October 23, 2012	
30982	1	NA	October 23, 2012	
30983	1	NA	October 23, 2012	
30984	1	NA	October 23, 2012	
30985	1	NA	October 23, 2012	
30986	1	NA	October 23, 2012	
30987	1	NA	October 23, 2012	
30988	1	NA	October 23, 2012	
30989	1	NA	October 23, 2012	
30990	1	NA	October 23, 2012	
30991	1	NA	October 23, 2012	
30992	1	NA	October 23, 2012	
49351	1	NA	October 23, 2012	
49352	1	NA	October 23, 2012	
49353	1	NA	October 23, 2012	
49354	1	NA	October 23, 2012	
49355	1	NA	October 23, 2012	
49356	1	NA	October 23, 2012	
49357	1	NA	October 23, 2012	
49358	1	NA	October 23, 2012	
49359	1	NA	October 23, 2012	
49360	1	NA	October 23, 2012	
49361	1	NA	October 23, 2012	
49362	1	NA	October 23, 2012	
49363	1	NA	October 23, 2012	
49364	1	NA	October 23, 2012	
49365	1	NA	October 23, 2012	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	December 11, 2019
Project name:	Lorrain Chain
ODM batch number:	8213
Sample numbers:	Unit 13 to Unit 25, Unit 27 to Unit 33
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	20
Number of samples processed to date:	20
Total number of samples in project:	95
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples prescreened to -6.0 mm in the field
2. One ±300 g archival split taken from each sample.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates
5. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Overburden Drilling Management Limited

Client: RJK Exploration Ltd.

Primary Sample Processing Weights and Descriptions

File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Weight (kg wet)					Screening and Shaking Table Sample Descriptions													Class
						Clasts (+2.0 mm)					Matrix (-2.0 mm)								
							Percentage				Distribution					Colour			
	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY		Class
Unit 13	8.8	0.3	8.5	1.3	7.2	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC		TILL
Unit 14	12.5	0.3	12.2	1.1	11.1	P	90	10	0	0	U	+	Y	-	Y	DOC	DOC		TILL
Unit 15	7.8	0.3	7.5	0.8	6.7	G	95	5	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 16	7.9	0.3	7.6	0.5	7.1	G	95	5	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 17	4.7	0.3	4.4	0.5	3.9	G	90	10	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 18	8.9	0.3	8.6	0.8	7.8	G	95	5	0	0	U	+	Y	-	Y	DOC	DOC		TILL
Unit 19	5.2	0.3	4.9	0.3	4.6	G	100	0	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 20	5.0	0.3	4.7	0.4	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 21	9.8	0.3	9.5	0.6	8.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 22	9.8	0.3	9.5	0.5	9.0	G	100	0	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 23	5.3	0.3	5.0	0.4	4.6	P	95	5	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 24	8.7	0.3	8.4	0.5	7.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 25	8.5	0.3	8.2	0.6	7.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC		TILL
Unit 27	9.7	0.3	9.4	0.8	8.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC		TILL
Unit 28	5.9	0.3	5.6	0.5	5.1	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC		TILL
Unit 29	5.9	0.3	5.6	1.0	4.6	C	80	20	0	0	U	Y	Y	Y	Y	OC	OC		TILL
Unit 30	5.3	0.3	5.0	0.6	4.4	P	90	10	0	0	U	Y	Y	Y	Y	OC	OC		TILL
Unit 31	8.8	0.3	8.5	0.8	7.7	P	80	20	0	0	U	+	Y	-	Y	OC	OC		TILL
Unit 32	8.1	0.3	7.8	0.8	7.0	P	70	30	0	0	U	Y	Y	Y	Y	DOC	DOC		TILL
Unit 33	8.1	0.3	7.8	0.9	6.9	P	70	30	0	0	U	+	Y	-	Y	DOC	DOC		TILL

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

	Number of Visible Gold Grains				Nonmag	Calculated PPB Visible Gold in HMC			
Sample Number	Total	Reshaped	Modified	Pristine	HMC Weight*	Total	Reshaped	Modified	Pristine
Unit 13	2	1	1	0	28.8	9	7	3	0
Unit 14	1	1	0	0	44.4	4	4	0	0
Unit 15	0	0	0	0	26.8	0	0	0	0
Unit 16	1	0	0	1	28.4	1	0	0	1
Unit 17	0	0	0	0	15.6	0	0	0	0
Unit 18	0	0	0	0	31.2	0	0	0	0
Unit 19	1	0	0	1	18.4	4	0	0	4
Unit 20	0	0	0	0	17.2	0	0	0	0
Unit 21	0	0	0	0	35.6	0	0	0	0
Unit 22	0	0	0	0	36.0	0	0	0	0
Unit 23	0	0	0	0	18.4	0	0	0	0
Unit 24	0	0	0	0	31.6	0	0	0	0
Unit 25	1	1	0	0	30.4	12	12	0	0
Unit 27	3	3	0	0	34.4	72	72	0	0
Unit 28	1	1	0	0	20.4	9	9	0	0
Unit 29	1	1	0	0	18.4	10	10	0	0
Unit 30	0	0	0	0	17.6	0	0	0	0
Unit 31	2	2	0	0	30.8	125	125	0	0
Unit 32	1	1	0	0	28.0	50	50	0	0
Unit 33	2	2	0	0	27.6	8	8	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited

Client: RJK Exploration Ltd.

Detailed Gold Grain Data

File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 13	8	C	25	50		1		1		3	No sulphides.
	10	C	50	50	1			1		7	
								2	28.8	9	
Unit 14	10	C	50	50	1			1		4	No sulphides.
								1	44.4	4	
Unit 15	No Visible Gold										No sulphides.
Unit 16	5	C	25	25			1	1		1	No sulphides.
								1	28.4	1	
Unit 17	No Visible Gold										No sulphides.
Unit 18	No Visible Gold										No sulphides.
Unit 19	8	C	25	50			1	1		4	No sulphides.
								1	18.4	4	
Unit 20	No Visible Gold										No sulphides.
Unit 21	No Visible Gold										No sulphides.
Unit 22	No Visible Gold										No sulphides.
Unit 23	No Visible Gold										No sulphides.
Unit 24	No Visible Gold										No sulphides.
Unit 25	13	C	50	75	1			1		12	No sulphides.
								1	30.4	12	
Unit 27	13	C	50	75	1			1		10	No sulphides.
	20	C	50	150	1			1		33	
	18	C	75	100	1			1		29	
								3	34.4	72	
Unit 28	10	C	50	50	1			1		9	No sulphides.
								1	20.4	9	
Unit 29	10	C	50	50	1			1		10	No sulphides.
								1	18.4	10	
Unit 30	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 31	20	C	75	125	1			1		46	No sulphides.
	25	C	75	175	1			1		79	
								2	30.8	125	
Unit 32	20	C	75	125	1			1		50	No sulphides.
								1	28.0	50	
Unit 33	5	C	25	25	1			1		1	No sulphides.
	10	C	50	50	1			1		7	
								2	27.6	8	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 13	1298.6	773.4	525.2	510.8	14.4	3.1	2.0	9.3	5.8	2.6	0.9
Unit 14	1433.1	924.7	508.4	498.4	10.0	2.3	1.0	6.7	4.0	1.9	0.8
Unit 15	1274.7	670.7	604.0	599.1	4.9	1.1	0.5	3.3	1.8	1.1	0.4
Unit 16	1488.7	977.5	511.2	507.2	4.0	1.3	0.6	2.1	1.3	0.6	0.2
Unit 17	806.5	518.3	288.2	262.3	25.9	10.9	8.0	7.0	6.4	0.6	0.03
Unit 18	1525.8	998.6	527.2	522.3	4.9	1.5	0.4	3.0	1.9	0.8	0.3
Unit 19	1051.7	515.9	535.8	535.1	0.7	0.3	0.1	0.3	0.2	0.1	0.03
Unit 20	886.4	493.5	392.9	390.9	2.0	0.7	0.3	1.0	0.6	0.3	0.1
Unit 21	1339.8	637.8	702.0	696.2	5.8	1.2	0.5	4.1	2.4	1.1	0.6
Unit 22	1001.6	714.7	286.9	280.2	6.7	1.6	0.5	4.6	3.0	1.3	0.3
Unit 23	769.6	535.8	233.8	230.7	3.1	0.9	0.3	1.9	1.4	0.4	0.1
Unit 24	1271.7	856.0	415.7	412.4	3.3	0.9	0.3	2.1	1.4	0.6	0.1
Unit 25	980.9	616.3	364.6	356.7	7.9	1.9	1.2	4.8	3.0	1.4	0.4
Unit 27	1211.0	799.6	411.4	406.0	5.4	1.3	0.6	3.5	2.3	1.0	0.2
Unit 28	1219.9	588.9	631.0	629.3	1.7	0.5	0.2	1.0	0.7	0.2	0.1
Unit 29	817.5	635.4	182.1	176.1	6.0	1.3	0.5	4.2	2.9	1.1	0.2
Unit 30	879.0	581.0	298.0	292.9	5.1	1.1	0.6	3.4	2.2	0.9	0.3
Unit 31	1110.8	778.9	331.9	325.1	6.8	1.1	0.5	5.2	3.6	1.3	0.3
Unit 32	1404.1	968.8	435.3	425.5	9.8	2.3	0.3	7.2	6.4	0.7	0.1
Unit 33	1095.8	806.8	289.0	287.1	1.9	0.6	0.2	1.1	0.9	0.2	0.01

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
Unit 13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 14	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs

Sample Number	1.0 to 2.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.5 to 1.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.25 to 0.5 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
Unit 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	2	2	6	6	2	2	0	0	12	12	4	4	0	0	29	29
Unit 14	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	3	3	0	0	1	1	5	5	1	1	2	2	11	11	10	10	1	1	36	36
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	1	1	11	11	0	0	18	18
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	4	4	1	1	0	0	8	8	10	10	1	1	25	25
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	3	3	0	0	5	5
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	5	5	2	2	0	0	10	10
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	3	3
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	0	0	0	0	1	1	0	0	5	5
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	3	3	2	2	8	8
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	7	7	0	0	10	10
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	4	4	6	6	1	1	14	14
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	0	0	4	4	11	11	1	1	19	19
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1	6	6	0	0	1	1	4	4	6	6	6	6	26	26
Unit 27	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	2	2	0	0	3	3	3	3	1	1	0	0	15	15	12	12	4	4	42	42
Unit 28	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	1	4	4	0	0	0	0	9	9
Unit 29	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	5	5	0	0	1	1	3	3	0	0	0	0	10	10	12	12	2	2	35	35
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	8	8	8	8	1	1	21	21
Unit 31	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	6	6	16	16	0	0	27	27
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	5	5	3	3	1	1	12	12
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	6	6	3	3	0	0	12	12

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Overburden Drilling Management Limited

2019-12-11

Client: RJK Exploration Ltd.

Kimberlite Indicator Mineral Remarks

File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Remarks
Unit 13	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 14	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.
Unit 15	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 16	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 17	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.
Unit 18	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.
Unit 19	Almandine/epidote-diopside assemblage.

Overburden Drilling Management Limited 2019-12-11

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Remarks
Unit 20	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 21	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.
Unit 22	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 23	Amandine-hornblende/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 24	Almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 25	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.

Overburden Drilling Management Limited 2019-12-11

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Remarks
Unit 27	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.
Unit 28	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 29	Almandine-hornblende-augite/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 30	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 31	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 32	Hornblende-almandine/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Overburden Drilling Management Limited 2019-12-11

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Remarks
Unit 33	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Exploring Heavy Minerals

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	December 11, 2019
Project name:	Lorrain Chain
ODM batch number:	8213
Sample numbers:	Unit 13 to Unit 25, Unit 27 to Unit 33
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	20
Number of samples processed to date:	20
Total number of samples in project:	95
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples prescreened to -6.0 mm in the field
2. One ±300 g archival split taken from each sample.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates
5. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Overburden Drilling Management Limited - Abbreviations Table

Raw Sample Weights and Descriptions Log

Largest Clast Size Present:
G: Granules
P: Pebbles
C: Cobbles

Clast Composition:
V/S: Volcanics and/or sediments
GR: Granitics
LS: Limestone, carbonates
OT: Other lithologies (refer to footnotes)
TR: Only trace present
NA: Not applicable
OX: Very oxidized, undifferentiated
MB: Marble

Matrix Grain Size Distribution:
S/U: Sorted or unsorted
SD: Sand (F: Fine; M: Medium; C: Coarse)
ST: Silt
CY: Clay
Y: Fraction present
+: Fraction more abundant than normal
-: Fraction less abundant than normal
N: Fraction not present

Matrix Organics:
ORG: Y: Organics present in matrix
N: Organics absent or negligible in matrix
+: Matrix is mainly organic

Matrix Colour:
Primary:
BE: Beige
BR: Brick Red
GY: Grey
GB: Grey-beige
GN: Green
GG: Grey-green
PP: Purple
PK: Pink
PB: Pink-beige
MN: Maroon

Secondary (soil):
OC: Ochre
BN: Brown
BK: Black

Secondary Colour Modifier:
L: Light
M: Medium
D: Dark

Detailed Gold Grain Log

VG: Visible gold grains

Thickness:
M: Actual measured thickness of grain (µm)
C: Thickness of grain (µm) calculated from measured width and length

Kimberlite Indicator Mineral (KIM) Log

GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
CR: Chromite
FO: Forsterite

Metamorphosed/Magmatic Massive Sulphide Indicator Mineral (MMSIM) and Porphyry Cu Indicator Mineral (PCIM) Logs

Adr: Andradite
Ap: Apatite
Ase: Anatase
Aspy: Arsenopyrite
Ax: Axinite
Ba: Barite
Cpx: Clinopyroxene
Cpy: Chalcopyrite
Cr: Chromite
Fay: Fayalite
Gh: Gahnite
Grs: Grossular
Gth: Goethite
Ilm: Ilmenite
Ky: Kyanite
Mrc: Marcasite
Mz: Monazite
Ol: Olivine
Opx: Orthopyroxene
PGM: Platinum group-bearing mineral
Py: Pyrite
REM: Rare earth-bearing mineral
Rt: Red rutile
Sil: Sillimanite
Spi: Spinel
Sps: Spessartine
St: Staurolite
Tm: Tourmaline
Ttn: Titanite
Zir: Zircon

Other

HMC: Heavy mineral concentrate
UV: Ultra-violet
EPD: Electric-pulse disaggregation
PGE: Platinum group element

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

	Weight (kg wet)					Screening and Shaking Table Sample Descriptions													
						Clasts (+2.0 mm)					Matrix (-2.0 mm)								
							Percentage				Distribution					Colour			
Sample Number	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class
Unit 13	8.8	0.3	8.5	1.3	7.2	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 14	12.5	0.3	12.2	1.1	11.1	P	90	10	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 15	7.8	0.3	7.5	0.8	6.7	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 16	7.9	0.3	7.6	0.5	7.1	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 17	4.7	0.3	4.4	0.5	3.9	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 18	8.9	0.3	8.6	0.8	7.8	G	95	5	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 19	5.2	0.3	4.9	0.3	4.6	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 20	5.0	0.3	4.7	0.4	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 21	9.8	0.3	9.5	0.6	8.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 22	9.8	0.3	9.5	0.5	9.0	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 23	5.3	0.3	5.0	0.4	4.6	P	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 24	8.7	0.3	8.4	0.5	7.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 25	8.5	0.3	8.2	0.6	7.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 27	9.7	0.3	9.4	0.8	8.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 28	5.9	0.3	5.6	0.5	5.1	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 29	5.9	0.3	5.6	1.0	4.6	C	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 30	5.3	0.3	5.0	0.6	4.4	P	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 31	8.8	0.3	8.5	0.8	7.7	P	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 32	8.1	0.3	7.8	0.8	7.0	P	70	30	0	0	U	Y	Y	Y	Y	DOC	DOC	TILL
Unit 33	8.1	0.3	7.8	0.9	6.9	P	70	30	0	0	U	+	Y	-	Y	DOC	DOC	TILL

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
Unit 13	2	1	1	0	28.8	9	7	3	0
Unit 14	1	1	0	0	44.4	4	4	0	0
Unit 15	0	0	0	0	26.8	0	0	0	0
Unit 16	1	0	0	1	28.4	1	0	0	1
Unit 17	0	0	0	0	15.6	0	0	0	0
Unit 18	0	0	0	0	31.2	0	0	0	0
Unit 19	1	0	0	1	18.4	4	0	0	4
Unit 20	0	0	0	0	17.2	0	0	0	0
Unit 21	0	0	0	0	35.6	0	0	0	0
Unit 22	0	0	0	0	36.0	0	0	0	0
Unit 23	0	0	0	0	18.4	0	0	0	0
Unit 24	0	0	0	0	31.6	0	0	0	0
Unit 25	1	1	0	0	30.4	12	12	0	0
Unit 27	3	3	0	0	34.4	72	72	0	0
Unit 28	1	1	0	0	20.4	9	9	0	0
Unit 29	1	1	0	0	18.4	10	10	0	0
Unit 30	0	0	0	0	17.6	0	0	0	0
Unit 31	2	2	0	0	30.8	125	125	0	0
Unit 32	1	1	0	0	28.0	50	50	0	0
Unit 33	2	2	0	0	27.6	8	8	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	
Sample Number	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			Metallic Minerals in Pan Concentrate
Unit 13	8	C	25	50		1		1		3	No sulphides.
	10	C	50	50	1			1		7	
								2	28.8	9	
Unit 14	10	C	50	50	1			1		4	No sulphides.
								1	44.4	4	
Unit 15	No Visible Gold										No sulphides.
Unit 16	5	C	25	25			1	1		1	No sulphides.
								1	28.4	1	
Unit 17	No Visible Gold										No sulphides.
Unit 18	No Visible Gold										No sulphides.
Unit 19	8	C	25	50			1	1		4	No sulphides.
								1	18.4	4	
Unit 20	No Visible Gold										No sulphides.
Unit 21	No Visible Gold										No sulphides.
Unit 22	No Visible Gold										No sulphides.
Unit 23	No Visible Gold										No sulphides.
Unit 24	No Visible Gold										No sulphides.
Unit 25	13	C	50	75	1			1		12	No sulphides.
								1	30.4	12	
Unit 27	13	C	50	75	1			1		10	No sulphides.
	20	C	50	150	1			1		33	
	18	C	75	100	1			1		29	
								3	34.4	72	
Unit 28	10	C	50	50	1			1		9	No sulphides.
								1	20.4	9	
Unit 29	10	C	50	50	1			1		10	No sulphides.
								1	18.4	10	
Unit 30	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 31	20	C	75	125	1			1		46	No sulphides.
	25	C	75	175	1			1		79	
								2	30.8	125	
Unit 32	20	C	75	125	1			1		50	No sulphides.
								1	28.0	50	
Unit 33	5	C	25	25	1			1		1	No sulphides.
	10	C	50	50	1			1		7	
								2	27.6	8	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited

2021-02-10

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 13	1298.6	773.4	525.2	510.8	14.4	3.1	2.0	9.3	5.8	2.6	0.9
Unit 14	1433.1	924.7	508.4	498.4	10.0	2.3	1.0	6.7	4.0	1.9	0.8
Unit 15	1274.7	670.7	604.0	599.1	4.9	1.1	0.5	3.3	1.8	1.1	0.4
Unit 16	1488.7	977.5	511.2	507.2	4.0	1.3	0.6	2.1	1.3	0.6	0.2
Unit 17	806.5	518.3	288.2	262.3	25.9	10.9	8.0	7.0	6.4	0.6	0.03
Unit 18	1525.8	998.6	527.2	522.3	4.9	1.5	0.4	3.0	1.9	0.8	0.3
Unit 19	1051.7	515.9	535.8	535.1	0.7	0.3	0.1	0.3	0.2	0.1	0.03
Unit 20	886.4	493.5	392.9	390.9	2.0	0.7	0.3	1.0	0.6	0.3	0.1
Unit 21	1339.8	637.8	702.0	696.2	5.8	1.2	0.5	4.1	2.4	1.1	0.6
Unit 22	1001.6	714.7	286.9	280.2	6.7	1.6	0.5	4.6	3.0	1.3	0.3
Unit 23	769.6	535.8	233.8	230.7	3.1	0.9	0.3	1.9	1.4	0.4	0.1
Unit 24	1271.7	856.0	415.7	412.4	3.3	0.9	0.3	2.1	1.4	0.6	0.1
Unit 25	980.9	616.3	364.6	356.7	7.9	1.9	1.2	4.8	3.0	1.4	0.4
Unit 27	1211.0	799.6	411.4	406.0	5.4	1.3	0.6	3.5	2.3	1.0	0.2
Unit 28	1219.9	588.9	631.0	629.3	1.7	0.5	0.2	1.0	0.7	0.2	0.1
Unit 29	817.5	635.4	182.1	176.1	6.0	1.3	0.5	4.2	2.9	1.1	0.2
Unit 30	879.0	581.0	298.0	292.9	5.1	1.1	0.6	3.4	2.2	0.9	0.3
Unit 31	1110.8	778.9	331.9	325.1	6.8	1.1	0.5	5.2	3.6	1.3	0.3
Unit 32	1404.1	968.8	435.3	425.5	9.8	2.3	0.3	7.2	6.4	0.7	0.1
Unit 33	1095.8	806.8	289.0	287.1	1.9	0.6	0.2	1.1	0.9	0.2	0.01

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Number of Grains – Selected MMSIMs

	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm					
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 14	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains – KIMs

	1.0 to 2.0 mm												0.5 to 1.0 mm												0.25 to 0.5 mm												Total (KIMs)	
	GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	2	2	6	6	2	2	0	0	12	12	4	4	0	0	29	29
Unit 14	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	3	3	0	0	1	1	5	5	1	1	2	2	11	11	10	10	1	1	36	36
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	1	1	11	11	0	0	18	18
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	4	4	1	1	0	0	8	8	10	10	1	1	25	25
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	3	3	0	0	5	5
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	5	5	2	2	0	0	10	10
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	3	3
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	0	0	0	0	1	1	0	0	5	5
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	3	3	2	2	8	8
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	7	7	0	0	10	10
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	4	4	6	6	1	1	14	14
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	0	0	4	4	11	11	1	1	19	19
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1	6	6	0	0	1	1	4	4	6	6	6	6	26	26
Unit 27	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	2	2	0	0	3	3	3	3	1	1	0	0	15	15	12	12	4	4	42	42
Unit 28	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	1	4	4	0	0	0	0	9	9
Unit 29	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	5	5	0	0	1	1	3	3	0	0	0	0	10	10	12	12	2	2	35	35
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	8	8	8	8	1	1	21	21
Unit 31	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	6	6	16	16	0	0	27	27
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	5	5	3	3	1	1	12	12
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	6	6	3	3	0	0	12	12

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8213

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 13	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 14	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.
Unit 15	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 16	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 17	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.
Unit 18	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.
Unit 19	Almandine/epidote-diopside assemblage.	Almandine/epidote-diopside	
Unit 20	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).	Almandine/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 21	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.
Unit 22	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 23	Amandine-hornblende/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has partial alteration mantle.	Amandine-hornblende/epidote-diopside	1 IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 24	Almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 25	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.
Unit 27	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.
Unit 28	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 29	Almandine-hornblende-augite/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 30	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 31	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 32	Hornblende-almandine/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Hornblende-almandine/epidote-diopside-staurolite	SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 33	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Exploring Heavy Minerals

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	January 06, 2020
Project name:	Lorrain Chain
ODM batch number:	8214
Sample numbers:	Unit 34 to Unit 53
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	20
Number of samples processed to date:	40
Total number of samples in project:	95
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples prescreened to -6.0 mm in the field
2. One ±300 g archival split taken from each sample.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates
5. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Weight (kg wet)					Screening and Shaking Table Sample Descriptions													
						Clasts (+2.0 mm)					Matrix (-2.0 mm)								
							Percentage				Distribution					Colour			
	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class
Unit 34	7.3	0.3	7.0	0.5	6.5	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 35	4.6	0.3	4.3	0.3	4.0	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 36	8.8	0.3	8.5	0.6	7.9	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 37	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 38	5.3	0.3	5.0	0.5	4.5	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 39	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
Unit 40	8.0	0.3	7.7	0.9	6.8	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 41	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 42	4.8	0.3	4.5	0.3	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 43	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 44	5.2	0.3	4.9	0.3	4.6	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 45	5.1	0.3	4.8	0.4	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 46	4.8	0.3	4.5	0.4	4.1	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 47	5.3	0.3	5.0	0.3	4.7	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 48	4.9	0.3	4.6	0.3	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 49	4.6	0.3	4.3	0.4	3.9	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 50	8.2	0.3	7.9	0.8	7.1	P	90	10	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
Unit 51	4.9	0.3	4.6	0.4	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 52	5.0	0.3	4.7	0.5	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 53	5.1	0.3	4.8	0.5	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

	Number of Visible Gold Grains				Nonmag	Calculated PPB Visible Gold in HMC			
Sample Number	Total	Reshaped	Modified	Pristine	HMC Weight*	Total	Reshaped	Modified	Pristine
Unit 34	2	2	0	0	26.0	129	129	0	0
Unit 35	0	0	0	0	16.0	0	0	0	0
Unit 36	4	4	0	0	31.6	597	597	0	0
Unit 37	3	3	0	0	17.2	36	36	0	0
Unit 38	0	0	0	0	18.0	0	0	0	0
Unit 39	1	1	0	0	17.2	87	87	0	0
Unit 40	2	2	0	0	27.2	24	24	0	0
Unit 41	1	1	0	0	17.6	32	32	0	0
Unit 42	7	6	1	0	16.8	192	67	125	0
Unit 43	1	1	0	0	17.6	4	4	0	0
Unit 44	2	2	0	0	18.4	20	20	0	0
Unit 45	9	6	1	2	17.6	179	172	4	3
Unit 46	3	3	0	0	16.4	24	24	0	0
Unit 47	1	1	0	0	18.8	1	1	0	0
Unit 48	1	1	0	0	17.2	8	8	0	0
Unit 49	2	1	0	1	15.6	90	90	0	<1
Unit 50	0	0	0	0	28.4	0	0	0	0
Unit 51	0	0	0	0	16.8	0	0	0	0
Unit 52	0	0	0	0	16.8	0	0	0	0
Unit 53	0	0	0	0	17.2	0	0	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Dimensions (µm) Thickness	Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 34	15 C	50	100	1			1		22	No sulphides.
	25 C	100	150	1			1		107	
							2	26.0	129	
Unit 35	No Visible Gold									No sulphides.
Unit 36	5 C	25	25	2			2		2	Tr (1 grain) arsenopyrite (75 µm).
	15 C	50	100	1			1		18	
	44 C	200	275	1			1		577	
							4	31.6	597	
Unit 37	5 C	25	25	1			1		1	No sulphides.
	13 C	25	100	1			1		14	
	13 C	50	75	1			1		21	
							3	17.2	36	
Unit 38	No Visible Gold									No sulphides.
Unit 39	20 C	100	100	1			1		87	Tr (1 grain) arsenopyrite (25 µm).
							1	17.2	87	
Unit 40	8 C	25	50	1			1		3	No sulphides.
	15 C	50	100	1			1		21	
							2	27.2	24	
Unit 41	15 C	50	100	1			1		32	No sulphides.
							1	17.6	32	
Unit 42	3 C	15	15	2			2		1	No sulphides.
	5 C	25	25	2			2		3	
	8 C	25	50	1			1		4	
	18 C	75	100	1			1		59	
	22 C	100	125		1		1		125	
							7	16.8	192	
Unit 43	8 C	25	50	1			1		4	No sulphides.
							1	17.6	4	
Unit 44	3 C	15	15	1			1		<1	No sulphides.
	13 C	50	75	1			1		19	
							2	18.4	20	
Unit 45	3 C	15	15	1			1		<1	No sulphides.
	5 C	25	25	1		2	3		4	
	8 C	25	50	1	1		2		8	
	10 C	25	75	1			1		8	
	13 C	50	75	1			1		20	
	25 C	75	175	1			1		138	
							9	17.6	179	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 46	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1			1		1	
	13	C	50	75	1			1		22	
								3	16.4	24	
Unit 47	5	C	25	25	1			1		1	No sulphides.
								1	18.8	1	
Unit 48	10	C	25	75	1			1		8	No sulphides.
								1	17.2	8	
Unit 49	3	C	15	15			1	1		<1	No sulphides.
	20	C	75	125	1			1		90	
								2	15.6	90	
Unit 50	No Visible Gold										No sulphides.
Unit 51	No Visible Gold										No sulphides.
Unit 52	No Visible Gold										No sulphides.
Unit 53	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 34	728.8	627.0	101.8	93.1	8.7	0.9	0.8	7.0	5.3	1.4	0.3
Unit 35	832.8	596.6	236.2	232.2	4.0	0.6	0.4	3.0	2.0	0.8	0.2
Unit 36	960.4	699.8	260.6	250.1	10.5	1.5	1.8	7.2	5.0	1.7	0.5
Unit 37	605.7	405.6	200.1	194.6	5.5	0.8	0.6	4.1	2.6	1.0	0.5
Unit 38	966.6	654.5	312.1	309.7	2.4	0.7	0.4	1.3	1.1	0.2	0.02
Unit 39	716.0	489.1	226.9	225.0	1.9	0.5	0.2	1.2	0.8	0.3	0.1
Unit 40	1044.0	663.9	380.1	373.6	6.5	1.5	1.3	3.7	2.4	0.9	0.4
Unit 41	832.5	507.1	325.4	322.9	2.5	0.4	0.3	1.8	1.2	0.4	0.2
Unit 42	1004.5	641.3	363.2	359.5	3.7	0.4	0.5	2.8	1.7	0.8	0.3
Unit 43	922.3	555.1	367.2	364.0	3.2	0.4	0.5	2.3	1.8	0.4	0.1
Unit 44	952.2	657.2	295.0	290.5	4.5	0.6	0.5	3.4	2.5	0.8	0.1
Unit 45	887.5	627.9	259.6	256.8	2.8	0.4	0.1	2.3	1.5	0.6	0.2
Unit 46	846.8	619.1	227.7	225.7	2.0	0.2	0.3	1.5	1.0	0.4	0.1
Unit 47	859.5	594.2	265.3	262.2	3.1	0.4	0.4	2.3	1.3	0.7	0.3
Unit 48	734.9	508.9	226.0	223.5	2.5	0.2	0.3	2.0	1.4	0.5	0.1
Unit 49	941.8	653.0	288.8	284.7	4.1	0.5	0.6	3.0	2.0	0.7	0.3
Unit 50	912.5	619.4	293.1	288.5	4.6	0.4	0.9	3.3	2.5	0.7	0.1
Unit 51	989.2	670.1	319.1	317.2	1.9	0.3	0.2	1.4	1.0	0.3	0.1
Unit 52	1046.1	761.7	284.4	281.7	2.7	0.1	0.6	2.0	1.3	0.5	0.2
Unit 53	767.2	518.8	248.4	245.6	2.8	1.2	0.4	1.2	0.8	0.3	0.1

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Number of Grains – Selected MMSIMs

	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm					
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains – KIMs

	1.0 to 2.0 mm												0.5 to 1.0 mm											
	GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	**1**	1	**5**	5
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**2**	2
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	**1**	1
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	1
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	0	0	0	0
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	**2**	2
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0

	KIMs 0.25 to 0.5 mm												Total (KIMs)	
	GP		GO		DC		IM		CR		FO			
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 34	**4**	4	**1**	1	**1**	1	**12**	12	**15**	15	**10**	10	**52**	52
Unit 35	**1**	1	0	0	0	0	**2**	2	**9**	9	0	0	**13**	13
Unit 36	**1**	1	**1**	1	**1**	1	**3**	3	**3**	3	**5**	5	**17**	17
Unit 37	**1**	1	0	0	0	0	**5**	5	**3**	3	**1**	1	**13**	13
Unit 38	**3**	3	0	0	0	0	**3**	3	**8**	8	**1**	1	**15**	15
Unit 39	**1**	1	**1**	1	0	0	**4**	4	**4**	4	**1**	1	**11**	11
Unit 40	**4**	4	0	0	0	0	**3**	3	**8**	8	**1**	1	**19**	19
Unit 41	**2**	2	**2**	2	**1**	1	**5**	5	**5**	5	**1**	1	**17**	17
Unit 42	**2**	2	**1**	1	0	0	**2**	2	**5**	5	**2**	2	**14**	14
Unit 43	**1**	1	0	0	0	0	**1**	1	**5**	5	0	0	**9**	9
Unit 44	**1**	1	0	0	0	0	**3**	3	**2**	2	**1**	1	**8**	8
Unit 45	**3**	3	**1**	1	**1**	1	**3**	3	**1**	1	**2**	2	**12**	12
Unit 46	**4**	4	**2**	2	**2**	2	**4**	4	**3**	3	**2**	2	**18**	18
Unit 47	**5**	5	0	0	0	0	**6**	6	**4**	4	**3**	3	**20**	20
Unit 48	0	0	0	0	**1**	1	**4**	4	**4**	4	0	0	**12**	12
Unit 49	**1**	1	0	0	0	0	**6**	6	**7**	7	**2**	2	**17**	17
Unit 50	**1**	1	**3**	3	**1**	1	0	0	**10**	10	**1**	1	**19**	19
Unit 51	**1**	1	0	0	0	0	**7**	7	**10**	10	0	0	**19**	19
Unit 52	**1**	1	0	0	0	0	**4**	4	**8**	8	**1**	1	**15**	15
Unit 53	0	0	0	0	0	0	**5**	5	**7**	7	0	0	**13**	13

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Remarks
Unit 34	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 35	Almandine-hornblende/epidote-diopside assemblage.
Unit 36	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 37	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.
Unit 38	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 39	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 40	Almandine-augite-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.
Unit 41	Almandine-hornblende/epidote-diopside assemblage.
Unit 42	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.
Unit 43	Almandine-fayalite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.
Unit 44	Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.
Unit 45	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Remarks
Unit 46	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 47	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 48	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 49	Almandine-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 50	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.
Unit 51	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 52	Almandine-hornblende/epidote-diopside assemblage.
Unit 53	Almandine-hornblende/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Exploring Heavy Minerals

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	January 06, 2020
Project name:	Lorrain Chain
ODM batch number:	8214
Sample numbers:	Unit 34 to Unit 53
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	20
Number of samples processed to date:	40
Total number of samples in project:	95
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples prescreened to -6.0 mm in the field
2. One ±300 g archival split taken from each sample.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates
5. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Overburden Drilling Management Limited - Abbreviations Table

Raw Sample Weights and Descriptions Log

Largest Clast Size Present:
- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:
- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated
- MB: Marble

Matrix Grain Size Distribution:
- S/U: Sorted or unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:
- ORG: Y: Organics present in matrix
  - N: Organics absent or negligible in matrix
  - +: Matrix is mainly organic

Matrix Colour:

Primary:
- BE: Beige
- BR: Brick Red
- GY: Grey
- GB: Grey-beige
- GN: Green
- GG: Grey-green
- PP: Purple
- PK: Pink
- PB: Pink-beige
- MN: Maroon

Secondary (soil):
- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:
- L: Light
- M: Medium
- D: Dark

Detailed Gold Grain Log

- VG: Visible gold grains

Thickness:
- M: Actual measured thickness of grain (μm)
- C: Thickness of grain (μm) calculated from measured width and length

Kimberlite Indicator Mineral (KIM) Log

- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

Metamorphosed/Magmatic Massive Sulphide Indicator Mineral (MMSIM) and Porphyry Cu Indicator Mineral (PCIM) Logs

- Adr: Andradite
- Ap: Apatite
- Ase: Anatase
- Aspy: Arsenopyrite
- Ax: Axinite
- Ba: Barite
- Cpx: Clinopyroxene
- Cpy: Chalcopyrite
- Cr: Chromite
- Fay: Fayalite
- Gh: Gahnite
- Grs: Grossular
- Gth: Goethite
- Ilm: Ilmenite
- Ky: Kyanite
- Mrc: Marcasite
- Mz: Monazite
- Ol: Olivine
- Opx: Orthopyroxene
- PGM: Platinum group-bearing mineral
- Py: Pyrite
- REM: Rare earth-bearing mineral
- Rt: Red rutile
- Sil: Sillimanite
- Spi: Spinel
- Sps: Spessartine
- St: Staurolite
- Tm: Tourmaline
- Ttn: Titanite
- Zir: Zircon

Other

- HMC: Heavy mineral concentrate
- UV: Ultra-violet
- EPD: Electric-pulse disaggregation
- PGE: Platinum group element

Overburden Drilling Management Limited

2021-02-10

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

						Screening and Shaking Table Sample Descriptions												
						Clasts (+2.0 mm)					Matrix (-2.0 mm)							
	Weight (kg wet)						Percentage				Distribution					Colour		
Sample Number	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class
Unit 13	8.8	0.3	8.5	1.3	7.2	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 14	12.5	0.3	12.2	1.1	11.1	P	90	10	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 15	7.8	0.3	7.5	0.8	6.7	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 16	7.9	0.3	7.6	0.5	7.1	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 17	4.7	0.3	4.4	0.5	3.9	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 18	8.9	0.3	8.6	0.8	7.8	G	95	5	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 19	5.2	0.3	4.9	0.3	4.6	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 20	5.0	0.3	4.7	0.4	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 21	9.8	0.3	9.5	0.6	8.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 22	9.8	0.3	9.5	0.5	9.0	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 23	5.3	0.3	5.0	0.4	4.6	P	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 24	8.7	0.3	8.4	0.5	7.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 25	8.5	0.3	8.2	0.6	7.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 27	9.7	0.3	9.4	0.8	8.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 28	5.9	0.3	5.6	0.5	5.1	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 29	5.9	0.3	5.6	1.0	4.6	C	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 30	5.3	0.3	5.0	0.6	4.4	P	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 31	8.8	0.3	8.5	0.8	7.7	P	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 32	8.1	0.3	7.8	0.8	7.0	P	70	30	0	0	U	Y	Y	Y	Y	DOC	DOC	TILL
Unit 33	8.1	0.3	7.8	0.9	6.9	P	70	30	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 34	7.3	0.3	7.0	0.5	6.5	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 35	4.6	0.3	4.3	0.3	4.0	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 36	8.8	0.3	8.5	0.6	7.9	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 37	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 38	5.3	0.3	5.0	0.5	4.5	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 39	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
Unit 40	8.0	0.3	7.7	0.9	6.8	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 41	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 42	4.8	0.3	4.5	0.3	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 43	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 44	5.2	0.3	4.9	0.3	4.6	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 45	5.1	0.3	4.8	0.4	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 46	4.8	0.3	4.5	0.4	4.1	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 47	5.3	0.3	5.0	0.3	4.7	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 48	4.9	0.3	4.6	0.3	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 49	4.6	0.3	4.3	0.4	3.9	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 50	8.2	0.3	7.9	0.8	7.1	P	90	10	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
Unit 51	4.9	0.3	4.6	0.4	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 52	5.0	0.3	4.7	0.5	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 53	5.1	0.3	4.8	0.5	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL

Overburden Drilling Management Limited 2021-02-10

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
Unit 13	2	1	1	0	28.8	9	7	3	0
Unit 14	1	1	0	0	44.4	4	4	0	0
Unit 15	0	0	0	0	26.8	0	0	0	0
Unit 16	1	0	0	1	28.4	1	0	0	1
Unit 17	0	0	0	0	15.6	0	0	0	0
Unit 18	0	0	0	0	31.2	0	0	0	0
Unit 19	1	0	0	1	18.4	4	0	0	4
Unit 20	0	0	0	0	17.2	0	0	0	0
Unit 21	0	0	0	0	35.6	0	0	0	0
Unit 22	0	0	0	0	36.0	0	0	0	0
Unit 23	0	0	0	0	18.4	0	0	0	0
Unit 24	0	0	0	0	31.6	0	0	0	0
Unit 25	1	1	0	0	30.4	12	12	0	0
Unit 27	3	3	0	0	34.4	72	72	0	0
Unit 28	1	1	0	0	20.4	9	9	0	0
Unit 29	1	1	0	0	18.4	10	10	0	0
Unit 30	0	0	0	0	17.6	0	0	0	0
Unit 31	2	2	0	0	30.8	125	125	0	0
Unit 32	1	1	0	0	28.0	50	50	0	0
Unit 33	2	2	0	0	27.6	8	8	0	0
Unit 34	2	2	0	0	26.0	129	129	0	0
Unit 35	0	0	0	0	16.0	0	0	0	0
Unit 36	4	4	0	0	31.6	597	597	0	0
Unit 37	3	3	0	0	17.2	36	36	0	0
Unit 38	0	0	0	0	18.0	0	0	0	0
Unit 39	1	1	0	0	17.2	87	87	0	0
Unit 40	2	2	0	0	27.2	24	24	0	0
Unit 41	1	1	0	0	17.6	32	32	0	0
Unit 42	7	6	1	0	16.8	192	67	125	0
Unit 43	1	1	0	0	17.6	4	4	0	0
Unit 44	2	2	0	0	18.4	20	20	0	0
Unit 45	9	6	1	2	17.6	179	172	4	3
Unit 46	3	3	0	0	16.4	24	24	0	0
Unit 47	1	1	0	0	18.8	1	1	0	0
Unit 48	1	1	0	0	17.2	8	8	0	0
Unit 49	2	1	0	1	15.6	90	90	0	<1
Unit 50	0	0	0	0	28.4	0	0	0	0
Unit 51	0	0	0	0	16.8	0	0	0	0
Unit 52	0	0	0	0	16.8	0	0	0	0
Unit 53	0	0	0	0	17.2	0	0	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 13	8	C	25	50		1		1		3	No sulphides.
	10	C	50	50	1			1		7	
								2	28.8	9	
Unit 14	10	C	50	50	1			1		4	No sulphides.
								1	44.4	4	
Unit 15	No Visible Gold										No sulphides.
Unit 16	5	C	25	25			1	1		1	No sulphides.
								1	28.4	1	
Unit 17	No Visible Gold										No sulphides.
Unit 18	No Visible Gold										No sulphides.
Unit 19	8	C	25	50			1	1		4	No sulphides.
								1	18.4	4	
Unit 20	No Visible Gold										No sulphides.
Unit 21	No Visible Gold										No sulphides.
Unit 22	No Visible Gold										No sulphides.
Unit 23	No Visible Gold										No sulphides.
Unit 24	No Visible Gold										No sulphides.
Unit 25	13	C	50	75	1			1		12	No sulphides.
								1	30.4	12	
Unit 27	13	C	50	75	1			1		10	No sulphides.
	20	C	50	150	1			1		33	
	18	C	75	100	1			1		29	
								3	34.4	72	
Unit 28	10	C	50	50	1			1		9	No sulphides.
								1	20.4	9	
Unit 29	10	C	50	50	1			1		10	No sulphides.
								1	18.4	10	
Unit 30	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 31	20	C	75	125	1			1		46	No sulphides.
	25	C	75	175	1			1		79	
								2	30.8	125	
Unit 32	20	C	75	125	1			1		50	No sulphides.
								1	28.0	50	
Unit 33	5	C	25	25	1			1		1	No sulphides.
	10	C	50	50	1			1		7	
								2	27.6	8	
Unit 34	15	C	50	100	1			1		22	No sulphides.
	25	C	100	150	1			1		107	
								2	26.0	129	
Unit 35	No Visible Gold										No sulphides.
Unit 36	5	C	25	25	2			2		2	Tr (1 grain) arsenopyrite (75 µm).
	15	C	50	100	1			1		18	
	44	C	200	275	1			1		577	
								4	31.6	597	
Unit 37	5	C	25	25	1			1		1	No sulphides.
	13	C	25	100	1			1		14	
	13	C	50	75	1			1		21	
								3	17.2	36	
Unit 38	No Visible Gold										No sulphides.
Unit 39	20	C	100	100	1			1		87	Tr (1 grain) arsenopyrite (25 µm).
								1	17.2	87	
Unit 40	8	C	25	50	1			1		3	No sulphides.
	15	C	50	100	1			1		21	
								2	27.2	24	
Unit 41	15	C	50	100	1			1		32	No sulphides.
								1	17.6	32	
Unit 42	3	C	15	15	2			2		1	No sulphides.
	5	C	25	25	2			2		3	
	8	C	25	50	1			1		4	
	18	C	75	100	1			1		59	
	22	C	100	125		1		1		125	
								7	16.8	192	
Unit 43	8	C	25	50	1			1		4	No sulphides.
								1	17.6	4	
Unit 44	3	C	15	15	1			1		<1	No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	13	C	50	75	1			1		19	
								2	18.4	20	
Unit 45	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1		2	3		4	
	8	C	25	50	1	1		2		8	
	10	C	25	75	1			1		8	
	13	C	50	75	1			1		20	
	25	C	75	175	1			1		138	
								9	17.6	179	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 46	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1			1		1	
	13	C	50	75	1			1		22	
								3	16.4	24	
Unit 47	5	C	25	25	1			1		1	No sulphides.
								1	18.8	1	
Unit 48	10	C	25	75	1			1		8	No sulphides.
								1	17.2	8	
Unit 49	3	C	15	15			1	1		<1	No sulphides.
	20	C	75	125	1			1		90	
								2	15.6	90	
Unit 50	No Visible Gold										No sulphides.
Unit 51	No Visible Gold										No sulphides.
Unit 52	No Visible Gold										No sulphides.
Unit 53	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited

2021-02-10

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 13	1298.6	773.4	525.2	510.8	14.4	3.1	2.0	9.3	5.8	2.6	0.9
Unit 14	1433.1	924.7	508.4	498.4	10.0	2.3	1.0	6.7	4.0	1.9	0.8
Unit 15	1274.7	670.7	604.0	599.1	4.9	1.1	0.5	3.3	1.8	1.1	0.4
Unit 16	1488.7	977.5	511.2	507.2	4.0	1.3	0.6	2.1	1.3	0.6	0.2
Unit 17	806.5	518.3	288.2	262.3	25.9	10.9	8.0	7.0	6.4	0.6	0.03
Unit 18	1525.8	998.6	527.2	522.3	4.9	1.5	0.4	3.0	1.9	0.8	0.3
Unit 19	1051.7	515.9	535.8	535.1	0.7	0.3	0.1	0.3	0.2	0.1	0.03
Unit 20	886.4	493.5	392.9	390.9	2.0	0.7	0.3	1.0	0.6	0.3	0.1
Unit 21	1339.8	637.8	702.0	696.2	5.8	1.2	0.5	4.1	2.4	1.1	0.6
Unit 22	1001.6	714.7	286.9	280.2	6.7	1.6	0.5	4.6	3.0	1.3	0.3
Unit 23	769.6	535.8	233.8	230.7	3.1	0.9	0.3	1.9	1.4	0.4	0.1
Unit 24	1271.7	856.0	415.7	412.4	3.3	0.9	0.3	2.1	1.4	0.6	0.1
Unit 25	980.9	616.3	364.6	356.7	7.9	1.9	1.2	4.8	3.0	1.4	0.4
Unit 27	1211.0	799.6	411.4	406.0	5.4	1.3	0.6	3.5	2.3	1.0	0.2
Unit 28	1219.9	588.9	631.0	629.3	1.7	0.5	0.2	1.0	0.7	0.2	0.1
Unit 29	817.5	635.4	182.1	176.1	6.0	1.3	0.5	4.2	2.9	1.1	0.2
Unit 30	879.0	581.0	298.0	292.9	5.1	1.1	0.6	3.4	2.2	0.9	0.3
Unit 31	1110.8	778.9	331.9	325.1	6.8	1.1	0.5	5.2	3.6	1.3	0.3
Unit 32	1404.1	968.8	435.3	425.5	9.8	2.3	0.3	7.2	6.4	0.7	0.1
Unit 33	1095.8	806.8	289.0	287.1	1.9	0.6	0.2	1.1	0.9	0.2	0.01
Unit 34	728.8	627.0	101.8	93.1	8.7	0.9	0.8	7.0	5.3	1.4	0.3
Unit 35	832.8	596.6	236.2	232.2	4.0	0.6	0.4	3.0	2.0	0.8	0.2
Unit 36	960.4	699.8	260.6	250.1	10.5	1.5	1.8	7.2	5.0	1.7	0.5
Unit 37	605.7	405.6	200.1	194.6	5.5	0.8	0.6	4.1	2.6	1.0	0.5
Unit 38	966.6	654.5	312.1	309.7	2.4	0.7	0.4	1.3	1.1	0.2	0.02
Unit 39	716.0	489.1	226.9	225.0	1.9	0.5	0.2	1.2	0.8	0.3	0.1
Unit 40	1044.0	663.9	380.1	373.6	6.5	1.5	1.3	3.7	2.4	0.9	0.4
Unit 41	832.5	507.1	325.4	322.9	2.5	0.4	0.3	1.8	1.2	0.4	0.2
Unit 42	1004.5	641.3	363.2	359.5	3.7	0.4	0.5	2.8	1.7	0.8	0.3
Unit 43	922.3	555.1	367.2	364.0	3.2	0.4	0.5	2.3	1.8	0.4	0.1
Unit 44	952.2	657.2	295.0	290.5	4.5	0.6	0.5	3.4	2.5	0.8	0.1
Unit 45	887.5	627.9	259.6	256.8	2.8	0.4	0.1	2.3	1.5	0.6	0.2
Unit 46	846.8	619.1	227.7	225.7	2.0	0.2	0.3	1.5	1.0	0.4	0.1
Unit 47	859.5	594.2	265.3	262.2	3.1	0.4	0.4	2.3	1.3	0.7	0.3
Unit 48	734.9	508.9	226.0	223.5	2.5	0.2	0.3	2.0	1.4	0.5	0.1
Unit 49	941.8	653.0	288.8	284.7	4.1	0.5	0.6	3.0	2.0	0.7	0.3
Unit 50	912.5	619.4	293.1	288.5	4.6	0.4	0.9	3.3	2.5	0.7	0.1
Unit 51	989.2	670.1	319.1	317.2	1.9	0.3	0.2	1.4	1.0	0.3	0.1
Unit 52	1046.1	761.7	284.4	281.7	2.7	0.1	0.6	2.0	1.3	0.5	0.2
Unit 53	767.2	518.8	248.4	245.6	2.8	1.2	0.4	1.2	0.8	0.3	0.1

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Number of Grains

	Selected MMSIMs																		KIMs											
	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						1.0 to 2.0 mm											
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		GP		GO		DC		IM		CR		FO	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 14	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	KIMs																								Total (KIMs)	
	0.5 to 1.0 mm												0.25 to 0.5 mm													
	GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 13	0	0	0	0	0	0	2	2	1	1	2	2	6	6	2	2	0	0	12	12	4	4	0	0	29	29
Unit 14	1	1	0	0	0	0	3	3	0	0	1	1	5	5	1	1	2	2	11	11	10	10	1	1	36	36
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	1	1	11	11	0	0	18	18
Unit 16	0	0	0	0	0	0	1	1	0	0	0	0	4	4	1	1	0	0	8	8	10	10	1	1	25	25
Unit 17	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	3	3	0	0	5	5
Unit 18	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	5	5	2	2	0	0	10	10
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	3	3
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	0	0	0	0	1	1	0	0	5	5
Unit 21	0	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	3	3	2	2	8	8
Unit 22	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	7	7	0	0	10	10
Unit 23	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	4	4	6	6	1	1	14	14
Unit 24	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	0	0	4	4	11	11	1	1	19	19
Unit 25	0	0	1	1	0	0	1	1	0	0	1	1	6	6	0	0	1	1	4	4	6	6	6	6	26	26
Unit 27	0	0	1	1	0	0	2	2	0	0	3	3	3	3	1	1	0	0	15	15	12	12	4	4	42	42
Unit 28	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	1	4	4	0	0	0	0	9	9
Unit 29	1	1	0	0	0	0	5	5	0	0	1	1	3	3	0	0	0	0	10	10	12	12	2	2	35	35
Unit 30	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	8	8	8	8	1	1	21	21
Unit 31	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	6	6	16	16	0	0	27	27
Unit 32	1	1	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	5	5	3	3	1	1	12	12
Unit 33	0	0	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	6	6	3	3	0	0	12	12
Unit 34	2	2	0	0	0	0	1	1	1	1	5	5	4	4	1	1	1	1	12	12	15	15	10	10	52	52
Unit 35	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	2	2	9	9	0	0	13	13
Unit 36	0	0	0	0	0	0	1	1	0	0	2	2	1	1	1	1	1	1	3	3	3	3	5	5	17	17
Unit 37	0	0	0	0	0	0	2	2	0	0	1	1	1	1	0	0	0	0	5	5	3	3	1	1	13	13
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3	3	8	8	1	1	15	15
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	4	4	4	4	1	1	11	11
Unit 40	0	0	0	0	0	0	0	0	2	2	0	0	4	4	0	0	0	0	3	3	8	8	1	1	19	19
Unit 41	0	0	0	0	0	0	0	0	1	1	0	0	2	2	2	2	1	1	5	5	5	5	1	1	17	17
Unit 42	0	0	0	0	0	0	0	0	1	1	1	1	2	2	1	1	0	0	2	2	5	5	2	2	14	14
Unit 43	0	0	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	1	1	5	5	0	0	9	9
Unit 44	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	3	3	2	2	1	1	8	8
Unit 45	1	1	0	0	0	0	0	0	0	0	0	0	3	3	1	1	1	1	3	3	1	1	2	2	12	12
Unit 46	0	0	0	0	0	0	0	0	0	0	1	1	4	4	2	2	2	2	4	4	3	3	2	2	18	18
Unit 47	0	0	0	0	0	0	0	0	0	0	2	2	5	5	0	0	0	0	6	6	4	4	3	3	20	20
Unit 48	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	1	1	4	4	4	4	0	0	12	12
Unit 49	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	6	6	7	7	2	2	17	17
Unit 50	1	1	0	0	0	0	0	0	0	0	2	2	1	1	3	3	1	1	0	0	10	10	1	1	19	19
Unit 51	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	7	7	10	10	0	0	19	19
Unit 52	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	4	4	8	8	1	1	15	15
Unit 53	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5	5	7	7	0	0	13	13

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Overburden Drilling Management Limited

2021-02-10

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 13	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5 1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 14	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.
Unit 15	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 16	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 17	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.
Unit 18	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.
Unit 19	Almandine/epidote-diopside assemblage.	Almandine/epidote-diopside	
Unit 20	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).	Almandine/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 21	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.
Unit 22	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 23	Amandine-hornblende/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has partial alteration mantle.	Amandine-hornblende/epidote-diopside	1 IM from 0.25-0.5 mm fraction has partial alteration mantle.

Overburden Drilling Management Limited

2021-02-10

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 24	Almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 25	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.
Unit 27	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.
Unit 28	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 29	Almandine-hornblende-augite/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 30	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 31	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 32	Hornblende-almandine/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Hornblende-almandine/epidote-diopside-staurolite	SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 33	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 34	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 35	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	

Overburden Drilling Management Limited

2021-02-10

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 36	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 37	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.
Unit 38	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 39	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 40	Almandine-augite-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.	Almandine-augite-hornblende/epidote-diopside	SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.
Unit 41	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 42	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.
Unit 43	Almandine-fayalite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.	Almandine-fayalite-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.
Unit 44	Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.	Hornblende-almandine/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.
Unit 45	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.
Unit 46	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 47	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Overburden Drilling Management Limited

2021-02-10

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 48	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 49	Almandine-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 50	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.
Unit 51	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 52	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 53	Almandine-hornblende/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 54	assemblage.		
Unit 55	assemblage.		
Unit 56	assemblage.		
Unit 57	assemblage.		
Unit 58	assemblage.		
Unit 59	assemblage.		
Unit 60	assemblage.		
Unit 61	assemblage.		
Unit 62	assemblage.		
Unit 63	assemblage.		
Unit 64	assemblage.		
Unit 65	assemblage.		
Unit 66	assemblage.		
Unit 67	assemblage.		
Unit 68	assemblage.		
Unit 69	assemblage.		
Unit 70	assemblage.		
Unit 71	assemblage.		
Unit 72	assemblage.		
Unit 73	assemblage.		
Unit 74	assemblage.		
Unit 75	assemblage.		
Unit 76	assemblage.		
Unit 77	assemblage.		
Unit 78	assemblage.		
Unit 79	assemblage.		
Unit 80	assemblage.		
Unit 81	assemblage.		
Unit 82	assemblage.		
Unit 83	assemblage.		
Unit 84	assemblage.		
Unit 85	assemblage.		
Unit 86			

Overburden Drilling Management Limited

2021-02-10

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8214

Sample Number	Remarks
Unit 87	assemblage.

INPUT ASSEMBLAGE	INPUT REMARKS

Exploring Heavy Minerals

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	January 23, 2020
Project name:	Lorrain Chain
ODM batch number:	8215
Sample numbers:	Unit 54 to Unit 73
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	20
Number of samples processed to date:	60
Total number of samples in project:	95
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples prescreened to -6.0 mm in the field
2. One ±300 g archival split taken from each sample.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates
5. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

	Weight (kg wet)					Screening and Shaking Table Sample Descriptions													
						Clasts (+2.0 mm)					Matrix (-2.0 mm)								
							Percentage				Distribution					Colour			
Sample Number	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class	
Unit 54	5.9	0.3	5.6	0.4	5.2	G	90	10	0	0	U	+	Y	-	Y	LOC	LOC	TILL	
Unit 55	5.6	0.3	5.3	0.8	4.5	G	85	15	0	0	U	+	Y	-	Y	LOC	LOC	TILL	
Unit 56	4.5	0.3	4.2	0.7	3.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 57	4.3	0.3	4.0	0.7	3.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 58	5.4	0.3	5.1	0.8	4.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 59	4.9	0.3	4.6	0.7	3.9	G	85	15	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 60	7.4	0.3	7.1	1.4	5.7	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 61	2.3	0.3	2.0	0.6	1.4	G	95	5	0	0	U	+	Y	-	Y	OC	DOC	TILL	
Unit 62	4.0	0.3	3.7	0.3	3.4	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 63	5.0	0.3	4.7	0.5	4.2	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 64	2.8	0.3	2.5	0.2	2.3	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL	
Unit 65	5.2	0.3	4.9	0.6	4.3	G	85	15	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 66	4.1	0.3	3.8	0.3	3.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 67	5.2	0.3	4.9	0.3	4.6	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 68	4.9	0.3	4.6	0.2	4.4	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 69	5.0	0.3	4.7	0.2	4.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 70	4.9	0.3	4.6	0.3	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL	
Unit 71	4.9	0.3	4.6	0.4	4.2	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL	
Unit 72	8.2	0.3	7.9	0.6	7.3	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL	
Unit 73	5.2	0.3	4.9	0.2	4.7	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL	

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
Unit 54	6	6	0	0	20.8	70	70	0	0
Unit 55	5	5	0	0	18.0	21	21	0	0
Unit 56	1	0	0	1	14.0	<1	0	0	<1
Unit 57	1	1	0	0	13.2	2443	2443	0	0
Unit 58	0	0	0	0	17.2	0	0	0	0
Unit 59	1	1	0	0	15.6	23	23	0	0
Unit 60	3	3	0	0	22.8	4	4	0	0
Unit 61	0	0	0	0	5.6	0	0	0	0
Unit 62	1	1	0	0	13.6	5	5	0	0
Unit 63	2	2	0	0	16.8	9	9	0	0
Unit 64	0	0	0	0	9.2	0	0	0	0
Unit 65	1	1	0	0	17.2	1	1	0	0
Unit 66	3	3	0	0	14.0	21	21	0	0
Unit 67	0	0	0	0	18.4	0	0	0	0
Unit 68	4	4	0	0	17.6	14	14	0	0
Unit 69	7	6	1	0	18.0	219	219	<1	0
Unit 70	3	3	0	0	17.2	14	14	0	0
Unit 71	0	0	0	0	16.8	0	0	0	0
Unit 72	4	4	0	0	29.2	28	28	0	0
Unit 73	5	5	0	0	18.8	41	41	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated V.G. Assay in HMC	
Sample Number	Thickness		Width	Length	Reshaped	Modified	Pristine	Total	(g)	(ppb)	Metallic Minerals in Pan Concentrate
Unit 54	3	C	15	15	2			2		1	No sulphides.
	5	C	25	25	1			1		1	
	18	C	25	150	1			1		24	
	13	C	50	75	1			1		17	
	15	C	50	100	1			1		27	
								6	20.8	70	
Unit 55	3	C	15	15	2			2		1	No sulphides.
	8	C	25	50	1			1		4	
	10	C	25	75	2			2		16	
								5	18.0	21	
Unit 56	3	C	15	15			1	1		<1	No sulphides.
								1	14.0	<1	
Unit 57	52	C	275	300	1			1		2443	No sulphides.
								1	13.2	2443	
Unit 58	No Visible Gold										No sulphides.
Unit 59	13	C	50	75	1			1		23	No sulphides.
								1	15.6	23	
Unit 60	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1			1		1	
	8	C	25	50	1			1		3	
								3	22.8	4	
Unit 61	No Visible Gold										No sulphides.
Unit 62	8	C	25	50	1			1		5	No sulphides.
								1	13.6	5	
Unit 63	8	C	25	50	2			2		9	No sulphides.
								2	16.8	9	
Unit 64	No Visible Gold										No sulphides.
Unit 65	5	C	25	25	1			1		1	No sulphides.
								1	17.2	1	
Unit 66	5	C	25	25	1			1		2	No sulphides.
	8	C	25	50	1			1		5	
	10	C	50	50	1			1		14	
								3	14.0	21	
Unit 67	No Visible Gold										No sulphides.
Unit 68	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	2			2		3	
	10	C	50	50	1			1		11	
								4	17.6	14	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 69	3	C	15	15	1	1		2		1	No sulphides.
	5	C	25	25	2			2		3	
	13	C	50	75	1			1		20	
	15	C	75	75	1			1		36	
	25	C	125	125	1			1		161	
								7	18.0	220	
Unit 70	5	C	25	25	2			2		3	No sulphides.
	10	C	50	50	1			1		11	
								3	17.2	14	
Unit 71	No Visible Gold										No sulphides.
Unit 72	5	C	25	25	1			1		1	Tr (4 grains) pyrite (25-100 µm).
	8	C	25	50	1			1		2	
	13	C	50	75	2			2		25	
								4	29.2	28	
Unit 73	5	C	25	25	2			2		3	No sulphides.
	8	C	25	50	2			2		8	
	15	C	50	100	1			1		30	
								5	18.8	41	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 54	833.6	539.7	293.9	285.6	8.3	1.0	1.1	6.2	3.9	1.6	0.7
Unit 55	622.1	443.2	178.9	174.2	4.7	1.0	0.6	3.1	1.9	0.9	0.3
Unit 56	387.4	271.4	116.0	113.1	2.9	0.6	0.3	2.0	1.3	0.5	0.2
Unit 57	542.0	369.5	172.5	169.7	2.8	0.8	0.2	1.8	1.1	0.4	0.3
Unit 58	688.6	470.3	218.3	217.0	1.3	0.2	0.1	1.0	0.6	0.3	0.1
Unit 59	492.4	384.4	108.0	104.5	3.5	0.5	0.2	2.8	2.0	0.6	0.2
Unit 60	776.0	528.2	247.8	244.4	3.4	0.6	0.4	2.4	1.5	0.7	0.2
Unit 61	340.4	189.5	150.9	150.0	0.9	0.2	0.4	0.3	0.2	0.1	0.04
Unit 62	446.7	340.4	106.3	104.4	1.9	0.6	0.1	1.2	0.9	0.3	0.03
Unit 63	772.7	535.1	237.6	234.9	2.7	0.5	0.1	2.1	1.4	0.6	0.1
Unit 64	572.5	367.0	205.5	203.0	2.5	0.4	0.2	1.9	1.1	0.6	0.2
Unit 65	797.4	527.8	269.6	263.7	5.9	0.9	0.4	4.6	2.8	1.3	0.5
Unit 66	451.0	306.8	144.2	141.4	2.8	0.4	0.1	2.3	1.2	0.8	0.3
Unit 67	485.3	291.2	194.1	191.2	2.9	0.5	0.5	1.9	1.1	0.6	0.2
Unit 68	683.6	482.1	201.5	197.9	3.6	0.4	0.5	2.7	1.5	0.8	0.4
Unit 69	806.8	541.1	265.7	261.4	4.3	0.5	0.4	3.4	2.1	0.9	0.4
Unit 70	613.1	378.3	234.8	232.8	2.0	0.5	0.3	1.2	0.9	0.2	0.1
Unit 71	504.0	366.7	137.3	134.5	2.8	0.7	0.5	1.6	1.1	0.4	0.1
Unit 72	570.6	337.5	233.1	225.2	7.9	1.0	0.6	6.3	3.5	2.5	0.3
Unit 73	238.8	175.1	63.7	61.5	2.2	0.4	0.2	1.6	1.2	0.3	0.1

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Number of Grains – Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
Unit 54	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
Unit 55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 57	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 64	0	0	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0
Unit 65	0	0	0	0	0	0	0	0	0	0	0	0	9	9	0	0	0	0
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0

Number of Grains – KIMs

Sample Number	1.0 to 2.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.5 to 1.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.25 to 0.5 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
Unit 54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	3	1	1	2	2	0	0	11	11	6	6	2	2	26	26
Unit 55	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	8	8	3	3	3	3	21	21
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	2	2	0	0	0	0	6	6	11	11	1	1	22	22
Unit 57	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	14	14	13	13	2	2	36	36
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	6	6	2	2	13	13
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	7	7	7	7	5	5	22	22
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	4	1	1	0	0	2	2	9	9	3	3	20	20
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	5	5	3	3	0	0	10	10
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	3	3	0	0	1	1	7	7	3	3	0	0	15	15
Unit 64	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	6	6	1	1	9	9
Unit 65	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	1	1	40	21	2	2	50	31
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	7	7
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	2	2	6	6	1	1	13	13
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3	3	2	2	0	0	6	6
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	4	4	1	1	0	0	10	10	11	11	1	1	30	30
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	3	3	3	3	0	0	7	7
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3	0	0	4	4
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	5	5	7	7	0	0	15	15
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	2	2	0	0	0	0	0	0	4	4	0	0	8	8

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Remarks
Unit 54	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 FO versus diopside candidates = 3 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine = 1 GO (Cr-poor pyrope); and 4 IM versus crustal ilmenite candidates = 4 IM. 1 GO and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 55	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 1 IM versus crustal ilmenite candidate = 1 IM. One GP from 0.5-1.0 mm and both GP, 1 GO, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 56	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 ruby corundum; and 1 FO versus zoisite candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 GP, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 57	Almandine-hornblende/epidote-diopside assemblage. All 3 GP and 1 IM from 0.5-1.0 mm and 1 GP and 6 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 58	Almandine-hornblende-augite/epidote-diopside-titanite assemblage.
Unit 59	Almandine-hornblende/epidote-diopside assemblage.
Unit 60	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 2 IM.
Unit 61	Hornblende-hematite/epidote-zircon assemblage. SEM checks from 0.25-0.5 mm fraction: 5 titanite versus zircon candidates = 5 zircons.
Unit 62	Hornblende-almandine/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and sole GP and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 63	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 64	Hornblende-almandine/epidote-diopside assemblage.
Unit 65	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 3 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite and 1 CR.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Remarks
Unit 66	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 CR.
Unit 67	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 FO versus diopside candidate = 1 FO. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 68	Almandine-hornblende/epidote-staurolite-diopside assemblage. Sole IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 69	Almandine-hornblende/epidote-diopside assemblage. 2 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 70	Almandine/epidote-diopside assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 71	Almandine-hornblende/epidote-staurolite assemblage.
Unit 72	Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 73	Almandine-hornblende/epidote-diopside assemblage.

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Exploring Heavy Minerals

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	January 23, 2020
Project name:	Lorrain Chain
ODM batch number:	8215
Sample numbers:	Unit 54 to Unit 73
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	20
Number of samples processed to date:	60
Total number of samples in project:	95
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples prescreened to -6.0 mm in the field
2. One ±300 g archival split taken from each sample.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates
5. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Overburden Drilling Management Limited - Abbreviations Table

Raw Sample Weights and Descriptions Log

Largest Clast Size Present:
- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:
- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated
- MB: Marble

Matrix Grain Size Distribution:
- S/U: Sorted or unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:

ORG: Y: Organics present in matrix
N: Organics absent or negligible in matrix
+: Matrix is mainly organic

Matrix Colour:

Primary:

BE: Beige	GG: Grey-green
BR: Brick Red	PP: Purple
GY: Grey	PK: Pink
GB: Grey-beige	PB: Pink-beige
GN: Green	MN: Maroon

Secondary (soil):
- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:
- L: Light
- M: Medium
- D: Dark

Detailed Gold Grain Log

VG: Visible gold grains

Thickness:
- M: Actual measured thickness of grain (µm)
- C: Thickness of grain (µm) calculated from measured width and length

Kimberlite Indicator Mineral (KIM) Log

- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

Metamorphosed/Magmatic Massive Sulphide Indicator Mineral (MMSIM) and Porphyry Cu Indicator Mineral (PCIM) Logs

Adr: Andradite	Cpx: Clinopyroxene	Gth: Goethite	PGM: Platinum group-bearing mineral	Sil: Sillimanite
Ap: Apatite	Cpy: Chalcopyrite	Ilm: Ilmenite		Spi: Spinel
Ase: Anatase	Cr: Chromite	Ky: Kyanite	Py: Pyrite	Sps: Spessartine
Aspy: Arsenopyrite	Fay: Fayalite	Mrc: Marcasite	REM: Rare earth-bearing mineral	St: Staurolite
Ax: Axinite	Gh: Gahnite	Mz: Monazite		Tm: Tourmaline
Ba: Barite	Grs: Grossular	Ol: Olivine	Rt: Red rutile	Ttn: Titanite
		Opx: Orthopyroxene		Zir: Zircon

Other

- HMC: Heavy mineral concentrate
- UV: Ultra-violet
- EPD: Electric-pulse disaggregation
- PGE: Platinum group element

Overburden Drilling Management Limited

2021-02-10

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

						Screening and Shaking Table Sample Descriptions												
	Weight (kg wet)					Clasts (+2.0 mm)					Matrix (-2.0 mm)							
							Percentage				Distribution					Colour		
Sample Number	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class
Unit 13	8.8	0.3	8.5	1.3	7.2	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 14	12.5	0.3	12.2	1.1	11.1	P	90	10	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 15	7.8	0.3	7.5	0.8	6.7	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 16	7.9	0.3	7.6	0.5	7.1	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 17	4.7	0.3	4.4	0.5	3.9	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 18	8.9	0.3	8.6	0.8	7.8	G	95	5	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 19	5.2	0.3	4.9	0.3	4.6	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 20	5.0	0.3	4.7	0.4	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 21	9.8	0.3	9.5	0.6	8.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 22	9.8	0.3	9.5	0.5	9.0	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 23	5.3	0.3	5.0	0.4	4.6	P	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 24	8.7	0.3	8.4	0.5	7.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 25	8.5	0.3	8.2	0.6	7.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 27	9.7	0.3	9.4	0.8	8.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 28	5.9	0.3	5.6	0.5	5.1	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 29	5.9	0.3	5.6	1.0	4.6	C	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 30	5.3	0.3	5.0	0.6	4.4	P	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 31	8.8	0.3	8.5	0.8	7.7	P	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 32	8.1	0.3	7.8	0.8	7.0	P	70	30	0	0	U	Y	Y	Y	Y	DOC	DOC	TILL
Unit 33	8.1	0.3	7.8	0.9	6.9	P	70	30	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 34	7.3	0.3	7.0	0.5	6.5	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 35	4.6	0.3	4.3	0.3	4.0	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 36	8.8	0.3	8.5	0.6	7.9	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 37	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 38	5.3	0.3	5.0	0.5	4.5	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 39	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
Unit 40	8.0	0.3	7.7	0.9	6.8	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 41	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 42	4.8	0.3	4.5	0.3	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 43	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 44	5.2	0.3	4.9	0.3	4.6	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 45	5.1	0.3	4.8	0.4	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 46	4.8	0.3	4.5	0.4	4.1	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 47	5.3	0.3	5.0	0.3	4.7	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 48	4.9	0.3	4.6	0.3	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 49	4.6	0.3	4.3	0.4	3.9	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 50	8.2	0.3	7.9	0.8	7.1	P	90	10	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
Unit 51	4.9	0.3	4.6	0.4	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 52	5.0	0.3	4.7	0.5	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 53	5.1	0.3	4.8	0.5	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 54	5.9	0.3	5.6	0.4	5.2	G	90	10	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 55	5.6	0.3	5.3	0.8	4.5	G	85	15	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 56	4.5	0.3	4.2	0.7	3.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 57	4.3	0.3	4.0	0.7	3.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 58	5.4	0.3	5.1	0.8	4.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 59	4.9	0.3	4.6	0.7	3.9	G	85	15	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 60	7.4	0.3	7.1	1.4	5.7	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 61	2.3	0.3	2.0	0.6	1.4	G	95	5	0	0	U	+	Y	-	Y	OC	DOC	TILL
Unit 62	4.0	0.3	3.7	0.3	3.4	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 63	5.0	0.3	4.7	0.5	4.2	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 64	2.8	0.3	2.5	0.2	2.3	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 65	5.2	0.3	4.9	0.6	4.3	G	85	15	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 66	4.1	0.3	3.8	0.3	3.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 67	5.2	0.3	4.9	0.3	4.6	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 68	4.9	0.3	4.6	0.2	4.4	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 69	5.0	0.3	4.7	0.2	4.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 70	4.9	0.3	4.6	0.3	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 71	4.9	0.3	4.6	0.4	4.2	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 72	8.2	0.3	7.9	0.6	7.3	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 73	5.2	0.3	4.9	0.2	4.7	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL

Overburden Drilling Management Limited

2021-02-10

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

	Number of Visible Gold Grains				Nonmag	Calculated PPB Visible Gold in HMC			
Sample Number	Total	Reshaped	Modified	Pristine	HMC Weight*	Total	Reshaped	Modified	Pristine
Unit 13	2	1	1	0	28.8	9	7	3	0
Unit 14	1	1	0	0	44.4	4	4	0	0
Unit 15	0	0	0	0	26.8	0	0	0	0
Unit 16	1	0	0	1	28.4	1	0	0	1
Unit 17	0	0	0	0	15.6	0	0	0	0
Unit 18	0	0	0	0	31.2	0	0	0	0
Unit 19	1	0	0	1	18.4	4	0	0	4
Unit 20	0	0	0	0	17.2	0	0	0	0
Unit 21	0	0	0	0	35.6	0	0	0	0
Unit 22	0	0	0	0	36.0	0	0	0	0
Unit 23	0	0	0	0	18.4	0	0	0	0
Unit 24	0	0	0	0	31.6	0	0	0	0
Unit 25	1	1	0	0	30.4	12	12	0	0
Unit 27	3	3	0	0	34.4	72	72	0	0
Unit 28	1	1	0	0	20.4	9	9	0	0
Unit 29	1	1	0	0	18.4	10	10	0	0
Unit 30	0	0	0	0	17.6	0	0	0	0
Unit 31	2	2	0	0	30.8	125	125	0	0
Unit 32	1	1	0	0	28.0	50	50	0	0
Unit 33	2	2	0	0	27.6	8	8	0	0
Unit 34	2	2	0	0	26.0	129	129	0	0
Unit 35	0	0	0	0	16.0	0	0	0	0
Unit 36	4	4	0	0	31.6	597	597	0	0
Unit 37	3	3	0	0	17.2	36	36	0	0
Unit 38	0	0	0	0	18.0	0	0	0	0
Unit 39	1	1	0	0	17.2	87	87	0	0
Unit 40	2	2	0	0	27.2	24	24	0	0
Unit 41	1	1	0	0	17.6	32	32	0	0
Unit 42	7	6	1	0	16.8	192	67	125	0
Unit 43	1	1	0	0	17.6	4	4	0	0
Unit 44	2	2	0	0	18.4	20	20	0	0
Unit 45	9	6	1	2	17.6	179	172	4	3
Unit 46	3	3	0	0	16.4	24	24	0	0
Unit 47	1	1	0	0	18.8	1	1	0	0
Unit 48	1	1	0	0	17.2	8	8	0	0
Unit 49	2	1	0	1	15.6	90	90	0	<1
Unit 50	0	0	0	0	28.4	0	0	0	0
Unit 51	0	0	0	0	16.8	0	0	0	0
Unit 52	0	0	0	0	16.8	0	0	0	0
Unit 53	0	0	0	0	17.2	0	0	0	0
Unit 54	6	6	0	0	20.8	70	70	0	0
Unit 55	5	5	0	0	18.0	21	21	0	0
Unit 56	1	0	0	1	14.0	<1	0	0	<1
Unit 57	1	1	0	0	13.2	2443	2443	0	0
Unit 58	0	0	0	0	17.2	0	0	0	0
Unit 59	1	1	0	0	15.6	23	23	0	0
Unit 60	3	3	0	0	22.8	4	4	0	0
Unit 61	0	0	0	0	5.6	0	0	0	0
Unit 62	1	1	0	0	13.6	5	5	0	0
Unit 63	2	2	0	0	16.8	9	9	0	0
Unit 64	0	0	0	0	9.2	0	0	0	0
Unit 65	1	1	0	0	17.2	1	1	0	0
Unit 66	3	3	0	0	14.0	21	21	0	0
Unit 67	0	0	0	0	18.4	0	0	0	0
Unit 68	4	4	0	0	17.6	14	14	0	0
Unit 69	7	6	1	0	18.0	219	219	<1	0
Unit 70	3	3	0	0	17.2	14	14	0	0
Unit 71	0	0	0	0	16.8	0	0	0	0
Unit 72	4	4	0	0	29.2	28	28	0	0
Unit 73	5	5	0	0	18.8	41	41	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 13	8	C	25	50		1		1		3	No sulphides.
	10	C	50	50	1			1		7	
								2	28.8	9	
Unit 14	10	C	50	50	1			1		4	No sulphides.
								1	44.4	4	
Unit 15	No Visible Gold										No sulphides.
Unit 16	5	C	25	25			1	1		1	No sulphides.
								1	28.4	1	
Unit 17	No Visible Gold										No sulphides.
Unit 18	No Visible Gold										No sulphides.
Unit 19	8	C	25	50			1	1		4	No sulphides.
								1	18.4	4	
Unit 20	No Visible Gold										No sulphides.
Unit 21	No Visible Gold										No sulphides.
Unit 22	No Visible Gold										No sulphides.
Unit 23	No Visible Gold										No sulphides.
Unit 24	No Visible Gold										No sulphides.
Unit 25	13	C	50	75	1			1		12	No sulphides.
								1	30.4	12	
Unit 27	13	C	50	75	1			1		10	No sulphides.
	20	C	50	150	1			1		33	
	18	C	75	100	1			1		29	
								3	34.4	72	
Unit 28	10	C	50	50	1			1		9	No sulphides.
								1	20.4	9	
Unit 29	10	C	50	50	1			1		10	No sulphides.
								1	18.4	10	
Unit 30	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	
Sample Number	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			Metallic Minerals in Pan Concentrate
Unit 31	20	C	75	125	1			1		46	No sulphides.
	25	C	75	175	1			1		79	
								2	30.8	125	
Unit 32	20	C	75	125	1			1		50	No sulphides.
								1	28.0	50	
Unit 33	5	C	25	25	1			1		1	No sulphides.
	10	C	50	50	1			1		7	
								2	27.6	8	
Unit 34	15	C	50	100	1			1		22	No sulphides.
	25	C	100	150	1			1		107	
								2	26.0	129	
Unit 35	No Visible Gold										No sulphides.
Unit 36	5	C	25	25	2			2		2	Tr (1 grain) arsenopyrite (75 µm).
	15	C	50	100	1			1		18	
	44	C	200	275	1			1		577	
								4	31.6	597	
Unit 37	5	C	25	25	1			1		1	No sulphides.
	13	C	25	100	1			1		14	
	13	C	50	75	1			1		21	
								3	17.2	36	
Unit 38	No Visible Gold										No sulphides.
Unit 39	20	C	100	100	1			1		87	Tr (1 grain) arsenopyrite (25 µm).
								1	17.2	87	
Unit 40	8	C	25	50	1			1		3	No sulphides.
	15	C	50	100	1			1		21	
								2	27.2	24	
Unit 41	15	C	50	100	1			1		32	No sulphides.
								1	17.6	32	
Unit 42	3	C	15	15	2			2		1	No sulphides.
	5	C	25	25	2			2		3	
	8	C	25	50	1			1		4	
	18	C	75	100	1			1		59	
	22	C	100	125		1		1		125	
								7	16.8	192	
Unit 43	8	C	25	50	1			1		4	No sulphides.
								1	17.6	4	
Unit 44	3	C	15	15	1			1		<1	No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
	13	C	50	75	1			1		19	
								2	18.4	20	
Unit 45	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1		2	3		4	
	8	C	25	50	1	1		2		8	
	10	C	25	75	1			1		8	
	13	C	50	75	1			1		20	
	25	C	75	175	1			1		138	
								9	17.6	179	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 46	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1			1		1	
	13	C	50	75	1			1		22	
								3	16.4	24	
Unit 47	5	C	25	25	1			1		1	No sulphides.
								1	18.8	1	
Unit 48	10	C	25	75	1			1		8	No sulphides.
								1	17.2	8	
Unit 49	3	C	15	15			1	1		<1	No sulphides.
	20	C	75	125	1			1		90	
								2	15.6	90	
Unit 50	No Visible Gold										No sulphides.
Unit 51	No Visible Gold										No sulphides.
Unit 52	No Visible Gold										No sulphides.
Unit 53	No Visible Gold										No sulphides.
Unit 54	3	C	15	15	2			2		1	No sulphides.
	5	C	25	25	1			1		1	
	18	C	25	150	1			1		24	
	13	C	50	75	1			1		17	
	15	C	50	100	1			1		27	
								6	20.8	70	
Unit 55	3	C	15	15	2			2		1	No sulphides.
	8	C	25	50	1			1		4	
	10	C	25	75	2			2		16	
								5	18.0	21	
Unit 56	3	C	15	15			1	1		<1	No sulphides.
								1	14.0	<1	
Unit 57	52	C	275	300	1			1		2443	No sulphides.
								1	13.2	2443	
Unit 58	No Visible Gold										No sulphides.
Unit 59	13	C	50	75	1			1		23	No sulphides.
								1	15.6	23	
Unit 60	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1			1		1	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
	8	C	25	50	1			1		3	
								3	22.8	4	
Unit 61	No Visible Gold										No sulphides.
Unit 62	8	C	25	50	1			1		5	No sulphides.
								1	13.6	5	
Unit 63	8	C	25	50	2			2		9	No sulphides.
								2	16.8	9	
Unit 64	No Visible Gold										No sulphides.
Unit 65	5	C	25	25	1			1		1	No sulphides.
								1	17.2	1	
Unit 66	5	C	25	25	1			1		2	No sulphides.
	8	C	25	50	1			1		5	
	10	C	50	50	1			1		14	
								3	14.0	21	
Unit 67	No Visible Gold										No sulphides.
Unit 68	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	2			2		3	
	10	C	50	50	1			1		11	
								4	17.6	14	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 69	3	C	15	15	1	1		2		1	No sulphides.
	5	C	25	25	2			2		3	
	13	C	50	75	1			1		20	
	15	C	75	75	1			1		36	
	25	C	125	125	1			1		161	
								7	18.0	220	
Unit 70	5	C	25	25	2			2		3	No sulphides.
	10	C	50	50	1			1		11	
								3	17.2	14	
Unit 71	No Visible Gold										No sulphides.
Unit 72	5	C	25	25	1			1		1	Tr (4 grains) pyrite (25-100 µm).
	8	C	25	50	1			1		2	
	13	C	50	75	2			2		25	
								4	29.2	28	
Unit 73	5	C	25	25	2			2		3	No sulphides.
	8	C	25	50	2			2		8	
	15	C	50	100	1			1		30	
								5	18.8	41	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited

2021-02-10

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 13	1298.6	773.4	525.2	510.8	14.4	3.1	2.0	9.3	5.8	2.6	0.9
Unit 14	1433.1	924.7	508.4	498.4	10.0	2.3	1.0	6.7	4.0	1.9	0.8
Unit 15	1274.7	670.7	604.0	599.1	4.9	1.1	0.5	3.3	1.8	1.1	0.4
Unit 16	1488.7	977.5	511.2	507.2	4.0	1.3	0.6	2.1	1.3	0.6	0.2
Unit 17	806.5	518.3	288.2	262.3	25.9	10.9	8.0	7.0	6.4	0.6	0.03
Unit 18	1525.8	998.6	527.2	522.3	4.9	1.5	0.4	3.0	1.9	0.8	0.3
Unit 19	1051.7	515.9	535.8	535.1	0.7	0.3	0.1	0.3	0.2	0.1	0.03
Unit 20	886.4	493.5	392.9	390.9	2.0	0.7	0.3	1.0	0.6	0.3	0.1
Unit 21	1339.8	637.8	702.0	696.2	5.8	1.2	0.5	4.1	2.4	1.1	0.6
Unit 22	1001.6	714.7	286.9	280.2	6.7	1.6	0.5	4.6	3.0	1.3	0.3
Unit 23	769.6	535.8	233.8	230.7	3.1	0.9	0.3	1.9	1.4	0.4	0.1
Unit 24	1271.7	856.0	415.7	412.4	3.3	0.9	0.3	2.1	1.4	0.6	0.1
Unit 25	980.9	616.3	364.6	356.7	7.9	1.9	1.2	4.8	3.0	1.4	0.4
Unit 27	1211.0	799.6	411.4	406.0	5.4	1.3	0.6	3.5	2.3	1.0	0.2
Unit 28	1219.9	588.9	631.0	629.3	1.7	0.5	0.2	1.0	0.7	0.2	0.1
Unit 29	817.5	635.4	182.1	176.1	6.0	1.3	0.5	4.2	2.9	1.1	0.2
Unit 30	879.0	581.0	298.0	292.9	5.1	1.1	0.6	3.4	2.2	0.9	0.3
Unit 31	1110.8	778.9	331.9	325.1	6.8	1.1	0.5	5.2	3.6	1.3	0.3
Unit 32	1404.1	968.8	435.3	425.5	9.8	2.3	0.3	7.2	6.4	0.7	0.1
Unit 33	1095.8	806.8	289.0	287.1	1.9	0.6	0.2	1.1	0.9	0.2	0.01
Unit 34	728.8	627.0	101.8	93.1	8.7	0.9	0.8	7.0	5.3	1.4	0.3
Unit 35	832.8	596.6	236.2	232.2	4.0	0.6	0.4	3.0	2.0	0.8	0.2
Unit 36	960.4	699.8	260.6	250.1	10.5	1.5	1.8	7.2	5.0	1.7	0.5
Unit 37	605.7	405.6	200.1	194.6	5.5	0.8	0.6	4.1	2.6	1.0	0.5
Unit 38	966.6	654.5	312.1	309.7	2.4	0.7	0.4	1.3	1.1	0.2	0.02
Unit 39	716.0	489.1	226.9	225.0	1.9	0.5	0.2	1.2	0.8	0.3	0.1
Unit 40	1044.0	663.9	380.1	373.6	6.5	1.5	1.3	3.7	2.4	0.9	0.4
Unit 41	832.5	507.1	325.4	322.9	2.5	0.4	0.3	1.8	1.2	0.4	0.2
Unit 42	1004.5	641.3	363.2	359.5	3.7	0.4	0.5	2.8	1.7	0.8	0.3
Unit 43	922.3	555.1	367.2	364.0	3.2	0.4	0.5	2.3	1.8	0.4	0.1
Unit 44	952.2	657.2	295.0	290.5	4.5	0.6	0.5	3.4	2.5	0.8	0.1
Unit 45	887.5	627.9	259.6	256.8	2.8	0.4	0.1	2.3	1.5	0.6	0.2
Unit 46	846.8	619.1	227.7	225.7	2.0	0.2	0.3	1.5	1.0	0.4	0.1
Unit 47	859.5	594.2	265.3	262.2	3.1	0.4	0.4	2.3	1.3	0.7	0.3
Unit 48	734.9	508.9	226.0	223.5	2.5	0.2	0.3	2.0	1.4	0.5	0.1
Unit 49	941.8	653.0	288.8	284.7	4.1	0.5	0.6	3.0	2.0	0.7	0.3
Unit 50	912.5	619.4	293.1	288.5	4.6	0.4	0.9	3.3	2.5	0.7	0.1
Unit 51	989.2	670.1	319.1	317.2	1.9	0.3	0.2	1.4	1.0	0.3	0.1
Unit 52	1046.1	761.7	284.4	281.7	2.7	0.1	0.6	2.0	1.3	0.5	0.2
Unit 53	767.2	518.8	248.4	245.6	2.8	1.2	0.4	1.2	0.8	0.3	0.1
Unit 54	833.6	539.7	293.9	285.6	8.3	1.0	1.1	6.2	3.9	1.6	0.7
Unit 55	622.1	443.2	178.9	174.2	4.7	1.0	0.6	3.1	1.9	0.9	0.3
Unit 56	387.4	271.4	116.0	113.1	2.9	0.6	0.3	2.0	1.3	0.5	0.2
Unit 57	542.0	369.5	172.5	169.7	2.8	0.8	0.2	1.8	1.1	0.4	0.3
Unit 58	688.6	470.3	218.3	217.0	1.3	0.2	0.1	1.0	0.6	0.3	0.1
Unit 59	492.4	384.4	108.0	104.5	3.5	0.5	0.2	2.8	2.0	0.6	0.2
Unit 60	776.0	528.2	247.8	244.4	3.4	0.6	0.4	2.4	1.5	0.7	0.2
Unit 61	340.4	189.5	150.9	150.0	0.9	0.2	0.4	0.3	0.2	0.1	0.04
Unit 62	446.7	340.4	106.3	104.4	1.9	0.6	0.1	1.2	0.9	0.3	0.03
Unit 63	772.7	535.1	237.6	234.9	2.7	0.5	0.1	2.1	1.4	0.6	0.1
Unit 64	572.5	367.0	205.5	203.0	2.5	0.4	0.2	1.9	1.1	0.6	0.2
Unit 65	797.4	527.8	269.6	263.7	5.9	0.9	0.4	4.6	2.8	1.3	0.5
Unit 66	451.0	306.8	144.2	141.4	2.8	0.4	0.1	2.3	1.2	0.8	0.3
Unit 67	485.3	291.2	194.1	191.2	2.9	0.5	0.5	1.9	1.1	0.6	0.2
Unit 68	683.6	482.1	201.5	197.9	3.6	0.4	0.5	2.7	1.5	0.8	0.4
Unit 69	806.8	541.1	265.7	261.4	4.3	0.5	0.4	3.4	2.1	0.9	0.4
Unit 70	613.1	378.3	234.8	232.8	2.0	0.5	0.3	1.2	0.9	0.2	0.1
Unit 71	504.0	366.7	137.3	134.5	2.8	0.7	0.5	1.6	1.1	0.4	0.1
Unit 72	570.6	337.5	233.1	225.2	7.9	1.0	0.6	6.3	3.5	2.5	0.3
Unit 73	238.8	175.1	63.7	61.5	2.2	0.4	0.2	1.6	1.2	0.3	0.1

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Number of Grains – Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
Unit 13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 14	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 54	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
Unit 55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 57	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 64	0	0	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0
Unit 65	0	0	0	0	0	0	0	0	0	0	0	0	9	9	0	0	0	0
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0

Number of Grains – KIMs (1.0 to 2.0 mm and 0.5 to 1.0 mm)

Sample Number	1.0 to 2.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.5 to 1.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	2	2
Unit 14	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	3	3	0	0	1	1
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1
Unit 27	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	2	2	0	0	3	3
Unit 28	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 29	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	5	5	0	0	1	1
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 31	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	1	1	5	5
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	1
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	3
Unit 55	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0
Unit 57	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	2	2	0	0	0	0
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 64	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
Unit 65	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0

Number of Grains – KIMs (0.25 to 0.5 mm), Total (KIMs), Actual and Estimated

Sample Number	0.25 to 0.5 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P	Actual	Estimated
Unit 13	6	6	2	2	0	0	12	12	4	4	0	0	29	29	29	29
Unit 14	5	5	1	1	2	2	11	11	10	10	1	1	36	36	36	36
Unit 15	6	6	0	0	0	0	1	1	11	11	0	0	18	18	18	18
Unit 16	4	4	1	1	0	0	8	8	10	10	1	1	25	25	25	25
Unit 17	0	0	0	0	0	0	1	1	3	3	0	0	5	5	5	5
Unit 18	1	1	1	1	0	0	5	5	2	2	0	0	10	10	10	10
Unit 19	0	0	0	0	0	0	0	0	3	3	0	0	3	3	3	3
Unit 20	3	3	1	1	0	0	0	0	1	1	0	0	5	5	5	5
Unit 21	2	2	0	0	0	0	0	0	3	3	2	2	8	8	8	8
Unit 22	0	0	0	0	0	0	1	1	7	7	0	0	10	10	10	10
Unit 23	2	2	0	0	0	0	4	4	6	6	1	1	14	14	14	14
Unit 24	1	1	1	1	0	0	4	4	11	11	1	1	19	19	19	19
Unit 25	6	6	0	0	1	1	4	4	6	6	6	6	26	26	26	26
Unit 27	3	3	1	1	0	0	15	15	12	12	4	4	42	42	42	42
Unit 28	1	1	1	1	1	1	4	4	0	0	0	0	9	9	9	9
Unit 29	3	3	0	0	0	0	10	10	12	12	2	2	35	35	35	35
Unit 30	2	2	0	0	0	0	8	8	8	8	1	1	21	21	21	21
Unit 31	2	2	0	0	0	0	6	6	16	16	0	0	27	27	27	27
Unit 32	0	0	1	1	0	0	5	5	3	3	1	1	12	12	12	12
Unit 33	1	1	0	0	0	0	6	6	3	3	0	0	12	12	12	12
Unit 34	4	4	1	1	1	1	12	12	15	15	10	10	52	52	52	52
Unit 35	1	1	0	0	0	0	2	2	9	9	0	0	13	13	13	13
Unit 36	1	1	1	1	1	1	3	3	3	3	5	5	17	17	17	17
Unit 37	1	1	0	0	0	0	5	5	3	3	1	1	13	13	13	13
Unit 38	3	3	0	0	0	0	3	3	8	8	1	1	15	15	15	15
Unit 39	1	1	1	1	0	0	4	4	4	4	1	1	11	11	11	11
Unit 40	4	4	0	0	0	0	3	3	8	8	1	1	19	19	19	19
Unit 41	2	2	2	2	1	1	5	5	5	5	1	1	17	17	17	17
Unit 42	2	2	1	1	0	0	2	2	5	5	2	2	14	14	14	14
Unit 43	1	1	0	0	0	0	1	1	5	5	0	0	9	9	9	9
Unit 44	1	1	0	0	0	0	3	3	2	2	1	1	8	8	8	8
Unit 45	3	3	1	1	1	1	3	3	1	1	2	2	12	12	12	12
Unit 46	4	4	2	2	2	2	4	4	3	3	2	2	18	18	18	18
Unit 47	5	5	0	0	0	0	6	6	4	4	3	3	20	20	20	20
Unit 48	0	0	0	0	1	1	4	4	4	4	0	0	12	12	12	12
Unit 49	1	1	0	0	0	0	6	6	7	7	2	2	17	17	17	17
Unit 50	1	1	3	3	1	1	0	0	10	10	1	1	19	19	19	19
Unit 51	1	1	0	0	0	0	7	7	10	10	0	0	19	19	19	19
Unit 52	1	1	0	0	0	0	4	4	8	8	1	1	15	15	15	15
Unit 53	0	0	0	0	0	0	5	5	7	7	0	0	13	13	13	13
Unit 54	1	1	2	2	0	0	11	11	6	6	2	2	26	26	26	26
Unit 55	2	2	2	2	0	0	8	8	3	3	3	3	21	21	21	21
Unit 56	2	2	0	0	0	0	6	6	11	11	1	1	22	22	22	22
Unit 57	2	2	0	0	0	0	14	14	13	13	2	2	36	36	36	36
Unit 58	0	0	0	0	0	0	5	5	6	6	2	2	13	13	13	13
Unit 59	2	2	0	0	0	0	7	7	7	7	5	5	22	22	22	22
Unit 60	4	4	1	1	0	0	2	2	9	9	3	3	20	20	20	20
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 62	1	1	0	0	0	0	5	5	3	3	0	0	10	10	10	10
Unit 63	3	3	0	0	1	1	7	7	3	3	0	0	15	15	15	15
Unit 64	0	0	0	0	0	0	0	0	6	6	1	1	9	9	9	9
Unit 65	2	2	2	2	0	0	1	1	40	21	2	2	50	31	50	31
Unit 66	0	0	0	0	0	0	0	0	7	7	0	0	7	7	7	7
Unit 67	1	1	0	0	0	0	2	2	6	6	1	1	13	13	13	13
Unit 68	0	0	0	0	0	0	3	3	2	2	0	0	6	6	6	6
Unit 69	4	4	1	1	0	0	10	10	11	11	1	1	30	30	30	30
Unit 70	1	1	0	0	0	0	3	3	3	3	0	0	7	7	7	7
Unit 71	0	0	0	0	0	0	1	1	3	3	0	0	4	4	4	4
Unit 72	2	2	0	0	0	0	5	5	7	7	0	0	15	15	15	15
Unit 73	2	2	0	0	0	0	0	0	4	4	0	0	8	8	8	8

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Overburden Drilling Management Limited

2021-02-10

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 13	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 14	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.
Unit 15	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 16	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 17	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.
Unit 18	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.
Unit 19	Almandine/epidote-diopside assemblage.	Almandine/epidote-diopside	
Unit 20	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).	Almandine/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 21	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.
Unit 22	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 23	Amandine-hornblende/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has partial alteration mantle.	Amandine-hornblende/epidote-diopside	1 IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 24	Almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 25	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.
Unit 27	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.
Unit 28	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 29	Almandine-hornblende-augite/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 30	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 31	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 32	Hornblende-almandine/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Hornblende-almandine/epidote-diopside-staurolite	SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 33	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 34	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Overburden Drilling Management Limited

2021-02-10

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 35	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 36	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 37	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.
Unit 38	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 39	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 40	Almandine-augite-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.	Almandine-augite-hornblende/epidote-diopside	SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.
Unit 41	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 42	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.
Unit 43	Almandine-fayalite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.	Almandine-fayalite-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.
Unit 44	Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.	Hornblende-almandine/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.
Unit 45	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.
Unit 46	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 47	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 48	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 49	Almandine-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 50	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.
Unit 51	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 52	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 53	Almandine-hornblende/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 54	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 FO versus diopside candidates = 3 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine = 1 GO (Cr-poor pyrope); and 4 IM versus crustal ilmenite candidates = 4 IM. 1 GO and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.5-1.0 mm fraction: 3 FO versus diopside candidates = 3 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine = 1 GO (Cr-poor pyrope); and 4 IM versus crustal ilmenite candidates = 4 IM. 1 GO and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 55	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 1 IM versus crustal ilmenite candidate = 1 IM. One GP from 0.5-1.0 mm and both GP, 1 GO, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 1 IM versus crustal ilmenite candidate = 1 IM. One GP from 0.5 1.0 mm and both GP, 1 GO, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 56	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 ruby corundum; and 1 FO versus zoisite candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 GP, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 ruby corundum; and 1 FO versus zoisite candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 GP, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 57	Almandine-hornblende/epidote-diopside assemblage. All 3 GP and 1 IM from 0.5-1.0 mm and 1 GP and 6 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	All 3 GP and 1 IM from 0.5-1.0 mm and 1 GP and 6 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 58	Almandine-hornblende-augite/epidote-diopside-titanite assemblage.	Almandine-hornblende-augite/epidote-diopside-titanite	

Overburden Drilling Management Limited

2021-02-10

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 20
ODM Batch Number(s): 8215

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 59	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 60	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 2 IM.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 2 IM.
Unit 61	Hornblende-hematite/epidote-zircon assemblage. SEM checks from 0.25-0.5 mm fraction: 5 titanite versus zircon candidates = 5 zircons.	Hornblende-hematite/epidote-zircon	SEM checks from 0.25-0.5 mm fraction: 5 titanite versus zircon candidates = 5 zircons.
Unit 62	Hornblende-almandine/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and sole GP and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Hornblende-almandine/epidote-diopside	Sole IM from 0.5-1.0 mm and sole GP and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 63	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.	Almandine-hornblende/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 64	Hornblende-almandine/epidote-diopside assemblage.	Hornblende-almandine/epidote-diopside	
Unit 65	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 3 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite and 1 CR.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 3 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite and 1 CR.
Unit 66	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 CR.	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 CR.
Unit 67	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 FO versus diopside candidate = 1 FO. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 FO versus diopside candidate = 1 FO. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 68	Almandine-hornblende/epidote-staurolite-diopside assemblage. Sole IM from 0.5-1.0 mm and 2 IM from 0.25 0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-staurolite-diopside	Sole IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 69	Almandine-hornblende/epidote-diopside assemblage. 2 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	2 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 70	Almandine/epidote-diopside assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine/epidote-diopside	2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 71	Almandine-hornblende/epidote-staurolite assemblage.	Almandine-hornblende/epidote-staurolite	
Unit 72	Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-staurolite-diopside	1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 73	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Exploring Heavy Minerals

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	February 06, 2020
Project name:	Lorrain Chain
ODM batch number:	8216
Sample numbers:	Unit 74 to Unit 108
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	35
Number of samples processed to date:	95
Total number of samples in project:	95
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples prescreened to -6.0 mm in the field
2. One ±300 g archival split taken from each sample.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates (HMCs).
5. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Weight (kg wet)					Screening and Shaking Table Sample Descriptions												
						Clasts (+2.0 mm)					Matrix (-2.0 mm)							
							Percentage				Distribution					Colour		
Sample Number	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class
Unit 74	4.6	0.3	4.3	0.3	4.0	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 75	5.2	0.3	4.9	0.2	4.7	G	100	TR	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 76	7.2	0.3	6.9	0.4	6.5	G	30	70	0	TR	U	Y	Y	-	Y	OC	OC	TILL
Unit 77	4.8	0.3	4.5	0.3	4.2	G	TR	100	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 78	4.6	0.3	4.3	0.4	3.9	G	TR	100	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 79	5.1	0.3	4.8	0.5	4.3	G	TR	100	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 80	4.9	0.3	4.6	0.4	4.2	G	70	30	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 81	4.9	0.3	4.6	0.3	4.3	G	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 82	4.4	0.3	4.1	0.3	3.8	G	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 83	5.2	0.3	4.9	0.4	4.5	G	80	20	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 84	8.3	0.3	8.0	0.5	7.5	G	40	60	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 85	2.5	0.3	2.2	0.2	2.0	G	30	70	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 86	7.9	0.3	7.6	0.6	7.0	G	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 87	5.6	0.3	5.3	0.2	5.1	G	100	TR	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 88	5.9	0.3	5.6	0.4	5.2	G	30	70	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 89	4.7	0.3	4.4	0.3	4.1	G	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 90	5.6	0.3	5.3	0.4	4.9	G	80	20	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 91	10.6	0.3	10.3	0.4	9.9	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 92	6.5	0.3	6.2	1.1	5.1	P	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 93	6.2	0.3	5.9	1.3	4.6	P	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 94	5.7	0.3	5.4	1.0	4.4	P	90	10	TR	0	U	+	Y	-	Y	OC	OC	TILL
Unit 95	6.0	0.3	5.7	0.2	5.5	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 96	8.6	0.3	8.3	0.1	8.2	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 97	12.7	0.3	12.4	0.4	12.0	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 98	4.8	0.3	4.5	0.2	4.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 99	5.3	0.3	5.0	0.3	4.7	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 100	8.4	0.3	8.1	0.6	7.5	P	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 101	8.1	0.3	7.8	0.5	7.3	G	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 102	7.9	0.3	7.6	0.6	7.0	P	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 103	4.9	0.3	4.6	0.2	4.4	P	70	30	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 104	7.5	0.3	7.2	0.4	6.8	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 105	7.6	0.3	7.3	0.7	6.6	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 106	7.6	0.3	7.3	1.0	6.3	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 107	7.3	0.3	7.0	1.1	5.9	P	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 108	13.7	0.3	13.4	0.6	12.8	G	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
Unit 74	0	0	0	0	16.0	0	0	0	0
Unit 75	0	0	0	0	18.8	0	0	0	0
Unit 76	1	1	0	0	26.0	3	3	0	0
Unit 77	1	1	0	0	16.8	21	21	0	0
Unit 78	1	1	0	0	15.6	9	9	0	0
Unit 79	2	2	0	0	17.2	11	11	0	0
Unit 80	1	1	0	0	16.8	38	38	0	0
Unit 81	1	1	0	0	17.2	11	11	0	0
Unit 82	0	0	0	0	15.2	0	0	0	0
Unit 83	3	2	0	1	18.0	15	15	0	<1
Unit 84	4	3	0	1	30.0	14	13	0	1
Unit 85	1	1	0	0	8.0	3	3	0	0
Unit 86	2	1	0	1	28.0	2	1	0	1
Unit 87	0	0	0	0	20.4	0	0	0	0
Unit 88	0	0	0	0	20.8	0	0	0	0
Unit 89	1	0	0	1	16.4	<1	0	0	<1
Unit 90	5	5	0	0	19.6	34	34	0	0
Unit 91	0	0	0	0	39.6	0	0	0	0
Unit 92	0	0	0	0	20.4	0	0	0	0
Unit 93	4	4	0	0	18.4	48	48	0	0
Unit 94	0	0	0	0	17.6	0	0	0	0
Unit 95	0	0	0	0	22.0	0	0	0	0
Unit 96	2	1	0	1	32.8	17	11	0	6
Unit 97	3	2	0	1	48.0	15	15	0	1
Unit 98	0	0	0	0	17.2	0	0	0	0
Unit 99	0	0	0	0	18.8	0	0	0	0
Unit 100	3	1	1	1	30.0	14	1	12	1
Unit 101	0	0	0	0	29.2	0	0	0	0
Unit 102	0	0	0	0	28.0	0	0	0	0
Unit 103	0	0	0	0	17.6	0	0	0	0
Unit 104	1	1	0	0	27.2	3	3	0	0
Unit 105	0	0	0	0	26.4	0	0	0	0
Unit 106	4	4	0	0	25.2	141	141	0	0
Unit 107	0	0	0	0	23.6	0	0	0	0
Unit 108	9	9	0	0	51.2	36	36	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm)			Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
Unit 74	No Visible Gold									No sulphides.
Unit 75	No Visible Gold									No sulphides.
Unit 76	8 C	25	50	1			1		3	No sulphides.
							1	26.0	3	
Unit 77	13 C	50	75	1			1		21	No sulphides.
							1	16.8	21	
Unit 78	10 C	25	75	1			1		9	No sulphides.
							1	15.6	9	
Unit 79	3 C	15	15	1			1		<1	No sulphides.
	10 C	50	50	1			1		11	
							2	17.2	11	
Unit 80	15 C	75	75	1			1		38	No sulphides.
							1	16.8	38	
Unit 81	10 C	50	50	1			1		11	No sulphides.
							1	17.2	11	
Unit 82	No Visible Gold									No sulphides.
Unit 83	3 C	15	15			1	1		<1	No sulphides.
	8 C	25	50	1			1		4	
	10 C	50	50	1			1		11	
							3	18.0	15	
Unit 84	3 C	15	15	1			1		<1	No sulphides.
	5 C	25	25	1		1	2		2	
	13 C	50	75	1			1		12	
							4	30.0	14	
Unit 85	5 C	25	25	1			1		3	No sulphides.
							1	8.0	3	
Unit 86	5 C	25	25	1		1	2		2	No sulphides.
							2	28.0	2	
Unit 87	No Visible Gold									No sulphides.
Unit 88	No Visible Gold									No sulphides.
Unit 89	3 C	15	15			1	1		<1	No sulphides.
							1	16.4	0	
Unit 90	5 C	25	25	4			4		5	No sulphides.
	15 C	50	100	1			1		29	
							5	19.6	34	
Unit 91	No Visible Gold									No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 92	No Visible Gold										No sulphides.
Unit 93	5	C	25	25	2			2		3	No sulphides.
	10	C	50	50	1			1		10	
	15	C	75	75	1			1		35	
								4	18.4	48	
Unit 94	No Visible Gold										No sulphides.
Unit 95	No Visible Gold										No sulphides.
Unit 96	10	C	50	50			1	1		6	No sulphides.
	13	C	50	75	1			1		11	
								2	32.8	17	
Unit 97	5	C	25	25			1	1		1	No sulphides.
	13	C	50	75	2			2		15	
								3	48.0	15	
Unit 98	No Visible Gold										No sulphides.
Unit 99	No Visible Gold										No sulphides.
Unit 100	5	C	25	25	1		1	2		2	No sulphides.
	13	C	50	75		1		1		12	
								3	30.0	14	
Unit 101	No Visible Gold										No sulphides.
Unit 102	No Visible Gold										No sulphides.
Unit 103	No Visible Gold										No sulphides.
Unit 104	8	C	25	50	1			1		3	No sulphides.
								1	27.2	3	
Unit 105	No Visible Gold										No sulphides.
Unit 106	8	C	25	50	2			2		6	No sulphides.
	15	C	75	75	1			1		25	
	25	C	100	150	1			1		110	
								4	25.2	141	
Unit 107	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 108	5	C	25	25	2			2		1	No sulphides.
	10	C	25	75	1			1		3	
	10	C	50	50	3			3		11	
	13	C	50	75	3			3		21	
								9	51.2	36	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 74	906.4	531.1	375.3	373.5	1.8	0.6	0.1	1.1	0.7	0.3	0.1
Unit 75	840.2	607.0	233.2	231.8	1.4	0.3	0.1	1.0	0.7	0.2	0.1
Unit 76	1042.0	566.8	475.2	470.0	5.2	1.5	0.7	3.0	1.7	0.9	0.4
Unit 77	894.6	446.9	447.7	446.0	1.7	0.6	0.2	0.9	0.6	0.2	0.1
Unit 78	533.4	308.1	225.3	223.3	2.0	0.6	0.3	1.1	0.7	0.3	0.1
Unit 79	660.4	333.6	326.8	322.8	4.0	1.1	0.4	2.5	1.4	0.8	0.3
Unit 80	843.5	361.6	481.9	477.2	4.7	1.1	0.6	3.0	1.6	1.0	0.4
Unit 81	792.9	419.3	373.6	371.2	2.4	0.7	0.2	1.5	0.9	0.4	0.2
Unit 82	824.9	376.8	448.1	441.4	6.7	3.3	0.7	2.7	2.3	0.3	0.1
Unit 83	712.5	375.2	337.3	335.2	2.1	0.6	0.2	1.3	0.9	0.3	0.1
Unit 84	945.7	464.3	481.4	470.9	10.5	2.3	1.1	7.1	4.3	2.2	0.6
Unit 85	517.4	257.2	260.2	259.1	1.1	0.4	0.1	0.6	0.4	0.1	0.1
Unit 86	1087.2	411.4	675.8	671.8	4.0	1.4	0.6	2.0	1.3	0.5	0.2
Unit 87	816.1	417.1	399.0	397.3	1.7	0.6	0.1	1.0	0.7	0.2	0.1
Unit 88	833.7	344.7	489.0	486.8	2.2	0.7	0.3	1.2	0.8	0.3	0.1
Unit 89	737.8	332.9	404.9	403.4	1.5	0.4	0.2	0.9	0.6	0.2	0.1
Unit 90	681.8	343.5	338.3	334.9	3.4	1.3	0.3	1.8	1.2	0.5	0.1
Unit 91	1114.7	394.9	719.8	713.1	6.7	2.4	0.8	3.5	2.1	0.9	0.5
Unit 92	777.3	351.1	426.2	422.1	4.1	1.4	0.5	2.2	1.4	0.6	0.2
Unit 93	1084.3	511.6	572.7	568.4	4.3	1.4	0.6	2.3	1.5	0.6	0.2
Unit 94	743.3	493.9	249.4	247.4	2.0	0.5	0.1	1.4	0.9	0.4	0.1
Unit 95	1053.7	778.0	275.7	274.1	1.6	0.4	0.1	1.1	0.8	0.3	0.03
Unit 96	577.0	412.3	164.7	163.1	1.6	0.5	0.1	1.0	0.8	0.2	0.01
Unit 97	1252.1	1069.9	182.2	172.8	9.4	2.2	0.2	7.0	5.5	1.3	0.2
Unit 98	641.9	433.3	208.6	207.2	1.4	0.4	0.1	0.9	0.7	0.2	0.03
Unit 99	607.9	445.3	162.6	159.7	2.9	0.9	0.2	1.8	1.3	0.4	0.08
Unit 100	836.5	676.1	160.4	156.4	4.0	1.3	0.2	2.5	1.8	0.6	0.06
Unit 101	540.1	293.6	246.5	243.8	2.7	0.8	0.4	1.5	1.1	0.3	0.07
Unit 102	635.3	483.7	151.6	146.4	5.2	1.1	0.4	3.7	2.6	1.0	0.1
Unit 103	511.4	348.8	162.6	160.5	2.1	0.7	0.1	1.3	1.0	0.3	0.03
Unit 104	984.9	749.9	235.0	231.6	3.4	1.0	0.3	2.1	1.4	0.6	0.1
Unit 105	854.4	621.4	233.0	229.8	3.2	0.8	0.3	2.1	1.4	0.6	0.1
Unit 106	1457.3	822.2	635.1	630.1	5.0	1.3	0.4	3.3	2.3	0.9	0.1
Unit 107	1037.1	591.5	445.6	441.8	3.8	0.9	0.3	2.6	1.7	0.7	0.2
Unit 108	1155.0	925.0	230.0	220.9	9.1	1.7	0.5	6.9	4.6	1.7	0.6

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Number of Grains

	Selected MMSIMs																		KIMs											
	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						1.0 to 2.0 mm											
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		GP		GO		DC		IM		CR		FO	
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 74	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 76	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 78	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 83	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0
Unit 86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 88	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 91	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 93	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 94	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0
Unit 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 96	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 97	0	0	0	0	0	0	1	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 100	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 101	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 102	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 103	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 104	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0
Unit 105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 107	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 108	0	0	0	0	0	0	1	1	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	KIMs																								Total (KIMs)	
	0.5 to 1.0 mm												0.25 to 0.5 mm													
	GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 74	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**3**	3
Unit 75	**1**	1	0	0	0	0	0	0	0	0	0	0	**5**	5	0	0	0	0	**1**	1	**1**	1	0	0	**8**	8
Unit 76	**2**	2	0	0	0	0	**3**	3	0	0	0	0	**2**	2	0	0	0	0	**5**	5	**6**	6	0	0	**18**	18
Unit 77	**1**	1	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	**2**	2	0	0	**6**	6
Unit 78	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	**5**	5	**1**	1	**8**	8
Unit 79	0	0	0	0	0	0	**1**	1	0	0	**1**	1	**1**	1	0	0	0	0	**3**	3	**1**	1	**2**	2	**9**	9
Unit 80	0	0	**1**	1	0	0	**2**	2	0	0	0	0	**1**	1	0	0	0	0	0	0	**7**	7	**4**	4	**15**	15
Unit 81	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	**1**	1	**1**	1	**3**	3	**4**	4	**1**	1	**12**	12
Unit 82	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**3**	3	0	0	0	0	**4**	4
Unit 83	0	0	0	0	0	0	0	0	0	0	0	0	**4**	4	0	0	0	0	**2**	2	**1**	1	0	0	**7**	7
Unit 84	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**2**	2	**2**	2	0	0	**6**	6
Unit 85	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	0	0	**1**	1	**3**	3	0	0	**8**	8
Unit 86	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	**3**	3	0	0	**6**	6
Unit 87	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**2**	2	**3**	3	**2**	2	**8**	8
Unit 88	0	0	0	0	0	0	0	0	0	0	0	0	**4**	4	0	0	0	0	0	0	**1**	1	0	0	**5**	5
Unit 89	0	0	0	0	0	0	**3**	3	0	0	0	0	**2**	2	0	0	0	0	**7**	7	0	0	**1**	1	**13**	13
Unit 90	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**1**	1
Unit 91	0	0	0	0	0	0	**3**	3	0	0	0	0	**10**	10	**1**	1	**1**	1	**15**	15	**14**	14	**1**	1	**45**	45
Unit 92	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	0	0	0	0	**6**	6	**2**	2	0	0	**11**	11
Unit 93	0	0	0	0	0	0	**1**	1	0	0	**1**	1	**7**	7	0	0	0	0	**4**	4	**2**	2	**3**	3	**18**	18
Unit 94	0	0	0	0	0	0	0	0	0	0	**1**	1	**2**	2	**1**	1	0	0	**1**	1	**2**	2	**1**	1	**9**	9
Unit 95	0	0	0	0	0	0	**2**	2	0	0	0	0	0	0	0	0	0	0	**2**	2	**2**	2	0	0	**6**	6
Unit 96	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	**12**	12	**7**	7	0	0	**20**	20
Unit 97	**1**	1	0	0	0	0	**2**	2	0	0	0	0	**10**	10	0	0	0	0	**12**	12	**18**	18	**3**	3	**46**	46
Unit 98	0	0	0	0	0	0	0	0	**1**	1	0	0	**1**	1	0	0	0	0	**1**	1	**6**	6	0	0	**9**	9
Unit 99	**1**	1	0	0	0	0	**2**	2	0	0	**1**	1	**5**	5	**1**	1	0	0	**2**	2	**2**	2	**2**	2	**16**	16
Unit 100	**1**	1	0	0	0	0	**2**	2	0	0	0	0	**1**	1	0	0	0	0	**2**	2	**1**	1	**1**	1	**8**	8
Unit 101	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	**2**	2	**4**	4
Unit 102	0	0	0	0	0	0	0	0	0	0	**1**	1	**3**	3	0	0	0	0	**10**	10	**2**	2	**1**	1	**17**	17
Unit 103	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	1	**1**	1	**5**	5	**4**	4	0	0	**12**	12
Unit 104	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	0	0	**9**	9	**6**	6	0	0	**19**	19
Unit 105	0	0	0	0	0	0	0	0	0	0	0	0	**4**	4	0	0	0	0	**2**	2	**2**	2	0	0	**8**	8
Unit 106	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	**1**	1	**4**	4	**4**	4	**1**	1	**13**	13
Unit 107	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	1	**1**	1	**1**	1	**7**	7	**8**	8	**1**	1	**20**	20
Unit 108	**1**	1	0	0	0	0	**2**	2	0	0	**2**	2	**6**	6	0	0	0	0	**10**	10	**11**	11	**1**	1	**33**	33

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Remarks
Unit 74	Almandine-hematite-hornblende/epidote-staurolite assemblage. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 75	Almandine-hematite/epidote-staurolite assemblage. Sole GP from 0.5-1.0 mm; and 2 GP and sole IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 76	Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 77	Almandine/epidote-diopside-staurolite assemblage. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 78	Almandine-hornblende/epidote-diopside-staurolite assemblage.
Unit 79	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 80	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 6 crustal ilmenite and 1 FO candidate = 1 FO. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 81	Almandine-hornblende/epidote-diopside-staurolite assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 82	Almandine-augite/diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 83	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM.
Unit 84	Almandine/epidote-staurolite assemblage. Both IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 85	Almandine-hornblende/epidote-staurolite assemblage. Sole IM from 1.0-2.0 mm fraction has a partial alteration mantle.
Unit 86	Almandine-hornblende/epidote-staurolite assemblage.
Unit 87	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus zoisite candidates = 2 FO. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 88	Almandine-hornblende/epidote-diopside-staurolite assemblage. 3 GP from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 89	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. 1 IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 90	Almandine-hornblende/epidote-diopside-staurolite assemblage.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Remarks
Unit 91	Almandine-hornblende/epidote-staurolite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); 1 FO versus zoisite candidate = 1 FO. 4 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 92	Almandine-hornblende/epidote-staurolite assemblage. 1 IM from 0.5-1.0 mm; and sole GP and 4IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 93	Almandine-hornblende/epidote-staurolite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 forsterite versus epidote candidates = 2 FO. 2 GP and 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 94	Almandine-hornblende/epidote-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 2 FO versus epidote candidates = 1 FO and 1 epidote. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 95	Almandine-hornblende/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 96	Almandine-hornblende/epidote-diopside assemblage. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 97	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 grossular. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular; and 2 FO versus enstatite candidates = 2 epidote. 1 IM from 0.5-1.0 mm; and 2 GP and 5 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 98	Almandine-hornblende/epidote-staurolite assemblage.
Unit 99	Almandine-hornblende/epdiote assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 100	Almandine-hornblende/epidote-diopside-staurolite assemblage. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 101	Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO. Sole GP from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 102	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM; 1 FO versus diopside candidate = 1 FO; and 1 enstatite versus FO candidate = 1 enstatite. 2 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 103	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 104	Almandine-hornblende/epidote-diopside-staurolite assemblage. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Remarks
Unit 105	Almandine-hornblende/epidote-diopside-staurolite assemblage.
Unit 106	Almandine-hornblende/epidote-diopside-staurolite assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 107	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 1 spessartine; and 1 FO versus epidote candidate = 1 FO (lost in transfer to vial). One CR has attached gangue material. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 108	Almandine-hornblende/epidote-diopside-staurolite assemblage. Sole GP and both IM from 0.5-1.0 mm; and 2 GP and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Exploring Heavy Minerals

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	February 06, 2020
Project name:	Lorrain Chain
ODM batch number:	8216
Sample numbers:	Unit 74 to Unit 108
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	35
Number of samples processed to date:	95
Total number of samples in project:	95
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples prescreened to -6.0 mm in the field
2. One ±300 g archival split taken from each sample.
3. All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
4. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates (HMCs).
5. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Overburden Drilling Management Limited - Abbreviations Table

Raw Sample Weights and Descriptions Log

Largest Clast Size Present:
- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:
- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated
- MB: Marble

Matrix Grain Size Distribution:
- S/U: Sorted or unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:
- ORG: Y: Organics present in matrix
  - N: Organics absent or negligible in matrix
  - +: Matrix is mainly organic

Matrix Colour:

Primary:
- BE: Beige
- BR: Brick Red
- GY: Grey
- GB: Grey-beige
- GN: Green
- GG: Grey-green
- PP: Purple
- PK: Pink
- PB: Pink-beige
- MN: Maroon

Secondary (soil):
- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:
- L: Light
- M: Medium
- D: Dark

Detailed Gold Grain Log

- VG: Visible gold grains

Thickness:
- M: Actual measured thickness of grain (µm)
- C: Thickness of grain (µm) calculated from measured width and length

Kimberlite Indicator Mineral (KIM) Log

- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

Metamorphosed/Magmatic Massive Sulphide Indicator Mineral (MMSIM) and Porphyry Cu Indicator Mineral (PCIM) Logs

- Adr: Andradite
- Ap: Apatite
- Ase: Anatase
- Aspy: Arsenopyrite
- Ax: Axinite
- Ba: Barite
- Cpx: Clinopyroxene
- Cpy: Chalcopyrite
- Cr: Chromite
- Fay: Fayalite
- Gh: Gahnite
- Grs: Grossular
- Gth: Goethite
- Ilm: Ilmenite
- Ky: Kyanite
- Mrc: Marcasite
- Mz: Monazite
- Ol: Olivine
- Opx: Orthopyroxene
- PGM: Platinum group-bearing mineral
- Py: Pyrite
- REM: Rare earth-bearing mineral
- Rt: Red rutile
- Sil: Sillimanite
- Spi: Spinel
- Sps: Spessartine
- St: Staurolite
- Tm: Tourmaline
- Ttn: Titanite
- Zir: Zircon

Other

- HMC: Heavy mineral concentrate
- UV: Ultra-violet
- EPD: Electric-pulse disaggregation
- PGE: Platinum group element

Overburden Drilling Management Limited

2021-02-10

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Weight (kg wet)					Screening and Shaking Table Sample Descriptions												
						Clasts (+2.0 mm)					Matrix (-2.0 mm)							
							Percentage				Distribution					Colour		
Sample Number	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class
Unit 13	8.8	0.3	8.5	1.3	7.2	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 14	12.5	0.3	12.2	1.1	11.1	P	90	10	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 15	7.8	0.3	7.5	0.8	6.7	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 16	7.9	0.3	7.6	0.5	7.1	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 17	4.7	0.3	4.4	0.5	3.9	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 18	8.9	0.3	8.6	0.8	7.8	G	95	5	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 19	5.2	0.3	4.9	0.3	4.6	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 20	5.0	0.3	4.7	0.4	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 21	9.8	0.3	9.5	0.6	8.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 22	9.8	0.3	9.5	0.5	9.0	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 23	5.3	0.3	5.0	0.4	4.6	P	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 24	8.7	0.3	8.4	0.5	7.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 25	8.5	0.3	8.2	0.6	7.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 27	9.7	0.3	9.4	0.8	8.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 28	5.9	0.3	5.6	0.5	5.1	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 29	5.9	0.3	5.6	1.0	4.6	C	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 30	5.3	0.3	5.0	0.6	4.4	P	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 31	8.8	0.3	8.5	0.8	7.7	P	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 32	8.1	0.3	7.8	0.8	7.0	P	70	30	0	0	U	Y	Y	Y	Y	DOC	DOC	TILL
Unit 33	8.1	0.3	7.8	0.9	6.9	P	70	30	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 34	7.3	0.3	7.0	0.5	6.5	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 35	4.6	0.3	4.3	0.3	4.0	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 36	8.8	0.3	8.5	0.6	7.9	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 37	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 38	5.3	0.3	5.0	0.5	4.5	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 39	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
Unit 40	8.0	0.3	7.7	0.9	6.8	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 41	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 42	4.8	0.3	4.5	0.3	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 43	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 44	5.2	0.3	4.9	0.3	4.6	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 45	5.1	0.3	4.8	0.4	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 46	4.8	0.3	4.5	0.4	4.1	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 47	5.3	0.3	5.0	0.3	4.7	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 48	4.9	0.3	4.6	0.3	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 49	4.6	0.3	4.3	0.4	3.9	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 50	8.2	0.3	7.9	0.8	7.1	P	90	10	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
Unit 51	4.9	0.3	4.6	0.4	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 52	5.0	0.3	4.7	0.5	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 53	5.1	0.3	4.8	0.5	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 54	5.9	0.3	5.6	0.4	5.2	G	90	10	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 55	5.6	0.3	5.3	0.8	4.5	G	85	15	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 56	4.5	0.3	4.2	0.7	3.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 57	4.3	0.3	4.0	0.7	3.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 58	5.4	0.3	5.1	0.8	4.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 59	4.9	0.3	4.6	0.7	3.9	G	85	15	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 60	7.4	0.3	7.1	1.4	5.7	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 61	2.3	0.3	2.0	0.6	1.4	G	95	5	0	0	U	+	Y	-	Y	OC	DOC	TILL
Unit 62	4.0	0.3	3.7	0.3	3.4	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 63	5.0	0.3	4.7	0.5	4.2	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 64	2.8	0.3	2.5	0.2	2.3	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 65	5.2	0.3	4.9	0.6	4.3	G	85	15	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 66	4.1	0.3	3.8	0.3	3.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 67	5.2	0.3	4.9	0.3	4.6	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 68	4.9	0.3	4.6	0.2	4.4	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 69	5.0	0.3	4.7	0.2	4.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 70	4.9	0.3	4.6	0.3	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 71	4.9	0.3	4.6	0.4	4.2	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 72	8.2	0.3	7.9	0.6	7.3	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 73	5.2	0.3	4.9	0.2	4.7	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 74	4.6	0.3	4.3	0.3	4.0	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 75	5.2	0.3	4.9	0.2	4.7	G	100	TR	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 76	7.2	0.3	6.9	0.4	6.5	G	30	70	0	TR	U	Y	Y	-	Y	OC	OC	TILL
Unit 77	4.8	0.3	4.5	0.3	4.2	G	TR	100	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 78	4.6	0.3	4.3	0.4	3.9	G	TR	100	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 79	5.1	0.3	4.8	0.5	4.3	G	TR	100	0	0	U	Y	Y	Y	Y	OC	OC	TILL

Overburden Drilling Management Limited

2021-02-10

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Weight (kg wet) Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Clasts (+2.0 mm) Size	Percentage V/S	GR	LS	OT	Matrix (-2.0 mm) Distribution S/U	SD	ST	CY	ORG	Colour SD	CY	Class
Unit 80	4.9	0.3	4.6	0.4	4.2	G	70	30	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 81	4.9	0.3	4.6	0.3	4.3	G	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 82	4.4	0.3	4.1	0.3	3.8	G	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 83	5.2	0.3	4.9	0.4	4.5	G	80	20	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 84	8.3	0.3	8.0	0.5	7.5	G	40	60	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 85	2.5	0.3	2.2	0.2	2.0	G	30	70	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 86	7.9	0.3	7.6	0.6	7.0	G	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 87	5.6	0.3	5.3	0.2	5.1	G	100	TR	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 88	5.9	0.3	5.6	0.4	5.2	G	30	70	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 89	4.7	0.3	4.4	0.3	4.1	G	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 90	5.6	0.3	5.3	0.4	4.9	G	80	20	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 91	10.6	0.3	10.3	0.4	9.9	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 92	6.5	0.3	6.2	1.1	5.1	P	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 93	6.2	0.3	5.9	1.3	4.6	P	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 94	5.7	0.3	5.4	1.0	4.4	P	90	10	TR	0	U	+	Y	-	Y	OC	OC	TILL
Unit 95	6.0	0.3	5.7	0.2	5.5	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 96	8.6	0.3	8.3	0.1	8.2	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 97	12.7	0.3	12.4	0.4	12.0	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 98	4.8	0.3	4.5	0.2	4.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 99	5.3	0.3	5.0	0.3	4.7	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 100	8.4	0.3	8.1	0.6	7.5	P	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 101	8.1	0.3	7.8	0.5	7.3	G	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 102	7.9	0.3	7.6	0.6	7.0	P	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 103	4.9	0.3	4.6	0.2	4.4	P	70	30	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 104	7.5	0.3	7.2	0.4	6.8	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 105	7.6	0.3	7.3	0.7	6.6	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 106	7.6	0.3	7.3	1.0	6.3	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 107	7.3	0.3	7.0	1.1	5.9	P	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 108	13.7	0.3	13.4	0.6	12.8	G	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL

Overburden Drilling Management Limited

2021-02-10

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Number of Visible Gold Grains				Nonmag	Calculated PPB Visible Gold in HMC			
Sample Number	Total	Reshaped	Modified	Pristine	HMC Weight*	Total	Reshaped	Modified	Pristine
Unit 13	2	1	1	0	28.8	9	7	3	0
Unit 14	1	1	0	0	44.4	4	4	0	0
Unit 15	0	0	0	0	26.8	0	0	0	0
Unit 16	1	0	0	1	28.4	1	0	0	1
Unit 17	0	0	0	0	15.6	0	0	0	0
Unit 18	0	0	0	0	31.2	0	0	0	0
Unit 19	1	0	0	1	18.4	4	0	0	4
Unit 20	0	0	0	0	17.2	0	0	0	0
Unit 21	0	0	0	0	35.6	0	0	0	0
Unit 22	0	0	0	0	36.0	0	0	0	0
Unit 23	0	0	0	0	18.4	0	0	0	0
Unit 24	0	0	0	0	31.6	0	0	0	0
Unit 25	1	1	0	0	30.4	12	12	0	0
Unit 27	3	3	0	0	34.4	72	72	0	0
Unit 28	1	1	0	0	20.4	9	9	0	0
Unit 29	1	1	0	0	18.4	10	10	0	0
Unit 30	0	0	0	0	17.6	0	0	0	0
Unit 31	2	2	0	0	30.8	125	125	0	0
Unit 32	1	1	0	0	28.0	50	50	0	0
Unit 33	2	2	0	0	27.6	8	8	0	0
Unit 34	2	2	0	0	26.0	129	129	0	0
Unit 35	0	0	0	0	16.0	0	0	0	0
Unit 36	4	4	0	0	31.6	597	597	0	0
Unit 37	3	3	0	0	17.2	36	36	0	0
Unit 38	0	0	0	0	18.0	0	0	0	0
Unit 39	1	1	0	0	17.2	87	87	0	0
Unit 40	2	2	0	0	27.2	24	24	0	0
Unit 41	1	1	0	0	17.6	32	32	0	0
Unit 42	7	6	1	0	16.8	192	67	125	0
Unit 43	1	1	0	0	17.6	4	4	0	0
Unit 44	2	2	0	0	18.4	20	20	0	0
Unit 45	9	6	1	2	17.6	179	172	4	3
Unit 46	3	3	0	0	16.4	24	24	0	0
Unit 47	1	1	0	0	18.8	1	1	0	0
Unit 48	1	1	0	0	17.2	8	8	0	0
Unit 49	2	1	0	1	15.6	90	90	0	<1
Unit 50	0	0	0	0	28.4	0	0	0	0
Unit 51	0	0	0	0	16.8	0	0	0	0
Unit 52	0	0	0	0	16.8	0	0	0	0
Unit 53	0	0	0	0	17.2	0	0	0	0
Unit 54	6	6	0	0	20.8	70	70	0	0
Unit 55	5	5	0	0	18.0	21	21	0	0
Unit 56	1	0	0	1	14.0	<1	0	0	<1
Unit 57	1	1	0	0	13.2	2443	2443	0	0
Unit 58	0	0	0	0	17.2	0	0	0	0
Unit 59	1	1	0	0	15.6	23	23	0	0
Unit 60	3	3	0	0	22.8	4	4	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
Unit 61	0	0	0	0	5.6	0	0	0	0
Unit 62	1	1	0	0	13.6	5	5	0	0
Unit 63	2	2	0	0	16.8	9	9	0	0
Unit 64	0	0	0	0	9.2	0	0	0	0
Unit 65	1	1	0	0	17.2	1	1	0	0
Unit 66	3	3	0	0	14.0	21	21	0	0
Unit 67	0	0	0	0	18.4	0	0	0	0
Unit 68	4	4	0	0	17.6	14	14	0	0
Unit 69	7	6	1	0	18.0	219	219	<1	0
Unit 70	3	3	0	0	17.2	14	14	0	0
Unit 71	0	0	0	0	16.8	0	0	0	0
Unit 72	4	4	0	0	29.2	28	28	0	0
Unit 73	5	5	0	0	18.8	41	41	0	0
Unit 74	0	0	0	0	16.0	0	0	0	0
Unit 75	0	0	0	0	18.8	0	0	0	0
Unit 76	1	1	0	0	26.0	3	3	0	0
Unit 77	1	1	0	0	16.8	21	21	0	0
Unit 78	1	1	0	0	15.6	9	9	0	0
Unit 79	2	2	0	0	17.2	11	11	0	0
Unit 80	1	1	0	0	16.8	38	38	0	0
Unit 81	1	1	0	0	17.2	11	11	0	0
Unit 82	0	0	0	0	15.2	0	0	0	0
Unit 83	3	2	0	1	18.0	15	15	0	<1
Unit 84	4	3	0	1	30.0	14	13	0	1
Unit 85	1	1	0	0	8.0	3	3	0	0
Unit 86	2	1	0	1	28.0	2	1	0	1
Unit 87	0	0	0	0	20.4	0	0	0	0
Unit 88	0	0	0	0	20.8	0	0	0	0
Unit 89	1	0	0	1	16.4	<1	0	0	<1
Unit 90	5	5	0	0	19.6	34	34	0	0
Unit 91	0	0	0	0	39.6	0	0	0	0
Unit 92	0	0	0	0	20.4	0	0	0	0
Unit 93	4	4	0	0	18.4	48	48	0	0
Unit 94	0	0	0	0	17.6	0	0	0	0
Unit 95	0	0	0	0	22.0	0	0	0	0
Unit 96	2	1	0	1	32.8	17	11	0	6
Unit 97	3	2	0	1	48.0	15	15	0	1
Unit 98	0	0	0	0	17.2	0	0	0	0
Unit 99	0	0	0	0	18.8	0	0	0	0
Unit 100	3	1	1	1	30.0	14	1	12	1
Unit 101	0	0	0	0	29.2	0	0	0	0
Unit 102	0	0	0	0	28.0	0	0	0	0
Unit 103	0	0	0	0	17.6	0	0	0	0
Unit 104	1	1	0	0	27.2	3	3	0	0
Unit 105	0	0	0	0	26.4	0	0	0	0
Unit 106	4	4	0	0	25.2	141	141	0	0
Unit 107	0	0	0	0	23.6	0	0	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited

2021-02-10

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Number of Visible Gold Grains				Nonmag	Calculated PPB Visible Gold in HMC			
Sample Number	Total	Reshaped	Modified	Pristine	HMC Weight*	Total	Reshaped	Modified	Pristine
Unit 108	9	9	0	0	51.2	36	36	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm) Thickness	Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 13	8 C	25	50		1		1		3	No sulphides.
	10 C	50	50	1			1		7	
							2	28.8	9	
Unit 14	10 C	50	50	1			1		4	No sulphides.
							1	44.4	4	
Unit 15	No Visible Gold									No sulphides.
Unit 16	5 C	25	25			1	1		1	No sulphides.
							1	28.4	1	
Unit 17	No Visible Gold									No sulphides.
Unit 18	No Visible Gold									No sulphides.
Unit 19	8 C	25	50			1	1		4	No sulphides.
							1	18.4	4	
Unit 20	No Visible Gold									No sulphides.
Unit 21	No Visible Gold									No sulphides.
Unit 22	No Visible Gold									No sulphides.
Unit 23	No Visible Gold									No sulphides.
Unit 24	No Visible Gold									No sulphides.
Unit 25	13 C	50	75	1			1		12	No sulphides.
							1	30.4	12	
Unit 27	13 C	50	75	1			1		10	No sulphides.
	20 C	50	150	1			1		33	
	18 C	75	100	1			1		29	
							3	34.4	72	
Unit 28	10 C	50	50	1			1		9	No sulphides.
							1	20.4	9	
Unit 29	10 C	50	50	1			1		10	No sulphides.
							1	18.4	10	
Unit 30	No Visible Gold									No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm) Thickness	Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 31	20 C	75	125	1			1		46	No sulphides.
	25 C	75	175	1			1		79	
							2	30.8	125	
Unit 32	20 C	75	125	1			1		50	No sulphides.
							1	28.0	50	
Unit 33	5 C	25	25	1			1		1	No sulphides.
	10 C	50	50	1			1		7	
							2	27.6	8	
Unit 34	15 C	50	100	1			1		22	No sulphides.
	25 C	100	150	1			1		107	
							2	26.0	129	
Unit 35	No Visible Gold									No sulphides.
Unit 36	5 C	25	25	2			2		2	Tr (1 grain) arsenopyrite (75 µm).
	15 C	50	100	1			1		18	
	44 C	200	275	1			1		577	
							4	31.6	597	
Unit 37	5 C	25	25	1			1		1	No sulphides.
	13 C	25	100	1			1		14	
	13 C	50	75	1			1		21	
							3	17.2	36	
Unit 38	No Visible Gold									No sulphides.
Unit 39	20 C	100	100	1			1		87	Tr (1 grain) arsenopyrite (25 µm).
							1	17.2	87	
Unit 40	8 C	25	50	1			1		3	No sulphides.
	15 C	50	100	1			1		21	
							2	27.2	24	
Unit 41	15 C	50	100	1			1		32	No sulphides.
							1	17.6	32	
Unit 42	3 C	15	15	2			2		1	No sulphides.
	5 C	25	25	2			2		3	
	8 C	25	50	1			1		4	
	18 C	75	100	1			1		59	
	22 C	100	125		1		1		125	
							7	16.8	192	
Unit 43	8 C	25	50	1			1		4	No sulphides.
							1	17.6	4	
Unit 44	3 C	15	15	1			1		<1	No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
	13	C	50	75	1			1		19	
								2	18.4	20	
Unit 45	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1		2	3		4	
	8	C	25	50	1	1		2		8	
	10	C	25	75	1			1		8	
	13	C	50	75	1			1		20	
	25	C	75	175	1			1		138	
								9	17.6	179	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm) Thickness	Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 46	3 C	15	15	1			1		<1	No sulphides.
	5 C	25	25	1			1		1	
	13 C	50	75	1			1		22	
							3	16.4	24	
Unit 47	5 C	25	25	1			1		1	No sulphides.
							1	18.8	1	
Unit 48	10 C	25	75	1			1		8	No sulphides.
							1	17.2	8	
Unit 49	3 C	15	15			1	1		<1	No sulphides.
	20 C	75	125	1			1		90	
							2	15.6	90	
Unit 50	No Visible Gold									No sulphides.
Unit 51	No Visible Gold									No sulphides.
Unit 52	No Visible Gold									No sulphides.
Unit 53	No Visible Gold									No sulphides.
Unit 54	3 C	15	15	2			2		1	No sulphides.
	5 C	25	25	1			1		1	
	18 C	25	150	1			1		24	
	13 C	50	75	1			1		17	
	15 C	50	100	1			1		27	
							6	20.8	70	
Unit 55	3 C	15	15	2			2		1	No sulphides.
	8 C	25	50	1			1		4	
	10 C	25	75	2			2		16	
							5	18.0	21	
Unit 56	3 C	15	15			1	1		<1	No sulphides.
							1	14.0	<1	
Unit 57	52 C	275	300	1			1		2443	No sulphides.
							1	13.2	2443	
Unit 58	No Visible Gold									No sulphides.
Unit 59	13 C	50	75	1			1		23	No sulphides.
							1	15.6	23	
Unit 60	3 C	15	15	1			1		<1	No sulphides.
	5 C	25	25	1			1		1	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	8	C	25	50	1			1		3	
								3	22.8	4	
Unit 61	No Visible Gold										No sulphides.
Unit 62	8	C	25	50	1			1		5	No sulphides.
								1	13.6	5	
Unit 63	8	C	25	50	2			2		9	No sulphides.
								2	16.8	9	
Unit 64	No Visible Gold										No sulphides.
Unit 65	5	C	25	25	1			1		1	No sulphides.
								1	17.2	1	
Unit 66	5	C	25	25	1			1		2	No sulphides.
	8	C	25	50	1			1		5	
	10	C	50	50	1			1		14	
								3	14.0	21	
Unit 67	No Visible Gold										No sulphides.
Unit 68	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	2			2		3	
	10	C	50	50	1			1		11	
								4	17.6	14	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 69	3	C	15	15	1	1		2		1	No sulphides.
	5	C	25	25	2			2		3	
	13	C	50	75	1			1		20	
	15	C	75	75	1			1		36	
	25	C	125	125	1			1		161	
								7	18.0	220	
Unit 70	5	C	25	25	2			2		3	No sulphides.
	10	C	50	50	1			1		11	
								3	17.2	14	
Unit 71	No Visible Gold										No sulphides.
Unit 72	5	C	25	25	1			1		1	Tr (4 grains) pyrite (25-100 µm).
	8	C	25	50	1			1		2	
	13	C	50	75	2			2		25	
								4	29.2	28	
Unit 73	5	C	25	25	2			2		3	No sulphides.
	8	C	25	50	2			2		8	
	15	C	50	100	1			1		30	
								5	18.8	41	
Unit 74	No Visible Gold										No sulphides.
Unit 75	No Visible Gold										No sulphides.
Unit 76	8	C	25	50	1			1		3	No sulphides.
								1	26.0	3	
Unit 77	13	C	50	75	1			1		21	No sulphides.
								1	16.8	21	
Unit 78	10	C	25	75	1			1		9	No sulphides.
								1	15.6	9	
Unit 79	3	C	15	15	1			1		<1	No sulphides.
	10	C	50	50	1			1		11	
								2	17.2	11	
Unit 80	15	C	75	75	1			1		38	No sulphides.
								1	16.8	38	
Unit 81	10	C	50	50	1			1		11	No sulphides.
								1	17.2	11	
Unit 82	No Visible Gold										No sulphides.
Unit 83	3	C	15	15			1	1		<1	No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited

2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
	8	C	25	50	1			1		4	
	10	C	50	50	1			1		11	
								3	18.0	15	
Unit 84	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1		1	2		2	
	13	C	50	75	1			1		12	
								4	30.0	14	
Unit 85	5	C	25	25	1			1		3	No sulphides.
								1	8.0	3	
Unit 86	5	C	25	25	1		1	2		2	No sulphides.
								2	28.0	2	
Unit 87	No Visible Gold										No sulphides.
Unit 88	No Visible Gold										No sulphides.
Unit 89	3	C	15	15			1	1		<1	No sulphides.
								1	16.4	0	
Unit 90	5	C	25	25	4			4		5	No sulphides.
	15	C	50	100	1			1		29	
								5	19.6	34	
Unit 91	No Visible Gold										No sulphides.
Unit 92	No Visible Gold										No sulphides.
Unit 93	5	C	25	25	2			2		3	No sulphides.
	10	C	50	50	1			1		10	
	15	C	75	75	1			1		35	
								4	18.4	48	
Unit 94	No Visible Gold										No sulphides.
Unit 95	No Visible Gold										No sulphides.
Unit 96	10	C	50	50			1	1		6	No sulphides.
	13	C	50	75	1			1		11	
								2	32.8	17	
Unit 97	5	C	25	25			1	1		1	No sulphides.
	13	C	50	75	2			2		15	
								3	48.0	15	
Unit 98	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited

2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm)			Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
Unit 99	No Visible Gold									No sulphides.
Unit 100	5 C	25	25	1		1	2		2	No sulphides.
	13 C	50	75		1		1		12	
							3	30.0	14	
Unit 101	No Visible Gold									No sulphides.
Unit 102	No Visible Gold									No sulphides.
Unit 103	No Visible Gold									No sulphides.
Unit 104	8 C	25	50	1			1		3	No sulphides.
							1	27.2	3	
Unit 105	No Visible Gold									No sulphides.
Unit 106	8 C	25	50	2			2		6	No sulphides.
	15 C	75	75	1			1		25	
	25 C	100	150	1			1		110	
							4	25.2	141	
Unit 107	No Visible Gold									No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited 2021-02-10

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 108	5	C	25	25	2			2		1	No sulphides.
	10	C	25	75	1			1		3	
	10	C	50	50	3			3		11	
	13	C	50	75	3			3		21	
								9	51.2	36	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Overburden Drilling Management Limited

2021-02-10

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 13	1298.6	773.4	525.2	510.8	14.4	3.1	2.0	9.3	5.8	2.6	0.9
Unit 14	1433.1	924.7	508.4	498.4	10.0	2.3	1.0	6.7	4.0	1.9	0.8
Unit 15	1274.7	670.7	604.0	599.1	4.9	1.1	0.5	3.3	1.8	1.1	0.4
Unit 16	1488.7	977.5	511.2	507.2	4.0	1.3	0.6	2.1	1.3	0.6	0.2
Unit 17	806.5	518.3	288.2	262.3	25.9	10.9	8.0	7.0	6.4	0.6	0.03
Unit 18	1525.8	998.6	527.2	522.3	4.9	1.5	0.4	3.0	1.9	0.8	0.3
Unit 19	1051.7	515.9	535.8	535.1	0.7	0.3	0.1	0.3	0.2	0.1	0.03
Unit 20	886.4	493.5	392.9	390.9	2.0	0.7	0.3	1.0	0.6	0.3	0.1
Unit 21	1339.8	637.8	702.0	696.2	5.8	1.2	0.5	4.1	2.4	1.1	0.6
Unit 22	1001.6	714.7	286.9	280.2	6.7	1.6	0.5	4.6	3.0	1.3	0.3
Unit 23	769.6	535.8	233.8	230.7	3.1	0.9	0.3	1.9	1.4	0.4	0.1
Unit 24	1271.7	856.0	415.7	412.4	3.3	0.9	0.3	2.1	1.4	0.6	0.1
Unit 25	980.9	616.3	364.6	356.7	7.9	1.9	1.2	4.8	3.0	1.4	0.4
Unit 27	1211.0	799.6	411.4	406.0	5.4	1.3	0.6	3.5	2.3	1.0	0.2
Unit 28	1219.9	588.9	631.0	629.3	1.7	0.5	0.2	1.0	0.7	0.2	0.1
Unit 29	817.5	635.4	182.1	176.1	6.0	1.3	0.5	4.2	2.9	1.1	0.2
Unit 30	879.0	581.0	298.0	292.9	5.1	1.1	0.6	3.4	2.2	0.9	0.3
Unit 31	1110.8	778.9	331.9	325.1	6.8	1.1	0.5	5.2	3.6	1.3	0.3
Unit 32	1404.1	968.8	435.3	425.5	9.8	2.3	0.3	7.2	6.4	0.7	0.1
Unit 33	1095.8	806.8	289.0	287.1	1.9	0.6	0.2	1.1	0.9	0.2	0.01
Unit 34	728.8	627.0	101.8	93.1	8.7	0.9	0.8	7.0	5.3	1.4	0.3
Unit 35	832.8	596.6	236.2	232.2	4.0	0.6	0.4	3.0	2.0	0.8	0.2
Unit 36	960.4	699.8	260.6	250.1	10.5	1.5	1.8	7.2	5.0	1.7	0.5
Unit 37	605.7	405.6	200.1	194.6	5.5	0.8	0.6	4.1	2.6	1.0	0.5
Unit 38	966.6	654.5	312.1	309.7	2.4	0.7	0.4	1.3	1.1	0.2	0.02
Unit 39	716.0	489.1	226.9	225.0	1.9	0.5	0.2	1.2	0.8	0.3	0.1
Unit 40	1044.0	663.9	380.1	373.6	6.5	1.5	1.3	3.7	2.4	0.9	0.4
Unit 41	832.5	507.1	325.4	322.9	2.5	0.4	0.3	1.8	1.2	0.4	0.2
Unit 42	1004.5	641.3	363.2	359.5	3.7	0.4	0.5	2.8	1.7	0.8	0.3
Unit 43	922.3	555.1	367.2	364.0	3.2	0.4	0.5	2.3	1.8	0.4	0.1
Unit 44	952.2	657.2	295.0	290.5	4.5	0.6	0.5	3.4	2.5	0.8	0.1
Unit 45	887.5	627.9	259.6	256.8	2.8	0.4	0.1	2.3	1.5	0.6	0.2
Unit 46	846.8	619.1	227.7	225.7	2.0	0.2	0.3	1.5	1.0	0.4	0.1
Unit 47	859.5	594.2	265.3	262.2	3.1	0.4	0.4	2.3	1.3	0.7	0.3
Unit 48	734.9	508.9	226.0	223.5	2.5	0.2	0.3	2.0	1.4	0.5	0.1
Unit 49	941.8	653.0	288.8	284.7	4.1	0.5	0.6	3.0	2.0	0.7	0.3
Unit 50	912.5	619.4	293.1	288.5	4.6	0.4	0.9	3.3	2.5	0.7	0.1
Unit 51	989.2	670.1	319.1	317.2	1.9	0.3	0.2	1.4	1.0	0.3	0.1
Unit 52	1046.1	761.7	284.4	281.7	2.7	0.1	0.6	2.0	1.3	0.5	0.2
Unit 53	767.2	518.8	248.4	245.6	2.8	1.2	0.4	1.2	0.8	0.3	0.1
Unit 54	833.6	539.7	293.9	285.6	8.3	1.0	1.1	6.2	3.9	1.6	0.7
Unit 55	622.1	443.2	178.9	174.2	4.7	1.0	0.6	3.1	1.9	0.9	0.3
Unit 56	387.4	271.4	116.0	113.1	2.9	0.6	0.3	2.0	1.3	0.5	0.2
Unit 57	542.0	369.5	172.5	169.7	2.8	0.8	0.2	1.8	1.1	0.4	0.3
Unit 58	688.6	470.3	218.3	217.0	1.3	0.2	0.1	1.0	0.6	0.3	0.1
Unit 59	492.4	384.4	108.0	104.5	3.5	0.5	0.2	2.8	2.0	0.6	0.2
Unit 60	776.0	528.2	247.8	244.4	3.4	0.6	0.4	2.4	1.5	0.7	0.2
Unit 61	340.4	189.5	150.9	150.0	0.9	0.2	0.4	0.3	0.2	0.1	0.04
Unit 62	446.7	340.4	106.3	104.4	1.9	0.6	0.1	1.2	0.9	0.3	0.03
Unit 63	772.7	535.1	237.6	234.9	2.7	0.5	0.1	2.1	1.4	0.6	0.1
Unit 64	572.5	367.0	205.5	203.0	2.5	0.4	0.2	1.9	1.1	0.6	0.2
Unit 65	797.4	527.8	269.6	263.7	5.9	0.9	0.4	4.6	2.8	1.3	0.5

Overburden Drilling Management Limited

2021-02-10

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 66	451.0	306.8	144.2	141.4	2.8	0.4	0.1	2.3	1.2	0.8	0.3
Unit 67	485.3	291.2	194.1	191.2	2.9	0.5	0.5	1.9	1.1	0.6	0.2
Unit 68	683.6	482.1	201.5	197.9	3.6	0.4	0.5	2.7	1.5	0.8	0.4
Unit 69	806.8	541.1	265.7	261.4	4.3	0.5	0.4	3.4	2.1	0.9	0.4
Unit 70	613.1	378.3	234.8	232.8	2.0	0.5	0.3	1.2	0.9	0.2	0.1
Unit 71	504.0	366.7	137.3	134.5	2.8	0.7	0.5	1.6	1.1	0.4	0.1
Unit 72	570.6	337.5	233.1	225.2	7.9	1.0	0.6	6.3	3.5	2.5	0.3
Unit 73	238.8	175.1	63.7	61.5	2.2	0.4	0.2	1.6	1.2	0.3	0.1
Unit 74	906.4	531.1	375.3	373.5	1.8	0.6	0.1	1.1	0.7	0.3	0.1
Unit 75	840.2	607.0	233.2	231.8	1.4	0.3	0.1	1.0	0.7	0.2	0.1
Unit 76	1042.0	566.8	475.2	470.0	5.2	1.5	0.7	3.0	1.7	0.9	0.4
Unit 77	894.6	446.9	447.7	446.0	1.7	0.6	0.2	0.9	0.6	0.2	0.1
Unit 78	533.4	308.1	225.3	223.3	2.0	0.6	0.3	1.1	0.7	0.3	0.1
Unit 79	660.4	333.6	326.8	322.8	4.0	1.1	0.4	2.5	1.4	0.8	0.3
Unit 80	843.5	361.6	481.9	477.2	4.7	1.1	0.6	3.0	1.6	1.0	0.4
Unit 81	792.9	419.3	373.6	371.2	2.4	0.7	0.2	1.5	0.9	0.4	0.2
Unit 82	824.9	376.8	448.1	441.4	6.7	3.3	0.7	2.7	2.3	0.3	0.1
Unit 83	712.5	375.2	337.3	335.2	2.1	0.6	0.2	1.3	0.9	0.3	0.1
Unit 84	945.7	464.3	481.4	470.9	10.5	2.3	1.1	7.1	4.3	2.2	0.6
Unit 85	517.4	257.2	260.2	259.1	1.1	0.4	0.1	0.6	0.4	0.1	0.1
Unit 86	1087.2	411.4	675.8	671.8	4.0	1.4	0.6	2.0	1.3	0.5	0.2
Unit 87	816.1	417.1	399.0	397.3	1.7	0.6	0.1	1.0	0.7	0.2	0.1
Unit 88	833.7	344.7	489.0	486.8	2.2	0.7	0.3	1.2	0.8	0.3	0.1
Unit 89	737.8	332.9	404.9	403.4	1.5	0.4	0.2	0.9	0.6	0.2	0.1
Unit 90	681.8	343.5	338.3	334.9	3.4	1.3	0.3	1.8	1.2	0.5	0.1
Unit 91	1114.7	394.9	719.8	713.1	6.7	2.4	0.8	3.5	2.1	0.9	0.5
Unit 92	777.3	351.1	426.2	422.1	4.1	1.4	0.5	2.2	1.4	0.6	0.2
Unit 93	1084.3	511.6	572.7	568.4	4.3	1.4	0.6	2.3	1.5	0.6	0.2
Unit 94	743.3	493.9	249.4	247.4	2.0	0.5	0.1	1.4	0.9	0.4	0.1
Unit 95	1053.7	778.0	275.7	274.1	1.6	0.4	0.1	1.1	0.8	0.3	0.03
Unit 96	577.0	412.3	164.7	163.1	1.6	0.5	0.1	1.0	0.8	0.2	0.01
Unit 97	1252.1	1069.9	182.2	172.8	9.4	2.2	0.2	7.0	5.5	1.3	0.2
Unit 98	641.9	433.3	208.6	207.2	1.4	0.4	0.1	0.9	0.7	0.2	0.03
Unit 99	607.9	445.3	162.6	159.7	2.9	0.9	0.2	1.8	1.3	0.4	0.08
Unit 100	836.5	676.1	160.4	156.4	4.0	1.3	0.2	2.5	1.8	0.6	0.06
Unit 101	540.1	293.6	246.5	243.8	2.7	0.8	0.4	1.5	1.1	0.3	0.07
Unit 102	635.3	483.7	151.6	146.4	5.2	1.1	0.4	3.7	2.6	1.0	0.1
Unit 103	511.4	348.8	162.6	160.5	2.1	0.7	0.1	1.3	1.0	0.3	0.03
Unit 104	984.9	749.9	235.0	231.6	3.4	1.0	0.3	2.1	1.4	0.6	0.1
Unit 105	854.4	621.4	233.0	229.8	3.2	0.8	0.3	2.1	1.4	0.6	0.1
Unit 106	1457.3	822.2	635.1	630.1	5.0	1.3	0.4	3.3	2.3	0.9	0.1
Unit 107	1037.1	591.5	445.6	441.8	3.8	0.9	0.3	2.6	1.7	0.7	0.2
Unit 108	1155.0	925.0	230.0	220.9	9.1	1.7	0.5	6.9	4.6	1.7	0.6

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Number of Grains

Selected MMSIMs

Sample Number	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm					
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh	
	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 14	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 40	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 52	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 54	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
Unit 55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 57	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0

KIMs

Sample Number	1.0 to 2.0 mm												0.5 to 1.0 mm												0.25 to 0.5 mm												Total (KIMs)	
	GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	2	2	6	6	2	2	0	0	12	12	4	4	0	0	29	29
Unit 14	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	3	3	0	0	1	1	5	5	1	1	2	2	11	11	10	10	1	1	36	36
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	1	1	11	11	0	0	18	18
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	4	4	1	1	0	0	8	8	10	10	1	1	25	25
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	3	3	0	0	5	5
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	5	5	2	2	0	0	10	10
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	3	3
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	0	0	0	0	1	1	0	0	5	5
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	3	3	2	2	8	8
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	7	7	0	0	10	10
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	4	4	6	6	1	1	14	14
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	0	0	4	4	11	11	1	1	19	19
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1	6	6	0	0	1	1	4	4	6	6	6	6	26	26
Unit 27	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	2	2	0	0	3	3	3	3	1	1	0	0	15	15	12	12	4	4	42	42
Unit 28	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	1	4	4	0	0	0	0	9	9
Unit 29	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	5	5	0	0	1	1	3	3	0	0	0	0	10	10	12	12	2	2	35	35
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	8	8	8	8	1	1	21	21
Unit 31	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	6	6	16	16	0	0	27	27
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	5	5	3	3	1	1	12	12
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	6	6	3	3	0	0	12	12
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	1	1	5	5	4	4	1	1	1	1	12	12	15	15	10	10	52	52
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	2	2	9	9	0	0	13	13
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	1	1	1	1	1	1	3	3	3	3	5	5	17	17
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	1	1	1	0	0	0	0	5	5	3	3	1	1	13	13
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3	3	8	8	1	1	15	15
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	4	4	4	4	1	1	11	11
Unit 40	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	4	0	0	0	0	3	3	8	8	1	1	19	19
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	2	2	1	1	5	5	5	5	1	1	17	17
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	1	1	0	0	2	2	5	5	2	2	14	14
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	1	1	5	5	0	0	9	9
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	3	3	2	2	1	1	8	8
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3	3	1	1	1	1	3	3	1	1	2	2	12	12
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	4	2	2	2	2	4	4	3	3	2	2	18	18
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	5	5	0	0	0	0	6	6	4	4	3	3	20	20
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	1	1	4	4	4	4	0	0	12	12
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	6	6	7	7	2	2	17	17
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	1	1	3	3	1	1	0	0	10	10	1	1	19	19
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	7	7	10	10	0	0	19	19
Unit 52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	4	4	8	8	1	1	15	15
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5	5	7	7	0	0	13	13
Unit 54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	3	1	1	2	2	0	0	11	11	6	6	2	2	26	26
Unit 55	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	8	8	3	3	3	3	21	21
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	2	2	0	0	0	0	6	6	11	11	1	1	22	22
Unit 57	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	14	14	13	13	2	2	36	36
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	6	6	2	2	13	13

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Number of Grains																																																							
	Selected MMSIMs																		KIMs																																					
	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						1.0 to 2.0 mm												0.5 to 1.0 mm												0.25 to 0.5 mm												Total (KIMs)	
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	7	7	7	7	5	5	22	22
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	4	1	1	0	0	2	2	9	9	3	3	20	20
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	5	5	3	3	0	0	10	10
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	3	3	0	0	1	1	7	7	3	3	0	0	15	15
Unit 64	0	0	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	6	6	1	1	9	9
Unit 65	0	0	0	0	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	1	1	40	21	2	2	50	31
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	7	7
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	2	2	6	6	1	1	13	13
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3	3	2	2	0	0	6	6
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	4	4	1	1	0	0	10	10	11	11	1	1	30	30
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	3	3	3	3	0	0	7	7
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3	0	0	4	4
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	5	5	7	7	0	0	15	15
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	2	2	0	0	0	0	0	0	4	4	0	0	8	8
Unit 74	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	3	3
Unit 75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	1	1	1	1	0	0	8	8
Unit 76	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	3	3	0	0	0	0	2	2	0	0	0	0	5	5	6	6	0	0	18	18
Unit 77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	2	2	0	0	6	6
Unit 78	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	5	5	1	1	8	8
Unit 79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	1	0	0	0	0	3	3	1	1	2	2	9	9
Unit 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	0	0	0	0	1	1	0	0	0	0	0	0	7	7	4	4	15	15
Unit 81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	1	1	3	3	4	4	1	1	12	12
Unit 82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	3	3	0	0	0	0	4	4
Unit 83	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	2	2	1	1	0	0	7	7
Unit 84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	2	2	2	0	0	6	6
Unit 85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	1	1	3	3	0	0	8	8
Unit 86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	3	3	0	0	6	6
Unit 87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	3	3	2	2	8	8
Unit 88	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	1	1	0	0	5	5
Unit 89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	2	2	0	0	0	0	7	7	0	0	1	1	13	13
Unit 90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Unit 91	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	10	10	1	1	1	1	15	15	14	14	1	1	45	45
Unit 92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	6	6	2	2	0	0	11	11
Unit 93	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	7	7	0	0	0	0	4	4	2	2	3	3	18	18
Unit 94	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	1	1	0	0	1	1	2	2	1	1	9	9
Unit 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	6	6
Unit 96	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12	12	7	7	0	0	20	20
Unit 97	0	0	0	0	0	0	1	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	10	10	0	0	0	0	12	12	18	18	3	3	46	46
Unit 98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	1	1	6	6	0	0	9	9
Unit 99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	1	1	5	5	1	1	0	0	2	2	2	2	2	2	16	16
Unit 100	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	2	2	1	1	1	1	8	8
Unit 101	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	2	2	4	4
Unit 102	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3	0	0	0	0	10	10	2	2	1	1	17	17
Unit 103	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	1	5	5	4	4	0	0	12	12

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

	Number of Grains																																																						
	Selected MMSIMs																		KIMs																																					
	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						1.0 to 2.0 mm												0.5 to 1.0 mm												0.25 to 0.5 mm												Total (KIMs)	
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 104	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	9	9	6	6	0	0	19	19
Unit 105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	2	2	2	2	0	0	8	8
Unit 106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	1	1	4	4	4	4	1	1	13	13
Unit 107	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	1	1	1	7	7	8	8	1	1	20	20
Unit 108	0	0	0	0	0	0	1	1	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	2	2	6	6	0	0	0	0	10	10	11	11	1	1	33	33

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 13	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 14	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.
Unit 15	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 16	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 17	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.
Unit 18	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.
Unit 19	Almandine/epidote-diopside assemblage.	Almandine/epidote-diopside	
Unit 20	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).	Almandine/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 21	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.
Unit 22	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 23	Amandine-hornblende/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has partial alteration mantle.	Amandine-hornblende/epidote-diopside	1 IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 24	Almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 25	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.
Unit 27	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.
Unit 28	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 29	Almandine-hornblende-augite/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 30	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 31	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 32	Hornblende-almandine/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Hornblende-almandine/epidote-diopside-staurolite	SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 33	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 34	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 35	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 36	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 37	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.
Unit 38	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 39	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 40	Almandine-augite-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.	Almandine-augite-hornblende/epidote-diopside	SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.
Unit 41	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 42	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.
Unit 43	Almandine-fayalite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.	Almandine-fayalite-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.
Unit 44	Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.	Hornblende-almandine/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.
Unit 45	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.
Unit 46	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 47	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 48	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.	Almandine-hornblende-augite/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 49	Almandine-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 50	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.
Unit 51	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 52	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 53	Almandine-hornblende/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 54	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 FO versus diopside candidates = 3 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine = 1 GO (Cr-poor pyrope); and 4 IM versus crustal ilmenite candidates = 4 IM. 1 GO and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende-augite/epidote-diopside	SEM checks from 0.5-1.0 mm fraction: 3 FO versus diopside candidates = 3 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine = 1 GO (Cr-poor pyrope); and 4 IM versus crustal ilmenite candidates = 4 IM. 1 GO and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 55	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 1 IM versus crustal ilmenite candidate = 1 IM. One GP from 0.5-1.0 mm and both GP, 1 GO, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 1 IM versus crustal ilmenite candidate = 1 IM. One GP from 0.5 1.0 mm and both GP, 1 GO, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 56	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 ruby corundum; and 1 FO versus zoisite candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 GP, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 ruby corundum; and 1 FO versus zoisite candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 GP, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 57	Almandine-hornblende/epidote-diopside assemblage. All 3 GP and 1 IM from 0.5-1.0 mm and 1 GP and 6 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	All 3 GP and 1 IM from 0.5-1.0 mm and 1 GP and 6 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 58	Almandine-hornblende-augite/epidote-diopside-titanite assemblage.	Almandine-hornblende-augite/epidote-diopside-titanite	

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 59	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 60	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 2 IM.	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 2 IM.
Unit 61	Hornblende-hematite/epidote-zircon assemblage. SEM checks from 0.25-0.5 mm fraction: 5 titanite versus zircon candidates = 5 zircons.	Hornblende-hematite/epidote-zircon	SEM checks from 0.25-0.5 mm fraction: 5 titanite versus zircon candidates = 5 zircons.
Unit 62	Hornblende-almandine/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and sole GP and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Hornblende-almandine/epidote-diopside	Sole IM from 0.5-1.0 mm and sole GP and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 63	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.	Almandine-hornblende/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 64	Hornblende-almandine/epidote-diopside assemblage.	Hornblende-almandine/epidote-diopside	
Unit 65	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 3 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite and 1 CR.	Almandine-augite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 3 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite and 1 CR.
Unit 66	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 CR.	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 CR.
Unit 67	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 FO versus diopside candidate = 1 FO. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 FO versus diopside candidate = 1 FO. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 68	Almandine-hornblende/epidote-staurolite-diopside assemblage. Sole IM from 0.5-1.0 mm and 2 IM from 0.25 0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-staurolite-diopside	Sole IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 69	Almandine-hornblende/epidote-diopside assemblage. 2 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside	2 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 70	Almandine/epidote-diopside assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine/epidote-diopside	2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 71	Almandine-hornblende/epidote-staurolite assemblage.	Almandine-hornblende/epidote-staurolite	
Unit 72	Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-staurolite-diopside	1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 73	Almandine-hornblende/epidote-diopside assemblage.	Almandine-hornblende/epidote-diopside	
Unit 74	Almandine-hematite-hornblende/epidote-staurolite assemblage. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.	Almandine-hematite-hornblende/epidote-staurolite	Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 75	Almandine-hematite/epidote-staurolite assemblage. Sole GP from 0.5-1.0 mm; and 2 GP and sole IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hematite/epidote-staurolite	Sole GP from 0.5-1.0 mm; and 2 GP and sole IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 76	Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-staurolite-diopside	1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 77	Almandine/epidote-diopside-staurolite assemblage. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine/epidote-diopside-staurolite	Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 78	Almandine-hornblende/epidote-diopside-staurolite assemblage.	Almandine-hornblende/epidote-diopside-staurolite	
Unit 79	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 80	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 6 crustal ilmenite and 1 FO candidate = 1 FO. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-diopside	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 6 crustal ilmenite and 1 FO candidate = 1 FO. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 81	Almandine-hornblende/epidote-diopside-staurolite assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 82	Almandine-augite/diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine-augite/diopside	1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 83	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM.
Unit 84	Almandine/epidote-staurolite assemblage. Both IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine/epidote-staurolite	Both IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 85	Almandine-hornblende/epidote-staurolite assemblage. Sole IM from 1.0-2.0 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-staurolite	Sole IM from 1.0-2.0 mm fraction has a partial alteration mantle.
Unit 86	Almandine-hornblende/epidote-staurolite assemblage.	Almandine-hornblende/epidote-staurolite	
Unit 87	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus zoisite candidates = 2 FO. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 2 FO versus zoisite candidates = 2 FO. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 88	Almandine-hornblende/epidote-diopside-staurolite assemblage. 3 GP from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	3 GP from 0.25-0.5 mm fraction have partial alteration mantles.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 35
ODM Batch Number(s): 8216

Sample Number	Remarks	INPUT ASSEMBLAGE	INPUT REMARKS
Unit 89	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. 1 IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. 1 IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 90	Almandine-hornblende/epidote-diopside-staurolite assemblage.	Almandine-hornblende/epidote-diopside-staurolite	
Unit 91	Almandine-hornblende/epidote-staurolite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); 1 FO versus zoisite candidate = 1 FO. 4 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-staurolite-diopside	SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); 1 FO versus zoisite candidate = 1 FO. 4 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 92	Almandine-hornblende/epidote-staurolite assemblage. 1 IM from 0.5-1.0 mm; and sole GP and 4IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-staurolite	1 IM from 0.5-1.0 mm; and sole GP and 4IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 93	Almandine-hornblende/epidote-staurolite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 forsterite versus epidote candidates = 2 FO. 2 GP and 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-staurolite-diopside	SEM checks from 0.25-0.5 mm fraction: 2 forsterite versus epidote candidates = 2 FO. 2 GP and 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 94	Almandine-hornblende/epidote-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 2 FO versus epidote candidates = 1 FO and 1 epidote. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 2 FO versus epidote candidates = 1 FO and 1 epidote. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 95	Almandine-hornblende/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 96	Almandine-hornblende/epidote-diopside assemblage. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside	3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 97	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 grossular. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular; and 2 FO versus enstatite candidates = 2 epidote. 1 IM from 0.5-1.0 mm; and 2 GP and 5 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 grossular. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular; and 2 FO versus enstatite candidates = 2 epidote. 1 IM from 0.5-1.0 mm; and 2 GP and 5 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 98	Almandine-hornblende/epidote-staurolite assemblage.	Almandine-hornblende/epidote-staurolite	
Unit 99	Almandine-hornblende/epdiote assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).	Almandine-hornblende/epdiote	SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 100	Almandine-hornblende/epidote-diopside-staurolite assemblage. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-diopside-staurolite	1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 101	Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO. Sole GP from 0.25-0.5 mm fraction has a partial alteration mantle.	Hornblende-almandine/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO. Sole GP from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 102	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM; 1 FO versus diopside candidate = 1 FO; and 1 enstatite versus FO candidate = 1 enstatite. 2 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM; 1 FO versus diopside candidate = 1 FO; and 1 enstatite versus FO candidate = 1 enstatite. 2 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 103	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 104	Almandine-hornblende/epidote-diopside-staurolite assemblage. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 105	Almandine-hornblende/epidote-diopside-staurolite assemblage.	Almandine-hornblende/epidote-diopside-staurolite	
Unit 106	Almandine-hornblende/epidote-diopside-staurolite assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.	Almandine-hornblende/epidote-diopside-staurolite	1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 107	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 1 spessartine; and 1 FO versus epidote candidate = 1 FO (lost in transfer to vial). One CR has attached gangue material. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 1 spessartine; and 1 FO versus epidote candidate = 1 FO (lost in transfer to vial). One CR has attached gangue material. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 108	Almandine-hornblende/epidote-diopside-staurolite assemblage. Sole GP and both IM from 0.5-1.0 mm; and 2 GP and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.	Almandine-hornblende/epidote-diopside-staurolite	Sole GP and both IM from 0.5-1.0 mm; and 2 GP and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	March 16, 2020
Project name:	Lorrain Chain
ODM batch number:	8314
Sample numbers:	Unit 01 to Unit 12
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	12
Number of samples processed to date:	117
Total number of samples in project:	117
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples preconcentrated by client prior to submission.
2. Submitted sample fractions homogenized prior to processing.
3. One ±100 g archival split taken from each sample.
4 All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
5. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates (HMCs).
6. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Weight (kg wet)					Screening and Shaking Table Sample Descriptions												
						Clasts (+2.0 mm)					Matrix (-2.0 mm)							
							Percentage				Distribution					Colour		
	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class
Unit 01	2.6	0.1	2.5	0.0	2.5			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 02	3.3	0.1	3.2	0.0	3.2			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 03	3.4	0.1	3.3	0.0	3.3			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 04	2.0	0.1	1.9	0.0	1.9			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 05	1.9	0.1	1.8	0.0	1.8			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 06	0.9	0.1	0.8	0.0	0.8			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 07	2.4	0.1	2.3	0.0	2.3			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 08	3.4	0.1	3.3	0.0	3.3			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 09	1.6	0.1	1.5	0.0	1.5			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 10	3.1	0.1	3.0	0.0	3.0			No Clasts			U	+	-	N	N	LOC	NA	TILL
Unit 11	2.1	0.1	2.0	0.0	2.0			No Clasts			U	+	-	N	N	OC	NA	TILL
Unit 12	1.5	0.1	1.4	0.0	1.4			No Clasts			U	+	.	N	N	OC	NA	TILL

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
Unit 01	7	7	0	0	10.0	150	150	0	0
Unit 02	10	9	0	1	12.8	518	490	0	28
Unit 03	2	2	0	0	13.2	115	115	0	0
Unit 04	1	0	0	1	7.6	10	0	0	10
Unit 05	1	0	0	1	7.2	3	0	0	3
Unit 06	0	0	0	0	3.2	0	0	0	0
Unit 07	3	3	0	0	9.2	409	409	0	0
Unit 08	1	1	0	0	13.2	159	159	0	0
Unit 09	2	2	0	0	6.0	92	92	0	0
Unit 10	1	1	0	0	12.0	16	16	0	0
Unit 11	0	0	0	0	8.0	0	0	0	0
Unit 12	1	1	0	0	5.6	13	13	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 01	5	C	25	25	2			2		5	Tr (~20 grains) pryite (25-200 µm).
	8	C	25	50	1			1		7	Tr (4 grains) loellingite (75-250) SEM
	10	C	50	50	2			2		38	check 2 of 4 loellingite versus
	13	C	50	75	1			1		36	2 loellingite.
	15	C	75	75	1			1		64	
								7	10.0	150	
Unit 02	8	C	25	50	2			2		11	Tr (3 grains) pyrite (25-50 µm).
	13	C	50	75	3		1	4		112	
	20	C	50	150	1			1		88	
	15	C	75	75	1			1		50	
	20	C	75	125	1			1		110	
	22	C	75	150	1			1		147	
								10	12.8	518	
Unit 03	5	C	25	25	1			1		2	No sulphides.
	20	C	100	100	1			1		114	
								2	13.2	115	
Unit 04	8	C	25	50			1	1		10	Tr (3 grains) loellingite (25-50 µm).
								1	7.6	10	
Unit 05	5	C	25	25			1	1		3	Tr (3 grains) loellingite (25-50 µm).
								1	7.2	3	
Unit 06	No Visible Gold										Tr (2 grains) loellingite (100-250 µm). Tr (~10 grains) pyrite (25-250 µm).
Unit 07	5	C	25	25	1			1		3	Tr (1 grain) loellingite (25 µm).
	10	C	50	50	1			1		21	
	27	C	100	175	1			1		385	
								3	9.2	409	
Unit 08	22	C	100	125	1			1		159	Tr (2 grains) loellingite (75 µm).
								1	13.2	159	
Unit 09	10	C	50	50	1			1		32	No sulphides.
	13	C	50	75	1			1		60	
								2	6.0	92	
Unit 10	10	C	50	50	1			1		16	Tr (2 grains) pyrite (50 µm).
								1	12.0	16	
Unit 11	No Visible Gold										No sulphides.
Unit 12	8	C	25	50	1			1		13	Tr (4 grains) loellingite (25-130 µm).
								1	5.6	13	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 01	823.2	431.6	391.6	387.6	4.0	0.7	0.5	2.8	1.6	0.7	0.5
Unit 02	995.2	611.0	384.2	372.8	11.4	1.6	2.0	7.8	4.5	2.2	1.1
Unit 03	1153.8	731.1	422.7	415.5	7.2	0.8	1.0	5.4	3.0	1.6	0.8
Unit 04	678.7	418.4	260.3	255.9	4.4	0.8	1.4	2.2	1.2	0.7	0.3
Unit 05	691.5	393.0	298.5	294.5	4.0	0.6	0.6	2.8	1.7	0.8	0.3
Unit 06	341.3	174.3	167.0	165.0	2.0	0.6	0.9	0.5	0.3	0.1	0.1
Unit 07	914.4	495.7	418.7	414.5	4.2	0.5	0.7	3.0	1.8	0.8	0.4
Unit 08	1167.2	668.1	499.1	487.5	11.6	1.2	1.7	8.7	4.3	2.9	1.5
Unit 09	589.6	385.1	204.5	202.7	1.8	0.3	0.3	1.2	0.7	0.4	0.1
Unit 10	862.6	634.8	227.8	222.5	5.3	0.8	0.4	4.1	2.5	1.1	0.5
Unit 11	828.8	564.6	264.2	260.7	3.5	0.7	0.3	2.5	1.6	0.6	0.3
Unit 12	623.9	387.0	236.9	234.0	2.9	0.6	0.4	1.9	1.2	0.5	0.2

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
Unit 01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 03	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 06	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 08	0	0	0	0	0	0	4	4	0	0	0	0	20	10	2	2	0	0
Unit 09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 10	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	0	0	0
Unit 11	0	0	0	0	0	0	1	1	0	0	0	0	8	8	0	0	0	0
Unit 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs

Sample Number	1.0 to 2.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.5 to 1.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 03	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3
Unit 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Unit 08	2	2	0	0	1	1	19	19	0	0	0	0	18	18	10	10	0	0	50	20	0	0	0	0
Unit 09	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
Unit 10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2
Unit 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	0	0
Unit 12	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0

Sample Number	0.25 to 0.5 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
Unit 01	2	2	0	0	1	1	0	0	3	3	0	0	6	6
Unit 02	1	1	0	0	1	1	5	5	7	7	0	0	15	15
Unit 03	3	3	0	0	1	1	5	5	11	11	0	0	25	25
Unit 04	0	0	0	0	0	0	2	2	0	0	0	0	2	2
Unit 05	0	0	0	0	0	0	1	1	3	3	0	0	4	4
Unit 06	0	0	0	0	0	0	1	1	1	1	0	0	2	2
Unit 07	0	0	0	0	0	0	3	3	5	5	0	0	10	10
Unit 08	80	20	30	20	3	3	120	20	8	8	0	0	341	141
Unit 09	2	2	1	1	0	0	2	2	7	7	1	1	15	15
Unit 10	6	6	2	2	0	0	5	5	8	8	0	0	24	24
Unit 11	2	2	0	0	0	0	9	9	3	3	0	0	18	18
Unit 12	1	1	0	0	1	1	0	0	6	6	0	0	10	10

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Remarks
Unit 01	Almandine-augite-hornblende/epidote-staurolite-diopside assemblage.
Unit 02	Almandine-augite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 bronz sulfide candidate = 1 niccolite (NiAs); and 1 arsenopyrite versus loellingite candidate = 1 loellingite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 03	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 04	Augite-almandine/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 05	Augite-almandine-hornblende/epidote-diopside assemblage.
Unit 06	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 grossular; and 1 IM versus crustal ilminite candidate = 1 IM.
Unit 07	Almandine-augie-hornblende/epidote-diopside assemblage.
Unit 08	Almandine-augite/epidote-diopside assemblage. 20% IM from 0.5-1.0 mm and 20% IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 09	Almandine-augite-hematite/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 10	Almandine-hornblende-augite/epidote-diopside-staurolite assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 11	Almandine-hornblende-augite/epidote-diopside assemblage. 1 IM from 0.5-1.0 mm and 4 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 12	Almandine-hornblende/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm and sole IM from 0.5-1.0 mm fractions have partial alteration mantles.

Overburden Drilling Management Limited
Unit 107, 15 Capella Court
Nepean, Ontario, Canada, K2E 7X1
Tel: (613) 226-1771 Fax: (613) 226-8753
odm@storm.ca www.odm.ca

Exploring Heavy Minerals

Laboratory Data Report

Client Information

RJK Exploration Ltd.
4 Al Wende Avenue
Kirkland Lake, ON
P2N 3J5

gkasner2001@yahoo.com

Attention: Glenn Kasner

Data-File Information

Date:	March 16, 2020
Project name:	Lorrain Chain
ODM batch number:	8314
Sample numbers:	Unit 01 to Unit 12
Data file:	20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Number of samples in this report:	12
Number of samples processed to date:	117
Total number of samples in project:	117
Preliminary data:	
Final data:	X
Revised data:	

Samples Processed For: Gold, KIMs

Processing Specifications:

1. Submitted by client: Till samples preconcentrated by client prior to submission.
2. Submitted sample fractions homogenized prior to processing.
3. One ±100 g archival split taken from each sample.
4 All samples panned for gold, PGMs and fine-grained metallic indicator minerals.
5. Shaking table concentrates refined by heavy liquid separation at S.G. 3.2 to obtain heavy mineral concentrates (HMCs).
6. 0.25-2.0 mm, nonferromagnetic HMC fractions picked for kimberlite indicator minerals.

Notes

Mike Crawford
Laboratory Manager

Overburden Drilling Management Limited - Abbreviations Table

Raw Sample Weights and Descriptions Log

Largest Clast Size Present:

- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:

- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated
- MB: Marble

Matrix Grain Size Distribution:

- S/U: Sorted or unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:

ORG: Y: Organics present in matrix
N: Organics absent or negligible in matrix
+: Matrix is mainly organic

Matrix Colour:

Primary:

BE:	Beige	GG:	Grey-green
BR:	Brick Red	PP:	Purple
GY:	Grey	PK:	Pink
GB:	Grey-beige	PB:	Pink-beige
GN:	Green	MN:	Maroon

Secondary (soil):

- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:

- L: Light
- M: Medium
- D: Dark

Detailed Gold Grain Log

VG: Visible gold grains

Thickness:

- M: Actual measured thickness of grain (µm)
- C: Thickness of grain (µm) calculated from measured width and length

Kimberlite Indicator Mineral (KIM) Log

- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

Metamorphosed/Magmatic Massive Sulphide Indicator Mineral (MMSIM) and Porphyry Cu Indicator Mineral (PCIM) Logs

- Adr: Andradite
- Ap: Apatite
- Ase: Anatase
- Aspy: Arsenopyrite
- Ax: Axinite
- Ba: Barite
- Cpx: Clinopyroxene
- Cpy: Chalcopyrite
- Cr: Chromite
- Fay: Fayalite
- Gh: Gahnite
- Grs: Grossular
- Gth: Goethite
- Ilm: Ilmenite
- Ky: Kyanite
- Mrc: Marcasite
- Mz: Monazite
- Ol: Olivine
- Opx: Orthopyroxene
- PGM: Platinum group-bearing mineral
- Py: Pyrite
- REM: Rare earth-bearing mineral
- Rt: Red rutile
- Sil: Sillimanite
- Spi: Spinel
- Sps: Spessartine
- St: Staurolite
- Tm: Tourmaline
- Ttn: Titanite
- Zir: Zircon

Other

- HMC: Heavy mineral concentrate
- UV: Ultra-violet
- EPD: Electric-pulse disaggregation
- PGE: Platinum group element

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Weight (kg wet) Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Clasts (+2.0 mm) Size	Percentage V/S	GR	LS	OT	Matrix (-2.0 mm) Distribution S/U	SD	ST	CY	ORG	Colour SD	CY	Class
Unit 13	8.8	0.3	8.5	1.3	7.2	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 14	12.5	0.3	12.2	1.1	11.1	P	90	10	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 15	7.8	0.3	7.5	0.8	6.7	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 16	7.9	0.3	7.6	0.5	7.1	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 17	4.7	0.3	4.4	0.5	3.9	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 18	8.9	0.3	8.6	0.8	7.8	G	95	5	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 19	5.2	0.3	4.9	0.3	4.6	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 20	5.0	0.3	4.7	0.4	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 21	9.8	0.3	9.5	0.6	8.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 22	9.8	0.3	9.5	0.5	9.0	G	100	0	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 23	5.3	0.3	5.0	0.4	4.6	P	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 24	8.7	0.3	8.4	0.5	7.9	G	100	TR	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 25	8.5	0.3	8.2	0.6	7.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 27	9.7	0.3	9.4	0.8	8.6	G	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 28	5.9	0.3	5.6	0.5	5.1	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 29	5.9	0.3	5.6	1.0	4.6	C	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 30	5.3	0.3	5.0	0.6	4.4	P	90	10	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 31	8.8	0.3	8.5	0.8	7.7	P	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 32	8.1	0.3	7.8	0.8	7.0	P	70	30	0	0	U	Y	Y	Y	Y	DOC	DOC	TILL
Unit 33	8.1	0.3	7.8	0.9	6.9	P	70	30	0	0	U	+	Y	-	Y	DOC	DOC	TILL
Unit 34	7.3	0.3	7.0	0.5	6.5	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 35	4.6	0.3	4.3	0.3	4.0	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 36	8.8	0.3	8.5	0.6	7.9	P	90	10	0	0	U	+	Y	-	N	LOC	LOC	TILL
Unit 37	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 38	5.3	0.3	5.0	0.5	4.5	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 39	5.0	0.3	4.7	0.4	4.3	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
Unit 40	8.0	0.3	7.7	0.9	6.8	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 41	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 42	4.8	0.3	4.5	0.3	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 43	5.0	0.3	4.7	0.3	4.4	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 44	5.2	0.3	4.9	0.3	4.6	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 45	5.1	0.3	4.8	0.4	4.4	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 46	4.8	0.3	4.5	0.4	4.1	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 47	5.3	0.3	5.0	0.3	4.7	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 48	4.9	0.3	4.6	0.3	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 49	4.6	0.3	4.3	0.4	3.9	P	90	10	0	0	U	+	Y	-	N	DOC	DOC	TILL
Unit 50	8.2	0.3	7.9	0.8	7.1	P	90	10	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
Unit 51	4.9	0.3	4.6	0.4	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 52	5.0	0.3	4.7	0.5	4.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 53	5.1	0.3	4.8	0.5	4.3	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
Unit 54	5.9	0.3	5.6	0.4	5.2	G	90	10	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 55	5.6	0.3	5.3	0.8	4.5	G	85	15	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 56	4.5	0.3	4.2	0.7	3.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 57	4.3	0.3	4.0	0.7	3.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 58	5.4	0.3	5.1	0.8	4.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 59	4.9	0.3	4.6	0.7	3.9	G	85	15	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 60	7.4	0.3	7.1	1.4	5.7	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 61	2.3	0.3	2.0	0.6	1.4	G	95	5	0	0	U	+	Y	-	Y	OC	DOC	TILL
Unit 62	4.0	0.3	3.7	0.3	3.4	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 63	5.0	0.3	4.7	0.5	4.2	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 64	2.8	0.3	2.5	0.2	2.3	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 65	5.2	0.3	4.9	0.6	4.3	G	85	15	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 66	4.1	0.3	3.8	0.3	3.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 67	5.2	0.3	4.9	0.3	4.6	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 68	4.9	0.3	4.6	0.2	4.4	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 69	5.0	0.3	4.7	0.2	4.5	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 70	4.9	0.3	4.6	0.3	4.3	G	95	5	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 71	4.9	0.3	4.6	0.4	4.2	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 72	8.2	0.3	7.9	0.6	7.3	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 73	5.2	0.3	4.9	0.2	4.7	G	95	5	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 74	4.6	0.3	4.3	0.3	4.0	G	100	TR	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 75	5.2	0.3	4.9	0.2	4.7	G	100	TR	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 76	7.2	0.3	6.9	0.4	6.5	G	30	70	0	TR	U	Y	Y	-	Y	OC	OC	TILL
Unit 77	4.8	0.3	4.5	0.3	4.2	G	TR	100	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 78	4.6	0.3	4.3	0.4	3.9	G	TR	100	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 79	5.1	0.3	4.8	0.5	4.3	G	TR	100	0	0	U	Y	Y	Y	Y	OC	OC	TILL

Primary Sample Processing Weights and Descriptions

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

						Screening and Shaking Table Sample Descriptions												
	Weight (kg wet)					Clasts (+2.0 mm)					Matrix (-2.0 mm)							
							Percentage				Distribution					Colour		
Sample Number	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	-2.0 mm Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY	Class
Unit 80	4.9	0.3	4.6	0.4	4.2	G	70	30	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 81	4.9	0.3	4.6	0.3	4.3	G	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 82	4.4	0.3	4.1	0.3	3.8	G	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 83	5.2	0.3	4.9	0.4	4.5	G	80	20	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 84	8.3	0.3	8.0	0.5	7.5	G	40	60	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 85	2.5	0.3	2.2	0.2	2.0	G	30	70	0	0	U	Y	Y	-	Y	OC	OC	TILL
Unit 86	7.9	0.3	7.6	0.6	7.0	G	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 87	5.6	0.3	5.3	0.2	5.1	G	100	TR	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 88	5.9	0.3	5.6	0.4	5.2	G	30	70	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 89	4.7	0.3	4.4	0.3	4.1	G	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 90	5.6	0.3	5.3	0.4	4.9	G	80	20	0	TR	U	Y	Y	Y	Y	OC	OC	TILL
Unit 91	10.6	0.3	10.3	0.4	9.9	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 92	6.5	0.3	6.2	1.1	5.1	P	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 93	6.2	0.3	5.9	1.3	4.6	P	80	20	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 94	5.7	0.3	5.4	1.0	4.4	P	90	10	TR	0	U	+	Y	-	Y	OC	OC	TILL
Unit 95	6.0	0.3	5.7	0.2	5.5	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 96	8.6	0.3	8.3	0.1	8.2	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 97	12.7	0.3	12.4	0.4	12.0	P	80	20	0	0	U	+	Y	-	Y	LOC	LOC	TILL
Unit 98	4.8	0.3	4.5	0.2	4.3	G	90	10	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 99	5.3	0.3	5.0	0.3	4.7	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 100	8.4	0.3	8.1	0.6	7.5	P	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 101	8.1	0.3	7.8	0.5	7.3	G	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 102	7.9	0.3	7.6	0.6	7.0	P	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 103	4.9	0.3	4.6	0.2	4.4	P	70	30	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 104	7.5	0.3	7.2	0.4	6.8	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 105	7.6	0.3	7.3	0.7	6.6	G	90	10	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 106	7.6	0.3	7.3	1.0	6.3	G	80	20	0	0	U	+	Y	-	Y	OC	OC	TILL
Unit 107	7.3	0.3	7.0	1.1	5.9	P	70	30	0	0	U	Y	Y	Y	Y	OC	OC	TILL
Unit 108	13.7	0.3	13.4	0.6	12.8	G	80	20	0	0	U	Y	+	-	Y	OC	OC	TILL
Unit 01	2.6	0.1	2.5	0.0	2.5		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 02	3.3	0.1	3.2	0.0	3.2		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 03	3.4	0.1	3.3	0.0	3.3		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 04	2.0	0.1	1.9	0.0	1.9		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 05	1.9	0.1	1.8	0.0	1.8		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 06	0.9	0.1	0.8	0.0	0.8		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 07	2.4	0.1	2.3	0.0	2.3		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 08	3.4	0.1	3.3	0.0	3.3		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 09	1.6	0.1	1.5	0.0	1.5		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 10	3.1	0.1	3.0	0.0	3.0		No Clasts				U	+	-	N	N	LOC	NA	TILL
Unit 11	2.1	0.1	2.0	0.0	2.0		No Clasts				U	+	-	N	N	OC	NA	TILL
Unit 12	1.5	0.1	1.4	0.0	1.4		No Clasts				U	+	.	N	N	OC	NA	TILL

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

	Number of Visible Gold Grains				Nonmag	Calculated PPB Visible Gold in HMC			
Sample Number	Total	Reshaped	Modified	Pristine	HMC Weight*	Total	Reshaped	Modified	Pristine
Unit 13	2	1	1	0	28.8	9	7	3	0
Unit 14	1	1	0	0	44.4	4	4	0	0
Unit 15	0	0	0	0	26.8	0	0	0	0
Unit 16	1	0	0	1	28.4	1	0	0	1
Unit 17	0	0	0	0	15.6	0	0	0	0
Unit 18	0	0	0	0	31.2	0	0	0	0
Unit 19	1	0	0	1	18.4	4	0	0	4
Unit 20	0	0	0	0	17.2	0	0	0	0
Unit 21	0	0	0	0	35.6	0	0	0	0
Unit 22	0	0	0	0	36.0	0	0	0	0
Unit 23	0	0	0	0	18.4	0	0	0	0
Unit 24	0	0	0	0	31.6	0	0	0	0
Unit 25	1	1	0	0	30.4	12	12	0	0
Unit 27	3	3	0	0	34.4	72	72	0	0
Unit 28	1	1	0	0	20.4	9	9	0	0
Unit 29	1	1	0	0	18.4	10	10	0	0
Unit 30	0	0	0	0	17.6	0	0	0	0
Unit 31	2	2	0	0	30.8	125	125	0	0
Unit 32	1	1	0	0	28.0	50	50	0	0
Unit 33	2	2	0	0	27.6	8	8	0	0
Unit 34	2	2	0	0	26.0	129	129	0	0
Unit 35	0	0	0	0	16.0	0	0	0	0
Unit 36	4	4	0	0	31.6	597	597	0	0
Unit 37	3	3	0	0	17.2	36	36	0	0
Unit 38	0	0	0	0	18.0	0	0	0	0
Unit 39	1	1	0	0	17.2	87	87	0	0
Unit 40	2	2	0	0	27.2	24	24	0	0
Unit 41	1	1	0	0	17.6	32	32	0	0
Unit 42	7	6	1	0	16.8	192	67	125	0
Unit 43	1	1	0	0	17.6	4	4	0	0
Unit 44	2	2	0	0	18.4	20	20	0	0
Unit 45	9	6	1	2	17.6	179	172	4	3
Unit 46	3	3	0	0	16.4	24	24	0	0
Unit 47	1	1	0	0	18.8	1	1	0	0
Unit 48	1	1	0	0	17.2	8	8	0	0
Unit 49	2	1	0	1	15.6	90	90	0	<1
Unit 50	0	0	0	0	28.4	0	0	0	0
Unit 51	0	0	0	0	16.8	0	0	0	0
Unit 52	0	0	0	0	16.8	0	0	0	0
Unit 53	0	0	0	0	17.2	0	0	0	0
Unit 54	6	6	0	0	20.8	70	70	0	0
Unit 55	5	5	0	0	18.0	21	21	0	0
Unit 56	1	0	0	1	14.0	<1	0	0	<1
Unit 57	1	1	0	0	13.2	2443	2443	0	0
Unit 58	0	0	0	0	17.2	0	0	0	0
Unit 59	1	1	0	0	15.6	23	23	0	0
Unit 60	3	3	0	0	22.8	4	4	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight*	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
Unit 61	0	0	0	0	5.6	0	0	0	0
Unit 62	1	1	0	0	13.6	5	5	0	0
Unit 63	2	2	0	0	16.8	9	9	0	0
Unit 64	0	0	0	0	9.2	0	0	0	0
Unit 65	1	1	0	0	17.2	1	1	0	0
Unit 66	3	3	0	0	14.0	21	21	0	0
Unit 67	0	0	0	0	18.4	0	0	0	0
Unit 68	4	4	0	0	17.6	14	14	0	0
Unit 69	7	6	1	0	18.0	219	219	<1	0
Unit 70	3	3	0	0	17.2	14	14	0	0
Unit 71	0	0	0	0	16.8	0	0	0	0
Unit 72	4	4	0	0	29.2	28	28	0	0
Unit 73	5	5	0	0	18.8	41	41	0	0
Unit 74	0	0	0	0	16.0	0	0	0	0
Unit 75	0	0	0	0	18.8	0	0	0	0
Unit 76	1	1	0	0	26.0	3	3	0	0
Unit 77	1	1	0	0	16.8	21	21	0	0
Unit 78	1	1	0	0	15.6	9	9	0	0
Unit 79	2	2	0	0	17.2	11	11	0	0
Unit 80	1	1	0	0	16.8	38	38	0	0
Unit 81	1	1	0	0	17.2	11	11	0	0
Unit 82	0	0	0	0	15.2	0	0	0	0
Unit 83	3	2	0	1	18.0	15	15	0	<1
Unit 84	4	3	0	1	30.0	14	13	0	1
Unit 85	1	1	0	0	8.0	3	3	0	0
Unit 86	2	1	0	1	28.0	2	1	0	1
Unit 87	0	0	0	0	20.4	0	0	0	0
Unit 88	0	0	0	0	20.8	0	0	0	0
Unit 89	1	0	0	1	16.4	<1	0	0	<1
Unit 90	5	5	0	0	19.6	34	34	0	0
Unit 91	0	0	0	0	39.6	0	0	0	0
Unit 92	0	0	0	0	20.4	0	0	0	0
Unit 93	4	4	0	0	18.4	48	48	0	0
Unit 94	0	0	0	0	17.6	0	0	0	0
Unit 95	0	0	0	0	22.0	0	0	0	0
Unit 96	2	1	0	1	32.8	17	11	0	6
Unit 97	3	2	0	1	48.0	15	15	0	1
Unit 98	0	0	0	0	17.2	0	0	0	0
Unit 99	0	0	0	0	18.8	0	0	0	0
Unit 100	3	1	1	1	30.0	14	1	12	1
Unit 101	0	0	0	0	29.2	0	0	0	0
Unit 102	0	0	0	0	28.0	0	0	0	0
Unit 103	0	0	0	0	17.6	0	0	0	0
Unit 104	1	1	0	0	27.2	3	3	0	0
Unit 105	0	0	0	0	26.4	0	0	0	0
Unit 106	4	4	0	0	25.2	141	141	0	0
Unit 107	0	0	0	0	23.6	0	0	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Gold Grain Summary

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

	Number of Visible Gold Grains				Nonmag	Calculated PPB Visible Gold in HMC			
Sample Number	Total	Reshaped	Modified	Pristine	HMC Weight*	Total	Reshaped	Modified	Pristine
Unit 108	9	9	0	0	51.2	36	36	0	0
Unit 01	7	7	0	0	10.0	150	150	0	0
Unit 02	10	9	0	1	12.8	518	490	0	28
Unit 03	2	2	0	0	13.2	115	115	0	0
Unit 04	1	0	0	1	7.6	10	0	0	10
Unit 05	1	0	0	1	7.2	3	0	0	3
Unit 06	0	0	0	0	3.2	0	0	0	0
Unit 07	3	3	0	0	9.2	409	409	0	0
Unit 08	1	1	0	0	13.2	159	159	0	0
Unit 09	2	2	0	0	6.0	92	92	0	0
Unit 10	1	1	0	0	12.0	16	16	0	0
Unit 11	0	0	0	0	8.0	0	0	0	0
Unit 12	1	1	0	0	5.6	13	13	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm) Thickness	Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 13	8 C	25	50		1		1		3	No sulphides.
	10 C	50	50	1			1		7	
							2	28.8	9	
Unit 14	10 C	50	50	1			1		4	No sulphides.
							1	44.4	4	
Unit 15	No Visible Gold									No sulphides.
Unit 16	5 C	25	25			1	1		1	No sulphides.
							1	28.4	1	
Unit 17	No Visible Gold									No sulphides.
Unit 18	No Visible Gold									No sulphides.
Unit 19	8 C	25	50			1	1		4	No sulphides.
							1	18.4	4	
Unit 20	No Visible Gold									No sulphides.
Unit 21	No Visible Gold									No sulphides.
Unit 22	No Visible Gold									No sulphides.
Unit 23	No Visible Gold									No sulphides.
Unit 24	No Visible Gold									No sulphides.
Unit 25	13 C	50	75	1			1		12	No sulphides.
							1	30.4	12	
Unit 27	13 C	50	75	1			1		10	No sulphides.
	20 C	50	150	1			1		33	
	18 C	75	100	1			1		29	
							3	34.4	72	
Unit 28	10 C	50	50	1			1		9	No sulphides.
							1	20.4	9	
Unit 29	10 C	50	50	1			1		10	No sulphides.
							1	18.4	10	
Unit 30	No Visible Gold									No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
Unit 31	20	C	75	125	1			1		46	No sulphides.
	25	C	75	175	1			1		79	
								2	30.8	125	
Unit 32	20	C	75	125	1			1		50	No sulphides.
								1	28.0	50	
Unit 33	5	C	25	25	1			1		1	No sulphides.
	10	C	50	50	1			1		7	
								2	27.6	8	
Unit 34	15	C	50	100	1			1		22	No sulphides.
	25	C	100	150	1			1		107	
								2	26.0	129	
Unit 35	No Visible Gold										No sulphides.
Unit 36	5	C	25	25	2			2		2	Tr (1 grain) arsenopyrite (75 µm).
	15	C	50	100	1			1		18	
	44	C	200	275	1			1		577	
								4	31.6	597	
Unit 37	5	C	25	25	1			1		1	No sulphides.
	13	C	25	100	1			1		14	
	13	C	50	75	1			1		21	
								3	17.2	36	
Unit 38	No Visible Gold										No sulphides.
Unit 39	20	C	100	100	1			1		87	Tr (1 grain) arsenopyrite (25 µm).
								1	17.2	87	
Unit 40	8	C	25	50	1			1		3	No sulphides.
	15	C	50	100	1			1		21	
								2	27.2	24	
Unit 41	15	C	50	100	1			1		32	No sulphides.
								1	17.6	32	
Unit 42	3	C	15	15	2			2		1	No sulphides.
	5	C	25	25	2			2		3	
	8	C	25	50	1			1		4	
	18	C	75	100	1			1		59	
	22	C	100	125		1		1		125	
								7	16.8	192	
Unit 43	8	C	25	50	1			1		4	No sulphides.
								1	17.6	4	
Unit 44	3	C	15	15	1			1		<1	No sulphides.
	13	C	50	75	1			1		19	
								2	18.4	20	
Unit 45	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1		2	3		4	
	8	C	25	50	1	1		2		8	
	10	C	25	75	1			1		8	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
	13	C	50	75	1			1		20	
	25	C	75	175	1			1		138	
								9	17.6	179	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 46	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1			1		1	
	13	C	50	75	1			1		22	
								3	16.4	24	
Unit 47	5	C	25	25	1			1		1	No sulphides.
								1	18.8	1	
Unit 48	10	C	25	75	1			1		8	No sulphides.
								1	17.2	8	
Unit 49	3	C	15	15			1	1		<1	No sulphides.
	20	C	75	125	1			1		90	
								2	15.6	90	
Unit 50	No Visible Gold										No sulphides.
Unit 51	No Visible Gold										No sulphides.
Unit 52	No Visible Gold										No sulphides.
Unit 53	No Visible Gold										No sulphides.
Unit 54	3	C	15	15	2			2		1	No sulphides.
	5	C	25	25	1			1		1	
	18	C	25	150	1			1		24	
	13	C	50	75	1			1		17	
	15	C	50	100	1			1		27	
								6	20.8	70	
Unit 55	3	C	15	15	2			2		1	No sulphides.
	8	C	25	50	1			1		4	
	10	C	25	75	2			2		16	
								5	18.0	21	
Unit 56	3	C	15	15			1	1		<1	No sulphides.
								1	14.0	<1	
Unit 57	52	C	275	300	1			1		2443	No sulphides.
								1	13.2	2443	
Unit 58	No Visible Gold										No sulphides.
Unit 59	13	C	50	75	1			1		23	No sulphides.
								1	15.6	23	
Unit 60	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	1			1		1	
	8	C	25	50	1			1		3	
								3	22.8	4	
Unit 61	No Visible Gold										No sulphides.
Unit 62	8	C	25	50	1			1		5	No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm) Thickness		Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
								1	13.6	5	
Unit 63	8	C	25	50	2			2		9	No sulphides.
								2	16.8	9	
Unit 64	No Visible Gold										No sulphides.
Unit 65	5	C	25	25	1			1		1	No sulphides.
								1	17.2	1	
Unit 66	5	C	25	25	1			1		2	No sulphides.
	8	C	25	50	1			1		5	
	10	C	50	50	1			1		14	
								3	14.0	21	
Unit 67	No Visible Gold										No sulphides.
Unit 68	3	C	15	15	1			1		<1	No sulphides.
	5	C	25	25	2			2		3	
	10	C	50	50	1			1		11	
								4	17.6	14	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm)			Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
Unit 69	3 C	15	15	1	1		2		1	No sulphides.
	5 C	25	25	2			2		3	
	13 C	50	75	1			1		20	
	15 C	75	75	1			1		36	
	25 C	125	125	1			1		161	
							7	18.0	220	
Unit 70	5 C	25	25	2			2		3	No sulphides.
	10 C	50	50	1			1		11	
							3	17.2	14	
Unit 71	No Visible Gold									No sulphides.
Unit 72	5 C	25	25	1			1		1	Tr (4 grains) pyrite (25-100 µm).
	8 C	25	50	1			1		2	
	13 C	50	75	2			2		25	
							4	29.2	28	
Unit 73	5 C	25	25	2			2		3	No sulphides.
	8 C	25	50	2			2		8	
	15 C	50	100	1			1		30	
							5	18.8	41	
Unit 74	No Visible Gold									No sulphides.
Unit 75	No Visible Gold									No sulphides.
Unit 76	8 C	25	50	1			1		3	No sulphides.
							1	26.0	3	
Unit 77	13 C	50	75	1			1		21	No sulphides.
							1	16.8	21	
Unit 78	10 C	25	75	1			1		9	No sulphides.
							1	15.6	9	
Unit 79	3 C	15	15	1			1		<1	No sulphides.
	10 C	50	50	1			1		11	
							2	17.2	11	
Unit 80	15 C	75	75	1			1		38	No sulphides.
							1	16.8	38	
Unit 81	10 C	50	50	1			1		11	No sulphides.
							1	17.2	11	
Unit 82	No Visible Gold									No sulphides.
Unit 83	3 C	15	15			1	1		<1	No sulphides.
	8 C	25	50	1			1		4	
	10 C	50	50	1			1		11	
							3	18.0	15	
Unit 84	3 C	15	15	1			1		<1	No sulphides.
	5 C	25	25	1		1	2		2	
	13 C	50	75	1			1		12	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm) Thickness	Width	Length	Number of Visible Gold Grains Reshaped	Modified	Pristine	Total	Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
							4	30.0	14	
Unit 85	5 C	25	25	1			1		3	No sulphides.
							1	8.0	3	
Unit 86	5 C	25	25	1		1	2		2	No sulphides.
							2	28.0	2	
Unit 87	No Visible Gold									No sulphides.
Unit 88	No Visible Gold									No sulphides.
Unit 89	3 C	15	15			1	1		<1	No sulphides.
							1	16.4	0	
Unit 90	5 C	25	25	4			4		5	No sulphides.
	15 C	50	100	1			1		29	
							5	19.6	34	
Unit 91	No Visible Gold									No sulphides.
Unit 92	No Visible Gold									No sulphides.
Unit 93	5 C	25	25	2			2		3	No sulphides.
	10 C	50	50	1			1		10	
	15 C	75	75	1			1		35	
							4	18.4	48	
Unit 94	No Visible Gold									No sulphides.
Unit 95	No Visible Gold									No sulphides.
Unit 96	10 C	50	50			1	1		6	No sulphides.
	13 C	50	75	1			1		11	
							2	32.8	17	
Unit 97	5 C	25	25			1	1		1	No sulphides.
	13 C	50	75	2			2		15	
							3	48.0	15	
Unit 98	No Visible Gold									No sulphides.
Unit 99	No Visible Gold									No sulphides.
Unit 100	5 C	25	25	1		1	2		2	No sulphides.
	13 C	50	75		1		1		12	
							3	30.0	14	
Unit 101	No Visible Gold									No sulphides.
Unit 102	No Visible Gold									No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm)				Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness		Width	Length	Reshaped	Modified	Pristine	Total			
Unit 103	No Visible Gold										No sulphides.
Unit 104	8	C	25	50	1			1		3	No sulphides.
								1	27.2	3	
Unit 105	No Visible Gold										No sulphides.
Unit 106	8	C	25	50	2			2		6	No sulphides.
	15	C	75	75	1			1		25	
	25	C	100	150	1			1		110	
								4	25.2	141	
Unit 107	No Visible Gold										No sulphides.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Detailed Gold Grain Data

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Dimensions (µm)			Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
	Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
Unit 108	5 C	25	25	2			2		1	No sulphides.
	10 C	25	75	1			1		3	
	10 C	50	50	3			3		11	
	13 C	50	75	3			3		21	
							9	51.2	36	
Unit 01	5 C	25	25	2			2		5	Tr (~20 grains) pryite (25-200 µm).
	8 C	25	50	1			1		7	Tr (4 grains) loellingite (75-250) SEM
	10 C	50	50	2			2		38	check 2 of 4 loellingite versus
	13 C	50	75	1			1		36	2 loellingite.
	15 C	75	75	1			1		64	
							7	10.0	150	
Unit 02	8 C	25	50	2			2		11	Tr (3 grains) pyrite (25-50 µm).
	13 C	50	75	3		1	4		112	
	20 C	50	150	1			1		88	
	15 C	75	75	1			1		50	
	20 C	75	125	1			1		110	
	22 C	75	150	1			1		147	
							10	12.8	518	
Unit 03	5 C	25	25	1			1		2	No sulphides.
	20 C	100	100	1			1		114	
							2	13.2	115	
Unit 04	8 C	25	50			1	1		10	Tr (3 grains) loellingite (25-50 µm).
							1	7.6	10	
Unit 05	5 C	25	25			1	1		3	Tr (3 grains) loellingite (25-50 µm).
							1	7.2	3	
Unit 06	No Visible Gold									Tr (2 grains) loellingite (100-250 µm).
										Tr (~10 grains) pyrite (25-250 µm).
Unit 07	5 C	25	25	1			1		3	Tr (1 grain) loellingite (25 µm).
	10 C	50	50	1			1		21	
	27 C	100	175	1			1		385	
							3	9.2	409	
Unit 08	22 C	100	125	1			1		159	Tr (2 grains) loellingite (75 µm).
							1	13.2	159	
Unit 09	10 C	50	50	1			1		32	No sulphides.
	13 C	50	75	1			1		60	
							2	6.0	92	
Unit 10	10 C	50	50	1			1		16	Tr (2 grains) pyrite (50 µm).
							1	12.0	16	
Unit 11	No Visible Gold									No sulphides.
Unit 12	8 C	25	50	1			1		13	Tr (4 grains) loellingite (25-130 µm).
							1	5.6	13	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 0.4% of the table feed.

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 13	1298.6	773.4	525.2	510.8	14.4	3.1	2.0	9.3	5.8	2.6	0.9
Unit 14	1433.1	924.7	508.4	498.4	10.0	2.3	1.0	6.7	4.0	1.9	0.8
Unit 15	1274.7	670.7	604.0	599.1	4.9	1.1	0.5	3.3	1.8	1.1	0.4
Unit 16	1488.7	977.5	511.2	507.2	4.0	1.3	0.6	2.1	1.3	0.6	0.2
Unit 17	806.5	518.3	288.2	262.3	25.9	10.9	8.0	7.0	6.4	0.6	0.03
Unit 18	1525.8	998.6	527.2	522.3	4.9	1.5	0.4	3.0	1.9	0.8	0.3
Unit 19	1051.7	515.9	535.8	535.1	0.7	0.3	0.1	0.3	0.2	0.1	0.03
Unit 20	886.4	493.5	392.9	390.9	2.0	0.7	0.3	1.0	0.6	0.3	0.1
Unit 21	1339.8	637.8	702.0	696.2	5.8	1.2	0.5	4.1	2.4	1.1	0.6
Unit 22	1001.6	714.7	286.9	280.2	6.7	1.6	0.5	4.6	3.0	1.3	0.3
Unit 23	769.6	535.8	233.8	230.7	3.1	0.9	0.3	1.9	1.4	0.4	0.1
Unit 24	1271.7	856.0	415.7	412.4	3.3	0.9	0.3	2.1	1.4	0.6	0.1
Unit 25	980.9	616.3	364.6	356.7	7.9	1.9	1.2	4.8	3.0	1.4	0.4
Unit 27	1211.0	799.6	411.4	406.0	5.4	1.3	0.6	3.5	2.3	1.0	0.2
Unit 28	1219.9	588.9	631.0	629.3	1.7	0.5	0.2	1.0	0.7	0.2	0.1
Unit 29	817.5	635.4	182.1	176.1	6.0	1.3	0.5	4.2	2.9	1.1	0.2
Unit 30	879.0	581.0	298.0	292.9	5.1	1.1	0.6	3.4	2.2	0.9	0.3
Unit 31	1110.8	778.9	331.9	325.1	6.8	1.1	0.5	5.2	3.6	1.3	0.3
Unit 32	1404.1	968.8	435.3	425.5	9.8	2.3	0.3	7.2	6.4	0.7	0.1
Unit 33	1095.8	806.8	289.0	287.1	1.9	0.6	0.2	1.1	0.9	0.2	0.01
Unit 34	728.8	627.0	101.8	93.1	8.7	0.9	0.8	7.0	5.3	1.4	0.3
Unit 35	832.8	596.6	236.2	232.2	4.0	0.6	0.4	3.0	2.0	0.8	0.2
Unit 36	960.4	699.8	260.6	250.1	10.5	1.5	1.8	7.2	5.0	1.7	0.5
Unit 37	605.7	405.6	200.1	194.6	5.5	0.8	0.6	4.1	2.6	1.0	0.5
Unit 38	966.6	654.5	312.1	309.7	2.4	0.7	0.4	1.3	1.1	0.2	0.02
Unit 39	716.0	489.1	226.9	225.0	1.9	0.5	0.2	1.2	0.8	0.3	0.1
Unit 40	1044.0	663.9	380.1	373.6	6.5	1.5	1.3	3.7	2.4	0.9	0.4
Unit 41	832.5	507.1	325.4	322.9	2.5	0.4	0.3	1.8	1.2	0.4	0.2
Unit 42	1004.5	641.3	363.2	359.5	3.7	0.4	0.5	2.8	1.7	0.8	0.3
Unit 43	922.3	555.1	367.2	364.0	3.2	0.4	0.5	2.3	1.8	0.4	0.1
Unit 44	952.2	657.2	295.0	290.5	4.5	0.6	0.5	3.4	2.5	0.8	0.1
Unit 45	887.5	627.9	259.6	256.8	2.8	0.4	0.1	2.3	1.5	0.6	0.2
Unit 46	846.8	619.1	227.7	225.7	2.0	0.2	0.3	1.5	1.0	0.4	0.1
Unit 47	859.5	594.2	265.3	262.2	3.1	0.4	0.4	2.3	1.3	0.7	0.3
Unit 48	734.9	508.9	226.0	223.5	2.5	0.2	0.3	2.0	1.4	0.5	0.1
Unit 49	941.8	653.0	288.8	284.7	4.1	0.5	0.6	3.0	2.0	0.7	0.3
Unit 50	912.5	619.4	293.1	288.5	4.6	0.4	0.9	3.3	2.5	0.7	0.1
Unit 51	989.2	670.1	319.1	317.2	1.9	0.3	0.2	1.4	1.0	0.3	0.1
Unit 52	1046.1	761.7	284.4	281.7	2.7	0.1	0.6	2.0	1.3	0.5	0.2
Unit 53	767.2	518.8	248.4	245.6	2.8	1.2	0.4	1.2	0.8	0.3	0.1
Unit 54	833.6	539.7	293.9	285.6	8.3	1.0	1.1	6.2	3.9	1.6	0.7
Unit 55	622.1	443.2	178.9	174.2	4.7	1.0	0.6	3.1	1.9	0.9	0.3
Unit 56	387.4	271.4	116.0	113.1	2.9	0.6	0.3	2.0	1.3	0.5	0.2
Unit 57	542.0	369.5	172.5	169.7	2.8	0.8	0.2	1.8	1.1	0.4	0.3
Unit 58	688.6	470.3	218.3	217.0	1.3	0.2	0.1	1.0	0.6	0.3	0.1
Unit 59	492.4	384.4	108.0	104.5	3.5	0.5	0.2	2.8	2.0	0.6	0.2
Unit 60	776.0	528.2	247.8	244.4	3.4	0.6	0.4	2.4	1.5	0.7	0.2
Unit 61	340.4	189.5	150.9	150.0	0.9	0.2	0.4	0.3	0.2	0.1	0.04
Unit 62	446.7	340.4	106.3	104.4	1.9	0.6	0.1	1.2	0.9	0.3	0.03
Unit 63	772.7	535.1	237.6	234.9	2.7	0.5	0.1	2.1	1.4	0.6	0.1
Unit 64	572.5	367.0	205.5	203.0	2.5	0.4	0.2	1.9	1.1	0.6	0.2
Unit 65	797.4	527.8	269.6	263.7	5.9	0.9	0.4	4.6	2.8	1.3	0.5

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 66	451.0	306.8	144.2	141.4	2.8	0.4	0.1	2.3	1.2	0.8	0.3
Unit 67	485.3	291.2	194.1	191.2	2.9	0.5	0.5	1.9	1.1	0.6	0.2
Unit 68	683.6	482.1	201.5	197.9	3.6	0.4	0.5	2.7	1.5	0.8	0.4
Unit 69	806.8	541.1	265.7	261.4	4.3	0.5	0.4	3.4	2.1	0.9	0.4
Unit 70	613.1	378.3	234.8	232.8	2.0	0.5	0.3	1.2	0.9	0.2	0.1
Unit 71	504.0	366.7	137.3	134.5	2.8	0.7	0.5	1.6	1.1	0.4	0.1
Unit 72	570.6	337.5	233.1	225.2	7.9	1.0	0.6	6.3	3.5	2.5	0.3
Unit 73	238.8	175.1	63.7	61.5	2.2	0.4	0.2	1.6	1.2	0.3	0.1
Unit 74	906.4	531.1	375.3	373.5	1.8	0.6	0.1	1.1	0.7	0.3	0.1
Unit 75	840.2	607.0	233.2	231.8	1.4	0.3	0.1	1.0	0.7	0.2	0.1
Unit 76	1042.0	566.8	475.2	470.0	5.2	1.5	0.7	3.0	1.7	0.9	0.4
Unit 77	894.6	446.9	447.7	446.0	1.7	0.6	0.2	0.9	0.6	0.2	0.1
Unit 78	533.4	308.1	225.3	223.3	2.0	0.6	0.3	1.1	0.7	0.3	0.1
Unit 79	660.4	333.6	326.8	322.8	4.0	1.1	0.4	2.5	1.4	0.8	0.3
Unit 80	843.5	361.6	481.9	477.2	4.7	1.1	0.6	3.0	1.6	1.0	0.4
Unit 81	792.9	419.3	373.6	371.2	2.4	0.7	0.2	1.5	0.9	0.4	0.2
Unit 82	824.9	376.8	448.1	441.4	6.7	3.3	0.7	2.7	2.3	0.3	0.1
Unit 83	712.5	375.2	337.3	335.2	2.1	0.6	0.2	1.3	0.9	0.3	0.1
Unit 84	945.7	464.3	481.4	470.9	10.5	2.3	1.1	7.1	4.3	2.2	0.6
Unit 85	517.4	257.2	260.2	259.1	1.1	0.4	0.1	0.6	0.4	0.1	0.1
Unit 86	1087.2	411.4	675.8	671.8	4.0	1.4	0.6	2.0	1.3	0.5	0.2
Unit 87	816.1	417.1	399.0	397.3	1.7	0.6	0.1	1.0	0.7	0.2	0.1
Unit 88	833.7	344.7	489.0	486.8	2.2	0.7	0.3	1.2	0.8	0.3	0.1
Unit 89	737.8	332.9	404.9	403.4	1.5	0.4	0.2	0.9	0.6	0.2	0.1
Unit 90	681.8	343.5	338.3	334.9	3.4	1.3	0.3	1.8	1.2	0.5	0.1
Unit 91	1114.7	394.9	719.8	713.1	6.7	2.4	0.8	3.5	2.1	0.9	0.5
Unit 92	777.3	351.1	426.2	422.1	4.1	1.4	0.5	2.2	1.4	0.6	0.2
Unit 93	1084.3	511.6	572.7	568.4	4.3	1.4	0.6	2.3	1.5	0.6	0.2
Unit 94	743.3	493.9	249.4	247.4	2.0	0.5	0.1	1.4	0.9	0.4	0.1
Unit 95	1053.7	778.0	275.7	274.1	1.6	0.4	0.1	1.1	0.8	0.3	0.03
Unit 96	577.0	412.3	164.7	163.1	1.6	0.5	0.1	1.0	0.8	0.2	0.01
Unit 97	1252.1	1069.9	182.2	172.8	9.4	2.2	0.2	7.0	5.5	1.3	0.2
Unit 98	641.9	433.3	208.6	207.2	1.4	0.4	0.1	0.9	0.7	0.2	0.03
Unit 99	607.9	445.3	162.6	159.7	2.9	0.9	0.2	1.8	1.3	0.4	0.08
Unit 100	836.5	676.1	160.4	156.4	4.0	1.3	0.2	2.5	1.8	0.6	0.06
Unit 101	540.1	293.6	246.5	243.8	2.7	0.8	0.4	1.5	1.1	0.3	0.07
Unit 102	635.3	483.7	151.6	146.4	5.2	1.1	0.4	3.7	2.6	1.0	0.1
Unit 103	511.4	348.8	162.6	160.5	2.1	0.7	0.1	1.3	1.0	0.3	0.03
Unit 104	984.9	749.9	235.0	231.6	3.4	1.0	0.3	2.1	1.4	0.6	0.1
Unit 105	854.4	621.4	233.0	229.8	3.2	0.8	0.3	2.1	1.4	0.6	0.1
Unit 106	1457.3	822.2	635.1	630.1	5.0	1.3	0.4	3.3	2.3	0.9	0.1
Unit 107	1037.1	591.5	445.6	441.8	3.8	0.9	0.3	2.6	1.7	0.7	0.2
Unit 108	1155.0	925.0	230.0	220.9	9.1	1.7	0.5	6.9	4.6	1.7	0.6
Unit 01	823.2	431.6	391.6	387.6	4.0	0.7	0.5	2.8	1.6	0.7	0.5
Unit 02	995.2	611.0	384.2	372.8	11.4	1.6	2.0	7.8	4.5	2.2	1.1
Unit 03	1153.8	731.1	422.7	415.5	7.2	0.8	1.0	5.4	3.0	1.6	0.8
Unit 04	678.7	418.4	260.3	255.9	4.4	0.8	1.4	2.2	1.2	0.7	0.3
Unit 05	691.5	393.0	298.5	294.5	4.0	0.6	0.6	2.8	1.7	0.8	0.3
Unit 06	341.3	174.3	167.0	165.0	2.0	0.6	0.9	0.5	0.3	0.1	0.1
Unit 07	914.4	495.7	418.7	414.5	4.2	0.5	0.7	3.0	1.8	0.8	0.4
Unit 08	1167.2	668.1	499.1	487.5	11.6	1.2	1.7	8.7	4.3	2.9	1.5
Unit 09	589.6	385.1	204.5	202.7	1.8	0.3	0.3	1.2	0.7	0.4	0.1
Unit 10	862.6	634.8	227.8	222.5	5.3	0.8	0.4	4.1	2.5	1.1	0.5

Heavy Mineral Concentrate Processing Weights

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

	Weight of -2.0 mm Table Concentrate (g)										
			0.25 to 2.0 mm Heavy Liquid Separation at S.G. 3.20								
					HMC S.G.>3.20						
								Nonferromagnetic HMC			
Sample Number	Total	-0.25 mm	Total	Lights S.G. <3.2	Total	-0.25 mm (wash)	Mag	Total	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Unit 11	828.8	564.6	264.2	260.7	3.5	0.7	0.3	2.5	1.6	0.6	0.3
Unit 12	623.9	387.0	236.9	234.0	2.9	0.6	0.4	1.9	1.2	0.5	0.2

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

	Number of Grains																																																							
	Selected MMSIMs																		KIMs																																					
	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm						1.0 to 2.0 mm												0.5 to 1.0 mm												0.25 to 0.5 mm												Total (KIMs)	
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
Sample Number	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	**1**	1	**2**	2	**6**	6	**2**	2	0	0	**12**	12	**4**	4	0	0	**29**	29
Unit 14	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**3**	3	0	0	**1**	1	**5**	5	**1**	1	**2**	2	**11**	11	**10**	10	**1**	1	**36**	36
Unit 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	**6**	6	0	0	0	0	**1**	1	**11**	11	0	0	**18**	18
Unit 16	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**4**	4	**1**	1	0	0	**8**	8	**10**	10	**1**	1	**25**	25
Unit 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	**1**	1	**3**	3	0	0	**5**	5
Unit 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	1	0	0	**5**	5	**2**	2	0	0	**10**	10
Unit 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	0	0	**3**	3
Unit 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	**1**	1	0	0	0	0	**1**	1	0	0	**5**	5
Unit 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**2**	2	0	0	0	0	0	0	**3**	3	**2**	2	**8**	8
Unit 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	**1**	1	**7**	7	0	0	**10**	10
Unit 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	0	0	**4**	4	**6**	6	**1**	1	**14**	14
Unit 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	**1**	1	0	0	**4**	4	**11**	11	**1**	1	**19**	19
Unit 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**1**	1	0	0	**1**	1	**6**	6	0	0	**1**	1	**4**	4	**6**	6	**6**	6	**26**	26
Unit 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	1	0	0	**2**	2	0	0	**3**	3	**3**	3	**1**	1	0	0	**15**	15	**12**	12	**4**	4	**42**	42
Unit 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	**1**	1	**1**	1	**4**	4	0	0	0	0	**9**	9
Unit 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**5**	5	0	0	**1**	1	**3**	3	0	0	0	0	**10**	10	**12**	12	**2**	2	**35**	35
Unit 30	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**2**	2	0	0	0	0	**8**	8	**8**	8	**1**	1	**21**	21
Unit 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**2**	2	0	0	0	0	**6**	6	**16**	16	0	0	**27**	27
Unit 32	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	**1**	1	0	0	**1**	1	0	0	**5**	5	**3**	3	**1**	1	**12**	12
Unit 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	0	0	0	0	**6**	6	**3**	3	0	0	**12**	12
Unit 34	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	**1**	1	**5**	5	**4**	4	**1**	1	**1**	1	**12**	12	**15**	15	**10**	10	**52**	52
Unit 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**2**	2	**9**	9	0	0	**13**	13
Unit 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**2**	2	**1**	1	**1**	1	**1**	1	**3**	3	**3**	3	**5**	5	**17**	17
Unit 37	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	**1**	1	**1**	1	0	0	0	0	**5**	5	**3**	3	**1**	1	**13**	13
Unit 38	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	0	0	0	0	**3**	3	**8**	8	**1**	1	**15**	15
Unit 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	1	0	0	**4**	4	**4**	4	**1**	1	**11**	11
Unit 40	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	**4**	4	0	0	0	0	**3**	3	**8**	8	**1**	1	**19**	19
Unit 41	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**2**	2	**2**	2	**1**	1	**5**	5	**5**	5	**1**	1	**17**	17
Unit 42	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	1	**2**	2	**1**	1	0	0	**2**	2	**5**	5	**2**	2	**14**	14
Unit 43	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	0	0	0	0	**1**	1	**5**	5	0	0	**9**	9
Unit 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**3**	3	**2**	2	**1**	1	**8**	8
Unit 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**3**	3	**1**	1	**1**	1	**3**	3	**1**	1	**2**	2	**12**	12
Unit 46	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**4**	4	**2**	2	**2**	2	**4**	4	**3**	3	**2**	2	**18**	18
Unit 47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	**5**	5	0	0	0	0	**6**	6	**4**	4	**3**	3	**20**	20
Unit 48	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	0	0	0	0	0	0	0	0	**1**	1	**4**	4	**4**	4	0	0	**12**	12
Unit 49	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**6**	6	**7**	7	**2**	2	**17**	17
Unit 50	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	**2**	2	**1**	1	**3**	3	**1**	1	0	0	**10**	10	**1**	1	**19**	19
Unit 51	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**7**	7	**10**	10	0	0	**19**	19
Unit 52	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	1	0	0	0	0	**4**	4	**8**	8	**1**	1	**15**	15
Unit 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**5**	5	**7**	7	0	0	**13**	13
Unit 54	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**3**	3	**1**	1	**2**	2	0	0	**11**	11	**6**	6	**2**	2	**26**	26
Unit 55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	0	0	0	0	0	0	0	0	**2**	2	**2**	2	0	0	**8**	8	**3**	3	**3**	3	**21**	21
Unit 56	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	**1**	0	0	**2**	2	0	0	0	0	**6**	6	**11**	11	**1**	1	**22**	22
Unit 57	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	0	0	0	0	**2**	2	0	0	0	0	**2**	2	0	0	0	0	**14**	14	**13**	13	**2**	2	**36**	36
Unit 58	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**	5	**6**	6	**2**	2	**13**	13

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Number of Grains – Selected MMSIMs

Sample Number	1.0 to 2.0 mm						0.5 to 1.0 mm						0.25 to 0.5 mm					
	Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh		Low-Cr diopside		Cpy		Gh	
	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 64	0	0	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0
Unit 65	0	0	0	0	0	0	0	0	0	0	0	0	9	9	0	0	0	0
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 74	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 76	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 78	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 83	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 88	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 91	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 93	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 94	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 96	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 97	0	0	0	0	0	0	1	1	0	0	0	0	5	5	0	0	0	0
Unit 98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 100	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0
Unit 101	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
Unit 102	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 103	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0

Number of Grains – KIMs

Sample Number	1.0 to 2.0 mm												0.5 to 1.0 mm												0.25 to 0.5 mm												Total (KIMs)	
	GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO		GP		GO		DC		IM		CR		FO			
	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Unit 59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**2**	2	0	0	0	0	**7**	7	**7**	7	**5**	5	**22**	22
Unit 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**4**	4	**1**	1	0	0	**2**	2	**9**	9	**3**	3	**20**	20
Unit 61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**5**	5	**3**	3	0	0	**10**	10
Unit 63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**3**	3	0	0	**1**	1	**7**	7	**3**	3	0	0	**15**	15
Unit 64	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	**6**	6	**1**	1	**9**	9
Unit 65	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	0	0	0	0	0	0	0	0	**2**	2	**2**	2	0	0	**1**	1	**40**	21	**2**	2	**50**	31
Unit 66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**	7	0	0	**7**	7
Unit 67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	1	**1**	1	**1**	1	0	0	0	0	**2**	2	**6**	6	**1**	1	**13**	13
Unit 68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**3**	3	**2**	2	0	0	**6**	6
Unit 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	0	0	0	0	**4**	4	**1**	1	0	0	**10**	10	**11**	11	**1**	1	**30**	30
Unit 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**3**	3	**3**	3	0	0	**7**	7
Unit 71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**3**	3	0	0	**4**	4
Unit 72	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**5**	5	**7**	7	0	0	**15**	15
Unit 73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**1**	1	0	0	**2**	2	0	0	0	0	0	0	**4**	4	0	0	**8**	8
Unit 74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	0	0	**3**	3
Unit 75	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**5**	5	0	0	0	0	**1**	1	**1**	1	0	0	**8**	8
Unit 76	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**3**	3	0	0	0	0	**2**	2	0	0	0	0	**5**	5	**6**	6	0	0	**18**	18
Unit 77	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	**2**	2	0	0	**6**	6
Unit 78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	**5**	5	**1**	1	**8**	8
Unit 79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**1**	1	**1**	1	0	0	0	0	**3**	3	**1**	1	**2**	2	**9**	9
Unit 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**2**	2	0	0	0	0	**1**	1	0	0	0	0	0	0	**7**	7	**4**	4	**15**	15
Unit 81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	**1**	1	**1**	1	**3**	3	**4**	4	**1**	1	**12**	12
Unit 82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**3**	3	0	0	0	0	**4**	4
Unit 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**	4	0	0	0	0	**2**	2	**1**	1	0	0	**7**	7
Unit 84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**2**	2	**2**	2	0	0	**6**	6
Unit 85	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	0	0	**1**	1	**3**	3	0	0	**8**	8
Unit 86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	**3**	3	0	0	**6**	6
Unit 87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**2**	2	**3**	3	**2**	2	**8**	8
Unit 88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**	4	0	0	0	0	0	0	**1**	1	0	0	**5**	5
Unit 89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	0	0	0	0	**2**	2	0	0	0	0	**7**	7	0	0	**1**	1	**13**	13
Unit 90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	**1**	1
Unit 91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	3	0	0	0	0	**10**	10	**1**	1	**1**	1	**15**	15	**14**	14	**1**	1	**45**	45
Unit 92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	**1**	1	0	0	0	0	**6**	6	**2**	2	0	0	**11**	11
Unit 93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**1**	1	**7**	7	0	0	0	0	**4**	4	**2**	2	**3**	3	**18**	18
Unit 94	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**2**	2	**1**	1	0	0	**1**	1	**2**	2	**1**	1	**9**	9
Unit 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	0	0	0	0	0	0	0	0	0	0	**2**	2	**2**	2	0	0	**6**	6
Unit 96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	**12**	12	**7**	7	0	0	**20**	20
Unit 97	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	0	0	**10**	10	0	0	0	0	**12**	12	**18**	18	**3**	3	**46**	46
Unit 98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	**1**	1	0	0	0	0	**1**	1	**6**	6	0	0	**9**	9
Unit 99	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	**1**	1	**5**	5	**1**	1	0	0	**2**	2	**2**	2	**2**	2	**16**	16
Unit 100	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**2**	2	0	0	0	0	**1**	1	0	0	0	0	**2**	2	**1**	1	**1**	1	**8**	8
Unit 101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	**1**	1	0	0	**2**	2	**4**	4
Unit 102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	**3**	3	0	0	0	0	**10**	10	**2**	2	**1**	1	**17**	17
Unit 103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	1	**1**	1	**5**	5	**4**	4	0	0	**12**	12

Kimberlite Indicator Mineral Counts

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Number of Grains — Selected MMSIMs

Sample Number	1.0 to 2.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.5 to 1.0 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P	0.25 to 0.5 mm Low-Cr diopside T	P	Cpy T	P	Gh T	P
Unit 104	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 107	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 108	0	0	0	0	0	0	1	1	0	0	0	0	8	8	0	0	0	0
Unit 01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 03	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
Unit 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 06	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 08	0	0	0	0	0	0	4	4	0	0	0	0	20	10	2	2	0	0
Unit 09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 10	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	0	0	0
Unit 11	0	0	0	0	0	0	1	1	0	0	0	0	8	8	0	0	0	0
Unit 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number of Grains — KIMs

Sample Number	1.0 to 2.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	0.5 to 1.0 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P
Unit 104	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Unit 107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Unit 108	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	2	2
Unit 01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Unit 03	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3
Unit 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Unit 08	2	2	0	0	1	1	19	19	0	0	0	0	18	18	10	10	0	0	50	20	0	0	0	0
Unit 09	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
Unit 10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2
Unit 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	1	0	0
Unit 12	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0

Sample Number	0.25 to 0.5 mm GP T	P	GO T	P	DC T	P	IM T	P	CR T	P	FO T	P	Total (KIMs) T	P
Unit 104	2	2	0	0	0	0	9	9	6	6	0	0	19	19
Unit 105	4	4	0	0	0	0	2	2	2	2	0	0	8	8
Unit 106	2	2	0	0	1	1	4	4	4	4	1	1	13	13
Unit 107	1	1	1	1	1	1	7	7	8	8	1	1	20	20
Unit 108	6	6	0	0	0	0	10	10	11	11	1	1	33	33
Unit 01	2	2	0	0	1	1	0	0	3	3	0	0	6	6
Unit 02	1	1	0	0	1	1	5	5	7	7	0	0	15	15
Unit 03	3	3	0	0	1	1	5	5	11	11	0	0	25	25
Unit 04	0	0	0	0	0	0	2	2	0	0	0	0	2	2
Unit 05	0	0	0	0	0	0	1	1	3	3	0	0	4	4
Unit 06	0	0	0	0	0	0	1	1	1	1	0	0	2	2
Unit 07	0	0	0	0	0	0	3	3	5	5	0	0	10	10
Unit 08	80	20	30	20	3	3	120	20	8	8	0	0	341	141
Unit 09	2	2	1	1	0	0	2	2	7	7	1	1	15	15
Unit 10	6	6	2	2	0	0	5	5	8	8	0	0	24	24
Unit 11	2	2	0	0	0	0	9	9	3	3	0	0	18	18
Unit 12	1	1	0	0	1	1	0	0	6	6	0	0	10	10

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Remarks
Unit 13	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 CR; and 2 FO versus diopside candidates = 2 FO. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope). 1 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 14	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 6 IM versus crustal ilmenite candidates = 2 IM and 4 CR; and 1 FO versus diopside candidate = 1 FO.
Unit 15	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 16	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 4 grossular; and 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 17	Orthopyroxene-fayalite-ilmenite/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.; 5 fayalite (major paramagnetic assemblange mineral) candidates = 5 fayalite; and 5 orthopyroxene (major paramagnetic assemblage mineral) versus augite candidates =5 orthopyroxene.
Unit 18	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite.
Unit 19	Almandine/epidote-diopside assemblage.
Unit 20	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 21	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM check from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO.
Unit 22	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 IM, 3 crustal ilmenite and 1 CR. Sole IM from 0.25-0.5 mm fraction has partial alteration mantle.
Unit 23	Amandine-hornblende/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has partial alteration mantle.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Remarks
Unit 24	Almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 1 IM and 1 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 25	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). SEM checks from 0.25-0.5 mm fraction: 2 GP verus almandine candidates = 2 GP; and 6 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 3 CR.
Unit 27	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 FO versus epidote candidates = 2 FO and 1 epidote. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidate = 1 CR; and 1 FO versus diopside candidate = 1 FO. Sole IM from 1.0-2.0 mm, both IM from 0.5-1.0 mm, and 1 GP and 5 IM from 0.25-0.5 fractions have partial alteration mantles.
Unit 28	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope). Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 29	Almandine-hornblende-augite/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm; 2 IM from 0.5-1.0 mm; and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 30	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 13 IM versus crustal ilmenite candidates = 4 IM, 4 crustal ilmenite and 5 CR; and 3 FO versus epidote candidates = 1 FO and 2 epidote. 1 IM from 0.5-1.0 mm; 1 GP and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 31	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 CR. Sole IM from 1.0-2.0 mm; 1 IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 32	Hornblende-almandine/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GP versus almandine candidate = 1 GP. SEM check from 0.25-0.5 mm fraction: 1 IM versus CR candidate = 1 CR. 1 GP from 0.5-1.0; and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 33	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 34	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; and 3 GO versus grossular candidates = 3 grossular. 1 GP from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Remarks
Unit 35	Almandine-hornblende/epidote-diopside assemblage.
Unit 36	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus grossular candidate = 1 grossular. Sole GP and 1 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 37	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 5 IM and 1 crustal ilmenite. Both IM from 0.5-1.0 mm fractions have partial alteration mantles.
Unit 38	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 1 FO and 1 epidote. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 39	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus epidote candidates = 2 epidote. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 40	Almandine-augite-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; and 5 CR candidates = 4 CR and 1 crustal ilmenite.
Unit 41	Almandine-hornblende/epidote-diopside assemblage.
Unit 42	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 3 IM versus crustal ilmenite candidates = 2 IM and 1 CR; and 4 CR candidates = 4 CR. 1 GP from 0.25-0.5 mm fraction lost in transfer to vial.
Unit 43	Almandine-fayalite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 1 IM, 4 crustal ilmenite and 1 CR.
Unit 44	Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 almandine; 2 IM versus crustal ilmenite candidates = 2 IM; and 1 FO versus epidote candidate = 1 epidote. Sole IM from 0.5-1.0 fraction has a partial alteration mantle.
Unit 45	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus grossular candidate = 1 Mn-almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 GO (Cr-poor pyrope); 1 IM versus CR candidates = 1 crustal ilmenite; and 1 FO versus epidote candidates = 1 epidote. 1 GP and 2 IM from 0.25-0.5 mm have partial alteration mantles.
Unit 46	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 7 IM versus crustal ilmenite candidates = 4 IM and 3 crustal ilmenite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Remarks
Unit 47	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite, 1 tourmaline and 1 andradite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 48	Almandine-hornblende-augite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 staurolite. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 49	Almandine-hornblende/epidote-diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 almandine. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 50	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.
Unit 51	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 almandine. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 52	Almandine-hornblende/epidote-diopside assemblage.
Unit 53	Almandine-hornblende/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 54	Almandine-hornblende-augite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 FO versus diopside candidates = 3 FO. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine = 1 GO (Cr-poor pyrope); and 4 IM versus crustal ilmenite candidates = 4 IM. 1 GO and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 55	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 1 IM versus crustal ilmenite candidate = 1 IM. One GP from 0.5-1.0 mm and both GP, 1 GO, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 56	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 ruby corundum; and 1 FO versus zoisite candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 GP, and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 57	Almandine-hornblende/epidote-diopside assemblage. All 3 GP and 1 IM from 0.5-1.0 mm and 1 GP and 6 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 58	Almandine-hornblende-augite/epidote-diopside-titanite assemblage.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Remarks
Unit 59	Almandine-hornblende/epidote-diopside assemblage.
Unit 60	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope); and 2 IM versus crustal ilmenite candidates = 2 IM.
Unit 61	Hornblende-hematite/epidote-zircon assemblage. SEM checks from 0.25-0.5 mm fraction: 5 titanite versus zircon candidates = 5 zircons.
Unit 62	Hornblende-almandine/epidote-diopside assemblage. Sole IM from 0.5-1.0 mm and sole GP and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 63	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Unit 64	Hornblende-almandine/epidote-diopside assemblage.
Unit 65	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 2 GO (Cr-poor pyrope); and 3 IM versus crustal ilmenite candidates = 1 IM, 1 crustal ilmenite and 1 CR.
Unit 66	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 CR.
Unit 67	Almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 FO versus diopside candidate = 1 FO. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 68	Almandine-hornblende/epidote-staurolite-diopside assemblage. Sole IM from 0.5-1.0 mm and 2 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 69	Almandine-hornblende/epidote-diopside assemblage. 2 IM from 0.5-1.0 mm and 5 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 70	Almandine/epidote-diopside assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 71	Almandine-hornblende/epidote-staurolite assemblage.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

Sample Number	Remarks
Unit 72	Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 73	Almandine-hornblende/epidote-diopside assemblage.
Unit 74	Almandine-hematite-hornblende/epidote-staurolite assemblage. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 75	Almandine-hematite/epidote-staurolite assemblage. Sole GP from 0.5-1.0 mm; and 2 GP and sole IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 76	Almandine-hornblende/epidote-staurolite-diopside assemblage. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 77	Almandine/epidote-diopside-staurolite assemblage. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 78	Almandine-hornblende/epidote-diopside-staurolite assemblage.
Unit 79	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. Sole IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 80	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 6 crustal ilmenite and 1 FO candidate = 1 FO. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 81	Almandine-hornblende/epidote-diopside-staurolite assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 82	Almandine-augite/diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 83	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM.
Unit 84	Almandine/epidote-staurolite assemblage. Both IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 85	Almandine-hornblende/epidote-staurolite assemblage. Sole IM from 1.0-2.0 mm fraction has a partial alteration mantle.
Unit 86	Almandine-hornblende/epidote-staurolite assemblage.
Unit 87	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus zoisite candidates = 2 FO. Sole IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 88	Almandine-hornblende/epidote-diopside-staurolite assemblage. 3 GP from 0.25-0.5 mm fraction have partial alteration mantles.

Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

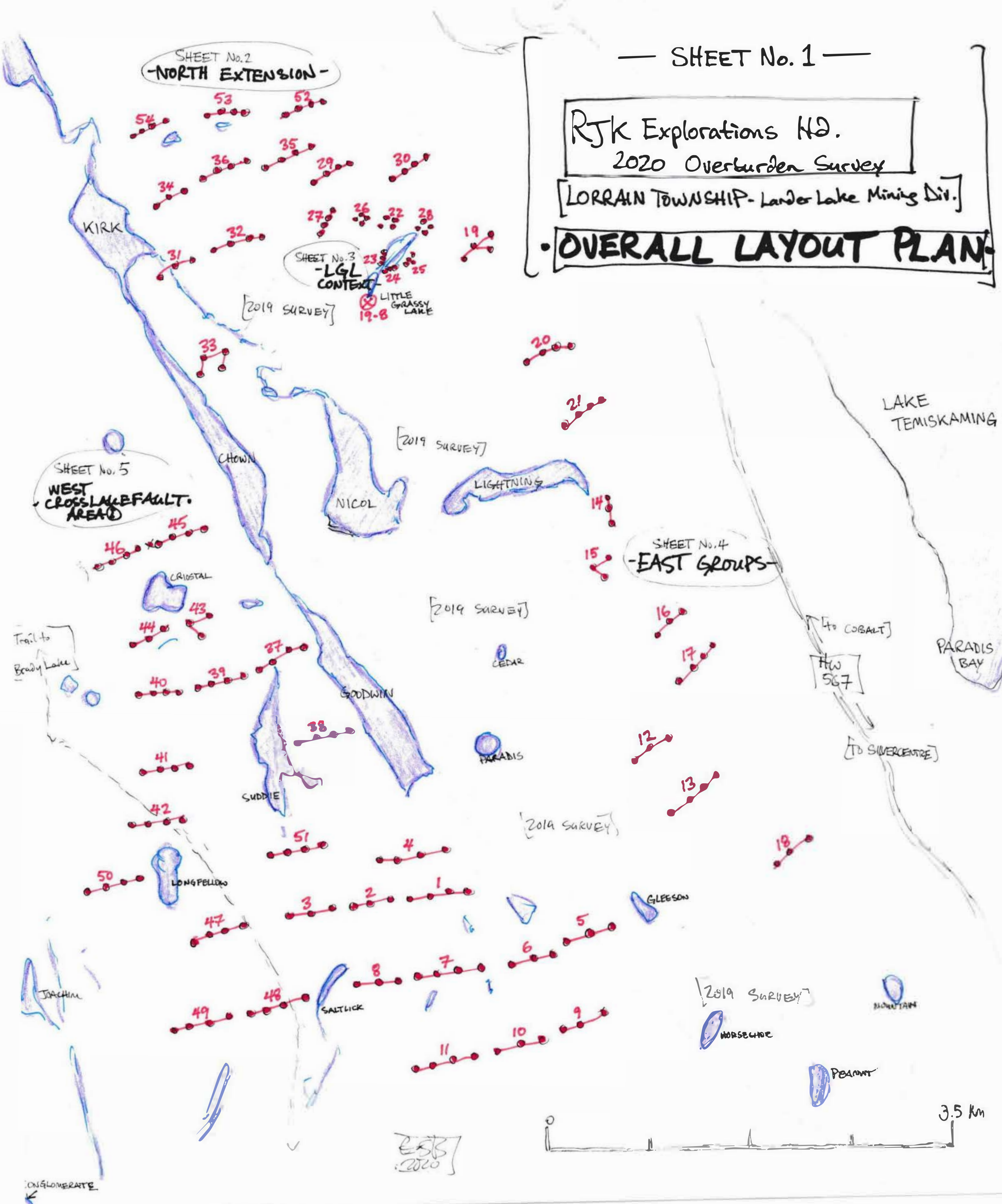
Sample Number	Remarks
Unit 89	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. 1 IM from 0.5-1.0 mm and 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 90	Almandine-hornblende/epidote-diopside-staurolite assemblage.
Unit 91	Almandine-hornblende/epidote-staurolite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope); 1 FO versus zoisite candidate = 1 FO. 4 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 92	Almandine-hornblende/epidote-staurolite assemblage. 1 IM from 0.5-1.0 mm; and sole GP and 4IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 93	Almandine-hornblende/epidote-staurolite-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 forsterite versus epidote candidates = 2 FO. 2 GP and 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 94	Almandine-hornblende/epidote-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM; 2 FO versus epidote candidates = 1 FO and 1 epidote. Sole IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 95	Almandine-hornblende/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular. 1 IM from 0.5-1.0 mm and 1 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 96	Almandine-hornblende/epidote-diopside assemblage. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 97	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 grossular. SEM checks from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 grossular; and 2 FO versus enstatite candidates = 2 epidote. 1 IM from 0.5-1.0 mm; and 2 GP and 5 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 98	Almandine-hornblende/epidote-staurolite assemblage.
Unit 99	Almandine-hornblende/epdiote assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus staurolite candidate = 1 GO (Cr-poor pyrope).
Unit 100	Almandine-hornblende/epidote-diopside-staurolite assemblage. 1 IM from 0.5-1.0 mm fraction has a partial alteration mantle.
Unit 101	Hornblende-almandine/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 FO. Sole GP from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 102	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 FO versus diopside candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 IM; 1 FO versus diopside candidate = 1 FO; and 1 enstatite versus FO candidate = 1 enstatite. 2 GP and 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.

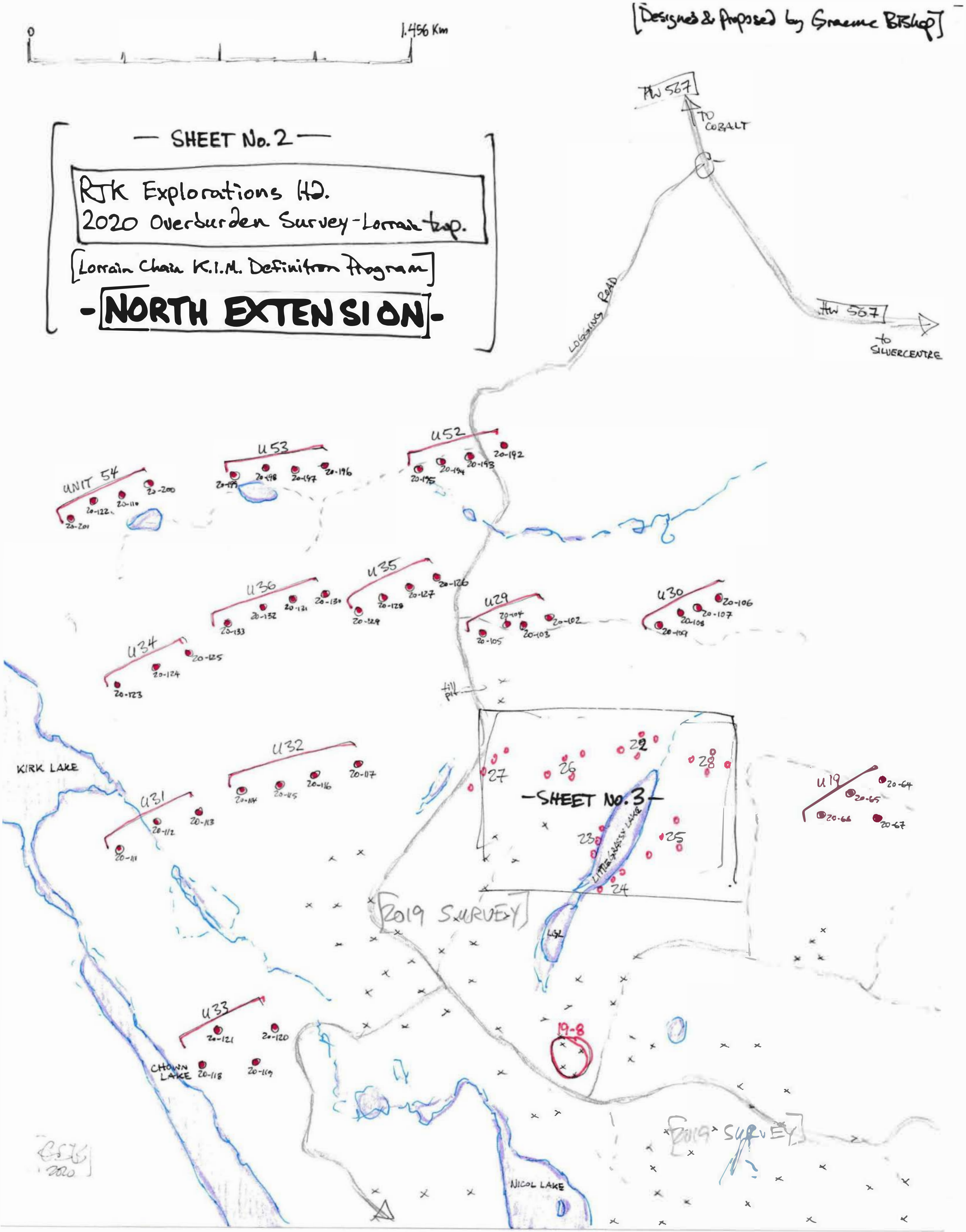
Kimberlite Indicator Mineral Remarks

Client: RJK Exploration Ltd.
File Name: 20198213 - RJK Exploration - Kasner - (Gold, KIMs) - December 2019
Total Number of Samples in this Report: 12
ODM Batch Number(s): 8314

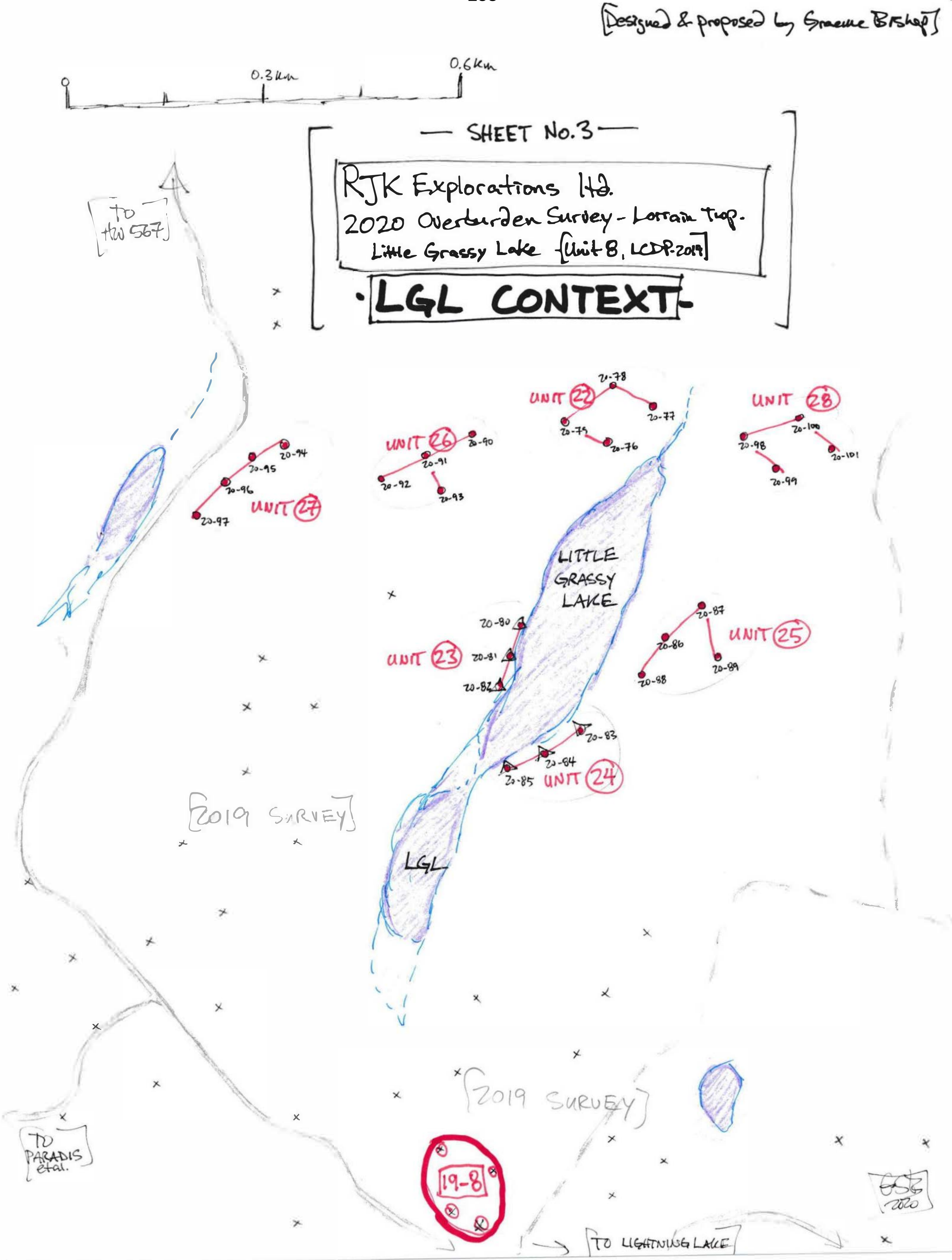
Sample Number	Remarks
Unit 103	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 GO (Cr-poor pyrope). 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 104	Almandine-hornblende/epidote-diopside-staurolite assemblage. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 105	Almandine-hornblende/epidote-diopside-staurolite assemblage.
Unit 106	Almandine-hornblende/epidote-diopside-staurolite assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 107	Almandine-hornblende/epidote-diopside-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GO versus grossular candidates = 1 GO (Cr-poor pyrope) and 1 spessartine; and 1 FO versus epidote candidate = 1 FO (lost in transfer to vial). One CR has attached gangue material. 4 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 108	Almandine-hornblende/epidote-diopside-staurolite assemblage. Sole GP and both IM from 0.5-1.0 mm; and 2 GP and 3 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 01	Almandine-augite-hornblende/epidote-staurolite-diopside assemblage.
Unit 02	Almandine-augite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 bronz sulfide candidate = 1 niccolite (NiAs); and 1 arsenopyrite versus loellingite candidate = 1 loellingite. 3 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 03	Almandine-augite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 2 IM, 1 crustal ilmenite and 2 CR. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 04	Augite-almandine/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 05	Augite-almandine-hornblende/epidote-diopside assemblage.
Unit 06	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 grossular; and 1 IM versus crustal ilminite candidate = 1 IM.
Unit 07	Almandine-augie-hornblende/epidote-diopside assemblage.
Unit 08	Almandine-augite/epidote-diopside assemblage. 20% IM from 0.5-1.0 mm and 20% IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 09	Almandine-augite-hematite/epidote-diopside assemblage. 1 IM from 0.25-0.5 mm fraction has a partial alteration mantle.
Unit 10	Almandine-hornblende-augite/epidote-diopside-staurolite assemblage. 2 IM from 0.25-0.5 mm fraction have partial alteration mantles.
Unit 11	Almandine-hornblende-augite/epidote-diopside assemblage. 1 IM from 0.5-1.0 mm and 4 IM from 0.25-0.5 mm fractions have partial alteration mantles.
Unit 12	Almandine-hornblende/epidote-diopside assemblage. Sole IM from 1.0-2.0 mm and sole IM from 0.5-1.0 mm fractions have partial alteration mantles.

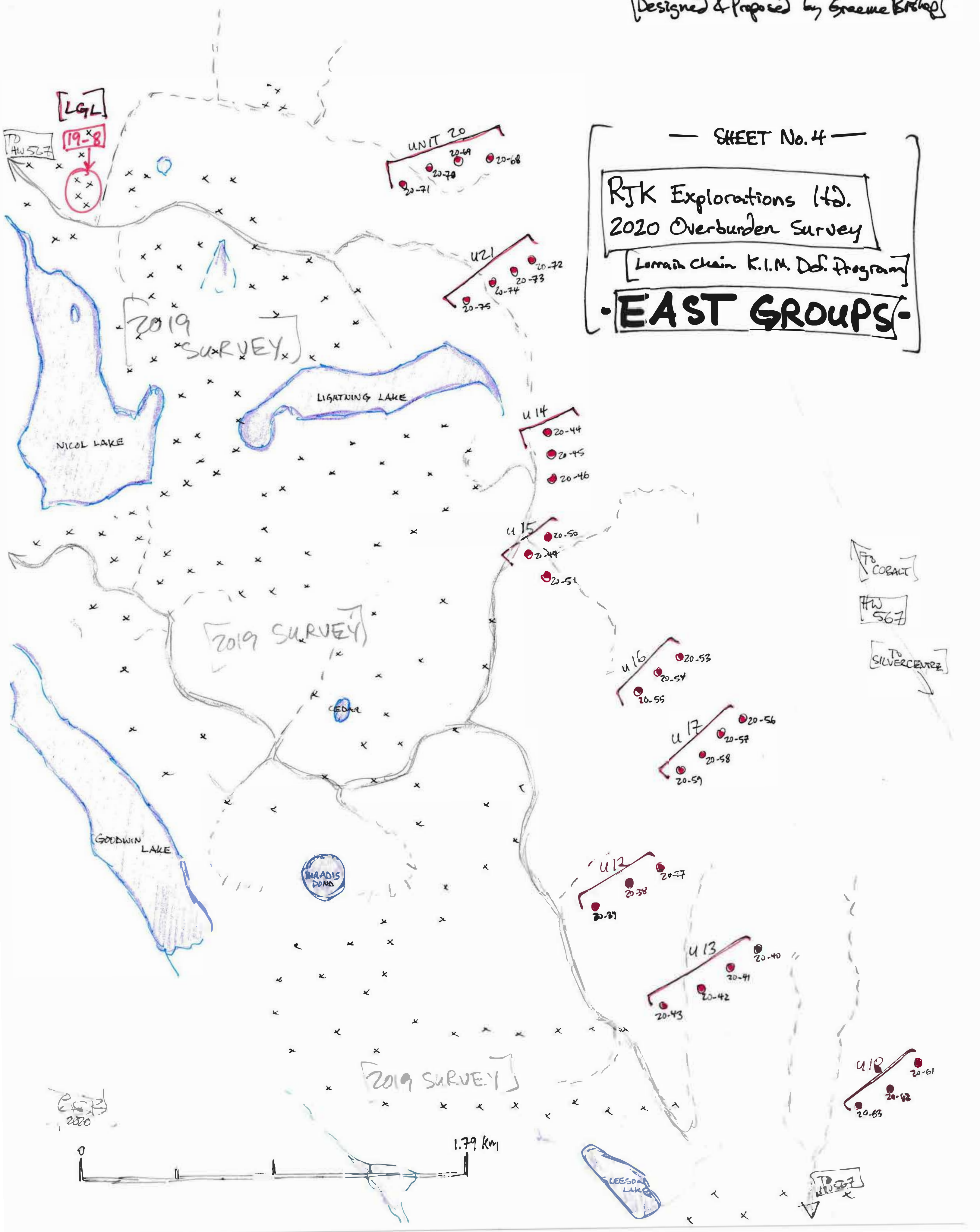
[Designed & proposed by Graeme Bishop]



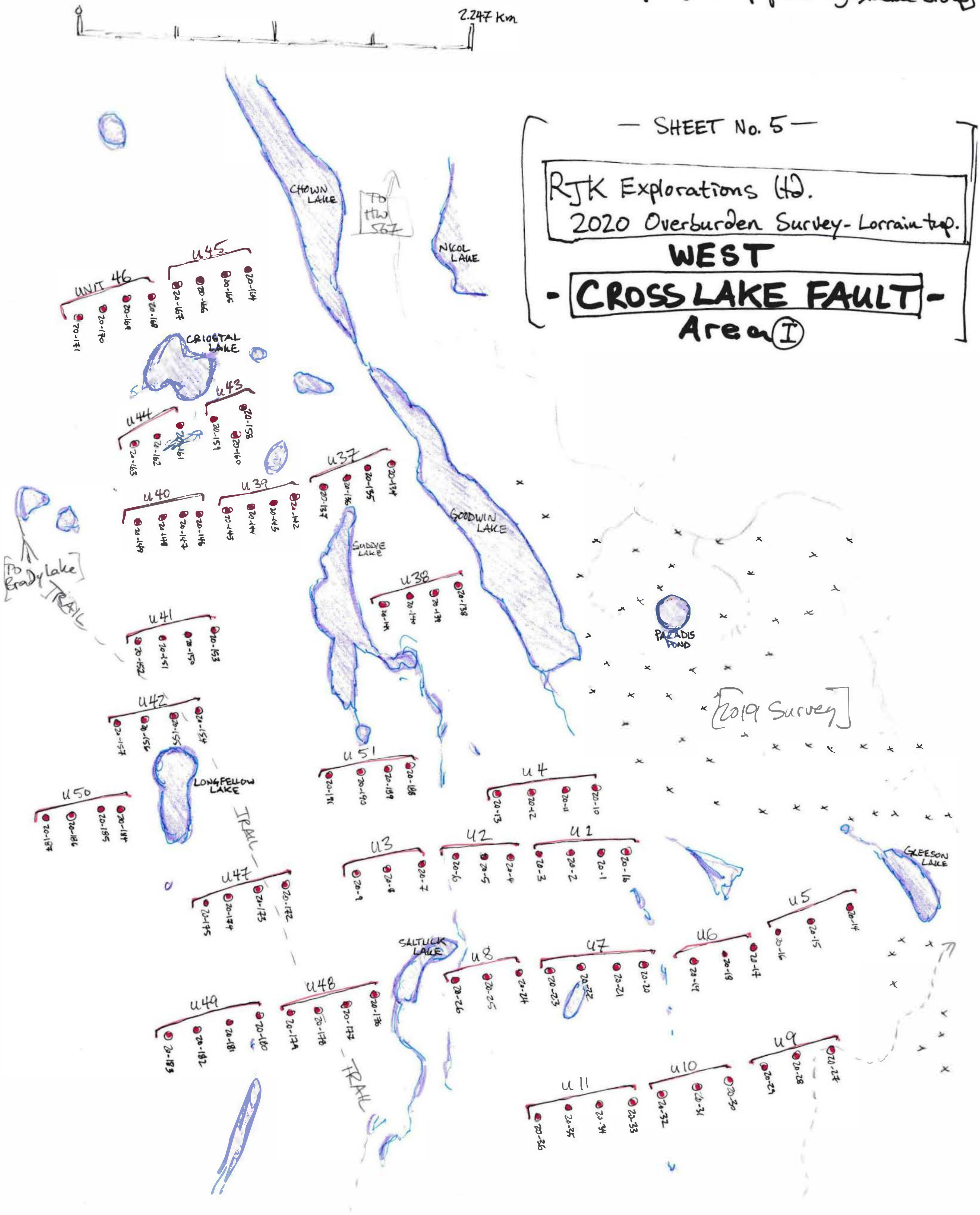


[Designed & Proposed by Graeme Bishop]
0
1.456 Km
— SHEET No. 2 —
RJK Explorations Ltd.
2020 Overburden Survey - Lorrain twp.
[Lorrain Chain K.I.M. Definition Program]
-[NORTH EXTENSION]-
HW 567
TO COBALT
HW 567
to SILVERCENTRE
LOGGING ROAD
UNIT 54
20-201
20-122
20-110
20-200
U53
20-199
20-198
20-197
20-196
U52
20-195
20-194
20-193
20-192
U36
20-133
20-132
20-131
20-130
U35
20-129
20-128
20-127
20-126
U29
20-105
20-104
20-103
20-102
U30
20-109
20-108
20-107
20-106
U34
20-123
20-124
20-125
till pit
U32
20-114
20-115
20-116
20-117
KIRK LAKE
U31
20-111
20-112
20-113
27
26
22
28
-SHEET No. 3-
LITTLE GRASSY LAKE
23
25
24
LGL
U19
20-64
20-65
20-66
20-67
[2019 SURVEY]
U33
20-121
20-120
CHOWN LAKE
20-118
20-119
19-8
[2019 SURVEY]
NICOL LAKE
GSB 2020


[Designed & proposed by Graeme Bishop]
0
0.3 km
0.6 km
— SHEET No.3 —
RJK Explorations Ltd.
2020 Overburden Survey - Lorrain Twp.
Little Grassy Lake {Unit 8, LCDP-2019}
·LGL CONTEXT·
TO HW 567
UNIT 22
20-78
20-77
20-79
20-76
UNIT 28
20-100
20-98
20-101
20-99
UNIT 26
20-90
20-91
20-92
20-93
20-94
20-95
20-96
20-97
UNIT 27
LITTLE GRASSY LAKE
20-87
20-86
UNIT 25
20-88
20-89
20-80
UNIT 23
20-81
20-82
20-83
20-84
20-85
UNIT 24
[2019 SURVEY]
LGL
[2019 SURVEY]
TO PARADIS et al.
19-8
TO LIGHTNING LAKE
GSB 2020


[Designed & Proposed by Graeme Bishop]
— SHEET No. 4 —
RJK Explorations Ltd.
2020 Overburden Survey
[Lorrain Chain K.I.M. Def. Program]
- EAST GROUPS -
LGL
19-8
TO HW 567
UNIT 20
20-69
20-68
20-70
20-71
U21
20-72
20-73
20-74
20-75
2019 SURVEY
LIGHTNING LAKE
NICOL LAKE
U14
20-44
20-45
20-46
U15
20-50
20-49
20-51
2019 SURVEY
TO COBALT
HW 567
TO SILVERCENTRE
U16
20-53
20-54
20-55
CEDAR
U17
20-56
20-57
20-58
20-59
GOODWIN LAKE
PARADIS POND
U12
20-37
20-38
20-39
U13
20-40
20-41
20-42
20-43
2019 SURVEY
U18
20-61
20-62
20-63
2020
0
1.79 Km
LEESON LAKE
TO HW 567

[Designed & proposed by Graeme Bishop]



2020 – RJK Explorations ltd. Overburden Sampling, Lorrain Twp.

(plan and units proposed by GSB)

Sheet No.1 – Overall Layout Plan

Sheet No.2 - North Extension: **12 Units**. (28 29 30 31 32 33 34 35 36 52 53 54)

Sheet No. 3 - LGL Context: **7 Units**. (19 22 23 24 25 26 27)

Sheet No. 4 - East Groups: **9 Units**. (12 13 14 15 16 17 18 20 21)

Sheet No. 5 - West Cross Lake Fault area: **26 Units**. (1 2 3 4 5 6 7 8 9 10 11 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51)

-Estimated total ODM lab invoice cost @ **20,679.30**
-Estimated time in the field for sample collection 15-18 days @ approx.. 9,000.00
Survey cost estimate approximately **30,000.00 - 35,000.00**

Sheet No.2

NORTH EXTENSION

Sample No.	Coordinates	Claim Area
	Unit 28:	**[Cobalt Pow.]**
20-98 -	0606313 E 5246645 N	
20-99 -	0606367 E 5246598 N	
20-100 -	0606401 E 5246671 N	
20-101 -	0606450 E 5246625 N	
	Unit 29:	**[Cobalt Pow.]**
20-102 -	0605779 E 5247181 N	
20-103 -	0605677 E 5247165 N	
20-104 -	0605587 E 5247149 N	
20-105 -	0605510 E 5247116 N	

Unit 30: [Cobalt Pow.]

20-106 - 0606411 E
5247251 N

20-107 - 0606335 E
5247225 N

20-108 - 0606264 E
5247195 N

20-109 - 0606186 E
5247155 N

Unit 31: [Cobalt Pow.]

20-111 - 0604146 E
5246292 N

20-112 - 0604275 E
5246398 N

20-113 - 0604448 E
5246440 N

Unit 32: [Cobalt Pow.]

20-114 - 0604596 E
5246521 N

20-115 - 0604750 E
5246547 N

20-116 - 0604868 E
5246571 N

20-117 - 0605034 E
5246623 N

Unit 33: [Cobalt Ind.]

20-118 - 0604459 E
5245470 N

20-119 - 0604660 E
5245487 N

20-120 - 0604745 E
5245627 N

20-121 - 0604522 E
5245611 N

Unit 34:	[Cobalt Pow.]
20-123 -	0604123 E 5246917 N
20-124 -	0604274 E 5246993 N
20-125 -	0604387 E 5247033 N

Unit 35:	[Cobalt Pow.]
20-126 -	0605342 E 5247334 N
20-127 -	0605237 E 5247296 N
20-128 -	0605133 E 5247248 N
20-129 -	0605022 E 5247204 N

Unit 36:	[Cobalt Pow.]
20-130 -	0604921 E 5247263 N
20-131 -	0604788 E 5247245 N
20-132 -	0604670 E 5247211 N
20-133 -	0604539 E 5247145 N

Unit 52:	[Cobalt Pow.]
20-192 -	0605576 E 5247830 N
20-193 -	0605460 E 5247794 N
20-194 -	0605359 E 5247768 N
20-195 -	0605259 E 5247745 N

Unit 53: [Cobalt Pow.]

20-196 - 0604908 E
5247756 N

20-197 - 0604790 E
5247744 N

20-198 - 0604673 E
5247731 N

20-199 - 0604556 E
5247715 N

Unit 54: [Cobalt Pow.]

20-200 - 0604249 E
5247673 N

20-110 - 0604130 E
5247636 N

20-122 - 0604027 E
5247601 N

20-201 - 0603937 E
5247547 N

Sheet No.3

Little Grassy Lake Context

Unit 19: [Cobalt Ind.]

20-64 - 0607065 E
5246604 N

20-65 - 0606916 E
5246535 N

20-66 - 0606798 E
5246454 N

20-67 - 0607032 E
5246456 N

Unit 22: [Cobalt Pow.]

20-76 - 0606103 E
5246643 N

20-77 - 0606174 E
5246698 N

20-78 - 0606612 E
5246728 N

20-79 - 0606041 E
5246682 N

Unit 23: **[Cobalt Pow.]**

20-80 - 0605956 E
5244361 N

20-81 - 0605946 E
5246308 N

20-82 - 0605923 E
5246273 N

Unit 24: **[Bishop, Cobalt Pow.]**

20-83 - 0606050 E
5246190 N

20-84 - 0605996 E
5246159 N

20-85 - 0605936 E
5246136 N

Unit 25: **[Cobalt Pow.]**

20-86 - 0606183 E
5246335 N

20-87 - 0606243 E
5246390 N

20-88 - 0606152 E
5246287 N

20-89 - 0606269 E
5246306 N

Unit 26: **[Cobalt Pow.]**

20-90 - 0605892 E
5246660 N

20-91 - 0605820 E
5246628 N

20-92 - 0605753 E
5246590 N

20-93 - 0605841 E
5246565 N

Unit 27: [Cobalt Pow.]

20-94 - 0605602 E
5246644 N

20-95 - 0605550 E
5246623 N

20-96 - 0605510 E
5246585 N

20-97 - 0605467 E
5246534 N

Sheet No.4

EAST GROUPS

Sample No.	Coordinates	Claim Area
	Unit 12:	**[Bishop, Cruz Cob.]**
20-37 -	0608607 E 5242343 N	
20-38 -	0608423 E 5242252 N	
20-39 -	0608275 E 5242151 N	
	Unit 13:	**[RJK, Bishop]**
20-40 -	0609025 E 5241939 N	
20-41 -	0608896 E 5241847 N	
20-42 -	0608768 E 5241747 N	
20-43 -	0608591 E 5241668 N	
	Unit 14:	**[Bishop]**
20-44 -	0608046 E 5244337 N	
20-45 -	0608061 E 5244248 N	
20-46 -	0608064 E 5244135 N	
	Unit 15:	**[Cruz Cob.]**
20-49 -	0607945 E 5243767 N	
20-50 -	0608055 E 5243854 N	
20-51 -	0608050 E 5243664 N	

Unit 16: **[RJK, Cruz Cob.]**

20-52 - 0608811 E
5243422 N

20-53 - 0608688 E
5243327 N

20-54 - 0608585 E
5243251 N

20-55 - 0608486 E
5243174 N

Unit 17: **[RJK]**

20-56 - 0608987 E
5243036 N

20-57 - 0608872 E
5242950 N

20-58 - 0608775 E
5242865 N

20-59 - 0608678 E
5242776 N

Unit 18: **[RJK, Bishop]**

20-61 - 0609813 E
5241397 N

20-62 - 0609655 E
5241297 N

20-63 - 0609519 E
5241216 N

Unit 20: **[RJK, Cobalt Ind.]**

20-68 - 0607761 E
5245648 N

20-69 - 0607625 E
5245650 N

20-70 - 0607482 E
5245593 N

20-71 - 0607352 E
5245524 N

Unit 21: **[Bishop]**

20-72 - 0607963 E
5245190 N

20-73 - 0607868 E
5245124 N

20-74 - 0607797 E
5245080 N

20-75 - 0607676 E
5245010 N

Sheet no.5

West Cross Lake Fault area

Sample No. Coordinates Claim Area

Unit 1: **[RJK, Camilleri]**

20-1 – 0606640 E
5240940 N

20-1b - 0606790 E
5240938 N

20-2 - 0606462 E
5240925 N

20-3 - 0606294 E
5240915 N

Unit 2: **[Camilleri]**

20-4 – 0606123 E
5240898 N

20-5 - 0605971 E
5240889 N

20-6 - 0605824 E
5240880 N

Unit 3: **[RJK, Camilleri]**

20-7 - 0605628 E
5240846 N

20-8 - 0605439 E
5240814 N

20-9 - 0605247 E
5240773 N

Unit 4: [Camilleri]

20-10 - 0606602 E
5241297 N

20-11 - 0606413 E
5241280 N

20-12 - 0606228 E
5241265 N

20-13 - 0606043 E
5241244 N

Unit 5: [RJK, Bishop]

20-14 - 0608058 E
5240676 N

20-15 - 0607852 E
5240594 N

20-16 – 0607635 E
5240528 N

Unit 6: [RJK, Cruz Cob.]

20-17 – 0607512 E
5240418 N

20-18 – 0607345 E
5240381 N

20-19 - 0607169 E
5240326 N

Unit 7: [RJK]

20-20 - 0606900 E
5240302 N

20-21 – 0606714 E
5240284 N

20-22 - 0606543 E
5240275 N

20-23 - 0606361 E
5240258 N

Unit 8: [RJK]

20-24 - 0606182 E
5240239 N

20-25 - 0606017 E
5240218 N

20-26 - 0605839 E
5240200 N

Unit 9: [Bishop, Cruz Cob.]

20-27 - 0607991 E
5239922 N

20-28 – 0607793 E
5239840 N

20-29 – 0607615 E
5239766 N

Unit 10: [Cruz Cob.]

20-30 - 0607438 E
5239688 N

20-31 - 0607250 E
5239647 N

20-32 - 0607036 E
5239590 N

Unit 11: [RJK, Cruz Cob.]

20-33 - 0606877 E
5239550 N

20-34 – 0606671 E
5239530 N

20-35 – 0606510 E
5239503 N

20-36 - 0606334 E
5239486 N

Unit 37: [Camilleri]

20-134 - 0605391 E
5243091 N

20-135 - 0605240 E
5243032 N

20-136 - 0605123 E
5244297 N

20-137 - 0604989 E
5242926 N

Unit 38: [Camilleri]

20-138 - 0605789 E
5242391 N

20-139 - 0605636 E
5242341 N

20-140 - 0605479 E
5242305 N

20-141 - 0605333 E
5242261 N

Unit 39: [Cobalt Pwr., Camilleri]

20-142 - 0604856 E
5242872 N

20-143 - 0604729 E
5242830 N

20-144 - 0604591 E
5242801 N

20-145 - 0604453 E
5242772 N

Unit 40: [Cobalt Pwr.]

20-146 - 0604323 E
5242746 N

20-147 - 0604206 E
5242729 N

20-148 - 0604088 E
5242703 N

20-149 - 0603963 E
5242698 N

Unit 41: [Cobalt Pwr.]

20-150 - 0604263 E
5242072 N

20-151 - 0604126 E
5242041 N

20-152 - 0603989 E
5242023 N

20-153 - 0604415 E
5242096 N

Unit 42: [Bishop]

20-154 - 0604350 E
5241633 N

20-155 - 0604198 E
5241618 N

20-156 - 0604041 E
5241594 N

20-157 - 0603887 E
5241570 N

Unit 43: [Bishop, English?]

20-158 - 0604535 E
5243306 N

20-159 - 0604359 E
5243260 N

20-160 - 0604480 E
5243153 N

Unit 44: [Camilleri]

20-161 - 0604183 E
5243218 N

20-162 - 0604043 E
5243160 N

20-163 - 0603911 E
5243119 N

Unit 45: [Cobalt Ind., Chard/Dillman?]

20-164 - 0604537 E
5244144 N

20-165 - 0604400 E
5244105 N

20-166 - 0604259 E
5244058 N

20-167 - 0604115 E
5244017 N

Unit 46: [Cobalt Ind.]

20-168 - 0603987 E
5243975 N

20-169 - 0603848 E
5243927 N

20-170 - 0603714 E
5243874 N

20-171 - 0603583 E
5243824 N

Unit 47: [Bishop]

20-172 - 0604863 E
5240722 N

20-173 - 0604704 E
5240680 N

20-174 - 0604554 E
5240643 N

20-175 - 0604411 E
5240601 N

Unit 48: [RJK]

20-176 - 0605381 E
5240093 N

20-177 - 0605220 E
5240045 N

20-178 - 0605067 E
5240004 N

20-179 - 0604916 E
5239973 N

Unit 49: [RJK]

20-180 - 0604737 E
5239948 N

20-181 - 0604570 E
5239911 N

20-182 - 0604398 E
5239870 N

20-183 - 0604246 E
5239832 N

Unit 50: [Bishop]

20-184 - 0603939 E
5241103 N

20-185 - 0603810 E
5241085 N

20-186 - 0603663 E
5241070 N

20-187 - 0603501 E
5241028 N

Unit 51: [RJK, Camilleri]

20-188 - 0605534 E
5241388 N

20-189 - 0605386 E
5241353 N

20-190 - 0605241 E
5241320 N

20-191 - 0605081 E
5241295 N

Appendix Item 20: InsideExploration article by Tony and Graeme Bishop 2019

An online article published by InsideExploration on their website:

https://insidexploration.com/the-story-of-the-nipissing-diamond-by-tony-and-graeme-bishop/

accessed Feb. 10, 2021

The Story of the Nipissing Diamond by Tony and Graeme Bishop

by **MikeyMike426**

December 9, 2020

in **Articles**, **Exclusive**, **Featured**, **RJX**, **RJX Articles**

0

Appendix Item 20: InsideExploration article by Tony and Graeme Bishop 2019

Written March 2019 by Tony and Graeme Bishop

Between 1903 and 1904, an extraordinary diamond was found somewhere in the area around Cobalt, Ontario. This diamond, while not widely known about, remains one of the largest diamonds ever discovered, and was named after the district in which it was found: the Nipissing Diamond. Here are the facts about the Nipissing Diamond, in addition to some of the historical quirks of fate which curtailed public knowledge of this diamond for nearly a century and the current efforts to reconstruct the story and the continuing effort by various companies and prospectors to locate the primary source of the Nipissing Diamond.

For context, let us first briefly consider the associated sciences of geology and glaciology, as they apply to this story. In the 16th century, the pioneering mind of Georgios Agricola was directed towards mineral extraction and the processing of ores; his seminal text on mining De Re Metallica remains a functional document, if a little dated, on the subject of working with metallic ores. With the settlement and exploration of ‘the new world’ by Europeans came the first official geological surveys of North America, beginning early in the 19th century. The Geological Survey of Canada was founded in Montreal in 1842, and its initial mandate was largely directed towards the discovery and development of coal deposits. In the history of organized resource extraction, metallic ores and fossil fuel sources have always been preceded by more mundane minerals used as aggregates and building materials, or as Henry Thoreau put it ‘the raw resources of civilization’. Needless to say, the geology and mining of diamonds is a relatively recent addition to the field of mining in general.

The conditions for diamond creation exist beneath the oldest and deepest portions of the earth’s crust, called Cratons, through which diamonds are brought to the surface by means of intrusive features, most often transported by erupting kimberlitic pipes and lamprophyre/lamporite dykes. Aside from circumstances in which these ‘surfaced’ sources of diamonds have been eroded and redeposited in sedimentary structures or as placers, these pipes and dykes remain the dominant sources of diamonds. The geologist and early glaciologist Louis Agassiz commented that “America, so far as her physical history is concerned, has been falsely denominated the New World”; the Superior Craton which underlies much of central Canada contains some of the most ancient rock on earth, and diamond-bearing kimberlite pipes have been identified and actively mined from this host rock. Around 1870, at the place which would be named Kimberley in South Africa, the first ‘modern’ diamond mining location was established, where diamonds could be extracted directly from the ‘kimberlite pipe’ sources which were exposed on surface. In this initial period of modern diamond mining the De Beers company became the primary producer. The glacial history of the Pleistocene created vastly different circumstances for the discovery of diamonds and the location of their sources in North America.

Prior to the 19th century, ‘ice ages’ were not well understood and there was no theory of ‘continental’ glaciation as a geomorphological process. The study of glaciology became an essential part of understanding the geology of Canada, since nearly all of the bedrock of Canada has been exposed and shaped by the action of glaciers during the end-Quaternary glaciation. The massive often miles deep sheets of ice tore through the soil and sand and bedrock and scoured them clean depositing the debris sometimes several feet away, or 100’s of feet, and sometimes 1000’s of miles in the direction ice flowed. Mineral deposits became exposed by glacial erosion and transported with fragments ‘down-ice’ by the expansion of the glacier. Unlike the diamonds in South Africa, the first diamonds found in North America were found in post-glacial regolith (mostly sand, gravel, and boulders) and had been transported great distances from their places of origin (some of which perhaps remain undiscovered) by the movement of glacial ice sheets.

In the decades after the opening of the De Beers diamond projects in Africa, the American company Tiffany’s was actively pursuing North American sources of diamonds. From 1843 to the early 1900’s a number of these diamonds were found in placers and till by miners and occasionally by curious children and adults. In 1876, a self-taught but brilliant geologist, George Frederick Kunz, came to the attention of Tiffany’s Co. of New York. By 1879, Kunz was made Vice President and Chief Mineralogist for the company. His mandate was to investigate all rumors and confirm all findings of individual diamonds, and to purchase them on behalf of Tiffany's, often at far above actual value, with the intent of locating the primary source of these stones.

Kunz eventually developed a theory that the diamonds found in the northern states below the Great Lakes had been transported by glaciers from somewhere in Northern Ontario. He prophesied that the 'big strike' would not happen in his own land, but in the unexplored north of Canada. Meanwhile, he continued in his attempt to find an American source rich enough to rival Africa's mines. Following yet another diamond report, in 1906 he traveled to Arkansas where it seems finally a primary source of American diamonds has been discovered. He spent the next year at a diamond prospect in Murfreesboro in what is now a popular tourist site known as the 'Crater of Diamonds'.

However, while Kunz was busy investigating the 'Crater of Diamonds' in 1906, Tiffany's Co. was visited by a Canadian Member of Provincial Parliament from the northern Ontario district of Nipissing, a Mr. Adolphe Aubin. Mr. Aubin presented a fabulous, 800 carat, slightly yellow-tinted diamond the size of a large hen's egg, to be evaluated and cut into smaller stones.

Interestingly, in 1920 Kunz also investigated the 'Peterborough Diamond', a 33 carat 'rough, broken and of low value' stone found near Peterborough, Ontario. It was discovered in till while a new railway line was being built. In journalist Kevin Krajick's book Barren Lands (2001), he relates that Kunz was excited by the Peterborough diamond because it was proof of concept that diamonds could be found in Canada. Another of George Kunz's responsibilities was as a special investigator for the U.S. Geological Survey. Following the discovery of the Peterborough Diamond, Kunz strove to validate the theory that diamonds were transported to the northern states below the Great Lakes from Canada.

The existence of the Nipissing Diamond, and its journey to Tiffany's were recorded by several publications in 1906

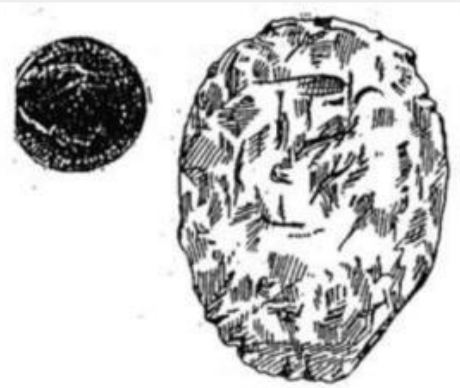
The Montreal Herald, Monday, November 12, 1906, page 268:

Appendix Item 20: InsideExploration article by Tony and Graeme Bishop 2019

"The Diamond Find in Temiskaming"

"… Geologists Anticipate Results from Tiffany Expedition."
"… expedition of geologists and diamond specialists that has been organized by the Tiffany diamond firm of New York for the purpose of investigating the indications of the presence of diamonds that have been found in the district west of Temiskaming."

(Approximately 112 years later at the Diavik Mine, a 552-carat yellow diamond, nearly the same shape
and texture as the Nipissing Diamond, is also found in Canada.)



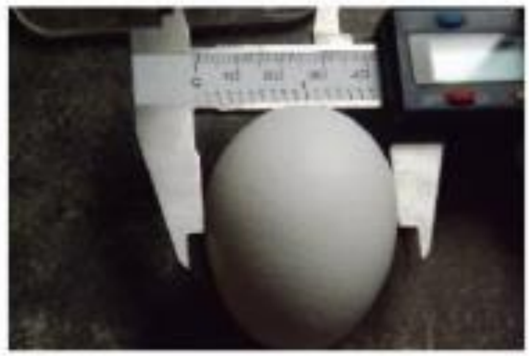
THE "NIPISSING DIAMOND."

"The stone discovered in the Nipissing District, and now owned by Mr. Adolphe O. Aubin, M.P.P. Sketch, actual size, by Rev. Father Paradis. (55mm x 43mm)" from *The Mining Journal, Sep 22, 1906 pp333 and reprinted in OGS OFR 6083 pp21. An American nickel was included in the Mining Journal sketch to provide size reference.*

A 552-carat yellow diamond unearthed in October 2018 at the Diavik Diamond Mine, approximately 217 kilometers south of the Arctic Circle in Canada's Northwest Territories (54.5mm x 33.7mm) accessed at https://www.cbc.ca/news/canada/north/large-diamond-dominion-nwt-1.4946571

The following method was used to closer determine the weight (in carats) of the Nipissing Diamond which measures 55x43mm.

A Pyrex graduated cylinder was filled to a level of 300ml with clean water. When one large egg (55x43mm) was placed in the beaker, 50ml of water was displaced.



The specific gravity of diamond is 3.52. Using the formula for finding specific gravity using mass and volume (mass = density x volume) and having a known specific gravity and volume, we can therefore find the diamond's mass (weight). The result gives a weight of 0.176kg or 880 carats. Now, due to slight irregularities in the surface of the diamond, I subtracted 5% and 10% of the weight, which closer approximates the actual stone's weight of somewhere between 836 and 792 carats.

The Gazette Montreal, Thursday, July 26, 1906, page 5

"Stone Sent to New York."

"'New Ontario Diamond' Declared to Be Real Thing"

"… recurrent reports of diamond discoveries in New Ontario by the fact that Mr. A.O. Aubin, M.P.P., is now in possession of a stone, which, if a genuine diamond, will be one of the largest in the world. …

"The stone … has been submitted to experts, who declare that it is a genuine diamond, and on this assurance, Mr. Aubin is sending it to New York to be cut and polished."

The Mining Journal, September 22, 1906, page 333

The article in the Mining Journal repeats much of the material in the above articles and also includes a copy of the ‘actual size’ drawing made by Father Paradis while the stone was in his possession. Prior to visiting Tiffany’s, Mr. Aubin displayed the stone to Parliament. Although the diamond discovery had been reported in a number of prestigious newspapers, no specific source location or other stones were documented as being found.

Tiffany’s, being very secretive, made no further mention of this or the location of other discoveries they investigated. This is with good reason, as it is on the historical record that upon discovering the ‘Crater of Diamonds’ site, over 10,000 hopeful miners and treasure seekers descended on that location the same year. In 1906, due to the discovery of vastly rich silver veins at Cobalt in 1903, there were already over 10,000 miners and prospectors camped next to Lake Temiskaming, when Tiffany’s was also searching quietly nearby for the source of the Nipissing Diamond.

Jeweler’s Circular Weekly, August 1, 1906, page 55

> Father Paradis states, *“I myself have seen the stone. It is as large as a hen’s egg, and has a rough surface and a yellowish tinge. All the usual tests have been applied to it”*

…”

Fast forward ~ 85 years from 1906 and Keith Barron, a geologist from Southern Ontario (currently CEO and Chairman of Aurania Resources), hears a rumour of a large diamond found in Northern Ontario and decides to investigate. Methodically reading early newspaper articles stored on microfiche, he tracks down a possible location of the large egg-shaped diamond found as Father Paradis reported, ‘somewhere near Cobalt’. Keith, along with Rob Towner, a gold and sapphire miner from Montana, travel North to investigate, where they eventually meet Mike Leahy, a prospector and claim staker of note, and Tony Bishop, a hobbyist prospector and dealer of metal detectors and small-scale mining equipment – gold pans, sluices and the like.

Keith and Mike stake claims near Cobalt and look for the source of the Nip Diamond, as had Tiffany’s, some 85 years before.

Appendix Item 20: InsideExploration article by Tony and Graeme Bishop 2019

Approximately 25 years later Tony Bishop staked a curious perfectly round lake. Now it's not that unusual to find small round lakes; they are usually 'kettle lakes' formed from massive ice chunks calving off of melting glaciers as they are melting and retreating. They are typically found in sandy or sand/gravel areas and often are deep enough with cold clear water to contain trout.

What is unusual is to find a lake like this in a shallow overburden to outcropping expanse of granite, such as the Lorrain Granite Batholith.

The lake on the first Bishop claim is near a major fault system, the Cross Lake Fault, and there have been kimberlites found to the North and Northwest not too far away in the Haileybury/New Liskeard Area. It's almost a year later that till samples are taken, panned for concentrates, and looked at under the microscope. Over the next winter the tiny colorful grains found are compared to samples at the Mines Office in nearby Kirkland Lake. As well, much of the winter is spent using the internet to research diamonds, kimberlites, and indicator minerals. The following summer more claims and potential targets are staked.

Shortly thereafter Tony recalls Keith's story of the Nipissing Diamond and with much help from David Crouch (P.Eng.), obtains the original newspaper articles from the early 1900's about the diamond on the internet.

Father Paradis publicly stated a number of times that the diamond was found near Cobalt. Father Paradis was a seasoned prospector of note, and well versed in the discipline of geology. Note that his sketch clearly shows what appear to be trigons on the stone's surface. Along with his other attributes, he was an excellent sketch artist and to this day his art work is considered to be very good and collectible. A number of modern articles about the diamond name Father Paradis as the finder (including a public release by MPP David Ramsay), but the historical records mention it was found by a settler, which Father Paradis was himself. If the diamond was indeed found by a different settler, there's a good possibility that settler would have shown it to Father Paradis, who was the local priest and also a well-known prospector.

Another interesting paper found by David is Mr. Aubin's 'Certificate of Registration of Death – District of Nipissing, March 27, 1932', where curiously his father's name was written as 'Jean. B. Aubin (Paradis)'. It seems that the father/husband in a French (Canadian) family also lists their mother's maiden name. This strongly suggests that Mr. Aubin, the buyer of the Nipissing Diamond, and Father Paradis, who arranged for Aubin to buy the diamond (and possibly found it), were closely related.

David also tracked down a surviving descendant of Mr. Aubin and personally viewed several multi-carat stones cut from the original rough by Tiffany's. This adds yet more proof of the existence of the Nipissing Diamond. She mentioned that more stones were in the possession of other family members.

"[In September 1882] Father Paradis and a Brother Moffet established a model farm, …on the Quebec side (just south of …Paradis Bay on the Ontario side"
(Paradis of Temagami, Bruce W. Hodgins (1976), page 7)

There was a farm collective established on Paradis Bay in the late 1800's, which can be seen on a 1905 map created by the Ontario Bureau of Mines, which includes a wagon road connecting Paradis Bay on Lake Temiskaming to the mining camp at Cobalt. The Paradis Bay road was constructed between 1903 and 1905; the Nipissing diamond was discovered by Father Paradis or someone close to him during the same period of time, and M.P. Aubin had contacted Tiffany's Co. about the stone not long after.

Please consider the following historical contradiction: George Kunz, foremost American diamond expert, a special agent of the U.S.G.S., and V.P. and Chief Mineralogist of Tiffany's spent decades personally investigating reports of diamond finds in North America, specifically in the USA while also publicizing the theory that many of these glacially erratic diamonds had their origin in Canada: a world-class diamond is discovered in Canada, the stone is proven and cut by the company Kunz operates, while Tiffany's also sends a geological expedition to the Cobalt area in 1906 to follow up on the Nipissing Diamond. The Nipissing Diamond exists, and was handled, cut, and investigated by Tiffany's; however, the 'Peterborough Diamond' found more than fifteen years later was the 'first Canadian diamond'? Concerning the lack of acknowledgement of the Nipissing Diamond as the first diamond discovered in Canada, the simplest conclusion is that its existence was strategically suppressed by Kunz and Tiffany's. The overwhelming success of the silver mines of the Cobalt area at that time served as a natural disguise to the possibility of such an extraordinary stone being discovered so close to the world's foremost silver deposit.

Following the tour of the diamond to Parliament with M.P.P. Aubin, its subsequent processing in New York by Tiffany's, the sketch of the diamond by Paradis, and the newspaper articles by 1906, there is no mention of the Nipissing Diamond for almost a century. The knowledge of the diamond might have been lost until renewed by a Toronto-based PhD. Exploration Geologist named Keith Barron, who researched the story of the Nipissing Diamond and traveled to Cobalt to try to ascertain its source in the Temiskaming District (Nipissing District was subdivided and the region around Cobalt became the district of Temiskaming in 1911). In the 1980s, there was renewed interest in the geology of the area, this time in search of diamond-bearing kimberlite pipes. Soil sampling and geophysics by companies like Cabo, Tres-Or Resources Ltd., DeBeers, and others in addition to exploration by the Ontario Geological Survey, uncovered more than 50 known kimberlite pipes, some diamondiferous, which helped to outline the existence of a Lake Temiskaming Kimberlite Field on the Lake Temiskaming Structural Zone (LTSZ), which appears to have intruded the Canadian Shield in this region approximately 148 million years before present. The Lake Temiskaming Structural Zone continues North through Kirkland Lake's diamond corridor, and from there to Attawapiskat. Deep sonar has also revealed circular features beneath the water of Lake Temiskaming itself which are inferred to be kimberlite pipes.

Below is a portion of Keith Barron's 1995 article:

"A Geologist on the Trail of a Canadian Find"

"An exciting new exploration play is unfolding in Canada, far from the frozen tundra of Lac de Gras, in rolling farmland just a day's drive from Toronto. Diapros, a De Beers subsidiary, had been working quietly in this area in the early 1960s. It was joined by four other companies, who worked through the late 1980s until they abandoned the area for prospects elsewhere. But others have filled the gap, using new techniques and ideas which are yielding sparkling success. I entered the scene in 1991, following up on a reference in a 1906 U.S. Geological Survey Report to a large diamond found in the Nipissing district of Ontario. My research uncovered a jewelry trade article of that year describing the stone as ‘large as a hen’s egg with a rough surface and a yellowish tinge.’ The stone had passed through the hands of a priest, a colonization agent for the Canadian Pacific Railway, and Adolphe Aubin, Member of Parliament. Ultimately, it was sent to Tiffany for cutting. The story rang true, especially since the location of the find – on the west side of Lake Timiskaming – matched the location of two kimberlite pipes found 75 years later. The weight was not recorded, but some quick math renders an approximate weight of more than 700 carats. How the discovery escaped world attention was a quirk of history. The find was made near the settlement of Cobalt, where three years earlier, silver veins were uncovered by railway workers. This led to a silver rush, with all it’s associated wild rumors and con games. The Provincial Geologist, Willett Miller, was badgered by prospectors for glowing endorsements of their claims, prompting him to refuse to visit or write about the area for a full five years. He probably considered reports of a giant diamond to be a hoax. The Montreal Herald reported that Tiffany sent geologists to investigate the area, but it’s quite possible they decided against sharing their information with the press, particularly with a silver mining tent city down the road. There is, however, strong evidence that the stone was real. The granddaughter of the original owner, Nicole Aubin, claims that her sister owns one of five stones ‘cut from a large rough diamond owned by her grandfather’.”

Barron, K. M. – A Geologist on the Trail of a Canadian Find (Dec 3, 1995). Accessed online at http://www.diamonds.net/News/NewsItem.aspx?ArticleID=1032&ArticleTitle=A+Geologist+on+the+Trail+of+a+Canadian+Find

We know that Tiffany’s would go to great lengths and expense in its search for diamonds in North America; however, even with this determination and experience they would not send a group of knowledgeable employees from New York to the vast and wild country of Northern Ontario, circa 1906, without a goal and some idea of where to look.

Father Paradis was an experienced prospector and a shrewd dealer in business matters (he regularly butted heads with church and government officials while trying to keep his parish funded so far from the head office in Montreal (reference Hodgins, B.W. (1976): Paradis of Temagami: The story of Charles Paradis, 1848-1926, Northern Priest, Colonizer and Rebel. Pub by The Highway Bookshop, Cobalt ON, 1976), and knew full well about mining options and agreements as undoubtedly did Mr. Aubin, who as an M.P.P. with the Ontario government would have been savvy in exploiting advantageous knowledge. Tiffany's had a history of sending geologists, with ample funding to purchase and make deals whenever a diamond was located. That their vice-president and chief diamond exploration geologist postulated and believed that most of the diamonds found in the U.S.A. originated somewhere in Northern Canada must have greatly piqued their interest even further.

If Father Paradis found the diamond and sold it to his relative, Mr. Aubin, they definitely would have gone back for another look. If it was an unknown settler who found and sold the diamond, Father Paradis would have at least attempted to be shown the location of the find (whoever found the diamond had trusted Paradis enough to let him possess it long enough to make a detailed sketch), as would the buyer Aubin require/negotiate to be taken to that location with financial compensation to the
settler of course.

With his prospector background Father Paradis undoubtedly would have put forward some kind of percentage agreement to the finder if the location were revealed and more diamonds were located. Indeed, why would a settler not confide in a priest? (at least in 1906 they probably would have). When Tiffany's got involved, they definitely would have made an irresistible deal with Aubin to be taken to where the diamond was found to try to ascertain the source. In this light, sending in a contingent of diamond experts and geologists to the railway's end in Cobalt, Northern Ontario makes sense. Perhaps if the brilliant Kunz had been sent to Cobalt instead of the Crater of Diamonds in Arkansas in 1906, the history of Cobalt and Ontario mining history might be vastly different.

Next, we travel to 2017 and another story unfolds, the 'Story of the Trench', as first published as part of Assessment Work Report on Claim L4282142 dated June 6, 2018.

Story of the Trench

Approximately 3km to the east of legacy claim 4282142 lies a steep high hill that runs north-south for a considerable distance with Hwy 567 and Lake Timiskaming on the other side except for a small valley through which Lake Timiskaming can be viewed at several locations, near Cedar Pond and Paradis Pond. (A ski hill lies a short distance to the NE of Paradis and Cedar Pond on this hill.)

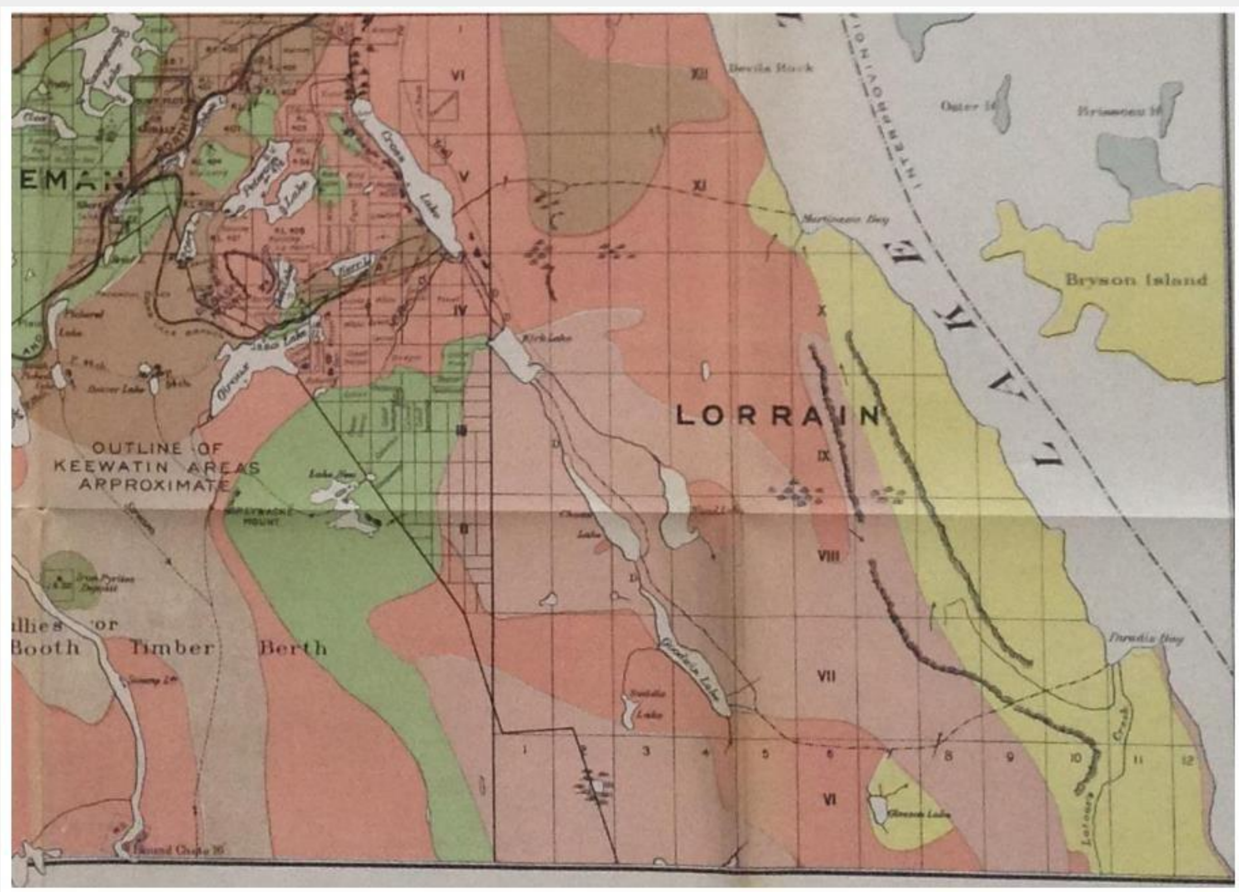
When I first noticed this view of Lake Temiskaming, and after driving Hwy 567 and utilizing a Topography Map, I realized I was seeing Paradis Bay. I reckoned that with the discovery of silver in 1903-1904, a farming community in Paradis Bay and others in Quebec nearby would have wanted to ship fresh produce, meat, etc. to the many hungry prospectors in Cobalt. About then I recalled the discovery of an 800-carat diamond found near Cobalt as first told to me by Keith Barron.

The most direct route from Paradis Bay would be a road through my claims. I envisioned an east-west road from Paradis Bay between the lakes on legacy claims 4273040 and 4282189 (~600m) apart, and to the southeast of Goodwin Lake. and continuing from there northwest to the top of Chown Lake where the road would then trend towards Cobalt. Many recent articles (including one by our MPP David Ramsey) credited Father Paradis with finding the large diamond. This led me to wonder if the diamond might have been found while building a (hypothetical) road from Paradis Bay at the time of the diamond's discovery first reported in 1906.

I was then and afterwards getting excellent KIM results from sampling below but not off-ice of the two lakes mentioned which added even more interest. Then sometime after, my son, Graeme was looking through his extensive map collection and on one map from 1905 (Miller, (1905)) there was a wagon road shown from Paradis Bay to just below the lake on 4273040 where it angled up towards the southeast end of Goodwin Lake and passed west of Paradis Pond. It then continued northwest to the top of Chown Lake where it turned west to the newly built rail spur at Kerr Lake. To be included on the 1905 map, the road would have been under construction in 1903-1904 and being used by 1905.

This is especially interesting as it would have been within the time frame in which the diamond was reported being found by a settler and purchased by Mr. Aubin. With this in mind, I drew a line down-ice of Paradis Pond to where it met the road from Paradis Bay and re plotted that to Google Earth and recorded the UTM coordinates. I then planned a till sampling traverse for my son Graeme to that location and others in the general area that he deemed interesting.

When he arrived at the location, he could see a ribbon nearby from one of my previous till sampling excursions. This general area is in a trough-like feature extending down-ice from Paradis Pond. Graeme found the ground a bit wet there and hard to get a good sample, so he moved uphill a short way to the east to get a dry till sample closer to my predetermined coordinates. At the top of the gentle ~20’ rise, he ‘stumbled’ across a trench. It was obviously very old, ~50’ long, oriented due north-south with two trees growing in it and much humus infill. Realizing the potential importance of the trench being where material glaciated from Paradis Pond meets the road, he took several samples from the trench and then spent the remainder of the day looking for other signs of the wagon road or human activity, before returning to the truck.



When Graeme and I later returned, the ferns were a solid carpet waist deep, the trench was not visible from 5 meters away, unlike Graeme’s first trip in early spring. We resampled the trench and spent more time searching and found a small dug pit a short distance north of the trench which we also sampled. Directly north, a sample was taken which is possibly from the same ridge.

Finding the trench was particularly significant due to its being in non-descript gravelly-sandy till, surrounded by the Lorrain Granite Batholith. There are no outcrops within ~200 m, and there are no silver mines or known mineralized prospects up-ice of this area.

Digging into the till in the trench’s location is no easy task, and after talking to geologists such as Doug Robinson, P.Eng (who worked in Agnico’s Temiskaming Silver Mine for many years) the labour expenditure to build a trench at that location makes no sense. Unless the quarry was not silver and Cobalt, but instead perhaps a diamond. Both Paradis and Cedar Pond have been flown over with a magnetometer on a drone and the results 3-D modeled.

These combined results helped RJK Explorations decide to option the Bishop Properties in Lorrain and Gillies Limit, and as of March 1, 2019 a drill is on location at Paradis Pond to drill into the mag anomaly.

Appendix Item 21 – Charles Paradis chronology

Summarized Chronology of events during Father Paradis' life

[summarized from Bruce W. Hodgins. *Paradis of Temagami*, Highway Book Shop, Cobalt Ontario, 1976.]

1873 – became an Oblate Father (not ordained)
1875 – in Ottawa, studying Theology
1878-1881 - a professor at Ottawa College
1880 - first trip to Northern Ontario, Temagami in July
1881 - ordained an Oblate Father
1881-1882 - studied in Rome
1882 - moved from Ottawa to Temiskaming mission, clashes w/ Father Nedelec
-canoe trip to Abitibi Mission etc.
1883 - Paradis and Brother Moffet establish farm at the Narrows
1883-1884 - spent winter in Ottawa, writing and lobbying for Temiskaming colonization
-presented Bishop Duhamel with '*La Region du Temiskaming*.' Arranged a $5000 engineering commitment from P.M. Macdonald government public works minister Langevin to eliminate Long Sault rapids on Ottawa River to open Temiskaming colonization route.
1884 - still in Temiskaming, accompanies Bishop Lorrain to Abitibi and James Bay. On return, leaves the expedition due to conflict with Father Nedelec and returns to Temiskaming early.
1884 - in September, ordered to leave Temiskaming (Re: Nedelec) by the Bishop and is sent to Maniwaki. In November, the church organizes "*La Societe de colonization du Lac Temiskaming*", in December the Society elects its officers.
1885 - the Society publishes booklet and acknowledges Paradis' work in the Temiskaming colonization effort.
1886 - the Temisk. Oblate Mission is moved to the Quebec side of the Narrows (Ville Marie)
Paradis enters legal battle with Lumber companies.
1887 - Paradis wins case against Lumber companies amidst political and religious issues in Quebec and Ontario. Paradis travels to Ottawa, then Montreal, dealing with political conflict with Oblate Order.
1888 - in February, Paradis is exiled to Plattsburg, New York. He writes to the head of the Oblate Order in Paris, France to complain. In May, is transferred to the Oblate house in Buffalo. Writes to the religious superiors in Rome to complain about the Order in Paris. In August 1888, Paradis is expelled from Oblate Order. In September 1888, he was forcibly ejected from his residence in Buffalo.
1888-1889 - travels to Rome, and London, to defend himself.
1890 - back in Ontario, still trying to defend himself.
1891 - in Peterborough, Bishop O'Connor gives Paradis the right to mission work and colonization only in Temagami. In spring 1891 Paradis returns to Temagami (Bear Island, Sandy Inlet): decides to build 'Home Base' in Temagami.
1892 - had two Missionaries helping him in Temagami and a chapel being built on Bear Island. Still advocating for settlement/colonization with government. Had workers in Verner area building small chapel, became Domremy. Paradis travelled back and forth between Temagami and Domremy but kept basic residence in Domremy.

Appendix Item 21 – Charles Paradis chronology

1893 - Paradis primarily in Temagami, issues a pamphlet from Sandy Inlet against English Capitalists destroying the natural world, plus advocating for colonization. 1893 gov't opened 86 townships for settlement near Verner

Note: 1891-1895 – Verner was officially part of the parish of Sturgeon Falls, under **Father Farron** and **Father Desaulniers**, neither of whom could tolerate Father Paradis, and who felt alienated by his activity at Domremy. [Hodgins pg. 30-31]

From 1892 to 1895, while developing Sandy Inlet and Domremy, Father Paradis was also travelling between Montreal, Ottawa, Peterborough, Toronto, and the state of Michigan organizing colonization efforts.

1895 - in Spring, Paradis brought the first significant influx of settlers (mainly from Michigan) into the Domremy area. Father Desaulniers of Verner complained against Paradis officially to church superiors. Bishop O'Connor in Peterborough revokes all of Father Paradis' rights except in Temagami.

1896 - Paradis travels to Ottawa, put on payroll of Laurier govt's Colonization Society as an agent of immigration. Now promoting colonization under aegis of government, not the church.

1897-1898 - Continues to develop settlement efforts at Domremy, visits Temagami often, April trip to Ottawa.

1899 - trip to Ottawa. Is discharged from Dept. of Interior, no longer an immigration agent. Paradis decides to stay in Temagami. In Peterborough, Bishop O'Connor appoints Father Gingras, the parish priest of Sturgeon Falls to oversee the whole region of north eastern Ontario that concerned Father Paradis. In 1904 the Diocese of Sault Ste. Marie was separated from the Diocese of Peterborough.

1899-1905 - Paradis, now acting free from the Oblate Order and the government, resides primarily in Temagami, but spends much of his time in Domremy. In 1905, Bishop Scollard granted Father Paradis 'free rights' to celebrate mass throughout the new Diocese. Paradis concludes most of his activity in Domremy and returns to Temagami.

1905-1926 - Paradis lives at Sandy Inlet, Temagami. He prospects, surveys, paints, travels, preaches, and explores around north eastern Ontario during this time.

1906 - Paradis sketches the "Nipissing Diamond"

1909 - Prospecting Porcupine area, Paradis drops the water level of Fredrick House Lake by 18 feet. Forms a grubstake out of North Bay, forms a company out of Montreal. Prospecting.

1924 - Paradis' residence at Sandy Inlet is lost to a fire.

1926 - Paradis travels to Montreal, where he died.

RJK EXPLORATIONS LTD.
Distribution of 2019 Lorrain Chain Survey Assessment Value

A total of 84 claims were sampled during the 2019 Lorrain Chain overburden survey. The 84 claims belong to five parties: Bishop (RJK), Camilleri, Cruz Cobalt, Cobalt Power, and Cobalt Industries. The sampling took place between June 15, 2019 and October 4, 2019, totalling 26 days of field work.

Approximately 250 soil samples were collected during fieldwork and combined into numbered units from Unit 1 -Unit 108 for lab analysis. Unit 1 – Unit 12, and Unit 26 were processed by Bishop Lab. Units 13-25, 27-108 were processed by ODM in four Batch's; Units 1-12 were later processed by ODM in a fifth Batch.

Personnel in the field: Graeme Bishop @250/day, Patrick Harrington @250/day, Kevin Schraeder @150/day. Lab work was done by Overburden Drilling Management, and by the Bishop Lab (see invoices). Planning, management, and paperwork was done by Graeme Bishop @250/day. Some data modelling was done by Terry Link @400/day.

Total expense being claimed: $ 58,153.00

from Labour:	**11,400.00**
from Lab costs:	**42,385.00**
from Management:	**4,368.00**

The following claims were included in the work:

BISHOP:
254147, 106280, 158049, 144502, 144503, 240537, 158050, 203194, 247266, 155683, 336683, 172334, 143090, 283212, 175091, 343852, 237309, 126017, 105615, 247076, 330989, 199568, 151798, 343734, 219399, 210724, 222764, 230056, 326048, 203195, 144504, 241581, 124604, 241582, 140959, 296727, 337054, 241583, 199542, 235751, 234633, 252459, 341583, 139060, 329881, 131127, 258850, 317177, 277042, 269300, 150827, 186844, 302829, 155684, 199567, 150826, (569262 - RJK. Ex. Ltd)

(**Dates in the field, 2019**: June 15, 19. July 14, 15, 17, 18, 20. August 5, 6, 7, 9, 10, 13. September 13, 14, 15, 16, 17, 18, 19, 22, 23, 25, 26. October 3.)

Total labour in the field: 8,566.00
Total Lab costs: 33,097.00
Management/paperwork: 2,964.00

Value on Bishop Claims: $ 44,627.00

CAMILLERI:
100292, 100293, 238289, 157190, 312362, 189654, 251980.

(**Dates in the field, 2019**: June 15. August 6. September 14, 18, 19, 22, 23.)

Total labour in the field: 1,013.00
Total Lab costs: 2,477.00
Management/paperwork: 364.00

Value on Camilleri Claims: $ 3,854.00

CRUZ COBALT:
139941, 260102, 145839.

(**Dates in the field, 2019**: August 7. September 15, 19.)

Total labour in the field: 290.00
Total Lab costs: 1,113.00
Management/paperwork: 156.00

Value on Cruz Cobalt Claims: $ 1559.00

COBALT POWER:
159145, 191647, 211151, 277043, 307616.

(**Dates in the field, 2019**: July 17. October 3.)

Total labour in the field: 183.00
Total Lab costs: 1,401.00
Management/paperwork: 260.00

Value on Cobalt Power Claims: $ 1,844.00

COBALT INDUST.:
133843, 196494, 265306, 265306, 245678, 214477, 299835, 301841, 214520, 300383, 131742, 187190.

(**Dates in the field, 2019**: July 17. August 6. October 2, 3, 4.)

Total labour in the field: 1,348
Total Lab costs: 4,297
Management/paperwork: 624

Value on Cobalt Indust. Claims: $ 6,269.00

Notes on Distribution Calculations

A total of 108 Units are included in this assessment, which were collected across 84 different mining claims. Each unit did not necessarily incur the same expenses for collection/analysis; units were collected over 26 days, sometimes at 500.00 per day sometimes at 400.00 per day and analysed in five ODM batches with different invoice values.

To accurately determine and distribute assessment value across the 84 mining claims, several complex calculations had to be made.

Due to the fact that expenses must be applied accurately to each individual mining claim that work was conducted on, it was necessary to determine which mining claims hosted which units as part of the survey, in order to accurately distribute assessment value for each mining claim.

In order to calculate the appropriate distribution of the work to each of 84 claims, this process was followed:

-Management expenses: 84 claims are involved in this survey, so the management and planning costs, totalling 4368.00, were divided by 84 in order to determine *an equal distribution of value to all the claims affected*. Therefore, each of the 84 claims involved in the survey *have 52.00 applied to them* for the planning and management of the survey.

-Labour expenses: Twenty-six days were spent in the field collecting samples. A day-by-day chronology of the personnel employed, their rates, and which survey Units were collected was compiled in order to determine *the cost of labour for collecting each individual Unit* in the survey.

For example: Unit 76 was collected on September 22, 2019, by P.Harrington and K.Schraeder. The combined labour for Sept.22 equals 400.00. Three units' worth of samples were collected on that date. Thus, the labour cost for three units, including Unit 76, was 133.34 per unit.

-Lab expenses: Overburden Drilling Management processed 107 units of the survey in five Batch's. Each Batch contained multiple units. The cost of each Batch was divided by the number of the units it contained to determine *the cost per unit* in each Batch. (In the case of Batch 8314, containing units 1 through 12, the ODM expense for the Batch was combined with expenses from the Bishop lab work on these twelve units, and the total was divided by 12 to determine cost per unit.)

For example: Unit 76 was processed by ODM in Batch 8216. This Batch cost 12,862.74, and contained 35 Units of the survey. 12,862.74 divided by 35 Units equals 367.00 per unit. Thus, Unit 76 cost 367.00 in lab expense.

-Distributing to Claims:
Most of the units were composed of multiple samples taken in the field and there are many *individual*

units that contain *samples collected from two or more claims*. Therefore, if two claims each contained fifty percent of a single unit, both claims would have one half of that unit's particular expenses applied to them. If three claims each contained one third of the samples in one unit, all three claims would have one third of the unit's expenses applied to them, and so on.

For example: Unit 76 cost 133.00 to collect, and 367.00 to ODM for analysis; labour and lab expenses for Unit 76 equal 500.00. The unit contains three samples; one sample was taken in claim 312362, one in claim 189645, and one in claim 238289. Therefore, one third of the combined labour and lab expenses for the Unit was applied to each of the three claims affected by Unit 76. Claims 312362, 189645, and 238289 each have 166.00 worth of assessment value from labour and lab expenses for Unit 76.

[Some claims *contain two or more Units*. Values for each mining claim were calculated by adding the combined unit expenses applicable to the claim and adding the fraction of the total management cost.]

Lab Expense per Unit

Units 13 – 25, 27 – 33
ODM Report, Batch 8213. Cost – 7659.00
Cost per Unit: 383.00

Units 34 – 53
ODM Report, Batch 8214. Cost – 7659.00
Cost per Unit: 383.00

Units 54 – 73
ODM Report, Batch 8215. Cost – 7393.19
Cost per Unit: 369.00

Units 74 – 108
ODM Report, Batch 8216. Cost – 12,862.74
Cost per Unit: 367.00

Units 1 – 12
Bishop Lab costs: July 27, 28, 29, 2019. (concentrating samples first stage) – 1500.00
Bishop Lab costs: September 18, 2019. (concentrating samples final stage) – 500.00
Bishop Lab costs: January 21, 2020. (recombine and prepare for ODM) –
250.00 ODM Report, Batch 8314. Cost – 4560.76
Cost per Unit: 567.00

Labour Expense per Unit

June 15:
Patrick Harrington – 250.00
Graeme Bishop – 250.00
Work: Collecting Samples for Unit 26. Creek from Paradis to Goodwin.
Day cost: 500.00. Cost per Unit: 500.00

June 19:
Patrick Harrington – 250.00
Graeme Bishop – 250.00
Work: Collecting Samples for Units 98, 99, 100, 101.
Day cost: 500.00. Cost per Unit: 125.00

July 14:
Patrick Harrington – 250.00
Graeme Bishop – 250.00
Work: Collecting Samples for Units 92, 93, 94, 95, 96, 97.
Day cost: 500.00. Cost per Unit: 83.34

July 15:
Patrick Harrington – 250.00
Graeme Bishop – 250.00
Work: Collecting Samples for Units 106, 107.
Day cost: 500.00. Cost per Unit: 250.00

July 17:
Patrick Harrington – 250.00
Graeme Bishop – 250.00
Work: Collecting Samples for Units 1, 2, 3, 4, 5, 11, 12.
Day cost: 500.00. Cost per Unit: 71.43

July 18:
Patrick Harrington – 250.00
Graeme Bishop – 250.00
Work: Collecting Samples for Units 6, 7, 8, 9, 10.
Day cost: 500.00. Cost per Unit: 100.00

August 5:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 41, 45, 50, 51.
Day cost: 400.00. Cost per Unit: 100.00

August 6:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 36, 37, 38, 39, 40.
Day cost: 400.00. Cost per Unit: 80.00

August 7:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 46, 47, 48, 49.
Day cost: 400.00. Cost per Unit: 100.00

August 9:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 28, 30, 31, 32.
Day cost: 400.00. Cost per Unit: 100.00

August 10:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 42, 43, 44.
Day cost: 400.00. Cost per Unit: 133.34

August 13:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 102, 103, 104, 105.
Day cost: 400.00. Cost per Unit: 100.00

September 13:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 84, 85, 90, 91.
Day cost: 400.00. Cost per Unit: 100.00

September 14:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 52, 53, 54, 60.
Day cost: 400.00. Cost per Unit: 100.00

September 15:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 55, 56, 57, 58, 59.
Day cost: 400.00. Cost per Unit: 80.00

September 16:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 61, 62, 63, 64, 65.
Day cost: 400.00. Cost per Unit: 80.00

September 17:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 66, 67, 68, 69.
Day cost: 400.00. Cost per Unit: 100.00

September 18:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 80, 81, 82, 83.
Day cost: 400.00. Cost per Unit: 100.00

September 19:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 77, 78, 79.
Day cost: 400.00. Cost per Unit: 133.34

September 22:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 73, 75, 76.
Day cost: 400.00. Cost per Unit: 133.34

September 23:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 70, 71, 72, 74.
Day cost: 400.00. Cost per Unit: 100.00

September 25:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 86, 87, 88, 89.
Day cost: 400.00. Cost per Unit: 100.00

September 26:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 21, 22, 23, 24, 25, 27.
Day cost: 400.00. Cost per Unit: 66.67

October 2:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 18, 19, 20.
Day cost: 400.00. Cost per Unit: 133.34

October 3:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Units 13, 14, 15, 16, 17.
Day cost: 400.00. Cost per Unit: 80.00

October 4:
Patrick Harrington – 250.00
Kevin Schraeder – 150.00
Work: Collecting Samples for Unit 108.
Day cost: 400.00. Cost per Unit: 400.

RJK EXPLORATIONS LTD. 2019 Overburden Work

Tony BISHOP - Claims and Assessment LORRAIN CHAIN K.I.M. Definition Program [June 15 - October 3, 2019]

CLAIM no.	Owner	CELL	Lorrain Chain Unit sampled on claim on date	percentage of LC Unit in claim	LC Units ODM Batch No.	Value of ODM expense in claim	Date of field work in claim	Person doing work in claim	cost of sample: labour @ 500 day in claim	cost of sample: labour @ 400 day in claim	% of total planning management and data mapping cost	Bishop Lab work: Units 1-12 only	TOTAL VALUE	CLAIM no.
569262	RJK. Ex. Ltd	31M05A133	Unit 107	0.75	8216	275	15-Jul-19	P.Harrington, G.Bishop	187	0	52	0	514	569262
254147	Bishop	31M05H365	Unit 40	0.333	8214	127	06-Aug-19	P.Harrington, K.Schraeder	0	27	52	0	206	254147
106280	Bishop	31M05H366	Unit 36	0.333	8214	127	06-Aug-19	P.Harrington, K.Schraeder	0	27	52	0	755	106280
106280	Bishop	31M05H366	Unit 40	0.666	8214	255	06-Aug-19	P.Harrington, K.Schraeder	0	53		0		
106280	Bishop	31M05H366	Unit 50	0.5	8214	191	05-Aug-19	P.Harrington, K.Schraeder	0	50		0		
158049	Bishop	31M05A090	Unit 83	0.5	8216	183	18-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	752	158049
158049	Bishop	31M05A090	Unit 82	100	8216	367	18-Sep-19	P.Harrington, K.Schraeder	0	100		0		
144502	Bishop	31M05A091	Unit 83	0.5	8216	184	18-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	286	144502
144503	Bishop	31M05A110	Unit 85	0.5	8216	184	13-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	441	144503
144503	Bishop	31M05A110	Unit 84	0.333	8216	122	13-Sep-19	P.Harrington, K.Schraeder	0	33		0		
240537	Bishop	31M05A111	Unit 86	0.5	8216	184	25-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	753	240537
240537	Bishop	31M05A111	Unit 87	100	8216	367	25-Sep-19	P.Harrington, K.Schraeder	0	100		0		
158050	Bishop	31M05A112	Unit 88	100	8216	367	25-Sep-19	P.Harrington, K.Schraeder	0	100	52	0	519	158050
203194	Bishop	31M05A130	Unit 84	0.666	8216	245	13-Sep-19	P.Harrington, K.Schraeder	0	67	52	0	481	203194
203194	Bishop	31M05A130	Unit 91	0.25	8216	92	13-Sep-19	P.Harrington, K.Schraeder	0	25		0		
247266	Bishop	31M05A131	Unit 89	0.5	8216	184	25-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	1321	247266
247266	Bishop	31M05A131	Unit 85	0.5	8216	184	13-Sep-19	P.Harrington, K.Schraeder	0	50		0		
247266	Bishop	31M05A131	Unit 86	0.5	8216	184	25-Sep-19	P.Harrington, K.Schraeder	0	50		0		
247266	Bishop	31M05A131	Unit 91	0.25	8216	92	13-Sep-19	P.Harrington, K.Schraeder	0	25		0		
247266	Bishop	31M05A131	Unit 92	100	8216	367	14-Jul-19	P.Harrington, G.Bishop	83	0		0		
155683	Bishop	31M05H386	Unit 53	100	8214	383	14-Sep-19	P.Harrington, K.Schraeder	0	100	52	0	655	155683
155683	Bishop	31M05H386	Unit 50	0.25	8214	95	05-Aug-19	P.Harrington, K.Schraeder	0	25		0		
336683	Bishop	31M05A005	Unit 54	0.5	8215	185	14-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	287	336683
172334	Bishop	31M05A006	Unit 54	0.5	8215	185	14-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	512	172334
172334	Bishop	31M05A006	Unit 57	0.5	8215	185	15-Sep-19	P.Harrington, K.Schraeder	0	40		0		
143090	Bishop	31M05A007	Unit 61	100	8215	369	16-Sep-19	P.Harrington, K.Schraeder	0	80	52	0	951	143090
143090	Bishop	31M05A007	Unit 62	0.5	8215	185	16-Sep-19	P.Harrington, K.Schraeder	0	40		0		
143090	Bishop	31M05A007	Unit 57	0.5	8215	185	15-Sep-19	P.Harrington, K.Schraeder	0	40		0		
283212	Bishop	31M05A008	Unit 62	0.5	8215	185	16-Sep-19	P.Harrington, K.Schraeder	0	40	52	0	1175	283212
283212	Bishop	31M05A008	Unit 63	100	8215	369	16-Sep-19	P.Harrington, K.Schraeder	0	80		0		
283212	Bishop	31M05A008	Unit 64	100	8215	369	16-Sep-19	P.Harrington, K.Schraeder	0	80		0		
175091	Bishop	31M05A026	Unit 60	0.666	8215	246	14-Sep-19	P.Harrington, K.Schraeder	0	67	52	0	365	175091
343852	Bishop	31M05A027	Unit 60	0.333	8215	123	14-Sep-19	P.Harrington, K.Schraeder	0	33	52	0	657	343852
343852	Bishop	31M05A027	Unit 65	100	8215	369	16-Sep-19	P.Harrington, K.Schraeder	0	80		0		
237309	Bishop	31M05A028	Unit 66	100	8215	369	17-Sep-19	P.Harrington, K.Schraeder	0	100	52	0	521	237309
126017	Bishop	31M05A047	Unit 71	100	8215	369	23-Sep-19	P.Harrington, K.Schraeder	0	100	52	0	1242	126017
126017	Bishop	31M05A047	Unit 70	0.5	8215	185	23-Sep-19	P.Harrington, K.Schraeder	0	50		0		
126017	Bishop	31M05A047	Unit 73	0.5	8215	185	22-Sep-19	P.Harrington, K.Schraeder	0	67		0		
126017	Bishop	31M05A047	Unit 74	0.5	8216	184	23-Sep-19	P.Harrington, K.Schraeder	0	50		0		
105615	Bishop	31M05A067	Unit 74	0.5	8216	184	23-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	286	105615
247076	Bishop	31M05H306	Unit 11	0.333	8314	127	17-Jul-19	P.Harrington, G.Bishop	19	0	52	62	1450	247076
247076	Bishop	31M05H306	Unit 12	100	8314	383	17-Jul-19	P.Harrington, G.Bishop	57	0		188		
247076	Bishop	31M05H306	Unit 22	0.75	8213	288	26-Sep-19	P.Harrington, K.Schraeder	0	50		0		
247076	Bishop	31M05H306	Unit 23	0.5	8213	191	26-Sep-19	P.Harrington, K.Schraeder	0	33		0		
330989	Bishop	31M05H386	Unit 56	100	8215	369	15-Sep-19	P.Harrington, K.Schraeder	0	80	52	0	950	330989
330989	Bishop	31M05H386	Unit 58	100	8215	369	15-Sep-19	P.Harrington, K.Schraeder	0	80		0		
199568	Bishop	31M05H388	Unit 46	0.5	8214	191	07-Aug-19	P.Harrington, K.Schraeder	0	50	52	0	1017	199568
199568	Bishop	31M05H388	Unit 47	100	8214	383	07-Aug-19	P.Harrington, K.Schraeder	0	100		0		
199568	Bishop	31M05H388	Unit 48	0.5	8214	191	07-Aug-19	P.Harrington, K.Schraeder	0	50		0		

151798	Bishop	31M05A048	Unit 69	100	8215	369	17-Sep-19	P.Harrington, K.Schraeder	0	100	52	0	756	151798
151798	Bishop	31M05A048	Unit 70	0.5	8215	185	23-Sep-19	P.Harrington, K.Schraeder	0	50		0		
343734	Bishop	31M05A069	Unit 78	100	8216	367	19-Sep-19	P.Harrington, K.Schraeder	0	133	52	0	718	343734
343734	Bishop	31M05A069	Unit 79	0.333	8216	122	19-Sep-19	P.Harrington, K.Schraeder	0	44		0		
219399	Bishop	31M05A070	Unit 79	0.666	8216	245	19-Sep-19	P.Harrington, K.Schraeder	0	89	52	0	386	219399
210724	Bishop	31M05A089	Unit 80	0.5	8216	184	18-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	753	210724
210724	Bishop	31M05A089	Unit 81	100	8216	367	18-Sep-19	P.Harrington, K.Schraeder	0	100		0		
222764	Bishop	31M05A171	Unit 97	0.333	8216	122	14-Jul-19	P.Harrington, G.Bishop	27	0	52	0	201	222764
230056	Bishop	31M05A172	Unit 97	0.666	8216	245	14-Jul-19	P.Harrington, G.Bishop	55	0	52	0	1090	230056
230056	Bishop	31M05A172	Unit 98	100	8216	367	19-Jun-19	P. Harrington, G.Bishop	125	0		0		
230056	Bishop	31M05A172	Unit 99	0.5	8216	184	19-Jun-19	P. Harrington, G.Bishop	62	0		0		
326048	Bishop	31M05A132	Unit 89	0.5	8216	184	25-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	736	326048
326048	Bishop	31M05A132	Unit 93	100	8216	367	14-Jul-19	P.Harrington, G.Bishop	83	0		0		
203195	Bishop	31M05A150	Unit 90	100	8216	367	13-Sep-19	P.Harrington, K.Schraeder	0	100	52	0	636	203195
203195	Bishop	31M05A150	Unit 91	0.25	8216	92	13-Sep-19	P.Harrington, K.Schraeder	0	25		0		
144504	Bishop	31M05A151	Unit 94	0.5	8216	184	14-Jul-19	P. Harrington, G.Bishop	42	0	52	0	921	144504
144504	Bishop	31M05A151	Unit 91	0.25	8216	92	13-Sep-19	P.Harrington, K.Schraeder	0	25		0		
144504	Bishop	31M05A151	Unit 95	0.5	8216	184	14-Jul-19	P. Harrington, G.Bishop	42	0		0		
144504	Bishop	31M05A151	Unit 96	0.666	8216	245	14-Jul-19	P. Harrington, G.Bishop	55	0		0		
241581	Bishop	31M05A153	Unit 100	0.333	8216	122	19-Jun-19	P. Harrington, G.Bishop	42	0	52	0	1274	241581
241581	Bishop	31M05A153	Unit 101	100	8216	367	19-Jun-19	P. Harrington, G.Bishop	125	0		0		
241581	Bishop	31M05A153	Unit 106	0.666	8216	245	15-Jul-19	P. Harrington, G.Bishop	167	0		0		
241581	Bishop	31M05A153	Unit 107	0.25	8216	92	15-Jul-19	P. Harrington, G.Bishop	62	0		0		
124604	Bishop	31M05A154	Unit 106	0.333	8216	122	15-Jul-19	P. Harrington, G.Bishop	83	0	52	0	257	124604
241582	Bishop	31M05A152	Unit 100	0.333	8216	122	19-Jun-19	P. Harrington, G.Bishop	42	0	52	0	818	241582
241582	Bishop	31M05A152	Unit 94	0.5	8216	184	14-Jul-19	P. Harrington, G.Bishop	42	0		0		
241582	Bishop	31M05A152	Unit 95	0.5	8216	184	14-Jul-19	P. Harrington, G.Bishop	42	0		0		
241582	Bishop	31M05A152	Unit 96	0.333	8216	122	14-Jul-19	P. Harrington, G.Bishop	28	0		0		
140959	Bishop	31M05A173	Unit 99	0.5	8216	184	19-Jun-19	P. Harrington, G.Bishop	62	0	52	0	617	140959
140959	Bishop	31M05A173	Unit 100	0.333	8216	122	19-Jun-19	P. Harrington, G.Bishop	42	0		0		
140959	Bishop	31M05A173	Unit 105	0.333	8216	122	13-Aug-19	P.Harrington, K.Schraeder	0	33		0		
296727	Bishop	31M05A174	Unit 105	0.666	8216	245	13-Aug-19	P.Harrington, K.Schraeder	0	67	52	0	364	296727
337054	Bishop	31M05A193	Unit 102	100	8216	367	13-Aug-19	P.Harrington, K.Schraeder	0	100	52	0	986	337054
337054	Bishop	31M05A193	Unit 103	100	8216	367	13-Aug-19	P.Harrington, K.Schraeder	0	100		0		
241583	Bishop	31M05A194	Unit 104	100	8216	367	13-Aug-19	P.Harrington, K.Schraeder	0	100	52	0	519	241583
199542	Bishop	31M05H346	Unit 33	100	8213	383	20-Jul-19	P.Harrington, G.Bishop	125	0	52	0	1829	199542
199542	Bishop	31M05H346	Unit 35	100	8214	383	20-Jul-19	P.Harrington, G.Bishop	125	0		0		
199542	Bishop	31M05H346	Unit 34	100	8214	383	20-Jul-19	P.Harrington, G.Bishop	125	0		0		
199542	Bishop	31M05H346	Unit 29	0.5	8213	191	20-Jul-19	P.Harrington, G.Bishop	62	0		0		
235751	Bishop	31M05H389	Unit 59	0.5	8215	191	15-Sep-19	P.Harrington, K.Schraeder	0	40	52	0	283	235751
234633	Bishop	31M05H327	Unit 24	0.333	8213	127	26-Sep-19	P.Harrington, K.Schraeder	0	22	52	0	1101	234633
234633	Bishop	31M05H327	Unit 27	100	8213	383	26-Sep-19	P.Harrington, K.Schraeder	0	67		0		
234633	Bishop	31M05H327	Unit 25	100	8213	383	26-Sep-19	P.Harrington, K.Schraeder	0	67		0		
252459	Bishop	31M05H325	Unit 30	100	8213	383	09-Aug-19	P.Harrington, K.Schraeder	0	100	52	0	1178	252459
252459	Bishop	31M05H325	Unit 32	100	8213	383	09-Aug-19	P.Harrington, K.Schraeder	0	100		0		
252459	Bishop	31M05H325	Unit 31	0.333	8213	127	09-Aug-19	P.Harrington, K.Schraeder	0	33		0		
341583	Bishop	31M05H326	Unit 23	0.5	8213	191	26-Sep-19	P.Harrington, K.Schraeder	0	33	52	0	1334	341583
341583	Bishop	31M05H326	Unit 31	0.666	8213	255	09-Aug-19	P.Harrington, K.Schraeder	0	67		0		
341583	Bishop	31M05H326	Unit 28	100	8213	383	09-Aug-19	P.Harrington, K.Schraeder	0	100		0		
341583	Bishop	31M05H326	Unit 29	0.5	8213	191	20-Jul-19	P.Harrington, G.Bishop	62	0		0		
139060	Bishop	31M05H286	Unit 21	100	8213	383	26-Sep-19	P.Harrington, K.Schraeder	0	67	52	0	502	139060
329881	Bishop	31M05H305	Unit 5	0.5	8314	191	17-Jul-19	P.Harrington, G.Bishop	28	0	52	94	1118	329881
329881	Bishop	31M05H305	Unit 8	0.5	8314	191	18-Jul-19	P.Harrington, G.Bishop	50	0		94		
329881	Bishop	31M05H305	Unit 11	0.666	8314	255	17-Jul-19	P.Harrington, G.Bishop	38	0		125		
131127	Bishop	31M05H284	Unit 3	0.666	8314	255	17-Jul-19	P.Harrington, G.Bishop	38	0	52	125	973	131127

131127	Bishop	31M05H284	Unit 4	0.5	8314	191	17-Jul-19	P.Harrington, G.Bishop	28	0		94		
131127	Bishop	31M05H284	Unit 14	0.4	8213	158	03-Oct-19	P.Harrington, K.Schraeder	0	32		0		
258850	Bishop	31M05H307	Unit 24	0.666	8213	255	26-Sep-19	P.Harrington, K.Schraeder	0	44	52	0	351	258850
317177	Bishop	31M05H304	Unit 4	0.5	8314	191	17-Jul-19	P.Harrington, G.Bishop	29	0	52	94	366	317177
277042	Bishop	31M05H285	Unit 6	100	8314	383	18-Jul-19	P.Harrington, G.Bishop	100	0	52	188	3069	277042
277042	Bishop	31M05H285	Unit 7	100	8314	383	18-Jul-19	P.Harrington, G.Bishop	100	0		187		
277042	Bishop	31M05H285	Unit 8	0.5	8314	191	18-Jul-19	P.Harrington, G.Bishop	50	0		94		
277042	Bishop	31M05H285	Unit 9	100	8314	383	18-Jul-19	P.Harrington, G.Bishop	100	0		188		
277042	Bishop	31M05H285	Unit 10	100	8314	383	18-Jul-19	P.Harrington, G.Bishop	100	0		187		
269300	Bishop	31M05H264	Unit 3	0.333	8314	127	17-Jul-19	P.Harrington, G.Bishop	23	0	52	62	389	269300
269300	Bishop	31M05H264	Unit 2	0.2	8314	76	17-Jul-19	P.Harrington, G.Bishop	11	0		38		
150827	Bishop	31M05H387	Unit 55	100	8215	369	15-Sep-19	P.Harrington, K.Schraeder	0	80	52	0	621	150827
150827	Bishop	31M05H387	Unit 50	0.25	8214	95	05-Aug-19	P.Harrington, K.Schraeder	0	25		0		
186844	Bishop	31M05H367	Unit 45	100	8214	383	05-Aug-19	P.Harrington, K.Schraeder	0	100	52	0	1500	186844
186844	Bishop	31M05H367	Unit 46	0.5	8214	191	07-Aug-19	P.Harrington, K.Schraeder	0	50		0		
186844	Bishop	31M05H367	Unit 51	100	8214	383	05-Aug-19	P.Harrington, K.Schraeder	0	100		0		
186844	Bishop	31M05H367	Unit 41	0.5	8214	191	05-Aug-19	P.Harrington, K.Schraeder	0	50		0		
302829	Bishop	31M05H347	Unit 41	0.5	8214	191	05-Aug-19	P.Harrington, K.Schraeder	0	50	52	0	1067	302829
302829	Bishop	31M05H347	Unit 42	100	8214	383	10-Aug-19	P.Harrington, K.Schraeder	0	133		0		
302829	Bishop	31M05H347	Unit 43	0.5	8214	191	10-Aug-19	P.Harrington, K.Schraeder	0	67		0		
155684	Bishop	31M05A046	Unit 72	0.333	8215	123	23-Sep-19	P.Harrington, K.Schraeder	0	33	52	0	458	155684
155684	Bishop	31M05A046	Unit 26	0.5		0	15-Jun-19	P.Harrington, G.Bishop	250	0		0		
199567	Bishop	31M05H349	Unit 49	0.5	8214	191	07-Aug-19	P.Harrington, K.Schraeder	0	50	52	0	293	199567
150826	Bishop	31M05H348	Unit 43	0.5	8214	191	10-Aug-19	P.Harrington, K.Schraeder	0	67	52	0	1067	150826
150826	Bishop	31M05H348	Unit 44	100	8214	383	10-Aug-19	P.Harrington, K.Schraeder	0	133		0		
150826	Bishop	31M05H348	Unit 48	0.5	8214	191	07-Aug-19	P.Harrington, K.Schraeder	0	50		0		

The following claims were included in the work:

254147, 106280, 158049, 144502, 144503, 240537, 158050, 203194, 247266, 155683, 336683, 172334, 143090, 283212, 175091, 343852, 237309, 126017, 105615, 247076, 330989, 199568, 151798, 343734, 219399, 210724, 222764, 230056, 326048, 203195, 144504, 241581, 124604, 241582, 140959, 296727, 337054, 241583, 199542, 235751, 234633, 252459, 341583, 139060, 329881, 131127, 258850, 317177, 277042, 269300, 150827, 186844, 302829, 155684, 199567, 150826, (569262 - RJK. Ex. Ltd)

(Dates in the field, 2019: June 15, 19. July 14, 15, 17, 18, 20. August 5, 6, 7, 9, 10, 13. September 13, 14, 15, 16, 17, 18, 19, 22, 23, 25, 26. October 3.)

Value on Bishop Claims: $ 44,627.00
Total labour in the field: 8,566.00
Total Lab costs: 33,097.00
Management/paperwork: 2,964.00

RJK EXPLORATIONS LTD. 2019 Overburden Work

John CAMILLERI - Claims and Assessment LORRAIN CHAIN K.I.M. Definition Program [June 15 - September 19, 2019]

CLAIM no.	Owner	CELL	Lorrain Chain Unit sampled on claim on date	percentage of LC Unit in claim	LC Units ODM Batch No.	Value of ODM expense in claim	Date of field work in claim	Person doing work in claim	cost of sample: labour @ 500 day in claim	cost of sample: labour @ 400 day in claim	% of total planning management and data mapping cost	Bishop Lab work: Units 1-12 only	TOTAL VALUE	CLAIM no.
100292	John Camilleri	31M05H385	Unit 39	100	8214	383	06-Aug-19	P.Harrington, K.Schraeder	0	80	52	0	756	100292
100292	John Camilleri	31M05H385	Unit 52	0.5	8214	191	14-Sep-19	P.Harrington, K.Schraeder	0	50		0		
100293	John Camilleri	31M05A005	Unit 52	0.5	8214	191	14-Sep-19	P.Harrington, K.Schraeder	0	50	52	0	293	100293
238289	John Camilleri	31M05A088	Unit 76	0.333	8216	122	22-Sep-19	P.Harrington, K.Schraeder	0	44	52	0	451	238289
238289	John Camilleri	31M05A088	Unit 80	0.5	8216	183	18-Sep-19	P.Harrington, K.Schraeder	0	50		0		
157190	John Camilleri	31M05A087	Unit 75	0.5	8216	183	22-Sep-19	P.Harrington, K.Schraeder	0	67	52	0	302	157190
312362	John Camilleri	31M05A067	Unit 73	0.5	8215	184	22-Sep-19	P.Harrington, K.Schraeder	0	67	52	0	719	312362
312362	John Camilleri	31M05A067	Unit 75	0.5	8216	183	22-Sep-19	P.Harrington, K.Schraeder	0	67		0		
312362	John Camilleri	31M05A067	Unit 76	0.333	8216	122	22-Sep-19	P.Harrington, K.Schraeder	0	44		0		
189654	John Camilleri	31M05A068	Unit 77	100	8216	367	19-Sep-19	P.Harrington, K.Schraeder	0	133	52	0	718	189654
189654	John Camilleri	31M05A068	Unit 76	0.333	8216	122	22-Sep-19	P.Harrington, K.Schraeder	0	44		0		
251980	John Camilleri	31M05A046	Unit 72	0.666	8215	246	23-Sep-19	P.Harrington, K.Schraeder	0	67	52	0	615	251980
251980	John Camilleri	31M05A046	Unit 26	0.5		0	15-Jun-19	P.Harrington, G.Bishop	250	0		0		

The following claims were included in the work:

100292, 100293, 238289, 157190, 312362, 189654, 251980.

(Dates in the field, 2019: June 15. August 6. September 14, 18, 19, 22, 23.)

Value on Camilleri Claims: $ 3,854.00

Total labour in the field: 1,013.00

Total Lab costs:2,477.00

Management/paperwork: 364.00

RJK EXPLORATIONS LTD. 2019 Overburden Work

CRUZ COBALT - Claims and Assessment LORRAIN CHAIN K.I.M. Definition Program [August 7 - September 17, 2019]

CLAIM no.	Owner	CELL	Lorrain Chain Unit sampled on claim on date	percentage of LC Unit in claim	LC Units ODM Batch No.	Value of ODM expense in claim	Date of field work in claim	Person doing work in claim	cost of sample: labour @ 500 day in claim	cost of sample: labour @ 400 day in claim	% of total planning management and data mapping cost	Bishop Lab work: Units 1-12 only	TOTAL VALUE	CLAIM no.
139941	Cruz Cobalt	31M05H386	Unit 59	0.5	8215	184	15-Sep-19	P.Harrington, K.Schraeder	0	40	52	0	276	139941
260102	Cruz Cobalt	31M05H369	Unit 49	0.5	8214	191	07-Aug-19	P.Harrington, K.Schraeder	0	50	52	0	293	260102
145839	Cruz Cobalt	31M05A029	Unit 67	100	8215	369	17-Sep-19	P.Harrington, K.Schraeder	0	100	52	0	990	145839
145839	Cruz Cobalt	31M05A029	Unit 68	100	8215	369	17-Sep-19	P.Harrington, K.Schraeder	0	100		0		

The following claims were included in the work:

139941, 260102, 145839.

(Dates in the field, 2019: August 7. September 15, 19.)

Value on Cruz Cobalt Claims: $ 1559.00
Total labour in the field: 290.00
Total Lab costs: 1,113.00
Management/paperwork: 156.00

RJK EXPLORATIONS LTD. 2019 Overburden Work

COBALT POWER - Claims and Assessment LORRAIN CHAIN K.I.M. Definition Program [July 17 - October 3, 2019]

CLAIM no.	Owner	CELL	Lorrain Chain Unit sampled on claim on date	percentage of LC Unit in claim	LC Units ODM Batch No.	Value of ODM expense in claim	Date of field work in claim	Person doing work in claim	cost of sample: labour @ 500 day in claim	cost of sample: labour @ 400 day in claim	% of total planning management and data mapping cost	Bishop Lab work: Units 1-12 only	TOTAL VALUE	CLAIM no.
159145	Cobalt Power	31M05H245	Unit 1	0.333	8314	126	17-Jul-19	P.Harrington, G.Bishop	19	0	52	62	259	159145
191647	Cobalt Power	31M05H244	Unit 1	0.333	8314	126	17-Jul-19	P.Harrington, G.Bishop	19	0	52	62	259	191647
211151	Cobalt Power	31M05H224	Unit 1	0.333	8314	126	17-Jul-19	P.Harrington, G.Bishop	19	0	52	62	259	211151
277043	Cobalt Power	31M05H264	Unit 2	0.8	8314	304	17-Jul-19	P.Harrington, G.Bishop	46	0	52	150	552	277043
307616	Cobalt Power	31M05H263	Unit 17	100	8213	383	03-Oct-19	P.Harrington, K.Schraeder	0	80	52	0	515	307616

The following claims were included in the work:

159145, 191647, 211151, 277043, 307616.

(Dates in the field, 2019: July 17. October 3.)

Value on Cobalt Power Claims: $ 1,844.00
Total labour in the field: 183.00
Total Lab costs: 1,401.00
Management/paperwork: 260.00

RJK EXPLORATIONS LTD. 2019 Overburden Work

COBALT INDUSTRIES - Claims and Assessment LORRAIN CHAIN K.I.M. Definition Program [July 17 - October 4, 2019]

CLAIM no.	Owner	CELL	Lorrain Chain Unit sampled on claim on date	percentage of LC Unit in claim	LC Units ODM Batch No.	Value of ODM expense in claim	Date of field work in claim	Person doing work in claim	cost of sample: labour @ 500 day in claim	cost of sample: labour @ 400 day in claim	% of total planning management and data mapping cost	Bishop Lab work: Units 1-12 only	TOTAL VALUE	CLAIM no.
133843	Cobalt Indust.	31M05H364	Unit 38	0.5	8214	191	06-Aug-19	P.Harrington, K.Schraeder	0	40	52	0	283	133843
196494	Cobalt Indust.	31M05H232	Unit 18	0.333	8213	127	02-Oct-19	P.Harrington, K.Schraeder	0	44	52	0	223	196494
265306	Cobalt Indust.	31M05H324	Unit 18	0.666	8213	255	02-Oct-19	P.Harrington, K.Schraeder	0	89	52	0	912	265306
265306	Cobalt Indust.	31M05H324	Unit 19	100	8213	383	02-Oct-19	P.Harrington, K.Schraeder	0	133		0		
265306	Cobalt Indust.	31M05H324	Unit 20	100	8213	383	02-Oct-19	P.Harrington, K.Schraeder	0	133	52	0	568	265306
245678	Cobalt Indust.	31M05H304	Unit 5	0.5	8314	190	17-Jul-19	P.Harrington, G.Bishop	28	0	52	94	364	245678
214477	Cobalt Indust.	31M05H287	Unit 108	0.75	8216	275	04-Oct-19	P.Harrington, K.Schraeder	0	300	52	0	627	214477
299835	Cobalt Indust.	31M05H267	Unit 108	0.25	8216	92	04-Oct-19	P.Harrington, K.Schraeder	0	100	52	0	244	299835
301841	Cobalt Indust.	31M05H284	Unit 14	0.4	8213	158	03-Oct-19	P.Harrington, K.Schraeder	0	32	52	0	242	301841
214520	Cobalt Indust.	31M05H283	Unit 13	100	8213	383	03-Oct-19	P.Harrington, K.Schraeder	0	80	52	0	1070	214520
214520	Cobalt Indust.	31M05H283	Unit 14	0.2	8213	76	03-Oct-19	P.Harrington, K.Schraeder	0	16		0		
214520	Cobalt Indust.	31M05H283	Unit 15	100	8213	383	03-Oct-19	P.Harrington, K.Schraeder	0	80		0		
300383	Cobalt Indust.	31M05H263	Unit 16	100	8213	383	03-Oct-19	P.Harrington, K.Schraeder	0	80	52	0	515	300383
131742	Cobalt Indust.	31M05H307	Unit 20	0.25	8213	95	06-Aug-19	P.Harrington, K.Schraeder	0	20	52	0	167	131742
187190	Cobalt Indust.	31M05H365	Unit 38	0.5	8214	191	06-Aug-19	P.Harrington, K.Schraeder	0	40	52	0	1054	187190
187190	Cobalt Indust.	31M05H365	Unit 36	0.666	8214	255	06-Aug-19	P.Harrington, K.Schraeder	0	53		0		
187190	Cobalt Indust.	31M05H365	Unit 37	100	8214	383	06-Aug-19	P.Harrington, K.Schraeder	0	80		0		

The following claims were included in the work:

133843, 196494, 265306, 265306, 245678, 214477, 299835, 301841, 214520, 300383, 131742, 187190.

(Dates in the field, 2019: July 17. August 6. October 2, 3, 4.)

Value on Cobalt Indust. Claims: $ 6,269.00

Total labour in the field: 1,348

Total Lab costs: 4,297

Management/paperwork: 624