

NLPA workshop, St. John's March 12, 2015

Stephen Hinchey, Mineral Lands Division Mines Branch, Department of Natural Resources

Mineral Lands Division, Department of Natural Resources Questions? Call, Email, Visit. 729-0573 (Trina), 729-5748 (Stephen), 729-6437 (Justin)



Full contact information:

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Justin Lake (claims recorder), justinwlake@gov.nl.ca, 729-6437

Before we begin...

Assessment report is documentation of annual exploration work

(including a statement of expenditures)

To keep mineral licence beyond one year, must submit assessment report

(and meet expenditure requirements)

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Topic of presentation:

Assessment report essentials

mandatory + strongly recommended

= essentials

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essential items for a quality, professional report with findings clearly presented



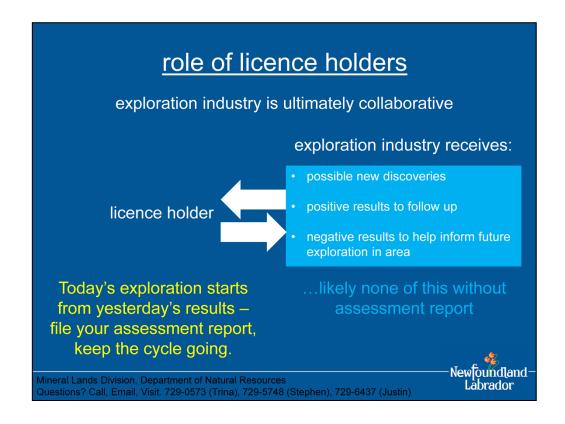
role of regulators

- administer legislation and regulations: assessment reports are a requirement under the Mineral Act, our job is to ensure assessment reports meet regulatory requirements
- validate expenditures, ensure that licences are held because work requirements clearly met, ensure the transparency and integrity of our system of mineral rights
- ensure reports contain all necessary information, to be useful for future explorers, public geoscience, value for posterity

role of licence holders mineral licence is a bargain between licence holder and public licence holder receives: public receives: public receives: public geoscience public geoscience increasing knowledge of resource base possible future employment possible future resource revenue ...none of this without assessment report Mineral Lands Division, Department of Natural Resources Questions? Call, Email, Visit. 729-0573 (Trina), 729-5748 (Stephen), 729-6437 (Justin)

role of licence holders

- licence grants holder the "exclusive right to explore", thereby alienating the land from others (licence also grants holder the exclusive option to apply for mining lease)
- in exchange for this exclusive right, the licence holder explores and documents the exploration work, thereby providing useful information for future explorers, public geoscience, value for posterity
- exploration work on a licence is not a solely private matter



role of licence holders

- hopefully significant new discoveries, but regardless of findings, all exploration work is valuable because it will inform future explorers, but needs to be clearly documented in assessment report
- negative results are valuable, inform future explorers of where not to look, or where not to repeat the same type and scale of work
- you are part of an exploration industry, ultimately collaborative effort over the decades

regulators licence holders our professional duties are the same: to ensure reports contain all necessary information, clearly presented Mineral Lands Division, Department of Natural Resources Questions? Call, Email, Visit. 729-0573 (Trina), 729-5748 (Stephen), 729-6437 (Justin)

- with respect to assessment reports, our professional duties are the same: to ensure that reports contain all necessary information, clearly presented
- prospecting is a business venture, producing a quality assessment report is a professional requirement

value of assessment report to you

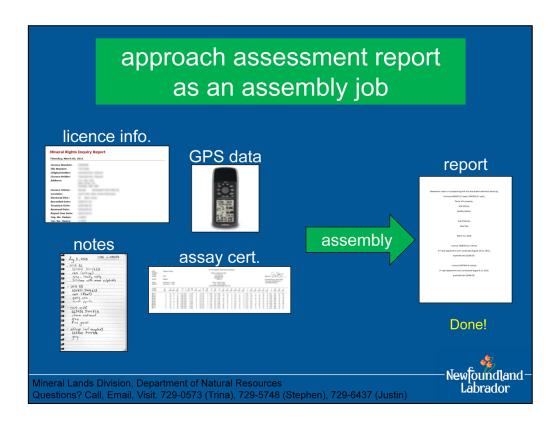
- account of your work
- ideal information package for companies, conferences
- quality report demonstrates professionalism
- sample maps advance your understanding, ensure parts of your property not neglected, essential for promotion
- your contribution to posterity (your report), regardless of your contribution to prosperity (your discoveries)

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value of assessment report to the individual prospector

- an account of your work on your property (ideally, an account of all exploration work on your property)
- ideal information package for interested companies, conferences
- quality report demonstrates your professionalism
- producing sample maps and compilation maps advances your understanding, helps you stand back and survey your own work, helps focus your work, helps ensure that parts of property not neglected, essential for promotion
- producing report helps clarify thinking on topic
- your contribution to posterity (your report), regardless of your contribution to prosperity (your discoveries)



 approach to assessment report: assemble the information and data you have (or really should have) – everything else is gravy and not essential

helpful tips:

- keep formatting simple! (just type)
- assemble the essentials or mandatory items first extras can be added later if you have time or interest
- maps, sample table, assay certificates, etc. may be submitted as separate files
- report body should be submitted as PDF file, but paper reports are acceptable

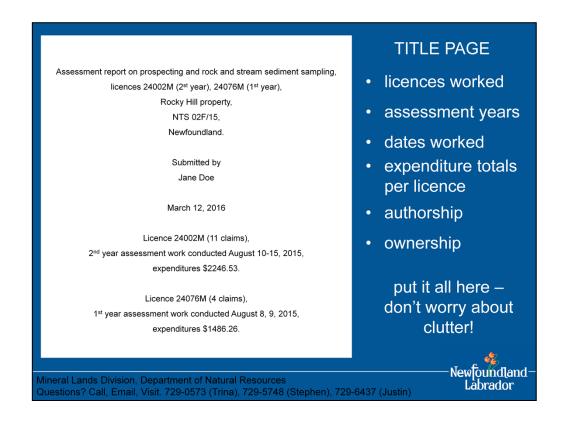
now let's review each essential...



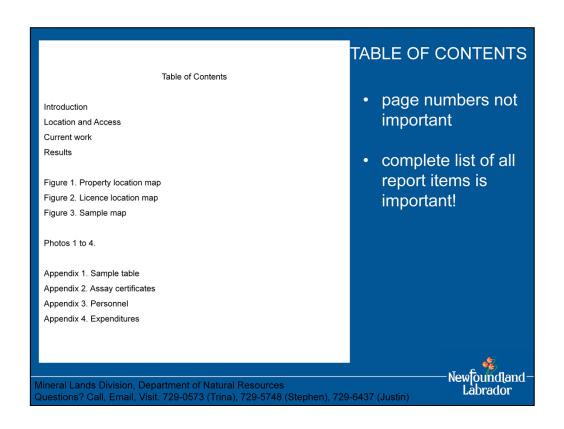
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some helpful tips:

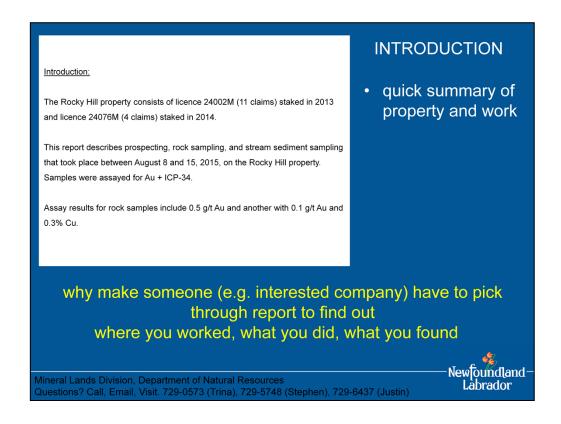
- keep formatting simple: don't worry about font sizes, bold, italics, word alignment, etc. (just type what you need to say)
- assemble the essentials or mandatory items first, extras can be added later if you have the time and interest
- maps, sample table, etc. may be submitted as separate files
- can convert document files into PDF files using OpenOffice or LibreOffice, both of which are free software
- OpenOffice and LibreOffice also include spreadsheet programs for making your sample table



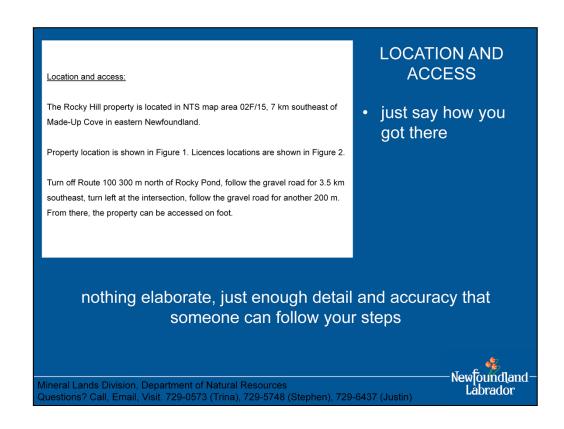
• title page (the title page is the place to write all such important information as licences worked, dates worked, expenditure totals per licence, ownership, authorship; don't worry about clutter)



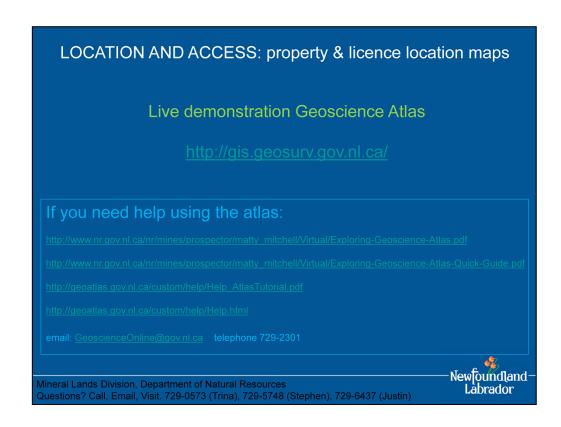
• table of contents (page numbers not important, complete listing of report contents is important) [not mandatory, but essential for a quality, professional report]



 introduction (basically a summary) [not mandatory, but essential for a quality, professional report]



 location and access is simply a description of how you got there – nothing elaborate, just enough detail and accuracy that someone else could follow your steps



• can use Geoscience Atlas to make property and licence location maps

CURRENT WORK

Current work:

Prospecting, rock sampling, and stream sediment sampling took place between August 8 and 15, 2014, on the Rock Hill property. Samples were assayed for Au + ICP-34.

Exposure is good except in the western part of licence 24076M where outcrops are rare.

54 rock samples and 3 stream sediment samples were collected and analysed for Au + ICP-34. 30 rock samples and the 3 stream sediment samples came from licence 24002M, 24 of the rock samples came from licence 24076M.

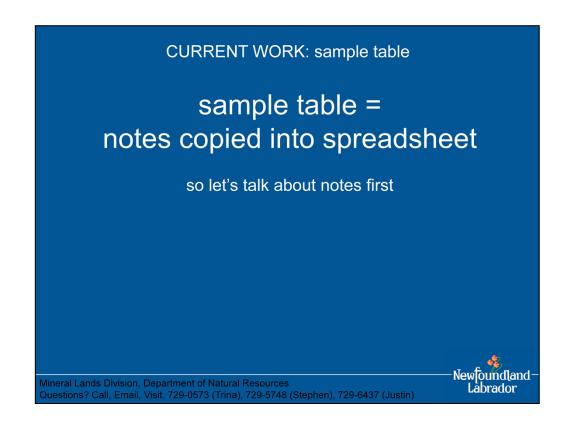
Sample locations are shown in Figure 3. Sample table is included as Appendix 1.

The rocks sampled included siltstone, sandstone, and quartz vein.

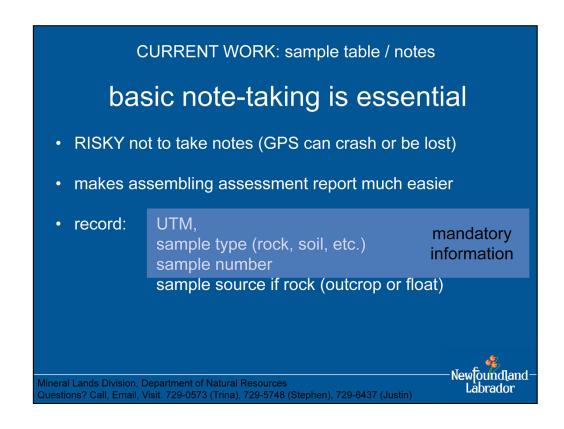
simply what you did

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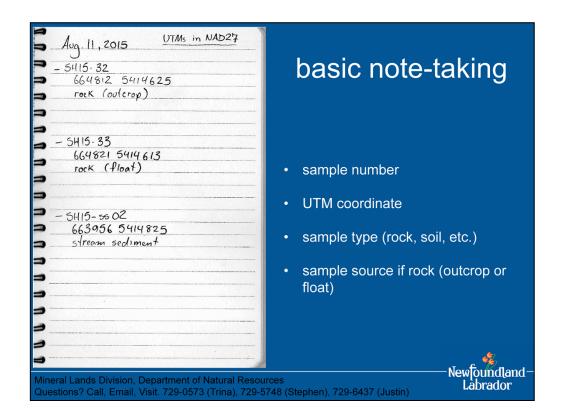


• sample table = your notes copied into a spreadsheet



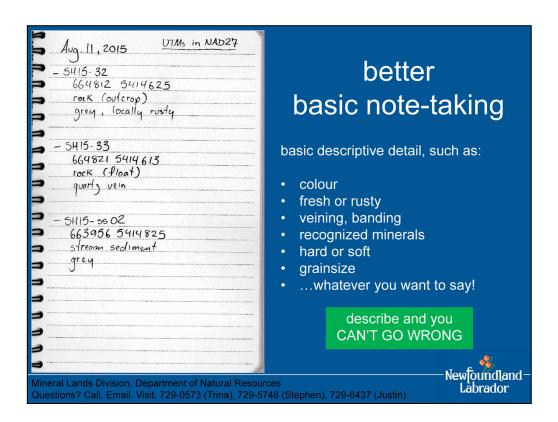
basic note taking is an essential practice:

- risky not to take notes (there have been cases of GPSs crashing or being lost, sample locations lost, work down the toilet)
- taking notes makes assembling assessment report much easier
- notes do not need to be anything elaborate
- most basic note-taking: record UTM, sample type (rock, soil, etc.), sample source
 if rock (outcrop or float, grab or chip), sample number (mandatory information for
 report to be accepted)

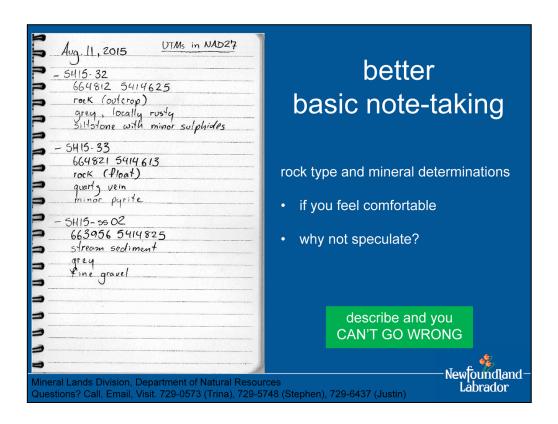


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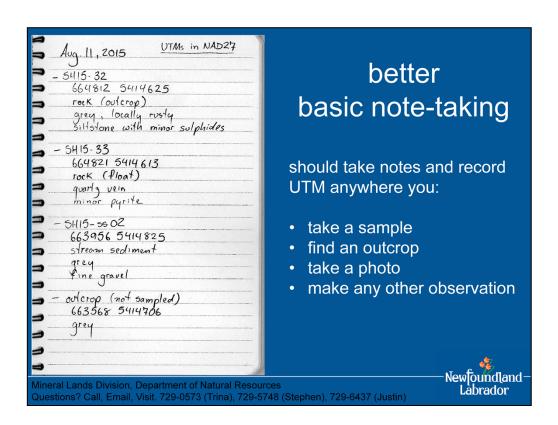
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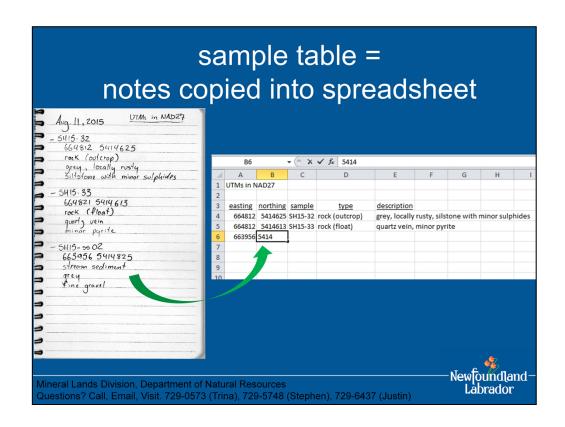
 for observations, whether of sampled material or outcrop, record basic descriptive detail such as colour, hard or soft, grainsize, veining, banding, fresh or rusty, recognized minerals – describe first and you can't go wrong! everything else is secondary



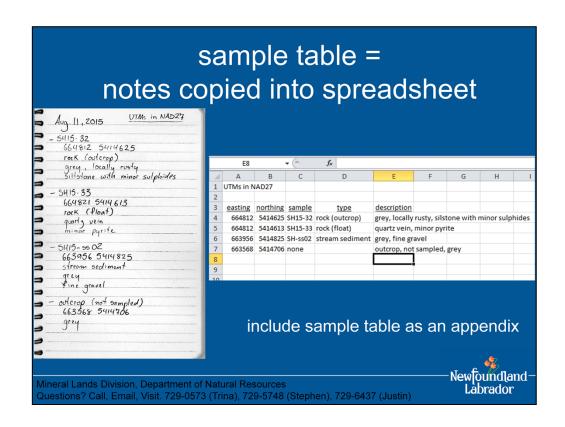
• if you feel comfortable making a rock type determination or wish to speculate on rock type or interpretation, go for it, otherwise don't worry



• better but still basic note-taking: take notes anywhere you collect a sample, make an observation, take a photo, or just find an outcrop: write down UTM coordinates and simply note what you sampled and (or) what you saw



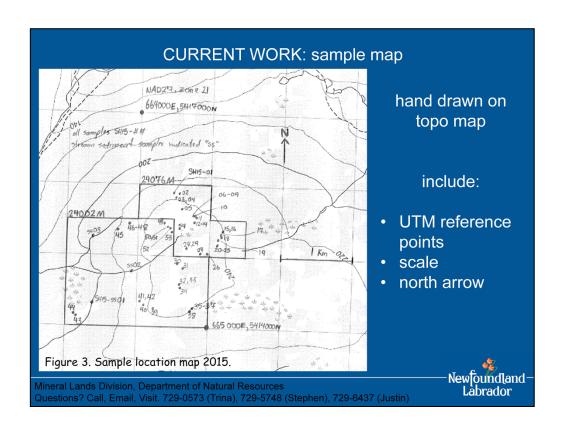
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- OpenOffice and LibreOffice are free software suites that include spreadsheet programs



- better but still basic note-taking: take notes anywhere you collect a sample, make an observation, take a photo, or just find an outcrop: write down UTM coordinates and simply note what you sampled and (or) what you saw
- also, if you want to report geological observations then observations must be associated with UTMs and tabulated, map would be a bonus
- OpenOffice and LibreOffice are free software suites that include spreadsheet programs

CURRENT WORK: sample map here are two relatively easy options: Google Earth Pro hand drawn on topo map careful pencil work can create nice Google Earth Pro is now free of maps charge use NAD 27 topo map so that licences transfer GPS data directly into can be drawn using grid Google Earth Pro – plots instantly · outputs directly to image file with map in Geoscience Atlas, take screen shot or use "print" function, save image, scale, caption block, north arrow print enlarged • or you can obtain topo maps from regional Forestry offices scan your final map Newfoundland-Mineral Lands Division, Department of Natural Resources Läbrador Questions? Call, Email, Visit. 729-0573 (Trina), 729-5748 (Stephen), 729-6437 (Justin

- mineral licences are made up of mineral claims (individual 500 m square blocks); an individual claim comprises one-quarter part of a NAD 27 UTM grid square and is bounded by one corner of a NAD 27 UTM grid square
- for this reason, if you want to conveniently draw your licences on a topographic map using the map grid, you will need to use a NAD 27 map (Natural Resources Canada now provides NAD 83 maps; on these maps, your licence boundaries with be offset from the map grid)
- also be aware that Google Earth uses WGS 84 (a.k.a. NAD 83) for its UTM datum
- you can also import shape files (.shp) directly into Google Earth Pro; you can
 obtain shape files for mineral licences (a.k.a. map staked claims) and other data
 from the Geoscience Atlas (note that when exporting a shapefile from the
 Geoscience Atlas it will export only what is within the current field of view)
- when importing GPS data or shapefiles, Google Earth Pro will automatically convert UTM coordinates to NAD 83 (you do not need to worry about conversion)



CURRENT WORK: sample map

Live demonstration Google Earth Pro

Before we begin:

- GPS tracklogs easily imported into Google Earth Pro to produce map showing prospecting coverage (even if nothing found)
- download GPS waypoints and tracklogs frequently to protect against loss and to see where you've prospected
- (Google Earth Pro might ask you for a key; enter your email address and "GEPFREE")

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- tracklogs should be retained in full detail (some GPS units will reduce tracklog detail when saving; solution is to transfer to computer first)
- be aware that Google Earth uses WGS 84 (a.k.a. NAD 83) for its UTM datum
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- when importing GPS data or shapefiles, Google Earth Pro will automatically convert UTM coordinates to NAD 83 (you do not need to worry about conversion)

CURRENT WORK: sample map

Before we move on: value of sample map to you

- essential for promotion (point to location of mineralized samples on map)
- · help you survey your own work, ensure coverage of licence
- plot mineralized samples / anomalous results, advances interpretation, guides follow up work
- there is no one involved in prospecting, exploration, geology that does not benefit greatly by plotting results

Newfoundland-

Labrador

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- photos of outcrops, especially sample sites: picture worth 1000 words, provides valuable visual record that can be re-examined, re-interpreted later by yourself and others
- photos of landscapes: shows where you've been, valuable for future explorers; should note the direction photo taken towards
- taking photos is quick, easy, and valuable no reason not to do it
- UTMs for all photos; in assessment report, report photo UTMs in captions or table, could even upload to Google Earth

CURRENT WORK: what to do if...

"I didn't find any outcrop / anything worth assaying"

You can still provide:

- GPS tracklogs to show prospecting coverage (or occasional GPS waypoints, or sketch on topo map)
- photos of landscapes or outcrops (with UTMs)
- UTM coordinates for outcrops, panned sample sites where nothing found, samples taken but not assayed, etc.

All valuable for planning future exploration!

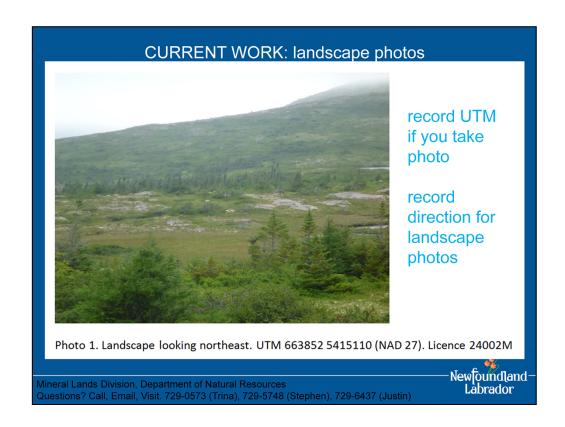


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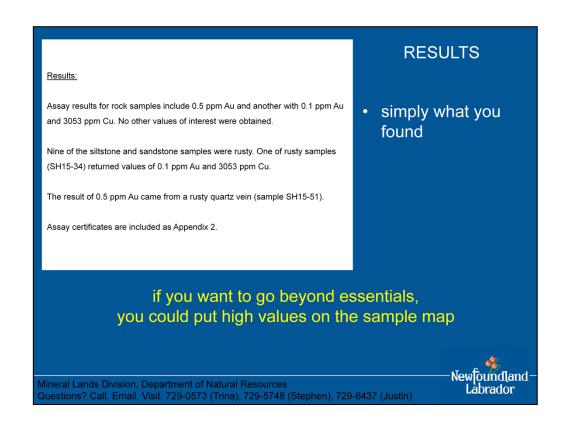
assessment report will not be accepted unless you can substantiate *in the report* what you did and where you've been, so...

besides samples and accompanying notes, you should be taking / recording:

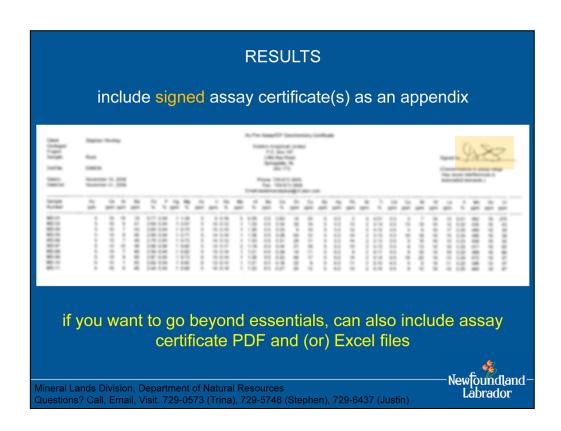
- UTMs for all outcrops encountered: if nothing interesting is found, no rock worth sampling, no samples worth assaying, etc., then at least you've recorded outcrop locations (valuable information in itself); place in table in report, plot on map
- photos of outcrops, especially sample sites: picture worth 1000 words, provides valuable visual record that can be re-examined, re-interpreted later by yourself and others
- photos of landscapes: shows where you've been, valuable for future explorers; should note the direction photo taken towards
- taking photos is quick, easy, and valuable no reason not to do it
- UTMs for all photos; in assessment report, report photo UTMs in captions or table, could even upload to Google Earth!
- GPS tracklogs are ideal for substantiating where you've been, very valuable information for planning future work; tracklogs should be retained in full detail
- or, instead of tracklogs, can periodically record waypoints / UTMs to give an indicatation of your prospecting coverage
- even if no outcrops found: GPS tracklogs and landscape photos substantiate where you've been



- photos of landscapes: shows where you've been, valuable for future explorers; should note the direction photo taken towards
- taking photos is quick, easy, and valuable no reason not to do it
- UTMs for all photos; in assessment report, report photo UTMs in captions or table, could even upload to Google Earth!



also, if you want to report geological observations then observations must be associated with UTMs and tabulated, map would be a bonus



Appendix 4. Expenditures

Licence 24002M (11 claims, 2nd year)

Report preparation (2 days @ \$100 day) = \$200 Prospecting (6 days @ \$100 day) = \$600 Rock sample assays (30 @ \$38.25 each) + \$9.21 (handling) = \$1156.71 Stream sediment sample assays (3 @ \$33.84 each) = \$101.52 Per Diem Food (6 days @ \$30 day) = \$240 Per Diem Vehicle (1 days @ \$60 day) = \$60 Fuel = \$80

Subtotal: \$2418.23 15% Overhead: \$314.37 Total: \$2732.60

Licence 24076M (4 claims, 1st year)

Report preparation (1 day @ \$100) = \$100 Prospecting (2 days @100 day) = \$200 Rock sample assays (24 @ \$33.85) = \$812.40 Per Diem Food (2 days @ \$30 day) = \$60 Per Diem Vehicle (1 days @ \$60 day) = \$60 Fuel = \$80

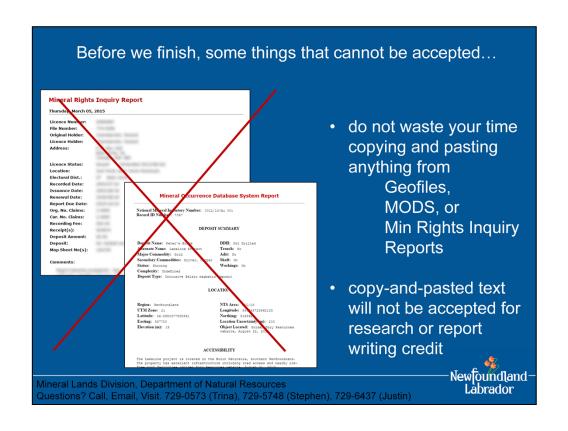
Subtotal: \$1292.40 15% Overhead: \$193.86 Total: \$1486.26

STATEMENT OF EXPENDITURES

report expenditures separately for each licence – MANDATORY

items that apply to more than one licence (e.g. fuel, vehicle) should be prorated

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Closing remarks (1 / 3)

- Please make it easy for us to accept your report.
- We don't want to have to ask for missing information.
- Clear, complete reports are easy to accept. Speeds up process and refund of securities.
- · If you have any questions: Call, Email, Visit:

Trina Adams, <u>trinaadams@gov.nl.ca</u>, 729-0573 Stephen Hinchey, <u>stephenhinchey@gov.nl.ca</u>, 729-5748 Justin Lake, <u>justinwlake@gov.nl.ca</u>, 729-6437

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- make it easy for us to accept your report: we don't want to have to ask for extras, slows down the process for everyone, including refund of staking securities
- if you have any questions about assessment reports, just call or email us: Trina, Stephen, Justin
- Additional contacts:

Heather Rafuse (Exploration Approvals), heatherrafuse@gov.nl.ca, 729-6408 Dale O'Reilly (Prospectors Assistance Program), daleoreilly@gov.nl.ca, 729-6448 Glen Penney (Core Storage Geologist), glenpenney@gov.nl.ca, 729-5833

Closing remarks (2 / 3)

There are almost 11,000 assessment reports on file and publicly available. There are thousands more geological reports, maps, and data sets on file and publicly available.

When you file your assessment report, regardless of what you found or didn't find, you are contributing to this public resource. As licence holder, filing assessment reports fulfills your bargain with the public.

As explorers, these geofiles are your inheritance. These are yesterday's results for you to follow up.

The truth is, mines emerge gradually in successive assessment reports

To ensure that you and future explorers have complete, usable assessment reports at your fingertips, we as regulators have a duty to ensure that assessment reports are complete.

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Closing remarks (3 / 3)

organized, complete assessment report with sample map & photos

ideal information package for interested companies, for MRR, PDAC, etc.

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- At the end of the day: clear, organized, complete assessment report with sample map and photos = ideal information package for interested companies, for MRR, PDAC, etc.
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