



Mineral Titles

Information Update

No. 8 – Registration of Physical Exploration and Development Work on Claims

Revision Date: May 5, 2024

PHYSICAL EXPLORATION AND DEVELOPMENT

Section 1 of the Mineral Tenure Act Regulation (the Regulation) defines [physical exploration and development](#) activities on mineral and placer claims as:

- trenches, open cuts (for collecting and sampling of mineralized rock), adits, pits, shafts and other underground activity for the purpose of collecting samples or other geological or technical information
- reclamation related to exploration and development activities
- ground control surveys, line cutting and grids that support an activity described in paragraphs (b) to (h) of the definition of technical exploration and development in section 1 of the Mineral Tenure Act Regulation
- precision survey techniques such as global positioning or surveys conducted by a practicing land surveyor
- panning, digging or washing of gravels to test for the presence of economically significant minerals (**on placer claims only**)

Applying exploration and development work to a claim is a two-step process:

1. Register the work event in Mineral Titles Online (MTO)
2. Submit a completed work report to the Mineral Titles Branch.

For more information about how to register exploration and development in Mineral Titles Online see [Statement of Work](#) under MTO Help Documents – Search by Topic.

The Chief Gold Commissioner requires that physical exploration and development work be recorded using the Physical Work Report form and submitted within 30 days of registering the work event registered in MTO. The report can be uploaded into MTO or emailed as an attachment to Mineral.Titles@gov.bc.ca. More information about uploading the physical work report form in MTO can be found at [Exploration and Development Work - Upload Report under MTO Help Documents](#).

The physical work report must clearly demonstrate how physical exploration and development activity was conducted for collecting samples, assessing geological or

In the event of a discrepancy between this information and the provisions in the *Mineral Tenure Act* and Regulation, the provisions in the statute and regulations will apply.

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technical information, or for testing for the presence of economically significant minerals. Assay results, geological information or other technical information collected in the field must be included in the report to substantiate that physical exploration and development was completed.

Physical exploration and development work may also be included with the registration of technical exploration and development work. See [Information Update 25 - Exploration and Development Work](#)

WORK REPORT FORM

The Physical Work Report form is available at:

<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mineral-titles/mineral-placer-titles/forms-maps-publications/forms-mineral-placer-titles#Physical>

Handwritten reports will not be accepted. Reports must be typed and submitted on the physical work report form.

Section 1 – List statement of work (SOW) event numbers from the work registrations you entered in MTO for the work done.

Section 2 – List claim numbers where the work was done.

Section 3 – Select mineral or placer claim.

Section 4 – Enter recorded holder contact information.

Section 5 – List the report author; if the recorded holder and report author are the same person, leave section 5 blank.

Section 6 – Enter both, a range of dates, and the exact dates the work was completed. Select either hand work or mechanical for the work type. If the mechanical checkbox is selected, check the checkbox for Approved Mines Act Permit and provide the permit number and permit approval number.

Section 7 – Describe in detail the work activity, location, and global positioning system (GPS) coordinates for all site locations. Incomplete information will result in returned work reports and/or cancelled registrations of work.

- Describe sites in meters (length x width x depth) to indicate a total volume in cubic meters (m³).
 - Amounts tested may also be entered as a volume estimate in cubic meters (m³).

- Amounts produced may be entered as a weight measurement in grams, milligrams, micrograms or ounces.
- Enter instructions for traveling to the site(s) where work was done. This ensures an Inspector may easily locate the site(s).
- Create a map at a scale of 1:10,000 or more detailed that accurately identifies the geographic location of the work site(s) relative to the claim boundaries, The 'make a map' button provides [instructions on how to make an acceptable map](#).
- Provide a detailed written description explaining the type of activity and the result obtained as per [Section 15\(1\)\(a\)](#) of the Mineral Tenure Act Regulation.
 - This may take the form of either assay results, other geological or technical information or a written description of samples.

If conducting placer work, please clearly specify in grams, milligrams, micrograms or ounces how much gold or amounts of other placer minerals were recovered.

Section 8 – Complete the cost statement as it relates to transportation, labour, exploration equipment and, food and lodging costs. See section 'Cost Statement Guidelines' below for detailed information.

Section 9 - Summarize additional report details in this section.

9. SUPPLEMENTAL SECTION

Additional information can be attached to this report if required.

Examples:

1. Further descriptions on equipment used. i.e., Volvo EC 250 Excavator was only used for reclamation.
2. Additional coordinates and sites listings.
3. Photographs.
4. Worklogs or supplemental information clarifying the work program. 'Gravels were transported to the wash plant with the rock truck, and then washed in the trommel. The loader was used to feed the plant, and the cat was used for reclamation.'

Section 10 - Certify the report for completeness and accuracy by including the name of the recorded holder/agent and date.

Note: In order to enter mineral lands and work on a mineral title you must have a current and valid FMC; this includes an agent of a free miner (as per S. 11(1) of the [Mineral Tenure Act](#)). A person must be at least 18 years of age or over and ordinarily a resident of Canada for at least 183 days in each calendar year or authorized to work in Canada to possess a [free miner certificate](#). Work performed on a mineral title by someone with a suspended FMC, no FMC, or an expired FMC will not be eligible for work credits.

10. CERTIFICATION OF REPORT (Required)

I hereby certify that the information contained in this report is a complete, true and accurate description of the work performed on the aforementioned title(s), and understand that any false statement or report may be grounds for cancellation of my claim(s) under Section 40 (1)(b) of the *Mineral Tenure Act*.

Recorded Holder/ Agent

Date (YYYY-MM-DD)

COST STATEMENT GUIDELINES

A cost statement detailing all the costs for claiming credit must be included in the report.

The following information is intended as a guide to estimate the costs of labour, machinery, and equipment that were used, to determine the value of physical exploration and development work performed.

The figures in this guide are approximations.

Receipts for items claimed in a cost statement must be provided on request.

Goods and Services Tax (GST) may be included in approved costs, where it has been paid in the purchase of goods and services.

Transportation and travel costs may be included to a maximum of 20% of the value allowed for the exploration and development work completed on the claim(s). When aircraft are used, up to 50% of the cost of the exploration and development work completed may be included for transportation/travel costs. The actual value of the transportation/travel must be sufficient to justify the 20% or 50% and receipts must be provided if requested. If the actual cost for transportation/travel is less than 20% or 50% (as applicable) of the work value, only the actual costs may be claimed.

Transportation/travel costs cannot be included in the work details except as an addition to the value in the cost statement for the total work costs which are exclusive to any transportation and travel. Transportation costs are not stand-alone costs and must be part of an overall exploration program. For Example:

Work Costs:	\$1,000.00	
Maximum transportation/travel allowable:	\$ 200.00*	(20% of \$1,000.00)
Total claimable assessment:	\$1,200.00	

*the **actual** value of the transportation/travel must be claimed if less than the percentage maximum

VEHICLE TRANSPORTATION RATES

Pick-up Truck

4x4 \$0.68 per km

4x2 \$0.60 per km

Trailer \$0.10 per km

ATV

\$1.00/ km OR \$130/day, \$517.55/week,

\$1551.80/month

Notes:

- ATV use must be entered as daily, weekly or monthly rates in the transportation costs section, as they are only eligible for up to 20% of the total exploration and development cost.
- An ATV or any off-road vehicle used on Crown land must be registered in BC. For more information see <https://www2.gov.bc.ca/gov/content/industry/crown-land-water/crown-land/crown-land-uses/off-road-vehicles>.

LABOUR

	Per Hour
Foreman/Supervisor	\$40.00
Labourers/Additional workers	\$30.00

Note: You must provide the names and current client ID numbers described in MTO for each supervisor and labourer on the work report form.

Other rates will only be accepted if invoices and a written description are provided that justify the employment of specialized personnel on the property.

MACHINERY AND EQUIPMENT

The rates for machinery and equipment are based on the rental rates published in The Blue Book: Equipment Rental Rate Guide, published by the B.C. Road Builders & Heavy Construction Association and Authorized by the Government of British Columbia (www.roadbuilders.bc.ca). Exceptions to this are noted.

Common equipment models are provided for the most recently produced model year. For any model produced prior to 2005, including some of the common models listed, the appropriate adjustment factor is noted at the bottom of the table. The adjustment factors are as follows:

- 0.96 for model years 2010-2007

- 0.92 for model years 2006-2002
- 0.88 for model years 2001 or older

To adjust rates for the model year of your equipment, multiply the rental rate provided by the appropriate adjustment factor.

In most cases, equipment shown with an hourly 'all found rental rate' are not subject to standby charges.

The make, model and year of the equipment used should be included in the report.

1. EXCAVATORS

Compact Excavators – under 9526 kg (21000lbs)

Weight tonnes (lbs)	Common Models		All Found Rental Rate
	Bobcat	Kubota	
1.36 – 2.72 (3000 – 5999)	E20, E26	KX018-4, U27-4	\$99.60
2.72 – 4.08 (6000 – 8999)	E32, E35		\$105.15
4.08 – 5.9 (9000-12999)	E42, E50	KX057-4	\$111.85
5.9 – 7.71 (13000 – 16999)	E60		\$124.25

Heavy Hydraulic Excavators

Weight tonnes (lbs)	Common Models					All Found Rental Rate
	Case	Cat	Deere	Hitachi	Link-Belt	
Under 14.51 (32000)		313, 313 FL	130G 135G 130P	ZX135US-6	130-X4	\$154.60
14.51 – 19.05 (32000 – 42000)		315 316F 317	160G 135P 160P		145X4 160X4	\$167.30
19.05 – 20.41 (42000 – 45000)		318F 318FL				\$180.30
20.41 – 23.13 (45000 – 51000)	CX210D	320 3320GC 325	210G-LC 200G		210-X4	\$197.75
23.13 – 26.76 (51000 – 59000)	CX250D	323, 325F, 326	245G 250G-LC		245-X4 250-X4	\$204.35
26.76 – 30.84 (59000 – 68000)	CX300D	326F 330 GC	250P		300-X4	\$228.10
30.84 – 39.92 (68000 – 88000)	CX350D	330 335	300G-LC 345G-LC		250X4LF 350X4	\$274.

		336 336GC 340	350G-LC 380GLC 300P 345P			
39.92 – 43.54 (88000 – 96000)					350X4LF	\$291
43.54 – 46.72 (96000 – 103000)		345CL			460LX	\$318.85
46.72 – 53.98 (103000 – 119000)		3499 350 352	470G-LC 470P		490-X4	\$358.80
53.98 – 68.95 (119000 – 152000)		245B/D 365BL	550LC 600C-LC	EX550LC-5 EX700 ZX600LC		\$370.85
Over 68.95 (152000)	CX700B CX800B	374 374F 390F L395	670G-LC 870 G- LC 670P		750X4	\$480.85

2. FRONT END LOADERS

Crawler Front End Loaders

Bucket Capacity - m ³ (cu yd)	Common Models			All Found Rental Rate
	Case	Cat	Deere	
0.96 – 1.14 (1.25- 1.5)		933, 933C	244E, 455G	\$124.25
1.15 – 1.33 (1.5 – 1.75)	855E/D	939C, 943	555G	\$131.50
1.53 – 1.71 (2 – 2.5)	1155E		655B	\$145.25
1.72 – 1.9 (2.25 – 2.5)		953D	655K	\$168.25
1.91 – 2.09 (2.5 – 2.75)				\$177.05
2.1 – 2.67 (2.75 – 3.5)		936D		\$186.75

Rubber Tired Front-End Loaders (4-wheel drive)

Bucket Capacity - m ³ (cu yd)	Common Models			All Found Rental Rate
	Case	Cat	Deere	
Under 0.76 (1)	21F, SR130, SV185, SR210, SV300	226B 226D 232D3 236D3 242D3	312GR 314G	\$120.45
0.76 (1)	121F, 221F, 321F	903D 906 H2 907H2908H2	204L 244L 304L	\$124.50

1.15 (1.5)		906M 920 906 907 908 910	924P	\$141.65
1.53 (2)	521E 521F	908M 910 914	304L 324L 344L 344P	\$148.30
1.91 (2.5)		910M 914M	444L 524L 444P 524P	\$159.20
2.29 (3)	721F	910K 914K	544L 544P 544G	\$169.00
2.68 (3.5)		938	624L 624P 644L 644P 644G 644X 724P	\$184.15
3.06 (4)	821F	950 GC 950M	724L	\$208.70
3.44 (4.5)	921F	926M 930M 938M 982XE 950	744P	\$216.10
3.82 (5)		966M 966M XE 962	744L 824P	\$251.15

3. TRACTORS WITH BACKHOES

FWHP (KW)	Common Models					All Found Rental Rate
	Case	Deere	Ford - N.H.	Kubota	Massey Ferguson	
Crawler						
Under 75 (55.93)	450C 550 550E	450H 450G 400G				\$126.85

	550H						
Rubber Tired	4x2 and 4x4					4x2	4x4
40 – 49.9 (29.8 – 37.2)	885	1250 2040 5200 5210	3010S 3430 3600 3830 3930 4100	L4150 L4850 M5030D T	240 250 253 360	\$88.45	\$106.50
50 – 59.9 (37.3 – 44.7)	3230 585 595	2150 2155 2255 2355N 5300 5310	250C 345C 445C 455C 4610 4630 530A 5600	M5950, M6030F	174S 255 261 270 362 374S 4225 670	\$91.10	\$110.75
60 – 69.9 (44.7 – 52.1)	1394 685 4210 695	2350 2355 2440 2550 5400 5410	4230 5000 5030 5530 5900 6600	M7030 M6950F	194F 265 275 283 3050 3060 375 384S 690	\$93.50	\$113.70
70 – 79.9 (52.2 – 59.6)	1494 4230	2555 2640 5500 5510 6210 6300	5610S 6530 6610 6640 6640S	M7500F M8030	383 390 698 3945 4243	\$95.05	\$116.65
80 – 89.9 (59.7 – 67)	1594 4240 5220 995	2750 2755 2940 2950 2955 6310 6400	6610S 7600 7610 7710 7740 7740S 7810	M8950	390T 393 396 6150 398 3075 3070	\$69.85	\$118.80
90 – 99.9 (67.1 – 74.5)	1896 5230	6410 7200	7610S 7810S 7840		3505 399 6170	\$98.55	\$121.35

4. TRUCKS

Dump Truck with Belly Dump, Clam or End Dump

Capacity	Hourly Rental Rate
10.7 m ³ (14 cu yd)	\$160.17
11.5 m ³ (15 cu yd)	\$164.25
12.2 m ³ (16 cu yd)	\$150.80
13.0 m ³ (17 cu yd)	\$154.60
13.8 m ³ (18 cu yd)	\$158.25
14.5 m ³ (19 cu yd)	\$161.85
15.3 m ³ (20 cu yd)	\$165.10

Articulated Trucks

Weight tonnes (tons)	Common Models					All Found Rental Rate
	Cat	Deere	Moxy	Terex	Volvo	
Under 20 (22)	D20D					\$178.15
20-24 (22-26)	725C2	260E		TA350 TA400	A25G	\$235.30
25-29 (28-32)	730 C EJ 740B EJ	310E 260P			A30G	\$243.90
30-34 (33-37)	735 735C 740EJ 745	370E 310P			A35G	\$301.35

5. SLUICES AND HIGHBANKERS

Description	Rate/hour (less operator)
Sluices or Highbankers up to \$700. Examples: Black Max Highbanker, Goldhawk 2 Highbanker, Goldhawk 10 Highbanker	\$2/hour
Sluices or Highbankers \$700 to \$1,500. Examples: Goldhawk 10 Highbanker with 1.5" pump, Goldhawk 2 Highbanker with 1.5" pump, Goldeagle 12 Highbanker with pump and hoses	\$5/hour
Sluices or Highbankers \$1,500 to \$2,500. Examples: Keene Powersluice incl. hopper, support legs and 4 Hp Engine	\$8/hour
Sluices or Highbankers \$2,500 to \$4,000. Examples: Keene Powersluice models 17325 H., 175 H incl. up to a 6.5 Hp Engine and up to a 3" intake	\$14/hour

OTHER EQUIPMENT AND MISCELLANEOUS COSTS

Safety Devices (SPOT, inREACH), GPS	\$10/day
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Chainsaw	\$30/day for deadfall danger tree work, as used only (i.e. no standby costs).
Report writing	\$30/hr to \$300 maximum
Food Costs	\$50.00/day maximum, per person
Accommodation Costs	Costs for commercial accommodation may be claimed. Copies of receipts must be provided.
Camping costs	Maximum is \$50/day, per person (include camping receipt)

PROHIBITED COSTS

Activities listed under [Technical Exploration and Development as per Section 1 of the Mineral Tenure Act Regulation](#) cannot be claimed as Physical Exploration and Development work. Some examples include:

- The construction and maintenance of roads and trails provided such work is required to support an activity described in any of paragraphs (b) to (i)
- Ground control surveys, line cutting and grids that support an activity described in paragraphs (b) to (h).
- The costs of drill core storage buildings

Items not defined in the definition of [Physical Exploration and Development as per Section 1 of the Mineral Tenure Act Regulation](#), may not be used for physical work credits. Some examples are:

- Metal detecting
- Buildings and camp construction
- Walking around a claim, picking up rocks, planning, reconnaissance or surveying for work sites or roads, and marking claim boundaries
- Airline tickets and capital costs (i.e. trucks or cars, equipment, instruments) are not acceptable costs. Vehicle transportation rates and/or reasonable rental rates will be considered.

SUMMARY OF REPORT REQUIREMENTS

A physical work report must include all the following sections as applicable:

1. A detailed written description explaining the type of activity and the results obtained

If the work is conducted on a **mineral claim** the written description may contain:

- Location coordinates of samples taken and sites investigated
- Geological descriptions of samples taken and sites investigated, such as bedrock descriptions, rock sample descriptions, number of samples, number of trenches, length/depth of trenches, cuts, adits, pits, or shafts
- Descriptions of the geological information collected such as the type of information collected, number of sites sampled, and a description of the information collected

- Samples and investigation sites should be plotted on a map that shows claim boundaries
- Photos or images of samples taken and sites investigated
- Assay results or any other technical analysis results of collected samples

If the work is conducted on a **placer claim** the written description may contain:

- Location coordinates for all sites where placer material was sampled
- A description of the activity conducted (panning, digging, washing), the type of material tested, and the approximate weight of material tested
- List of economic mineral(s) targeted (e.g. gold, platinum)
- If assays are conducted, provide the assay reports and assay results
- If mineral/element grains are counted, provide the count results for each sample
- A description of the visual analysis and interpretation of the test results (e.g. “no gold observed after panning”, or “several sub mm-scale gold flakes observed after panning”, etc.)
- Test source material locations on a map with claim boundaries
- Photos of the panned, dug, and/or washed samples before and after testing

2. The date the exploration and development started and the number of hours of work.
3. An itemized cost statement related to the activities including the costs for labour, food, accommodation, transportation, rental and operation of machinery, equipment, and instruments.
4. A map at a scale of detail of 1:10 000 or more detailed that shows the geographic location of the exploration and development activity relative to the boundaries of the claim or block of claims on which the activity was carried out.
5. Metric dimensions of all workings, openings and related activity referenced to the map described in item 4 above for trenches, open cuts, adits, pits, shafts and underground activity.
6. A map at a scale of detail of 1: 5,000 or more detailed that shows the ground control or grid lines if ground control survey or line cutting work was conducted.
7. If a survey was conducted, a plan prepared by a practicing land surveyor.
8. The amount in metric units of material removed from the ground and tested or processed including the metric dimensions of the excavation for placer panning, digging and washing of gravel.

For More Information on Submitting Exploration and Development Work Reports, please review [Information Update No. 14](#).