



# Mineral Titles

## *Information Update*

### No. 8 – Guide to the Submission of Physical Exploration and Development Work for Assessment Credit on Claims

Revision Date: March 5, 2020

#### 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 follows:

- 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;
- in relation to a placer claim only, panning, digging or washing of gravels **to test for the presence of economically significant minerals.**

In order to be acceptable for registration on a claim, it must be demonstrated in a report that physical exploration and development **was conducted in support of collecting samples, other geological or technical information, or to test for the presence of economically significant minerals.**

Evidence in the report must be provided that demonstrates samples or other geological or technical information were collected or that testing for placer minerals was performed.

Physical exploration and development may also be included as part of a registration of technical exploration and development.

In order to be used as credit to advance the good to date of a claim, physical exploration and development must be [registered](#) using Mineral Titles Online (MTO). Within 30 days of the date of the registration of physical exploration and development, a report must be submitted. The report may be [uploaded](#) as a PDF into MTO, emailed digitally as a PDF attachment to [Mineral.Titles@gov.bc.ca](mailto:Mineral.Titles@gov.bc.ca) or [mailed](#) to Mineral Titles, Vancouver

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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## WORK REPORT FORM

The physical 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>

The work report form features numerous enhancements, including links to legislation.

Section 1 – List Event Numbers

Section 2 – List Titles

Section 3 – Select Title Type

Section 4 – Enter Recorded Holder Contact Information and Report Author Contact Information.

Section 5 – 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. If the mechanical tick box is selected, it is mandatory to complete the tick box for the Approved *Mines Act* Permit and provide the permit number and permit approval number.

Section 7 – details on work activity, location and global positioning system (GPS) coordinates for all site locations. **This information is mandatory.**

It is expected that sites are described by length x width x depth in meters to indicate a total volume in cubic meters (m<sup>3</sup>). Amounts tested may also be entered as a volume estimate in cubic meters (m<sup>3</sup>). Amounts produced may be entered as a weight measurement in ounces, grams, milligrams or micrograms.

You must ensure that this section is completed. Incomplete information will result in returned work reports and/or cancelled registrations of work.

Section 7 requests concise details with respect to accessing sites. Please provide complete information so that an Inspector may easily locate the site(s).

Section 7 also requires that 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, is provided with a completed report. The 'make a map' button provides instructions on how to make an acceptable map.

Evidence demonstrating “a detailed written description explaining the type of activity and result obtained”, as per [Section 15\(1\)\(a\)](#) of the Mineral Tenure Act Regulation, is required. If you are claiming any type of physical exploration and development, you **must** provide a detailed written description explaining the type of activity and the result obtained.

This may take the form of either assay results, other geological or technical information or a written description of samples.

Section 8 – cost statement.

Please note that airline tickets and capital costs (i.e. trucks or cars, equipment, instruments) are not acceptable costs. Vehicle transportation rates (see page 6 of this information update) and/or reasonable rental rates will be considered.

## **COST STATEMENT GUIDELINES**

A cost statement detailing all the costs for which credit is to be claimed 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, in order to determine a value of physical exploration and development work performed.

The figures in this guide are approximations and amounts claimed in excess of these guidelines may require the submission of receipts.

Any and all receipts for anything 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 but only 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 the 20% or 50% (as applicable) of the work value, then 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	
<b>Maximum</b> transportation/travel allowable:	<u>\$ 200.00*</u>	(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 cents/km

<b>ATV</b>	\$1.00 per km
	OR
	\$123.35/day

## LABOUR

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

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](http://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.

**Please include the model and year of the equipment you used in your 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)	324, E26	KX41-3V	\$68.80
2.72 – 4.08 (6000 – 8999)	E32, E35	KX71-3, KX91-3, U35	\$72.00
4.08 – 5.9 (9000-12999)	E42, E45	KX040-4HG, KX057-4	\$78.00
5.9 – 7.71 (13000 – 16999)	E60		\$86.80

#### Heavy Hydraulic Excavators

Weight tonnes (lbs)	Common Models						All Found Rental Rate
	Case	Cat	Deere	Hitachi	Hyundai	Link-Belt	
Under 14.51 (32000)	CX130D	313FL, 313 FL	130G, 135G	ZX130-5		130-X4	\$108.05
14.51 – 19.05 (32000 – 42000)	CX160C	312E L, 316E L	160G-LC	ZX160		160X4	\$116.05
19.05 – 20.41 (42000 – 45000)		318EL/ F/FL	180G			210LX	\$126.30
20.41 – 23.13 (45000 – 51000)	CX210C	320F, 323F	210G-LC	ZX210LC-5		210X4	\$144.60
23.13 – 26.76 (51000 – 59000)	CX230, CX250	320E L, 320E L	245G, 250G	ZX250LC-6	250LC	250-X4	\$149.55
26.76 – 30.84 (59000 – 68000)	CX300D	324, 330	290G-LC	ZX300LC-6	290LC	300-X4	167.55
30.84 – 39.92 (68000 – 88000)	CX350D	328D, 329E	330GL, 350	ZX350LC-5, ZX380LC-6		350-X4	\$202.35
39.92 – 43.54 (88000 – 96000)		336F					\$215.05
43.54 – 46.72 (96000 – 102000)	CX460	345			450LC	460LX	\$237.00.
46.72 – 53.98		349	450G-	ZX470LC-5		470-	\$266.30

(103000 – 119000)		352 F	LC			X4	
53.98 – 68.95 (119000 – 152000)		365BL-II	600CLC	ZX600			\$288.75
Over 68.95 (152000)	CX700B CX800B	374 390	670 870	ZX870LC-5		800-X3	\$358.50

## 2. FRONT END LOADERS

### Crawler Front End Loaders

Bucket Capacity – m <sup>3</sup> (cu yd)	Common Models			All Found Rental Rate
	Case	Cat	Deere	
0.96 – 1.14 (1.25- 1.5)		933C <sup>1</sup>	455G	\$89.40
1.15 – 1.33 (1.5 – 1.75)	855E/D	943	555G	\$94.70
1.53 – 1.71 (2 – 2.5)	1155E		655B	\$104.85
1.72 – 1.9 (2.25 – 2.5)		953C/D	655C-II	\$113.20
1.91 – 2.09 (2.5 – 2.75)		963		\$115.85
2.1 – 2.67 (2.75 – 3.5)		963C, 936D	755C-II/D	\$130.35

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

Bucket Capacity – m <sup>3</sup> (cu yd)	Common Models			All Found Rental Rate
	Case	Cat	Deere	
Under 0.76 (1)	21F, SR160, SR185, SR210, SV250, SV300	216B, 226B, 232D, 236D, 242D, 903C	312, 314, 316, 318, 320, 324, 326, 328, 332	\$86.15
0.76 (1)	121F, 221F, 321F	903, 906, 907, 908	244K	\$89.20
1.15 (1.5)		914G2, IT14G2	324K	\$102.20
1.53 (2)	521F	924HZ	344K	\$107.75
1.91 (2.5)	621F	924K	444K, 524K	\$115.45
2.29 (3)	721F	910, 914, 930	544K	\$122.85
2.68 (3.5)		938K	624K	\$134.25
3.06 (4)	821F	950	644K	\$152.80
3.44 (4.5)	921F	926M, 930M, 938M, 962K	724K	\$156.50
3.82 (5)		966K, 966M	744K	\$184.90

### 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)		450J				\$96.75	
Rubber Tired 4x2 and 4x4						4x2	4x4
40 – 49.9 (29.8 – 37.2)	885	1250, 2040, 5200, 5210	3010S	L4150, L4850, M5030D T	240, 250, 253, 360	\$63.00	\$76.30
50 – 59.9 (37.3 – 44.7)	3230, 585, 595	5310	4630	M5950	4225	\$64.95	\$79.45
60 – 69.9 (44.7 – 52.1)	1394, 685, 4210, 695	5410, 6110	5030	M7030 M6950	283-375, 384S	\$66.70	\$81.60
70 – 79.9 (52.2 – 59.6)	1494, 4230	5510, 6210	5610S	M8030	4243	\$67.80	\$85.35
80 – 89.9 (59.7 – 67)	1594, 5220	2750, 6310	7600, 7810	M8950	390T, 393, 396, 6150, 398, 3075	\$69.10	\$85.35
90 – 99.9 (67.1 – 74.5)	1896, 5230	6410, 7200	7610S		399, 6170	\$70.40	\$87.20

### 4. TRUCKS

Dump Truck w/ Belly Dump, Clam or End Dump	
Capacity	Hourly Rental Rate
10.7 m <sup>3</sup> (14 cu yd)	\$105.90
11.5 m <sup>3</sup> (15 cu yd)	\$109.10
12.2 m <sup>3</sup> (16 cu yd)	\$112.70
13.0 m <sup>3</sup> (17 cu yd)	\$115.70
13.8 m <sup>3</sup> (18 cu yd)	\$118.65
14.5 m <sup>3</sup> (19 cu yd)	\$121.60
15.3 m <sup>3</sup> (20 cu yd)	\$124.20

<b>Articulated Trucks</b>						
<b>Weight tonnes (tons)</b>	<b>Common Models</b>					<b>All Found Rental Rate</b>
	<b>Cat</b>	<b>Deere</b>	<b>Moxy</b>	<b>Terex</b>	<b>Volvo</b>	
Under 20 (22)	B20C				A20	\$129.20
20-24 (22-26)	730C	250D-II	5222B	TA350 TA400	A25F	\$162.95
25-29 (28-32)	735B/C 740B EJ	300D-II	MT31	TA27 TA30	A30F	\$181.80
30-34 (33-37)	740B/C EJ 745C	370E 350D-II	MT36-II	TA35	A35F	\$204.30

## **METAL DETECTORS**

Metal detecting is not an activity outlined in the definition of physical work within the Mineral Tenure Act Regulation. As such, metal detecting may not be used for physical work credits.

## **SLUICES AND HIGHBANKERS**

<b>Description</b>	<b>Rate/hour (less operator)</b>
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

**ANY OTHER CLAIMS FOR COSTS MUST BE SUPPORTED BY COPIES OF RECEIPTS WITH NO EXCEPTIONS.**

## **OTHER EQUIPMENT AND MISCELLANEOUS COSTS**

**Safety Devices** (SPOT, inREACH) - \$10/day

**Chainsaw-** \$30/day

**Report writing-** \$30/hr to \$300 maximum.

**Food Costs** – \$50.00 per day per person

**Accommodation Costs** – Costs for commercial accommodation may be claimed.

Copies of receipts must be provided.

Field cost maximum is \$50 per day per person.

Section 9 contains the supplemental section of the report. The supplemental section may be used to summarize additional details or additional site and GPS details should there be more information than the site location information or cost statement allows.

#### 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.'

Finally, please ensure that section 10 of the report is appropriately authorized.

#### 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)

Handwritten reports will not be accepted. Reports must be typed in a readable font of at least 11 points. Reports may be submitted as MS-word documents, text documents, or in Adobe Acrobat PDF.

The construction and maintenance of roads and trails fall under the definition of “technical exploration and development”, provided such work is required to support an activity described in any of paragraphs (b) to (i) as noted in the [definition of technical exploration and development](#) in Section 1 of the Mineral Tenure Act Regulation.

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 must be documented and claimed as part of a registered technical report.

The costs associated with buildings and camp construction are not acceptable as they are not defined as physical exploration and development activities.

The costs of drill core storage buildings may be included in the cost statement of a technical work report.

The costs of activities such as walking around a claim, picking up rocks, planning, reconnaissance or surveying for work sites or roads, and marking claim boundaries are not acceptable for registration as they are not defined as physical or technical exploration and development activities.

## **SUMMARY OF REPORT REQUIREMENTS**

**A Report of Physical Exploration and Development must include all of 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
- provide 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
  - identify which economic mineral(s) is targeted (eg. gold, platinum)
  - if assays are conducted, provide the assay reports and assay results
  - if mineral/element grains are counted, a documentation of the count results for each sample
  - a description of the visual analysis and interpretation of the test results (eg. “no gold observed after panning”, or “several sub mm-scale gold flakes observed after panning”, etc.)
  - indicate test source material locations on a map with respect to claim boundaries
  - provide 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**
  - 9. A statement of the qualifications of the author of the report**

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