

ASSOCIATION OF CANADA LANDS SURVEYORS

BOARD OF EXAMINERS

SCHEDULE III / ITEM 1

ACTS AND REGULATIONS RELATING TO SURVEYS OF CANADA LANDS

October 2004
(March 18, 1999 Regulations)

Notice to Candidates:

On December 23, 2003 the Surveyor General of Canada Lands advised that the "Manual of Instructions for the Survey of Canada Lands, e-Edition" would replace the Third Edition of the Manual on April 1, 2004. Three Government of Yukon successor statutes, the *Territorial Lands Act (Yukon)*, the *Placer Mining Act (Yukon)* and the *Quartz Mining Act (Yukon)*, which came into effect on April 1, 2003 are now available in the e-Edition. Minor section numbering differences exist between the earlier and successor versions.

As the Syllabus descriptions for this examination are still based on the earlier federal legislation appearing in the Third Edition, Candidates who provide answers based on the successor Yukon legislation should clearly state so at the beginning of any affected questions.

This examination consists of 9 questions on 4 pages.

<u>Q. No</u>	<u>Time: 3 hours</u>	<u>Marks</u>							
		<u>Value</u>	<u>Earned</u>						
1.	(a) What is a compiled plan? (b) Under whose direction is a compiled plan prepared?	2 2							
2.	<p>A CLS 77 monument has been unintentionally pried out of its position in sandy-clay soil by a front-end loader removing snow in the spring, prior to construction on the property which the monument was defining. A Canada Lands Surveyor is called to the site and relocates its approximate former location using measurements from the remaining undisturbed official monuments defining the property. Her careful scraping of the cleared soil reveals a vertical hole which beyond doubt was the original position of the monument. Measurements and alignment from the new CLS 77 placed in the hole to the adjoining monuments agree with official plan measurements within acceptable tolerances.</p> <p>The CLS files field notes of her work with the Surveyor General. Using the authorized abbreviations for plans and field notes, give the appropriate notation that will appear near the symbol for this monument.</p>	6							
3.	<p>James Menzies, a placer miner on Rabbit Creek in the Klondike region of the Yukon Territory, searches for and finds three consecutive official monuments of the Rabbit Creek Base Line. The official plan shows the following information for the two courses:</p> <table style="margin-left: 40px; margin-right: 40px;"> <tr> <td>Monument 6 to Monument 7</td> <td style="text-align: center;">354°05'00"</td> <td style="text-align: right;">1,865.80 ft</td> </tr> <tr> <td>Monument 7 to Monument 8</td> <td style="text-align: center;">46°05'00"</td> <td style="text-align: right;">1,124.77 ft</td> </tr> </table> <p>Menzies has held and worked a group of creek claims about a kilometre south of Monument 6 for a number of years. Wanting to establish additional holdings of creek claims north of Monument 6, Menzies commences by placing a legal post for the JM 21 claim at Monument 6. He then places additional legal posts close to the base line by pacing in the upstream direction towards Monument 7 at spacings which are subsequently determined by survey to be 492.0 ft, 481.6 ft, and 495.8 feet respectively,</p>	Monument 6 to Monument 7	354°05'00"	1,865.80 ft	Monument 7 to Monument 8	46°05'00"	1,124.77 ft		
Monument 6 to Monument 7	354°05'00"	1,865.80 ft							
Monument 7 to Monument 8	46°05'00"	1,124.77 ft							

	<p>thereby completing the staking of the JM 21, 22 and 23 claims. He continues on with the staking of the JM 24, establishing its upstream post 131.0 feet northeast of Monument 7, again in close proximity to the base line. He continues staking along the baseline to complete the JM 25 and 26 claims with posts determined by survey to have spacings of 466.6 and 495.2 ft. respectively. His legal posts are in full compliance with the <i>Placer Mining Act (Yukon)</i>.</p> <p>(a) Draw a neatly dimensioned sketch to an appropriate Imperial scale showing the JM 21 to 26 claims located by Menzies. There are no other existing claims which conflict with his staking. Indicate a typical configuration for Rabbit Creek. Use small open circles or squares to indicate the legal posts established.</p> <p>(b) Give the exact markings that would appear on the upstream legal post for the JM 24 claim.</p> <p>(c) In which direction would the markings of the legal post in (b) face?</p> <p>(d) What option is available to a miner such as Menzies to enlarge the size of a claim to cover "open" ground unintentionally created during his staking? How might this apply in Menzies' case?</p> <p>(e) Specific survey instructions are issued to a Canada Lands Surveyor by the Surveyor General for the survey of the JM 21 to 26 claims as a group of contiguous claims and Lot 1255, Quad 115D/2 is assigned for the survey. Using your sketch prepared in (a) or a tracing thereof, indicate using small solid circles the <u>minimum</u> monumentation the CLS would establish in performing this survey.</p> <p>(f) Indicate the markings that the CLS would place on a CLS Standard Post marking the most northerly corner of Lot 1255.</p> <p>(g) The furthest claim in the group is 22 miles from the office of the mining recorder. Menzies staked his claims on May 1, 1999. By what date must he have recorded them?</p> <p>(h) Menzies continues exploration and placer gold production on his original group of claims, performs \$355.00 worth of eligible representation work on the JM 23 claim later in the same summer, and files a detailed statement thereof with the mining recorder in accordance with the <i>Act</i>. By what date must he make the filing?</p> <p>(i) If Menzies makes the filing on the last possible day, what is the status of the JM 24 claim on the day following the filing? State any assumptions you make.</p>	<p>8</p> <p>4</p> <p>1</p> <p>4</p> <p>4</p> <p>4</p> <p>2</p> <p>2</p> <p>4</p>	
4.	<p>A CLS making a legal survey of Canada Lands incorporates a previous surveyor's boundary and measurements representing the fourth side of a new adjoining square parcel, having sides of 804.67 metres.</p> <p>(a) What is the semi-major axis of the error ellipse showing the 95% confidence region with respect to the two monuments defining the previously surveyed side?</p> <p>(b) Assuming that the four corner monuments are intervisible, what is the maximum allowable angular misclosure for the survey?</p>	<p>4</p> <p>3</p>	

5.	<p>Metal identification tags are used in the process of establishing mineral rights in the Yukon and the Northwest Territories pursuant to the <i>Quartz Mining Act (Yukon)</i> and the Canada Mining Regulations, respectively.</p> <p>(a) What is the main difference in the use of the tags in these jurisdictions?</p> <p>(b) Under the <i>Quartz Mining Act (Yukon)</i> what criterion is applied in determining whether the failure of a locator to comply with or to observe any of the requirements of location will invalidate that location?</p>	3	
6.	<p>(a) What two requirements of the Territorial Lands Regulations must be met before letters patent for territorial lands may be issued?</p> <p>(b) List two deemed reservations to the Crown out of every grant of territorial lands pursuant to the <i>Territorial Lands Act</i>?</p>	4	
7.	<p>State whether each of the following statements is TRUE or FALSE:</p> <p>(a) An explanatory plan may also be used to document the re-establishment of a monument in the course of an easement survey if the adjacent monuments are found to be in undisturbed condition and the resulting measurements agree with the original official plan of the parcel over which the easement is being created.</p> <p>(b) No lands in a reserve within the meaning of the <i>Indian Act</i> may be sold or title to them conveyed until they have been absolutely surrendered to Her Majesty by the chief and council of the band for whose use and benefit in common the reserve was set apart.</p> <p>(c) The <i>Indian Act</i> provides that the Surveyor General may authorize the surveys of reserves and the preparation of plans and reports with respect thereto.</p> <p>(d) Legal surveys of titled land in the Yukon Territory do not normally require specific survey instructions.</p> <p>(e) It is required to show only the radius and arc length of a tangential circular curve boundary being dealt with by a plan of survey of Canada Lands.</p> <p>(f) As defined in the Canada Oil and Gas Land Regulations, Section 20, Grid Area 78°00', 110°00' is adjoined on the north by Sections 1 and 11, Grid Area 78°10, 110°00'.</p> <p>(g) The location of natural boundaries of Canada Lands can be determined by any method, provided the boundary can be plotted at the final plan scale to an accuracy of 0.5 mm.</p> <p>(h) The Surveyor General may make such orders and regulations as he deems necessary to carry out the <i>Canada Lands Surveys Act</i> or to meet any cases with reference to surveys under the management of the Surveyor General for which no provision is made in the <i>Act</i>.</p> <p>(i) Pursuant to the Canada Mining Regulations, a mineral claim which is 3,000 feet wide and 36,000 feet long may be located by a single locator.</p> <p>(j) National park reserves established pursuant to the <i>Canada National Parks Act</i> may only become a national park after a claim in respect of aboriginal rights over the park reserve area has been settled.</p>	2	

	Name the official(s) or entity having the following responsibilities or jurisdiction:		
	(a) allotment of land in a reserve to an Indian	2	
	(b) cancellation in whole or in part or amendments or alterations of a plan of survey at the instance of a person filing or registering the plan	2	
8.	(c) giving a decision on a dispute following the filling of a notice of protest pursuant to the Canada Mining Regulations	2	
	(d) approval of a subdivision of a parcel of land in Yellowknife, NWT	2	
	(e) request of a resurvey of Canada Lands	2	
	(f) amending the height of land natural boundary between Yukon and the Northwest Territories	2	
9.	Give two examples of a jurisdictional boundary involving Canada Lands.	4	
	Total Marks:	100	