

**ASSOCIATION OF CANADA LANDS SURVEYORS
BOARD OF EXAMINERS**

**EXAMINATION P1
ACTS AND REGULATIONS RELATING TO SURVEYS OF CANADA LANDS**

March 2013

Notice to Candidates:

This examination is based on the e-Edition to the Manual of Instructions for the Survey of Canada Lands.

This examination consists of 10 questions on 3 pages.

<u>Q. No</u>	<u>Time: 3 hours</u>	<u>Marks</u>	
		<u>Value</u>	<u>Earned</u>
1.	Identify 5 categories of individuals who are authorized to take oaths, affidavits, declarations or solemn affirmations pursuant to the <i>Canada Lands Surveys Act</i> .	5	
2.	a) Name the statute that provides for the establishment of mining districts in Yukon for the administration of mineral claims. b) What action by the locator of a mineral claim pursuant to the Northwest Territories and Nunavut Mining Regulations deems the claim to have been located?	3 2	
3.	a) Name four committees that the Council of the Association of Canada Lands Surveyors is required to establish. b) What major effect did the proclamation of the <i>Canada Lands Surveyors Act</i> in 1999 have on the <i>Canada Lands Surveys Act</i> ?	4 2	
4.	Provide a numerical value only for each of the following provisions related to surveys of Canada Lands: a) the maximum allowable length in feet of a rectangular mineral claim, located under the Northwest Territories and Nunavut Mining Regulations, whose width is 4,500 feet. b) the maximum allowable angular misclosure, expressed in seconds of arc, in an official survey of a parcel having 7 angles. c) the number of geometric elements of a non-tangential circular curve boundary that must be shown on official field notes. d) the maximum spacing, expressed in metres, between monuments being established on a long straight line boundary in an official survey. e) the number of days a locator of a claim under the Northwest Territories and Nunavut Mining Regulations has to record the claim with the Mining Recorder. f) the maximum number of adjoining quartz mining claims which can be grouped by their owner(s) for the performance of work. g) the minimum length in metres of a GPS baseline established to determine bearing for an official survey.	2 marks each = 14	

5.	<p>Indicate TRUE or FALSE for each of the following statements:</p> <p>a) The Minister of Aboriginal Affairs and Northern Development is also the superintendent general of Indian affairs pursuant to the <i>Indian Act</i>.</p> <p>b) A Registrar, pursuant to the <i>NWT Land Titles Act</i>, is permitted to correct any omission, clerical error or other defect on a plan submitted under that <i>Act</i> as long as the correction does not have the effect of changing any boundary shown on the plan.</p> <p>c) National Park Reserves are set aside for National Parks pending the completion of public consultation and the development of a park management plan.</p> <p>d) A compiled plan can create a new boundary by computing the bearing and distance between two points, which have not been measured or calculated previously.</p> <p>e) The UTM easting of a point on the International Date Line is 500,000 metres.</p> <p>f) The Surveyor General may authorize the surveys of reserves and the preparation of plans and reports with respect thereto.</p> <p>g) The grantee of a placer mining claim is entitled to construct and maintain a residence and other structures on the claim required for the miner-like working of the claim.</p> <p>h) A new quartz mining claim must be recorded with the mining recorder within thirty days of its location date.</p> <p>i) The chief of an <i>Indian Act</i> band may issue a certificate of possession to an Indian who is in lawful possession of land in a reserve, provided that a Band Council Resolution has approved the issuance.</p> <p>j) The position of a natural boundary may be determined by any method that will permit the boundary to be plotted to an accuracy of 1.0 mm at the final plan scale.</p>	2 marks each = 20	
6.	Give the complete Canada Oil and Gas Land Regulations designation for the unit(s) immediately south of Unit B, Section 11, Grid Area 68°10', 133°30', Yukon Territory.	8	
7.	<p>Canada Lands Surveyors working in the northern territories encounter several different types of authorized monuments from official surveys that pre-dated the CLS69 type monument.</p> <p>Name four distinct types of those monuments and provide the abbreviation for each authorized in the GIS-e for use in plans and field notes.</p>	8	
8.	Name five statutes or regulations under which legal surveys can be conducted in accordance with Part D - Survey Standards, of the GIS-e without obtaining specific instructions from the Surveyor General.	5	
9.	Explain the concept of confidence region as it applies to the accuracy requirements for legal surveys of Canada lands.	5	

10.	<p>A Canada Lands Surveyor in private practice in Yukon was engaged by a placer miner to make a survey of his four adjoining full size creek claims, GOLD 1 to 4, in the Indian River valley in the Dawson mining district. An official base line had been surveyed in 1905 for this section of the Indian River and its monuments had been recently restored by a recent survey. The base line had a bearing of $272^{\circ}12'$ in the vicinity of the claims lying between Angles 11 and 12.</p> <p>Shortly after this engagement, a second claim holder engaged the CLS to make a survey of his single standard quartz mining claim FRANK in the same vicinity. The CLS made a search of records in the mining recorder's office and determined that no other claims were nearby and no other claims in good standing were relevant when his clients' claims were located.</p> <p>The GOLD claims were staked on April 2, 2002 and recorded on April 4, 2002; the FRANK claim was located on April 1, 2002 and recorded on April 9, 2002. The mining recorder subsequently issued grants for all five claims under the respective legislation.</p> <p>The CLS commenced his field survey by recovering monumentation on the base line and making ties to the five legal post locations defining the placer claims. He determined that all four claims were a few feet less than the maximum allowable length measured along the baseline.</p> <p>He then made ties to the two location posts for the FRANK quartz claim which were found south of the base line and he determined that the location line exceeded the maximum length by 15.7 feet and had a bearing of $93^{\circ}45'$. The FRANK claim had claimed the maximum allowable width left of its location line and the resulting claim overlapped approximately 800 feet of the southerly extent of three of the four GOLD creek claims.</p> <p>a) From the information given, and assuming any necessary missing dimensions or details, plot at an appropriate scale a composite plan showing the four placer claims and the quartz claim relative to the Indian River base line segment. Indicate the bearings and distances for those boundaries that are known.</p> <p>b) Using two distinguishing colors or other line detail, clearly indicate the area you would assign to the four placer claims and to the quartz claim for their respective survey plans and explain your reasoning for each.</p> <p>c) Using separate sketches derived from the plan compiled in part a) above, indicate by solid dark circles where you would indicate CLS monuments for each plan of survey.</p>	10 8 6	
	Total Marks:	100	