

**2013 Assessment Report  
for the  
Casino Creek Placer Claims**

Whitehorse Mining District  
Yukon Territory  
NTS 115J/10  
Latitude: 62° 44' N  
Longitude: 138° 50'

**Placer Claim Names:  
Cas PI 4 to 58**

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**For:  
Casino Mining Corp.  
a subsidiary of  
Western Copper and Gold Corporation  
1800 – 570 Granville Street  
Vancouver, BC, V6C 3P1**

**January 26, 2013**

## SUMMARY

The Casino Property is located 300 km northwest of Whitehorse on NTS map sheets 115J/09, 10 and 15, in the Whitehorse Mining District. The Property consists of 705 full and partial quartz claims registered in the name of Casino Mining Corp., and 2 blocks of placer claims. Placer claims "Brit PI 1 to 30" are located on Britannia Creek and claims "Cas PI 4 to 58" located on the headwaters of Casino Creek. This report covers assessment work performed in the summer of 2013 on the Casino Creek placer claims.

The 2013 testing program on Casino Creek placer claims consisted of drilling 2 holes with a sonic drill (holes DH13-5 and 10), and 2 holes with a diamond drill (holes Dh13-5B and DH13-06) and test pitting with an excavator. The sonic drill was not able to penetrate boulders at site DH13-05, hence the diamond drill was used at this site and at site DH13-06. The drill and test pit material was logged and sampled and four samples were collected and analyzed at ALS Chemex Labs for gold and silver content (3 samples from drill core, 1 sample from the test pit).

The drill holes in the upper reaches of the placer claims did not return significant concentrations of gold. The sample collected from the test pit at the junctions of Meloy Creek and Casino Creek returned 9.95 g/t Au from a pan concentrate. Recommendations for further work on the Casino Creek placer claims are to systematically test the valley gravels by drilling or test pitting at 500 m intervals, particularly the lower reaches of the claims.

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## **1.0 INTRODUCTION**

The exploration program on the Casino Creek placer claims consisted of sonic and diamond drilling, test pitting and sampling. The program was conducted between August 1 and 31, 2013.

The exploration program was managed by Casselman Geological Services Ltd of Whitehorse, Yukon. Heavy equipment and diamond drilling services were provided by Kluane Drilling Ltd, Sonic drilling services were provided by Dark Side Drilling, also from Whitehorse. The author of this report managed the field program.

## **2.0 LOCATION AND ACCESS**

The Casino Property is located in the Dawson Range Mountains, 300 km northwest of Whitehorse (Figure 1). The property is centered at latitude 62° 44' 16" N and longitude 138° 49' 41" W on NTS map sheets 115J/09, 10 and 15.

Principle access to the property is by air to a 900 m landing strip at the exploration camp. Alternatively, a rough road from the camp accesses a barge landing on the Yukon River. Historically, overland access to the property has been by winter road routes to the east and west.

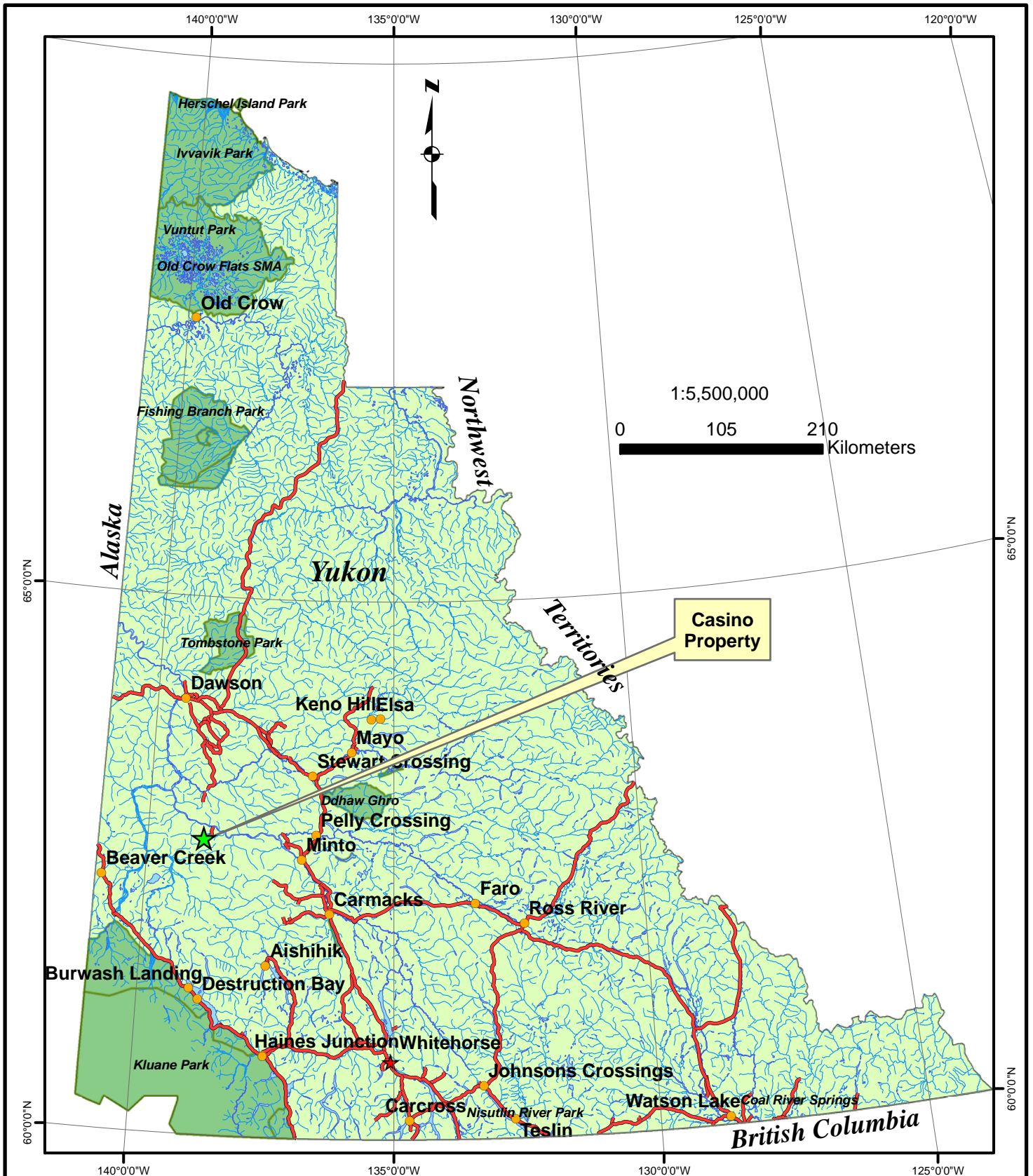
## **3.0 CLAIM INFORMATION**

The Casino Creek placer claims lie within the Whitehorse Mining District and cover 5 miles on the headwaters of Casino Creek, on NTS map sheet 115J10. The project is located on Crown land administered by the Yukon Government and is within the Selkirk First Nation traditional territory. Claim Information is listed in Table 1 and illustrated in Figure 3.

Table 1. Claim data

Grant #	Name	Expiry Date
P 508065	CAS PL 4	11/02/2014
P 508066	CAS PL 5	11/02/2014
P 508067	CAS PL 6	11/02/2014
P 508068	CAS PL 7	11/02/2014
P 508069	CAS PL 8	11/02/2014
P 508070	CAS PL 9	11/02/2014
P 508071	CAS PL 10	11/02/2014
P 508072	CAS PL 11	11/02/2014
P 508073	CAS PL 12	11/02/2014
P 508074	CAS PL 13	11/02/2014
P 508075	CAS PL 14	11/02/2014
P 508076	CAS PL 15	11/02/2014
P 508077	CAS PL 16	11/02/2014
P 508078	CAS PL 17	11/02/2014
P 508079	CAS PL 18	11/02/2014
P 508080	CAS PL 19	11/02/2014
P 508081	CAS PL 20	11/02/2014
P 508082	CAS PL 21	11/02/2014
P 508083	CAS PL 22	11/02/2014
P 508084	CAS PL 23	11/02/2014
P 508085	CAS PL 24	11/02/2014
P 508086	CAS PL 25	11/02/2014
P 508087	CAS PL 26	11/02/2014
P 508088	CAS PL 27	11/02/2014
P 508089	CAS PL 28	11/02/2014
P 508090	CAS PL 29	11/02/2014
P 508091	CAS PL 30	11/02/2014
P 508092	CAS PL 31	11/02/2014

Grant #	Name	Expiry Date
P 508093	CAS PL 32	11/02/2014
P 508094	CAS PL 33	11/02/2014
P 508095	CAS PL 34	11/02/2014
P 508096	CAS PL 35	11/02/2014
P 508097	CAS PL 36	11/02/2014
P 508098	CAS PL 37	11/02/2014
P 508099	CAS PL 38	11/02/2014
P 508100	CAS PL 39	11/02/2014
P 509301	CAS PL 40	11/02/2014
P 509302	CAS PL 41	11/02/2014
P 509303	CAS PL 42	11/02/2014
P 509304	CAS PL 43	11/02/2014
P 509305	CAS PL 44	11/02/2014
P 509306	CAS PL 45	11/02/2014
P 509307	CAS PL 46	11/02/2014
P 509308	CAS PL 47	11/02/2014
P 509309	CAS PL 48	11/02/2014
P 509310	CAS PL 49	11/02/2014
P 509311	CAS PL 50	11/02/2014
P 509312	CAS PL 51	11/02/2014
P 509313	CAS PL 52	11/02/2014
P 509314	CAS PL 53	11/02/2014
P 509315	CAS PL 54	11/02/2014
P 509316	CAS PL 55	11/02/2014
P 509317	CAS PL 56	11/02/2014
P 509318	CAS PL 57	11/02/2014
P 509319	CAS PL 58	11/02/2014



**WESTERN COPPER and GOLD CORPORATION**

**CASINO PROPERTY, YUKON**

**Figure 1. Property Location Map**

June 7, 2012

CASSELMAN GEOLOGICAL SERVICES LTD.

#### 4.0 PHYSIOGRAPHY AND CLIMATE

The Dawson Range forms a series of well-rounded ridges and hills that reach a maximum elevation of 1,675 m above mean sea level (ASL). The ridges rise above the Yukon Plateau, a peneplain at approximately 1200 m ASL, which is deeply incised by the mature drainage of the Yukon River watershed. Major drainage channels extend below 1,000 m ASL. Most of the project lies between the 650 m elevation at Dip Creek and an elevation of 1,400 m at Patton Hill. The most notable local physical feature is the Yukon River, which flows west about 16 km north of the project site.

Most of the Dawson Range escaped Pleistocene continental glaciation, although minor alpine glaciation produced small cirques and terminal moraines locally.

The climate in the Dawson Range is subarctic. Permafrost is widespread on north-facing slopes, and discontinuous on south-facing slopes. Outcrop is rare, except on hilltops and rugged ridge crests. The residual nature of much of the rubble on upper slopes allows for generalized geological mapping and good geochemical and geophysical interpretation. Most broad valleys are filled with thick alpine glacial debris and alluvium, which mask bedrock geology and associated geochemical and geophysical signatures.

The mean annual temperature for the area is approximately  $-5.5^{\circ}\text{C}$  with a summer mean of  $10.5^{\circ}\text{C}$  and a winter mean of  $-23^{\circ}\text{C}$ . Temperatures range between  $-40^{\circ}\text{C}$  in the winter to  $30^{\circ}\text{C}$  in the summer. Mean annual precipitation is low, ranging between 300-450 mm, with most precipitation occurring in July and early August. Most of the terrain supports forests of black and white spruce, lodgepole pine, balsam poplar, white birch, and speckled alder. At higher elevations and in the alpine terrain, only dwarf birch, scrub willows, and alpine mosses, grasses, and sedges are found.

Snow survey data for the years 1977 to 1994 (based on information from Hallam, Knight Piesold, Casino Project, Data Report 1993-1995, March 1997) showed the maximum snow depth was 97 cm containing the equivalent of 225 mm of water in April 1991. Average depths (equivalent  $\text{H}_2\text{O}$ ) by month were: February 1: 52 cm (73 mm), March 1: 62 cm (107 mm), April 1: 65 cm (126 mm), May 1: 55 cm (128 mm), and May 15: 27 cm (74 mm). Snow begins accumulating in mid to late September and is mostly melted by mid to late May.

## 5.0 PROPERTY HISTORY

The Casino Property has had a long and varied exploration history. The first documented placer claims in the immediate area were recorded in April 1911, following a placer gold discovery on Canadian Creek by J. Britton and C. Brown. In 1917, D.D. Cairnes, of the Geological Survey of Canada, recognized huebnerite ( $MnWO_4$ ) in the heavy-mineral concentrates of the placer workings. He suggested that the gold and tungsten mineralization was derived from an intrusive complex on Patton Hill (which is now recognized as the core of the Casino porphyry deposit). The total placer gold production is unknown; the most recent work (1980-1985) yielded about 50 kg (1615 troy ounces) of gold. During the Second World War, a small amount of tungsten was recovered.

The first mineral claims at Casino were staked by N. Hansen in 1917. In 1936, silver-lead-zinc veins were discovered by J. Meloy and A. Brown approximately 3 km south of the Canadian Creek placer workings. Over the next several years the Bomber and Helicopter vein systems were explored by hand trenches and pits. The Helicopter claims were staked in 1943 and the Bomber and Airport groups in 1947.

From 1948 to 1963 the focus of exploration on the property was for lead-silver mineralization at the Helicopter and Bomber veins. The property was optioned to Noranda in 1948 and then to Rio Tinto in 1963. During this time trenching, mapping and sampling were conducted.

In 1963, L. Proctor purchased the claims and formed Casino Silver Mines Limited to develop the silver-rich veins. Between 1965 and 1980, the silver-bearing veins were explored and developed intermittently by underground and surface workings. In total, 372.5 tonnes of hand-cobbed argentiferous galena, assaying 3689 g/t Ag, 17.1 g/t Au, 48.3% Pb, 5% Zn, 1.5% Cu and 0.02% Bi, were shipped to the smelter at Trail, British Columbia.

B. Hestor noted that the area had porphyry deposit potential in 1963, but his observations did not become generally known. In 1967, the porphyry potential was recognized again, this time by A. Archer and separately by G. Harper. Archer's evaluation led to the acquisition of Casino Silver Mines Limited by the Brynelsen Group, and from 1968 to 1973 exploration was directed jointly by Brameda, Quintana, and Teck Corporation towards a porphyry target. Exploration included extensive geophysical and trenching programs, but it was mainly thanks to the soil geochemistry, that the porphyry deposit was discovered in 1969.

Following the porphyry discovery, various parties including Brameda Resources, Quintana Minerals and Teck Corporation drilled the property. During this period (between 1969 and 1973), 5,328 m of reverse circulation drilling in 35 holes and 12,547 m of diamond drilling in 56 holes was completed.

In 1991, Archer Cathro & Associates (1981), Ltd. optioned the property and assigned the option to Big Creek Resources Ltd. A drill program in 1992 consisting of 21 HQ (63.5 mm diameter) holes totaling 4,729 m, systematically assessed the gold potential in the core of the deposit for the first time. The larger-sized core gave better recovery and more reliable assays than earlier drilling.

In 1992, Pacific Sentinel Gold Corp. (PSG) acquired 100% the property from Archer Cathro and commenced a major exploration program. The 1993 program included surface mapping and 50,316 m of drilling in 127 holes. All but one of the 1992 drill holes were deepened in 1993.

In 1994, PSG drilled an additional 108 drill holes totaling 18,085 m. This program completed the delineation drilling set out in 1993 and investigated various geological, geotechnical, structural, and environmental aspects of the project. In addition, PSG performed a considerable amount of metallurgical, geotechnical and environmental work and completed a scoping study in 1995. The scoping study envisioned a large-scale open pit mine, conventional flotation concentrator that would produce a copper-gold concentrate for sale to Pacific Rim smelters

First Trimark Resources and CRS Copper Resources obtained the property and using the Pacific Sentinel Gold data published a Qualifying Report on the property in 2003 to bring the resource estimate into compliance with National Instrument 43-101 requirements. The two firms combined to form Lumina Copper Corporation in 2004. An update of the Qualifying Report was issued in 2004.

Western Copper Corporation acquired Lumina Copper Corporation, and the Casino Deposit, in November, 2006.

In 2007, Western Copper conducted an evaluation of the Bomber Vein System and southern slope of Patton Hill by VLF-EM and Horizontal Loop EM surveying and soil geochemistry. Environmental baseline studies were also initiated in 2007.

From 2008 to 2011, Western Copper completed reclamation of historic work sites and camp, 22.5 km of DC/IP surveying and MT surveying using the Quantec Geosciences Ltd Titan system, baseline environmental studies, archaeological studies, engineering, geotechnical, metallurgical and acid-rock drainage (ARD) studies, an airphoto survey, and access road upgrades. The company also conducted 24,306 m of exploration drilling in 87 holes and 5,248 m of drilling in 58 holes for geotechnical and hydrogeological purposes.

In January 2013, M3 Engineering and Technology Corporation prepared a Feasibility Study for Western Copper and Gold incorporating Pacific Sentinel's historic data and Western Copper's data. The updated resource calculated measured, indicated and inferred resources for the Leached Cap of 101 Mtonnes grading 0.38 g/t gold at a 0.25 g/t gold cut-off. The M, I & I resource of the combined supergene sulphide and hypogene zone, at a 0.25% copper equivalent cut-off, returned 2,753 Mtonnes grading

0.16% copper, 0.19 g/t gold, 0.021% molybdenum and 1.50 g/t silver for and equivalent copper grade of 0.42%.

The Feasibility Study contemplated the development of the Casino deposit as a conventional truck-shovel, open pit mine, initially processing the gold bearing oxide cap as a heap leach operation. Sulphide ore processing would commence approximately 2.5 years later at a nominal rate of 120,000 tpd in a concentrator, which would produce copper concentrate and molybdenum concentrate.

## 6.0 REGIONAL GEOLOGY

The regional geological setting in the Casino area was recently updated as part of a joint initiative of the Geological Survey of Canada and the Yukon Geological Survey as part of the Geo-mapping for Energy and Minerals (GEM) program. Fieldwork was undertaken in 2010, 2011 and 2012 and published, in preliminary form, in early 2013 (Ryan, et. al., 2013). The regional geological setting presented here, displayed in Figure 2 and summarized in the stratigraphic column in Table 1 has been taken, in large part, from the updated geological framework from Ryan's work.

The Casino porphyry deposit lies in the Stevenson Ridge portion of the central Dawson Range Mountains of Yukon-Tanana Terrane: an accretionary and pericratonic, metamorphic fragment of the Omineca Belt. The Yukon-Tanana is subdivided into the Yukon Catalastic Terrane (northern portion of Figure 2) and the Yukon Crystalline Terrane (southern portion of Figure 2), separated by a northwest-trending suture which occurs along the Yukon River, north of the Casino Deposit. Sporadic bands of Permian to Triassic ultramafic rocks exist along this contact zone.

The oldest rocks of the Yukon Cataclastic Terrane in the Dawson Range area are the pre-Devonian Snowcap assemblage of mostly amphibolite facies siliclastic rocks including quartzite, micaceous quartzite and psammitic quartz-muscovite-biotite ( $\pm$  garnet) schist (unit PtDv-SA1 on Figure 2) and marble (unit PtDv-SA2). The Snowcap assemblage is locally in structural contact with massive amphibolite and coarse hornblende-garnet-plagioclase of the Devonian to Mississippian Finlayson assemblage (unit Ms-F). Finlayson assemblage rocks are rare south of the Yukon River.

In the southwestern part of Figure 2, in the Dip Creek valley, Late Devonian to Early Mississippian Stevenson Ridge schist (unit Ms-SRS) forms a monotonous sequence of grey to black, carbonaceous quartzite, psammite and phyllite.

In the northern part of the region, on either side of the Yukon River, the Early Mississippian Simpson Range suite is dominant. It consists of highly foliated to gneissic biotite granodiorite (unit Ms-SR1) and hornblende-biotite (Ms-SR2). The Simpson Range suite is thrust over the Snowcap assemblage rocks along the Yukon River thrust.

The Snowcap and Finlayson assemblages are intruded by K-feldspar porphyroclastic augen granite of the Permian Sulphur Creek suite (Pr-KSC). The Permian Klondike Schist (Pr-K1) is the extrusive equivalent of the Sulphur Creek suite and occurs very rarely in the region with a small occurrence northwest of the property.

The Yukon Crystalline Terrane consists of several Mesozoic intrusive suites and their extrusive equivalents in a Mesozoic Arc that is part of Stikinia/Quesnellia Terrane and is built upon the Paleozoic basement. The oldest rocks of this Terrane in the Casino area are Early Jurassic Aishihik suite (EJr-A) which consists of coarse-grained, equigranular or alkali-feldspar porphyritic biotite $\pm$ hornblende granodiorite to monzonite (locally monzonite and quartz monzonite).

The central core of the Stevenson Ridge area is transected by the Middle Cretaceous Whitehorse suite, which is made up of two distinct phases. The more voluminous Dawson Range phase (mCt-W2) is composed of white to beige, hornblende-biotite granodiorite and lesser granite, tonalite, quartz diorite and diorite. It is characteristically blocky weathering, hornblende-phyric and medium- to coarse-grained. Foliation is weak to absent. The less voluminous Coffee Creek phase (mCt-W1) is composed of unfoliated pink to beige, biotite monzogranite. It is medium- to coarse-grained, characterized by smoky quartz phenocrysts, and is locally pegmatitic. The Dawson Range and Coffee Creek phases generally occur as distinct plutons.

The Casino Deposit is hosted in rocks of the late Cretaceous Casino suite and surrounding rocks. Regionally, the Casino suite is represented as sparse, small volume porphyritic quartz monzonite to dacite plutons. They are fine- to medium-grained, and alkali-feldspar-plagioclase-biotite-quartz-phyric (uCt-CS2). At Casino, a distinct matrix-supported heterolithic breccia (uCt-CS1) is closely associated with the intrusion and is crucial for the mineralizing process of the deposit.

The Prospector Mountain suite (uCt-PM) is largely co-spacial with the Casino suite. It is characterized by light grey to pink alkali feldspar-biotite-hornblende porphyritic, fine- to medium-grained quartz monzonite dykes, sills and plugs. The suite has been investigated for porphyry- and epithermal-style gold mineralization.

The Carmacks Group (uCt-C1) is widespread throughout the Yukon and is, in part, coeval with the Prospector Mountain suite and consists of an intermediate to mafic volcanic and volcanoclastic lower sequence and flow-dominated upper sequence.

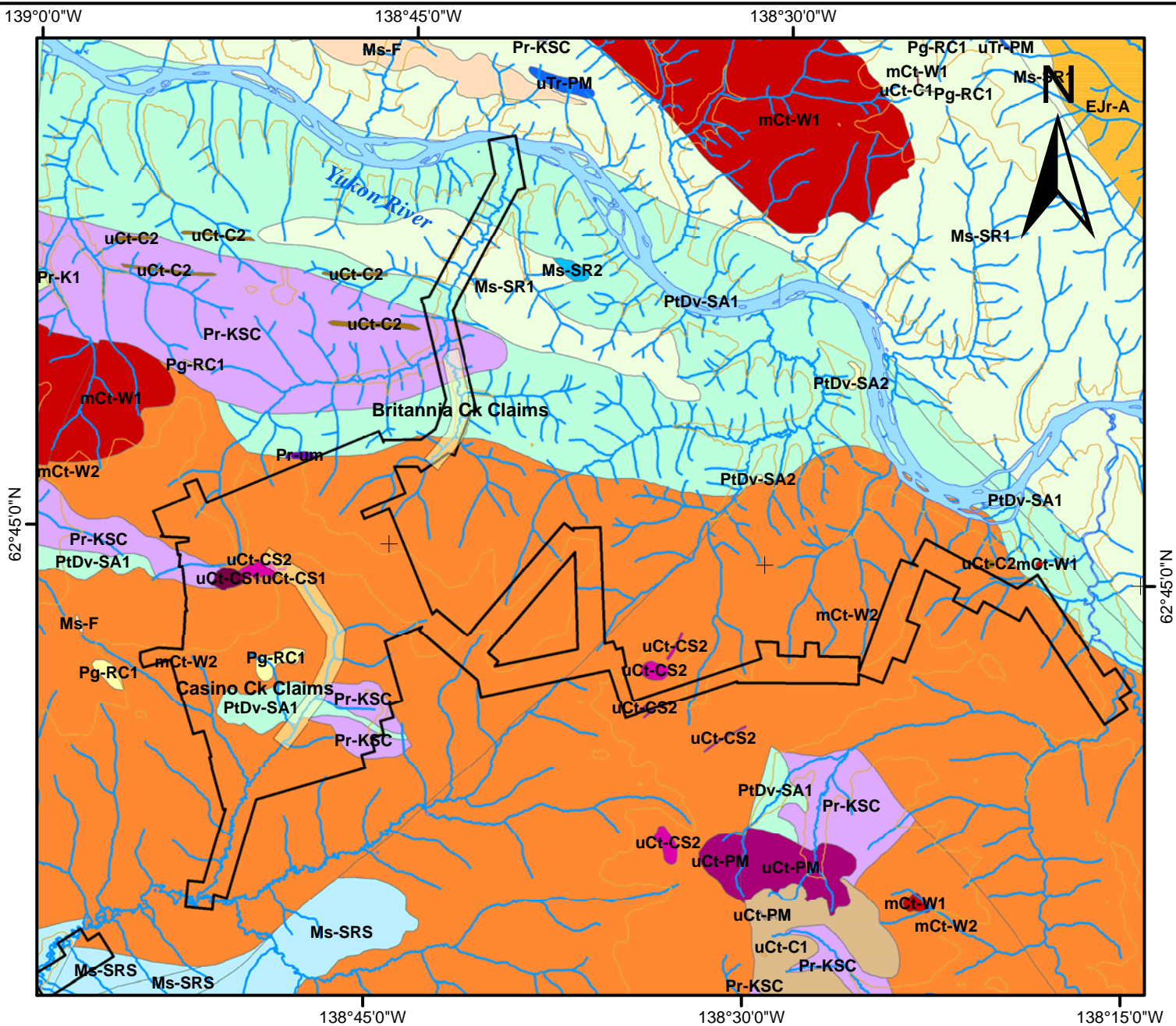
The Paleogene Rhyolite Creek complex constitutes small erosional remnants and intrusions in the southern part of the region. Smokey quartz and feldspar porphyritic dykes predominate, with less common flow-banded rhyolite and locally grey green to mauve andesitic volcanic to hypabyssal rocks.

The central belt of Yukon-Tanana terrane is characterized by at least two phases of isoclinal folding and development of transpositional foliation (Ryan, et. al, 2013). The main foliation developed at upper greenschist to amphibolite facies conditions. The second regionally pervasive foliation is present in Permian and older rocks, and is thought to have developed in the late Permian. The main structural feature in the region is the Yukon River thrust, which emplaced Simpson Range suite rocks on top of Snowcap and Sulphur Creek rocks south of the Yukon River. Middle to Late Cretaceous strike slip and normal faults in the Dip Creek and Casino Creek valleys appear to have long strike length, but do not have significant offset.

Table 2. Regional Geology Stratigraphic Column \*

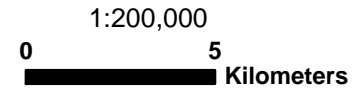
Age	Map Unit	Geological Unit	Description
Paleogene	Pg-RC1	Rhyolite Creek complex - felsic rocks	<i>rhyolite</i>
	Pg-RC2	Rhyolite Creek complex - intermediate to mafic rocks	<i>andesite</i>
Upper Cretaceous	uCt-PM	Prospector Mountain suite	<i>monzonite</i>
	uCt-C3	Carmacks Group	<i>conglomerate, sandstone, siltstone, tuff</i>
		Casino suite	
	uCt-CS1	Casino suite breccia	<i>igneous breccia</i>
	uCt-CS2	Casino suite porphyry	<i>monzonite, dacite</i>
Middle to Upper Cretaceous	muCt-CC	Colorado Creek conglomerate	<i>polymictic conglomerate</i>
Middle Cretaceous		Whitehorse suite	
	mCt-W1	Coffee Creek phase	<i>monzogranite</i>
	mCt-W2	Dawson Range phase	<i>granodiorite, granite, quartz diorite, diorite</i>
	Ejr-A	Aishihik suite	<i>granodiorite, monzogranite, qtz monzonite, qtz monzodiorite</i>
Permian	Pr-KSC	Sulphur Creek suite	<i>monzogranite, augen gneiss</i>
	Pr-K1	Klondike Schist	<i>felsic schist, phyllonite</i>
Late Devonian - Early Mississippian		Simpson Range suite	
	Ms-SR1	felsic to intermediate	<i>granodiorite, monzogranite, quartz diorite and diorite</i>
	Ms-SR2	intermediate to mafic	<i>quartz diorite, diorite, gabbro, amphibolite</i>
	Ms-F	Finlayson assemblage	<i>Amphibolite, garnet amphibolite, schist</i>
	Ms-SRS	Stevenson Ridge schist	<i>quartzite, quartz-mica schist, phyllite</i>
Late Devonian and older		Snowcap assemblage	
	PTDv-SA2		<i>quartzite</i>
	PtDv-SA1		<i>marble</i>
Permian and older	Pr-um	Ultramafic Complexes	<i>undivided ultramafic rocks</i>

\*modified from Ryan (2013)



**Legend**

- |   |   |   |
|---|---|---|
| <p>Mesozoic-Cenozoic Successor rocks</p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #ffffcc; border: 1px solid black; margin-right: 5px;"></span> Rhyolite Creek felsic volcanics</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #d9ead3; border: 1px solid black; margin-right: 5px;"></span> Rhyolite Creek intermediate to mafic volcanics</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #990099; border: 1px solid black; margin-right: 5px;"></span> Prospector Mountain suite</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #c4c499; border: 1px solid black; margin-right: 5px;"></span> Upper Carmacks Group</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #6aa84f; border: 1px solid black; margin-right: 5px;"></span> Casino suite breccia</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #e31a1c; border: 1px solid black; margin-right: 5px;"></span> Casino suite porphyry</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #d9534f; border: 1px solid black; margin-right: 5px;"></span> Coffee Creek phase</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #e69d00; border: 1px solid black; margin-right: 5px;"></span> Dawson Range phase</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4b400; border: 1px solid black; margin-right: 5px;"></span> Aishihik suite</li> </ul> | <p>Yukon Tanana</p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #c4c499; border: 1px solid black; margin-right: 5px;"></span> Sulphur Creek suite</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #99cc99; border: 1px solid black; margin-right: 5px;"></span> Klondike schist</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #d9ead3; border: 1px solid black; margin-right: 5px;"></span> Simpson Range suite felsic to intermediate</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #4f81bd; border: 1px solid black; margin-right: 5px;"></span> Simpson Range suite intermediate to mafic</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #a6c9ec; border: 1px solid black; margin-right: 5px;"></span> Stevenson Ridge schist</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4b400; border: 1px solid black; margin-right: 5px;"></span> Finlayson assemblage amphibolite</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #99cc99; border: 1px solid black; margin-right: 5px;"></span> Snowcap assemblage siliciclastics</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #ffffcc; border: 1px solid black; margin-right: 5px;"></span> Snowcap assemblage marble</li> </ul> | <p>Ultramafic Complexes</p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #990099; border: 1px solid black; margin-right: 5px;"></span> Undivided ultramafic rocks</li> </ul> |
|---|---|---|
- Faults



**WESTERN COPPER CORPORATION  
CASINO PROPERTY  
Figure 2. REGIONAL GEOLOGY  
January 20, 2014**

*Casselmann Geological Services Ltd*

Modified from - Ryan, et. al., 2013. Geology, Stevenson Ridge (northeast part), Yukon;  
Geological Survey of Canada CGM 116 (2nd edition, preliminary), scale 1:100,000

## 7.0 2013 PLACER EXPLORATION PROGRAM

The sonic drill was mobilized to the property on August 1, 2013 as part of a larger geotechnical program on the Casino Project site. This program involved drilling at many sites throughout the property, but included drilling the 2 sonic holes on the Casino Creek placer claims. The diamond drill and heavy equipment was on site from previous work conducted for exploration and geotechnical purposes.

Sonic hole DH13-10 was drilled on August 2, hole DH13-05 on August 25. The sonic drill was unable to complete hole DH13-05 due to large boulders in the overburden and the diamond drill was required to complete drilling at this site (DH13-05B) and at site DH13-06. Hole DH13-05B was drilled from August 26 to 27 and hole DH13-06 from August 28 to 29. The material recovered from the holes was logged, sampled and analyzed to assess the placer gold resources in the Casino Creek valley.



Photo 1. Sonic drill at site DH13-10

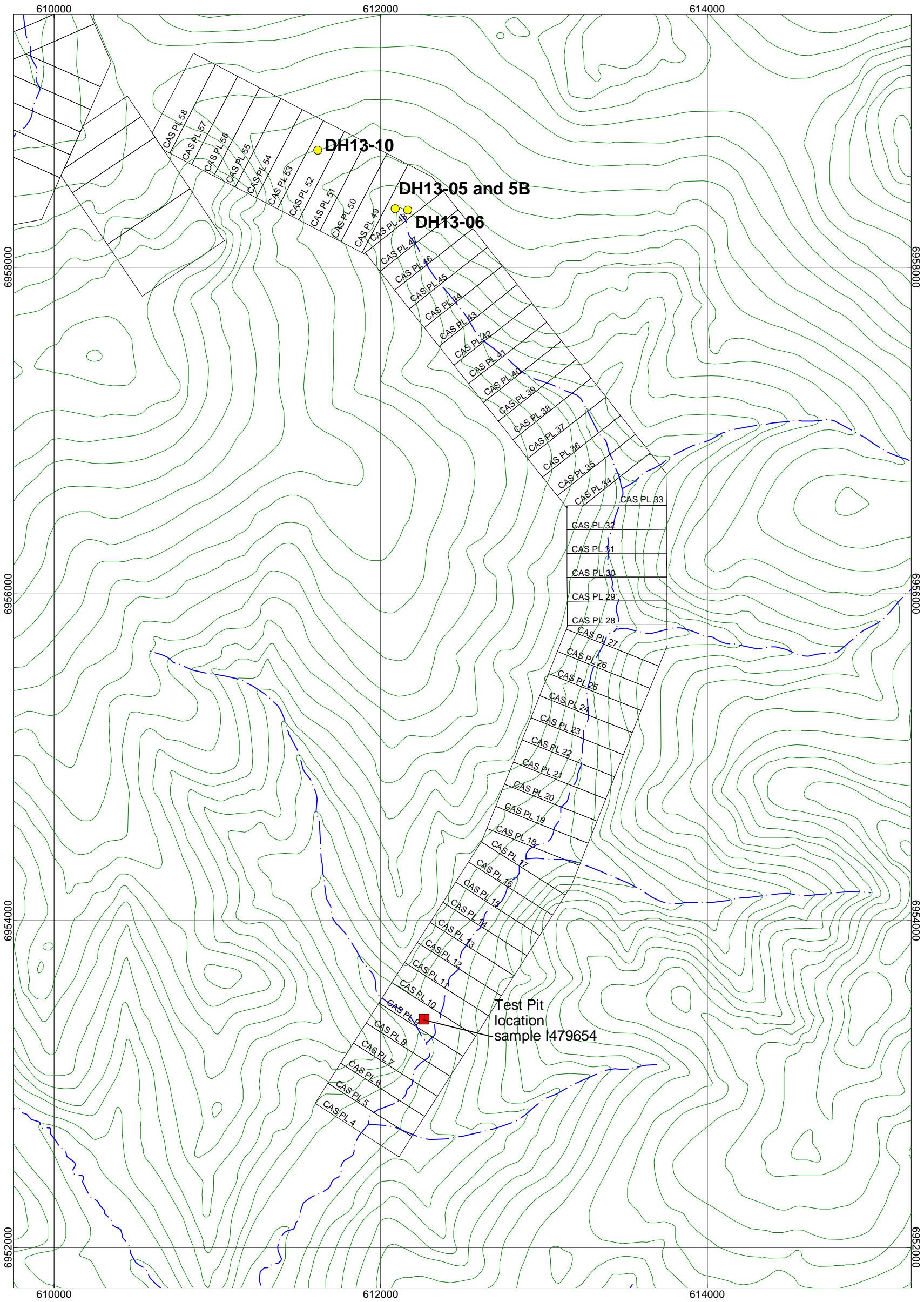


Photo 2. Test pit at the junction of Meloy Creek and Casino Creek

A single test pit was dug using a Cat 225 excavator near the junction of Meloy Creek and Casino Creek. The pit was dug to the limit of the excavator at 5.0 m, although it quickly filled with water to the 2.0 m depth from top.

The four samples collected were sent to ALS Chemex Laboratories in Whitehorse for analysis. The analytical process for gold and silver involved sample preparation by procedure Prep-33D. This process involved logging the sample into the tracking system, weighing, drying and crushing the entire sample to better than 70% -2mm. A 250 gram split of the crushed material was then collected by riffle splitter and it was pulverized to better than 85% passing 75 microns. The resultant pulp was then sent for analysis.

Gold and silver analyses were run on the pulps using a 30 gram sample with fire assay and gravimetric finish to a 0.001 ppm detection limit according to procedure Au-GRA2. Results were reported in parts per million (ppm).

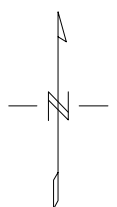
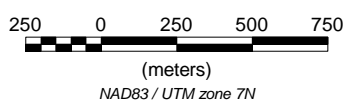


● 2013 Sonic Drill Hole Location

**Casino Mining Corp**  
CASINO PROJECT

2013 Placer Claims Exploration Work

NTS: 115J10 Mining District: Whitehorse  
Projection: UTM, Zone 7 Datum: NAD83



## 8.0 CONCLUSIONS and RECOMENDATIONS

The sonic and diamond drill holes in the upper reaches of Casino Creek intersected thin overburden with abundant large boulders. The samples collected from these holes failed to return significant concentrations of gold. The pan concentrate sample collected from the gravels from test pit from the junctions of Meloy Creek and Casino Creek returned 9.95 g/t Au. The test pit also demonstrated that significant thickness of placer gravels exist in the lower reaches of the creek. The pit was dug to the limit of the excavator at 5.0 m in gravel. The base of the gravels at this location has not yet been determined.

Recommendations for further work to evaluate the placer potential on Casino Creek are to systematically test the valley gravels by drilling or test pitting at 500 m intervals, particularly the lower reaches of the claims. Sonic drilling may prove the better technique for testing the deeper gravels in lower Casino Creek and Meloy Creek due to the depth of the overburden and gravels and the influx of water. Test pits and/or holes should be dug from both the east and west sides of the creek. As well, it is recommended to test the Meloy Creek valley to determine if there is gold in this valley.

Respectfully Submitted

Scott Casselman, B.Sc., P.Geo.

**9.0 STATEMENT OF EXPENDITURES**

Geologist - Core logging and sampling (5 days)	3,750.00
Dark Side Drilling - DH13-10	4,430.00
- DH13-05	3,540.00
Kluane Drilling - DH13-05B	6,680.00
- DH13-06	7,697.00
Excavator	1,800.00
Analytical costs	330.25
ATV/truck rental – 2 vehicles, 5 days	1,000.00
Fuel	480.00
Meals and Accommodation – 15 man-days @ \$150 per man-day	2,250.00
Report Writing Costs	<u>2,000.00</u>
Total	<u>\$ 33,957.25</u>

## 10.0 REFERENCES

Casselmann, S.C., 2012. Casino, 2012 Assessment Report for the Casino Property. Yukon Government Assessment Report.

Dunn, W., 2012. 2012 Assessment Report for the Casino Property Placer Claims. Yukon Government Assessment Report.

**APPENDIX I**  
**STATEMENT OF QUALIFICATIONS**

### **Statement of Qualifications**

I, Scott Casselman, of 33 Firth Road, Whitehorse, Yukon Territory, certify that

- 1) I am a geologist employed by Casselman Geological Services Ltd. of Whitehorse, Yukon Territory.
- 2) I graduated from Carleton University in Ottawa, Ontario with a Bachelor of Science Degree in Geology in 1985 and have worked as a geologist since that time.
- 3) I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia, Registration No. 20032.
- 4) I supervised the mineral exploration program on the Casino Property for Casino Mining Corporation in 2013.
- 5) I am responsible for preparation of this report.





Respectfully Submitted:

Dated 26th of January, 2014.

Scott Casselman, P.Geo.

**APPENDIX II**  
**Drill and Test Pit Logs**

<b>Project:</b> Casino Project	<b>Test Pit No.:</b> TP13-14	<b>Page</b> 1 of 2
Contractor: <b>Kluane Drilling Ltd.</b>	Equipment Used: <b>CAT 322C</b>	Date Started: <b>10 Aug 13</b>
Location: <b>Tailing Management Facility</b>	Total Depth: <b>5 m</b>	Date Completed: <b>10 Aug 13</b>
Coordinates <b>6,953,188 N, 612,254 E (UTM ZONE 7 NAD83)</b>	Elevation: <b>745.992 m</b>	Logged by: <b>SB</b>
		Reviewed by: <b>JEH</b>

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	745				<p><b>VEGETATION</b> (0 to 0.1 m) Moss, roots.</p> <p><b>TOPSOIL</b> (0.1 to 0.2 m) Cobbly, silty SAND, dark brown (Topsoil).</p> <p><b>GRAVELLY SANDS AND COBBLES, ORIGINALLY FROZEN</b> (0.2 to 3 m) Gravelly SANDS and COBBLES, trace silt, poorly graded but originally frozen (previously exposed Alluvium - Creekbed Deposit). Sand is fine to coarse, subrounded to subangular, quartz rich, brown to colourless, gravel is fine to coarse, subrounded to rounded, cobbles up to 0.5m in diameter, subrounded to rounded, various host rocks, fresh, strong.</p>	Soil was previously frozen but exposed for several years and thawed out according to excavator operator.
2	744					
3	743				<p><b>GRAVELLY SANDS AND COBBLES, FROZEN</b> (3 to 4.8 m) As above but frozen, material sloughs during excavation (Alluvium - Creekbed Deposit).</p>	Water flows fast into pit and causes instability below 3 m depth.
4	742		BU-1		<p><b>GRAVELLY SANDS AND COBBLES, FROZEN</b> (4.8 to 5 m)</p>	

**GENERAL REMARKS:**  
 Samples tested at Knight Piésold Soils Laboratory in Denver, Colorado.

<b>Casino Mining Corporation Casino Project TEST PIT LOG FOR TP13-14</b>	
	PROJECT/ASSIGNMENT NO. <b>VA101-325/16</b>
FIGURE <b>TP13-14</b>	REF NO. <b>1</b>
	REV. <b>0</b>

File: \\VAN11\PRJ\_FILES\1010032516\DATA\TASK\_200 - 2013\_GEO\TECHNICAL\_SI\PROGRAM\GINT\MINE SITE REPORT\CASINO 2013 TEST PIT LOGS.GPJ  
 Library: \\VAN11\PRJ\_FILES\1010032516\DATA\TASK\_200 - 2013\_GEO\TECHNICAL\_SI\PROGRAM\GINT\LIBRARY\_TEMPLATE-IPS.GLB TEST PIT LOG METRIC TEST PIT DATA TEMPLATE MAY08.GDT 23 Dec 13

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.



HOLE # : DH13-05

**WESTERN COPPER CORPORATION  
CASINO PROJECT  
DIAMOND DRILL LOG**

HOLE # : DH13-05

UTM Coordinates NAD 83, Zone 7

Collar Survey Type: Garmin GPS

Northing : 6958359 mN

Easting : 612089 mE

Elevation (m) : 1087 m

Zone Legend



Hole Length : 4.10 m

Azimuth (true) : 0

Dip : -90

NTS : 115J/10

Core Size: HQ

Overburden : 4.10 m

Contractor : Klwane Drilling Ltd.

Logged By : S. Casselman

Date Hole Started : August 25, 2013

Date Hole Completed : August 25, 2013

----- Sample Data -----

Depth (m)

R.Q.D.

Weak

strong

Zone

Pyrite

0% 10%

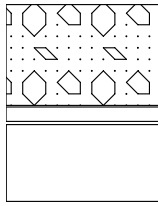
From (m) To (m)

DESCRIPTION

From (m) To (m) Width (m) Sample

Cu % Mo % Au (g/t) Ag (g/t)

0



0.00, 4.10 OVB: Overburden. Dark red-brown gravelly clay with abundant iron oxide staining.

From (m)	To (m)	Width (m)	Sample	Cu %	Mo %	Au (g/t)	Ag (g/t)
0.00	2.00	2.00	1479651				
2.00	3.00	1.00	1479652				
3.00	4.10	1.10	1479653				

HOLE # : DH13-05B

# WESTERN COPPER CORPORATION CASINO PROJECT DIAMOND DRILL LOG

HOLE # : DH13-05B

UTM Coordinates NAD 83, Zone 7

Collar Survey Type: Yukon Engineering

Northing : 6958359.907 mN

Easting : 612087.665 mE

Elevation (m) : 1080.387 m

Zone Legend



Hole Length : 39.62 m

Azimuth (true) : 0

Dip : -90

NTS : 115J/10

Core Size: HTW

Overburden : 4.10 m

Contractor : Kluane Drilling Ltd.

Logged By : S. Casselman

Date Hole Started : August 26, 2013

Date Hole Completed : August 27, 2013

----- Sample Data -----

Depth (m)	R.Q.D.	Weak	strong	Zone	Pyrite %	From (m)	To (m)	DESCRIPTION	From (m)	To (m)	Wath (m)	Sample	Cu %	Mo %	Au (g/t)	Ag (g/t)
0																
4.10								0.00, 4.10 OVB: Overburden. Deep red-brown, silty gravel with abundant iron oxide coating on silt and gravel.								
13.72								4.10, 13.72 WRGD: Granodiorite. Weathered, fractured and bleached white with abundant iron oxide staining on fractures.								
13.72								13.72, 39.62 WRGD: Granodiorite. Weathering is much less than above. Medium-grained, grey to white with 8% black hornblende phenocrysts. Unaltered and <0.5% pyrite.								

**WESTERN COPPER CORPORATION  
CASINO PROJECT  
DIAMOND DRILL LOG**

Depth (m)	R.Q.D. weak strong	Pyrite 0% 10%	Zone	From (m)		To (m)		DESCRIPTION	Sample Data									
				From (m)	To (m)	From (m)	To (m)		Sample	Cu %	Mo %	Au (g/t)	Ag (g/t)					
25			Zone															
30																		
35																		

HOLE # : DH13-06

# WESTERN COPPER CORPORATION CASINO PROJECT DIAMOND DRILL LOG

HOLE # : DH13-06

UTM Coordinates NAD 83, Zone 7

Collar Survey Type: Yukon Engineering

Northing : 6958350.764 mN

Easting : 612167.696 mE

Elevation (m) : 1078.893 m

Zone Legend



Hole Length : 41.15 m

Azimuth (true) : 0

Dip : -90

NTS : 115J/10

Core Size: HTW

Overburden : 4.10 m

Contractor : Kluane Drilling Ltd.

Logged By : S. Casselman

Date Hole Started : August 28, 2013

Date Hole Completed : August 30, 2013

----- Sample Data -----

Depth (m)	R.Q.D.	Pyrite %	Zone	From (m)	To (m)	Description	From (m)	To (m)	Width (m)	Sample	Cu %	Mo %	Au (g/t)	Ag (g/t)
0				0.00	4.10	OV/B: Overburden. No recovery								
5				4.10	10.67	WRGD: Granodiorite. Weathered, fractured GRDR. Minor iron oxide on fractures, slightly bleached.								
10				10.67	41.15	WRGD: Granodiorite. Medium grained GRDR with 10 to 15 % medium grained hornblende. <5% pyrite, 1% quartz-calcite veinlets.								



HOLE # : DH13-10

**WESTERN COPPER CORPORATION  
CASINO PROJECT  
DIAMOND DRILL LOG**

HOLE # : DH13-10

UTM Coordinates NAD 83, Zone 7

Collar Survey Type: Yukon Engineering

Northing : 6958714.993 mN

Easting : 611614.864 mE

Elevation (m) : 1169.7 m

Zone Legend



Hole Length : 7.50 m

Azimuth (true) : 0

Dip : -90

NTS : 115J/10

Core Size: HQ

Overburden : 7.50 m

Contractor : Kluane Drilling Ltd.

Logged By : S. Casselman

Date Hole Started : August 2, 2013

Date Hole Completed : August 2, 2013

----- **Sample Data** -----

Depth (m)	R.Q.D.	Pyrite	From (m)	To (m)	DESCRIPTION	From (m)	To (m)	Width (m)	Sample	Cu %	Mo %	Au (g/t)	Ag (g/t)
0		0%											
5		10%			0.00, 7.50 OVB: Overburden. Grey-brown gravelly clay, becomes more granular towards bottom.								

**APPENDIX III**  
**Geochemical Analytical Certificates**



ALS Canada Ltd.  
2103 Dollarton Hwy  
North Vancouver BC V7H 0A7  
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: WESTERN COPPER AND GOLD CORP  
C/O CASINO MINING  
2050 - 1111 WEST GEORGIA STREET  
VANCOUVER BC V6E 4M3

Page: 1  
Finalized Date: 19- SEP- 2013  
Account: WECOGO

**CERTIFICATE WH13160732**

Project: Casino  
P.O. No.: 13- 01

This report is for 4 Drill Core samples submitted to our lab in Whitehorse, YT,  
Canada on 3-SEP-2013.

The following have access to data associated with this certificate:

ESTERN COPPER AND GOLD CORPOI  
SCOTT CASSELMAN

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-32	Fine Crushing 90% < 2mm
SPL-21	Split sample - riffle splitter
PUL-35a	Pulv 1 kg split to 95%< 106 um
BAG-01	Bulk Master for Storage
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-GRA21	Au Ag 30g FA- GRAV finish	WST- SIM
ME-GRA22	Au Ag 50g FA- GRAV finish	WST- SIM

To: WESTERN COPPER AND GOLD CORP  
ATTN: SCOTT CASSELMAN  
C/O CASINO MINING  
2050 - 1111 WEST GEORGIA STREET  
VANCOUVER BC V6E 4M3

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



ALS Canada Ltd.  
 2103 Dollarton Hwy  
 North Vancouver BC V7H 0A7  
 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: WESTERN COPPER AND GOLD CORP  
 C/O CASINO MINING  
 2050 - 1111 WEST GEORGIA STREET  
 VANCOUVER BC V6E 4M3

Page: 2 - A  
 Total # Pages: 2 (A)  
 Plus Appendix Pages  
 Finalized Date: 19- SEP- 2013  
 Account: WECOGO

Project: Casino

**CERTIFICATE OF ANALYSIS WH13160732**

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	ME- GRA21 Au ppm	ME- GRA21 Ag ppm	ME- GRA22 Au ppm	ME- GRA22 Ag ppm
I479651		4.26	0.14	<5	<0.05	<5
I479652		10.02	0.07	<5	<0.05	<5
I479653		10.83	<0.05	<5	<0.05	<5
I479654		<0.02	NSS	NSS	9.95	<5



ALS Canada Ltd.  
 2103 Dollarton Hwy  
 North Vancouver BC V7H 0A7  
 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: WESTERN COPPER AND GOLD CORP  
 C/O CASINO MINING  
 2050 - 1111 WEST GEORGIA STREET  
 VANCOUVER BC V6E 4M3

Page: Appendix 1  
 Total # Appendix Pages: 1  
 Finalized Date: 19-SEP-2013  
 Account: WECOGO

Project: Casino

**CERTIFICATE OF ANALYSIS WH13160732**

<b>CERTIFICATE COMMENTS</b>	
<b>ANALYTICAL COMMENTS</b>	
<p>Applies to Method:</p>	<p>NSS is non-sufficient sample.            ALL METHODS</p>
<p>Applies to Method:</p>	<p><b>LABORATORY ADDRESSES</b></p> <p>Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.            BAG- 01 CRU- 32            PUL- 35a PUL- QC</p> <p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.            ME- GRA21</p>
<p>Applies to Method:</p>	<p>LOG- 22            WEI- 21</p>