

**Ministry of Energy, Mines & Petroleum Resources**  
Mining & Minerals Division  
BC Geological Survey

**Assessment Report  
Title Page and Summary**

**TYPE OF REPORT [type of survey(s)]:** Physical and Geochemical

**TOTAL COST:** \$12,589

**AUTHOR(S):** Warner Gruenwald, P.Geo

**SIGNATURE(S):** "W. Gruenwald"

**NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):** MX-1-693

**YEAR OF WORK:** 2013

**STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):** 5438816 filed on March 20, 2013

**PROPERTY NAME:** Silver Hope

**CLAIM NAME(S) (on which the work was done):** 518061, 518062

**COMMODITIES SOUGHT:** Cu, Ag, Au, Mo

**MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:**

**MINING DIVISION:** Omineca

**NTS/BCGS:** 093L/01

**LATITUDE:** 54 ° 10 ' " **LONGITUDE:** 126 ° 15 ' " (at centre of work)

**OWNER(S):**

1) Finlay Minerals Ltd.

2)

**MAILING ADDRESS:**

Suite 912-510 West Hastings Street

Vancouver, BC V6B 1L8

**OPERATOR(S) [who paid for the work]:**

1) As above

2)

**MAILING ADDRESS:**

**PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):**

Cretaceous age Goosly Lake volcanics and sediments intruded by Paleocene quartz monzonite. Volcanics and sediments strike northerly and dip steeply west. Phyllic alteration of andesitic ash tuffs. Quartz monzonite alteration includes argillic, potassic and sericitic. Intrusives contain disseminated and stockwork chalcopryite-molybdenite. Bleached, brecciated and variably silicified and volcanics contain zones of chalcopryite, tetrahedrite, arsenopryite, galena and sphalerite.

**REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:** 13943, 15710, 16968, 26751, 29018, 30988, 32162, 32622

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
<b>Ground, mapping</b> _____	_____	_____	_____
<b>Photo interpretation</b> _____	_____	_____	_____
<b>GEOPHYSICAL (line-kilometres)</b>			
<b>Ground</b>			
<b>Magnetic</b> _____	_____	_____	_____
<b>Electromagnetic</b> _____	_____	_____	_____
<b>Induced Polarization</b> _____	_____	_____	_____
<b>Radiometric</b> _____	_____	_____	_____
<b>Seismic</b> _____	_____	_____	_____
<b>Other</b> _____	_____	_____	_____
<b>Airborne</b> _____	_____	_____	_____
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
<b>Soil</b> _____	_____	_____	_____
<b>Silt</b> _____	_____	_____	_____
<b>Rock</b> _____	_____	_____	_____
<b>Other</b> _____	_____	_____	_____
<b>DRILLING (total metres; number of holes, size)</b>			
<b>Core</b> _____	_____	_____	_____
<b>Non-core</b> _____	_____	_____	_____
<b>RELATED TECHNICAL</b>			
<b>Sampling/assaying</b> 4 samples 53 element ICP-MS	518061, 518062		630
<b>Petrographic</b> _____	_____	_____	_____
<b>Mineralographic</b> _____	_____	_____	_____
<b>Metallurgic</b> _____	_____	_____	_____
<b>PROSPECTING (scale, area)</b> _____	518061, 518062		1,888
<b>PREPARATORY / PHYSICAL</b>			
<b>Line/grid (kilometres)</b> _____	_____	_____	_____
<b>Topographic/Photogrammetric (scale, area)</b> _____	_____	_____	_____
<b>Legal surveys (scale, area)</b> _____	_____	_____	_____
<b>Road, local access (kilometres)/trail</b> 1.28 km drill access rd.	518061, 518062		10,071
<b>Trench (metres)</b> _____	_____	_____	_____
<b>Underground dev. (metres)</b> _____	_____	_____	_____
<b>Other</b> _____	_____	_____	_____
		<b>TOTAL COST:</b>	<b>\$12,589</b>

**ASSESSMENT REPORT**

**On The**

**SILVER HOPE PROPERTY**

**Houston, British Columbia**

**Tenure  
Numbers:** 518057, 518058, 518059, 518060, 518061, 518062,  
518063, 518064, 530080, 530081, 530082, 530083,  
530084, 705773, 705774, 835782, 835783, 835784,  
969449, 969469, 980129, 980130, 980131, 980132,  
980133, 1014063, 1014117

**54°10' NORTH LATITUDE 126°15' WEST LONGITUDE**  
**Map Sheet NTS 93L/01**

**For**

**FINLAY MINERALS LTD.**  
**912-510 West Hastings St.**  
**Vancouver, B.C.**  
**V6B 1L8**



**Prepared By:**

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**W. Gruenwald, P. Geo.**  
**June 16, 2013**

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## SUMMARY

*The Silver Hope property is situated approximately 40 kilometres southeast of the town of Houston. It is easily accessible via the well maintained Equity Silver Mine road and a network of exploration and logging roads. Driving time from Houston is roughly one hour. The property consists of eighteen mineral tenures covering 6,343 hectares that are 100% owned by Finlay Minerals Ltd. of Vancouver, BC. The Silver Hope claims are contiguous with the southern boundary of the past producing Equity Silver Mine.*

*The property occupies the southwest facing slope of a northwest trending range of low hills in the Nechako Plateau. These hills are dissected in the south by the east-west trending Buck Creek. Topographic relief on the property is gentle to moderate and lies at elevations of between 800 and 1400 metres. Pleistocene glaciation has deposited variable thicknesses of glacial till. Rock outcroppings are not common.*

*The region first received attention in the mid 1960s from grassroots exploration programs conducted by Kennco Explorations Ltd with the Equity deposit discovered in 1968 using regional silt sampling. Equity Silver Mines commenced production in 1980 at 5,500 tons/day and operated until 1994. Mining took place at several copper-silver-gold deposits namely the Main, North, Waterline, and Southern Tail Zones. Of these, the Main and Southern Tail deposits contributed most of the ore mined. Open pit and underground production totaled 33.8 million tonnes at an average grade of 0.4% copper, 64.9 g/t silver and 0.46 g/t gold.*

*Historic exploration in the area focused on the Equity Silver property and surrounding area. Between 1985 and 1988 Teck Explorations Ltd. conducted drilling on the Gaul Zone, the southernmost of three mineralized zones on the Silver Hope property. This work revealed wide low-grade and narrow high-grade copper-silver bearing zones. In 1986 Equity Silver Mines Ltd. conducted a 79 hole (14,416 m) drilling program covering several areas including the Hope and Superstition Zones on the Silver Hope property. Broad intervals of low-grade and narrower high-grade copper-silver-gold mineralization were encountered in the Hope Zone. This was exemplified by hole X86CH-262 that returned 21.3 metres of 0.38% Cu and 295 g/t Ag including 3.0 metres of 0.91% Cu and 1,030 g/t Ag.*

*In 2004, Canadian Empire optioned the property from Sci-Tek Resources Ltd. and drilled five holes at the Gaul Zone and three holes at the Hope Zone. In the Gaul area copper-silver mineralization is more localized and related to remobilization and reconcentration of copper +/- silver sulphides along late, post-mineral andesitic dikes. At the Hope Zone, drilling intersected high-grade copper-silver-gold associated with breccias and sulphide mineralization (pyrite-tetrahedrite-chalcopyrite) along with brittle deformation and alteration similar to Equity's Southern Tail deposit. The program highlight was in hole 04SH-06 with an intersection of 2.4 metres grading 4.1% Cu, 637 g/t Ag and 1.4 g/t Au at a down hole depth of 287 metres. Here mineralization occurs beneath near surface low grade mineralization which was historically the target for the Equity Silver bulk tonnage deposits.*

*In 2007 Finlay Minerals further tested the Hope Zone with four holes that confirmed the continuity of copper-silver mineralization intersected by Canadian Empire. Up to 2007 a total of 69 holes were drilled on the Hope, Superstition and Gaul Zones. IP and gravity surveys along with soil sampling were also completed in 2007.*

*Geologically the property lies within the Stikine Terrane of the Intermontane geomorphologic belt. During early to mid-Jurassic time uplift along the northeast-southwest trending Skeena Arch thus divided the Bowser Basin to the north from the Nechako Trough to the south. The Buck Creek area of the Silver Hope property and the adjoining Equity Silver Mine property are located to the southeast of the Skeena Arch. These deposits lie within a homoclinal*

inlier of Lower Cretaceous Skeena Group volcano-sedimentary rocks exposed in an erosional window through younger andesitic-basaltic volcanics of the Goosly Lake and Buck Creek Formations. The Cretaceous stratigraphy that hosts the Equity Silver mine and local mineral occurrences are referred to as the Goosly Sequence. Exploration south of the Equity mine resulted in the discovery of the Hope, Superstition and Gaul Zones on the present day Silver Hope property. These zones, along strike with the Equity mine occur along a north-south trend known as the Main Horizon.

In 2010 Finlay Minerals Ltd. completed six diamond drill holes totaling 2,039 metres on the "West Horizon". This area is defined by strong, nearly one kilometre long, north trending IP chargeability anomalies just west of the Hope Zone. The anomalies were believed to represent potential, deep, higher grade Equity style copper-silver mineralization. No prior drilling was known to have tested this area.

The drill program was surprising and successful in that it resulted in the discovery of porphyry intrusive related copper- molybdenum and volcanic hosted copper-silver mineralization. Several long intervals of copper-molybdenum mineralization were encountered within a quartz monzonite intrusion and nearby andesitic volcanic rocks. Examples include 219.87 m grading 0.3% copper, 0.02% molybdenum, and 3.4 g/t silver (drill hole SH10-03). Drill hole SH10-05 located 260 metres north-northeast yielded a 209.7 metre intersection grading 0.29% Cu and 0.014% Mo. This hole ended in porphyry grading 0.18% Cu.

Exploration work in 2011 was comprised of drilling and additional IP surveys. Two drilling phases totaling 6,086 metres were conducted; one in March-April and the second in July-September. **Phase I** consisted of six holes (2,485 metres) of which the first three targeted the East Horizon coincident IP and soil arsenic-silver soil anomalies. Anomalous arsenic in core samples along with locally abundant pyrite, pyrrhotite and graphite in sediments and volcanic rocks do not completely explain the geochemical and geophysical anomalies. Three holes in the West Horizon Cu-Mo porphyry intersected long intervals of disseminated and fracture/veinlet controlled chalcopyrite and molybdenite. DDH11-05, a 603 metre vertical hole, intersected virtually continuous porphyry. Intersections included 182.1 metres of 0.31% Cu and 0.013% Mo followed by 364 metres of 0.11% Cu and 0.057% Mo.

**Phase II** consisted of eight holes totaling 3,602 metres targeting the West, Main and East Zones. Drill holes SH11-09, 10 and 13 in the West Horizon again intersected long intervals of porphyry Cu-Mo mineralization. Thus far the eight holes in this zone have delineated a mineralized porphyry for approximately 1,000 metres from the north property boundary south to drill hole SH11-13. The porphyry is open to the north, south, and west and to depth. Significant zones of copper-silver± gold mineralization also occur well into the adjacent volcanics and sediments.

Four holes tested IP anomalies below the depth of historic drilling in the Hope and Superstition Zones. Each hole intersected substantial lengths of Cu-Ag ± Au mineralization. Two holes drilled beneath the Hope Zone returned long intervals of Cu-Ag mineralization. Hole SH11-07 returned a 238.25 metre core length intercept starting at 313.75 metres grading 6.48 g/t Ag and 0.25% Cu. Within this interval 91.25 metres grades 10.81 g/t Ag and 0.47% Cu. Interestingly drill hole SH10-04 located ~75-100 metres northerly yielded an interval grading 9.26 g/t Ag and 0.51% Cu over 82.50 metres that occurs at similar elevations to SH11-07. This suggests the potential for the discovery of more extensive mineralized zones beneath the Hope Zone.

Drill hole SH11-12, located ~800 metres southerly of SH11-07 tested an IP anomaly well below depths attained by historic holes in the Superstition Zone, yielded one of the most significant discoveries of the 2011 program.

Tuffaceous rocks with numerous zones of bleaching, brecciation and silicification contain abundant pyrite, arsenopyrite, chalcopyrite, sphalerite and minor galena and molybdenite in fractures, tension gashes and veinlets. **Beginning at a down hole depth of 204.00 metres this hole reported 76.00 metres grading 0.43 g/t Au, 29.37 g/t Ag and 0.19% Cu.** In addition this intersection contains among the highest gold values of the 2010/11 drilling programs with five samples assaying >1 g/t Au and one at 9.4 g/t Au. Most high gold values show coincident high amounts of silver, arsenic, bismuth, lead, antimony, zinc and tellurium. Three core samples contain over 100 g/t Ag with the highest grading 747 g/t Ag.

On February 13, 14, 2012 Finlay Minerals contracted Geotech Ltd. of Aurora, Ontario to conduct an airborne ZTEM and magnetic survey over a large part of the property. This work is described in detail in an assessment report by Peter E. Walcott & Associates Limited (May 2013). For reference a compilation plan of the ZTEM survey along with the mineralized zones described in the report is presented on Figure 7 in Section 8.0 of this report.

The ZTEM survey was designed to augment existing geophysical coverage over the property, in an effort to locate additional porphyry systems, and define structural corridors. It successfully identified a number of resistive features. The West Horizon, host to recently discovered copper/molybdenum porphyry system, presents as a zone of elevated resistivity. Flanking this feature is a contact between a less resistive unit. Situated proximal to this contact are the Hope, Superstition, and Gaul Zones that lie along the Main Horizon which immediately north of the property hosts the Equity Silver deposits. A number of secondary ZTEM targets were also identified. Recommendations include 3D inversion on the ZTEM data utilizing ground DC resistivity data to help constrain resistivities in order to generate additional targets. Identified targets should be followed up by prospecting, mapping and soil/rock sampling.

Between February 10 and March 27, 2013 the company contracted Low Profile Exploration of Houston, BC to construct an access road in the East Horizon Area. The objectives of this work were to provide easier access to this area and potentially expose bedrock in order to help determine the cause of the geochemical and geophysical anomalies.

The new road (1.28 km) was successfully completed and now allows access along much of the East Horizon Zone. This will greatly facilitate future exploration work including drilling. Bedrock was uncovered in several areas along the new road. Most consisted of argillaceous sediments some of which were rusty due to the weathering of iron sulphides. Rock samples collected from only a few locations along the new road did not contain any anomalous concentrations of precious metals. Some elevated antimony, arsenic, barium and zinc were indicated. Recommendations are to conduct prospecting, mapping and detailed soil/rock sampling along the new road.

The total cost of the 2013 work was \$12,589.





## 2.0 INTRODUCTION

### 2.1 General Statement

Finlay Mineral's Silver Hope property is an advanced stage exploration property located southeast of Houston in central British Columbia (Figure 1). It is situated immediately south of the former producing Equity Mine which is historically the largest silver producer in the province.

During the period from February 25 and March 27, 2013 Finlay Minerals Ltd. contracted Low Profile Exploration Services of Houston, BC to carry out work on the property.

*The primary objectives were to:*

- Construct an access road in the southern part of the East Horizon Zone that would connect with drill access roads further north. This would greatly facilitate future exploration in the area.
- Expose bedrock with the hope of potentially explaining the geochemical and geophysical anomalies.

### 2.2 Location and Access

The Silver Hope property is located approximately 35 air kilometres southeast of Houston, BC. Access to the property from Houston is via the Equity Silver Mine road to the Equity mine gate at Km 38 (Figure 2). From here travel is south for 7.4 km along the Goosly North Road (past a small cabin), then easterly past Equity Silver's Bessemer creek silt check pond. Just past this pond the road splits with one fork heading north along the east side of Bessemer Creek (to West and Main Horizons) and the other heading easterly across the central part of the property to the East Horizon. Several logging and exploration roads access the northern part of the property. Total driving distance is 52 kilometres and takes about one hour of travel from Houston.

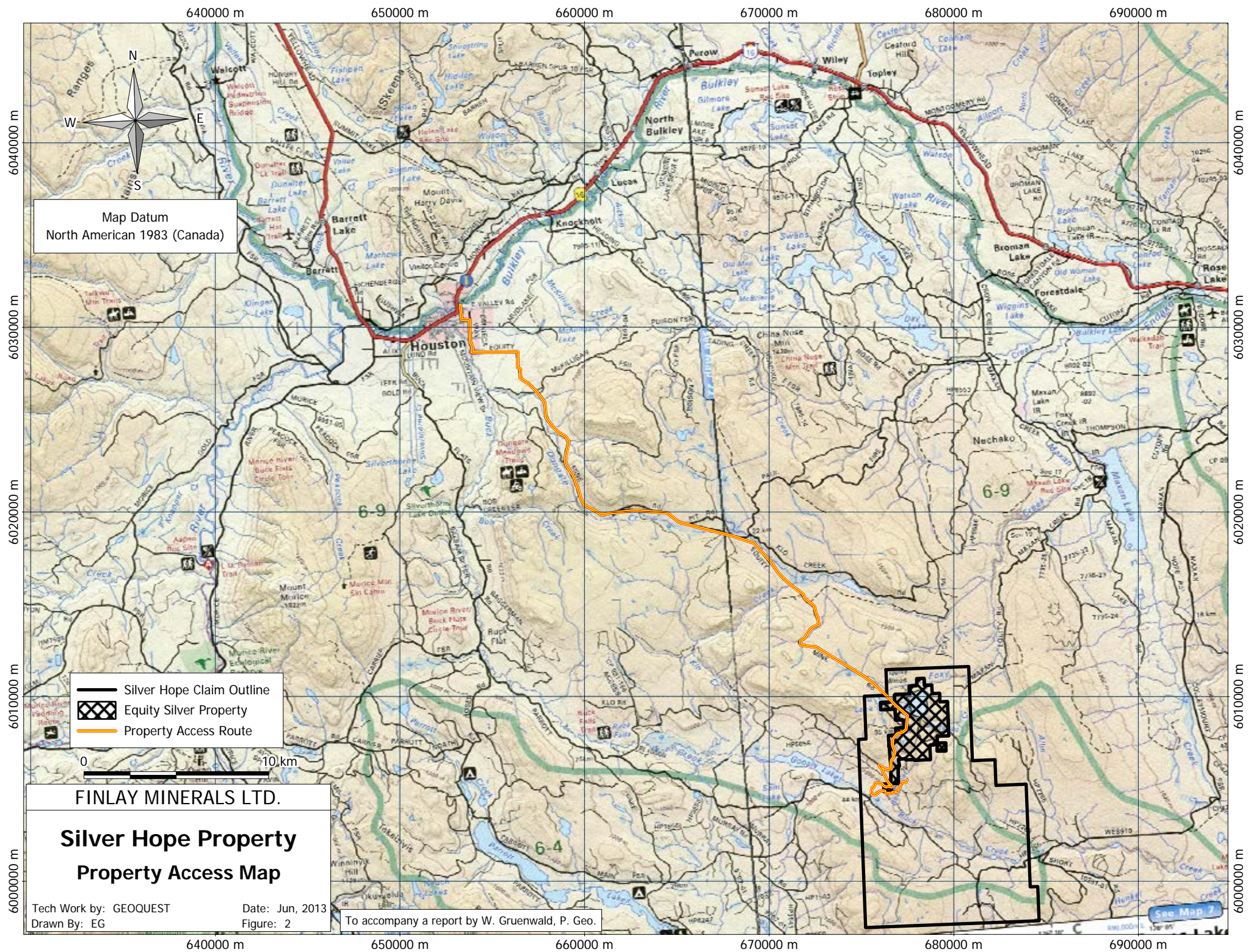
The Equity Silver Mine Road is maintained year-round by the municipality. The road down from the mine site to Goosly Lake is also maintained even in winter to provide access to the Bessemer Creek water monitoring pond and other stream check stations. The road maintenance is of great benefit to Finlay Minerals exploration efforts.

### 2.3 Physiography and Vegetation

The Silver Hope property lies in the gently rolling terrain of the Nechako physiographic region, between elevations of 800 and 1400 metres. The property is located on the western flanks of a broad NW-SE trending ridge which is cut by the Foxy Creek drainage to the north of the Equity Silver Mine and by the Buck Creek drainage to the south. The area is covered by mixed stands of second growth sub alpine vegetation (predominantly Pine and Spruce), as well as recently logged blocks. Many portions of the property have undergone logging over the past 20+ years. Due to the thickness of glacial till (15+ metres) outcroppings are not common.

This area is characterized by relatively cold snowy winters and warm summers. Being situated leeward of the Coast Range Mountains, the property receives only moderate annual precipitation. Moderate snow accumulation of 1-2 metres is typical during the winter months. A southwest exposure promotes a relatively early spring snow melt. Since the Equity Mine road is open in the winter it could be feasible to conduct nearly year round exploration.





Map Datum  
North American 1983 (Canada)

- Silver Hope Claim Outline
- Equity Silver Property
- Property Access Route

0 10 km

**FINLAY MINERALS LTD.**

**Silver Hope Property**

**Property Access Map**

Tech Work by: GEOQUEST  
Date: Jun, 2013  
Drawn By: EG  
Figure: 2

To accompany a report by W. Gruenwald, P. Geo.



## 2.4 Mineral Claims

The Silver Hope property consists of 27 contiguous mineral tenures covering 9736 hectares or 97.36 km<sup>2</sup> (Figure 3). The registered (100%) owner of these tenures is Finlay Minerals Ltd. of Vancouver, BC.

**Table 1 - Mineral Claim Details – Silver Hope Property**

<b>Tenure No.</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Good To Date</b>	<b>Area (Hectares)</b>
518057		142793 (100%)	30-Dec-23	170
518058		142793 (100%)	20-Dec-23	246
518059		142793 (100%)	23-Mar-23	682
518060		142793 (100%)	26-Apr-23	473
518061		142793 (100%)	25-Dec-23	208
518062		142793 (100%)	10-Jan-24	189
518063		142793 (100%)	15-Jul-23	587
518064		142793 (100%)	18-Aug-23	435
530080	FINLAY 1	142793 (100%)	15-Mar-23	340
530081	FINLAY 2	142793 (100%)	19-Apr-23	227
530082	FINLAY 3	142793 (100%)	23-May-23	303
530083	FINLAY 4	142793 (100%)	25-Jun-23	379
530084	FINLAY 5	142793 (100%)	19-Mar-23	152
705773	FINLAY 6	142793 (100%)	19-May-23	455
705774	FINLAY 7	142793 (100%)	20-Jun-23	455
835782	FINLAY 8	142793 (100%)	14-Oct-23	132
835783	FINLAY 9	142793 (100%)	15-Nov-23	455
835784	FINLAY 10	142793 (100%)	16-Dec-23	455
969449	BUCK 1	142793 (100%)	17-Feb-14	455
969469	BUCK 2	142793 (100%)	16-Feb-14	379
980129	FINLAY 11	142793 (100%)	13-Mar-14	455
980130	FINLAY 12	142793 (100%)	15-Mar-14	379
980131	FINLAY 13	142793 (100%)	18-Mar-14	379
980132	FINLAY 14	142793 (100%)	21-Mar-14	379
980133	FINLAY 15	142793 (100%)	24-Mar-14	379
1014063	BUCK 3	142793 (100%)	29-Sep-14	284
1014117	BUCK 4	142793 (100%)	30-Sep-14	303
<b>Total:</b>				<b>9736</b>

The good to dates of the claims are based upon acceptance of this assessment report. The company conducted the 2013 work under a Multi-Year Area Based Permit (MX –1- 693) issued by the Smithers office of the Ministry of Energy and Mines. This permit is good to March 31, 2016.

## 3.0 HISTORY

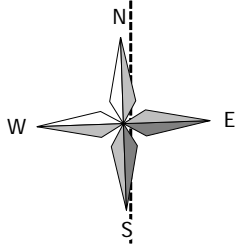
### 3.1 Regional History

The first record of mineral exploration in the region dates back to approximately 1905 when native Indians recovered a small amount of placer gold from Bob Creek near it's confluence with Buck creek, 10.6 km south of Houston. Sulphide mineralization was discovered and explored from 1912 to 1923 at Owen Lake, 35 kilometers

675000 m

680000 m

685000 m



Map Datum  
North American 1983 (Canada)  
Map No. 93L.019  
True N is 2.2° W of UTM Grid N  
Magnetic Declination: 19°33'E

0 Scale: 1:60000 2000 m

FINLAY MINERALS LTD.

**Silver Hope Property****Claim Map**

Tech Work by: GEOQUEST  
Drawn by: EG

Date: Jun, 2013  
Figure: 3

**LEGEND**

- Access Road 2013
- FYL Drill Hole 2004-11 (Angled)
- FYL Drill Hole 2004-11 (Vertical)
- Drill Hole (Historic)

6010000 m

6010000 m

6005000 m

6005000 m

6000000 m

6000000 m

**EQUITY SILVER  
(Goldcorp)**

Figure 6

Buck Creek

675000 m

680000 m

685000 m

south of Houston. Intermittent exploration in the Owen Lake area ultimately led to the start of underground production at the Silver Queen mine in 1972. From March 1972 to September 1973, the mining of 190,676 tonnes of ore yielded 98 kg of gold, 13,646 kg of silver, 405 tonnes of copper, 702 tonnes of lead, 5049 tonnes of zinc, and 15.8 tonnes of cadmium. In 1915, the Diamond Belle property (Au, Ag, Cu, Pb, Zn veins) located northeast of the Silver Queen was discovered by Mr. Cole and partners. In the early 1960's chalcopryite and molybdenite bearing porphyry mineralization was discovered on the Dungate logging road 6.2 kilometers southeast of Houston.

In 1961 regional stream sampling conducted by Kennco Explorations, in its search for porphyry copper deposits, revealed anomalous zinc and copper in a stream east of Goosly Lake. Subsequently Mr. John Barakso (Kennco's geochemist) suggested the use of fluorine geochemistry as a prospecting tool. This facilitated the discovery of chalcopryite and molybdenite mineralization in a small granitic intrusion northeast of Goosly Lake.

From 1968 to 1971, Kennco conducted intensive exploration programs in the Equity Silver/Silver Hope area, including geological mapping, ground and airborne geophysical surveys, geochemical (soil) surveys, trenching and 366 metres of diamond drilling in four holes. In 1972, Kennco arranged an option agreement with Equity Mining Capital Ltd., to earn a 50% interest in the holdings. During 1973-1974, Equity and a joint venture partner (Congdon and Carey Ltd.), delineated the Southern Tail and Main ore bodies by drilling 13,062 metres in 112 holes. A decline and crosscut were driven to obtain a bulk sample from the centre of the proposed pit. This work defined an open pit reserve of 39.5 million tonnes grading 0.33% Cu, 95.4 g/t Ag, 0.89 g/t Au and .085% Sb. The property interests were subsequently merged into Equity Silver Mining Corporation. In 1978, Placer Development Corporation purchased the property and bought out an underlying royalty interest held by Kennco. The asset was held in a wholly owned subsidiary referred to as Equity Silver Mines Ltd.

The Equity Silver Mine was British Columbia's largest producing silver mine. Mining ceased in January 1994 due to depletion of ore reserves after 13 years of open pit and underground mining. Copper, silver and gold were extracted through conventional crushing, grinding, and flotation circuits plus a cyanide leach circuit. A total of 33.8 million tonnes were mined averaging 0.4% copper, 64.9 g/t silver and 0.46 g/t gold.

Mining occurred from three open pits and a small underground operation that ramped off from the bottom of the final open pit. Two pits are now flooded and one was backfilled with mined rock. There are three capped mine rock storage areas that have been revegetated and a plant site area that has been dismantled and capped. The tailings impoundment was flooded during operations and remains flooded in closure.

There are three mine rock storage areas on the site with 85 million tonnes of mine rock and one tailings pond that contains 35 million tonnes of tailings. In 1981 shortly after the mine opened, acid rock drainage (ARD) was found to be occurring from the oxidization of sulphide minerals contained in the mined rock. The ARD from the mine site is collected and processed in one of two lime treatment plants to neutralize the acid and remove metals prior to discharging the treated water back to the environment. The majority of the reclamation work completed at the site has been geared towards minimizing the production of ARD and protecting the surrounding environment. At closure the mine rock storage areas were re-sloped and covered with a compacted clay cap to reduce water and oxygen infiltration. The clay cover reduced the volume of ARD produced from the mine rock storage areas, but there is still a significant volume of ARD produced annually that requires collection and treatment. Goldcorp expects to be collecting and treating ARD at the Equity Silver site indefinitely. Since closure there has been an average of four permanent employees at the site (Goldcorp, 2006).

### 3.2 Local History

In the mid to late 1960s the Gaul Zone on the present day Silver Hope property was originally staked by Kennco Explorations Ltd. In 1969-1970, Maverick Mining conducted geological mapping, geochemical soil and silt surveys, and IP and magnetometer surveys. In 1971 Maverick drilled six holes totaling 755 metres in the Gaul Zone (M1-6). Also in 1971, Teck Explorations Ltd. conducted soil surveys, self potential and VLF-EM surveys along with eight diamond drill holes (T7-14) totaling 1221.3 metres. Drilling intersected fracture-controlled mineralization (pyrite +/- chalcopyrite, sphalerite and galena) as well as steeply dipping siliceous breccias mineralized with pyrite, chalcopyrite and pyrrhotite. In 1983, Equity Silver drill tested this zone to the northeast by drilling two rows of holes (E83-135, 136, 137, 139). These holes were located north of the Maverick holdings at that time.

In 1982, Equity Silver Mines conducted a soil and till survey that encompassed much of the current Silver Hope property. This excluded the Gaul claims, which were held by another company at that time. A total of 920 soil samples were collected on a 50 X 100-200 metre grid and analyzed for Cu-Zn-Pb-Ag-Hg. A total of 73 till samples were collected on a 100 X 100 metre grid and analyzed for Cu-Zn-Pb-Ag-Sb. Survey results highlighted a series of anomalous Cu-Zn-Ag values in soils in the northwest and central portions of the grid. Anomalous copper values were noted in a northeast trending zone in the Hope area.

In 1986, Equity Silver Mines drilled 21 holes to test geological and geochemical targets over a 1.2 km distance. Drilling intersected mineralization in the Hope and Superstition Zones of the current Silver Hope property.

In 1985, Teck Explorations Ltd. completed a drilling program on the Gaul claims on behalf of a joint venture between Teck (39.1%), Maverick (39.1%), and Equity Silver Mines. Four holes were drilled (685.2 metres) to test geochemical anomalies from the 1982 survey and to follow-up on mineralized intersections in holes M2 and M4 of the 1971 Maverick campaigns. Hole 85TG-18 returned moderate to high grade results over narrow sections of semi-massive pyrite, chalcopyrite +/- tetrahedrite, and arsenopyrite. Mineralization was locally concentrated along post-mineral andesitic dykes.

In 1987, Teck drilled six diamond holes (1186.4m) in the Gaul area to follow up on these intersections. All holes encountered low grade chalcopyrite and tetrahedrite mineralization with occasional narrow sections of high grade chalcopyrite. Mineralization occurred as fracture fillings, sulphides in quartz-carbonate veinlets, breccias, and massive sulphide veins. The highest values occurred in hole 87TG-20 between 65.7 to 69.5m. A 65.4m intersection assayed 12.9g/t Ag and .71% Cu within which a 3.8m interval graded 105 g/t Ag and 7.88% Cu. In 1988, a third phase of drilling in the Gaul area was completed by Teck to test the down dip extent of mineralization encountered in previous drill holes. Six holes totaling 1,236 metres were completed (88GT25-30).

Most of the claims in the Hope to Gaul area were allowed to lapse, and in 2001 the Hope group of 2-post claims (Hope 1-27) was staked by Sci-Tek Resources Ltd. During this year Sci-Tek conducted a program of reconnaissance stream sampling and prospecting on the Silver Hope property and the surrounding area. A program of soil sampling was also conducted. Results from Equity Silver's 1982 soil and till sampling program were also reviewed and compared to the results of this survey (Zastavnikovich, 2001).

In 2002 and 2004, Sci-Tek added the 4-post Win 1 and Silver 1-9 claims, respectively, to the Silver Hope property. Canadian Empire Exploration entered into an agreement in 2004 with Sci-Tek Resources Ltd. In 2004 eight

diamond drill holes totaling 2,141m were drilled on the Gaul and Hope Zones. The highlight of the drilling program came from the Hope Zone where a 2.4 metre intersection graded 4.1 % Cu, 637 g/t Ag and 1.40 g/t Au.

In March of 2006 Finlay Minerals Ltd. acquired five new tenures (FINLAY 1-5). These are located to the north and south of the Equity Mine property. During the summer of 2006 Finlay Minerals contracted the cutting of six lines with one pair over each of the Hope, Superstitious, and Gaul Zones. Walcott Geophysics completed a magnetic, gravity IP survey. These surveys were documented in a 2007 report.

In June of 2007 Finlay Minerals contracted Driftwood Diamond Drilling of Smithers, B.C. to complete a 4 hole 1,719.5 meter core drilling program on the Hope Zone. In particular Finlay Minerals was interested in proving geological and grade continuity of copper-silver values in the deep high-grade zone first drilled by Equity Silver Mines and then in 2004 by Canadian Empire Exploration. Two holes yielded significant intersections of copper-silver mineralization including 9.35 metres grading 0.69% Cu and 333 g/t Ag.

In 2008 additional IP and soil geochemical surveys were completed. This and previous surveys identified two distinct IP anomalies the eastern one of which displayed coincident multi-element soil anomalies.

In 2010 Finlay Minerals Ltd. completed a six-hole (2,036 metre) diamond drilling program in a large IP chargeability anomaly referred to as the West Horizon Zone. The program's objective was to test for "Equity type" volcanic hosted Cu-Ag mineralization west of the "Main Horizon" that hosts the Equity Silver deposits and the three historic mineralized zones on the Silver Hope property. The program resulted in the discovery of porphyry intrusive copper- molybdenum and volcanic hosted copper-silver mineralization. Table 2 below outlines the significant mineralized intersections from the 2010 program.

**Table 2 - 2010 Drilling Significant Intersections**

DDH	Zone	From (m)	To (m)	Width (m)	Ag (g/t)	Cu %	Mo %
SH10-01	West	136.25	143.09	6.84	0.74	0.14	0.013
		267.25	287.20	19.95	1.00	0.18	0.002
		328.91	332.18	3.27	15.70	0.27	0.004
		347.60	353.60	6.00	5.55	0.18	0.003
SH10-02	West	0.00	260.90	260.90	1.23	0.17	0.020
<i>includes</i>		124.00	198.07	74.02	2.34	0.24	0.020
		397.85	409.80	11.95	5.83	0.23	0.005
		433.70	495.91	62.21	2.77	0.10	0.007
SH10-03	West	38.90	258.77	<b>219.87</b>	<b>3.37</b>	<b>0.30</b>	<b>0.019</b>
SH10-04	Main	27.56	55.94	28.38	4.86	0.16	0.013
		291.00	313.00	22.00	15.65	0.22	0.002
		353.00	435.50	<b>82.50</b>	<b>9.26</b>	<b>0.51</b>	<b>&lt;0.002</b>
<i>includes</i>		375.00	387.00	12.00	13.62	0.83	<0.002
<i>includes</i>		397.00	405.00	8.00	20.45	1.25	<0.002
SH10-05	West	6.70	216.41	<b>209.71</b>	<b>1.62</b>	<b>0.29</b>	<b>0.014</b>
SH10-06	West	5.20	193.07	<b>187.87</b>	<b>2.10</b>	<b>0.28</b>	<b>0.027</b>



Given the very positive 2010 program an aggressive exploration program was carried out in 2011. Work included Induced Polarization surveys, prospecting and sampling, access road construction and a two-phase diamond drilling program. Twelve holes totaling 6,087 metres were completed between March 7 and September 12, 2011. Four holes were drilled in the East Horizon Zone with the remainder in the Main and West Horizon Zones.

Drilling resulted in the expansion of the West Horizon Cu-Mo porphyry mineralization and the discovery of deeper volcanic hosted gold-silver-copper mineralization along the Main Horizon. Significant drill results are below.

**Table 3 - 2011 Drilling Significant Intersections**

Zone	DDH	From (m)	To (m)	Length (m)	Au g/t	Ag g/t	Cu %	Mo %
Phase I								
West Horizon	SH11-04	135.30	308.80	173.50	0.03	0.55	0.21	0.011
West Horizon	SH11-05	11.66	193.80	182.14	0.06	<2.00	0.31	0.013
	<i>includes</i>	51.50	152.85	101.35	0.07	<2.00	0.36	0.016
	SH11-05	238.60	602.59	363.99	<0.01	2.36	0.11	0.057
	<i>includes</i>	238.60	373.00	134.40	0.10	5.47	0.18	0.088
	<i>includes</i>	296.00	301.00	5.00	1.87	65.40	0.12	1.161
West Horizon	SH11-06	8.00	218.50	210.50	0.05	<2.00	0.26	0.012
Phase II								
	SH11-06	416.55	430.00	13.45	<0.01	5.18	0.19	0.017
		462.00	476.50	14.50	0.01	3.52	0.23	0.005
		495.00	509.00	14.00	0.01	5.14	0.37	0.004
		642.00	714.10	72.10	0.02	5.66	0.19	<0.001
		<i>includes</i>	642.00	683.00	41.00	<0.01	5.93	<0.001
Main Horizon (Hope Zone)	SH11-07	313.75	552.00	238.25	0.01	6.48	0.25	<0.001
	<i>includes</i>	313.75	405.00	91.25	0.02	10.81	0.47	0.002
	<i>includes</i>	322.00	345.00	23.00	0.01	14.69	0.68	0.002
East Horizon	SH11-08	388.72	390.73	2.01	0.00	498.00	0.22	0.000
West Horizon	SH11-09	127.00	181.00	54.00	0.03	5.02	0.14	0.004
		<i>includes</i>	148.00	154.00	6.00	0.12	29.39	0.38
		281.50	346.15	64.65	0.01	1.47	0.09	0.062
		<i>includes</i>	281.50	314.00	32.50	0.01	0.41	0.104
West Horizon	SH11-10	28.07	68.00	39.93	0.04	0.98	0.16	0.002
		191.50	276.60	85.10	0.02	3.63	0.07	0.013
		379.70	384.00	4.30	0.02	8.79	0.27	0.002
Main Horizon (Superstition Zone)	SH11-11	220.24	385.30	165.06	0.06	9.23	0.14	0.001
	<i>includes</i>	220.24	266.50	46.26	0.05	14.81	0.20	<0.001
	<i>includes</i>	312.70	341.00	28.30	0.05	6.24	0.18	<0.001
	<i>includes</i>	355.00	385.30	30.30	0.16	13.96	0.15	0.003
Main Horizon (Superstition Zone)	SH11-12	13.00	67.75	54.75	0.01	2.47	0.18	<0.001
		204.00	280.00	76.00	0.41	29.37	0.19	<0.001
		<i>includes</i>	213.80	245.23	31.43	0.48	42.67	<0.001
West Horizon	SH11-13	109.00	385.00	276.00	0.01	1.29	0.07	0.008
		<i>includes</i>	156.00	241.85	85.85	0.02	1.50	0.006

*Note: All intersections are core length.*

## 4.0 GEOLOGY

### 4.1 Regional Geology

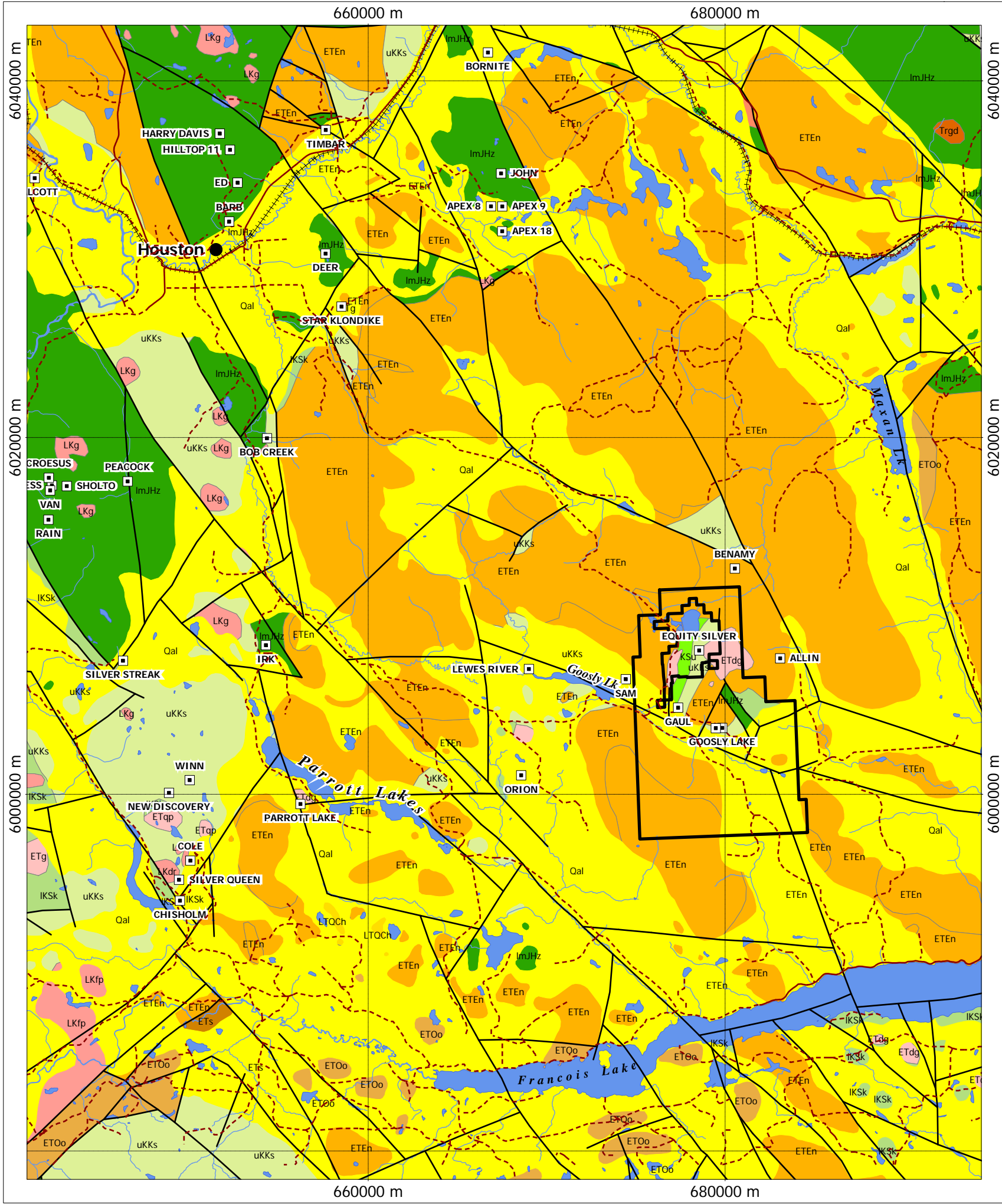
An excellent account of the regional and local geology is outlined in a Technical Report by G. E. Ray (2006). The following excerpts are largely taken from this report.

The Silver Hope property lies within the Stikine Terrane of the Intermontane geomorphological belt (Figure 4). Early to mid-Jurassic uplift along the northeast-southwest trending Skeena Arch divided the Bowser Basin to the north from the Nechako Trough to the south. The formation of the Skeena Arch is related to magmatism and the emplacement of the Topley Intrusions that are sub volcanic granitic stocks along the Skeena Arch axis. This trend coincides with the projection of a major magnetic discontinuity extending southeasterly from the Great Slave Lake fault. Assuming this part of the Intermontane Belt is underlain by Precambrian basement rock, reactivation of this ancient zone of weakness in the Early Mesozoic may have played a role in the development of the Skeena Arch. The core of the uplifted Arch consists of volcanic arc assemblages which are onlapped to the northwest by marine and non-marine sedimentary rocks of Late Jurassic to Late Cretaceous age. To the southeast, these volcanic arc rocks are onlapped by equivalents of these groups, as well as Tertiary volcanic rocks. In central British Columbia, mid Cretaceous volcanic centres have been identified in five areas: near Old Fort Mountain at Babine Lake, at Mt. Cronin in the Babine Range, along the Rocher Deboile Range, in the Buck Creek area, and in the Tahsta area.

Recent regional government mapping of the rocks associated with these volcanic centres has divided the Skeena Group into several formations which comprise a fore arc succession to the continental arc of the Omineca belt, which lies to the east. To the north of the Arch, the southern edge of the Bowser Basin has been described as a basal sequence of deltaic to fluvial sediments interbedded with, and overlain by, a sequence of bimodal ocean island to continental arc volcanics. These are in turn interbedded with, and overlain by, an upper sequence of deltaic to estuary /fluvial sediments.

The occurrence of marine shales, siltstones and conglomerates with pillowed flows provides evidence for a submarine depositional environment. Variations in the thickness of this formation may indicate proximity to eruptive centres and the rapid facies changes among sedimentary horizons suggests mass movement along unstable escarpments. Cauldron subsidence complexes in this setting could host a variety of mineral occurrences including vein, sub volcanic epithermal and volcanogenic massive sulphides (MacIntyre et al, 2003). Rhyolite domes in the area which intruded marine sediments, as well as angular clasts of rhyolite in the sediments suggest coeval formation of the volcanics and sediments, and have been dated as Cretaceous (104-108 Ma).

The deposition of the Cretaceous volcanic strata, the overlying Tertiary Volcanics, and the flanking rhyolite domes suggests that the Buck Creek basin is an area of volcanic subsidence related to part of a cauldron subsidence complex. It is noteworthy that the geology of the area is not considered to be part of a true caldera as it lacks voluminous ash flows which are typically related to an episode of rapid evacuation of a magma chamber. Subsidence and related volcanic activity may have begun in the mid-Cretaceous, with the eruption of Rocky Ridge Formation volcanic rocks and the emplacement of rhyolite flow domes in a shallow, submarine environment. Both VMS and sub volcanic epithermal mineral deposits could form in such a setting.



Volcanic and Sedimentary Rocks

CENOZOIC

Neogene to Quaternary



Quaternary Cover

Alluvium, glaciofluvial gravels and sand, till.

Paleogene



Endako Group

Andesite, basalt, minor dacite: flows, breccia and tuff, vesicular, amygdaloidal, locally hyaloclastic, minor picrite basalt and rhyolite; conglomerate, sandstone, shale, lignite.



Ootsa Lake Group

Rhuolite, dacite, trachyte flows; related tuff and breccia; andesite and basalt; minor conglomerate, grit, greywacke and tuffaceous shale.

MESOZOIC

Cretaceous to Tertiary



Sustat Group

Sandstone, siltstone, mudstone, chert and quartz-pebble conglomerate, felsic ash-tuff, minor coal.

Upper Cretaceous



Kasalka Group

Hornblende-feldspar porphyritic andesite to basalt flows and related pyroclastics, breccias and epiclastic beds, lesser dacite, rhyodacite, basaltic andesite, quartz porphyry; sandstone, conglomerate.

Lower Cretaceous



Skeena Group

Feldspathic and volcanic sandstone, siltstone, shale, mudstone, chert-pebble conglomerate, minor coal; autite-plagioclase phyric alkaline basalt to basaltic andesite, plagioclase phyric andesite to dacite; aphyric basalt, green to maroon mafic lapilli tuff, volcanic beccia, rhyolite to dacite flows.

Lower to Middle Jurassic



Skeena Group

Feldspathic and volcanic sandstone, siltstone, shale, mudstone, chert-pebble conglomerate, minor coal; autite-plagioclase phyric alkaline basalt to basaltic andesite, plagioclase phyric andesite to dacite; aphyric basalt, green to maroon mafic lapilli tuff, volcanic beccia, rhyolite to dacite flows.

Intrusive Rocks

CENOZOIC

Cretaceous to Tertiary



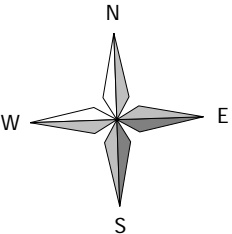
diorite (dr), monzodiorite (dg), gabbro (gb), granodiorite (gd), granite (gr), quartz diorite (qd), quartz monzonite (qm), syenite (sy), tonalite (to), diabase (db), quartz porphyry (qp), feldspar porphyry (fp), orthogneiss (og), migmatite (mi) and undifferentiated intrusive rocks (g).

Late Cretaceous



diorite (dr), gabbro (gb), granodiorite (gd), granite (gr), quartz diorite (qd), quartz monzonite (qm), syenite (sy), tonalite (to), quartz porphyry (qp), feldspar porphyry (fp), orthogneiss (og), and undifferentiated intrusive rocks (g).

- Fault
- Thrust
- - - Gravel Road
- Paved Road
- +++++ Railway
- Minfile Occurrence



0 10 km

FINLAY MINERALS LTD.

Silver Hope Property  
Regional Geology

Tech Work By: GEOQUEST  
Drawn By: EG

Date: Jun, 2013  
Figure: 4

To accompany a report by W. Gruenwald, P. Geo.

The Silver Queen deposit comprises mesothermal and epithermal polymetallic veins. Goosly intrusion related dikes are contemporaneous with vein emplacement. The Silver Queen and Equity deposits appear to be genetically related thus representing the full spectrum of hydrothermal plumbing systems driven by the Goosly intrusions.

## 4.2 Local Geology

The Equity Silver Mine and Silver Hope property area was first mapped by Kennco geologists in the late 1960s and was published as a map by Ney et al. (1972). The regional geology of the area of the Owen, Parrott and Goosly Lakes was mapped by B.N. Church in 1971, as well as N.C. Carter in 1981. More regional mapping for the NTS 93L area was published by the GSC in 1976 (Tipper). Detailed studies of the Mesozoic stratigraphy in the area of the Main Zone ore body of the Equity Silver Mine were completed as graduate theses by Wodjak and Sinclair (1984) and Wetherell (1979). In 1982, Equity Silver Mines conducted 1:5000 scale mapping which focused on the claim holdings surrounding the mine site, including much of the current Silver Hope property. Figure 5 modified after Open File 2007-09 (Alldrick, D.J. Pease, and R. Panteleyev) displays the Equity mine and Silver Hope geology.

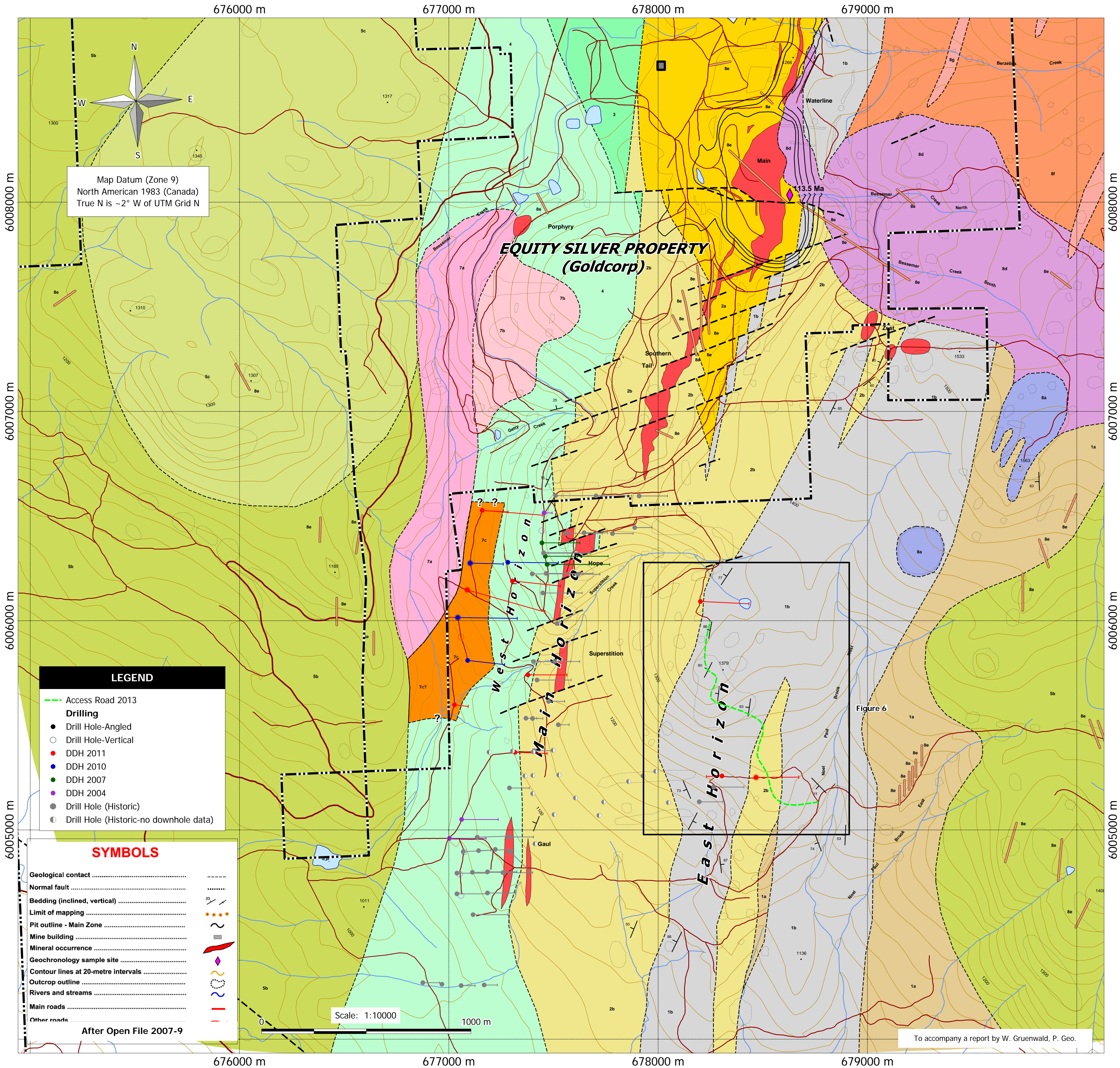
The Equity Mine and Silver Hope mineral deposits are located within an erosional window of uplifted Cretaceous age sedimentary, pyroclastic, and volcanic rocks near the midpoint of the Buck Creek Basin. The Lower Cretaceous Goosly sequence in the claims area strikes north-northeast and dips moderately to gently west (Figure 4). *This sequence consists of three stratigraphic divisions or units as follows:*

- **Unit 1** - Lower clastic unit composed of basal conglomerate, chert pebble conglomerate, and argillite.
- **Unit 2** - Middle pyroclastic unit consisting of heterogeneous sequence of ash and dust tuffs, breccia, and reworked pyroclastic debris. ***This unit hosts the main mineral deposits at the Equity Silver Mine as well as the mineralization seen on the Silver Hope property.***
- **Unit 3** - Upper sedimentary – volcanic unit consisting of tuff, sandstone and conglomerate. There are notable facies variations within the stratigraphy, with an increased thickness of sediments in the south. Tuffs vary from fine-grained to coarsely reworked within the pyroclastic division, and the dip of the strata is generally steep. The inlier is flanked by flat-lying to shallow-dipping Eocene andesitic to basaltic flows and flow breccias of the Francois Lake Group.

Intrusive rocks in the Equity and Silver-Silver Hope areas include a north striking approximately two kilometre long Paleocene (58 Ma) quartz monzonite stock (Figure 4). The southern part of this intrusion lies on the western edge of the Silver Hope property and is mapped to within 200 metres of the 2004 drill hole collars 04SH-06, 07, and 08. The copper-silver-gold mineralization at the Equity Silver Mine is believed to be epigenetic in origin and may be related to the emplacement of this Paleocene quartz-monzonite stock. Coincident K - Ar ages were obtained for both the quartz monzonite and the sericitized tuffs hosting the mineralization.

The Goosly sequence is cut to the east by an Eocene (48 Ma) gabbro with associated monzonite to diorite phases. Post mineral andesite and quartz latite dikes of Eocene age (49 Ma) cut the Cretaceous strata on both the Equity Silver and Silver Hope properties. On the Gaul portion of the Silver Hope claims, mineralization is often concentrated marginal to these late dikes, likely as a result of remobilization. Due to a thick layer of compact glacial till (up to 50m), the geology of the Gaul area has been mainly compiled from diamond drilling campaigns. All six 2004 drill holes in the Gaul Zone collared in sedimentary-volcanic rocks (Unit 3) and cored into the underlying pyroclastic strata of Unit 2. The succession is cut by shallowly to moderately dipping late stage andesitic dikes ranging from sub-metre to 15 metres thick. In cross section, the dikes appear to be sub concordant to stratigraphy.





# LEGEND

## INTRUSIVE ROCKS

### TERTIARY

#### MIDDLE EOCENE

##### GOOSLY INTRUSIVE SUITE

###### EAST STOCK

Dike and Sill Phases

8g

BIOTITE MONZONITE DIKES Equigranular. Large dike-like masses cut earlier intrusive phases and coeval Goosly Lake Volcanics. Characteristic 030° strike.

8f

MONZONITE PORPHYRY SILLS Sill complex interlayered with screens of pyritic Goosly Lake Volcanics - may represent the roof zone of the intrusive complex.

8e

DIKES AND SILLS Mainly bladed feldspar porphyry; minor andesite. Abundant (>15% by volume) to common (15% by volume) in Skeena Group strata and West Stock. Less common in East Stock; minor in Goosly Lake Volcanics.

Stocks and Plugs

8d

MONZONITE Coarse-grained, with trachytic bladed plagioclase phenocrysts. Plagioclase-orthoclase-quartz-hornblende-biotite-magnetite-apatite monzonite.

8c

MONZOGABBRO Intermediate phase, transitional between gabbro and monzonite. Plagioclase-orthoclase-augite-hornblende-biotite-quartz-magnetite-apatite.

8b

GABBRO Pyroxene-labradorite-biotite-magnetite-apatite gabbro. Coarse-grained, with trachytic bladed plagioclase phenocrysts.

8a

DIORITE Plagioclase-hornblende-biotite-magnetite-apatite rock. Coarse-grained, with trachytic bladed plagioclase phenocrysts.

#### LATE PALEOCENE

##### NANIKA INTRUSIVE SUITE

###### WEST STOCK

7c

Cu-Mo MINERALIZED QUARTZ MONZONITE Potassic, argillic, sericitic altered. Chalcopyrite molybdenite as disseminations, veinlets, local stockwork zones.

7b

ALTERED QUARTZ MONZONITE Pervasive sericitic alteration, with widespread but weak sulphide mineralisation. Cu-Mo mineralisation at north end of intrusion; tetrahedrite veinlets at south end; small lens of Ag-sulphides in central area.

7a

QUARTZ MONZONITE Plagioclase-biotite-orthoclase porphyritic. Medium-grained. 57.2 ± 2.3 Ma.

## STRATIFIED ROCKS

### MIDDLE EOCENE

#### ENDAKO GROUP

##### BUCK CREEK VOLCANICS

6

BASALT Flows and breccias. Grey to black; plagioclase porphyritic. 47.3 ± 1.6 Ma

### LATE PALEOCENE

#### OOTSA LAKE GROUP

##### GOOSLY LAKE VOLCANICS

5c

AMYGDALOIDAL ANDESITE Reddish purple, weakly trachytic flows. Minor fine plagioclase phenocrysts. Local biotite concentrations; minor apatite.

5b

TRACHYANDESITE Dark grey to purplish bladed feldspar porphyry flows. Local vesicles, commonly parallel to flow direction.

5a

BASAL BRECCIA Trachyandesite flow breccia

### EARLY CRETACEOUS

#### SKEENA GROUP

##### Mount Ney Volcanics

###### Sedimentary-Volcanic Division

4

SANDSTONE AND CONGLOMERATE, volcaniclastic, well-bedded, interbedded. Minor intercalated well-bedded waterlain intermediate ash and dust tuff. Conformable, gradational lower contact with Pyroclastic Division.

###### Volcanic Flow Division

3

ANDESITE AND DACITE FLOWS Plagioclase porphyritic. Interlayered with Sedimentary-Volcanic Division along strike; interlayered with Pyroclastic Division near lower contact.

###### Pyroclastic Division

2b

DUST TUFF Distal dacitic dust tuff; minor ash and lapilli tuff. Massive. Local brecciated dust tuff is sulphide-cemented. Lenses of chert pebble conglomerate near base. Interlayered lower contact; gradational upper contact.

2a

PYROCLASTIC FLOWS Proximal dacitic, fragment-poor pyroclastic flows, coarse fragment-rich breccias, welded tuff; minor ash tuff. Crude bedding. Lenses and interbeds of volcanic conglomerate and rare volcanic sandstone. Clasts primarily dacite porphyry; minor tuff and chert pebble conglomerate clasts.

###### Bulkley Canyon Formation

###### Clastic Division

1b

CHERT PEBBLE CONGLOMERATE Conglomerate, sandstone; local thin, laminated lenses of welded felsic tuff. Graded beds. Interlayered lower and upper contacts.

1a

POLYMICTIC CONGLOMERATE Conglomerate and sandstone. Graded beds. Interlayered upper contact.

## FINLAY MINERALS LTD.

# Silver Hope Property

# Property Geology

Tech Work By: GEOQUEST  
Drawn By: EG

Date: Jun, 2013  
Figure: 5



The sedimentary-volcanic sequence of Unit 3 is a thick, conformable succession of intercalated siltstone, argillite, and reworked ash/dust to lapilli tuff and heterolithic volcanic conglomerate. The succession is progressively more pyroclastic in character at depth. Locally mixed depositional textures between sediments and pyroclastic fragmentals suggest that sedimentation was coeval with volcanic activity. Distinct intervals of chert pebble conglomerate (also referred to as felsic volcanic conglomerate) are found throughout Unit 3 and are progressively thicker and more abundant at depth. The base of the lowermost horizon of conglomerate marks the transition between the sedimentary-volcanic (Unit 3) and the pyroclastic (Unit 2) sequences.

The Unit 2 pyroclastic sequence in the Silver Hope area consists mostly of variably bleached green-grey ash to dust tuff with occasional local fine interbeds of lapilli tuff. At depth, where it is less altered and bleached, the tuffs are maroon colored. Tuffaceous intervals in near the base of the overlying Unit 3 also appear texturally similar and are variably bleached.

Andesitic dikes, 0.5 to 15 metres wide, cut the entire Goosly sequence. Dikes are feldspar porphyritic, massive, relatively fresh and magnetic suggesting they are late stage and possibly post-mineral. In cross section the dikes are moderately west dipping and discordant to stratigraphy. Dike contact core angles suggest that dikes cut both the section and the stratigraphy obliquely, possibly along a northeasterly trend.

In the Hope area, the stratigraphy appears to have been subjected to more intense hydrothermal alteration than in the Gaul area further south. Alteration and fracturing are best developed within dust and ash tuffs of Unit 2 but also affect tuffaceous horizons of the overlying Unit 3. The 2010 drilling intersected extensive lengths of crackle brecciated ash tuffs deep below the Hope Zone. Elevationally lower and to the west the drilling encountered a chalcopyrite-molybdenite mineralized quartz monzonite intrusion. It is now even more plausible that fracturing and alteration of the ash tuffs in the Hope Zone result from the emplacement of this intrusion.

### **4.3 Alteration**

Alteration assemblages described by Pease (1987) in the Goosly lithologies are characterized by minerals rich in alumina, boron, and phosphorous. Four types of alteration are recognized in the Equity Mine area.

- *Aluminous alteration* is characterized by a suite of aluminous minerals including andalusite, corundum, pyrophyllite, and scorzalite. These alteration zones show a systematic spatial relationship to areas of mineral deposits.
- *Boron-bearing minerals* consisting of tourmaline and dumortierite occur within the ore zones and in the hanging wall section of the Goosly sequence.
- *Phosphorous-bearing minerals* including scorzalite, apatite, augelite, and svanbergite occur in the hanging wall zone, immediately above and intimately associated with sulphide minerals – particularly in the Main and Waterline zones.
- *Phyllic alteration* is characterized by weak to pervasive sericite-quartz replacement. It appears to envelope zones of intense fracturing, with or without chalcopyrite/tetrahedrite occurrences, particularly in Unit 2 dust tuffs.

## 5.0 MINERALIZATION AND ALTERATION

### 5.1 Regional Mineralization

The region hosts a variety of mineral deposit types including copper and molybdenum-bearing porphyries (Dungate Creek), epithermal and mesothermal veins (Silver Queen, Diamond Belle), and replacement deposits (Main Zone -Equity Mine). The Cu-Mo porphyries tend to be associated with Late Cretaceous to early Tertiary granitoids while the younger Cu-Pb-Zn veins found in the Silver Queen deposit as well as the Ag-Cu rich fracture fillings, disseminations and replacements at the Equity mine are related to the Goosly syeno-monzonite intrusions. Figure 3 displays the location of BC Minfile occurrences for the region.

The Silver Queen deposit lies approximately 30 km west-southwest of the Silver Hope property and consists of mesothermal and epithermal polymetallic veins. Sulphides include pyrite, sphalerite, with accessory chalcopryrite, galena and tennantite within a quartz/rhodochrosite/barite gangue. Rocks adjacent to the veins are argillically altered. A broad zone of propylitic alteration is distal to the vein systems.

### 5.2 Local Mineralization

#### Equity Mine

The Equity Silver Mine was British Columbia's largest producing silver mine. Milling ceased in January 1994, after 13 years of open pit and underground mining. A total of 33.8 million tonnes were mined averaging a grade of 0.4% copper, 64.9 g/t silver and 0.46 g/t gold. At the mine the upper portion of the Goosly stock and sub-volcanic structures have been exposed by erosion. A zone of disseminated and massive sulphides consisting of pyrite, chalcopryrite, and tetrahedrite +/- pyrrhotite, sphalerite, and magnetite is situated adjacent to the stock. Aluminous alteration (andalusite, scorzolite, pyrophyllite and corundum) is associated with much of this mineralization. Weak to pervasive sericite-quartz alteration appears to envelope zones of intense fracturing, including chalcopryrite/tetrahedrite mineralization.

Three principal zones of mineralization occur at the Equity Silver mine and are referred to as the Main, Southern Tail (just north of the Silver Hope property), and the Waterline Zones (Figure 4). Sulphides within the Main Zone are fine-grained occurring primarily as disseminations and lesser veins within a dust tuff. Mineralization typically occurs in tabular fracture zones roughly paralleling stratigraphy. Locally massive, coarse-grained sulphide replacement bodies occur within the Main Zone. These replacements form lens-like bodies, up to three metres thick, with average sulphide contents of 31% chalcopryrite, 23% pyrite, and 17% pyrrhotite. Magnetite is locally abundant in the Main Zone. The Main Zone has a true thickness of approximately 60 metres. A narrow appendage, the Southern Tail Zone, strikes southerly away from the Main ore body. Sulphides in the Southern Tail Zone are coarse-grained and occur as veins, fracture-fillings and breccia zones hosted by a brittle, less permeable tuff. Arsenopyrite is especially common in the Southern Tail Zone where it rims and replaces fragments of brecciated host rock. The Southern Tail Zone is approximately 30 metres thick. The Waterline Zone characterized by relatively high gold grades is approximately 200 metres long, 12 metres wide and dips approximately 50° to the west.

Copper-silver-gold mineralization at the Equity Mine is thought to be epigenetic in origin and may be related to the emplacement of the quartz monzonite stock to the west (Cyr, Pease, et al). In this model intrusive activity resulted in hydrothermal metal-rich solutions permeating the pyroclastic division of the Goosly sequence. Sulphides introduced into the more competent and permeable ash and lapilli tuffs of the Main, Waterline, and North Zones formed as stringers and disseminations which grade randomly into zones of massive sulphide. In the Southern Tail,

Superstition, and Hope Zones, sulphides formed as veins, fracture fillings, and breccia zones in the brittle, less permeable fine-grained dust tuff. Emplacement of post mineral dikes into all types of sulphide-rich pyroclastic rocks resulted in remobilization and concentration of sulphides adjacent to intrusive contacts. Remobilization, concentration and contact metamorphism of sulphides occurred in the Main and Waterline Zones at the contact with the post mineral gabbro-monzonite complex to the east.

Ore minerals are generally restricted to tabular zones sub concordant to host stratigraphy occurring as veins, fracture fillings, disseminations and locally as massive pods and breccia zone matrix. Primary ore control is structural, since "economic" sulphides tend to be concentrated in zones of intense fracturing (microveins, stringers) and brecciation.

### **Silver Hope Property**

Three mineralized zones occur on the Silver Hope property southerly and along strike with the Equity deposits and along what is called the Main Horizon. From north to south these are the **Hope, Superstition and Gaul Zones** all of which occur in the Goosly volcanic rocks. The following descriptions combine historic knowledge of these zones and Finlay's 2010/11 exploration programs.

#### **(A) Hope Zone**

The Hope Zone bears a resemblance to Equity's Southern Tail deposit. Historical and recent drilling intersected a succession of Unit 3 sedimentary-volcanic strata overlying pyroclastic strata of Unit 2. These are cut by moderately to steeply dipping late stage andesitic dikes up to ten metres wide. Dense sets of micro-fractures in-filled with pyrite  $\pm$  quartz, calcite, chlorite, chalcopryrite and local tetrahedrite form stockworks predominantly hosted by Unit 2 and 3 dust tuffs as well as local sections of Unit 3 pebble conglomerate. Mineralization occurs primarily within fractures, and within local sub-metre zones of micro fracturing and brecciation. Higher fracture density is coincident with more intense alteration and the occurrence of more diverse sulphide fracture-fillings and breccia veins with pyrite, tetrahedrite  $\pm$  chalcopryrite. Although sulphide-filled micro fractures are ubiquitous the best copper-silver mineralization occurs in a series of parallel, metre scale zones of moderately steep west dipping breccia veins and/or dense stockworks. These contain semi-massive tetrahedrite  $\pm$  pyrite  $\pm$  chalcopryrite, sphalerite and galena. Anomalous amounts of gold, arsenic, antimony and locally, bismuth are present. Pyrite is pervasive, typically as millimetre to centimetre scale fracture fillings. Fracture densities are moderate to locally as high as 60/m. Sulphide content ranges from 2% to 5%.

Consolidated Empire's drill hole 04SH-6 was a 100 metre down dip test of the high-grade mineralized zone found in Equity's drill hole X86CH-274. The Equity hole yielded two high grade intersections. The first between 211.0-214.0 metres returned assays of 2.89% Cu and 49 g/t Ag. The second intersection between 232.0-235.0 metres returned assays of 0.95% Cu and 139 g/t Ag. Drill hole 04SH-06 intersected a high-grade zone grading 4.1% Cu and 637g/t Ag over 2.4 metres beginning at 287.0 metres (Photo 1). Along strike, Equity drill hole X86CH-262 also contained a high grade interval from 244.0 to 247.0 metres grading 0.91% Cu 1030 g/t Ag. These intersections demonstrated the high grade potential of the Hope Zone. The 2.4 metre zone in 04SH-06 consists of a breccia vein of semi-massive pyrite-tetrahedrite overprinted with massive pyrite $\pm$  quartz veins, which crosscut dust tuff at 30°-50° to the core axis. This interval contains 60% pyrite and 25% tetrahedrite overall. The host rock is moderately to strongly alumina (?) altered dust tuff. Coarse-grained pyrite clots and narrow tension gashes of tetrahedrite are mutually crosscutting and closely coeval in paragenesis. These high grade copper-silver  $\pm$  gold zones are flanked by



a broader halo (>20m) of lower to moderate grade mineralization (i.e. drill hole X86CH-262, which returned 21.3 metres of 0.38 % Cu and 295g/t Ag).



**Photo 1**  
**Hope Zone (DDH 04-SH-06)**  
**Tetrahedrite-pyrite vein cutting tuffs.**

Finlay's 2007 drilling continued to intersect locally high-grade copper-silver mineralization. In the 2010 program drill hole SH10-04 intersected extensive lengths of crackle brecciated ash tuffs deeper below the Hope Zone. Elevationally lower and to the west drill holes SH10-05 and 06 encountered a chalcopyrite-molybdenite mineralized quartz monzonite intrusion referred to as the West Horizon. The writer suggests that the intrusion may have remobilized pre-existing sulphide mineralization and introduced copper  $\pm$  silver mineralization into the host tuffs.

#### **(B) Superstition Zone**

In 1982, Equity's mapping discovered a weakly mineralized outcrop in Superstition Creek centred approximately 500 metres south of the Hope Zone. A chip sample of an exposure of tan dust tuff with pyrite and tetrahedrite bearing fractures returned 0.22% Cu, 18 g/t Ag, 0.22 g/t Au, 1.79% As, 0.01 1% Pb and 0.039% Zn (Pease, 1983). By 1986 surface work and drilling delineated a zone trending 020°, dipping westerly at 45° to 70° and averaging 20 metres wide and 500 metres long. Mineralization was described as veinlets of chalcopyrite, sphalerite, arsenopyrite and tetrahedrite cutting variably sericitized and silicified Unit 2 dust tuffs.

A highlight of Finlay's 2011 exploration program was drill hole SH11-12 which targeted deep IP chargeability anomalies in this zone. Between downhole depths of 200 and 289 metres the tuffaceous rocks contain numerous bleached, brecciated, silicified and sulphide-rich zones. Pyrite is ubiquitous and it along with arsenopyrite, chalcopyrite, sphalerite and minor galena and molybdenite occur in fractures and tension gashes in the breccias. Photo 2 below displays silicification (veining) disrupted by later brecciation followed by introduction of some if not most of the sulphides. Sulphide minerals visible in this photo are abundant arsenopyrite (silvery mineral surrounding fragments), pyrite and sphalerite (dark brown clots). As previously mentioned arsenopyrite is especially common in Equity's Southern Tail Zone where it rims and replaces fragments of brecciated host rock.

Starting at a downhole depth of 204.00 metres this mineralized zone yielded a 76.00 metre interval grading 0.43 g/t Au, 29.37 g/t Ag and 0.19% Cu. This intersection also contains among the highest gold values of the 2010/11 drilling programs with five samples assaying >1 g/t Au and one sample returning 9.4 g/t Au. Most of the high gold values also show coincident high amounts of silver, arsenic, bismuth, lead, antimony and zinc. Three core samples contain over 100 g/t Ag with the highest grading 747 g/t Ag. Several samples also contain high arsenic (>1%) and three core samples reported >1% combined Pb-Zn.



**Photo 2 - SH11-12 @ 219.1 m (1.48 g/t Au, 54.9 g/t Ag, >1% As, 0.11% Cu, 1.25% Pb/Zn)**

### **(C) Gaul Zone**

The Gaul Zone, the most southerly of the Main Horizon mineral occurrences, is hosted by Lower Cretaceous Skeena group pyroclastic sequence (Unit 2) that under the Unit 3 sedimentary sequence. In this area the Unit 2 pyroclastic rocks consist predominantly of variably bleached (sericite altered?) green-grey ash to dust tuff with local fine interbeds of lapilli tuff. At depth, where less altered, the tuffs are maroon coloured. Primary sulphides are pyrite, chalcopryite, tetrahedrite and minor sphalerite/galena. Mineralization occurs mainly within fractures (density of 6-30/m), sub-metre zones of micro fracturing and brecciation, as well as disseminations. Locally chert pebble conglomerates are also mineralized with pyrite  $\pm$  chalcopryite in fractures, disseminations, and clots. The strongest copper-silver mineralization in the Gaul Zone is sub-metre intervals of semi-massive pyrite, chalcopryite  $\pm$  tetrahedrite locally concentrated along andesitic dike margins. These late dikes are not mineralized implying that sulphides may have been remobilized and reconcentrated from other mineralized sites cut by these dikes.

Elevated multi-element signatures including gold are frequently associated with the presence of a quartz-feldspar porphyry phase and semi-massive sulphides. Late overprints of quartz/chalcedony healed epithermal breccias were also reported to contain elevated amounts of gold and arsenic.

### **(D) West Horizon Zone**

Little was known of this area prior to the company's 2010 drilling program. Mapping by Equity Silver and the BC Geological Survey indicates a two-kilometre long, north striking quartz monzonite intrusion (Figure 5). In the West Zone there are virtually no rock outcroppings although there is a contact shown (inferred) in the immediate area. The closest intrusive outcroppings (Figure 5) are mapped approximately 350 metres west of Bessemer Creek however there is no documentation of any significant mineralization. In 2010 construction of a short drill access road for drill holes SH10-02/03 exposed quartz monzonite bedrock containing disseminated chalcopryite and molybdenite mineralization. Hornfelsed andesitic rocks containing disseminated chalcopryite were also found at this site. To the writer this was the first evidence of porphyry style Cu-Mo mineralization on the property.

**The West Horizon Zone mineralization consists of:**

- 1) Very fine to medium-grained (<1mm to 3mm) disseminations of pyrite, chalcopyrite and molybdenite. Total sulphide content generally ranges from 1% to 3% however local concentrations of 5% and more are present. Chalcopyrite often occurs proximal to biotite grains.
- 2) Fracture controlled chalcopyrite and molybdenite. Fracture density can exceed 10-20/metre.
- 3) Chalcopyrite and molybdenite in quartz veinlets of numerous orientations and from 1mm to 1 cm wide. The latter often occurs along veinlet margins. Veinlet density ranges from <1/metre to locally >10/metre.
- 4) Chalcopyrite and molybdenite as fracture and veinlet fillings in host tuffs and conglomerates.

Alteration of the quartz monzonite is pervasive consisting of varying intensities of clay (argillic), potassic and sericite. A pale, bleached appearance is not unusual with colours of off white, pale grey to pale green. Clay alteration is occasionally intense and wetted core will show protrusions of “swelling clays” which are likely a result of feldspar alteration. Silica is manifested by varying intensities of quartz stockwork veining and localized flooding. Potassic (K-feldspar) alteration imparts a pinkish or salmon colour to the entire core or as haloes around quartz veinlets and fractures. Secondary biotite is also present as fine grains. Locally biotite “books” are present as coarse (up to 1 cm) aggregates in quartz veins.

Petrographic analysis of a suite of intrusive rocks by Mr. Jim Oliver, PhD in 2011 confirmed it to be quartz monzonite. Two supracrustal (host) rock samples were identified as intermediate to felsic composition ash tuffs that typically lack lithic fragments. Thus the term andesitic ash tuffs would seem appropriate.

*Four hydrothermal alteration assemblages were also identified from this work and include:*

**Potassic:**

Intrusive rocks display well developed potassic mineral assemblages defined by secondary K-feldspar selvages to quartz veins and secondary biotite identified within both mm and cm scale veinlets and occasionally as secondary biotite replacing primary biotite as disseminations within the rock matrix. This alteration assemblage is strongly associated with chalcopyrite and molybdenite and is readily evident in drill core under a hand lens.

**Phyllic:**

This alteration is only noted in supracrustal rocks and as with the potassic assemblages is associated with chalcopyrite. Alteration is dominated by fine-grained sericite, pyrite, plus or minus quartz thus classifying it as a moderate phyllic or quartz-sericite-pyrite assemblage. No secondary biotite or other potassic mineral phases were identified.

**Phyllic Hornfels:**

This was identified in a proximal hornfels contact aureole characterized by the development of red-brown garnets. Development of garnet hornfels pre-dates the formation of phyllic (sericite-pyrite) alteration assemblages.

**Calcite – Chlorite:**

Late stage calcite microveinlets locally overprint early stage secondary biotite. Secondary biotite is also overprinted by late stage chlorite. A single sulphide phase, tetrahedrite, is likely associated with late stage, cooler (?) fluid conditions. All tetrahedrite grains have a close spatial relation to secondary chlorite and not to secondary potassic mineral assemblages.

Textural data suggests the sulphide paragenesis consists of an early pyrite/chalcopyrite phase followed by a late molybdenite - tetrahedrite phase. No secondary sulphides were noted in the sample suite however in some drill holes malachite, azurite and chalcocite are documented. Hematite is the sole oxide observed. Petrographic analysis also revealed that none of the samples contain a significant penetrative fabric and all samples represent a very low grade metamorphic rock suite. Most veinlets and vein breccias are extensional features. Occasional examples of an echelon shear hosted veinlets are also documented.

The discovery of the Cu-Mo mineralized porphyry lends support to the hypothesis that the Hope Zone and for that matter the Equity mineralization is epigenetic in origin and may well be at least partially related to the emplacement of the quartz monzonite intrusion.

#### **(E) East Horizon**

Geological work by Dani Alldrick of the BC Geological Survey (Open File 2007-9) put forward the hypothesis of a "Lower Sulphide Horizon" parallel to and east of the Main Horizon. Finlay refers to this area as the East Horizon (Zone). Support for this hypothesis is a prominent two kilometre north-south trending IP chargeability anomaly with coincident arsenic  $\pm$  silver-in-soil anomalies. The 2010 rock sampling and 2011 drilling analytical data confirm the presence of pyrite, arsenopyrite, tetrahedrite (?), galena, and sphalerite however no significant large scale mineralized zones have been identified.

### **6.0 EXPLORATION PROGRAM - 2013**

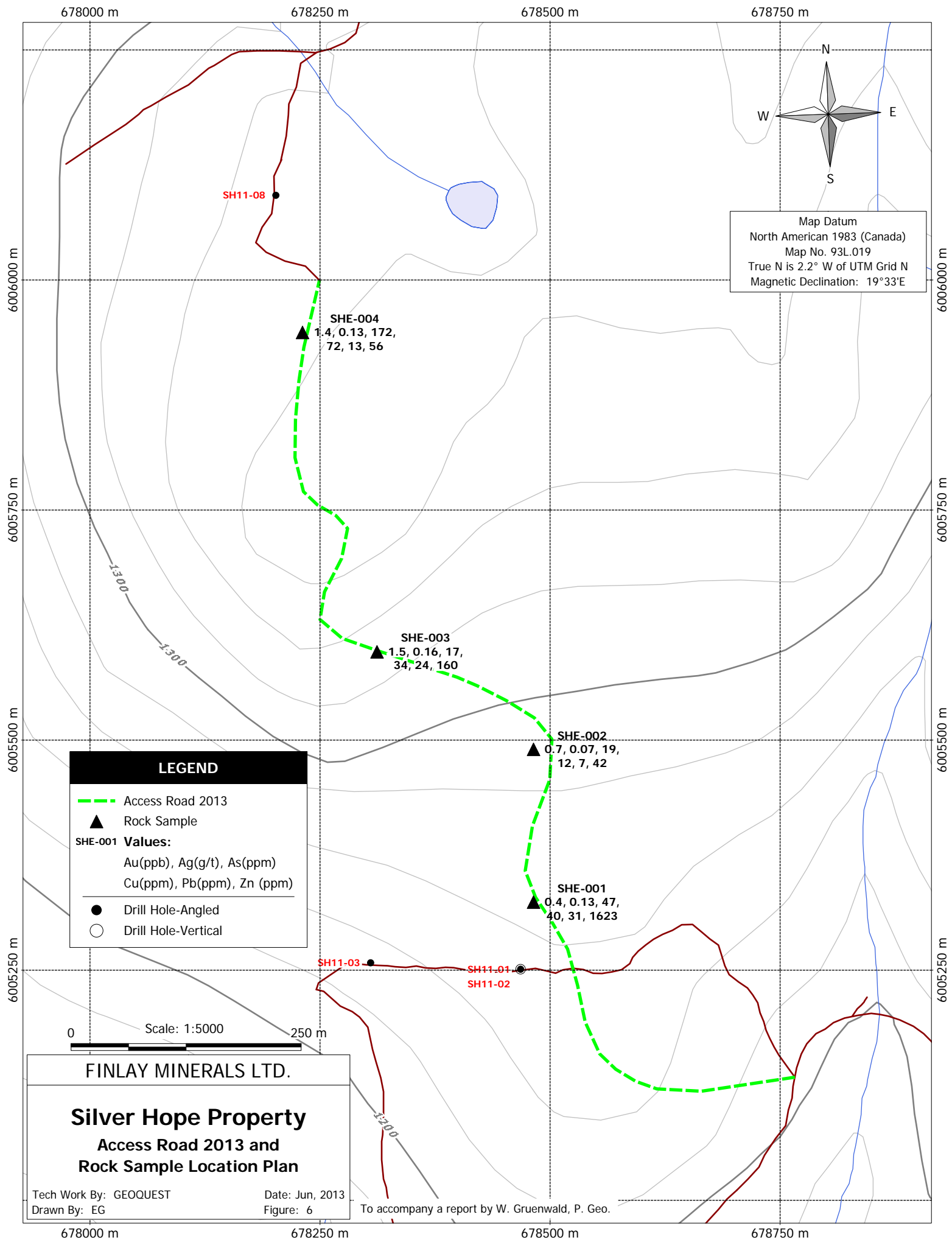
In February, 2013 the company contracted Low Profile Exploration of Houston, BC to construct an access road in the East Horizon Area. The objectives of this work were to provide easier access to this area and potentially expose bedrock in order to help determine the cause of the geochemical and geophysical anomalies.

Four rock samples (grab, composite chip) ranging from 1.5 to 2.5 metres wide were collected from bedrock exposed by this work (Figure 6). The samples were submitted to Acme Labs in Vancouver for 53 element Induction Coupled Plasma-Mass Spectrometer (ICP-MS) analysis. Surface conditions and time of the year prevented detailed examination of the road right of way. The total cost of the 2013 work was \$12,589.

### **7.0 PROGRAM RESULTS**

A 1.28 kilometre long road was successfully completed thus allowing access along much of the East Horizon Zone. This road now provides a link between the northern part of this zone (Hole SH11-08) and the southern area (Holes SH11-01, 02) and should facilitate any future exploration work (Figure 6).

Bedrock was uncovered in several areas along the new road. Most of this consisted of argillaceous sediments some of which were rusty due to the weathering of iron sulphides. Analytical results and methodology are presented in Appendix A while sample locations are plotted on Figure 6. The four rock samples did not contain any significant amounts of precious metals. One sample (SHE-001) contains 1600 ppm zinc along with 21 ppm Sb and 1761 ppm Ba. The 5.97% iron content of this sample indicates the presence of substantial amounts of pyrite and/or pyrrhotite. Rock sample SHE-002 returned 172 ppm arsenic which is likely related to minor amounts of arsenopyrite.



## 8.0 CONCLUSIONS

The Silver Hope property is situated along a belt of volcanoclastic-sedimentary rocks that host the adjacent Equity Silver mine, the largest former silver producer in British Columbia. Mineralization on the property displays geological characteristics that are most consistent with replacement style sub volcanic copper-silver-gold deposits.

The Equity Silver deposits have been described as a transitional sub-volcanic type between porphyry and epithermal. These deposit types typically have a Cu-Au-Ag signature, together with arsenic, antimony and possibly bismuth. In the ore zones, pyrite is the main sulphide mineral along with chalcopyrite and tetrahedrite-tennantite. Structural and lithological permeability are the main controls on the mineral distribution and alteration. Mineralization occurs in sulphide dominant stockworks, veins, breccias, disseminations and massive replacements.

Exploration work on the Silver Hope property has identified three zones of volcanic hosted copper-silver ±gold mineralization from north to south referred to as **Hope, Superstition and Gaul**. In the Hope Zone drill hole 04SH-6 intersected a narrow, steeply dipping tetrahedrite bearing breccia similar to that encountered in Equity Silver's Southern Tail Deposit. A 2.4 metre length assayed 4.1% Cu, 637 g/t Ag and 1.40 g/t Au. It has been hypothesized that mineralized fluids were focused along north-south brittle structures preferentially developed in dust and ash tuffs with higher grade copper-silver mineralization appearing to be better developed, and coeval with more intense brittle deformation. Potentially significant is that historic drilling below the low-grade open pit of Equity's Southern Tail deposit reportedly encountered a massive sulphide zone with high copper, zinc and silver grades.

Historic Gaul Zone drilling indicated that mineralization was more localized and related to remobilization and reconcentration of copper ± silver sulphides along late, post mineral andesitic dikes. While narrow, high grade drill intercepts were obtained it was postulated that mineralization may be localized at intersections between the dikes and steeply dipping structures.

Finlay's geophysical and geochemical surveys identified several distinct exploration targets. IP surveys identified the West Horizon, a strong 800+ metre long, north trending chargeability anomaly situated in a previously undrilled area just west of the Hope Zone. Moderate to strong, deep IP anomalies were identified immediately east of the West Horizon Zone. The East Horizon area is defined by a two kilometre long north trending chargeability anomaly with coincident arsenic-silver soil anomalies. Dani Alldrick of the BC Geological Survey suggested this area could host a lower sulphide horizon to the Main Horizon that hosts the Equity Mine deposits and the three Silver Hope zones.

Drilling of the West Horizon IP chargeability anomalies in 2010 and 2011 resulted in the discovery of previously unrecognized copper-molybdenum porphyry style mineralization. To date all eight of the West Horizon drill holes intersected significant lengths of copper-molybdenum mineralization. The mineralized porphyry has thus far been traced for approximately 1,000 metres south from north property boundary to hole SH11-13. The porphyry body is open to the north, south, and west and to depth. The latter is exemplified by hole SH11-05 which ended at 603 metres still in Cu-Mo mineralization.

Significant zones of copper-silver± gold mineralization also occur well into the adjacent volcanics and sediments. This was evidenced by hole SH10-04 which was drilled well below historic drilling in the Hope Zone. This hole returned a nearly 100 metre interval of abundant chalcopyrite mineralization hosted by crackle brecciated

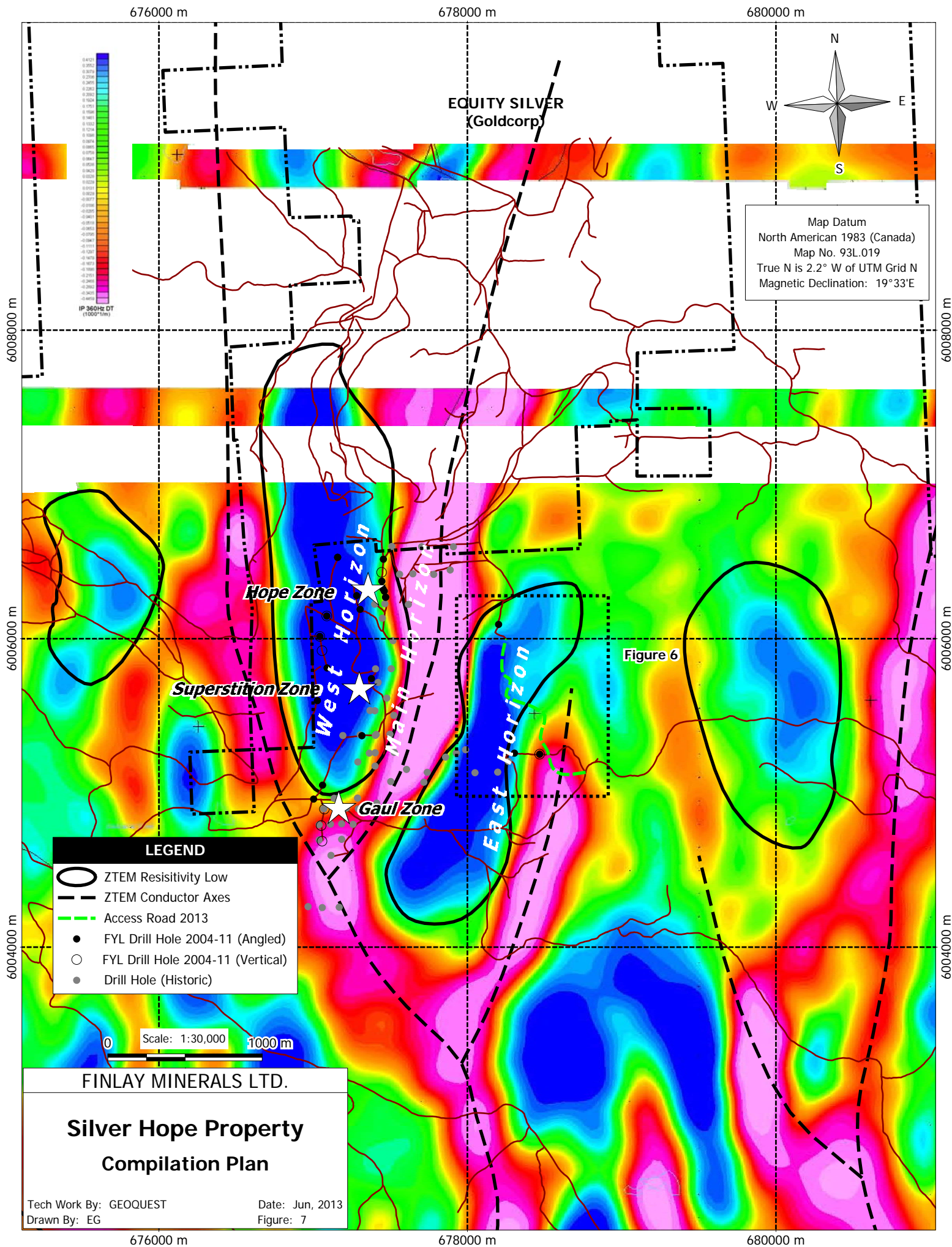
andesitic tuffs. As mentioned it is believed that this and other similar mineralization may have been emplaced and/or remobilized by the West Horizon quartz monzonite intrusion.

The 2011 drilling also revealed wide intersections of volcanic hosted copper-silver  $\pm$  gold mineralization well below the Hope and Superstition Zones. In all cases these intersections occur either in a strong IP chargeability anomaly or in the transition between strong and moderate IP anomalies. In two cases these wider intersections appear to be the down-dip projection of narrower and higher grade zones intersected by shallow Equity Silver drill holes. A 76 metre long gold-silver-copper intersection in SH11-12 indicates a new style of mineralization beneath the Superstition Zone with grades similar to those historically mined at the Equity Silver mine. The extent of this style of mineralization is unknown since no previous drilling had tested the zones at these depths. These discoveries have profound implications and suggest excellent exploration potential for the property.

The 2012 airborne ZTEM survey identified several linear resistive features (Figure 7). The West Horizon, host to recently discovered copper/molybdenum porphyry system, presents as a zone of elevated resistivity. Flanking this feature is a contact between a less resistive unit proximal to which are situated the Hope, Superstition, and Gaul Zones along the Main Horizon. This is significant since the northerly projection of the Main Horizon is believed to host the Equity Silver deposits. A number of secondary targets were also identified some of which have seen little or no exploration due to low relief, thicker glacial till and thus fewer bedrock exposures.

The most recent work (2013) has provided improved access to the East Horizon Zone that will facilitate future exploration of this area. The prominent geophysical and geochemical anomalies that identify this zone have not been fully explained. Drilling (2011) revealed that the IP chargeability and geochemical anomalies are at least in part caused by disseminated pyrite in locally graphitic sediments and pyrrhotite in volcanic rocks. Evidence for deeper mineralization cannot be ruled out especially in light of a narrow (2m) intersection grading 498 g/t Ag and 0.22% Cu in hole SH11-08 in the northern part of this zone. Described as a gouge (fault) zone this intersection could represent "leakage" possibly from a deep porphyry system.







## 9.0 RECOMMENDATIONS

Finlay Mineral's recent discoveries of a Cu-Mo mineralized porphyry in the West Horizon and Au-Ag-Cu mineralization beneath the Superstition Zone present ample justification for continued exploration. Other targets such as deep IP anomalies below the Hope, Superstition and Gaul Zones warrant more drilling in light of the highly successful 2010/2011 programs. Steep west angled to vertical step out holes to the north and south of SH11-12 are strongly recommended.

Historic drilling in the Gaul Zone intersected moderate to high-grade Cu-Ag mineralization at vertical depths often less than 100 metres and in several cases less than 50 metres below surface. Examination of Finlay's recent IP data reveal that the Teck drill holes did not cross cut the strong-moderate chargeability anomalies thus indicating further exploration potential for the Gaul Zone. Given that Finlay's deep drilling in 2010/11 returned wide mineralized (Cu-Ag-Au) intersections below the shallower and narrow zones of the Hope and Superstition Zones deeper drilling in the Gaul Zone should also be considered.

Recommendations by Peter E. Walcott and Associates include 3D inversion of the airborne ZTEM data utilizing ground DC resistivities values to help constrain resistivities in order to generate additional targets. The work will likely identify targets that should be investigated by prospecting along with rock and soil sampling. Consideration should be given to collecting standard "B" horizon as well as "Ah" horizon soil samples. The latter have proven to detect deeply buried mineralization in some environments.

The East Horizon remains largely unexplored and requires further work to fully assess its potential. Prospecting, mapping along with soil and rock sampling should be conducted along the newly constructed road right of way.

Submitted by,

Warner Gruenwald, P. Geo,  
June 16, 2013

## **APPENDIX A**

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**Analytical Data**  
**Analytical Methods**

## SILVER HOPE ROCK SAMPLES 2013

Certificate	Sample	Easting NAD83	Northing NAD83	Au ppb	Ag g/t	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	GE ppm	Hf ppm	Hg ppb	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm
VAN13000771	SHE-001	678482	6005324	0.4	0.13	2.47	46.5	1	1761.4	0.5	0.16	2.44	21.2	98.8	39.8	2.9	3.26	40.23	5.97	7.0	<0.1	0.03	178	0.08	0.19	46.5	17.5	1.00	3524	1.02
VAN13000771	SHE-002	678482	6005490	0.7	0.08	1.74	19.0	<1	129.5	0.3	0.46	2.77	0.3	8.1	13.0	10.9	1.69	11.71	4.34	3.6	<0.1	<0.02	20	0.04	0.07	3.8	34.0	1.06	1526	0.94
VAN13000771	SHE-003	678312	6005596	1.5	0.16	5.02	16.8	5	496.2	0.9	0.16	1.90	1.1	22.8	14.8	23.9	10.94	34.31	4.14	10.8	<0.1	0.03	11	0.03	0.51	11.2	30.3	1.11	735	0.73
VAN13000771	SHE-004	678231	6005943	1.4	0.13	4.30	171.8	4	147.9	0.8	2.17	2.23	0.1	11.7	19.5	28.8	6.61	72.27	4.20	9.4	<0.1	0.04	15	0.12	0.41	5.0	24.1	1.08	469	4.78

Certificate	Sample	Easting NAD83	Northing NAD83	Na %	Nb ppm	Ni ppm	P %	Pb ppm	Pd ppb	Pt ppb	Rb ppm	Re ppb	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
VAN13000771	SHE-001	678482	6005324	0.044	<0.02	37.9	0.303	31.46	<10	<2	4.6	<1	0.02	21.15	11.7	<0.1	0.5	161.7	<0.05	<0.02	3.9	0.002	0.07	0.3	109	<0.1	15.61	1622.6	2.0
VAN13000771	SHE-002	678482	6005490	0.027	<0.02	10.9	0.052	6.67	<10	<2	2.8	<1	<0.02	5.06	6.9	<0.1	0.4	69.2	<0.05	0.03	0.9	0.002	0.03	0.1	64	0.1	9.36	42.4	0.8
VAN13000771	SHE-003	678312	6005596	0.392	0.07	30.6	0.098	23.64	<10	<2	23.7	<1	<0.02	3	8.2	0.4	0.4	261.0	<0.05	0.07	1.6	0.036	0.33	0.3	84	<0.1	8.04	160.0	1.4
VAN13000771	SHE-004	678231	6005943	0.290	0.05	38.5	0.135	12.63	<10	<2	23.6	4	0.63	9.5	7.3	0.6	1.0	258.7	<0.05	0.04	1.8	0.049	0.41	0.3	75	0.1	7.74	55.6	1.7



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.

PHONE (604) 253-3158

**Client:** **Finlay Minerals Ltd.**  
912 - 510 W. Hastings St.  
Vancouver BC V6B 1L8 Canada

Submitted By: John Barakso  
Receiving Lab: Canada-Vancouver  
Received: March 12, 2013  
Report Date: March 27, 2013  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13000771.1

### CLIENT JOB INFORMATION

Project: None Given  
Shipment ID:  
P.O. Number  
Number of Samples: 4

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	4	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1F05	4	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	15	Completed	VAN

### SAMPLE DISPOSAL

RTRN-PLP Return  
RTRN-RJT Return

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Finlay Minerals Ltd.  
912 - 510 W. Hastings St.  
Vancouver BC V6B 1L8  
Canada

CC: Warner Gruenwald



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

# CERTIFICATE OF ANALYSIS

VAN13000771.1

	Method	WGHT	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01
SHE-001	Rock	2.63	1.02	40.23	31.46	1623	134	37.9	39.8	3524	5.97	46.5	0.3	0.4	3.9	161.7	21.20	21.15	0.16	109	2.44
SHE-002	Rock	6.13	0.94	11.71	6.67	42.4	75	10.9	13.0	1526	4.34	19.0	0.1	0.7	0.9	69.2	0.30	5.06	0.46	64	2.77
SHE-003	Rock	3.56	0.73	34.31	23.64	160.0	156	30.6	14.8	735	4.14	16.8	0.3	1.5	1.6	261.0	1.06	3.00	0.16	84	1.90
SHE-004	Rock	5.65	4.78	72.27	12.63	55.6	134	38.5	19.5	469	4.20	171.8	0.3	1.4	1.8	258.7	0.14	9.50	2.17	75	2.23

# CERTIFICATE OF ANALYSIS

VAN13000771.1

	Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Cs
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm
	MDL	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02
SHE-001	Rock	0.303	46.5	2.9	1.00	1761	0.002	1	2.47	0.044	0.19	<0.1	11.7	0.07	0.02	178	<0.1	<0.02	7.0	3.26
SHE-002	Rock	0.052	3.8	10.9	1.06	129.5	0.002	<1	1.74	0.027	0.07	0.1	6.9	0.03	<0.02	20	<0.1	0.03	3.6	1.69
SHE-003	Rock	0.098	11.2	23.9	1.11	496.2	0.036	5	5.02	0.392	0.51	<0.1	8.2	0.33	<0.02	11	0.4	0.07	10.8	10.94
SHE-004	Rock	0.135	5.0	28.8	1.08	147.9	0.049	4	4.30	0.290	0.41	0.1	7.3	0.41	0.63	15	0.6	0.04	9.4	6.61

# CERTIFICATE OF ANALYSIS

VAN13000771.1

	Method Analyte Unit MDL	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
		Hf	Nb	Rb	Sn	Ta	Zr	Y	Ce	In	Re	Be	Li	Pd
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb
		0.02	0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10
SHE-001	Rock	0.03	<0.02	4.6	0.5	<0.05	2.0	15.61	98.8	0.08	<1	0.5	17.5	<10
SHE-002	Rock	<0.02	<0.02	2.8	0.4	<0.05	0.8	9.36	8.1	0.04	<1	0.3	34.0	<10
SHE-003	Rock	0.03	0.07	23.7	0.4	<0.05	1.4	8.04	22.8	0.03	<1	0.9	30.3	<10
SHE-004	Rock	0.04	0.05	23.6	1.0	<0.05	1.7	7.74	11.7	0.12	4	0.8	24.1	<10

## QUALITY CONTROL REPORT

VAN13000771.1

	Method	WGHT	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01
Pulp Duplicates																					
SHE-004	Rock	5.65	4.78	72.27	12.63	55.6	134	38.5	19.5	469	4.20	171.8	0.3	1.4	1.8	258.7	0.14	9.50	2.17	75	2.23
REP SHE-004	QC		5.03	71.59	13.11	56.7	134	37.7	19.2	487	4.26	169.0	0.3	1.3	1.8	259.9	0.13	9.46	2.24	76	2.28
Reference Materials																					
STD DS9	Standard		13.30	110.8	142.0	331.2	1844	41.9	8.3	589	2.43	27.5	3.1	117.5	7.2	76.5	2.60	6.49	7.48	41	0.74
STD DS9 Expected			12.84	108	126	317	1830	40.3	7.6	575	2.33	25.5	2.69	118	6.38	69.6	2.4	4.94	6.32	40	0.7201
BLK	Blank		<0.01	0.08	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	0.3	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01
Prep Wash																					
G1	Prep Blank		0.05	1.47	2.76	47.1	10	3.4	4.1	566	1.90	1.7	1.4	0.5	4.7	57.8	<0.01	0.03	1.91	36	0.42



## QUALITY CONTROL REPORT

VAN13000771.1

	Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Cs
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm
	MDL	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02
Pulp Duplicates																				
SHE-004	Rock	0.135	5.0	28.8	1.08	147.9	0.049	4	4.30	0.290	0.41	0.1	7.3	0.41	0.63	15	0.6	0.04	9.4	6.61
REP SHE-004	QC	0.135	5.4	28.2	1.11	149.7	0.054	4	4.37	0.292	0.42	0.2	7.6	0.42	0.66	24	0.5	0.08	9.7	6.67
Reference Materials																				
STD DS9	Standard	0.088	14.7	122.4	0.64	317.5	0.121	3	0.98	0.087	0.41	3.3	2.5	5.55	0.16	239	4.9	5.12	4.7	2.53
STD DS9 Expected		0.0819	13.3	121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	2.5	5.3	0.1615	200	5.2	5.02	4.59	2.37
BLK	Blank	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	<0.02
Prep Wash																				
G1	Prep Blank	0.080	9.1	6.4	0.55	238.4	0.113	1	0.91	0.071	0.47	<0.1	2.2	0.29	<0.02	<5	<0.1	<0.02	4.9	2.58

## QUALITY CONTROL REPORT

VAN13000771.1

		Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
		Analyte	Hf	Nb	Rb	Sn	Ta	Zr	Y	Ce	In	Re	Be	Li	Pd
		Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb
		MDL	0.02	0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10
Pulp Duplicates															
SHE-004	Rock		0.04	0.05	23.6	1.0	<0.05	1.7	7.74	11.7	0.12	4	0.8	24.1	<10
REP SHE-004	QC		0.05	0.07	25.4	1.0	<0.05	1.9	8.05	12.5	0.13	2	0.9	23.6	<10
Reference Materials															
STD DS9	Standard		0.08	1.59	35.9	7.2	<0.05	2.1	6.46	28.0	2.40	62	5.6	26.6	122
STD DS9 Expected			0.08	1.33	33.8	6.4	0.004	2	5.97	25.4	2.2	61	5.4	25.2	120
BLK	Blank		<0.02	<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10
Prep Wash															
G1	Prep Blank		0.11	0.58	39.8	1.5	<0.05	1.3	5.01	17.9	<0.02	<1	0.1	31.9	<10



## Geochemical Aqua Regia Digestion

### Groups 1D, 1DX ICP-ES & ICP-MS

You can choose economically priced ICP-ES (Group 1D) or ICP-MS (Group 1DX) analysis to complement your exploration program.

Sample splits of 0.5g are leached in hot (95°C) Aqua Regia. Select a larger split size for more representative Au analysis. Refractory and graphitic samples can limit Au solubility.

Sample minimum 1g pulp.

Group 1D01	Cdn
32 elements	<b>\$8.95</b>

Group 1D02	Cdn
Include Hg and Tl	<b>+\$1.00</b>

Group 1D03	Cdn
Include Uranium	<b>+\$0.50</b>

Code	Group 1DX	Cdn
1DX1	36 elements 0.5g	<b>\$15.00</b>
1DX2	36 elements 15g	<b>\$19.00</b>
1DX3	36 elements 30g	<b>\$22.50</b>
Include U by request		

	Group 1D Detection	Group 1DX Detection	Upper Limit
Ag*	0.3 ppm	0.1 ppm	100 ppm
Al*	0.01 %	0.01 %	10 %
As	2 ppm	0.5 ppm	10000 ppm
Au*	2 ppm	0.5 ppb	100 ppm
B*†	20 ppm	20 ppm	2000 ppm
Ba*	1 ppm	1 ppm	10000 ppm
Bi	3 ppm	0.1 ppm	2000 ppm
Ca*	0.01 %	0.01 %	40 %
Cd	0.5 ppm	0.1 ppm	2000 ppm
Co	1 ppm	0.1 ppm	2000 ppm
Cr*	1 ppm	1 ppm	10000 ppm
Cu	1 ppm	0.1 ppm	10000 ppm
Fe*	0.01 %	0.01 %	40 %
Ga*	5 ppm	1 ppm	1000 ppm
Hg†	1 ppm	0.01 ppm	50 ppm
K*	0.01 %	0.01 %	10 %
La*	1 ppm	1 ppm	10000 ppm
Mg*	0.01 %	0.01 %	30 %
Mn*	2 ppm	1 ppm	10000 ppm
Mo	1 ppm	0.1 ppm	2000 ppm
Na*	0.01 %	0.001 %	5 %
Ni	1 ppm	0.1 ppm	10000 ppm
P*	0.001 %	0.001 %	5 %
Pb	3 ppm	0.1 ppm	10000 ppm
S*	0.05 %	0.05 %	10 %
Sb	3 ppm	0.1 ppm	2000 ppm
Sc	5 ppm	0.1 ppm	100 ppm
Se	–	0.5 ppm	100 ppm
Sr*	1 ppm	1 ppm	10000 ppm
Te	–	0.2 ppm	1000 ppm
Th*	2 ppm	0.1 ppm	2000 ppm
Ti*	0.001 %	0.001 %	5 %
Tl†	5 ppm	0.1 ppm	1000 ppm
V*	1 ppm	2 ppm	10000 ppm
W*	2 ppm	0.1 ppm	100 ppm
Zn	1 ppm	1 ppm	10000 ppm

\*Solubility of some elements will be limited by mineral species present.

†Detection limit = 1 ppm for 15g / 30g analysis.

## **APPENDIX B**

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### **Rock Sample Descriptions**

### SILVER HOPE ROCK SAMPLE DESCRIPTIONS - 2013

Sample Name	Easting (NAD83)	Northing (NAD83)	Zone	Description	Au ppb	Ag g/t	As ppm	Cu ppm	Pb ppm	Zn ppm
SHE-001	678482	6005324	East Horizon	Grab Sample from 1.5 metre excavated rusty weathering argillitic bedrock	0.4	0.13	46.5	40.23	31.46	1622.6
SHE-002	678482	6005490	East Horizon	Grab Sample from 1.5 metre excavated argillitic bedrock	0.7	0.08	19.0	11.71	6.67	42.4
SHE-003	678312	6005596	East Horizon	Composite sample from 2 metres of road cut bedrock	1.5	0.16	16.8	34.31	23.64	160.0
SHE-004	678231	6005943	East Horizon	Grab sample from 2.5 metre trench cut along new road	1.4	0.13	171.8	72.27	12.63	55.6

## APPENDIX C

### Personnel

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#### **Geoquest Consulting Ltd.**

W. Gruenwald, P. Geo. (11, 14, 15 June, 2013)

14 hours

E. Gruenwald (14, 15 June, 2013)

7 hours

#### **Low Profile Exploration (Gary Thompson)**

Feb 10- 25, 2013

85 man hours

#### **R. Groot Contracting (Low Bed of Excavator)**

Dec 24, 2012

5 man hours

**APPENDIX D**  
**Statement of Expenditures**

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**Road Building**

Low Profile Exploration (Road building, prospecting, travel costs)	\$10,206
R. Groot Contracting (Low bed equipment)	\$762

**Consulting Fees/Contractor**

Geoquest Consulting Ltd. (Assessment Report)	\$1,365
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**Analytical Costs**

Acme Analytical Labs	\$200
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<b>Freight (Sample Shipping to Acme Labs)</b>	<b>\$56</b>
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<b>TOTAL:</b>	<b><u>\$12,589</u></b>
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## APPENDIX E

### References

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- Walcott, P.E. (2012): A Report on Induced Polarization Survey on the Silver Hope property (ARIS Report 33405)

## **APPENDIX F**

### **Certificate**

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**I, WARNER GRUENWALD OF THE CITY OF VERNON, BRITISH COLUMBIA HEREBY CERTIFY THAT:**

1. I am a graduate of the University of British Columbia with a B. Sc. degree in Geology (1972).
2. I am a registered member of the Professional Engineers and Geoscientists of British Columbia (#23202).
3. I am employed as consulting geologist and president of Geoquest Consulting Ltd., Vernon, BC.
4. I have practiced continuously as a Geologist for the past 40 years in western Canada and the US.
5. I am Vice President of Exploration for Finlay Minerals Ltd. and have overseen and/or managed exploration work on the Silver Hope property since 2007.

W. Gruenwald, P. Geo.

Dated: June 16, 2013