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REPORT OF WORK

CHACO BEAR PROPERTY

BEAR LAKE AREA

OMINECA MINING DIVISION

BRITISH COLUMBIA

CANADA

McConnell Creek Map Sheet

NTS 094D

56°09' North, 126°56' West

NAD 83/Zone 9: 625500 East, 6226000 North

For: SITKA HOLDINGS LTD.

and

Houston Minerals Ltd. Suite 911, 850 West Hastings Street,

Vancouver, B. C., Canada, V6C 1E1.

Report prepared by:

J. M. Ashton, P. Eng.

and Farshad Shirvani, M. Sc.

Date of Report: January 15, 2010.

BC Geological Survey Assessment Report 31325

ICAL SURVEY BRANCE

R.



Ministry of Energy & Mines Energy & Minerals Division Geological Survey Branch

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT [type of survey(s)] Report of Work, Chaco Bear Property, Bear Lake Area, Omineca Mining Division	TOTAL COST \$4320.00
AUTHOR(S) J. W. Ashton, P. Eng. and F. Shirvani, M.Sc. SIGNATURE(S)	here The
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) N/A	YEAR OF WORK ²⁰⁰⁹
STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) Event No. 4421649	
PROPERTY NAME CHACO BEAR	
CLAIM NAME(S) (on which work was done) Chaco Bear 2, 4, 11, 12, 13, 21, 22, 24, 23, 25, tenur 561261, 598583, 598586 - 9	re no. 312052, 312054, 561258, 561260,
COMMODITIES SOUGHT copper, gold	
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN	
MINING DIVISION OMINECA NTS 94D	
LATITUDE <u>56</u> <u>10</u> LONGITUDE <u>126</u> <u>58</u>	(at centre of work)
OWNER(S) Sitka Holdings Ltd.	
MAILING ADDRESS 911 – 850 West Hastings Street Vancouver, B. C., V6C 1E1.	
OPERATOR(S) [who paid for the work]	
J. M. Ashton & Associates Ltd.	
Houston Minerals Inc.	
MAILING ADDRESS 911 – 850 Hastings Street	
Vancouver, B. C., V6C 1E1	
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, s Copper-gold silver veins and disseminated gold-copper-silver mineralization occur with qua	,
chlorite, sericite, carbonate and hematite alteration, hosted by felsic intrusions and co-eval r	hyolitic to andesitic volcanic rocks of
Upper Hazelton Group assemblage. Possibly situated at convergence of tectonic plates or m	
dominant sulphide minerals. Large areas are occupied by surficial deposits of transported or	r in situ-developed limonite, aka
REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS asse 14678, 24567, 24882, 27958, 29590	essment reports ARIS #1616, 14424,

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS) 10 km NW/SE, 7 km NE/SW	ON WHICH CLAIMS all claims	PROJECT COSTS APPORTIONED
Photogrammetric structural study			(incl. support)
GEOLOGICAL (scale, area) Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	·····		
Electromagnetic			
Induced Polarization			
Radiometric	······································		
Seismic			
Other			
Airborne			
GEOCHEMICAL			
(number of samples analysed for \dots)			
Soil	· · · · · · · · · · · · · · · · · · ·		
Silt			
Rock			
Other			
DRILLING			
(total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL PHOTOGRAMME	TRIC STRUCTURAL STUDY		
Sampling/assaying		ALL CLAIMS	\$4320
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Line/grid (kilometres)			
Topographic/P hotog ram metric (scale, area)			
Legal surveys (scale, area)			
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VIIIII	· · · · · · · · · · · · · · · · · · ·	TOTAL	
		TOTAL	\$4320

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SECTION 0.0 SUMMARY

The Chaco Bear Project is located west of Bear Lake, in the Omineca Mining Division, 160 km north of Smithers, British Columbia, Canada. Eleven contiguous mineral claims and tenures with total area 4003.88 hectares extend from the west side of Bear Lake westerly to the headwaters of the Driftwood River.

The Chaco Bear property occupies a broad ridge that separates the valley of Bear Lake to the east from the headwaters of Driftwood River and includes a variety of terrains, from marshy lowlands near several small lakes to high slopes of the Skeena Mountains division of the Interior Plateau. Access is best provided by helicopter, either from Smithers, B. C., 160 km south or, if available, from logging and/or construction camps situated 40 km southeast of the property at Lovell Cove on the Canadian National Railway, Ft. St. James Division.

The Chaco Bear property has been the subject of several episodes of mineral exploration. Several ARIS reports provide details of more recent work, in particular that of Suncor in 1984 – 1986, and Imperial Metals Corporation in 1996 – 1997. Both companies conducted prospecting and sampling surveys to determine the extent of quartz veinhosted copper, gold and silver mineralization. Imperial Metals Corporation, in 1996 conducted technical surveys and 455.8 metres of diamond drilling in five holes (ARIS #24882) and in 1997, technical surveys and 1382.25 metres of diamond drilling in eleven holes (ARIS # 25270). Geological mapping for Imperial by Geotex Consultants Limited in 1997 established and described in detail the stratigraphy of members of the Hazelton Group, characteristics of various plutonic rocks, and structural features, principally faults.

In addition to the work of the established companies, a prospecting group organized and guided by J. M. Ashton & Associates Ltd., held the claims in 1993 and at that time completed an induced polarization survey (ARIS #22,958). The Ashton Group continues to hold the Chaco Bear and has been actively promoting its exploration. Terracad Geoscience Services Ltd. in 2009 was engaged to apply computer-based structural analysis to satellite images of the property and nearby areas.

Terracad prepared drawings and data plots to illustrate the lineament frequencies, average length and maximum length and contributed an analysis of fracture patterns. Further satellite imagery studies, including spectral analyses, are recommended.

SECTION 1.0 INTRODUCTION

The Chaco Bear Project is located about 160 km due north of Smithers, British Columbia, in the Skeena Mountains of north central British Columbia, Canada (Figure 1). Mineral tenures extend from the west shore of Bear Lake westerly to the headwaters of Driftwood River (Figure 2). The property comprises eleven (11) contiguous mineral tenures with total area 4003.88 hectares (Table 1), all of which are owned by Sitka Holdings Ltd. That company is managed by J. M. Ashton & Associates Ltd.

A Statement of Exploration and Development Work was filed on December 7, 2009 with the Mineral Titles Branch to extend tenure expiry dates variously to October 17, 2010 and February 2 and June 26, 2011.

The Chaco Bear property is historic, with evidence and records of work in the 1930s. Prospecting attention was drawn to the area by a series of prominent pyrite-quartz-sericite altered gossans that are developed on members of the volcanic succession. In recent years the results of a Regional Geochemical Survey (reference RGS 94D) highlighted the area. Hydrothermal alteration is particularly strongly developed in proximity to Driftwood Creek, near "Rusty" Lake (local, informal name).

Suncor Inc. in 1985 and Imperial Metals Corporation in 1997 mapped and sampled the Rusty Lake and surrounding areas. Suncor directed most of its efforts to the area of present tenure "Chaco Bear 3" whereas Peter Read, PhD, of Geotex, for Imperial worked mostly in the area centred on "Rusty" Lake and occupied by CB 1 (now expired), CB 2, CB 3 and CB 4 tenures.

Terracad Geoscience Services Ltd. in fall, 2009 was engaged to apply satellite imagery and fracture analysis to a review of the structural features relevant to the Chaco Bear property. Data from that study are included in this report.





SECTION 2.0 ACKNOWLEDGEMENTS

The accompanying report incorporates much historic and recent field data that is presented in technical reports, many of which have been filed as assessment reports and can be accessed in the ARIS (Assessment Report Indexing Service) files.

Sources are acknowledged in the report and are listed in the References section.

SECTION 3.0 PROPERTY DESCRIPTION AND LOCATION

The centre of the Chaco Bear tenures is approximately 4 kilometres west of Bear Lake, British Columbia, at Longitude 126°50'00" West and Latitude 56°10'00" North. UTM NAD 83 coordinates are Zone 9, 625500 East, 6226000 North. The NTS Map Sheet is 94D.

Bear Lake is located about 160 km due north of Smithers and 350 km northnorthwest of Prince George. The Kemess Mine is located about 100 km northnortheast of Chaco Bear, and the deep-sea seaport town of Stewart is 225 km west.

The actively operated rail line of the Canadian National Railway (CNR) (formerly the British Columbia Railway) passes on the east side of Bear Lake. Similarly logging roads along the east side of Bear Lake provide access from Fort St. James which is serviced by the provincial highways system. Subject to permitting and construction issues, it appears that if the need arises road access to the Chaco Bear property can be readily provided. Speculatively, the British Columbia government has contemplated the feasibility of construction of the Stewart-Omineca Road that would provide access from the Sustut/Bear Lake area to the deep sea port of Stewart for the benefit of the Kemess Mine and other mineral prospects in that region.

SECTION 4.0 MINERAL CLAIMS

The Chaco Bear property comprises the following mineral tenures with expiry dates as shown. All mineral claims are held by record in the name of Sitka Holdings Ltd. of Vancouver, British Columbia. Expiry dates shown for Chaco Bear 21 to Chaco Bear 25 are provisional, subject to acceptance of this report by Mineral Titles Branch.

Mineral Claim	Tenure No.	Area in Hectares	Cells(C) or Units (U)	Expiry Date
Chaco Bear 2	312052	500	20U	17 October 2010
Chaco Bear 3	312053	500	20U	17 October 2010
Chaco Bear 4	312054	500	20U	17 October 2010
Chaco Bear 11 Cell Tenure	561258	450.48	25C	26 June 2011
Chaco Bear 12 Cell Tenure	561260	342.49	19C	26 June 2011
Chaco Bear 13 Cell	561261	432.41	24C	26 June 2011
	Sub-Total -	2,725.38	60U + 68C	
Chaco Bear 21	598583	378.24	21C	2 February 2011
¹ Chaco Bear 22	598586	108.07	6C	2 February 2011
¹ Chaco Bear 24	598587	162.05	9C	2 February 2011
Chaco Bear 23	598588	378.12	21C	2 February 2011
Chaco Bear 25	598589	252.02	14C	2 February 2011
	Sub-Total -	1,278.50	70C	

¹- reduced in size 17 Nov 2009

Table 1: Sitka Holdings Ltd. Mineral Tenures

SECTION 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Access to the Chaco Bear property is by road or railroad to Bear Lake and thence by helicopter to the property. The more practical route is by helicopter using services that are available on a seasonal basis from Lovell Cove on Takla Lake, and year-round from Smithers and Fort St. James. A rough airstrip at Bear Lake may be used by suitably equipped aircraft.

The prevailing climate in the Driftwood River valley may be characterized as "Interior Wet Belt" – winters are cold, with heavy snowfall (2 to 6 metres, with on-the-ground snowpack of 2 metres) and summers are pleasantly warm, with extended rain-free periods but occasional thunderstorms. Even though much of the Chaco Bear is situated above treeline, forest fires are a summer hazard and smoke accumulations may interfere with aircraft usage.

The Driftwood Valley is located in mountainous terrain, with nearby slopes rising to 2,200 metres above the valley floor that lies at 1500 metres. Mountains west of the Valley are ragged with serrated and knife edge-like ridges and peaks; to the east, ridge lines are lower and more gently defined. The Driftwood River is an immature fast-flowing stream with large variation in seasonal flows.

Treeline in the Chaco Bear area is at about 1,500 m: the majority of the tenures are near or above that elevation and stable slopes support alpine vegetation with grasses and tanglefoot conifers. Lower, forested areas support an abundant growth of small alpine fir, white and black spruce, and lodgepole pine. Talus slopes are present in much of the area.

Rock outcroppings are abundantly present in most parts of the Chaco Bear tenures, sufficient to allow gathering of "good" geological data. The exception is along the valley bottom of Driftwood River where talus, ferricrete, organic soils and marshy ground are dominant. Geological reconnaissance and mapping of the east-facing slope along the west side of the River is particularly frustrated by the presence of ferricrete.

According to research by the Geological Survey of Canada (Lord, 1948), the best evidence for the direction of movement of the ice-sheet was found only in the northeast half of the map area, NTS 94D, where ice movement was dominantly from west to east and southeast. U-shaped valleys at the headwaters of Driftwood River, particularly on Chaco Bear 4 claim, were created by alpine glaciers that flowed southeasterly.

SECTION 6.0 HISTORY

Early mineral exploration data for the Bear Lake-Chaco Bear area are poorly preserved. It is known that, among others, Cominco (now Teck), Noranda and Canadian Superior conducted prospecting-type surveys but much of their work was never submitted in accessible form. Work of scientists of the Geological Surveys of Canada and British Columbia and that of Suncor Inc. in 1985 and 1986, and Imperial Metals Corporation in 1996 and 1997 are preserved in publications and ARIS files. Numerous prospects on the tenures preserve signs of early trenches and test pits that may be as old as the 1930's. Verifiable work and the operators include but may not be limited to the following:

Years 1930's or 1940's? An area measuring about 2.4 km (1.5 miles) north-south by 1.6 km (1.0 mile) east-west at the north end of the Chaco Bear 1 to 4 mineral claims was claimed by 14 mineral claims that were surveyed for the purpose of applying for Crown Grant status. The application did not go forward. These claims are shown on NTS Map 94 D/2, Salix Creek south of Mount Coccola, east of the north end of Bear Lake.

Year 1948 The Driftwood River area was mapped by C. S. Lord as part of a regional geological survey (McConnell Creek Area; Geological Survey of Canada; Memoir 251).

Year 1968 Cominco (now Teck) staked the Dave Claims at the south end of "Big Lake" in the upper portion of Driftwood River. Anomalous stream sediment geochemistry guided the company to the area. They completed 7.8 line-miles of horizontal loop electromagnetic survey but the survey was unsuccessful in locating any conductors and it was concluded that the highly oxidized nature of the sulphides in the limited area of the survey insulated the sulphide grains from contiguous grains and blocked EM induction effects. The claims were abandoned.

Year 1984 Suncor Inc. of Calgary, Alberta, staked the Peteka 1-4 claims and completed stream sediment sampling, prospecting, and rock sampling. Their survey results identified highly anomalous gold and copper values in the stream sediments and from intensely altered rock samples.

Suncor's work resulted in recognition of areas of strongly developed veining with abundant specular hematite and significant values in copper, gold and silver. Free gold was reported in association with specularite in quartz veins. Geochemical soil survey

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work, a VLF-EM survey, and a total field magnetometer survey were also completed. Samples returned assays of up to 16.5% Cu, 0.255 oz/ton Au and 13.44 oz/ton Ag. Suncor interpreted the "mappable structural features" (the mineralized ones) "as major joint fractures and shear zones" striking 140° to 150° degrees azimuth (320° to 350° azimuth) and dipping 50° to as much as 70° southwest. A second set of mineralized structures striking between 40° to 45° azimuth with dips 60 to 70 degrees northwest, and northwest and northeast striking shears were identified as host structures of mineralization. The geochemical soil survey showed that "most" of the surveyed area is anomalous in copper and gold (ARIS #24882). A large copper, zinc, and lead in-soils anomaly with a contiguous gold anomaly was delineated in the northwest quadrant of CB 4 claim.

At least ten prominent very-low frequency (VLF) electromagnetic (EM) anomalies were found in what was later mapped as the core alteration zone of a hydrothermal system. The EM anomalies strike more or less northwesterly (approximately 325° azimuth).

Suncor's total field ground magnetometer survey resulted in the discovery of a strong magnetic anomaly, up to 2,000 gammas in amplitude, which occupies the central part of the Driftwood Creek valley west of the creek (ARIS #14424). The anomaly coincides with one of the most heavily altered areas in the valley and is interpreted to be the central core zone of the classic magnetite-rich potassium-silicate alteration zone of a concealed porphyry copper deposit. Suncor also noted vuggy quartz-specularite with chalcopyrite veins in this vicinity and elsewhere which contain massive chalcopyrite and specularite: the massive chalcopyrite occurs locally with the specular hematite. Assays from several occurrences showed significant copper with gold and silver. Thin section analyses by Suncor showed that gold in the specularite with free gold in quartz in the hematite is one of the main diagnostic features of the top of a fully preserved high-sulphidation epithermal mineralizing system.

Year 1985 Suncor Inc. continued prospecting, a limited amount of geological mapping, geochemical soil sampling, rock sampling, a VLF-EM survey, and a total field magnetic survey in a 1 square mile intensely altered area bisected by the Driftwood Valley that is now mostly covered by Chaco Bear 4 claim. Their results showed coincident or nearly coincident anomalous responses from all the survey programs in this central area of interest. In addition, many quartz, quartz-carbonate, carbonate and

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specularite veins, many of which contained high values in copper, gold and silver, were examined. Mapping identified a breccia pipe within the intensely altered area.

Suncor Inc. abandoned the property when their mineral exploration division was closed.

Year 1992 J. M. Ashton, P. Eng. acquired the Chaco Bear property by staking; and completed a shallow-probe reconnaissance-type induced-polarization (IP) survey over the northeastern part of the alteration zone. A high-chargeability, low-resistivity anomaly with its long axis oriented north-northwesterly was found coincident with one of ten VLF-EM anomalies identified by Suncor. The IP anomaly also coincided with the Suncor's strongest copper-zinc-lead-gold geochemical anomaly. The multi-element geochemical anomaly has a strike length of about 1,200 metres (4,000 feet).

A two line reconnaissance induced polarization (IP) survey completed by J. M. Ashton & Associates in 1992 over the most northeasterly EM anomaly of the ten identified by Suncor was reported in ARIS #22958. The EM target is concealed by overburden and was one of three EM anomalies which were coincidental to Suncor's large multi-element (Cu, Au, Pb, Zn) geochemical anomaly located in the northwest quadrant of CB 4 claim. The anomalous geochemical feature is 1,200 m in strike length and up to 160 m wide. The IP survey showed high-chargeability with corresponding moderately low-resistivity that was interpreted as an indication of the presence of significant amounts of sulphides; possibly semi-massive to massive sulphides. The IP anomaly is open to depth and to the southeast and the coincidental IP response suggests that the conductive material responsible for the EM anomaly is electronic and not ionic. The core zone of intense hydrothermal alteration was mapped (by B. Mackie, P. Eng.) and found to envelop the largest and the strongest EM anomalies.

A geological examination of the property by a specialist geologist working with Ashton confirmed the extensive zone of alteration and identified classic alteration facies and zonation symmetry of a transitional geological environment that has the potential for discovery of mineralization from epithermal to a high level porphyry system. Economic minerals include those associated with gold-rich porphyry copper, high sulphidation copper-gold lodes and low sulphidation gold lodes.

Years 1996/97 Imperial Metals Corporation in 1996 optioned the claims and conducted two small exploration programs consisting of rock and soil geochemical sampling. The first program of rock sampling confirmed the presence of anomalous gold and copper mineralization from areas previously sampled by Suncor Inc. in 1984 and 1985. Results included a high of 22.16 grams/t Au and 6.81% Cu from one rock sample. Prospecting in the Chaco Bear area by Imperial Metals Corporation in 1997 (see below) showed several narrow, mineralized felsic dikes containing chalcopyrite, specularite and magnetite. One sample assayed 3% copper and 0.10 oz/t gold. A soil survey over a small grid in CB 1 claim did not return any anomalous results in copper or gold.

Imperial's 1996 prospecting work found grab samples that returned assay values as high as 25.5 g/t gold, 10,530 g/t silver and 36.9% copper (ARIS #24567). Imperial also directed work to one of Suncor's vein targets located in CB1 claim. They completed a Max-Min geophysical survey followed by a five hole drilling program that which was unsuccessful in explaining the anomalous results. A second 1996 program consisted of further prospecting, geological mapping, and rock sampling throughout the property, and on CB 1 claim (now expired), a horizontal-loop max-min electromagnetic survey and some drilling. The prospecting and sampling program outlined numerous areas with narrow brecciated quartz-carbonate veins with anomalous gold, copper and silver values. Grab samples assayed as high as 0.744 ounces/t Au, 307 ounces/t Ag and 36.9% Cu. Five exploratory holes were drilled on CB 1 into a fault bounded quartz-carbonate vein system. One hole of this program was drilled on a Max-Min electromagnetic anomaly. All drill holes returned copper, gold, and silver mineralization but mostly low, uneconomic, metal values. The best hole, CB96-1, returned assays of 0.45 g/t Au, 5.61 g/t Ag, and 0.6% Cu over a width of 6.8 metres.

Imperial Metal's 1997 exploration program included claim staking, prospecting and rock sampling, reconnaissance and detailed geological mapping, a limited amount of VLF-EM geophysical surveying and 1,382 m of diamond drilling. Most of the drilling was directed to outlier vein systems away from the central alteration area. Although drilling widths and grades were uneconomic, prospecting discovered numerous vein showings which were mapped, sampled, and assayed and returned assays as high as 16.8% Cu, 0.82 oz/t Au and 34.3 oz/t Ag. An area of altered, brecciated, and mineralized rhyolite dikes was found to contain anomalous gold values, averaging about 0.75 grams/t Au over an aggregate width of 73 m (ARIS #25270).

Year 1997 Imperial engaged Geotex Consultants Ltd. (P.B. Read) who completed extensive geological mapping, established the geological formations and confirmed the large zone of alteration in the central southern section of the property. Late in the exploration program as a result of drilling shear hosted copper-gold-silver mineralization in the northeast part of the property, strongly altered rhyolite dikes with similarly altered andesitic wall rocks were discovered. These lithological intersections which were fractured and brecciated contained geochemically anomalous gold values throughout.

Geological mapping by Dr. Read for Imperial showed that the lower section of volcanics is made up of an incomplete sequence of the Hazelton Series consisting of a restricted Telkwa Formation that is unconformably overlain by a sequence of felsic extrusive rocks consisting of andesites, dacites, and rhyolites up to 600 metres thick. The Telkwa Formation contains andesites, andesite tuffs, rhyodacite breccias and basalt, many of which exhibit fragmental textures. Rock geochemistry shows shoshonitic or potassic composition. Dr. Read named the section of felsics the "Unnamed Formation", a unit that comprises porphyritic dacite, rhyolite flows and tuffs, dacite flows and aphyritic andesite. The rhyolite is significant in that it includes a sequence of welded and unwelded tuff that is as much as 300 metres thick. The unconformity shows that there was a hiatus in the evolution of the volcanic pile with the felsic stage of eruptives temporally delayed.

In addition to geological mapping, extensive prospecting and rock sampling was undertaken over several prospective areas. Two small VLF-EM surveys, totalling about 6.5 line-km, were conducted and four target areas were tested by eleven diamond drill holes drilled from seven sites for a total length of 1,382.2 metres (Raven, 1997). Imperial relinquished their option 1ate in 1997.

Year 1997 the British Columbia Geological Survey Branch released the results of a multi-element stream-sediment Regional Geochemical Survey which covered the entire NTS 94D, McConnell Creek map sheet. The results show a large and strong precious metals pathfinder anomaly of Au + Sb + As + Ag + Hg in a large proportion of the Chaco Bear claim area. This anomaly is coincident with the largest and strongest base metal pathfinder anomaly of Cu + Pb + Zn + Ag + Ba.

Read reported that shear zones and faults are widespread below the Unnamed Formation and that the major faults strike northwesterly and northerly and have a "...subvertical or westerly component of dip, are probably pre-vein in age, and provided channelways and open space for the vein mineralization" (Read, 1997, p. 6).

At one location close to the sub-Unnamed Formation unconformity, float boulders with vuggy-quartz veins containing bornite, chalcopyrite and specularite, assayed up to 10.6% copper, 0.57 oz/t gold, and 42 oz/t silver. Several other locations along the unconformity contain vuggy quartz-carbonate veins with significant gold, silver, and copper minerals.

Read (op. cit., 1997) described a mineralized vein exposure in a creek, in the meadows southwest of "Rusty" Lake that features vuggy quartz-specularite veining cutting hydrothermally altered bedded tuffs. Alteration consists of disseminated pyrite-quartz \pm sericite.

Suncor and Imperial identified a large zone of surficial "ferruginate" (compacted limonite/goethite of transported or local derivation) that appeared to be 3 to 4 metres thick, and possibly thicker, along both sides of Driftwood River. The ferruginate is present in most of the western half of CB4 tenure and extends upslope into CB3, covering an area at least 1.3 km by 1.3 km. Its western upslope origin it is bounded by a large gossan zone. The core hydrothermal alteration area of disseminated pyrite-quartz \pm sericite in felsic volcanics is largely concealed by the ferruginate and is the site of seven of the ten EM anomalies. Suncor tested seven anomalies by conventional geochemical sampling: correspondence of anomalies geochemistry within the ferruginate zone with the EM anomalies was poor. however where ferruginate was absent, e.g. the three north easternmost EM anomalies, the correspondence was very good. All EM-anomalous areas showed anomalous MMI metal values, including in some areas, significant base metal values (Ashton, 2008, ARIS #29590). Two of Suncor's largest and strongest EM anomalies are concealed beneath ferruginate: the effect of the ferruginate with respect to conventional geochemistry is unknown. One EM anomaly has 1 km strike length and 100 metre width: its characteristic crossover wave form may represent a steeply dipping tabular body, possibly accompanied by semi-massive or massive sulphide mineralization (Ashton, 2007, op. cit.). The anomaly strikes 325° azimuth, similar to observed mineralized veins with "high grade" values.

Year 2004 a geological mapping program in the western three-quarters of McConnell Creek map area was completed and released in 2004 by the Geological Survey of Canada (Evanchick and Porter, 1993). It showed that "Uppermost Hazelton Group" strata in north McConnell Creek map area (the area partly occupied by the Chaco Bear minerals claims) although of Callovian age (Upper Middle Jurassic), are lithologically similar to (and in the same stratigraphic position as) strata which host the Eskay Creek Au-Ag deposit on the west side of the Bowser Basin

Year 2007 Sitka Holdings Ltd., owner of the Chaco Bear mineral claims, optioned them to Houston Minerals Inc. (Houston) in 2007. Houston conducted a reconnaissance multi-element Mobile Metal Ion (MMI) geochemical survey over two areas of interest on the claims and obtained strongly anomalous precious and base metals analyses over three of the VLF-EM anomalies that had been identified in 1985 by Suncor Inc. One large

gold anomalous area was indentified in an area of favourable lithology that had not been included in the VLF-EM survey

Historic data, as outlined and summarized above, suggest that the hydrothermally altered area may contain (several) structurally controlled fully preserved high-sulphidation gold and/or gold copper deposits. In addition there is evidence of low-sulphidation epithermal mineralization within this same altered system that could enrich the former with overprinting by the latter. A structural interpretation using satellite imagery should supplement the existing structural knowledge, or confirm the structural sites occupied by the EM anomalies and boost the understanding of the ore genesis within this well mineralised system. Using this tool to identify other nearby structurally prepared sites that could host epithermal deposits related to this magmatic hydrothermal event is well justified.

SECTION 7.0 ABBREVIATED GEOLOGY

INTRODUCTION

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The first evidence of geological mapping directed to the Chaco Bear (CB) 1 to 4 mineral claims was by Suncor Inc. in the summer of 1985. Most of their work was focused on CB 3.

The most detailed property scale map was by prepared Dr. Peter Read (Geotex Consultants Ltd.) in 1997, under contract with Imperials Metals Corporation. Read's mapping forms the basis of the current understanding of property geology and the following abbreviated geological information and rock unit descriptions are based on that work. This geological information was supplemented by information from reports prepared by Charles Hartley of Suncor in 1986 (ARIS #14678), Wes Raven, P. Geo., for Imperial Metals, (Raven, 1997), and J. M. Ashton, P.Eng.

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REGIONAL GEOLOGY

The Driftwood River region was geologically mapped in 1941 – 1945 by C. S. Lord for the Geological Survey of Canada (Lord, 1948). The rocks were assigned to the Upper Jurassic division of the Takla Group volcanics. Richards, also of the GSC, in 1976 reclassified the rocks as forming part of the Hazelton Group volcanics. Read, in 1997, further subdivided the Hazelton Group rocks of Lower to Middle Jurassic age into an upper unit of mostly sedimentary rocks and a lower unit of mostly volcanic rocks. The Chaco Bear claims are underlain primarily by the lower unit rocks. Figure 3, from BC Geology Map (Map Place website) illustrates the regional geology of the Chaco Bear – Bear Lake area.

PROPERTY GEOLOGY

The Chaco Bear property was geologically mapped in 1997 by Geotex Consultants Limited (P. B. Read) for Imperial Metals Corporation.

Much of the Chaco Bear property is underlain by a thick succession of intermediate to basic metavolcanic rocks of the Telkwa Formation, the lowest member of the Hazelton Group which occupies the western and central portions of the property. Most of the units are of andesitic composition and comprise red and green coloured aphyric andesite flows, fine and coarser grained plagiophyric andesite flows, grey and maroon coloured basaltic flows and andesitic lithic ash tuffs, and flow breccias.

The eastern portion of the Chaco Bear claims is underlain by felsic metavolcanic rocks comprising flow-layered rhyolite flows, rhyolite welded and unwelded lapilli ash tuffs, porphyritic dacite flows and tuffs, and lesser aphyric andesite flows.

The only intrusive body of any size was located in the western part of the claims: a leucogranite to leucosyenite body that extends beyond the western property boundary.

All of the volcanic units are cut by mafic and felsite dikes, primarily volcanic in appearance and texture, with minor diabase intrusive dikes. The felsite dikes are fine grained, white to greenish-white, and are commonly flow banded, particularly at the margins. They are likely rhyolitic in composition and may be related to the thicker felsic volcanics on the east ridge, or possibly to the Kastberg intrusions that are found elsewhere in the district. The parent source of the dikes is uncertain. Mafic dikes occur throughout the property and are compositionally similar but with a variety of textures, from massive coarse grained, to layered feldspar phyric types.

The youngest units mapped are found on the ridge east of upper Driftwood River in the Unnamed formation of the Hazelton Group and comprise light to medium grey dacite flows with fine plagioclase laths. The unit is underlain by grey-green aphyric andesite flows of undetermined thickness that occur within a thick succession of rhyolitic flows and tuffs. The rhyolite assemblage is up to 300 metres thick and comprises tuff, lapilli tuff, and local spherulitic flows with coarse grained spherules up to 3-4 cm in cross section. This distinctive unit occurs over the length of the property and serves as a prominent marker horizon. It overlies porphyritic dacite flows and tuffs which were distinguished in the northern portion of the property. These latter flows appear to disappear to the southeast.

In summary, the majority of units mapped are of andesitic composition and occur in a northwest trending belt that extends through the length of the property.

INTRUSIONS

All bedded units within the map area are intruded by porphyritic or fine-grained granitic dykes that vary from less than 5 metres to 30 metres in thickness. Most are oriented northwesterly and dip from subvertical to moderately steeply southwest and westerly. East of "Big Lake" the inclination is mostly southeast to southerly. Dykes have been mapped by Read (op cit. 1997) variously as "mafic" (aphanitic andesite altered to greenschist facies), "plagiophyric meta-andesite", "metadiorite" (chloritized fine-grained diorite or gabbro), and "felsite". The latter are white aphanitic to fine-grained feldspathic units that are marginally flow-layered.

The principal area of intrusive rocks is in Chaco Bear 3 claim on the west side of "Tsaytut Spur", the ridge that lies west of the principal, Driftwood River, drainages. A northwesterly-trending body of white- to pink-coloured leucogranite/leucosyenite of unknown dimensions lies on the west side of the ridge: it is distinguished by the presence of medium-grained orthoclase feldspar and a virtual absence of mafic minerals. The rock is virtually unaltered with the exception of very minor specularite veinlets.

A strongly altered northwest to southeast oriented elliptical breccia pipe with exposed dimensions of about 250 metres by 110 metres was first mapped by Suncor personnel (Hartley, 1956). Its location on Chaco Bear 3 claim is poorly defined and it was described as heavily altered with intensely milled polymictic clasts in a dacitic matrix. Alteration includes epidotization with hematite and carbonate development, with silica flooding.

STRUCTURAL FEATURES

The Chaco Bear property occupies and is centered along a northwest zone of strong faulting and shearing and, speculatively, the headwaters portion of Driftwood River follows a significant regional-scale structural break and the property overlies a fault-bounded terrain Minfile data show at least 21 mineral occurrences within a twenty km radius of the property, of which the majority lie within the break and none are located east of that inferred structure (reference: Figure 3 in ARIS #24882 (Raven, 1998, for Imperial Metals)). A large number of shear zones and faults are present and, to a greater or lesser extent, pass through and/or offset all rock units, except possibly the leucogranite. The offsets of dike contacts and closely positioned rock unit boundaries indicate northwesterly and northerly striking faults that are subvertical or have a westerly component of dip. Again speculatively, the fractures pre-date the veining and provided channelways for vein mineralization.

Significant faults have been described by the claim owners and contract geologists. The Bearnx fault, located just north of "Big Lake", hosts the Bearnx quartz-carbonate vein occurrence of sub-economic mineralization that has been drill tested. The "Upper Driftwood" fault that strikes southeasterly across the width of the property from the head of Upper Driftwood Creek, across the north end of "Big Lake" to the ridge on the east side, is a normal fault, the southwest side having been down dropped, apparently with hundreds of metres of dip slip movement. The "Big Lake Fault" occupies a strong north-striking lineament that passes north from "Big Lake" to "Coccola Lake", a distance of 2.5 km. Where exposed in a gulley immediately north of Big Lake northerly-striking subvertical faults are accompanied by carbonate veining.

A large number of shear zones and fractures mimic the trend of major faulting and, in some cases, the stratigraphy. The most prominent joint sets are oriented about 320° to 340° with dips 50° to 60° southwest and are closely associated with mineralization. Another strong fracture pattern is oriented 040° to 050° with dips 60° to 70° northwest.

A structural study of the Chaco Bear mineral tenures was undertaken in 2009 and is discussed in a following section of this report.

MINERALIZATION

Large parts of the Chaco Bear tenures have zones of hydrothermal alteration comprising a porous assemblage of finely disseminated pyrite, quartz and sericite. The alteration has produced similar mineral suites irrespective of the host formation.

An alteration assemblage located at the basal unconformity of a rhyolite member of the "Unnamed" formation (per Read, 1997, p. 4) occurs on the east side of Driftwood Creek. It includes disseminated pyrite and weathers to a strongly coloured gossan.

A 600 metre long canyon in the Driftwood River north and south of "Rusty" Lake exposes zones of strongly disseminated pyrite-quartz±sericite alteration in undivided volcanics.

The so-called "Cigar Lake" zone is located on the east side of Tsaytut Spur immediately south of Cigar Lake (Gossan Zone) on CB 3 Claim. Mineralization comprises disseminated pyrite in felsic dikes and andesitic volcanics. The zone borders the Gossan Zone (see below) upslope to the west to the ridge top of Tsaytut Spur and the Ferruginate zones (see below), downslope to the Driftwood Creek valley near Rusty Lake.

The "Gossan Zone" to the west is manifested by three prominent limonite altered gossanous knobs aligned northwesterly over a length of 1.3 kilometres. Geologically this area is complex due to the presence of mafic and felsic dikes that crosscut and esitic flows and tuffs, and to pink leucogranite to leucosyentite dikes that intrude the area. The felsic dikes are found mostly as white to pale green coloured variably flow layered units that crosscut the volcanic stratigraphy and are impregnated with pyrite, quartz and sericite.

The "Ferruginate Zone" comprises a series of prominent gossans developed on rusty weathering agglomerate located both in the Driftwood River and along tributaries that drain easterly from the Gossan Zone into the Driftwood River. The host unit is either a tuffaceous dacite or quartz-sericite altered andesite tuff with widespread disseminated pyrite, up to 10%. The characteristic feature of this zone is the development of a thick cap of ferricrete which outcrops both sporadically and prominently in the creek beds down to the Driftwood River itself and partway up the eastern side of the valley. On the west side of the Driftwood River it appears as a cap up to 4 metres thick on a less iron altered andesitic agglomerate. In outcrops beside Driftwood River, the ferricrete appears to be 30 metres thick.

A meadowed bench southwest of Rusty Lake exposes very strongly altered plagiophyric meta-andesite dikes and rocks of unknown protolith. Intense pyrite-quartz \pm sericite alteration accompanies these closely fractured rocks.

In summary, the Chaco Bear property hosts many areas of vein mineralization, in joints, shears, fractures, and faults. Though narrow, the veins can carry significant amounts of

copper, gold, and silver, with previously reported assay values of trace up to 16.8% Cu, 0.82 ounces/t Au and 42 ounces/t Ag (reference: Raven and van Damme, 1997). Mineralized vein types are found throughout the area and include but are not limited to: quartz-carbonate veins, carbonate veins, specularite-carbonate veins, specularite veins, vuggy silica chalcopyrite-specularite veins, massive specularite veins, massive sulphide veins, veinlets of chalcopyrite, gold, pyrite, galena, sphalerite, specularite, crustified quartz and calcite. Reported mineral species include specularite, chalcopyrite, gold, pyrite, bornite, chalcocite, argentite? galena, sphalerite, quartz, calcite, and ferroan dolomite. Veins range from a few centimetres to 0.5 metres in width with some specularite veins as much as 1.5 metres in width. The zones include both high- and low-sulphidation epithermal systems.

A propyllitic zone peripheral to the core alteration zone hosts many of the above-listed vein types in shears, joints and fault structures. The zone extends as far as 1.5 km from the core area. Assays from these veins are as high as 16.8% copper, 0.82 ounces gold per tonne and 4.67 ounces silver per tonne (Raven and von Damme, 1997, and others). Of possible special interest are vuggy quartz-specularite veins that consistently carry significant gold values.

Hartley, in 1986 for Suncor, stated that generally massive chalcopyrite occurs locally with specular hematite both adjacent to the hematite and as open space vug filling within the hematite (ARIS #14424). His microscope-aided examination of the gold in the hematite veins showed it to occurs as free-gold in quartz with no preference for association with sulphides, either pyrite or chalcopyrite. Frequently free gold in quartz in high-sulphidation vein systems is diagnostic of proximity to the top of the system: hence it is possible that at Chaco Bear the system is fully preserved.

Sampling of several altered and mineralized rhyolite dikes that form part of a mineralized shear zone located below the Unnamed Formation on CB 4 claim showed anomalous gold values. The rhyolites, which pre-date the mineralizing event, are inherently brittle and may have been brecciated and fractured by the mineralizing event. The resulting fractured rock acts as a conduit for passage of magmatic-hydrothermal fluids to deposit sites and makes the rhyolite a preferred host to mineralization.

STRUCTURAL STUDY AND ANALYSIS

The following section of this report was prepared by Farshad Shirvani, M. Sc. of Terracad Geoscience Services Ltd. who has reviewed and approves this presentation of his observations.

A satellite imagery-based structural study was directed to the Chaco Bear property at the request of Mr. J. M. Ashton, P. Eng. The purpose of the study was to record the location and intensity of all lineaments and fractures and to determine if mineral zones that have been explored in recent decades can be related to particular fracture orientations. Other areas of interest included investigations of (1) the unconformity between Telkwa Formation andesites and the overlying Unnamed Formation, (2) a VLF-EM crossover feature near Rusty Lake, (3) a structurally anomalous circular feature that includes Rusty Lake, (4) an altered and silicified breccia pipe that lies about 1000 metres west of Rusty Lake, and (5) a large anomalous structural zone that was observed from a helicopter while over-flying the main area of alteration that may be manifestation of a collapsed zone above a concealed porphyry intrusion.

The imagery review was only partially successful in achieving the objectives.

Figure 4 is a regional scale satellite image on which are plotted major structural features that are recorded on Map Place database of provincial geology (Map Place, 2009). The figure shows major fractures/faults in Driftwood River valley and in the valley of Bear Lake, west and east, respectively, of the Chaco Bear tenures.

Chaco Bear lineaments are plotted in Figure 5. Figure 6 presents, in graphic Rose Diagrams, lineament count, average length and maximum length as determined using digital elevation models and hill-shade imagery techniques to highlight otherwise subtle topographic expressions of structures in the underlying formations. Application of a light source from different angles and elevations serves to reveal such features and also is used to confirm or discredit less recognizable possible features.

The following observations are pertinent:

The strongest concentration of lineaments (Figures 5, 6a) is in the 305° to 315° az. range, at variance from the regional trend of about 340° and approximately perpendicular to the second prominent orientation which is 035° to 055° . Lineaments in the narrow range close to 0° orientation are both long and numerous. Mineral explorationists, in part on the basis of strain ellipsoid theory as well as experience, consider the secondary (?) cross fracture-related structures significant as potential loci of epithermal mineralization.

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The west slope of the sharply defined Tsaytut Spur, the high ridge lying west of the "Big" and "Rusty" Lake valley, shows a large number of parallel northeast-trending fractures. This feature may be exaggerated due to maximum exposure and minimal vegetation cover on a steep slope and as a consequence the lineament count may be over-represented on Figure 6(a) rose diagram. The regional fault structure passes a short distance west of the base of the Spur and the possible presence of a Basin and Range type structure should be considered.

A significant number of short northeast lineaments also are present in and south of Chaco Bear 4 claim where geophysical work by Suncor and others was directed to a broad area of rusty ferruginous alteration and anomalous metal-in-soils geochemistry. Bedrock characteristics have been largely destroyed by hydrothermal alteration and weathering but geochemical samples contain weakly to strongly elevated metal values. Imperial Metals drilled several holes in the northwest of this claim and Houston Minerals Inc. has compiled magnetic, VLF-EM, and induced polarization survey data that have been tentatively interpreted (Ashton, 2009) in terms of possible porphyry, and high- and lowsulphidation exploration targets. The alignment of various conductors and other geophysical anomalies corresponds to the 305°- 315° direction associated with the strongest pattern of lineaments. An interpreted northeast fault, the "Notch" Fault, was not found west of Rusty Lake but several northeast lineaments were recorded on the east side of the valley.

The lineament data were scanned in search of anomalous clusterings of such features. The densest areas of apparent fracturing are east of Big Lake, in the southwest part of Chaco Bear 2 claim, and southwest of that lake on Chaco Bear 3 claim. A lighter concentration of fracturing was recognized in the vicinity of Round Lake near the northeast end of the property. The latter are, however, virtually all related to the above-cited northwest trend.

Linear structures in the lower-lying ground of Chaco Bear 11, 12 and 13 tenures east of Driftwood Creek valley are undoubtedly somewhat obscured by vegetation. Both the 305° - 315° set and the 035° - 050° set are present, with the regional, 340° , fractures more assertive close to the west side of Bear Lake.

It was not possible to recognize the unconformity within the Hazelton Group volcanic terrain. The VLF-EM crossover is apparently merely a geophysical item without observable expression. The circular feature at Rusty Lake is accompanied by a partial set of radiating fractures, consistent with either a plug-like intrusive body or a collapse structure. A circular

pattern of fractures occurs in the south part of Chaco Bear 21 tenure north of Big Lake and should be further investigated by compilation of existing exploration data in ARIS files, RGS files and government survey data.

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SECTION 8.0 REFERENCES

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- British Columbia Regional Geochemical Survey, NTS 94D McConnell Creek, BC RGS 45, Au+Sb+As+Ag+ Hg, Precious Metal Anomaly Map
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- Wamtech Pty. Ltd, 2004, MMI Manual for Mobile Metal Ion Geochemical Soil Surveys, Version 5.04, MMI Technology, Bentley Australia

SECTION 9.0 STATEMENT OF EXPENDITURES

The following expenditures were incurred in a property review and satellite imagery-based structural study and analysis:

Planning, data assembly and review, design of structural study, engagement of Terracad (contractor for GIS work) – J. M. Ashton, P. Eng.

(J.M.Ashton & Associates Ltd.) per invoice 020 – (see attached invoice)\$980.00Conversion of geological map for inclusion in report – CAD work by Esmeraldo Catapia (J. M.
Ashton & Associates Ltd.) per invoice 021 – (see attached invoice)\$840.00

Terracad Geoscience Services - per letter contract dated Nov. 15, 2009 -

(see attached letter contract)

Total expenditures -

\$4320.00.

\$2500.00



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J.M. ASHTON & ASSOCIATES LTD.

Fax (604) 685-6490 E-mail: <u>jmaconsultyvr@telus.net</u> Tel. (604) 685-6477

Suite 911, 850 West Hastings Street Vancouver, British Columbia V6C 1E1

14 December 2009

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 INVOICE 020

Houston Minerals Inc. Suite 911 850 West Hastings Street Vancouver British Columbia V6C 1E1

Dear Sirs:

Re: Chaco Bear Project

<u>An</u>	<u>100000 (\$)</u>
For professional services rendered for the period	
October 1, 2009 to December 20, 2009 including:	
a) Ostahan 1. Project technical planning and review	
a) October 1; Project technical planning and review	
of alternatives for assessment work:	
2 hours @\$70 per hour –	140.00
b) November 2009, Scope of work definition and meeting	
with Mr. F. Shirvani, M.Sc., of Terracad Geosciences	
Services Ltd. 2 hours @ \$70 per hour -	140.00
c) December 2009, preparation of Houston's component	

of the work for the "Structural Inte	erpretation from	
Satellite Photos" report: 10 hrs @ \$70 per hour -		<u>700.00</u>
	Sub-total -	980.00
GST (Reg 102664729 RT0001)	@5.0% -	<u>49.00</u>

TOTAL DUE & PAYABLE 1,029.00

Respectfully submitted,

W Ashton, P. Eng. J. M

J.M. ASHTON & ASSOCIATES LTD.

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14 December 2009

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INVOICE 021

Houston Minerals Inc. Suite 911 850 West Hastings Street Vancouver British Columbia V6C 1E1

Dear Sirs:

Re: Chaco Bear Project

For professional services rendered by E. Catapia for the period November 1 to December 14, 2009 in producing CAD drawings for the assessment work report "Structural Interpretation from Satellite Photos" report prepared by Terracad Geosciences Services Ltd. Work included completion of a 1:20,000 scale geological map made from an unworkable 1: 5,000 scale original geological map.	<u>Amount (\$)</u>
14 hours @ \$60 per hour -	840.00
GST (Bog 102664720 BT0001) @5 09/	42.00

GST (Reg 102664729 RT0001) @5.0% - <u>42.00</u>

TOTAL DUE & PAYABLE 882.00

Respectfully submitted,

Ushtom WA. J. N. Ashton, P. Eng.

Houston Minerals Inc.

Fax (604) 685-6490 E-mail: jmaconsultyvr@telus.net Tel. (604) 685-6477

Suite 911, 850 West Hastings Street Vancouver, British Columbia V6C 1E1

15 November 2009

Mr. Farashad Shirvani, M. Sc., President Terracad Geosciences Services Ltd. Suite 310, 675 West Hastings Street Vancouver, British Columbia, V6B 1N2

Dear Mr. Shirvani:

Re: Chaco Bear Mineral Claims, Near Bear Lake British Columbia

Further to our meeting in your office on Tuesday November 10th and the followup meeting of 24 November, it is our understanding that you will be able to complete a structural lineament study of the local area in which the Chaco Bear mineral claims are located which shall be suitable for acceptance by the Ministry of Energy, Mines and Petroleum Resources as qualifying assessment work.

Satellite imagery shall be used to study geological lineaments and structure, and shall include digital elevation models and the hill-shade imagery technique. The target outcome of the study is to identify major structural lineaments and the dominant fracture sets, their relative frequency, and directions. It may also be possible to recognize areas of anomalous fracture density.

More specifically there are five areas of interest in which your study may contribute towards increasing our understanding of the property's potential, e.g.,

1. The unconformity between the Unnamed Formation rhyolite and the Telkwa Formation andesites. These rocks are part of the Upper Hazelton volcanics.

2. Verification of the "Notch" Fault.

3. A major VLF-electromagnetic crossover feature commonly diagnostic of a major fault is identified up the centre of the Valley in Chaco Bear 4 claim.

4. A structurally anomalous physiographic feature, circular in plan view, is located in the centre of the valley. Rusty Lake is located within this nearly circular planar structure. It is yet to be investigated on the ground; however it has all the appearances of a maar volcano and may contain a breccia pipe. Consistent with this feature is a heavily altered and silicified breccia pipe about 1,000 metres westerly. Does the satellite imagery support this thesis?

5. A large anomalous structural zone is observable by helicopter striking northnortheasterly within the main alteration zone. It has an estimated average width of 700 metres and is perhaps more than 1,400 metres in length. This feature may be a collapsed zone consistent with the emplacement of a shallow concealed porphyry intrusive. Does the satellite imagery support this thesis? Details of the above will be conveyed to you in discussion along with supporting information and, notwithstanding the main theme of your report, we may not wish to publish any or all of the above information for the benefit of the public record.

Without limiting the generality of the foregoing we will contribute the following to the report:

- 1. the introduction
- 2. the location and access
- 3. the property and ownership
- 4. exploration history
- 5. physiography and outcrop
- 6. geology (the best place to deal with the structural geology is your report)
- 7. exploration potential
- 8 property location and claims locations maps.

We will contribute Dr. Peter Read's geological map to the report for which we will levy a charge to the project of \$700.00. It is necessary to reduce the large size of this geological map that was submitted in 1997, as assessment work by Imperial Metals; to facilitate its use. The cost of J. M. Ashton's contribution to the report shall be \$700.00 plus CAD work by Mr. Catapia. These costs shall be paid directly by Houston Minerals Inc. The integration of our work with yours shall be to Terracad's account.

It will be necessary to implement the organization of the report in a matter satisfactory to your major contribution to the scope of the work integrated with Houston's contribution.

We hereby submit our advance payment cheque for the sum of \$1,500 towards the cost of preparation of the report. We agree to pay you the total sum of \$2,500 plus GST for your report.

Yours very truly,

J. M Ashton, P. Eng.

Agreed the above in principle this 25th day of November 2009

Farshad Shirvani, President Terracad Geroscience Services Ltd.

Copy: David Mark, P.Geo., Geotronics Consulting Inc.

SECTION 10.0 CERTIFICATION OF J. M. ASHTON, P. Eng

I, J. M. Ashton, of Suite 911, 850 West Hastings Street, Vancouver, British Columbia, with respect to the accompanying technical report hereby certify that:

1. I am a Consulting Electrical Engineer and principal in J. M. Ashton & Associates Ltd., Consulting Electrical Engineers. I also provide professional services in mineral exploration as a Mineral Explorationist.

2. I am a graduate of the University of British Columbia with a B.A.Sc. in Electrical Engineering (1966).

3. I am a member in good standing, as a Professional Engineer, in the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

4. I am a member of the Canadian Institute of Mining and Metallurgy.

5. I have practised as: a Mineral Explorationist, performing significant work related to all aspects of mineral exploration with a focus on applied geophysics; and as consulting electrical engineer; since 1969.

6. Much of the text of the report, including Figures, was assembled by me and under my direct supervision. The structural study and analysis of fractures that forms part of the report were prepared by Terracad Geoscience Services.

7. Figures 1 through 3 inclusive were prepared by J. M. Ashton and Associates Limited including the reduced sized geology map.

J. M. Ahton, P. Eng.



Dated this 15th day of January 2010.

Vancouver, British Columbia.

STATEMENT OF QUALIFICATIONS - FARSHAD SHIRVANI, MSc.

Farshad Shirvani, MSc., geologist and GIS specialist, is the owner of TerraCAD Geoscience Services Ltd., a service company that provides graphic and other services to the mining industry, with offices at Suite 310, 675 West Hastings Street, Vancouver, B. C., V6B 1N2. He prepared the photogrammetric study and structural analysis that is included in the attached technical report titled "Report of Work, Chaco Bear Property, Bear Lake Area, Omineca Mining Division, British Columbia, Canada" dated January 15, 2010. An M.Sc. graduate of Shiraz University in Shiraz, Iran, he has practiced in the fields of geology and GIS for more than twenty years and is in the process of obtaining membership in the Association of Professional Engineers and Geoscientists of British Columbia.

Mr. Shirvani is a graduate of Shiraz University, Shiraz, Iran, and holds B.Sc. (1983) and M.Sc. (1986) degrees from that institute. He practiced geology in Iran for more than ten years in mineral exploration, engineering geology and hydrogeology and as Project Manager of the Malayer Reservoir Dam and City pipeline to Hamadan. He has lived in Canada since 1996 and was granted Canadian citizenship in 2002.

Mr. Shirvani has worked in Canada in 1996 as a geologist, AutoCAD specialist, 3D modeler, GIS specialist and web designer, and possesses the skills, qualifications and experience required to competently prepare, using sophisticated computer based methods, photogrammetric studies and structural interpretations.

Mr. Shirvani is a co-author of the accompanying technical report.

Mr. Shirvani is completely independent of Sitka Holdings Ltd., Houston Minerals Ltd. and J. M. Ashton & Associates Ltd., and has no interest, direct or indirect, in the mineral properties that are the subject of the accompanying technical report.

To the best of his knowledge and belief, Mr. Shirvani believes that his contributions to the accompanying technical report are based on data that are accurate and complete and than any areas of uncertainty or possible ambiguity have been disclosed and discussed in that report.

Dated this 15th Day of January, 2010.

Farshad Shirvani, M. S