Technical Report for the Red Lake Town Site Property Gold Geochemistry Project

Dome and Heyson Township
Red Lake Mining Division, Ontario

Staked Claims 4212632, 4214574, 4243103, 4248104
(and other adjacent Patent and Licence of Occupation Claims)

January 14th, 2013

Mark Epp – Goldcorp Inc., Senior Regional Exploration Geologist[1]

[1] - Goldcorp Inc, Red Lake Gold Mines, Bag 2000 Balmertown, ON, P0V 1C0, Tel. (807)735-2077 ext.3058

Table of Contents

Introduction and Location

Properties held by Goldcorp Inc., Red Lake Gold Mines are located in the Red Lake area of northwestern Ontario, approximately 180km north of Vermillion Bay (located on the Trans Canada Highway. See Fig. 1A). The Red Lake mining camp is one of the world's most significant gold camps, extracting gold primarily from the sheared and carbonatized iron tholeiitic basalts and basaltic komatiites of the Balmer Assemblage. A secondary gold event noted in the area is associated with later quartz tourmaline and other shear related veining found in the younger granodioritic rocks of the Dome and McKenzie stocks.

The Red Lake Town Site Property, as the name implies, is situated in and around the original Red Lake town site area, and consists of the old Hasaga Mines Ltd. patented properties as well as a number of other more recently staked properties around the Forestry Point and Skookum Bay areas to the west of the Hasaga patents (refer to Fig. 1B). A list of staked claims as well as the patented and license of occupation claims making up the Red Lake Town Site property are summarized in Table 1. Location of individual claims are shown in Figure 2.

The property straddles the boundary between Dome Township to the north and Heyson Township to the south, and contains numerous historic mines and other known mineral occurrences. Most occurrences appear to be associated with the secondary gold event formed by late stage deuteric fluids being driven off of nearby crystallizing plutons. Gold mineralization typically is associated with glassy quartz veins with varying amounts of black tourmaline, sulphides (typically pyrite and some chalcopyrite) and rarely visible gold. These ore veins occur internal to the Dome Stock as narrow but laterally extensive veins, but also within the Confederation aged volcanic as irregular and tectonized veins associated with a highly deformed porphyry dyke. These styles of mineralization have not been a focus of significant exploration in recent history, but still hold the potential of defining narrow high-grade to broad low-grade mineralization. For these reasons this property is highly prospective and a good target area owing to the lack of recorded exploration work.

Little is known of potential structures that may host mineralization in the immediate area due to the extensive till cover. Only lower resolution airborne magnetic surveys are available for this area, and only vaguely show potential east-west and northwesterly linear trends. Initial work on the property consists of reconnaissance sampling of bedrock for geochemical analysis at approximately 200m centers. This sampling approach has been used by Goldcorp in the northeastern portion of the Red Lake Greenstone Belt and has been useful in highlighting more favourable areas for gold mineralization by looking for anomalous concentrations of specific trace elements which correlate with gold. A total of 5.5 man-days of labour were spent by two field geologist between October 17th to 25th, 2012, in collecting and cataloging 47 samples from both lake shore and bush outcrops. The two Field Geologists completing this work were Mark Epp and Mitch Dumoulin. An attempt to make the sample coverage across the property as evenly distributed as possible, however, this was hampered by the availability of actual surface outcrops, the physical inaccessibility of certain areas and the limited time before the full appearance of the winter season.

Figure 1A. Location of Red Lake Ontario.

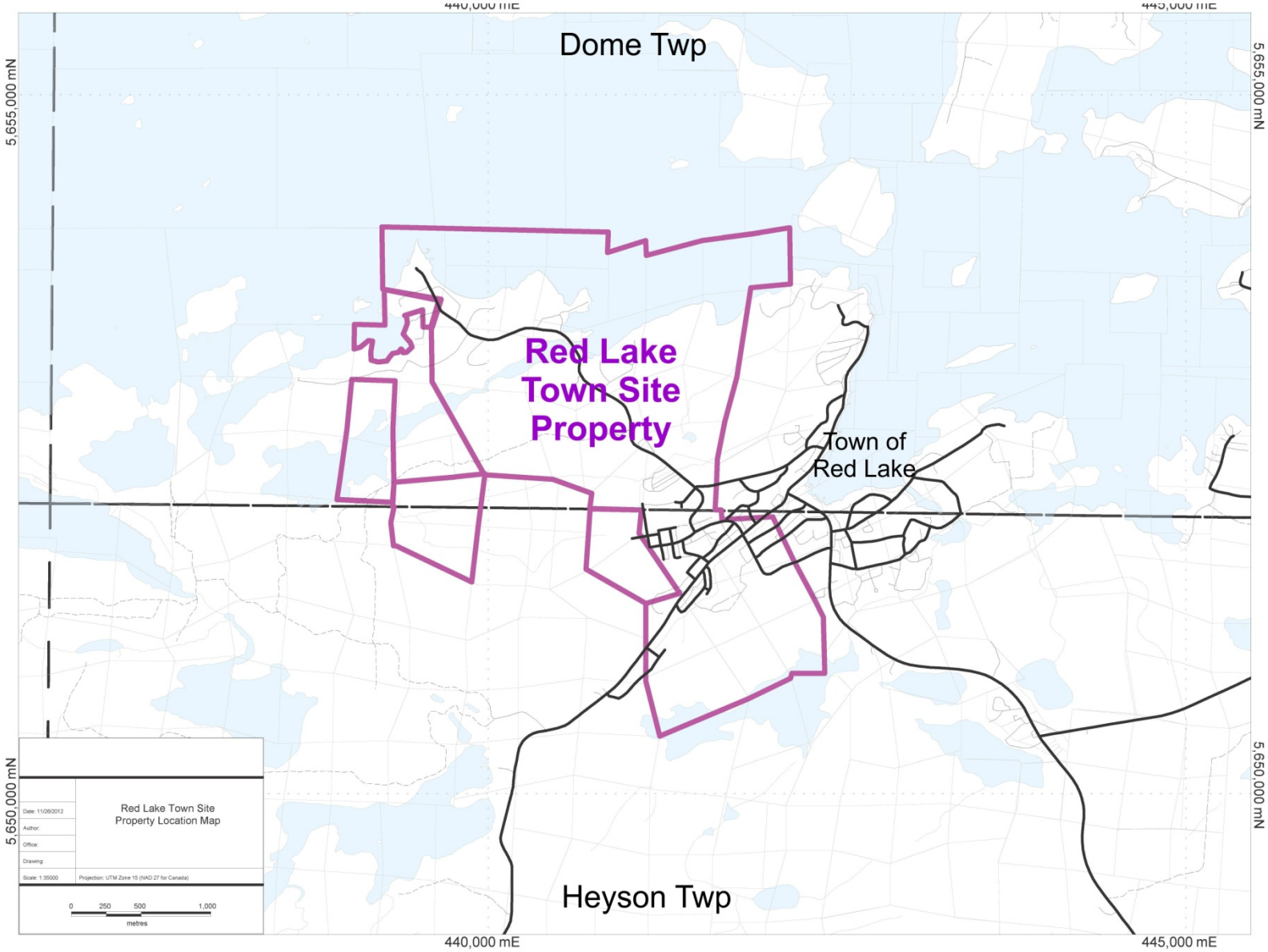

Dome Twp
Red Lake
Town Site
Property
Town of
Red Lake
Heyson Twp
5,655,000 mN
5,650,000 mN
440,000 mE
445,000 mE
Red Lake Town Site
Property Location Map
Date: 11/26/2012
Author:
Office:
Drawing:
Scale: 1:35000
Projection: UTM Zone 15 (NAD 27 for Canada)
0 250 500 1,000
metres

Figure 1B

Table 1. List of staked, patent and licence of occupation claims belonging to the "Red Lake Town Site" claim group.

Staked Claims

Name	Parties	Type	Grant Date	Expiry Date	Project	Township
4212632	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OC	6/11/2009	1/26/2013	Heyson/Dome	Dome
4214574	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OC	9/2/2008	9/2/2013	Heyson/Dome	Dome
4248103	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OC	6/26/2009	2/10/2013	Heyson/Dome	Dome
4248104	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OC	6/26/2009	2/10/2013	Heyson/Dome	Dome

Patents and Associated Licences of Occupation

Name	Parties	Type	Grant Date	Expiry Date	Project	Township
K1347	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
K1348	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
K1373	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K1374	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K1375	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K1376	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K1377	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K1378	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K1379	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K1380	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K1381	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Heyson
K10162	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/2/1900		Barrick-Lac	Dome
K10163	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/3/1900		Barrick-Lac	Dome
K10164	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/4/1900		Barrick-Lac	Dome
KRL2134	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL2134-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	3/1/1934	1/19/2013	Barrick-Lac	Dome
KRL2135	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL2136	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL2137	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL2137-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	3/1/1934	1/19/2013	Barrick-Lac	Dome
KRL2138	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL2138-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	3/1/1934	1/19/2013	Barrick-Lac	Dome
KRL2139	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Heyson/Dome	Dome
KRL2140	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Heyson/Dome	Heyson
KRL5888	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL5889	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/2/1900		Barrick-Lac	Dome
KRL5889-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	8/1/1934	1/19/2013	Barrick-Lac	Dome
KRL5890	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/3/1900		Barrick-Lac	Dome
KRL5890-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	8/1/1934	1/19/2013	Barrick-Lac	Dome
KRL818	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL819	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL819-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	9/1/1933	1/19/2013	Barrick-Lac	Dome
KRL820	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL821	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL821-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	9/1/1933	1/19/2013	Barrick-Lac	Dome
KRL822	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL1741	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMP	1/1/1900		Barrick-Lac	Dome
KRL1741-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	9/1/1933	1/19/2013	Barrick-Lac	Dome

Other Licences of Occupation

Name	Parties	Type	Grant Date	Expiry Date	Project	Township
KRL13257-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	7/1/1937	1/19/2013	Barrick-Lac	Dome
KRL5944-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	8/1/1934	1/19/2013	Barrick-Lac	Dome
KRL6005-LO	Goldcorp Inc. (72.00%), Goldcorp Canada Ltd (28.00%)	OMLOC	8/1/1934	1/19/2013	Barrick-Lac	Dome

Figure 2. Red Lake Town Site claim and geology map.

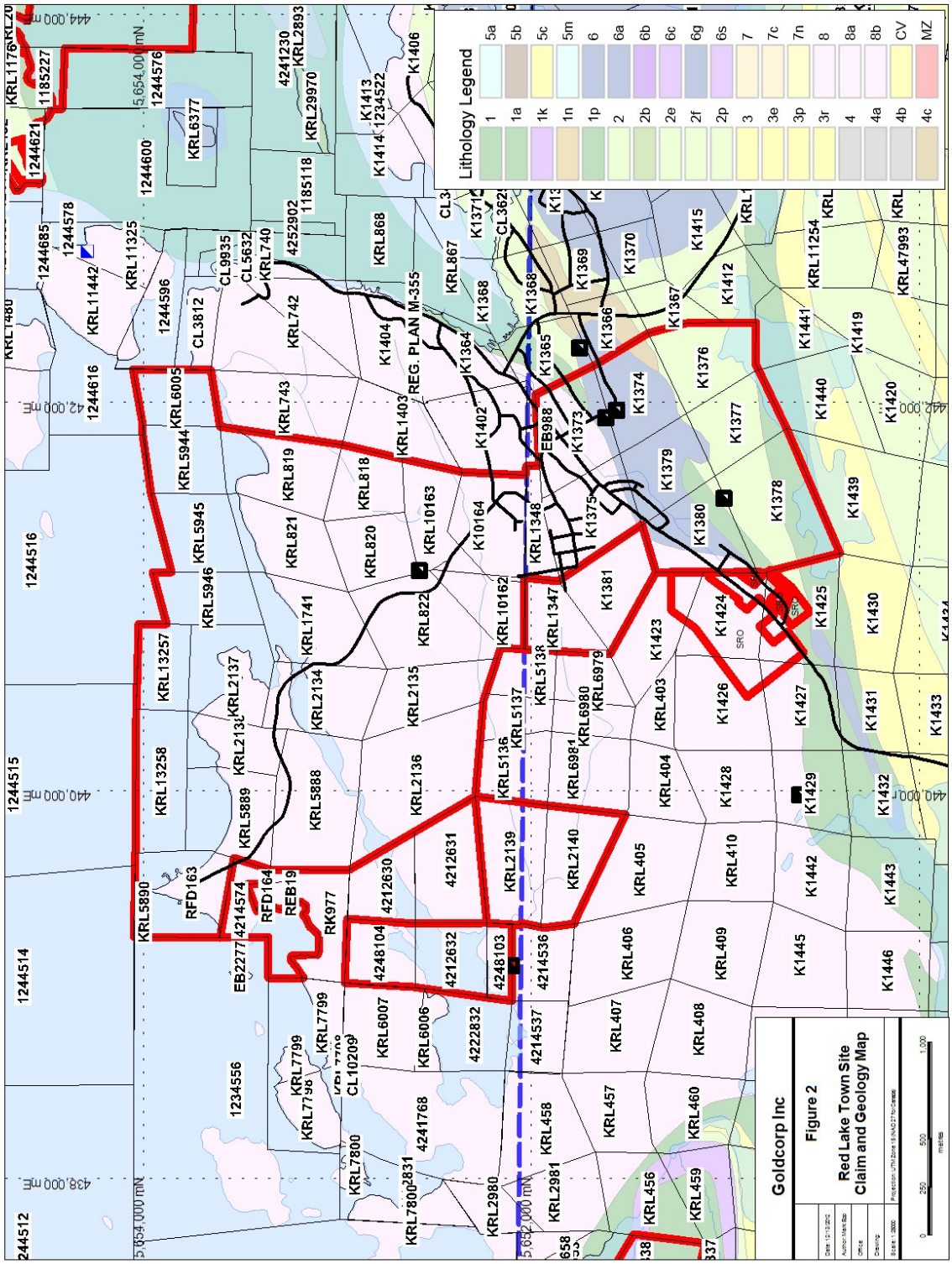


Table 2. Lithology code for regional mapping.

Geologic Setting

The Red Lake Greenstone Belt is situated in the western portion of the Uchi Sub-Province of the Superior Province, located in Northwestern Ontario. The Uchi Sub-Province is a typical Archean granite-greenstone terrain containing linear east-west trending belts of volcanic, sedimentary rocks and synvolcanic intrusions, which are later intruded by younger granitoid stocks and batholiths. The supracrustal rocks of the Red Lake Greenstone Belt represent discrete, magmatic and erosional events over a period of approximately 270 million years between 3.00 and 2.73 Ga.

A major continental collision event appears to be associated with the main episode of gold mineralization at around 2.7 Ga. Three episodes of significant plutonism emplaced diorite and lamprophyre dykes, feldspathic porphyry dykes and granitic stocks into the greenstones, with the last also producing many of the surrounding batholiths. Metamorphic grade increases from greenschist facies in the middle of the belt to amphibolite facies at the edges, and isograds are generally parallel to the contacts with the surrounding batholiths, suggesting contact metamorphism. The two episodes of gold emplacement appear to have occurred during the late stage of plutonic activity. The major gold deposits in the belt occur near the greenschist to amphibolite facies isograd, but a genetic relation has not been established. The southern margin of the Dome Stock is of particular interest largely because Flat Lake-Howey Bay and the Pipestone Bay-St Paul's Bay deformation trends intersect within the Red Lake Town Site Property.

The geology of the Red Lake Town Site Property extends from the central core of the granodioritic Dome Stock, southward into the calcalkaline dominated Confederation volcanic and mafic intrusive of the Howey Diorite (See Fig. 2 and Table 2 for lithology codes).

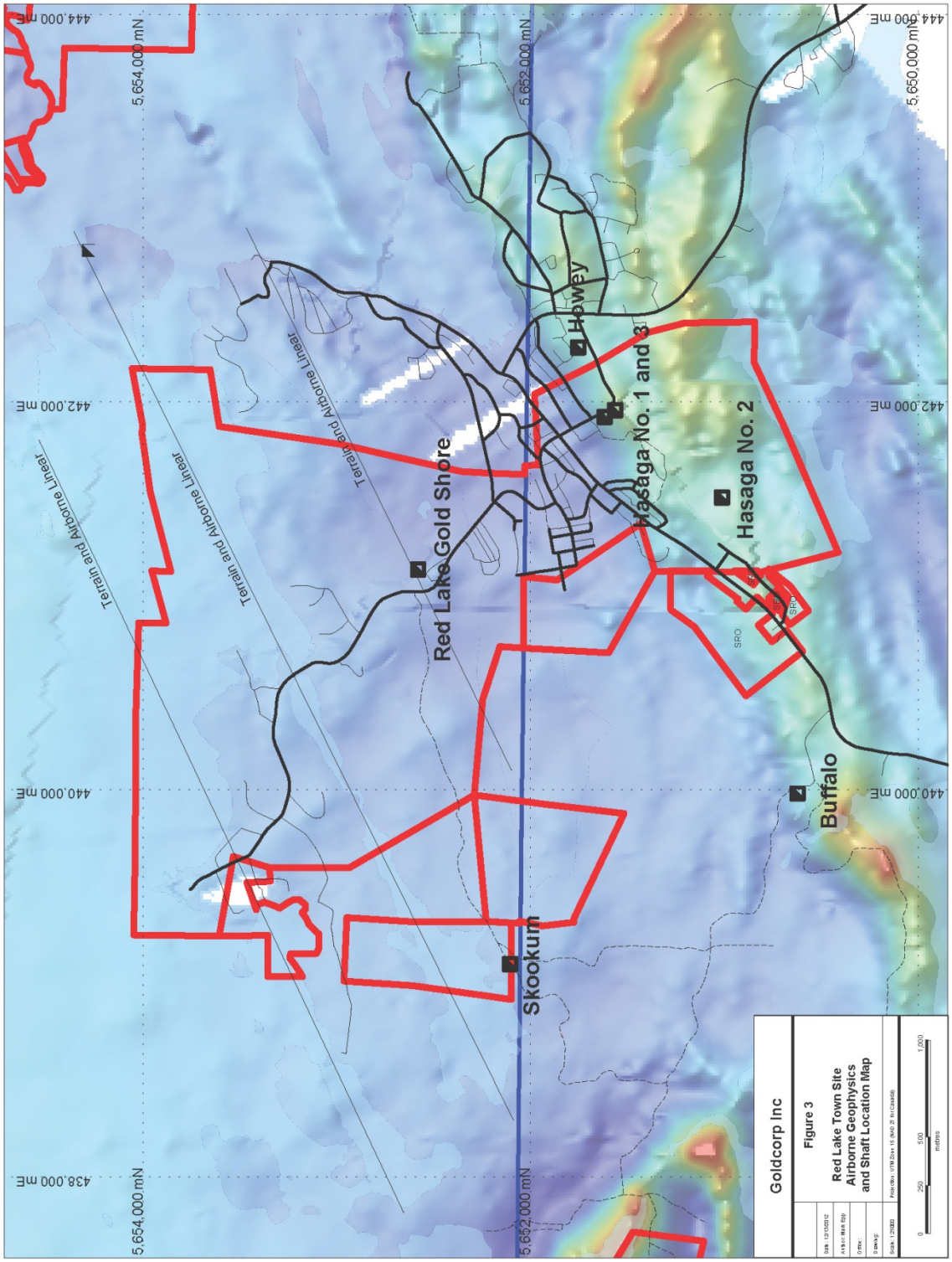
The placement of lithologies within the Confederation volcanics is highly variable depending upon which historic map you use, but a generalization off of Marie Sanborne-Barrie 2004 compilation map was used.

No other "new" detailed mapping is available for this area other than what was mapped by Horwood in the late 1930s. Airborne magnetic data is also quite low resolution in this area; however, significant linear structures can be inferred to cross at least at two locations within the property boundaries (see Fig. 3).

Property History

The Red Lake Town Site property contains three historic mining operations; however, two additional nearby operations are significant and will be mentioned. The large patented claim group contains the historic Red Lake Gold Shore Mine property to the north central area (which also contains the Skookum Mine property) and the Hasaga Mine property to the south. Refer to Figure 3 for the location of shafts for each of these historic mining operations.

Figure 3. Location map of local mine shaft plotted on total magnetic intensity airborne geophysics.



Skookum Mine - Initial exploration on this property began in 1936 with a short shaft being sunk to 170 feet in the summer of 1937, however, no lateral development was extended from this shaft. Structures of interest on this property were moderately well developed shears along 070/subvertical trends (which were frequently intruded by granodiorite to mafic dykes), and narrow quartz veins running 150/subvertical (Horwood, 1945). The southeasterly trending quartz vein carried most of the noted gold and tended to be less than six inches wide, white to bluish grey in colour and glassy in texture. The veins contain only minor pyrite and chalcopyrite with local visible free gold.

Red Lake Gold Shore Mine - In production from 1936 to 1938, producing 21,100 ounces at 0.244 oz/t. Located in granodiorites within the core of the Dome Stock. The main mineralization was pipe-like, with the strongest mineralization occurring at the intersection of two different aged shears (Horwood, 1945 and Ferguson, 1966). The older shear was oriented at 325/-74.5 and the younger shear oriented 040/-80. The main mineralized zone consisted of 5 to 30 foot wide quartz veins having strike lengths of 50 to 150 feet long. The veins themselves consisted near pure quartz with minor pyrite and chalcopyrite, with even rarer sphalerite, tetrahedrite, altaite and free gold. Underground development consisted of a 700 foot shaft with five developed levels and an internal winze down to 1000 feet with two additional developed levels. A 125 ton/day mill was constructed to support production. Ore grades were enriched on surface by hand sorting of the ore material, removing approximately 20% waste material from the mill feed. Once the ore resource on this property was depleted in 1938, the Hasaga Mine purchased the patented ground and all assets specifically to obtain ownership of the Gold Shore milling facilities.

Hasaga Mine - Originally staked in 1928, the Hasaga Mine was in production from 1938 to 1952, producing 218,213 ounces at an average grade of 0.144 oz/t. Ore being skipped to surface was also “hand cobbed” removing about 20% waste tonnage from the mill feed, and was then trucked to the milling facilities located at the old Red Lake Gold Shore Mine. Production came from two closely situated shafts in the northeast of the property; however, a third exploration shaft was driven to explore the potential for ore to the southwest. Underground excavations were quite extensive with the deepest shaft (No. 3 Shaft) reaching a depth of 2,450 feet with 14 established levels and stope panels being 500 to 600 feet in strike length. Mineralization at the Hasaga Mine was nearly identical to that at the Howey Mine situated immediately to the east, consisting of a fractured and mineralized quartz porphyry dyke contained within strongly sheared intermediate calcalkaline volcanics. This mineralized porphyry dyke is generally oriented 065/85 south, and can vary in widths 10 to 150 feet; however, the best grades occurred within the narrower (10 to 40 feet wide) portions of the dyke. Gold occurred within fracture veins consisting of bluish white quartz, black tourmaline, coarse pyrite and minor amounts of other sulphides including sphalerite, galena, chalcopyrite and tellurides. Visible gold is generally not apparent.

Buffalo Red Lake Mine - The Buffalo Deposit occurs along the southern edge of the Dome Stock immediately west of the old patented Hasaga Mine property. Initial staking was performed in 1925, with sufficient drilling and striping work being done up to 1931to patent the claims. Initial underground exploration work was only started in 1947 to 1948 and focused on narrow quartz-tourmaline (+/- coarse pyrite) veins in tectonized quartz porphyry dykes intruding sheared greenstones, similar to mineralization found at the Howey and Hasaga mines located to the east. Though these veins often had high gold content, the volume of vein material was not high enough and was found to be uneconomic at the time. Later in the early 1980s and late 1990s work shifted to quartz-tourmaline veining contained within granodiorite of the southern Dome Stock. These veins were also narrow quartz, tourmaline and pyrite

dominated, frequently occurring with pinkish carbonate alteration halos within gray granodiorite. A decline was driven down from surface to access small tonnage stopes, however, once again due to narrow vein widths and excessive mining dilution, this mineralization was found to be uneconomic as well. Ore from this phase of mining was trucked and processed at the nearby Madsen Mine.

Field Work, Sampling Methodology and Data Analysis

The goal of this field project was to systematically assess spaced ground rock gold content at a "part per billion" level to determine if minor enrichments in background gold values correlate with known gold occurrences and to possibly define other unknown deposits.

A total 18 man hours was spent collecting samples along lakeshore and 18 man hours was spent on samples collected on land. Seven (7) man hours were spent on data organization, data entry, sample sorting and shipping. An additional 9 man hours for property research and 20 man hours was spent preparing the assessment report document. (See details in Appendix B).

Clean, unweathered rock samples representative of the local rock mass were collected at each location (unless a specific vein/ore specimen was taken). Each sample was between 1 to 2 kilograms in weight and sample station spacing of approximately 200 metres was attempted and locations recorded on a Garmin GPS unit (please note that all UTM coordinates quoted in this report are in NAD27 reference). The 200m sample spacing was difficult to attain due to limited exposure, difficult access and the lack of time due to the arrival of a thick blanket of snow. It is fully anticipated that a second round of sampling will be conducted next summer to fill in poorly sampled areas where possible.

Gold assays of the collected rock samples were performed by Accurassay Labs located in Thunder Bay, Ontario using standard fire assay with AA finish analysis. Pulp samples were returned for possible further analysis. Assay certificates for these samples are shown in Appendix A and sample descriptions and their associated gold assays are summarized in Table 3.

Background value for Au appears to be <5ppb (detection limit). Samples returning Au detection limit values were arbitrarily given a value of 2.5ppb for the purpose of making the thematic map shown in Figure 4, though the actual number is not precisely known below the detection limit.

A total of 45 samples were collected though there were only 41 sample stations. This is because four sample stations selectively sampled vein material as well as representative wall rock material. An additional two samples were also taken for standard and blank QA/QC checks.

A spatial plot for the returned gold values is shown in Figure 4. From this plot a number of interesting observations can be made. Two apparent anomaly trends can be seen along the Skookum Bay and Howey/Hasaga trends. The Skookum Bay trend is evident in the airborne magnetic survey (trending ~063 degrees azimuth) and no doubt is associated with one of the more significant shears cutting through the southern part of the Dome Stock. This deep seated shear would have acted as a major conduit for gold-bearing fluids, allowing the observed weak mineralization of surrounding wall rocks, but also has the potential for more significant high grade gold mineralization either within the shear itself, or within brittle high angle structures heading out into the wall rock. The Howey/Hasaga trend correlates exactly

Table 3. Surface Sample Descriptions with gold assays quoted in parts per billion. (Note: UTM coordinates are in NAD27 and gold detection limit is 5 ppb).

Project area: Red Lake Townsite Properties

General comments: Samples were collected along lake shore exposures as well as from other outcrops along existing roads, trails and some bush traverses.
Most samples came from internal areas of the Dome Stock Granodiorite, but some samples were collected to the south from intermediate volcanics or the Howey Diorites.

Sample-ID	Station-ID	Sample-Type	UTM-E (m)	UTM-N (m)	UTM-EL (m)	Marking-Time	Litho1	Litho2	RockType	General location	Comments	ALFA1 Au ppb 5 DL
A692209	RL12001	Grab	441702	5653358	356	10/17/2012 10:14	V3	I3C	Quartz Vein in Granodiorite	Shore line north of Red Lake Townsite	Vein is dirty white, Approx. 2 to 3cm wide, oriented 165/80.	57
A692210	RL12001	Grab	441702	5653358	356	10/17/2012 10:14	I3C		Granodiorite	Shore line north of Red Lake Townsite	Pink, medium-coarse grained, massive.	<5
A692211	RL12002	Grab	441478	5653504	356	10/17/2012 10:36	I3C		Granodiorite	Shore line north of Red Lake Townsite	Pink, medium-coarse grained, massive, no obvious veins or foliation.	<5
A692212	RL12003	Grab	441195	5653403	356	10/17/2012 11:02	I3C		Granodiorite	Shore line north of Red Lake Townsite	Pink, medium-coarse grained, massive, no obvious veins or foliation.	<5
A692213	RL12004	Grab	440956	5653260	356	10/17/2012 11:17	I3C		Granodiorite	Shore line north of Red Lake Townsite	Whitish pink, medium grained, massive, no obvious veins or foliation.	<5
A692214	RL12005	Grab	440708	5653274	356	10/17/2012 11:26	I3C		Granodiorite	Shore line north of Red Lake Townsite	Whitish pink, medium grained, massive, no obvious veins or foliation.	47
A692215	RL12006	Grab	440418	5653087	356	10/17/2012 11:38	I3C	I2A	Granodiorite-Diorite	Skookum Bay	Light pink, medium-coarse grained, notable higher mafic component massive, no obvious veins or foliation.	<5
A692216	RL12007	Grab	440170	5652983	356	10/17/2012 11:55	I3C		Granodiorite	Skookum Bay	Pink (very felsic, Granite?), medium grained, massive, no obvious veins or foliation.	48
A692217	RL12008	Grab	439717	5652732	356	10/17/2012 12:13	I3C	I2A	Granodiorite-Diorite	Skookum Bay	Pink, medium grained, higher mafic component, massive, no obvious veins or foliation.	<5
A692218	RL12009	Grab	439200	5652618	356	10/17/2012 12:29	I3C		Granodiorite	Skookum Bay	Pink, coarse grained, massive, no obvious veins or foliation.	93
A692219	RL12010	Grab	439049	5652549	356	10/17/2012 13:11	I3C		Granodiorite	Skookum Bay	Grey to pink, medium-coarse grained, generally massive with some jointing. A grey waxy quartz vein ~3cm wide was present running parallel to jointing, but was not samplable (outcrop too smooth). Vein/joints running 170/85 to west and a minor joint set running 250/65 to north.	86
A692220	RL12011	Grab	439146	5652278	356	10/17/2012 13:18	I3C		Granodiorite	Skookum Bay	Grey, medium-coarse grained, massive, pervasive ~30cm spaced joints running 165/85 to north, no obvious veins or foliation.	39
A692221	RL12012	Grab	438921	5652107	356	10/17/2012 13:29	I3C	I2A	Granodiorite-Diorite	Skookum Bay	Grey, medium-coarse grained, massive, no obvious veins or foliation.	62
A692226	RL12014	Grab	439146	5652126	378	10/17/2012 15:09	I2A	I3C	Diorite-Granodiorite	Near Skookum Shaft area	Strongly foliated and some discrete shears running 060/subvertical	384
A692227	RL12014	Grab	439146	5652126	378	10/17/2012 15:09	I3C	V3	Quartz Vein	Near Skookum Shaft area	Pure blue-grey glassy quartz vein with obvious sulphides. Vein orientation 150/subvertical.	14824
A692228	RL12015	Grab	440537	5653557	356	10/17/2012 15:49	I3C		Granodiorite	Red Lake shore line north of Skookum Bay	Pink, coarse grained, massive, no obvious veins or foliation.	13
A692229	RL12016	Grab	440319	5653718	356	10/17/2012 15:58	I3C		Granodiorite	Red Lake shore line north of Skookum Bay	Pink, very coarse grained, massive, no obvious veins or foliation.	<5
A692230	RL12017	Grab	439977	5653531	356	10/17/2012 16:10	I3C		Granodiorite	Kinsman Beach area	Whitish pink, medium-coarse grained, massive, no obvious veins or foliation.	16
A692231	RL12018	Grab	442261	5651459	386	10/22/2012 13:58	E2A		Andesite	North of Red Lake Clinic	Well foliated, fine grained, medium grey intermediate volcanic. Foliation 080/75 to south.	<5
A692232	RL12019	Grab	442295	5651457	393	10/22/2012 14:08	E2A		Andesite	North of Red Lake Clinic	Well foliated, fine grained, medium grey intermediate volcanic. Foliation 080/near vertical.	<5
A692233	RL12020	Grab	442341	5651303	387	10/22/2012 14:34	E2A		Andesite	Red Lake Hospital power line	Massive, fine grained, medium grey intermediate volcanic with trace sulphides (pyrite).	<5
A692234	RL12021	Grab	442212	5651278	401	10/22/2012 14:58	I2A	I1A	Diorite-Gabbro	Red Lake Hospital power line	Massive coarse grained, greyish brown "Howey" diorite to gabbro... 1 to 2mm sized cubic pyrite <1%.	<5
A692235	RL12022	Grab	442067	5651280	393	10/22/2012 15:17	E2A		Andesite	Red Lake Hospital power line	Fine grained, grey well foliated intermediate volcanic. Foliation 070/near vertical.	<5
A692236	RL12023	Grab	441997	5651278	395	10/22/2012 16:00	E2A		Andesite	Red Lake Hospital power line	Medium grey fine graned sheared intermediate volcanic, shear foliation 060/80 to the south.	<5
A692237	RL12023	Grab	441997	5651278	395	10/22/2012 16:00	V3		Quartz Vein	Red Lake Hospital power line	Bluish white glassy tension quartz vein cutting across the above noted shear foliation. Other similar veins noted in the immediate area. Vein orientation 130/subvertical.	<5
A690520	RL12024	Grab	440381	5653381	380	10/22/2012 0:00	I3C		Granodiorite	Forestry Road area	Pinkish, fine grained, equigranular, massive granodiorite.	<5
A690521	RL12025	Grab	439526	5653720	380	10/23/2012 0:00	I3C		Granodiorite	Forestry Road area	Pinkish, fine grained, equigranular, massive granodiorite.	9
A690522	RL12026	Grab	439607	5653017	380	10/24/2012 0:00	I3C		Granodiorite	Forestry Road area	Pink, medium grained, equigranular, massive granodiorite. (Sampled alon a 15' high vertical cliff)	10
A690524	RL12028	Grab	440813	5652962	380	10/26/2012 0:00	I3C		Granodiorite	Forestry Road area	Pink, medium grained, equigranular, massive granodiorite.	<5
A692238	RL12029	Grab	442182	5651661	388	10/23/2012 13:31	E2A		Andesite	Near the Legion	Strongly foliated, pale green-grey fine grained intermediate volcanics. Folition 072/85 to south.	5
A692239	RL12030	Grab	442141	5651680	382	10/23/2012 13:59	E2A		Andesite	Near the Legion	Hasaga trenches just to the west of the Howey crown pillar fenced off area. Series of three shallowly blasted trenches crosscutting mineralization. Intermediate volcaninc with a significant proportion (approx. 20%) of quartz veins. Sample consists of silicified wallrock.	110
A692240	RL12030	Grab	442141	5651680	382	10/23/2012 13:59	V3		Quartz Vein	Near the Legion	Glassy white quartz veins with abundant black seams (tourmaline) and moderate to coarse pyrite (approx. 2 to 3%).	82957
A692241	RL12031	Grab	441599	5651336	375	10/23/2012 14:53	E2A	V3	Andesite	Westerlund power line	Strongly sheared and intensively silicified what is assume is assumed to be intermediate volcanics locally numerous irregular quartz-tourmaline veins (these could not be sampled due to smoothness of outcrop). Shear fol. 065/85 to south and viens 080 to 095/subvertical. Sample consists of highly silicified intermediate volcanics with ripped up quartz veinlets with no obvious sulphides.	371
A692242	RL12032	Grab	441681	5651371	374	10/23/2012 15:13	E2A		Andesite	Westerlund power line	Strongly sheared intermediat volcanic with foliation 068/subvertical . White glassy quartz veins cut the foliation at a shallow angle.	75
A692243	RL12033	Grab	442083	5651577	391	10/23/2012 15:49	E2A		Andesite	Near old Hasaga Shaft	Highly foliated bleached fine grained intermediate volcanic(?) Colour is pale yellow green making this possibly felsic. Foliation is 242/85 to north.	57
A692244	RL12034	Grab	441209	5651657	384	10/24/2012 10:53	I3C		Granodiorite	Edwards Street Trail	Whitish pink, massive medium grained granodiorite with jointing about 5cm spacing along 060/subvertical.	68
A692245	RL12035	Grab	441172	5651664	386	10/24/2012 10:59	I3C		Granodiorite	Edwards Street Trail	Pinkish grey massive medium to coarse grained granodiorite.	49
A692246	RL12036	Grab	441272	5651543	386	10/24/2012 11:17	I3C		Granodiorite	Edwards Street Trail	Greyish pink medium grained, massive granodiorite.	183
A692247	RL12037	Grab	441526	5652151	377	10/24/2012 11:33	I3C		Granodiorite	Forestry Road area	Grey , medium grained, massive granodiorite.	27
A692248	RL12038	Grab	440953	5652779	382	10/25/2012 9:54	I3C		Granodiorite	Forestry Road area	Pink, massive fine grained granodiorite.	15
A692249	Standard	Pulp										786
A692250	Blank	Core										<5
A691401	RL12039	Grab	440851	5652588	382	10/25/2012 10:23	I3C		Granodiorite	Skookum Trail	Pink to grey, medium grained massive granodiorite.	16
A691402	RL12040	Grab	440695	5652595	387	10/25/2012 10:47	I3C		Granodiorite	Skookum Trail	Pink , massive, medium grained granodiorite.	38
A691403	RL12041	Grab	439906	5652384	407	10/25/2012 11:15	I3C		Granodiorite	Skookum Trail	Pink , massive, medium grained granodiorite.	7
A691404	RL12042	Grab	439604	5652248	385	10/25/2012 11:43	I3C		Granodiorite	Skookum Trail	Grey to pink , massive, coarse grained granodiorite.	33
A691405	RL12043	Grab	439269	5652204	366	10/25/2012 12:01	I3C		Granodiorite	Skookum Trail	Pink , massive, medium grained granodiorite. Some nearby chalky quartz stringers.	38

Figure 4. Spatial plot of gold values around the Red Lake Town Site property, along with apparent and possible gold anomaly trends.

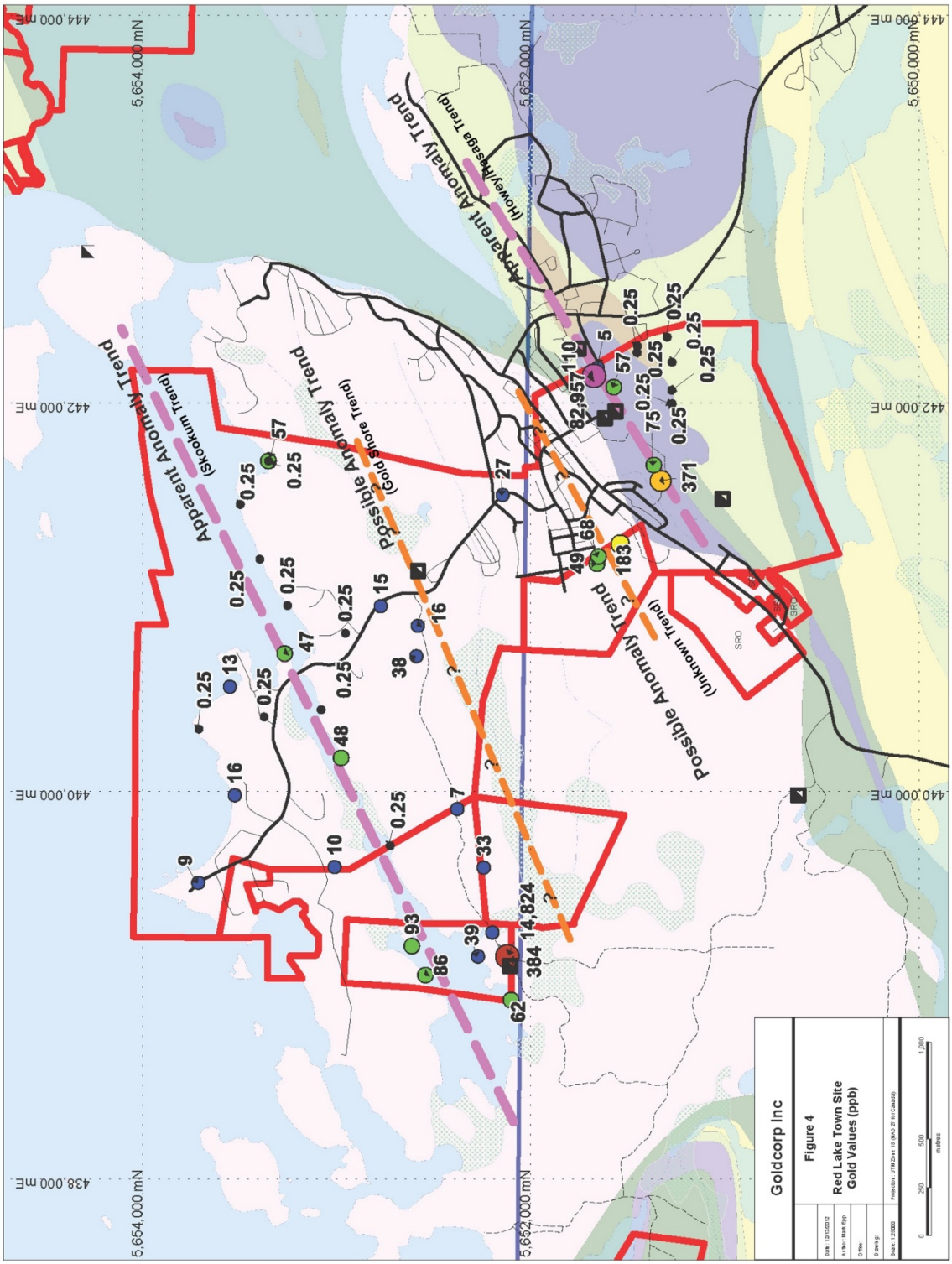
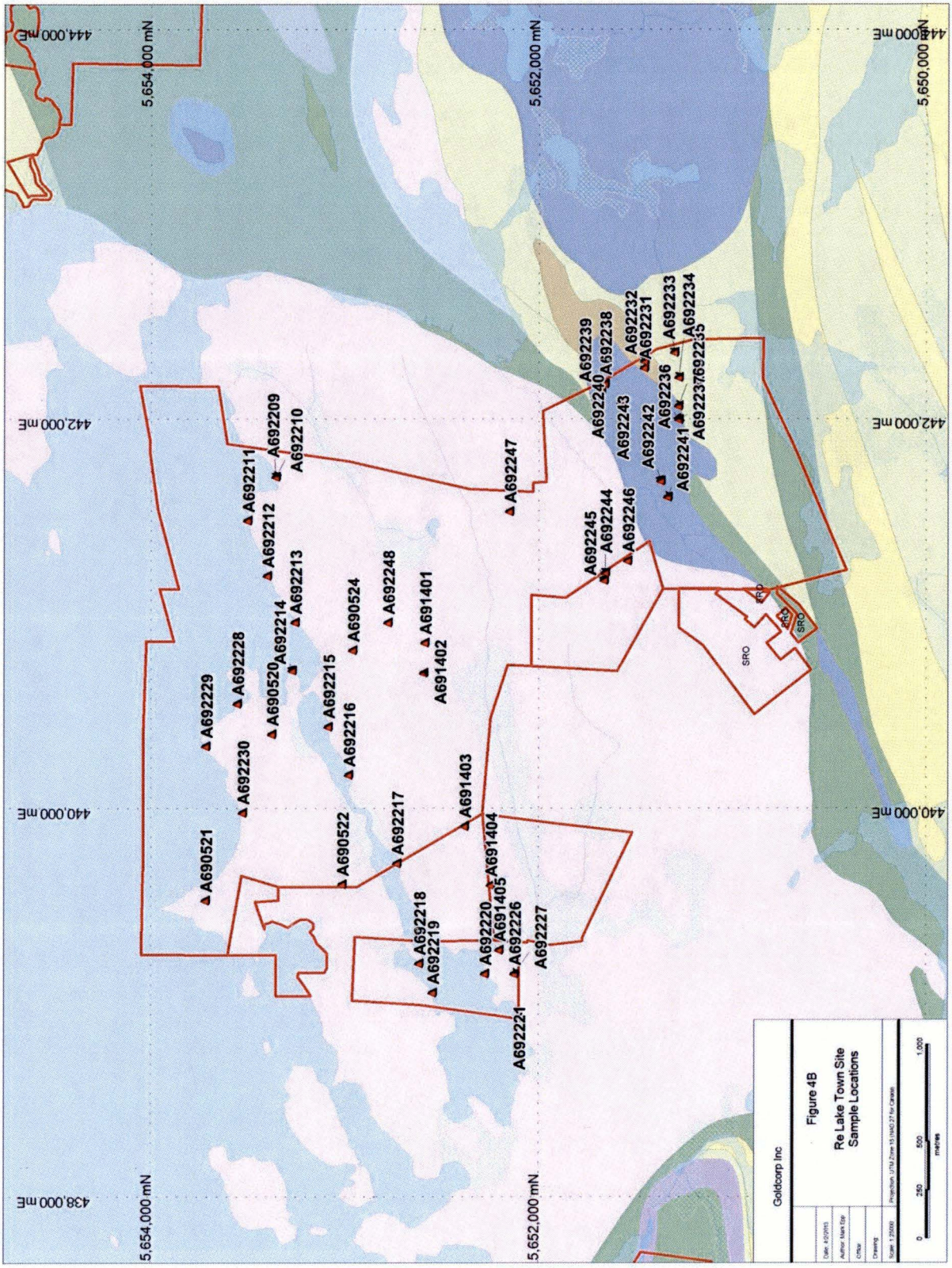


Figure 4B. Map showing sample locations within the Red Lake Town Site property.



with the trend of the quartz porphyry dyke which hosts the mineralization. As noted before, the best grades seem to be associated with narrower portions of the quartz porphyry dyke (<40 feet wide) where the dyke was more easily tectonized, improving permeability and the subsequently mineralized.

Two other possible anomaly trends are also suggested on Figure 4. The more northerly Gold Shore trend only shows a number of low anomalous values in the wall rocks to the north of the proposed trend, however, it is quite possible due to the low lying swampy trend along an ~70 degree azimuth, that higher grading samples are not exposed at surface. This interpretation is supported by historic information indicating that the primary mineralized shear at the Red Lake Gold Shore Mine ran roughly in this same direction. Further sample collection work should be pursued along both sides of this projected trend to confirm this interpretation. The other proposed mineralization trend is just north and runs parallel to the Howey/Hasaga trend in the southern most portion of the Dome Stock. This anomalous mineralization was quite unexpected since there was no significant alteration of the granodiorite located at these sample sites, however, these samples were taken on either side of a steep ravine, suggesting the presence of a significant fault. The proximity to the southern Dome Stock contact is also favourable since gold-rich fluids seem to have been channeled along major shear structures in this area.

Conclusions and Suggestions for Future Work

From historic, airborne magnetic, surface structural and gold assay data, there appears to be good evidence of several 060° to 070° trending anomalous gold bearing structures cutting across the claims that make up the Red Lake Town Site property. Two of these trends were associated with structures that had historic economic resource extraction.

From the conclusions made in the previous text, a proposal for continuing work on this property could proceed as follows:

1. Initiate a follow-up rock geochemistry sampling project to bring up the density of samples in the areas of “highest interest” as well as in areas of lower sample density due to limited time and access.

2. Complete trace element analysis on all rock pulps to determine if trace element anomalies define know and potential unknown gold occurrences.

3. Perform a modern detailed airborne magnetics survey to better define the subtle ore bearing shear structures internal to the Dome Stock. These important shear structures appear to trend 060/subvertical, with local land forms suggesting that these structures may repeat every 200m to 300m spacing across the southern part of the stock.

4. With positive results from the previously defined steps, a modest drill program could be proposed to transect the most promising east-west interpreted structures. Holes could be as short as 150m in length, and could conclusively confirm the presence of mineralization within these proposed structures.

References:

1. Chisholm, E.O., 1948, Goldcorp internal document entitled: “Visit to Buffalo Red Lake Property”, 1 page.

2. Ferguson, S.A., 1966, Geology of Dome Township, District of Kenora. Ontario Department of Mines, Geological Report 45, 106 p.

3. Ferguson, S.A., 1968, Geology of Heyson Township, District of Kenora. Ontario Department of Mines, Geological Report 56, 60 p.

4. Horwood, H.C., 1945, Geology and Mineral Deposits of the Red Lake Area: Ontario Department of Mines, v.49 pt. 2, 231 p.

5. Sanborn-Barrie, M., Rogers, N., Skulski, T., Parker, J., McNicoll, V., and Devaney, J., 2004. Geology and Tectonostratigraphic Assemblages, East Uchi Subprovince, Red Lake and Birch-Uchi belts, Ontario: Geological Survey of Canada, Open File 4256; Ontario Geological Survey, Preliminary Map P. 3460, scale 1:250 000.

Statement of Qualifications

I, **Mark Epp**, of 17 Pugsley St., Red Lake, Ontario, do hereby certify that:

1. I hold a **Bachelor of Science Degree in Geology (1989)** from Carleton University, Ottawa, Ontario, and a **Master's of Science Degree in Geology (1997)** from McMaster University, Hamilton, Ontario;

2. I have practiced my profession in Ontario, Québec and the Northwest Territories since 1987 and have been employed directly by several large mining and exploration companies as well as the Ontario Geological Survey;

3. I have been an employee of Goldcorp Inc. Red Lake Gold Mines, based in Red Lake, Ontario, for over 17 years and am currently working in the position of Senior Regional Exploration Geologist;

4. I have supervised ongoing rock geochemical survey projects similar to that represented by the Red Lake Town Site project. I consider this report to be accurate in all respects;

5. I have no personal interest in any of the mining claims pertaining to this report;

6. Permission is granted to Goldcorp Limited to use this report in all legality.

Date: January 14th of 2013 in Balmertown, Ontario.

Mark Epp
Senior Regional Exploration Geologist
Goldcorp Canada Limited
Red Lake Gold Mines

Appendix A (Gold Analysis Certificate)

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Tuesday, November 13, 2012

Final Certificate

GoldCorp Inc. (RL_Reg_Exp)
17 Mine Rd., Bag 2000
Balmertown, ON, CAN
P0V1G0
Ph#: (807) 735-2077
Fax#: (807) 662-4512
Email: Pascal.Chantigny@goldcorp.com, rlgmregassay@goldcorp.com

Date Received: 11/09/2012
Date Completed: 11/13/2012
Job #: 201244268
Reference: RUSH Batch 5
Sample #: 47

Acc #	Client ID	Au ppb	Au oz/t	Au g/t (ppm)
309915	A692209	57	0.002	0.057
309916	A692210	<5	<0.001	<0.005
309917	A692211	<5	<0.001	<0.005
309918	A692212	<5	<0.001	<0.005
309919	A692213	<5	<0.001	<0.005
309920	A692214	47	0.001	0.047
309921	A692215	<5	<0.001	<0.005
309922	A692216	48	0.001	0.048
309923	A692217	<5	<0.001	<0.005
309924	A692218	93	0.003	0.093
309925 Dup	A692218	152	0.004	0.152
309926	A692219	86	0.003	0.086
309927	A692220	39	0.001	0.039
309928	A692221	62	0.002	0.062
309929	A692226	384	0.011	0.384
309930	A692227	14824	0.432	14.824
309931	A692228	13	<0.001	0.013
309932	A692229	<5	<0.001	<0.005
309933	A692230	16	<0.001	0.016
309934	A692231	<5	<0.001	<0.005
309935	A692232	<5	<0.001	<0.005
309936 Dup	A692232	<5	<0.001	<0.005
309937	A692233	<5	<0.001	<0.005
309938	A692234	<5	<0.001	<0.005
309939	A692235	<5	<0.001	<0.005
309940	A692236	<5	<0.001	<0.005
309941	A692237	<5	<0.001	<0.005
309942	A692238	5	<0.001	0.005
309943	A692239	110	0.003	0.110
309944	A692240	82957	2.420	82.957

PROCEDURE CODES: ALP1, ALFA1

Certified By: Dr. David Brown, VP Quality

The results included on this report relate only to the items tested.
The Certificate of Analysis should not be reproduced except in full, without the written approval of the laboratory.

AL903-0273-11/13/2012 5:20 PM

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Tuesday, November 13, 2012

Final Certificate

GoldCorp Inc. (RL_Reg_Exp)
17 Mine Rd., Bag 2000
Balmertown, ON, CAN
P0V1G0
Ph#: (807) 735-2077
Fax#: (807) 662-4512
Email: Pascal.Chantigny@goldcorp.com, rlgmregassay@goldcorp.com

Date Received: 11/09/2012
Date Completed: 11/13/2012
Job #: 201244268
Reference: RUSH Batch 5
Sample #: 47

Acc #	Client ID	Au ppb	Au oz/t	Au g/t (ppm)
309945	A692241	371	0.011	0.371
309946	A692242	75	0.002	0.075
309947 Dup	A692242	32	<0.001	0.032
309948	A692243	57	0.002	0.057
309949	A692244	68	0.002	0.068
309950	A692245	49	0.001	0.049
309951	A692246	183	0.005	0.183
309952	A692247	27	<0.001	0.027
309953	A692248	15	<0.001	0.015
309954	A692249	786	0.023	0.786
309955	A692250	<5	<0.001	<0.005
309956	A690520	<5	<0.001	<0.005
309957	A690521	9	<0.001	0.009
309958 Dup	A690521	6	<0.001	0.006
309959	A690522	10	<0.001	0.010
309960	A690524	<5	<0.001	<0.005
309961	A691401	16	<0.001	0.016
309962	A691402	38	0.001	0.038
309963	A691403	7	<0.001	0.007
309964	A691404	33	<0.001	0.033
309965	A691405	38	0.001	0.038

PROCEDURE CODES: ALP1, ALFA1

Certified By: Dr. David Brown, VP Quality

The results included on this report relate only to the items tested.
The Certificate of Analysis should not be reproduced except in full, without the written approval of the laboratory.

AL903-0273-11/13/2012 5:20 PM

Appendix B (Work Summary)

Geologist	Date	From time	To time	Hours	Work Done
Mark Epp	17-Oct-12	8:00AM	5:00PM	9	Sample collection along lake shore north of Red Lake townsite and in Skookum Bay areas.
	18-Oct-12	8:00AM	11:00AM	3	Data organization and entry.
	22-Oct-12	1:00PM	5:00PM	4	Sample collection around Red Lake Hospital area.
	23-Oct-12	9:00AM	10:00AM	1	Data entry.
	23-Oct-12	12:00PM	4:30AM	4.5	Sample collection around the Hasaga Shaft area.
	24-Oct-12	9:00AM	10:00AM	1	Data entry.
	24-Oct-12	10:00AM	12:00PM	2	Sample collection around Edwards Street and Forestry Road areas.
	25-Oct-12	9:30AM	1:00PM	3.5	Sample collection around the Forestry Road and Skookum Trail areas.
	25-Oct-12	1:00PM	2:00PM	1	Data entry.
	7-Nov-12	10:00AM	11:00AM	1	Sorting and packing rock samples for shipping
	12-Dec-12	7:00AM	4:30PM	9	Property research
	7-Jan-13	7:00AM	12:00PM	5	Perparing document
	9-Jan-13	1:00PM	4:00PM	3	Perparing document
	10-Jan-13	7:00AM	4:30PM	9	Perparing document
	14-Jan-13	7:00AM	10:00AM	3	Perparing document
Mitch Dumoulin	17-Oct-12	8:00AM	5:00PM	9	Sample collection along lake shore north of Red Lake townsite and in Skookum Bay areas.
	22-Oct-12	10:00AM	2:00PM	4	Sample collection around Forestry Road area.
Total Man Hours				72	