PATTON CREEK PLACER PROPERTY

DAWSON MINING DISTRICT, YUKON TERRITORY

Yukon Mineral Exploration Program

Grant Number YMEP14-047

2014 Final Report

by

William LeBarge

Geoplacer Exploration Ltd.

Location of property: 63°18'36"N to 63°19'26"N and 138°58'46"W to 139°4'22"W NTS map sheets: 115O/06 and 115O/07 Mining District: Dawson Date: December 30, 2014

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Executive Summary

This is the final report submitted under grant number YMEP14-047, under the Target Evaluation Module of the Yukon Mineral Exploration Program, for Geoplacer Exploration Ltd.

Patton Creek is an officially un-named right-limit tributary of Maisy May Creek. Access to the property is via secondary gravel roads with the total road distance from Dawson City to the Patton Creek placer claims approximately 140 kilometres. In addition, a bush airstrip lies 1.4 km northeast of the claims. The property consists of Placer Claims P515224 (Mila) and P515225 (Irina) and the Alex 1-31 placer claims (P516012-P516042).

Government royalty records show that Maisy May Creek produced at least 25,926 crude ounces of gold between 1980 and 2010, the majority of which (19,202 crude ounces) was mined by Queenstake Resources in the period 1984 to 1989. This production is coincident with the location of a thrust fault which trends NNW/SSE along Maisy May Creek, a fact which points towards a component of structural control to the gold mineralization in the drainage. A splay from this thrust fault crosses Maisy May Creek in a NW direction, transecting the lower reaches of Patton Creek. This fault trace is coincident with a linear magnetic high, and overlaps with both the high-grade hand-mined left limit bench on Patton Creek and the high-grade zone in Maisy May Creek mined by Queenstake Resources Ltd. Therefore, due to the spatial association between linear magnetic anomalies, bedrock faults, bedrock gold mineralization and historic placer mining activity, there is a strong possibility of significant bedrock and associated placer gold values in Patton Creek and its tributaries.

Exploration in 2014 consisted of resistivity geophysics, auger drilling, and excavator test pitting. The program was successful in defining the thicknesses of the gravel and muck in the location of the excavator pit, while the auger drilling in conjunction with the resistivity geophysical surveys confirmed the interpreted depths to bedrock. The auger drilling also confirmed the presence of angular fine gold, heavy minerals and accessory limestone in several of the holes; although no coarse gold grains were recovered. The angular nature of the fine gold particles may indicate input from a local bedrock gold source, and marble units are often associated with increased bedrock and placer gold mineralization in south Klondike drainages including Indian River and Ten Mile Creek.

The relative coarseness of the gold in the Maisy May drainages requires a bulk test of significant volume. Bulk samples of no less than 250 cubic metres each are recommended to be processed at two locations on Patton Creek. If time and equipment availability allows, these two initial bulk samples should be expanded across the valley floor. In addition, since magnetite is a significant component of the heavy minerals present, a GPS-referenced, ground-based magnetometer or gradiometer geophysical survey is recommended. This will allow for potential correlation of the magnetic geophysical response with the interpreted location of paleochannels as delineated by the resistivity geophysics. It will also provide a starting point for further bulk sampling should a good correlation exist between interpreted paleochannels from resistivity, magnetic geophysical anomalies and placer gold content in the creek gravels.

Introduction

This report is submitted as a final requirement for grant number YMEP14-047 under the Target Evaluation Module of the Yukon Mineral Exploration Program, for Geoplacer Exploration Ltd. on Patton Creek. Patton Creek is the local name for the un-named creek, a right-limit tributary of Maisy May Creek.

Dates of Work and Personnel

The work documented herein was conducted on the property between April 15 and September 2, 2014. The project manager was William LeBarge of Geoplacer Exploration Ltd. The heavy equipment operator was Bud Davis of La Tierra Resources Ltd. The geophysics and auger drilling contractors were James Coates and Astrid Grawehr of Kryotek Arctic Innovation Inc. Other contractors included Bedrock Mining Corporation Inc., which cleared snow and trees for the resistivity surveys with a Caterpillar D8R bulldozer and Tatra Ventures Ltd., which supplied the Caterpillar 225 excavator.

Location and Access

Maisy May Creek is a right limit tributary of the lower Stewart River, located in central Yukon approximately 100 km by air south of Dawson City, Yukon (Figure 1).

The Patton Creek Property is located on an un-named right-limit tributary of Maisy May Creek, which is locally known as Patton Creek. The placer claims and prospecting lease of the Patton Creek Property are all adjoining.

The extent of the current property is 63°18'36"N to 63°19'26"N and 138°58'46"W to 139°4'22"W; on NTS map sheets 1150/06 and 1150/07, in the Dawson Mining District (Figure 2, Figure 3; Plate 1).

Access to the property can be gained by fixed-wing air or summer road. Surface access is via secondary gravel roads - the usual route runs along Hunker Creek to King Solomon Dome, down Sulfur Creek to Indian River, up Eureka Creek to Eureka Dome, down Black Hills Creek to the Henderson road turnoff towards Henderson Dome. At Henderson Dome a south-fork turn leads down Maisy May Creek road towards the property. The total road distance from Dawson City to the Patton Creek placer claims is approximately 140 kilometres. A 600 metre-long "bush" airstrip is located in the valley of Maisy May Creek a distance of 1.4 km from the Patton Creek property. The geographic coordinates of the airstrip are 63°20'05"N and 138°59'02"W.



Figure 1 - General Location of Patton Creek Project, Yukon.

Placer Tenure

The Patton Creek placer claims are shown on Figure 3. Three-mile prospecting lease ID01112 was staked by William LeBarge for Geoplacer Exploration Ltd. on June 12, 2013. After completion of assessment work (Coates, 2014a) the prospecting lease was staked to claims on May 31, 2014. The Alex 1-31 claims were recorded on June 3, 2014 and are in good standing until June 3, 2015. Co-discovery claims P515224 (Mila) and P515225 (Irina) were staked by William LeBarge and Bud Davis for Geoplacer Exploration Ltd. on June 12, 2013. After completion of assessment work (Coates, 2014b) the two co-discovery claims are in good standing until December 12, 2015. All placer claims on the Patton Property were grouped, and the second phase of the program has gained the entire property further assessment which is not yet credited. Table 1 shows a summary of the current claim status for Patton Creek property.



Plate 1- View looking north (upstream) on Maisy May Creek at the confluence with Patton Creek, June 2013. Patton Creek in mid-foreground joins Maisy May Creek from the left side of the photo.

Table 1 - Claim Status, Patton Creek Property

Grant	Claim	Claim Owner	Recording	Staking Date	Claim Expiry	Status	Lease	Total	NTS Map Number
Number	Name		Date		Date			Excess Credit	
P 515224	Mila	Geoplacer Exploration Ltd - 100%	13/06/2013	12/06/2013	12/12/2015	Active	-	0	1150/07
P 515225	Irina	Geoplacer Exploration Ltd - 100%	13/06/2013	12/06/2013	12/12/2015	Active	-	0	1150/07
P 516012	Alex 1	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/07
P 516013	Alex 2	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/07
P 516014	Alex 3	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/07
P 516015	Alex 4	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/07
P 516016	Alex 5	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/07
P 516017	Alex 6	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/07
P 516018	Alex 7	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/06, 1150/07
P 516019	Alex 8	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/06, 1150/07
P 516020	Alex 9	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/06
P 516021	Alex 10	Geoplacer Exploration Ltd - 100%	03/06/2014	31/05/2014	03/06/2015	Active	ID01112	0	1150/06
P 516022	Alex 11	Geoplacer Exploration Ltd - 100%	03/06/2014	01/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516023	Alex 12	Geoplacer Exploration Ltd - 100%	03/06/2014	01/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516024	Alex 13	Geoplacer Exploration Ltd - 100%	03/06/2014	01/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516025	Alex 14	Geoplacer Exploration Ltd - 100%	03/06/2014	01/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516026	Alex 15	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516027	Alex 16	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516028	Alex 17	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516029	Alex 18	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516030	Alex 19	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516031	Alex 20	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516032	Alex 21	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516033	Alex 22	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516034	Alex 23	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516035	Alex 24	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516036	Alex 25	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06

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Grant Number	Claim Name	Claim Owner	Recording Date	Staking Date	Claim Expiry Date	Status	Lease	Total Excess Credit	NTS Map Number
P 516037	Alex 26	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516038	Alex 27	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516039	Alex 28	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516040	Alex 29	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516041	Alex 30	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06
P 516042	Alex 31	Geoplacer Exploration Ltd - 100%	03/06/2014	02/06/2014	03/06/2015	Active	ID01112	0	1150/06



Figure 2 – Location of Patton Creek Placer Project and South Dawson region placer tenures.



Figure 3 - Patton Creek placer claims, local access roads, major faults and adjacent placer claims.

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Permitting

A Type B Water Use Licence (PM13-053) for Placer Mining and a Class 4 Mining Land Use Permit (#AP13053) are currently in place for all claims within the Patton Creek placer project. These permits are valid until February 4, 2024.

Quartz Tenure

The area of the Patton Creek placer project is coincident with the southern extent of the JP Ross property owned by Kinross Gold Corporation (Maisy claims). A Quartz Mining Land Use permit Class 3 (LQ00293) under Kinross Gold Corporation is in good standing until June 17, 2015. There is no perceived conflict between the proposed placer exploration activities of Patton Creek Mining Ltd. and the past or future quartz exploration activities of Kinross Gold Corporation.

History of Exploration and Mining - Maisy May Creek

The first documented mining activity on Maisy May Creek was by Maisy May Mines Ltd., who operated from 1980 to 1983 at a location about 11.7 km upstream of the confluence with the Stewart River.

According to Government royalty records, Maisy May Creek produced at least 25,926 crude ounces of gold between 1980 and 2010 (LeBarge, 2007; LeBarge and Nordling, 2011). The majority of that gold (19,202 crude ounces) was produced by Queenstake Resources in the period 1984 to 1989 (LeBarge, 2007). The area that Queenstake Resources mined is outlined in Figure 4.

Based on the work done during the 1984 season, Queenstake estimated that with selective mining, there were (pre NI43-101, non "compliant") "reserves" of 200,000 cubic yards (152, 911 cubic metres) of gravel with a recoverable grade of 0.012 ounces of fine gold per cubic yard (0.488 grams per cubic metre) at the property (LeBarge, 2007).

From 1990-1993, Jasper Equipment continued mining upstream from where Queenstake had finished mining in 1989, recovering approximately 2,650 crude ounces (LeBarge, 2007).

From 1993 to 1998, John VanEvery and Richard Fitch intermittently mined under VanEvery Inc. upstream near the headwaters of Maisy May Creek (LeBarge, 2007). Art Christiansen operated a small mine in the same area from 2007 to 2009 (LeBarge and Nordling, 2011). Mr. Christiansen was active in the area again in 2013 and 2014.

35249 Yukon Inc. mined Maisy May Creek approximately 3.5 miles (5 km) upstream from its confluence with the Stewart River from 2001 until 2003. Maisy Mae Mining Inc. bought the operation in 2006 and processed a mine cut in 2007 and 2008 located about 4 miles (7 km) upstream of the confluence (LeBarge and Nordling, 2011). The claims were later returned to 40419 Yukon Inc, which conducted a limited test program in late 2014.

H.C. Mining Ltd. conducted a test mining program on an upper right-limit Maisy May tributary in 2012, 2013 and 2014.

In 2013, Bedrock Mining Ltd. bought many of the Maisy May Creek claims (in the middle reaches) from 40419 Yukon Inc., and subsequently conducted a program of camp and access construction as well as limited test mining. In 2014, the test mining was expanded to an area on Maisy May creek downstream of the confluence of Candace Creek and just upstream of the 2014 test cut of 40419 Yukon Inc.

Candace Creek Mining Ltd. conducted a placer testing program on left-limit tributary Candace Creek (also known as Moosetooth Creek) in 2013 and 2014. The program consisted of access construction, resistivity geophysics, sonic drilling, auger drilling, bulldozer trenching and excavator test-pitting.



Plate 2 - View looking west of the mid- and upper reaches of Patton Creek (June 2013).



Figure 4 – Patton Creek, Candace Creek and Maisy May Creek - Location of adjacent properties and historical mining activity.

Exploration History - Patton Creek and Adjacent Maisy May Creek

Queenstake Resources (1987) mentions that hand-mining took place on a left-limit bench at the mouth of Patton Creek, beginning in the 1920s. This work was done by a Mr. Patton, for whom the creek is named. Reportedly 500 crude ounces were recovered during this time, although this is not recorded in any government royalty records. The area of these old bench workings is shown on Figure 4 and Figure 9.

In the early 1930s and again in the late 1970s, Mr. J. McDiarmid and partners (Maisy-May Mines Ltd.) dug hand shafts on Maisy May Creek beginning 1 mile from the confluence with Stewart River (Queenstake 1987a, 1987b). The best values encountered both times were at the mouth of Patton Creek (Queenstake, 1987a).

Queenstake Resources Ltd. had Patton Creek staked as a one-mile lease (PL6352) in 1987. Although no work by Queenstake is known on Patton Creek, a mining cut on Maisy May just downstream of the mouth of Patton Creek was the highest grade gravel they encountered (Queenstake 1987a; G. Gutrath 2013 pers. comm.). A total of 3892 fine ounces (at a fineness value of 780) was recovered in this area over a 300 foot mining width. The average grade was 0.016 fine oz/cubic yard (0.65 grams/cubic metre) although grades were encountered up to 0.019 fine oz/cubic yard (0.773 grams/cubic metre). This mined area is shown in Queenstake's report and on Figure 4.

Mr. Wayne Lerner also staked Patton Creek as a one-mile prospecting lease on Sept. 14, 1992. Some evidence of small collapsed excavations can be seen although no documented results of that work have been found.

Regional Bedrock Geology

The project area is situated within the Yukon-Tanana terrane, an accreted pericratonic sequence that covers a large part of the northern Cordillera from northern British Columbia to east-central Alaska (Gordey and Ryan, 2005; Colpron and Nelson, 2006). The Yukon Tanana Terrane consists of Paleozoic schist and gneiss that were deformed and metamorphosed in the late Paleozoic, and intruded by several suites of Mesozoic intrusions that range in age from Jurassic to Eocene (Colpron and Nelson, 2006). The Paleozoic rocks are pervasively foliated with at least two overprinting fabrics (MacKenzie and Craw, 2010; MacKenzie et al, 2008). During Late Permian to Early Jurassic time these rocks were tectonically-stacked along thrust faults which were parallel to regional foliation. Later tensionalextensional tectonics occurred during the mid-Cretaceous, and this resulted in brittle fracture of the Paleozoic rocks, which is likely responsible for structurally-controlled gold mineralization in the south Klondike area including the White Gold exploration camp (MacKenzie et al, 2008; MacKenzie and Craw, 2010; MacKenzie and Craw, 2012).

Regional Geophysics and Major Structures

Enhanced Residual Total Magnetic Field is shown in Figure 5, and First Vertical Derivative of Enhanced Magnetic Field is shown in Figure 6 (after Hayward et. al. 2012). The maps show several northwest-trending anomalies which may coincide with major structures and lineaments. At the lower reach of Patton Creek and trending NW along the left-limit tributary is a linear geophysical high, coincident with a fault trace mapped by MacKenzie and Craw (2012). For reference this fault trace is overlain on Figures 5 and 6. These structures and their associated cross-faults are thought to be related to structurally-controlled gold mineralization in brittle units of the Yukon Tanana Terrane including orthogneiss, amphibolite and quartzite (MacKenzie and Craw, 2010) and have been linked to the gold occurrences in the Coffee Creek area to the south (Wainwright et al., 2011). Figures 4, 5 and 6 show that the trace of this geophysical anomaly and structure across Maisy May and the lower reach of Patton Creek coincide with both the high grade placer gold zone mined in Maisy May Creek by Queenstake Resources Ltd., and the hand-mined placer gold reported from the Patton Creek left-limit bench.



Figure 5 - – Enhanced Residual Total Magnetic Field, Maisy May Creek area, modified from Hayward et. al. (2012). Fault traces overlain from MacKenzie and Craw (2012) and YGS (2014).



Figure 6 – First Vertical Derivative of the Enhanced Magnetic Field, Patton Creek, modified from Hayward et. al. (2012). Fault traces overlain from MacKenzie and Craw (2012) and YGS (2014).

Regional Surficial Geology

Most of the south Klondike region has not been glaciated (Duk-Rodkin, 1999) and in fact strong evidence exists that all of Maisy May creek and most of Black Hills Creek escaped glaciation altogether (Jackson et al., 2001). As such, the south Klondike region is dominated by colluvium on the upper slopes and ridges, variably-buried Tertiary to Late Pleistocene alluvial terraces in mid-slope reaches and Late Pleistocene to modern alluvial fans, stream complexes and gulch deposits in the lowermost points of valleys (Jackson, 2005a; Jackson, 2005b). Major trunk valleys such as the Stewart River were the locale for meltwater channels during the Pleistocene glaciations and contain glaciofluvial terraces well beyond the maximum extent of the Cordilleran ice, however these did not affect most major tributaries (such as Black Hills, Maisy May and Henderson creeks) except at their confluence.

Property Bedrock Geology

Maisy May Creek area bedrock is mapped as several metamorphic, metaplutonic and volcanic bedrock types (Figure 7). These include Devonian-Mississippian quartz-mica schist (map unit DMps), orthogneiss (map units DMt, DMag, DPg), marble (map unit DMc), amphibolite (map unit DMa), Paleozoic ultramafic-gabbro (map unit mPum) and Upper Cretaceous Carmacks volcanics (map unit uKCv).

Gordey and Ryan (2005) show that the Patton Creek transects quartz-mica schist (DMps) at the mouth, orthogneiss (DMt) in the mid-reaches and marble (DMc) in the mid- to upper reaches. Geological contacts trend N-S and NNW-SSE. Recent mapping by MacKenzie and Craw (2012) shows a thrust fault trending SE-NW along Maisy May Creek and several associated E-W and W-NW trending faults. One fault which appears to be a splay from the Maisy May thrust fault transects the lower portion of Patton Creek from SE to NW, roughly following the valley of the upper part of the lowermost left-limit tributary of Patton Creek, which is the location of the two co-discovery claims (Figure 7).

Property Surficial Geology

Along Patton Creek lie surficial units of several ages and types, as mapped by Jackson (2005a) and shown in Figure 8. These include: CEaP/AtT (Pleistocene Colluvial-Aeolian sediments overlying Tertiary Alluvial Terrace sediments) on the left limit of Patton at the confluence with Maisy May Creek; CEaP (Pleistocene Colluvial-Aeolian sediments) along the southern slope of the valley (right limit); and Cb-v (Colluvial blanket-veneer) on the hills above the creek.

Much of the valley centre is mapped as Cx (Colluvial complex); however field examination by the author in 2013 and 2014 revealed that the centre of the narrow valley should be mapped as ACxP (Pleistocene Alluvial Complex sediments) and Ax (alluvial complex sediments). In addition, field observations reveal that the buried Tertiary alluvial terrace found at the mouth continues up the valley some distance, and therefore parts of the valley on both sides should be mapped as CEaP/AtT (Pleistocene Colluvial-Aeolian sediments overlying Tertiary Alluvial Terrace sediments). The scale of regional mapping by Jackson (2005a, 2005b) was too large to include that level of detail in the published surficial maps.



Plate 3 - View looking downstream (southeast) of Patton Creek at its confluence with Maisy May Creek, June 2013. The approximate trace of the fault which transects Maisy May from Candace Creek to Patton Creek can be discerned as running from the linear drainages in the distance to the location of the observer.



Plate 4 - Similar view to Plate 3 aerial photo rendered in Google Earth, with fault traces of Mackenzie and Craw (2012) overlain.



Figure 7 - Bedrock Geology: Maisy May and Patton Creeks, after Gordey and Ryan (2005); MacKenzie and Craw (2012) and Yukon Geological Survey (2014). Rock unit legend in text.



Figure 8 - Surficial Geology, Patton Creek, after Jackson (2005a, 2005b). Fault traces overlain from MacKenzie and Craw (2012) and YGS (2014). Surficial unit legend in text.



Figure 9 - Location of 2014 resistivity lines, 2013 and 2014 test pits and 2014 auger drill holes on Patton Creek.

2014 Exploration Program

The 2014 exploration program on Patton Creek consisted of resistivity geophysics, auger drilling, excavator test-pitting, geological logging of drill hole and test pits, and processing of test pit and drill hole samples for gold and heavy minerals. The April 2014 resistivity program was aided by the Caterpillar D8R bulldozer (Bedrock Mining Company Ltd.) which stripped snow and small willows from along the resistivity lines.

Resistivity Geophysics

Methodology and Background

The geophysical contractor for 2014 was Kryotek Arctic Innovation Inc. Resistivity was selected as the electrical properties of silt, gravel and schist bedrock are distinct and usually easily definable. A Lippmann 4-point Resistivity System was used, which allowed up to 40 m (130ft.) of depth penetration. The start and end points of each survey line were measured in the field using a Garmin 60CSx GPS. Data was collected and inverted using AGI Earth Imager 2D software. Noisy data points and electrodes with poor contact resistance were removed and data was filtered for spikes or depressions in resistivity. The software produced two-dimensional tomograms using a smoothed, least squares damped and robust inversion parameters. The images were interpreted by James Coates.

2014 Geophysical Program

In early April of 2014, two lines of geophysics were conducted along Patton Creek on Prospecting Lease ID01112 (later converted to the Alex1-31 claims). Line PC A was surveyed a short distance up left limit tributary Mila Creek, while line PC B was surveyed on the left limit of Patton Creek just downstream from the mouth of Mila Creek. In June 2014, resistivity geophysical lines MC A and IC A were surveyed on Mila Creek on the Mila and Irina co-discovery claims. In August 2014, resistivity line PC C was surveyed on Patton Creek on the Alex 3 placer claim.

The locations of the profiles are shown on the map (Figure 9), and the resistivity profiles themselves are shown as Figures 10, 11, 12, 13 and 14. Overlapping auger drill holes and test pit locations are also plotted on the profiles where appropriate.

The geographic coordinates of the start and end points of each profile are given in Table 2, as well as their respective lengths and drilled or interpreted maximum depths to bedrock. The total length of all geophysical surveys conducted in 2014 is 844 ft. (257 m).

Line Endpoint	Latitude Decimal Degrees	Longitude Decimal Degrees	Latitude DMS	Longitude DMS	Length of survey (ft.)	Maximum depth to bedrock (ft.)
PC A start	63° 19' 12.0" N	138° 59' 6.18" W	63.32 N	-138.98505 W		
PC A end	63° 19' 12.1" N	138° 59' 9.50" W	63.32003 N	-138.985972 W	165	11 (drilled)
PC B start	63° 19' 10.4" N	138° 58' 54.50" W	63.319555 N	-138.981806 W		
PC B end	63° 19' 9.1" N	138° 58' 53.60" W	63.319194 N	-138.981555 W	138	9 (drilled)
PC C start	63° 19' 9.8" N	138° 59' 20.600" W	63.319389 N	-138.989056 W		
PC C end	63° 19' 7.1" N	138° 59' 18.600" W	63.318639 N	-138.9885 W	299	19 (drilled)
MC A Start	63°19'19.1" N	138° 59′ 19.8″ W	63.321972 N	-138.988833 W		
MC A end	63°19'19.7" N	138° 59' 18.0" W	63.322139 N	-138.988333 W	102	15 (est.)
IC A start	63°19'26.6" N	138° 59′ 33.2″ W	63.324056 N	-138.992556 W		
IC A end	63°19'27.8" N	138° 59′ 31.7″ W	63.324389 N	-138.992139 W	140	12 (est.)

Table 2 - Geographic Coordinates and Lengths of 2014 Resistivity Geophysical Surveys



Figure 10 - Drill holes PC A 14 BH-01 to PC A 14 BH-07 and Mila test pit outline plotted on Kryotek Line PC A (Coates, 2014a). View looking downstream on Mila Creek. Line is shown in Figure 9.



Figure 11 – Drill holes PC B 14 BH-01 to PC B 14 BH-05 plotted on Kryotek Line PC B (Coates, 2014a). View looking downstream on Patton Creek. Line is shown in Figure 9.



Figure 12 - Drill holes PC C 14 BH-01 to PC C 14-02 plotted on Kryotek Line PC C (2014). View looking downstream on Patton Creek. Line is shown on Figure 9.



Figure 13 - Kryotek Resistivity Line MC A (Coates, 2014b). View looking upstream on Patton left limit tributary Mila Creek. Interpretation shows a shallow gravel channel approximately 3.5 metres thick, just east of the current stream. This line is shown on Figure 9.



Figure 14 - Kryotek Resistivity Line IC A (Coates, 2014b). View looking upstream on Patton left limit tributary Mila Creek. Interpretation shows a shallow gravel channel approximately 3.5 metres thick, just east of the current stream. This line is shown on Figure 9.

Auger Drilling

Table 3 lists the geographic coordinates of the drill hole collars and depths to bedrock for the 2014 auger drilling program on Patton Creek. The drill hole collars are plotted on Figure 9, and Placer Drill Logs are contained in Appendix A.

Sixteen 6-inch diameter auger drill holes were completed in 2014, for a total of 167 feet (50.9 metres) of drilling. Nine of the drill holes were collared on resistivity line PC A (on Mila Creek); five of the drill holes were collared on resistivity line PC B (on Patton Creek downstream of Mila Creek) and two of the drill holes were collared on resistivity line PC C (on Patton Creek upstream of Mila Creek).

Drill holes PC A14 BH-01 to PC A14 BH-07 were targeted to intersect a broad area of possible gravel on the left limit of Mila Creek on line PC A. Drill holes PC A14 BH-08 and PC A14 BH-09 were targeted on a narrow possible channel on the right limit of Mila Creek. These drill holes are all plotted on Figure 10.

Drill holes PC B14 BH-01 to PC B14 BH-05 (plotted on Figure 11) were targeted to intersect a broad area of possible gravel on the left limit of Patton Creek on line PC B. Drill holes PC C14BH-01 and PC C14BH-02 (plotted on Figure 12) targeted two possible channels on Patton Creek upstream of Mila Creek, on resistivity line PC C.



Plate 5 - Auger drilling on Patton Creek tributary Mila Creek, on resistivity line PC A.

Drill hole number	Latitude Decimal Degrees	Longitude Decimal Degrees	Latitude DMS	Longitude DMS	Depth to bedrock (ft.)	Total depth (ft.)
PC A 14 BH-01	63.319997	138.985456	63° 19' 11.988" N	138° 59' 7.642" W	9.0	11.0
PC A 14 BH-02	63.319994	138.985381	63° 19' 11.978" N	138° 59' 7.370" W	11.0	13.0
PC A 14 BH-03	63.319991	138.985262	63° 19' 11.968" N	138° 59' 6.943" W	7.0	undetermined
PC A 14 BH-04	63.319992	138.98532	63° 19' 11.973" N	138° 59' 7.151" W	10.0	14.0
PC A 14 BH-05	63.319989	138.985169	63° 19' 11.960" N	138° 59' 6.608" W	3.0	undetermined
PC A 14 BH-06	63.31999	138.985213	63° 19' 11.964" N	138° 59' 6.767" W	6.0	8.0
PC A 14 BH-07	63.319986	138.985064	63° 19' 11.951" N	138° 59' 6.231" W	6.0	10.0
PC A 14 BH-08	63.320001	138.985656	63° 19' 12.004" N	138° 59' 8.360" W	10.5	11.0
PC A 14 BH-09	63.319976	138.985667	63° 19' 11.914" N	138° 59' 8.400" W	11.0	11.5
PC B 14 BH-01	63.319512	138.981775	63° 19' 10.243" N	138° 58' 54.390" W	8.0	undetermined
PC B 14 BH-02	63.319435	138.981722	63° 19' 9.965" N	138° 58' 54.198" W	8.0	undetermined
PC B 14 BH-03	63.319376	138.981681	63° 19' 9.752" N	138° 58' 54.051" W	8.0	9.5
PC B 14 BH-04	63.319417	138.981709	63° 19' 9.900" N	138° 58' 54.153" W	9.0	9.0
PC B 14 BH-05	63.319358	138.981668	63° 19' 9.687" N	138° 58' 54.006" W	8.0	undetermined
PC C 14 BH-01	63.319278	138.988778	63° 19' 9.400" N	138° 59' 19.600" W	19.0	19.5
PC C 14 BH-02	63.319143	138.98871	63° 19' 8.913" N	138° 59' 19.357" W	16.0	16.5

Table 3 - Geographic coordinates of 2014 auger drill holes, Patton Creek

Bulldozer vegetation clearing and excavator test-pitting

In mid-April, a Caterpillar D8R bulldozer was used to strip snow and small trees to facilitate conducting geophysical survey lines PC A on Mila Creek and PC B on Patton Creek.

The Caterpillar 225 excavator (equipped with a "frost bucket") was brought to Patton Creek in August, and proceeded to dig a test pit (MILA14-01) on resistivity line PC A after completion of the auger drilling. The test-pit was centred on auger drill holes PC A14 BH-02 and PC A14BH-04, and the pit outline is shown on Figure 10. The pit dimensions were 23 ft. (7 m) by 16 ft. (5 m) with a depth of 15 ft. (4.5 m).

Stratigraphy exposed in the excavator test-pit (Plate 6) consisted of 6 to 8 feet (1.8-2.5 m) of organics and black muck (with minor gravel lenses), overlying 3 to 4 feet (0.9-1.2 m) of angular, poorly-sorted sandy pebble-cobble gravel with muck lenses, overlying 2 to 3 feet (0.6-0.9m) of decomposed, green chlorite schist.



Plate 6 - Excavator test-pit MILA14-01 on Patton Creek tributary Mila Creek, located on geophysical line PC A.

Sample Processing

Samples from the drill holes and the excavator test-pit were processed by hand using a "Le Trap" long tom sluice with a hopper feeder (Plate 7). A Honda 1.5 inch pump supplied the water for sluicing and panning. Sluice concentrates were obtained from the Le Trap sluice and hand-panned to recover final gold and heavy minerals.

Gold and Heavy Mineral Results

Table 4 documents the gold and heavy mineral results from the drill sampling, panning and excavator test pits, along with approximate volume of each sample and comments on the types of material encountered.



Plate 7 - Drill samples and excavator test-pit samples were processed on the "Le Trap" sluice and hand-panned to a final concentrate.

Sample number	Drillhole or Pit number	Gold	Heavy minerals	Approximate Volume Processed	Comments
PC A 14 BH-01	PC A 14 BH-01	3 angular small colours, 5 very fine colours	Fine magnetite	30 litres	3 ft. of sandy gravel
PC A 14 BH-02	PC A 14 BH-02	2 very fine colours	Fine magnetite	30 litres	3 ft. of sandy gravel
PC A 14 BH-03	PC A 14 BH-03	not seen	Fine magnetite	15 litres	muck
PC A 14 BH-04	PC A 14 BH-04	1 fine colour	Fine magnetite	20 litres	6 ft. of sandy gravel
PC A 14 BH-05	PC A 14 BH-05	not seen	Fine magnetite	0.5 pan	muck
PC A 14 BH-06	PC A 14 BH-06	1 very fine colour	Fine magnetite	24 litres	1.5 ft. sandy gravel
PC A 14 BH-07	PC A 14 BH-07	2 fine angular colours	Fine magnetite	30 litres	6 ft. of silty sandy gravel
PC A 14 BH-08	PC A 14 BH-08	1 fine angular colour	Fine magnetite	40 litres	6 ft. of gravel
PC A 14 BH-09	PC A 14 BH-09	1 fine bright angular colour	Fine magnetite	30 litres	11 ft. of sandy gravel
PC B 14 BH-01	PC B 14 BH-01	6 very fine colours	Fine magnetite	30 litres	8 ft. of sandy gravel
PC B 14 BH-02	PC B 14 BH-02	5 very fine colours	Fine magnetite	30 litres	8 ft. of sandy gravel
PC B 14 BH-03	PC B 14 BH-03	3 very fine angular colours	Abundant fine magnetite	1 pan	2 ft. of sandy gravel
PC B 14 BH-04	PC B 14 BH-04	4 very fine angular colours	Fine magnetite	30 litres	6 ft. of sandy gravel
PC B 14 BH-05	PC B 14 BH-05	no sample	no sample	no sample	muck, wet hole
PC C 14 BH-01	PC C 14 BH-01	not seen	Magnetite, pyrite, marble rock fragments	10 litres	4 ft. gravel, wet hole
PC C 14 BH-02	PC C 14 BH-02	not seen	Magnetite, pyrite, marble rock fragments	10 litres	2 ft. gravel, wet hole
WL14-01	-none-	1 colour	Magnetite, pyrite, marble rock fragments	1 pan	Stream gravels
MILA 2014-1	MILA 2014 Pit	3 fine colours	Magnetite, pyrite, marble rock fragments	40 litres	

Table 4 - Gold and Heavy Mineral Results, Patton Creek 2014 Exploration Program

Discussion of Results

Overall, the 6 inch diameter auger drill with the "permafrost" bit worked well. The correlation between drill holes and interpreted contacts from the resistivity surveys was fairly good – Figures 10, 11 and 12 show that there was relatively good correlation between the interpreted muck/gravel and gravel/bedrock contacts. In addition, test pit MILA 2014 (schematically drawn on Figure 10) shows a good correlation between the interpreted contacts and lithologies from resistivity, auger drill holes, and within the test pit. Recovery was relatively good except in drill holes PC B14 BH-05, PC C14 BH-01 and PC C14 BH-02; which were thawed and wet resulting in negligible sample recovery.

Figures 13 and 14 (Resistivity profiles MC A and IC A on Mila Creek, plotted on Figure 9) show a shallow gravel channel just east of the current stream location. These profiles were not drilled; however the depths to bedrock are interpreted to be 10 to 15 feet (3 to 4 metres) which is consistent with the results found further downstream on profile PC A.

Processing of most of the drill samples recovered some very fine, angular gold particles and a variety of heavy minerals of both fine and coarse fractions, including magnetite and pyrite. The presence of limestone rock fragments in concentrates is indicative of significant sediment input from a marble bedrock unit upstream on Patton Creek. A marble bedrock unit is mapped approximately one kilometre upstream and is shown on Figure 7.

The gravel volumes obtained by the auger drill and the bulk test from Mila Creek (Mila 2014-01) were relatively small, and although some fine gold was recovered it is expected that the majority of the placer gold in Patton Creek would be coarser, similar in grain size to gold found on Maisy May and Candace Creek. The 2014 samples therefore would not have been sufficient to gain a representative amount of placer gold in the drainage.

Conclusions and Recommendations

The 2014 exploration program was successful in defining the thicknesses of the gravel and muck in the location of the excavator pit, while the auger drilling in conjunction with the resistivity geophysical surveys confirmed the interpreted depths to bedrock.

The auger drilling also confirmed the presence of fine gold, heavy minerals and accessory limestone rock fragments in several of the holes, although no coarse gold grains were recovered. The angular nature of the fine gold particles may indicate input from a local bedrock gold source; and marble units are often associated with increased gold mineralization in south Klondike drainages including Indian River and Ten Mile Creek.

The relative coarseness of the gold in the Maisy May drainages requires a bulk test of significant volume, in order to obtain a representative example of the amount of gold present. This sampling should target intervals along the entire stratigraphic section as well as the gravel/bedrock contact. Therefore, bulk samples of no less than 250 cubic metres each are recommended to be processed at two locations near resistivity lines PC B and PC C, shown on Figure 9. The bulk samples should cover an area on bedrock of at least 10 metres by 10 metres. Given the expected thickness of 1.5-2.5 metres of gravel, each bulk sample would comprise a volume of up to 250 cubic metres. If time and equipment availability allows, these two initial bulk samples should be expanded across the valley floor.

In addition, since magnetite is a significant component of the heavy minerals present, a GPS-referenced, ground-based magnetometer or gradiometer geophysical survey is recommended for the area near resistivity line PC C (shown on Figure 9). This will allow for potential correlation of the magnetic geophysical response with the interpreted location of paleochannels as delineated by the resistivity geophysics. It will also provide a starting point for further bulk sampling should a good correlation exist between interpreted paleochannels from resistivity, magnetic geophysical anomalies and placer gold content in the creek gravels.

2014 Placer Exploration Program	Rate	Subtotal	GST	Total	Invoice #
Geoplacer Exploration Ltd Project management, geological mapping, sample processing	8 days@\$500/day	\$4,000.00	\$0.00	\$4,000.00	2014-001IN
Geoplacer Exploration Ltd Final Report Production	4 days@\$500/day	\$2,000.00	\$0.00	\$2,000.00	2014-002IN
La Tierra Resources Ltd Field assistance, equipment	8 days@\$350/day	\$2,800.00	\$140.00	\$2,940.00	2014-01
operation, sample processing					
La Tierra Resources Ltd Mobilization from Whitehorse to Patton Creek	700 km@0.62/km	\$434.00	\$21.70	\$455.70	2014-01
La Tierra Resources Ltd Fuel expenses		\$208.67	\$0.00	\$208.67	2014-01
Kryotek Arctic Innovation Inc Geophysical 2D Resistivity Surveys	2 surveys@\$952.50	\$1,905.00	\$95.25	\$2,000.25	GE2014A
Kryotek Arctic Innovation Inc Claim staking	31 claims plus posts	\$3,600.00	\$180.00	\$3,780.00	GP2014A
Kryotek Arctic Innovation Inc Geophysical 2D Resistivity Surveys	1 survey@\$800	\$800.00	\$40.00	\$840.00	GP2014B
Kryotek Arctic Innovation Inc Drilling and Geophysics	4 days@\$2000/day plus mob	\$9,500.00	\$475.00	\$9,975.00	GE2014C
Bedrock Mining Company Inc Caterpillar D8R with operator	11.25 hours@\$295/hr	\$3,318.75	\$165.94	\$3,484.69	#7
Tatra Ventures Ltd Caterpillar 225 excavator rental	18 hours @\$120/hr	\$2,160.00	\$108.00	\$2,268.00	#620341
Tatra Ventures Ltd mob and demob of excavator	26 hours@\$185/hr	\$4,810.00	\$240.50	\$5,050.50	#620341
Truck, ATV and Trailer - Geoplacer Exploration Ltd.	8 days@\$106/day	\$848.00	\$0.00	\$848.00	flat rate
Fuel for Truck	as per receipts	\$255.90	\$12.80	\$268.70	receipts
Camp costs	16 person	\$1,600.00	\$0.00	\$1,600.00	flat rate
	days@\$100/day				
Totals		\$38,240.32	\$1,479.18	\$39,719.50	

Statement of Qualifications – William LeBarge, Geoplacer Exploration Ltd.

I, William LeBarge, of 13 Tigereye Crescent, Whitehorse, Yukon, Canada, DO HEREBY CERTIFY THAT:

- 1. I am a Consulting Geologist with current address at 13 Tigereye Crescent, Whitehorse, Yukon, Canada, Y1A 6G6.
- 2. I am a graduate of the University of Alberta (B.Sc., 1985, Geology) and the University of Calgary (M.Sc., 1993, Geology Sedimentology)
- 3. I am a Practicing Member in Good Standing (#37932) of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).
- 4. I have practiced my Profession as a Geologist continuously since 1985.
- I am author of the report entitled: "PATTON CREEK PLACER PROPERTY, DAWSON MINING DISTRICT, YUKON TERRITORY, Yukon Mineral Exploration Program, Grant Number YMEP14-047, 2014 Final Report, by William LeBarge, Geoplacer Exploration Ltd.".
- 6. I am President and sole shareholder of Geoplacer Exploration Ltd., a Yukon Registered Company.
- 7. The aforementioned report is based on my personal observations and interpretation and compilation of previously existing data.

Dated this 30th day of December, 2014

William LeBarge, P. Geo.

William Leb Barge

Statement of Qualifications – James Coates, Kryotek Arctic Innovation Inc.

Education

- BSc. Physical Geography. University of Calgary
- MSc. Physical Geography. University of Ottawa
- PhD (incomplete) Civil Engineering. Universite Laval

Geology, Prospecting and Exploration Experience

Yukon Geological Survey

- Bedrock mapping assistant to Project Geologist Maurice Colpron, Livingston area
- Geological assistant to Placer Geologist William LeBarge
- Bostock Core Library technician

Kryotek Arctic Innovation Inc. - President

- 10,000 meter shallow geochemical drilling program conducted in White Gold Area Boulevard Property
- 2,000 meter shallow geochemical drilling program conducted in Stewart Area Henderson Property
- Developed drilling and geophysics techniques and technologies

Dark Side Drilling – Owner/Operator

- Rio Tinto Minerals Exploration/Drilling Contractor, Diavik Mine, Lac deGras NWT
- Geoplacer Exploration Ltd. Exploration/Drilling, Patton Creek, Candace Creek, Nines Creek
- Golden Predator Minerals Exploration/Drilling Contractor, Livingston, Yukon
- K-1 Mining Exploration/Drilling Contractor, 60 Mile River, Yukon
- Western Copper Corporation Drilling Contractor, Casino Minesite
- Casino Mining Corporation Drilling Contractor, Casino Minesite
- XStrata Minerals Drilling Contractor, Hackett River, Nunavut
- DeBeers Diamond Corporation Exploration/Drilling Contractor, Churchill Manitoba
- Sector Resources Canada Geophysics Contractor, Atlin, BC

Independent Prospecting Experience

Pelly River Placer Properties

- 2008 YMIP grant recipient
- Claims staked and prospected along Pelly River

McQuesten River Placer Properties

Whitehorse Copper Tailings Ponds Gold Property

• 2013 YMIP grant recipient

Atlin Placer Prospecting, Spruce Creek

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Appendix A - Placer Drill Logs



Date: August 27, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: <u>Patton Creek/UNRL Trib Maisy May</u>

Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCA14-BH-01	0-6 ft.	6 ft.	Muck	
PCA14-BH-01	6-9 ft.	3 ft.	Sand and muddy gravel	2 – 5 gal pails recovered
PCA14-BH-01	9-11 ft. EOH	2 ft.	Bedrock	
	Total thickness 11 feet			

Signature (Driller or Representative):



Date: August 27, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May

Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCA14-BH-02	0-7 ft.	7 ft.	Wood/muck	
PCA14-BH-02	7-8 ft.	1 ft.	Sand	
PCA14-BH-02	8-11 ft.	3 ft.	Gravel	2 – 5 gal pails recovered
PCA14-BH-02	11-13 ft.	2 ft.	Bedrock	
	Total thickness 13 feet			

Signature (Driller or Representative):



Date: August 27, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May Leas

Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCA14-BH-03	0-7 ft. EOH	7 ft.	Muck	1 – 5 gal pail recovered
	Total thickness 7 feet			

Signature (Driller or Representative):



Date: August 27, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: <u>Patton Creek/UNRL Trib Maisy May</u>

Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCA14-BH-04	0-5 ft.	5 ft.	Muck	
PCA14-BH-04	5-10 ft.	5 ft.	Sand and sandy cobbly gravel	1.25 - 5 gal pail recovered
PCA14-BH-04	10-14 ft. EOH	4 ft.	Bedrock	
	Total thickness 14 feet			



Date: August 27, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: <u>Patton Creek/UNRL Trib Maisy May</u> Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole
NumberIntervalThicknessMaterials EncounteredRemarks: Samples/ResultsPCA14-BH-050-3 ft. EOH3 ft.Muck, silt and ice½ pan of material recoveredImage: PCA14-BH-050-3 ft. EOH3 ft.Muck, silt and ice½ pan of material recoveredImage: PCA14-BH-05Image: PCA14Image: PCA14Image: PCA14Image: PCA14Image: PCA14-BH-05Image: PCA14Image: PCA144Image: PCA14Image: PCA144Image: PCA144Image: PCA1444Image: PCA1444Image: PCA14Image: PCA1444Image: PCA1444Image:

Signature (Driller or Representative):



Date: August 27, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: <u>Patton Creek/UNRL Trib Maisy May</u>

Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole	Interval	Thickness	Materials Encountered	Remarks: Samples / Results
Number	Interval	Thekness	Materials Encountered	Remarks. Samples/ Results
PCA14-BH-06	0-4.5 ft.	4.5 ft.	Muck	
PCA14-BH-06	4.5-6 ft.	1.5 ft.	Sand and gravel	1 ¹ / ₂ - 5 gal pails of material recovered
PCA14-BH-06	6-8 ft. EOH	2 ft.	Bedrock	
	Total thickness drille	ed 8 feet		

Signature (Driller or Representative):



Date: August 27, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May

Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCA14-BH-07	0-0.5 ft.	0.5 ft.	Moss	
PCA14-BH-07	0.5 ft6 ft.	5.5 ft.	Sandy gravel and silt	2 – 5 gal pails recovered
PCA14-BH-07	6-10 ft. EOH	4 ft.	Bedrock	
	Total thickness 10 feet			

Signature (Driller or Representative):



Date: August 27, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May

Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCA14-BH-08	0-4 ft.	4 ft.	Muck	
PCA14-BH-08	4-7 ft.	3 ft.	Sand and fine gravel	
PCA14-BH-08	7-10.5 ft.	3.5 ft.	Coarse and medium gravel	2.5 – 5 gal pails recovered
PCA14-BH-08	10.5-11 ft. EOH	0.5 ft.	Bedrock	
	Total thickness 11 feet			

Signature (Driller or Representative):



Date: August 28, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: <u>Patton Creek/UNRL Trib Maisy May</u>

Lease or Grant Numbers: <u>Alex 2 P 516013</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCA14-BH-09	0-11 ft.	11 ft.	Sand and gravel	2 – 5 gal pails recovered
PCA14-BH-09	11-11.5 ft. EOH	0.5 ft.	Bedrock	
	Total thickness 11.5 feet			8 ft. downstream from BH-08

Signature (Driller or Representative):



Date: August 28, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May Lease

Lease or Grant Numbers: <u>Alex 1 P 516012</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCB14-BH-01	0-8 ft. EOH	8 ft.	Muddy angular gravel	2 – 5 gal pails recovered
	Total thickness 8 feet			

Signature (Driller or Representative):



Date: August 28, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May Le

Lease or Grant Numbers: <u>Alex 1 P 516012</u>

Drill Hole	Intorval	Thickness	Materials Encountered	Romarks: Samples / Rosults
Number	Interval	THICKNESS	Materials Encountered	Remarks. Samples/ Results
PCB14-BH-02	0-8 ft. EOH	8 ft.	Muddy angular gravel	2 – 5 gal pails recovered
	Total thickness 8 ft. +/- 6 in. organics			

Signature (Driller or Representative):



Date: August 28, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May Lo

Lease or Grant Numbers: <u>Alex 1 P 516012</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCB14-BH-03	0-6 ft.	6 ft.	Muck	Wet hole, only 1 pan of material
PCB14-BH-03	6-8 ft.	2 ft.	Sand and gravel	recovered
PCB14-BH-03	8-9.5 ft. EOH	1.5 ft.	Bedrock	
	Total thickness 9.5 feet			



Date: August 28, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May Location

Lease or Grant Numbers: <u>Alex 1 P 516012</u>

Drill Hole	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
Number				1 '
PCB14-BH-04	0-1 ft.	1 ft.	Modern organics	
PCB14-BH-04	1-3 ft.	2 ft.	Sand	
PCB14-BH-04	3-9 ft. EOH	6 ft.	Sandy gravel ending in bedrock	2 – 5 gal pails material recovered
	Total thickness 9 feet			

Signature (Driller or Representative):



Date: August 28, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: <u>Patton Creek/UNRL Trib Maisy May</u> Lease or (

Lease or Grant Numbers: <u>Alex 1 P 516012</u>

Drill Hole	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
Number	11101104	1 11101111000		nemanor sampres/ nesare
PCB14-BH-05	0-8 ft.	8 ft.	Muck	Wet hole – no sample
	Total thickness 8 feet			

Signature (Driller or Representative):



Date: August 31, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May

Lease or Grant Numbers: <u>Alex 3 P 516014</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCC14-BH-01	0-15 ft.	15 ft.	Muck	Wet hole
PCC14-BH-01	15-19 ft.	4 ft.	Muddy gravel	¹ / ₂ - 5 gal pail recovered
PCC14-BH-01	19-19.5 ft. EOH	0.5 ft.	Bedrock	
	Total thickness 19.5 feet			

Signature (Driller or Representative):



Date: August 31, 2014

Driller: Dark Side Drilling

Date Stamp

Type of Drill: Quad mounted auger

Inside Diameter of Drill: 6 inch

Location: Patton Creek/UNRL Trib Maisy May

Lease or Grant Numbers: <u>Alex 3 P 516014</u>

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
PCC14-BH-02	0-14 ft.	14 ft.	Muck	Wet hole
PCC14-BH-02	14-16 ft.	2 ft.	Muddy gravel	¹ / ₂ - 5 gal pail recovered
PCC14-BH-02	16-16.5 ft. EOH	0.5 ft.	Bedrock	
	Total thickness 16.5 feet			

Signature (Driller or Representative):