

**2006 GEOLOGICAL and GEOPHYSICAL
ASSESSMENT REPORT ON THE HARLAN PROPERTY**

Comprising the Following Claims:

Cam 1-8, Harlan 3-7, 9-23, 39-50, 55-69, 71, 263, 265-274, 276-283

Located in the Dahl Mountain Area
Mayo Mining District
Yukon Territory, Canada
N.T.S. 105O/04, 05

Latitude: 63° 14' North
Longitude: 131° 40' West

Prepared for

650399 BC Ltd
Db: Alexco Resource Corp.
1920 – 200 Granville Street
Vancouver, BC, V6C 1S4

Prepared by
Melanie Roberts, BSc
Mike Stammers, P.Geo
Lou O'Connor, Geophysicist

Dates work performed: August 22-31, 2006

Date of Report: January 25, 2007

EXECUTIVE SUMMARY

The Harlan property is located in east-central Yukon, approximately 150 kilometres north-northeast of Ross River and 60 kilometres northwest of the North Canol Road (Yukon Highway #6). The Harlan Property consists of 75 contiguous quartz mining claims within NTS Sheets 105 O/4 and O/5 in the Mayo Mining District. The claims are owned by 650399 B.C. Ltd., a wholly owned subsidiary of Alexco Resource Corp (Alexco) and are all in good standing.

The Harlan property is located within the Paleozoic Selwyn Basin sedimentary package extending east-southeast from north-west of Dawson City to the Yukon-Northwest Territory border, north of the major northwest-southeast trending Tintina Fault. The package consists of shallow shelf to off-shelf marine clastic and chemical sediments and basinal clastic sediments, intruded by the Mid-Cretaceous Tombstone-Tungsten Suites which control much of the gold mineralization within the package. Multiple large scale east-southeast oriented thrust faults dip to the southwest and may be offset by later northeast-southwest high angle faults.

On the Harlan property, large thrust faulted units of Road River Group chert and graphitic argillite overlie broad units of Earn Group chert pebble conglomerate and minor siltstone. Multiple narrow, variably argillically altered and mineralized quartz monzonite to monzonitic dykes intrude the package.

In the Vortex Zone, dyke emplacement caused localized and pervasive silicification, clay alteration and mineralization within the Earn Group sediments, with highly variable alteration patterns, multiple veining events and brecciation. Soil sampling and rock sampling show consistent anomalous gold, arsenic, silver and antimony within the Earn Group sediments, with increasing gold content associated with more intense silicification and clay alteration and the presence of disseminated and veined pyrite, arsenopyrite and scorodite.

The highest gold grades (3.81, 4.25, 2.95 and 3.34 parts per million) returned from 2006 sampling were associated with a highly silicified and clay altered northwest-trending shear zone cutting through Earn Group chert pebble conglomerate and minor siltstone, with multiple intrusive sills nearby. Mineralization consisted of massive sulphide – silica aggregates at dilational areas, coarse crystalline quartz-scorodite veining and disseminated pyrite-arsenopyrite with extensive scorodite staining. A second silicified, clay altered and slickenlined northeast trending fault structure within chert-pebble conglomerate and siltstone returned a 1.79 parts per million gold sample.

The Vortex Breccia, in the southern Vortex Zone, contained heterolithic breccia outcrops. Samples overall returned low anomalous gold mineralization (0.02-0.08 parts per million) except for one sample with disseminated pyrite in the matrix that returned 1.0 parts per million gold and 1350 parts per million arsenic. Soil samples taken through the breccia zone show elevated gold values up to 1.69 parts per million gold.

Rock sampling of intrusive phases showed no significant mineralization although a soil sample taken from intrusive material returned 0.96 parts per million gold and >10,000 parts per million arsenic. No significant mineralization was found in the Road River Group samples.

The geophysical survey showed a strong magnetic high in an area of Steel Formation (a member of the Road River Group) shale talus, which differs significantly from the surrounding Steel Formation rocks that form a magnetic low. The magnetic high could be related to the thrust fault contact between the Road River Group and Earn Group sediments, as the trace of the fault is not well constrained in the vegetated lower elevations. The intrusive sills and the variably silicified and clay altered Earn Group sediments form a moderately magnetic mass, with the high grade samples occurring along a shear structure at the edge of a break from moderate to low magnetic susceptibility. The intrusive sills could not be distinguished from the sediments in the magnetic data.

Field work completed in 2006 confirmed the presence of widespread anomalous to well mineralized, pervasively altered Earn Group sediments over at least an 800 x 600 metre area. Altered Earn Group sediments also extend westward beneath the thrust faulted Road River Group sediments, and the northern,

eastern and southern extents are not well constrained. The Earn Group sediments remain the most prospective target in the Vortex Zone. The volumetrically minor intrusive phases show sporadic mineralization despite the extensive alteration so are not considered a viable target in this area. The historically inferred intrusive stock at the south end of the Vortex Zone was not visited and could not be confirmed.

A two phase exploration program is proposed for future work at the Harlan property.

Phase I would entail detailed, systematic mapping and soil sampling. Mapping would concentrate on finding outcrop within the extensive talus to refine the lithology distributions, particularly the dyke orientations, and to determine the extents of the breccia body. The mineralized shear zone and fault found in 2006 highlight the probability of high grade mineralized structures within a lower grade disseminated ore body, so collection of structural information is a priority. The trace and extent of the mineralized shear zone should be refined to aid in drillhole targeting. The trace of the thrust fault on the western edge of the Vortex Zone could be better constrained to try to determine its relationship to the magnetic high seen in the 2006 survey.

A soil sample grid should be conducted over the Vortex Zone at 100 metre spacing with samples taken every 25 metres.

An airborne magnetic and radiometric survey should be flown over the entire property to help define intrusive bodies and major structures. The Tombstone Suite intrusives are generally highlighted in potassium radiometric maps.

Phase II would consist of a 2000 metre, 10 hole reconnaissance drill program with hole locations defined by results in Phase One. Two five hole fences oriented north-south could cover all the main targets identified to date: the mineralized shear zone, disseminated sulphide mineralization, the Vortex breccia body and the magnetic high.

TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| EXECUTIVE SUMMARY | 2 |
| 1.0 INTRODUCTION | 6 |
| 2.0 PROJECT DESCRIPTION AND LOCATION..... | 6 |
| 3.0 ACCESSIBILITY, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY..... | 10 |
| 4.0 HISTORY | 10 |
| 4.1 Regional Exploration History and Competitor Activity | |
| 4.2 Property Exploration History | |
| 5.0 2006 EXPLORATION PROGRAM..... | 11 |
| 5.1 Soil and Rock Sampling Methodology, Preparation and Analysis | |
| 5.2 Geophysical Surveying Methodology | |
| 6.0 GEOLOGICAL SETTING | 12 |
| 6.1 Regional Geology | |
| 6.2 Property Geology | |
| 7.0 2006 EXPLORATION RESULTS..... | 16 |
| 7.1 Results-Mapping and Rock Sampling | |
| 7.2 Results-Soil Sampling | |
| 7.3 Geophysics | |
| 8.0 CONCLUSIONS | 21 |
| 9.0 RECOMMENDATIONS..... | 22 |
| 10.0 REFERENCES..... | 23 |
| CERTIFICATES OF QUALIFICATIONS..... | 24 |

LIST OF FIGURES

| | <u>Page</u> |
|---|--------------------|
| Figure 1: Property Location and Surrounding Claims..... | 7 |
| Figure 2: Property Claim Holdings | 8 |
| Figure 3: Regional Geology..... | 13 |
| Figure 4: Rock and Soil Sample Locations..... | 14 |
| Figure 5: Property Geology..... | 19 |
| Figure 6: Magnetic Contour Map..... | 20 |

LIST OF TABLES

| | <u>Page</u> |
|---|--------------------|
| Table 1: Status of Claim Holdings..... | 9 |
| Table 2: List of Geological Formations..... | 15 |

LIST OF APPENDICES

| | |
|--|--|
| Appendix 1: List of Personnel and Contractors | |
| Appendix 2: Statement of Expenditures | |
| Appendix 3: Rock Sample Descriptions | |
| Appendix 4: Soil Sample Descriptions | |
| Appendix 5: ALS Chemex Laboratory Certificates | |
| Appendix 6: Aurora Geophysical Report with CD | |

1.0 INTRODUCTION

This report presents the results of the 2006 field program conducted on the Harlan property. The exploration program consisted of geological mapping and sampling, ground magnetic surveying and soil sampling. Work was conducted over a ten day period from August 22-31, 2006. Planning, logistics and field work were conducted by NovaGold Resource Inc. exploration personnel on behalf of 650399 BC Ltd. Aurora Geosciences Ltd of Whitehorse was contracted for geophysical surveying and provision of a fly camp. Trans North Helicopters provided all transportation for the fly camp, and mob/demob was conducted from Twin Creeks airstrip on the North Canol Road.

The Harlan Property consists of 75 contiguous quartz mining claims (Cam 1-8, Harlan 3-7, 9-23, 39-50, 55-69, 71, 263, 265-274, 276-283 Claims) within NTS Sheets 105 O/4 and O/5 in the Mayo Mining District (Figures 1 and 2). The claims are currently registered in the name of 650399 B.C. Inc., a wholly owned subsidiary of Alexco and are all in good standing.

A summary of expenditures for the program is presented in Appendix 1.

The reference datum used is UTM NAD27 Zone 9, unless otherwise noted.

The report was prepared in accordance with the guidelines of the Yukon Quartz Mining Act and is based on field observations made by the author and geochemical data obtained from samples submitted to an accredited laboratory. Qualified Person Mike Stammers of NovaGold Resources Inc conducted a one day property visit during the field program. Background information is based on data and geological information gathered from public sources, assessment files and internal company reports and memorandum.

2.0 PROJECT DESCRIPTION AND LOCATION

The Harlan property is located in the Mayo district, Yukon, approximately 150 kilometres north-northeast of Ross River and 60 kilometres northwest of the North Canol Road (Yukon Highway #6). The property is centered at latitude 63° 15' and longitude 131° 41' and is split between NTS Map Sheets 105 O/4 and O/5. (Figure 1).

Property Holdings

The Harlan Property consists of 75 contiguous quartz mining claims (Cam 1-8, Harlan 3-7, 9-23, 39-50, 55-69, 71, 263, 265-274, 276-283 Claims) within NTS Sheets 105 O/3 and O4 in the Mayo Mining District (Figure 2). The claims are currently registered in the name of 650399 B.C. Ltd., a wholly owned subsidiary of Alexco Resource Corp and are all in good standing. Table 1 provides listings of the property holdings for the claim block.

Property Agreement

On February 1, 2005, Alexco Resource Corporation acquired all the issued shares of the company 650399 BC Ltd., (Spectrumsub-a subsidiary of NovaGold) from NovaGold Canada Inc. Through this agreement, Alexco acquired the retained assets of Spectrumsub in British Columbia and the Yukon, including the Harlan property, subject to underlying agreements.

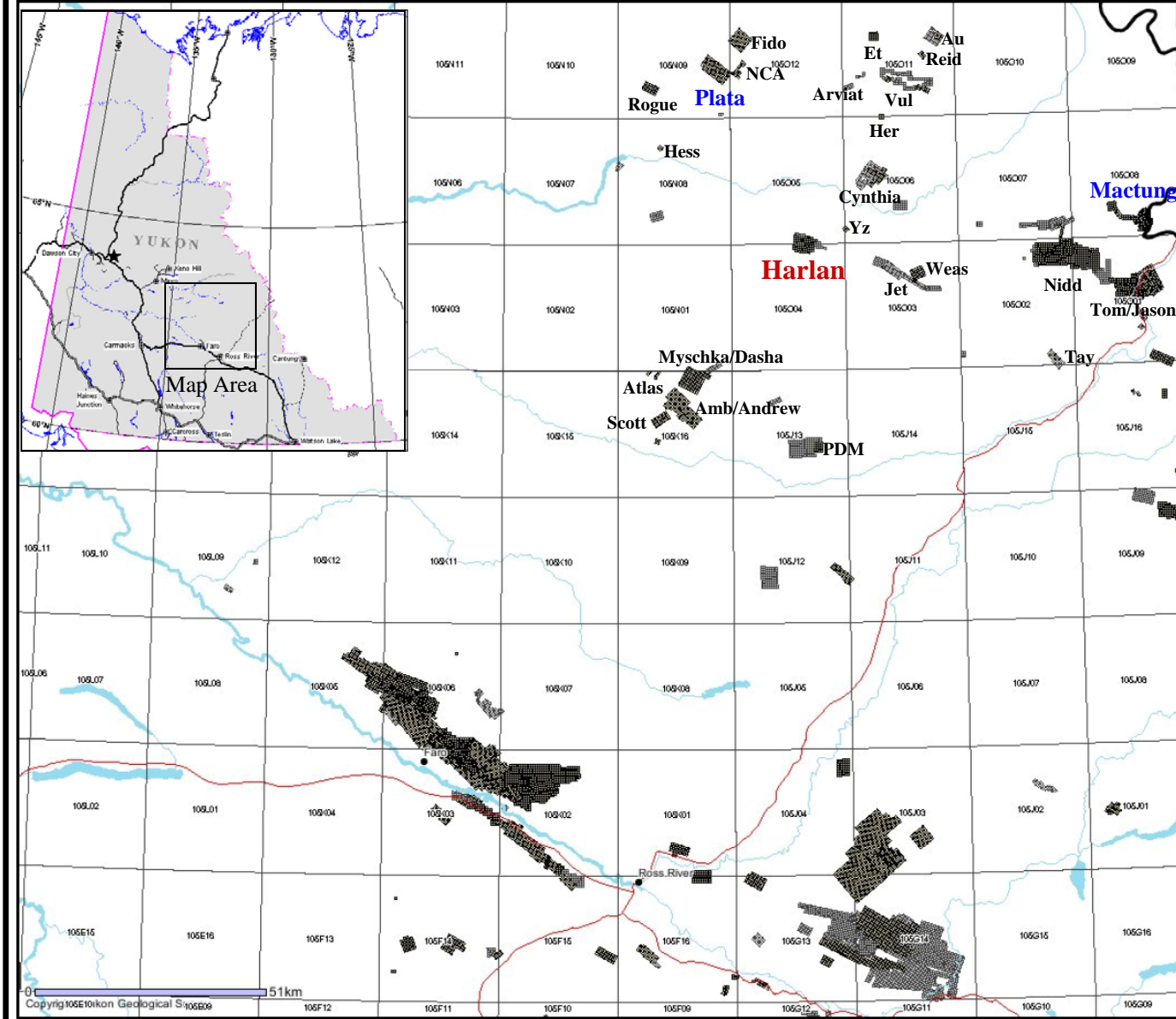
Land Use and Environmental

Activities on the property have been conducted under a current class III Quartz Mining Land Use Permit, approval number LQ00014 with an expiry date of 30 September 2008.

Yukon Geological Survey - Regional Location and Claims

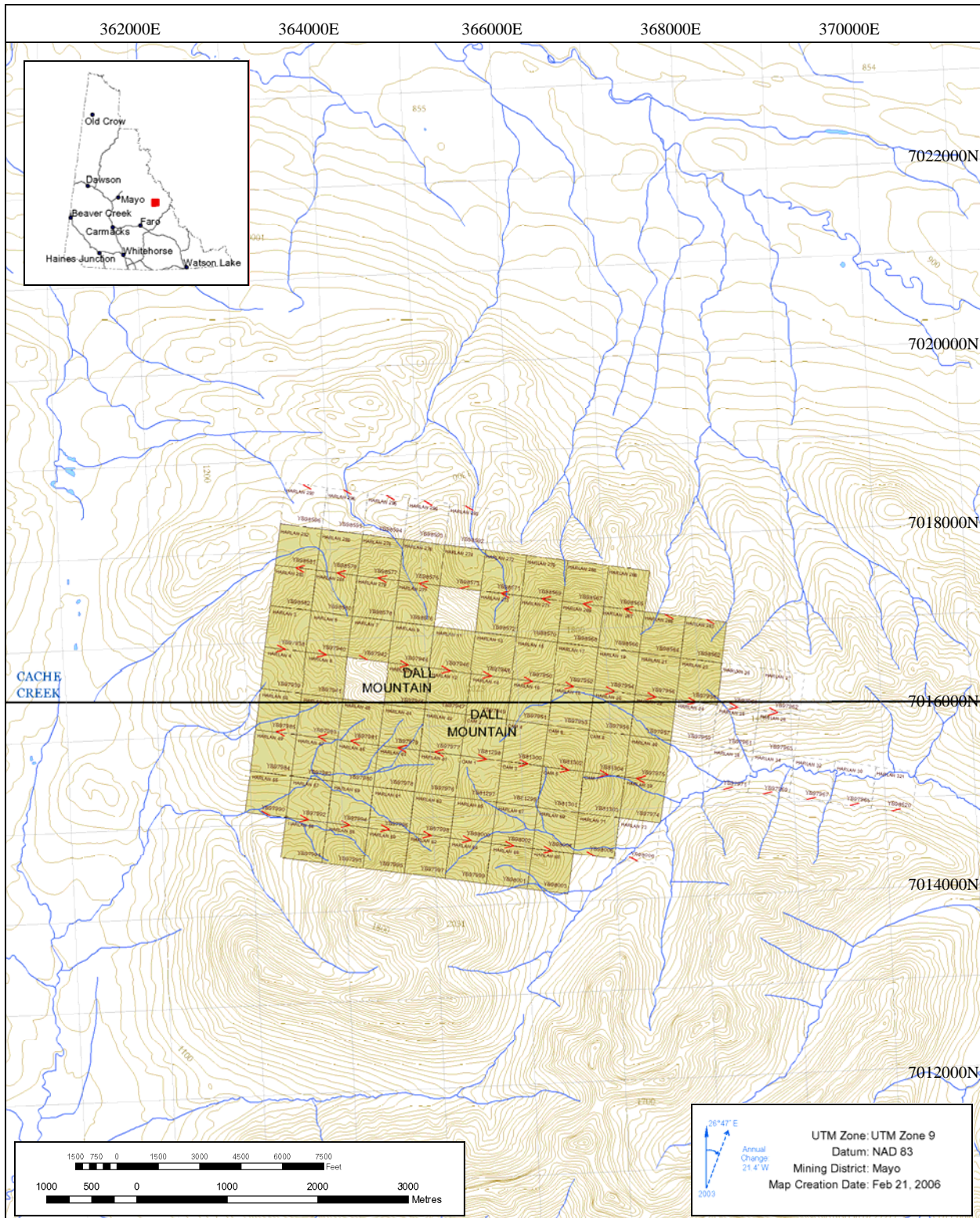
Legend

- Communities
- 250 000 NTS Index
- 50 000 NTS Index
- Roads (1M)
- Rivers (1M)
- Waterbodies (1M)
- Quartz Claims
- Active
- Expired



This is not a legal document: The information shown on this map is compiled from various sources and is subject to revision.

ALEXCO RESOURCE CORP
HARLAN PROJECT
 Figure 1: Regional Location and Surrounding Claims
 January 25, 2007



ALEXCO RESOURCE CORP
 Harlan Property, Mayo Mining District, YT
 Figure 2: Claims Holdings
 January 25, 2007

Table 1: Status of Claims Listing

| Grant Number | Claim Name | Claim Number | Claim Expiry Date * | Grant Number | Claim Name | Claim Number | Claim Expiry Date * |
|--------------|------------|--------------|---------------------|--------------|------------|--------------|---------------------|
| YB81297 | Cam | 1 | 10/17/2011 | YB97984 | Harlan | 49 | 10/17/2011 |
| YB81298 | Cam | 2 | 10/17/2011 | YB97985 | Harlan | 50 | 10/17/2011 |
| YB81299 | Cam | 3 | 10/17/2011 | YB97990 | Harlan | 55 | 10/17/2011 |
| YB81300 | Cam | 4 | 10/17/2011 | YB97991 | Harlan | 56 | 10/17/2011 |
| YB81301 | Cam | 5 | 10/17/2011 | YB97992 | Harlan | 57 | 10/17/2011 |
| YB81302 | Cam | 6 | 10/17/2011 | YB97993 | Harlan | 58 | 10/17/2011 |
| YB81303 | Cam | 7 | 10/17/2011 | YB97994 | Harlan | 59 | 10/17/2011 |
| YB81304 | Cam | 8 | 10/17/2011 | YB97995 | Harlan | 60 | 10/17/2011 |
| YB97938 | Harlan | 3 | 10/17/2011 | YB97996 | Harlan | 61 | 10/17/2011 |
| YB97939 | Harlan | 4 | 10/17/2011 | YB97997 | Harlan | 62 | 10/17/2011 |
| YB97940 | Harlan | 5 | 10/17/2011 | YB97998 | Harlan | 63 | 10/17/2011 |
| YB97941 | Harlan | 6 | 10/17/2011 | YB97999 | Harlan | 64 | 10/17/2011 |
| YB97942 | Harlan | 7 | 10/17/2011 | YB98000 | Harlan | 65 | 10/17/2011 |
| YB97944 | Harlan | 9 | 10/17/2011 | YB98001 | Harlan | 66 | 10/17/2011 |
| YB97945 | Harlan | 10 | 10/17/2011 | YB98002 | Harlan | 67 | 10/17/2011 |
| YB97946 | Harlan | 11 | 10/17/2011 | YB98003 | Harlan | 68 | 10/17/2011 |
| YB97947 | Harlan | 12 | 10/17/2011 | YB98004 | Harlan | 69 | 10/17/2011 |
| YB97948 | Harlan | 13 | 10/17/2011 | YB98006 | Harlan | 71 | 10/17/2011 |
| YB97949 | Harlan | 14 | 10/17/2011 | YB98562 | Harlan | 263 | 10/17/2011 |
| YB97950 | Harlan | 15 | 10/17/2011 | YB98564 | Harlan | 265 | 10/17/2011 |
| YB97951 | Harlan | 16 | 10/17/2011 | YB98565 | Harlan | 266 | 10/17/2011 |
| YB97952 | Harlan | 17 | 9/2/2011 | YB98566 | Harlan | 267 | 10/17/2011 |
| YB97953 | Harlan | 18 | 10/17/2011 | YB98567 | Harlan | 268 | 10/17/2011 |
| YB97954 | Harlan | 19 | 10/17/2011 | YB98568 | Harlan | 269 | 10/17/2011 |
| YB97955 | Harlan | 20 | 10/17/2011 | YB98569 | Harlan | 270 | 10/17/2011 |
| YB97956 | Harlan | 21 | 10/17/2011 | YB98570 | Harlan | 271 | 10/17/2011 |
| YB97957 | Harlan | 22 | 10/17/2011 | YB98571 | Harlan | 272 | 10/17/2011 |
| YB97958 | Harlan | 23 | 10/17/2011 | YB98572 | Harlan | 273 | 10/17/2011 |
| YB97974 | Harlan | 39 | 10/17/2011 | YB98573 | Harlan | 274 | 10/17/2011 |
| YB97975 | Harlan | 40 | 10/17/2011 | YB98575 | Harlan | 276 | 10/17/2011 |
| YB97976 | Harlan | 41 | 10/17/2011 | YB98576 | Harlan | 277 | 10/17/2011 |
| YB97977 | Harlan | 42 | 10/17/2011 | YB98577 | Harlan | 278 | 10/17/2011 |
| YB97978 | Harlan | 43 | 10/17/2011 | YB98578 | Harlan | 279 | 10/17/2011 |
| YB97979 | Harlan | 44 | 10/17/2011 | YB98579 | Harlan | 280 | 10/17/2011 |
| YB97980 | Harlan | 45 | 10/17/2011 | YB98580 | Harlan | 281 | 10/17/2011 |
| YB97981 | Harlan | 46 | 10/17/2011 | YB98581 | Harlan | 282 | 10/17/2011 |
| YB97982 | Harlan | 47 | 10/17/2011 | YB98582 | Harlan | 283 | 10/17/2011 |
| YB97983 | Harlan | 48 | 10/17/2011 | | | | |

*Claim expiry is after acceptance of value of assessment work from this program

3.0 ACCESSIBILITY, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Harlan property is accessed by helicopter from Ross River or staging points along the North Canal Road. The Twin Creeks Airstrip was used as a mobilization point for the 2006 field camp. A winter road that extends to the Plata property to the northwest passes within ten kilometres of the north property boundary.

Ross River and Faro are the nearest full service communities with an available workforce and limited contracting facilities.

The property covers fairly rugged terrain, with elevations ranging from 4,200 feet to 6,600 feet at the summit of Dall Mountain. Typical northern boreal spruce forest covers lower elevations, grading to subalpine fir forests towards the tree line. Higher elevations are covered by typical tundra vegetation, with sizable barren zones.

4.0 HISTORY

4.1 Regional Exploration History and Competitor Activity

The land surrounding the Harlan property continues to see limited exploration (Figure 1). Alliance Pacific Gold Ltd holds numerous claims in the area (AU, HER, ET, FIDO, WEAS) including the nearest claim block to Harlan (YZ) located 7 kilometres to the east, mostly overlying Tombstone Suite stocks and associated gold mineralization and gold in silt anomalies. The JET Claims (located roughly thirty kilometres north-west, held by the Archer-Cathro Group) overlying barite occurrences within Earn Group sediments have been largely dropped. Ron Berdahl staked the DASHA and MYSCHKA claims 40 kilometres to the south-west in 2002. The PLATA claims (a lead-zinc-silver prospect) and INCA claims, located roughly eighty kilometres to the north-west, continue to be held by Western Energy Services Corp. Archer Cathro picked up the ROGUE claims in 2006, close to the PLATA property. The TOM and JASON lead-zinc-silver Sedex style deposits, located roughly forty kilometres to the east and just south of the Mactung deposit, are held by Hudson Bay Exploration & Development Company Ltd and MacPass Resources Ltd, respectively.

4.2 Property Exploration History

No evidence of significant past exploration activity exists across the present Harlan property. In 1997, Viceroy Exploration (Canada) Inc. conducted a regional geochemical sampling program focused on identifying new potential bulk tonnage intrusive related and sediment hosted gold systems. The Harlan property was first identified as a target based on coincident gold-arsenic-mercury-antimony anomalies from RGS silt sampling and favorable stratigraphic and structural settings. The Cam 1-8 and Harlan 1-331 claims were staked in 1997 over kilometric-scale anomalous to high grade gold values from soils and rock chip sampling in Earn Group and Road River Group sediments intruded by Cretaceous quartz-monzonite dykes. Additional reconnaissance soil and rock sampling conducted in 1998 further defined anomalous areas.

NovaGold Resources Inc. acquired 100% interest in the property in 1999 and completed sampling and prospecting work focused on highly prospective areas. Further geological prospecting and sampling work was conducted in 2000 in conjunction with property visits by Teck Exploration Ltd and Homestake Canada.

5.0 2006 EXPLORATION PROGRAM

The 2006 field program consisted of a ten day, three person fly camp to conduct mapping, rock and soil sampling and a ground geophysical survey.

5.1 Rock and Soil Sampling Methodology, Preparation and Analysis

All rock and soil sample characteristics were recorded in the field and entered into standardized spreadsheets (Appendix 2 and 3). Criteria for each sample included: UTM location, sample type, width of chip sampling, color, lithology, alteration, mineralization and a brief description. In addition, texture and organic content, and horizon sampled were recorded for soil samples. Rock grab and chip samples were taken almost exclusively from outcrops amid the extensive talus. Sample locations are shown in Figure 4.

One soil line was planned passing through areas with anomalous to high historical assay results, with 25 samples taken at 40 metre spacing.

Samples were sent to ALS Chemex Labs in North Vancouver, B.C. Soil and rock samples were analyzed by gold fire assay using a 30gram sample and by ICP for a 33-element excluding mercury package using “near total” four acid digestion. Standards were inserted into each of the rock and soil sample batches for assay quality control. Laboratory certificates are found in Appendix 4.

5.2 Geophysical Surveying Methodology

The geophysical equipment, procedures and analysis methods used for the 2006 total magnetic field program is outlined in the Aurora Geosciences Ltd report in Appendix 6. A total of 7.32 line kilometres were surveyed over a one square kilometre area.

6.0 GEOLOGICAL SETTING

6.1 Regional Geology

Adapted from Schulze, 1999

The Harlan property is located within the Selwyn Basin which consists of a broad package of Paleozoic sediments extending east-southeast from north-west of Dawson City to the Yukon-Northwest Territory border north of the major northwest-southeast trending Tintina Fault. This stratigraphy consists of shallow shelf to off-shelf marine clastic and chemical sediments, as well as basinal clastic sediments derived from the Ancient North American Platform to the north-east with ages of deposition ranging from Late Precambrian to Permian. At least two major episodes of rifting have occurred: the first during deposition of the Late Precambrian Hyland Group sediments, and the second during deposition of the Devonian-Mississippian Earn Group sediments (Table 2, Figure 3). These major rift zones often host poorly sorted coarse clastic sediments, such as debris flows or turbidite horizons. Several episodes of continental uplift have led to periods of increased erosion and resulting continental margin or miogeosynclinal deposition, resulting in the creation of sequences of comparatively high energy, shallow water sediments, often coarsely grained and variably calcareous. These are separated by strata formed under deeper, quieter water conditions, resulting in formation of fine clastic sediments and chert. The Mid-Cretaceous Tombstone-Tungsten Plutonic Suites (95-89Ma) consisting primarily of monzonitic to quartz-monzonitic intrusive structures, have been emplaced within the Selwyn Basin. Members of these suites occur along an east-southeast trending belt extending for over 500 kilometres from north-west of Dawson City to the Yukon-Northwest Territory border. Tombstone Suite intrusives are believed to control much of the economic gold mineralization within the Selwyn Basin.

Extensive thrust faulting along the entire extent of the Selwyn Basin began during Late Jurassic time, with most thrust faults oriented roughly east-southeast and dipping to the south-west, subparallel to the overall east-southeast trend of stratigraphy. Several major regional thrust faults were formed including the Dawson Thrust, Tombstone Thrust, and Robert Service Thrust. This regional fabric has been overprinted by a slightly less pronounced northeast-southwest fabric, marked by high angle orthogonal faults that are strongly pronounced within the Harlan property area.

The Harlan property occurs within a broad deformation belt unofficially called the “Gold River Fold Belt” extending along the south side of the Hess River. Several west-northwest trending thrust faults, re-activated as strike-slip faults associated with fairly intense folding, extend across this belt. Tombstone Suite intrusives occur within the belt, particularly along the north and south flanks, and are common in the Harlan property area.

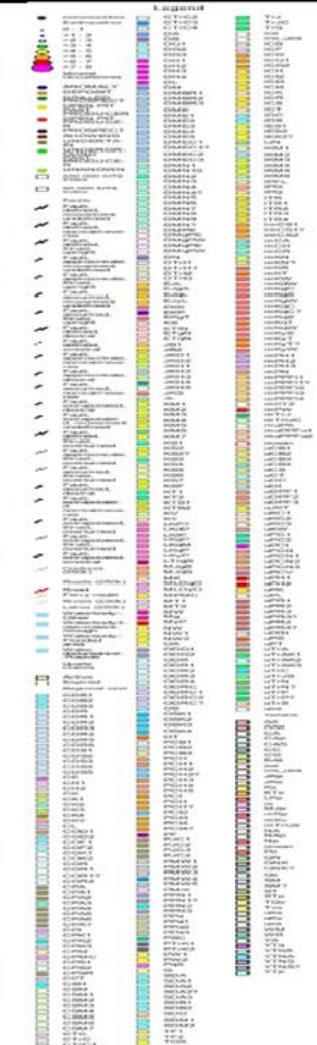
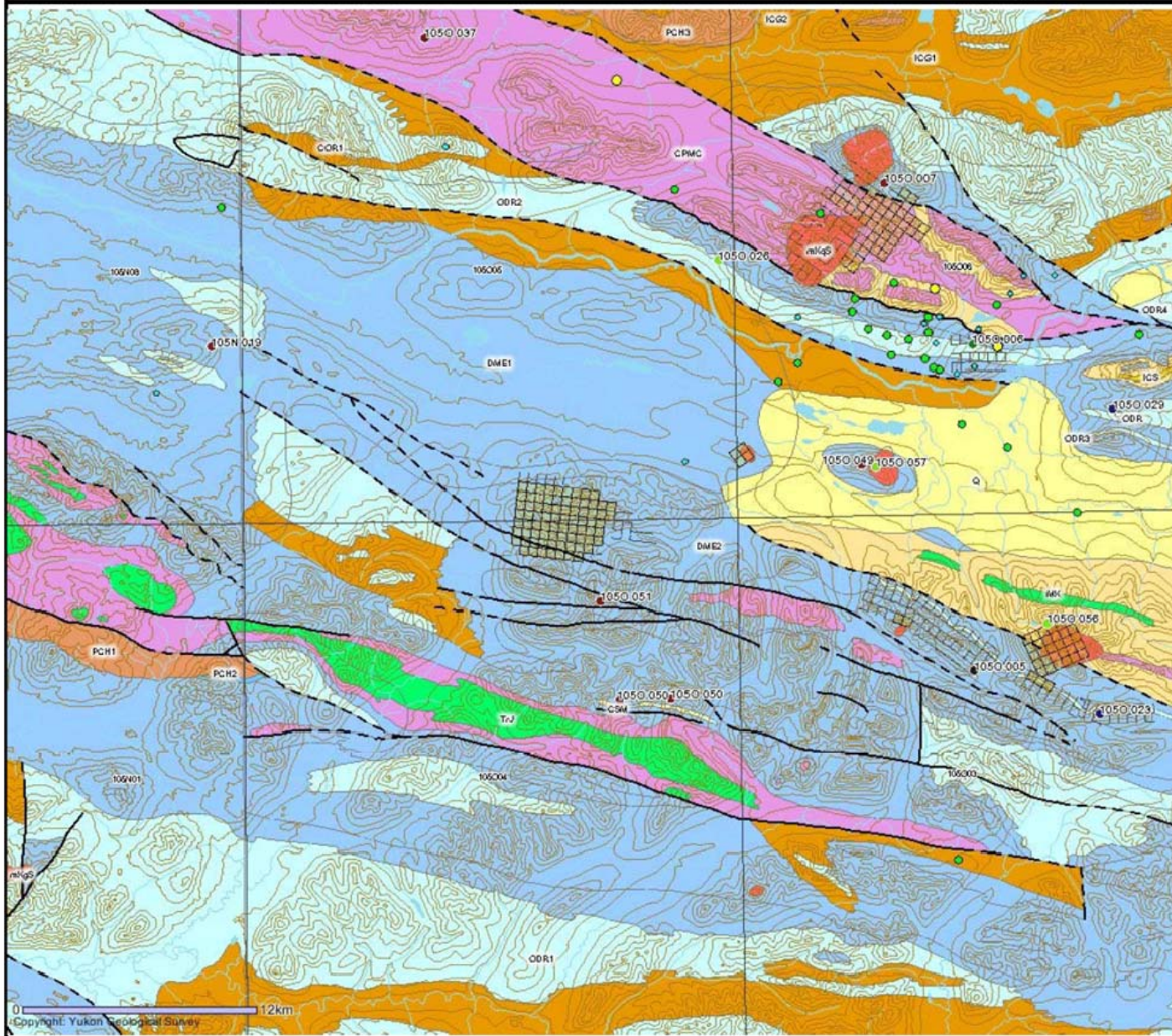
6.2 Property Geology

Adapted from Johnson, 2001

A thick sequence of Earn Group locally calcareous chert pebble conglomerate, sandstone and greywacke underlie the Harlan Property, with lesser shale to siltstone members. Several roughly southeast trending units of Road River Group shale to siltstone, and graphitic argillite units extend across the property and appear to be thrust over locally intensely altered Earn Group formation rocks. In the central part of the property called the Vortex Zone, these Earn Group coarse clastic sedimentary rocks have undergone strong argillic and advanced argillic alteration and display multi-episodic fine quartz vein and stockwork development. Southeast trending, moderately south dipping thrust faults have been mapped within Earn and Road River Group stratigraphy in the area.

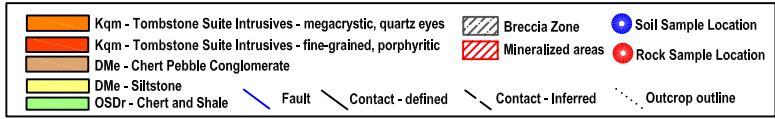
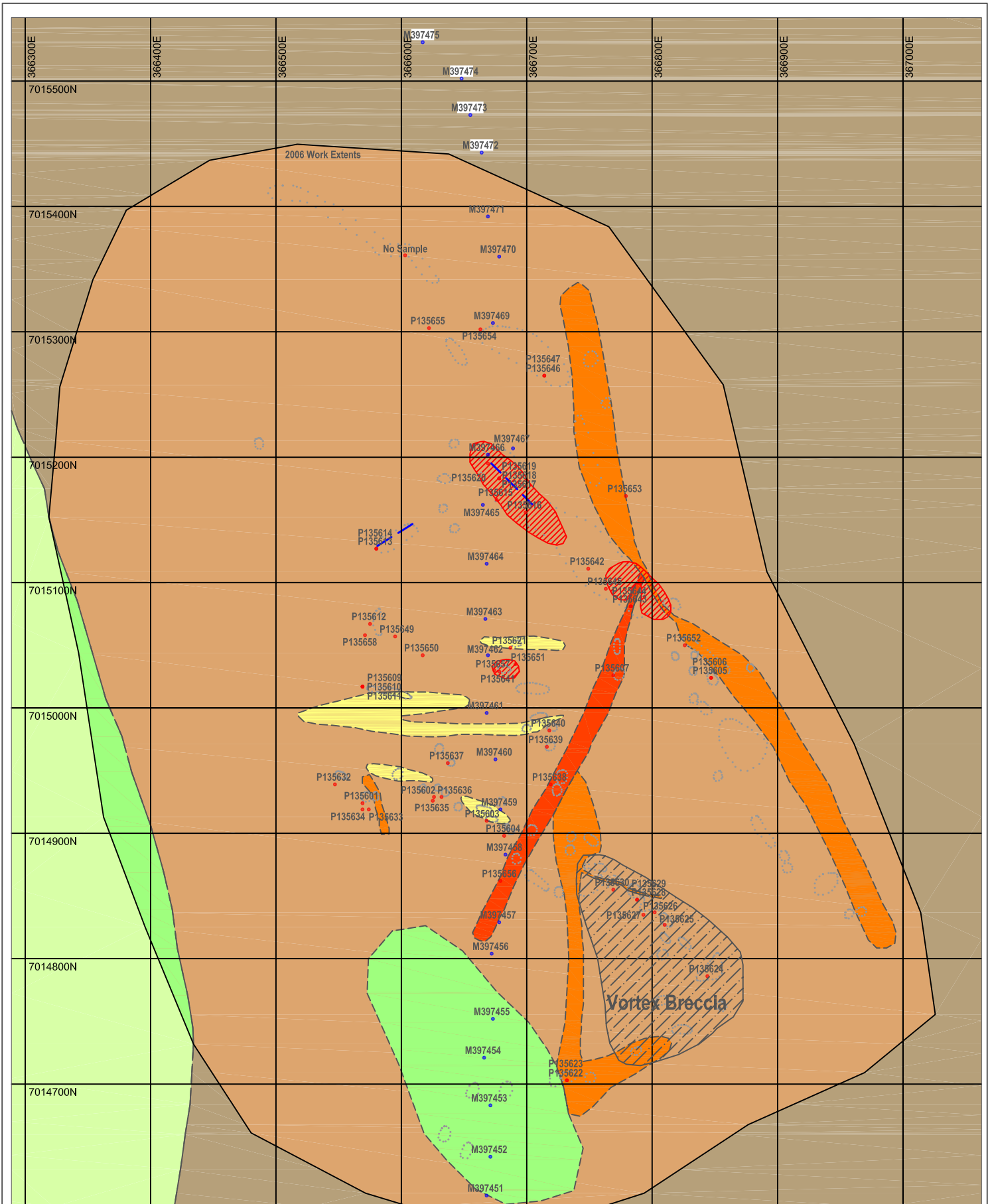
A suite of altered late-stage Tombstone Suite quartz-feldspar porphyritic dikes extends across the central property area. These extend primarily east-southeast, but also map other lineation orientations, largely in the Vortex Zone area. These dikes have intruded the graphitic argillite unit within the “West Porphyry Zone” up to three kilometers west of the central Vortex area. Dikes display variable intensities of argillic and phyllic alteration and localized silicification. An area of abundant feldspar porphyritic rubblecrop in a wooded area south of the Vortex Zone indicates the presence of a monzonitic stock.

Yukon Geological Survey - Bedrock Geology



This is not a legal document. The information shown on this map is compiled from various sources and is subject to revision.

**ALEXCO RESOURCE CORP
HARLAN PROJECT**
Figure 3: Regional
Geology and Claims
January 25, 2007



ALEXCO RESOURCE CORP
 Harlan Project, Mayo Mining District, YT
FIGURE 4: 2006 Rock and Soil Locations
 Scale 1:4000 Projection: NAD 27 Zone 9 January 25, 2006

Table 2: List of Geological Formations

| Age | Group | Formation (Lithology) | Geology Map Designation | Rock Code | Description |
|----------------------------|-------------------------------------|-----------------------------|-------------------------|---------------|--|
| Mid-Cretaceous | Tombstone - Tungsten Plutonic Suite | Monzonite, Quartz Monzonite | Kqm, Kg | QM, QFP, QPM | Felsic to intermediate quartz monzonitic, monzonitic, to quartz dioritic intrusives. The name "Selwyn Suite" often applies to eastern portion of the suite. Anvil Intrusives and coeval South Fork Volcanics now considered part of Tombstone Suite; varying phases due to different fractionation states rather than a separate major intrusive event. Quartz-monzonite dikes within Harlan are argillically altered and limonitic. |
| Devonian - Mississippian | Earn Group | Prevost Formation | Dmp (Dme) | CH, ARG ARGG | Brown weathering shale, grey to grey-brown weathering chert-pebble conglomerate, dark grey-black chert-quartz sandstone. |
| Devonian - Mississippian | Earn Group | Prevost Formation | Dme | CPC | Chert Pebble Conglomerate: pebble to cobble sized clasts in Silicified or calcareous matrix, local breccia fragments; lesser coarse to fine sandstone members. Host for major sediment-hosted mineralization within Harlan Property. |
| Devonian | Earn Group | Portrait Lake Formation | Dp (Dme) | CH, ARG, ARGG | Argillite, chert, minor sandstone and conglomerate. Black siliceous argillite form lower member. May contain minor greywacke, siltstone and baritic horizons. |
| Ordovician- Early Devonian | Road River Group | Steel Formation | (OSDr) | SS | Weakly to moderately calcareous orange weathering mudstone to siltstone, often bioturbated reflecting oxygenated bottom water conditions. Baritic horizons often form distinctive upper members near top of formation. |
| Ordovician- Early Devonian | Road River Group | Duo Lake Formation | Osd (OSDr) | CH, SLT, ARG | Black argillite and massive to thick bedded chert, weathers bluish white, local tan limonitic weathering. |

After Roots, C.F. Abbott, J.G. Cecile, M.P. Gordey, S.P. 1995

7.0 2006 EXPLORATION RESULTS

Previous work on the Harlan property had identified two areas of interest, the Vortex Zone and the Western Porphyry Zone, within a ten square kilometre area of anomalous surface geochemistry. Descriptions of the Western Porphyry zone may be found in earlier assessment reports.

Field work in 2006 concentrated on the Vortex Zone, a previously identified area of strongly altered and mineralized Earn Group sediments in the south-eastern portion on the property. Field work consisted of mapping and rock sampling, soil sampling and a geophysical survey. The area mapped contains extensive coarse talus slopes with little certain outcrop. Lower elevations are covered with buckbrush and balsam fir with very little outcrop, and likely have extensive talus cover. An effort was made to only take samples from confirmed outcrop or highly probable in situ rubblecrop. Soil sampling on the talus slopes is likely collecting talus fines samples rather than well developed soils.

7.1 Mapping and Rock Sampling

Mapping work confirmed the presence of variably altered Earn Group sediments, consisting largely of chert pebble conglomerate with minor siltstone and greywacke, covering most of the upper portions of the mountainside in the Vortex Zone (Figure 5). Well fractured and oxidized Road River Group interbedded shales and siltstones are thrust faulted over the Earn Group sediments to the south of the Vortex Zone and several phases of Tombstone intrusive phases intrude both sedimentary packages.

Intrusive Phases

Two texturally distinct phases of intrusive were found: a sparse megacrystic unit (“megacrystic”) and a finer-grained porphyritic unit (“crowded”). The megacrystic unit consists of 2-5% 1-3cm white alkali feldspar phenocrysts (often zoned), 5% 2-5mm round quartz eyes and 5% biotite lathes in a fine-grained feldspar groundmass. The crowded unit consists of 10-20% 2-5mm white equant alkali feldspar phenocrysts and 10% 2-5mm biotite books in a medium grained light green feldspathic groundmass.

Both intrusive units are often well altered, though the megacrystic phase tend to form more massive sills with unaltered areas. Feldspar phenocrysts are often clay-carbonate-quartz altered and leached out, biotite is often altered to coarse sericite or is oxidized and obliterated, and the groundmass is generally clay altered, well oxidized and orange weathering. The strongly altered dikes tend to form recessive units.

Mineralization noted in the intrusive phases was limited to 1-2% disseminated cubic to blebby pyrite in the groundmass, occasionally rimming grains or replacing biotite. Unaltered intrusive phases did not appear to contain primary sulphides. Assay results for the eight intrusive samples did not have any significant gold mineralization (all < 0.05 parts per million gold) despite anomalous arsenic values in several samples (up to 1050 parts per million arsenic).

Earn Group sediments

The Earn Group sediments in the Vortex Zone show highly variable alteration patterns, multiple veining events and brecciation. They host the majority of mineralization found in the Vortex Zone.

The chert pebble conglomerate showed large variation in grain sizes but typically appeared as a well sorted conglomerate with sub-rounded to rounded chert pebbles to cobbles, along with occasional angular to sub-rounded, clay altered siltstone clasts. Small outcrops of thinly bedded siltstone were observed with conformable contacts with overlying chert pebble conglomerate. The siltstone units were often bleached and clay altered, and may form recessive units under the more resistant chert pebble conglomerate talus.

The chert pebble conglomerate unit is pervasively silicified, sometimes texturally enhancing but often texturally destructive where only vague outlines of pebbles survive. Large areas previously mapped as siltstone are likely highly altered chert pebble conglomerate. Strong pervasive clay alteration in the central Vortex Zone is characterized by an earthy bleached appearance with leached vugs (carbonate and clay

removed?) and ubiquitous leached disseminated cubic pyrite, along with broad zones of earthy yellow alteration (antimony/arsenic oxides?). Clay alteration extends into the surrounding broadly silicified sediments in discrete, often oxidized corridors. Several generations of quartz veining were observed: a milky white quartz vein set (highly irregular stringers, 0.5-2 centimetres wide, occasional swarms) is cut by a clear dark quartz vein set (1-5 millimetres wide, planar, often sheeted).

Assay results for chert pebble conglomerate and siltstone samples show anomalous gold mineralization throughout the Earn Group sediments, with increasing gold content associated with more intense silicification and clay alteration and the presence of disseminated and veined pyrite and arsenopyrite. A forest green color due to scorodite staining is common. Geochemical results show a strong correlation amongst gold and silver, arsenic, Cu, Fe, Pb and particularly sulphur and antimony.

The highest gold grades (3.81, 4.25, 2.95 and 3.34 parts per million) were associated with a highly silicified and clay altered northwest-trending shear zone cutting through chert pebble conglomerate and minor siltstone, with multiple intrusive sills nearby. The relationship between the fault structure and the intrusive sills is unclear. The fault zone was approximately five metres wide, with discrete anastomosing clay-rich fault structures mirrored by a strong jointing fabric and quartz veining in surrounding silicified sediments. The jointing fabric extended over 100 metres along strike, with the fault structure likely recessive for the most part. Mineralization consisted of massive sulphide – silica aggregates at dilational areas, coarse crystalline quartz-scorodite veining and disseminated pyrite-arsenopyrite with extensive scorodite staining.

A second silicified, clay altered and slickenlined northeast trending fault structure within chert pebble conglomerate and siltstone returned a 1.79 parts per million gold sample.

Mapping in the area previously referred to as the Vortex Breccia, in the southern Vortex Zone, confirmed the presence of heterolithic breccia outcrops. Breccia clasts consisted of angular chert pebble conglomerate, argillite, clay altered siltstone and a small number of highly altered clasts of unknown lithology (possible intrusive?). The breccia matrix was composed of rock fragments and silica, with possible minor carbonate and minor blebby pyrite. The argillite clasts contained minor disseminated cubic pyrite. Several chert pebble conglomerate clasts contained milky quartz veins terminating at the clast edge, indicating that breccia formation occurred after that phase of veining. The breccia body appears to grade out into fractured chert pebble conglomerate with intense quartz veining, though the boundary is often difficult to distinguish due to strong texturally destructive silicification.

Breccia outcrop samples overall returned low anomalous gold mineralization (0.02-0.08 parts per million) except for one sample with disseminated pyrite in the matrix that returned 1.0 parts per million gold and 1350 parts per million arsenic.

Road River Group sediments

The Steel Formation interbedded shales and siltstones (part of the Road River Group stratigraphy) outcrop along the western edge of the Vortex Zone as they are thrust over altered Earn Group sediments to the east. The rocks close to the thrust surface are highly fractured or friable, oxidized and often brecciated. No samples were taken from these outcrops.

Dark grey blocky argillite talus slopes inferred to be Steel Formation sediments also occur in the southern portion of the Vortex Zone, where they become oxidized, bleached and clay altered adjacent to intrusive sills. Two samples taken from argillite lithologies did not show any significant mineralization.

7.2 Soil Sampling

Soil sample results largely confirm values seen in previous work. Almost all of the soil samples showed anomalous gold, arsenic, silver and antimony values, except for the south end of the soil line where the underlying lithology is likely Road River Group sediments. In the Vortex Breccia, elevated gold values of 1.69, 0.54, 0.34 and 0.31 parts per million were seen. In the Earn Group sediments, gold values ranged from 0.09 to 0.99 parts per million, while two samples taken near the clay altered shear zone returning 0.73

and 0.79 parts per million gold. A sample taken in intrusive material contained 0.96 parts per million gold and >10,000 parts per million arsenic.

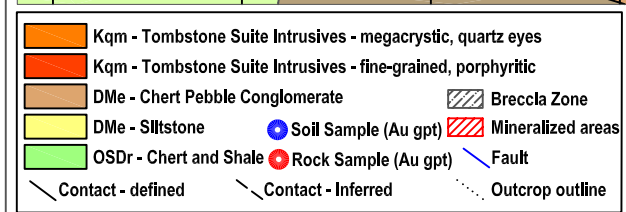
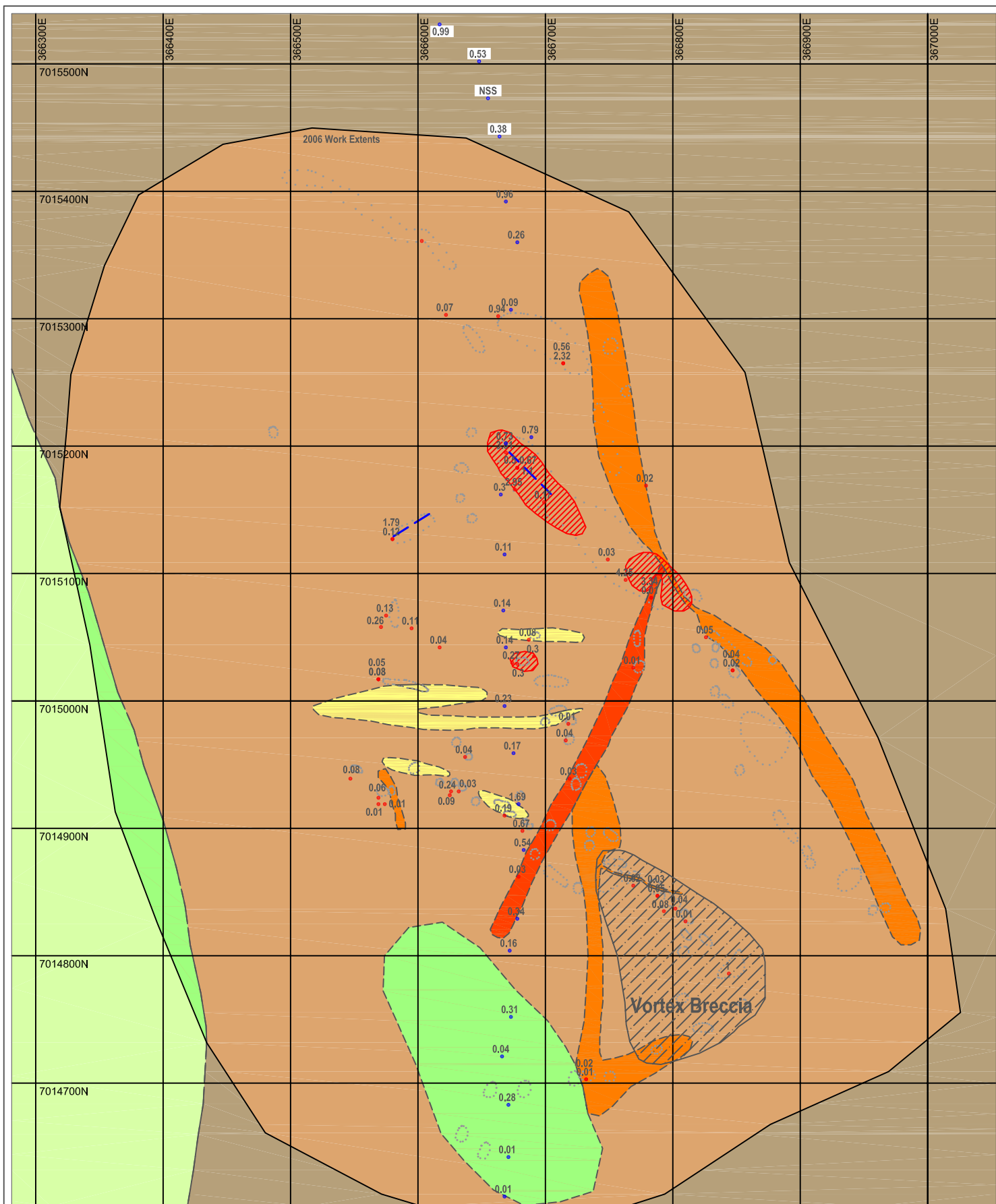
7.3 Geophysical survey results

Aurora Geosciences Ltd. (Aurora) of Whitehorse, Yukon completed a ground magnetic survey on the Harlan property in the Yukon during the summer season of 2006 for Alexco. The data was collected on GPS located, northeast-southwest oriented reconnaissance profiles with a nominal station spacing of 12.5 metres and a nominal line spacing of 100 metres. Ten lines were run in an area of about one square kilometre. The data were reduced using a local recording magnetic base station to remove diurnal drift. Aurora provided a color contour map of the reduced data and a digital file containing line and station ID's, locations in UTM coordinates, the field measurements and the reduced total magnetic field data.

The dominant feature of the contour map (Figure 6) of the magnetic field is a sharp, positive 600 to 900 nanoTesla anomaly located in the southwest corner of the survey area. The anomaly extends 400 metres along strike to the northwest and is 200 to 300 metres wide. The axis of the anomaly is located from about 366500E, 7014900N southeast to about 366725E, 7014600N. The anomaly is not completely defined and appears to extend to the south and southwest off the map. A southwest to northeast profile extracted from the magnetic grid indicates a shallow edge on the southwest end of the profile and a dike source with a dip to the northeast. The source is estimated to be about 40 metres deep. The contour map pattern indicates that a deeper, broad source extends up to 300 metres to the north and northeast of this shallow feature. A very flat magnetic response covers the rest of the survey area.

Subtle north-south, east-west and northwest-southeast magnetic linears can be seen in the magnetic map. These linears could be associated with structures or the edges of magnetic bodies. A north-south linear is located at about 366800E, marking the eastern edge of the high amplitude anomaly. An east-west linear is visible at about 7015000N. Two northwest-southeast linears that generally parallel the strike direction of the shallow magnetic body are visible extending from 367000E, 7015000N to the southeast to about 367150E, 7014800N and from 366700E, 7015300N to 367050E, 7014800N.

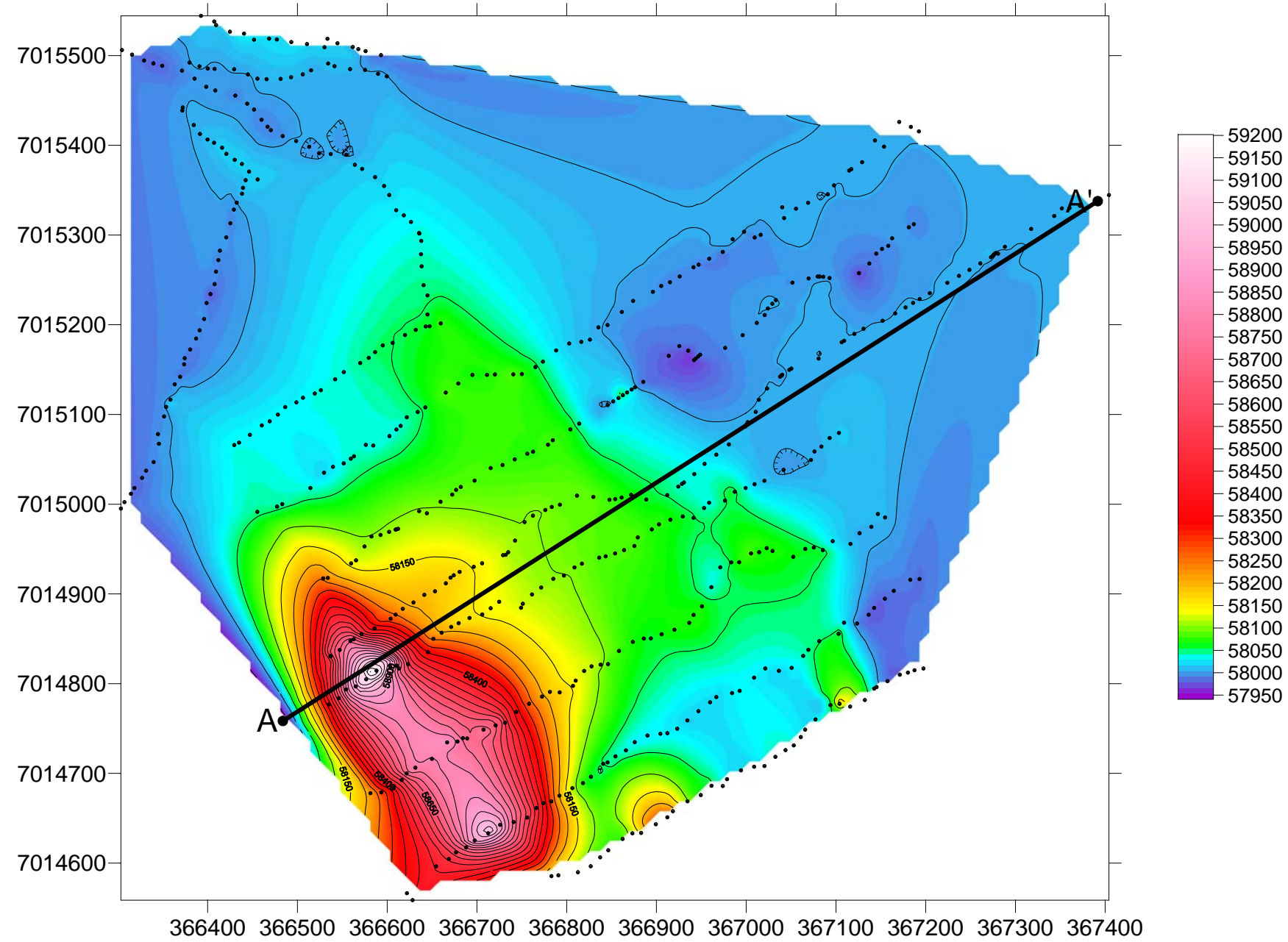
The geophysical survey showed a strong magnetic high in an area of Steel Formation (Road River Group) shale talus, which differs significantly from the surrounding Steel Formation rocks that form a magnetic low. The magnetic high could be related to the thrust fault contact between the Road River Group and Earn Group sediments, as the trace of the fault is not well constrained in the vegetated lower elevations. The intrusive sills and the variably silicified and clay altered Earn Group sediments form a moderately magnetic mass, with the high grade samples occurring along a shear structure at the edge of a break from moderate to low magnetic susceptibility. The intrusive sills could not be distinguished from the sediments in the magnetic data.



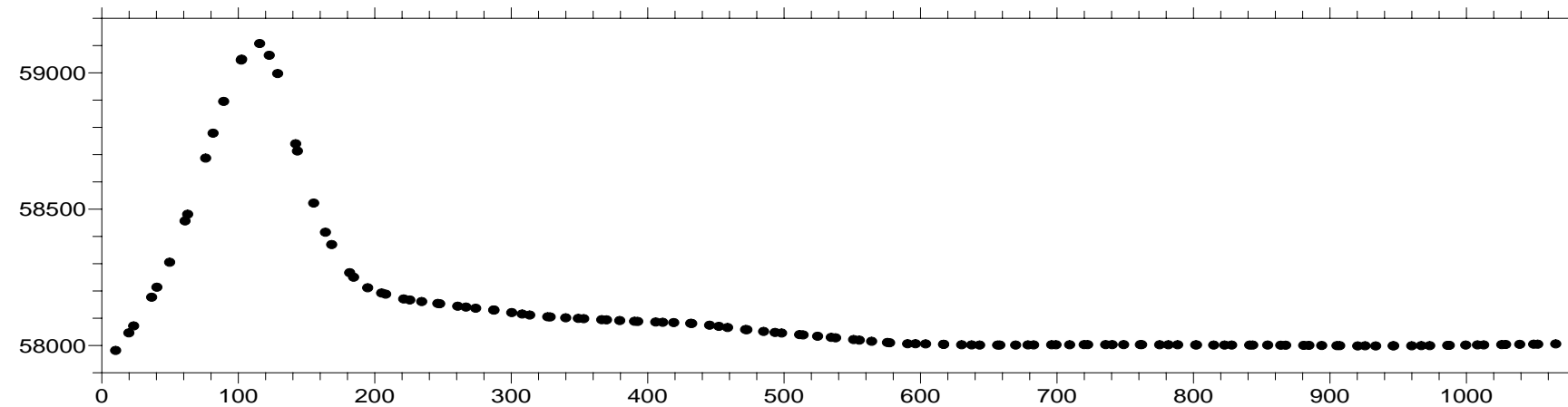
ALEXCO RESOURCE CORP
 Harlan Project, Mayo Mining District, YT
FIGURE 5: Property Geology - 2006 Vortex Zone Mapping

Scale 1:4000 Projection: NAD 27 Zone 9 January 25, 2006

Harlan Ground Total Field Magnetics Survey



Magnetic Profile A-A' Extracted from the Grid



ALEXCO RESOURCE CORP
Harlan Property, Yukon
Figure 6: 2006 Ground Magnetics with Profile
January 25, 2006

8.0 CONCLUSIONS

The Harlan property is located within the Paleozoic Selwyn Basin sedimentary package extending east-southeast from northwest of Dawson City to the Yukon-Northwest Territory border, north of the major northwest-southeast trending Tintina Fault. The package consists of shallow shelf to off-shelf marine clastic and chemical sediments and basinal clastic sediments, intruded by the Mid-Cretaceous Tombstone-Tungsten Suites which control much of the gold mineralization within the package. Multiple large scale east-southeast oriented thrust faults dip to the southwest and may be offset by later northeast-southwest high angle faults.

On the Harlan property, large thrust faulted units of Road River Group chert and graphitic argillite overlie broad units of Earn Group chert pebble conglomerate and minor siltstone. Multiple narrow, variably argillically altered and mineralized quartz monzonite to monzonitic dykes intrude the package.

In the Vortex Zone, dyke emplacement caused localized and pervasive silicification, clay alteration and mineralization within the Earn Group sediments, with highly variable alteration patterns, multiple veining events and brecciation. Soil sampling and rock sampling show consistent anomalous gold, arsenic, silver and antimony within the Earn Group sediments, with increasing gold content associated with more intense silicification and clay alteration and the presence of disseminated and veined pyrite, arsenopyrite and scorodite.

The highest gold grades (3.81, 4.25, 2.95 and 3.34 parts per million) were associated with a highly silicified and clay altered northwest trending shear zone cutting through chert pebble conglomerate and minor siltstone, with multiple intrusive sills nearby. Mineralization consisted of massive sulphide – silica aggregates at dilational areas, coarse crystalline quartz-scorodite veining and disseminated pyrite-arsenopyrite with extensive scorodite staining. A second silicified, clay altered and slickenlined northeast trending fault structure within chert pebble conglomerate and siltstone returned a 1.79 parts per million gold sample.

The Vortex Breccia, in the southern Vortex Zone, contained heterolithic breccia outcrops, consisting of angular chert pebble conglomerate, argillite, clay altered siltstone and a small number of highly altered clasts of unknown lithology (possible intrusive?) in a rock fragment/silica matrix. Breccia outcrop samples overall returned low anomalous gold mineralization (0.02-0.08 parts per million) except for one sample with disseminated pyrite in the matrix that returned 1.0 parts per million gold and 1350 parts per million arsenic. Soil samples taken through the breccia zone show elevated gold values up to 1.69 parts per million gold.

Rock sampling of intrusive phases showed no significant mineralization although a soil sample taken from intrusive material returned 0.96 parts per million gold and >10,000 parts per million arsenic. No significant mineralization was found in the Road River Group samples.

The geophysical survey showed a strong magnetic high in an area of Steel Formation shale talus (part of the Road River Group stratigraphy), which differs significantly from the surrounding Steel Formation rocks that form a magnetic low. The magnetic high could be related to the thrust fault contact between the Road River Group and Earn Group sediments, as the trace of the fault is not well constrained in the vegetated lower elevations. The intrusive sills and the variably silicified and clay altered Earn Group sediments form a moderately magnetic mass, with the high grade samples occurring along a shear structure at the edge of a break from moderate to low magnetic susceptibility. The intrusive sills could not be distinguished from the sediments in the magnetic data.

Field work completed in 2006 confirmed the presence of widespread anomalous to well mineralized, pervasively altered Earn Group sediments over at least an 800 x 600 metre area. Altered Earn Group sediments also extend westward beneath the thrust faulted Road River group sediments, and the northern, eastern and southern extents are not well constrained. The Earn Group sediments remain the most prospective target in the Vortex Zone. The volumetrically minor intrusive phases show sporadic mineralization despite the extensive alteration so are not considered a viable target in this area. The

historically inferred intrusive stock at the south end of the Vortex Zone was not visited and could not be confirmed.

9.0 RECOMMENDATIONS

Retention of the Harlan property is recommended and a two phase exploration program is proposed for future work at the Harlan property.

Phase One would entail detailed, systematic mapping and soil sampling. Mapping would concentrate on finding outcrop within the extensive talus to refine the lithology distributions, particularly the dyke orientations, and to determine the extents of the breccia body. The mineralized shear zone and fault found in 2006 highlight the probability of high grade mineralized structures within a lower grade disseminated ore body, so collection of structural information is a priority. The trace and extent of the mineralized shear zone should be refined to aid in drillhole targeting. The trace of the thrust fault on the western edge of the Vortex Zone could be better constrained to try to determine its relationship to the magnetic high seen in the 2006 survey.

A soil sample grid should be conducted over the Vortex Zone at 100 metre spacing with samples taken every 25 metres.

An airborne magnetic and radiometric survey should be flown over the entire property to help define intrusive bodies and major structures. The Tombstone Suite intrusives are generally highlighted in potassium radiometric maps.

Phase Two would consist of a 2000 metre, 10 hole reconnaissance drill program with hole locations defined by results in Phase One. Two five-hole fences oriented north-south could cover all the main targets identified to date: the mineralized shear zone, disseminated sulphide mineralization, the Vortex breccia body and the magnetic high.

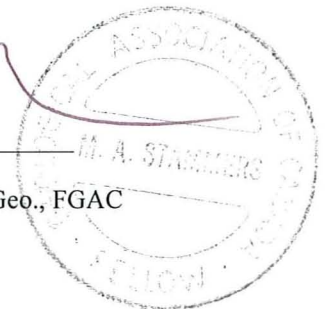
Respectfully submitted



Melanie Roberts, BSc



Michael A. Stammers, P. Geo., FGAC



10.0 REFERENCES

- Department of Indian and Northern Affairs, 1995: Yukon Minfile, Frances Lake Area (Sheet 105O); Exploration and Geological Services, Whitehorse.
- Diment, R, 1997; Brewery Creek Report, 1996: Exploration Progress Report, In-house report, Viceroy International Exploration, Inc.
- Gordey, S.P. and Anderson, R.G., 1996: Evolution of the Northern Cordilleran Miogeosyncline, Nahanni Map Area (105I), Yukon and Northwest Territories; Geological Survey of Canada, Memoir 428.
- Johnson, G., 2001: 2000 Geological and Geochemical Assessment Report on the Harlan Property: In-house report, NovaGold Resources Inc.
- Poulson, K.H., 1996: Carlin Type Gold Deposits: Canadian Potential?, in New Deposit Models of the Cordillera, Northwest Mining Association short course.
- Roots, C.F. Abbott, J.G. Cecile, M.P. Gordey, S.P. 1995: Bedrock Geology of Lansing Range Map Area (105N), East Half, Hess Mountains, Yukon; Exploration and Geological Services, Yukon Region, and Indian and Northern Affairs Canada.
- Schulze, C, 1997: Yukon Regional Project, 1997 Progress Report; In-house Report, Viceroy Exploration (Canada), Inc.
- Schulze, C. 1999: 1998 Geological and Geochemical Assessment Report on the Harlan Property; In-house report, Viceroy Exploration (Canada) Inc.
- Schulze, C. 2000: 1999 Geological and Geochemical Assessment Report on the Harlan Property; In-house report, NovaGold Resources Inc.

CERTIFICATE OF QUALIFICATIONS

I, Melanie Roberts, of 502-1100 Jervis Street, Vancouver, in the Province of British Columbia, Canada, certify that:

1. I am a project geologist employed with NovaGold Resources Inc., 2300 – 200 Granville Street, Vancouver, BC, V6E 1S4.
2. I am a graduate of the University of Victoria with a Bachelor of Science (Honors) in Geology in 2000.
3. I have practiced my profession continuously since 2000 and have been involved in projects in Australia, South Africa and Canada.
4. I was present at the Harlan property from August 22nd -August 31st, 2006 and during this time performed the mapping and rock sampling work, and supervised the geophysical survey and soil sampling. I reviewed the results from the program and have compiled this report based on these results and field observations.
5. I have no interest in the property described herein, nor do I expect to receive any such interest.

Dated at Vancouver, British Columbia, Canada, this 31 day of January, 2006.




M. Roberts, B.Sc.

GEOLOGIST'S CERTIFICATE


I, Michael A. Stammers, of 941 Kennedy Avenue, North Vancouver, in the Province of British Columbia, Canada, DO HEREBY CERTIFY:

- 1 THAT I am a Senior Geologist with NovaGold Resources Inc., 2300 – 200 Granville Street, Vancouver, BC, V6E 1S4.
- 2 THAT I have practiced in my profession with various mining companies in Yukon, British Columbia, Ontario, Nova Scotia, Northwest Territories, Alaska, Oregon, Vanuatu and Venezuela for 30 years.
- 3 THAT I am a graduate of McMaster University (1977) and hold a combined Honours B.A. in Geology and Geography.
- 4 THAT I am duly registered as a Professional Geoscientist in the Province of British Columbia (#18883).
- 5 THAT I am a Fellow of the Geological Association of Canada.
- 6 THAT this report is based on a Harlan property visit in 2005 and Harlan property work that I supervised from August to December, 2006.
- 7 THAT I have no interest in the property described herein, nor do I expect to receive any such interest.

DATED at Vancouver, British Columbia, Canada, this 31 day of January, 2006.



Michael A. Stammers, P. Geo., FGAC



APPENDIX 1: List of Personnel and Contractors

PERSONNEL

Melanie Roberts, Project Geologist, NovaGold Resources Inc.
502-1100 Jervis Street, Vancouver, BC, V6E 2C4

Mike Stammers, Senior Geologist, NovaGold Resources Inc.
941 Kennedy Avenue, North Vancouver, BC

CONTRACTORS

Lauren Blackburn, Geologist/geophysical technician
Aurora Geosciences, 108 Gold Road, Whitehorse, YT, Y1A 2W3

Ron Stacks, Technician/pro prospector
Aurora Geosciences, 108 Gold Road, Whitehorse, YT, Y1A 2W3

Trans North Helicopters
PO Box 8, 115 Range Road, Whitehorse, YT, Y1A 5X9

ALS Chemex
212 Brooksbank Avenue, North Vancouver, BC, V7J 2C1

APPENDIX 2: Statement of Expenditures

COST STATEMENT - HARLAN CLAIMS

Alexco Resource Corp. and 650399 BC Ltd.

CONTRACT GROUND GEOPHYSICAL SURVEYS

Contractor: Aurora Geosciences
 Description: Ground Magnetism and Support

| | | |
|-------------------------------------|------------|-------------|
| Geophysical Charges: | \$9,800.00 | |
| Camp and Equipment Support Charges: | \$5,700.00 | |
| Food, Fuel, Truck Rental | \$2,030.00 | \$17,530.00 |

CONTRACT GEOLOGICAL MAPPING AND SAMPLING SURVEYS

| | | |
|-------------------------------------|-------------|-------------|
| Wages: M. Roberts 32 days x \$350 | \$11,200.00 | |
| M. Stammers 3 days x \$500 | \$1,500.00 | |
| Lou O'Connor 1 day x \$600 | \$600.00 | |
| Trans North Helicopters | \$4,440.06 | |
| | \$5,178.80 | |
| | \$2,412.77 | |
| Freight | \$123.41 | |
| Norcan | \$1,040.38 | |
| Stammers Expenses - Hotel/gas/meals | \$644.00 | |
| Roberts Expenses – Hotels/gas/meals | \$391.00 | |
| Assays Soils - 25 | \$560.00 | |
| Rocks - 59 | \$1,565.00 | \$29,655.42 |

Total Minimum Expenditures Applied: \$47,185.42

| | | | | |
|---|--|----------|-------------|------|
| Estimated Minimum Expenditure per Work Claim*: | | Cam 5, 6 | \$14,155.63 | each |
| *Pro-rated to 30% to Cam 5 & 6 and 20% to Cam 7 and 8 | | Cam 7, 8 | \$9,437.08 | each |

APPENDIX 3: Rock Sample Descriptions

APPENDIX 4: Soil Sample Descriptions

ALEXCO RESOURCE CORP
Harlan Property, Mayo Mining District, YT
2006 Soil Sample Descriptions

| Soil Sample | Sample # | Easting | Northing | Sample depth (m) | Slope angle | Colour | Texture | Permafrost | % Coarse frags | Vegetation | Surface geology | Frag lithology | Organics | Au ppm | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | K % | Mg % | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | S % | Sb ppm | Sr ppm | Ti % | V ppm | W ppm | Zn ppm |
|-------------|----------|---------|----------|------------------|-------------|----------|---------|------------|----------------|------------------------------|-----------------|-------------------------|----------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|-------|------|------|--------|--------|------|--------|--------|--------|------|--------|--------|------|-------|-------|--------|
| Soil Stn 1 | M397451 | 366668 | 7014611 | 0.3 | 25 | Lt brown | Gritty | No | 60 | Moss, ground shrubs | Shale | Shale | 20 | 0.01 | 0.7 | 5.54 | 179 | 1140 | 1.2 | <2 | 0.77 | <0.5 | 2 | 39 | 24 | 2.23 | 1.59 | 0.35 | 226 | 4 | 1.16 | 10 | 1220 | 16 | 0.07 | 8 | 264 | 0.32 | 154 | <10 | 65 |
| Soil Stn 2 | M397452 | 366671 | 7014642 | 0.3 | 25 | Brown | Grit | No | 70 | Moss, buck brush | Shale | Shale, intrusive, qtz | 10 | 0.01 | <0.5 | 7.2 | 35 | 940 | 1.1 | <2 | 1.81 | <0.5 | 4 | 17 | 21 | 2.23 | 1.91 | 0.6 | 360 | 3 | 2.37 | 8 | 810 | 13 | 0.06 | <5 | 547 | 0.27 | 71 | <10 | 51 |
| Soil Stn 3 | M397453 | 366671 | 7014683 | 0.3 | 25 | Lt brown | Grit | No | 85 | None | Shale | Shale, intrusive | No | 0.28 | 2.6 | 4.95 | 975 | 1790 | 2 | 4 | 0.36 | 0.5 | 5 | 82 | 128 | 7.59 | 1.64 | 1.07 | 382 | 8 | 0.29 | 25 | 2210 | 49 | 0.68 | 49 | 191 | 0.31 | 293 | <10 | 122 |
| Soil Stn 4 | M397454 | 366666 | 7014721 | 0.45 | 25 | Brown | Grit | No | 80 | Moss, buck brush | Shale | Shale, CPC | 10 | 0.04 | 2.3 | 7.01 | 84 | 780 | 1.2 | <2 | 1.83 | <0.5 | 6 | 16 | 37 | 2.35 | 1.73 | 0.6 | 370 | 2 | 2.22 | 6 | 1090 | 10 | 0.08 | <5 | 529 | 0.24 | 63 | <10 | 51 |
| Soil Stn 5 | M397455 | 366673 | 7014752 | 0.3 | 30 | Tan | | No | 65 | Moss, buck brush | CPC | CPC, shale | 10 | 0.31 | 5.1 | 3.64 | 1590 | 350 | 1.4 | 10 | 0.34 | <0.5 | 4 | 79 | 65 | 11.85 | 1.33 | 0.63 | 523 | 13 | 0.39 | 11 | 4140 | 78 | 1.35 | 80 | 196 | 0.26 | 327 | <10 | 83 |
| Soil Stn 6 | M397456 | 366672 | 7014804 | 0.3 | 30 | Lt brown | | No | 75 | Moss, buck brush, balsam fir | CPC | CPC | 10 | 0.16 | 1.5 | 7.38 | 176 | 790 | 1.1 | 2 | 2.12 | <0.5 | 6 | 12 | 29 | 2.54 | 1.85 | 0.69 | 414 | 2 | 2.47 | 6 | 2340 | 11 | 0.05 | 6 | 589 | 0.26 | 71 | <10 | 51 |
| Soil Stn 7 | M397457 | 366678 | 7014829 | 0.3 | 35 | Tan | | No | 65 | Moss, buck brush | CPC | CPC, intrusive | 5 | 0.34 | 15.5 | 3.79 | 2150 | 1740 | 1.7 | 14 | 0.61 | <0.5 | 2 | 134 | 51 | 8.45 | 1.15 | 0.31 | 110 | 15 | 0.14 | 10 | >10000 | 131 | 0.53 | 68 | 194 | 0.23 | 396 | <10 | 61 |
| Soil Stn 8 | M397458 | 366683 | 7014883 | 0.3 | 35 | Grey | | No | ? | None | CPC | Intrusive, CPC | No | 0.54 | 11.3 | 4.73 | 2480 | 2290 | 1.9 | 14 | 0.29 | <0.5 | 2 | 146 | 50 | 5.06 | 1.55 | 0.55 | 253 | 20 | 0.27 | 10 | 5320 | 247 | 0.55 | 146 | 177 | 0.41 | 539 | 10 | 58 |
| Soil Stn 9 | M397459 | 366679 | 7014919 | 0.3 | 40 | Grey | | No | 75 | Moss | CPC | CPC, siltstone, chert | 5 | 1.69 | 33.4 | 4.5 | 3790 | 1840 | 2.3 | 29 | 0.12 | <0.5 | 1 | 164 | 33 | 3.04 | 1.06 | 0.63 | 154 | 15 | 0.25 | 4 | 6670 | 772 | 0.26 | 138 | 112 | 0.42 | 568 | 20 | 29 |
| Soil Stn 10 | M397460 | 366675 | 7014959 | 0.3 | 40 | Grey | | No | 75 | Moss | CPC | CPC, siltstone | 5 | 0.17 | 10.1 | 4.02 | 736 | 1530 | 1.1 | 7 | 0.51 | <0.5 | 2 | 103 | 23 | 2.92 | 1.12 | 0.33 | 149 | 9 | 0.47 | 11 | 5720 | 193 | 0.27 | 55 | 162 | 0.38 | 274 | <10 | 44 |
| Soil Stn 11 | M397461 | 366668 | 7014996 | 0.45 | 25 | Lt brown | | No | 60 | Moss | CPC, siltstone | CPC, siltstone | 5 | 0.23 | 42 | 5.17 | 1450 | 2180 | 1.5 | 7 | 0.58 | <0.5 | 2 | 131 | 29 | 3.51 | 1.55 | 0.53 | 228 | 14 | 0.55 | 15 | 3480 | 625 | 0.35 | 255 | 150 | 0.42 | 412 | 10 | 58 |
| Soil Stn 12 | M397462 | 366669 | 7015042 | 0.45 | 25 | Grey | | No | 65 | Moss | Siltstone | Siltstone, CPC | 5 | 0.14 | 8.7 | 3.68 | 1070 | 2160 | 1.4 | 5 | 0.4 | <0.5 | 1 | 128 | 19 | 3.22 | 1.46 | 0.33 | 134 | 14 | 0.34 | 9 | 5220 | 330 | 0.59 | 138 | 88 | 0.29 | 471 | 10 | 36 |
| Soil Stn 13 | M397463 | 366667 | 7015071 | 0.45 | 25 | Grey | | No | 70 | Moss | Siltstone, CPC | Siltstone, CPC | 5 | 0.14 | 7 | 3.83 | 618 | 2270 | 1.4 | 6 | 0.18 | <0.5 | <1 | 130 | 14 | 1.83 | 1.47 | 0.26 | 85 | 13 | 0.2 | 9 | 1270 | 144 | 0.3 | 60 | 63 | 0.44 | 549 | <10 | 36 |
| Soil Stn 14 | M397464 | 366668 | 7015115 | 0.3 | 30 | Brown | | No | 45 | Moss | CPC | CPC, siltstone | 5 | 0.11 | 1.7 | 4.1 | 701 | 1640 | 1.4 | 4 | 0.38 | <0.5 | 2 | 101 | 16 | 1.9 | 1.45 | 0.33 | 150 | 5 | 0.4 | 10 | 1010 | 61 | 0.08 | 33 | 82 | 0.42 | 407 | <10 | 44 |
| Soil Stn 15 | M397465 | 366665 | 7015162 | 0.3 | 20 | | | No | 70 | Moss | Siltstone | Siltstone, CPC | 5 | 0.3 | 4.6 | 4.53 | 3910 | 2760 | 1.2 | 24 | 0.36 | <0.5 | 1 | 115 | 36 | 2.87 | 1.57 | 0.35 | 168 | 17 | 0.38 | 10 | 960 | 82 | 0.3 | 60 | 82 | 0.46 | 448 | 10 | 47 |
| Soil Stn 16 | M397466 | 366669 | 7015202 | 0.3 | 30 | | | No | 80 | None | CPC | Siltstone, CPC | No | 0.73 | 2.8 | 3.18 | 6730 | 510 | 0.6 | 33 | 0.91 | <0.5 | 4 | 40 | 92 | 3.45 | 0.98 | 0.46 | 176 | 11 | 0.73 | 8 | 2960 | 397 | 0.5 | 102 | 219 | 0.23 | 109 | <10 | 33 |
| Soil Stn 17 | M397467 | 366689 | 7015207 | 0.3 | 40 | Tan | | No | 85 | None | CPC | Siltstone, CPC | No | 0.79 | 4.5 | 2.31 | 5240 | 600 | 0.8 | 82 | 0.13 | <0.5 | 1 | 53 | 53 | 2.49 | 1.05 | 0.19 | 65 | 6 | 0.09 | 6 | 1630 | 208 | 0.51 | 102 | 89 | 0.2 | 148 | 10 | 21 |
| Soil Stn 19 | M397469 | 366673 | 7015307 | 0.3 | 35 | Grey | | No | 80 | None | CPC | CPC, silicified breccia | No | 0.09 | <0.5 | 7.05 | 566 | 9090 | 1.1 | 8 | 2.31 | <0.5 | 7 | 13 | 22 | 2.17 | 1.72 | 0.8 | 375 | 2 | 2.38 | 6 | 820 | 17 | 0.28 | 9 | 628 | 0.26 | 74 | <10 | 46 |
| Soil Stn 20 | M397470 | 366678 | 7015360 | 0.3 | 45 | Tan | | No | 70 | None | Intrusive sill | Intrusive, CPC | No | 0.26 | 2.6 | 8.17 | 2040 | 1690 | 4 | 44 | 0.37 | 1.1 | 5 | 38 | 48 | 4.37 | 2.5 | 0.7 | 411 | 7 | 0.22 | 20 | 1390 | 101 | 0.63 | 47 | 96 | 0.21 | 121 | <10 | 127 |
| Soil Stn 21 | M397471 | 366669 | 7015392 | 0.3 | 45 | Lt brown | | No | 70 | None | Intrusive | Intrusive | No | 0.96 | 4.9 | 5.22 | >10000 | 310 | 1.9 | 170 | 0.18 | 0.7 | 2 | 57 | 72 | 7.66 | 2.39 | 0.41 | 143 | 15 | 0.19 | 13 | 2370 | 150 | 1.78 | 108 | 101 | 0.2 | 166 | <10 | 89 |
| Soil Stn 22 | M397472 | 366664 | 7015443 | 0.3 | 35 | Tan | | No | 70 | None | Intrusive | Intrusive | No | 0.38 | 5.9 | 9.9 | 5730 | 2610 | 4.7 | 149 | 0.11 | 3.6 | 14 | 30 | 91 | 6.23 | 3.28 | 0.47 | 1150 | 9 | 0.07 | 30 | 1690 | 233 | 1.04 | 93 | 130 | 0.17 | 87 | <10 | 236 |
| Soil Stn 23 | M397473 | 366655 | 7015473 | 0.3 | 40 | | | No | 80 | None | CPC | Intrusive, chert, CPC | No | NSS | 9.3 | 7.3 | 7980 | 1880 | 2.8 | 200 | 0.21 | <0.5 | 5 | 61 | 76 | 4.09 | 2.8 | 0.47 | 240 | 9 | 0.27 | 8 | 1440 | 297 | 0.6 | 169 | 132 | 0.34 | 203 | 10 | 111 |
| Soil Stn 24 | M397474 | 366648 | 7015502 | 0.3 | 40 | Grey | | No | 80 | None | CPC Breccia | Intrusive, CPC | No | 0.53 | 8.8 | 6.24 | >10000 | 1200 | 2 | 253 | 0.3 | <0.5 | <1 | 75 | 45 | 5.09 | 2.76 | 0.41 | 88 | 14 | 0.38 | <1 | 1980 | 170 | 1.09 | 217 | 175 | 0.39 | 239 | 10 | 43 |
| Soil Stn 25 | M397475 | 366617 | 7015531 | 0.3 | 40 | Grey | | No | 80 | None | CPC | CPC | No | 0.99 | 6.7 | 7.01 | 4480 | 2160 | 2.6 | 171 | 0.05 | <0.5 | <1 | 62 | 37 | 4.33 | 2.81 | 0.35 | 90 | 10 | 0.09 | 8 | 2180 | 145 | 0.76 | 123 | 80 | 0.35 | 196 | 10 | 123 |

Coordinates in NAD 27 Zone 9

APPENDIX 5: ALS Chemex Laboratory Certificates



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue
North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: ALEXCO RESOURCE CORP.
2300-200 GRANVILLE ST
VANCOUVER BC V6C 1S4

Page: 1
Finalized Date: 30-SEP-2006
Account: ALERES

CERTIFICATE VA06091273

Project: Harlan

P.O. No.:

This report is for 25 Soil samples submitted to our lab in Vancouver, BC, Canada on 5-SEP-2006.

The following have access to data associated with this certificate:

MELANIE ROBERTS

MIKE STAMMERS

M. STAMMERS

SAMPLE PREPARATION

| ALS CODE | DESCRIPTION |
|----------|--------------------------------|
| WEI-21 | Received Sample Weight |
| LOG-24 | Pulp Login - Rcd w/o Barcode |
| LOG-22 | Sample login - Rcd w/o BarCode |
| SCR-41 | Screen to -180um and save both |

ANALYTICAL PROCEDURES

| ALS CODE | DESCRIPTION | INSTRUMENT |
|----------|-------------------------------|------------|
| ME-ICP61 | 27 element four acid ICP-AES | ICP-AES |
| Au-AA25 | Ore Grade Au 30g FA AA finish | AAS |

To: ALEXCO RESOURCE CORP.
ATTN: MIKE STAMMERS
2300-200 GRANVILLE ST
VANCOUVER BC V6C 1S4

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

Signature:

Keith Rogers, Executive Manager Vancouver Laboratory



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.

212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: ALEXCO RESOURCE CORP.
2300-200 GRANVILLE ST
VANCOUVER BC V6C 1S4

Page: 2 - A
Total # Pages: 2 (A - B)
Finalized Date: 30-SEP-2006
Account: ALERES

Project: Harlan

CERTIFICATE OF ANALYSIS VA06091273

| Sample Description | Method Analyte Units LOR | WEI-21 | Au-AA25 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 |
|--------------------|-----------------------------------|-----------------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|----------|
| | | Recvd Wt. kg | Au ppm | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | K % |
| | | 0.02 | 0.01 | 0.5 | 0.01 | 5 | 10 | 0.5 | 2 | 0.01 | 0.5 | 1 | 1 | 1 | 0.01 | 0.01 |
| M397451 | | 0.44 | 0.01 | 0.7 | 5.54 | 179 | 1140 | 1.2 | <2 | 0.77 | <0.5 | 2 | 39 | 24 | 2.23 | 1.59 |
| M397452 | | 0.22 | 0.01 | <0.5 | 7.20 | 35 | 940 | 1.1 | <2 | 1.81 | <0.5 | 4 | 17 | 21 | 2.23 | 1.91 |
| M397453 | | 0.18 | 0.28 | 2.6 | 4.95 | 975 | 1790 | 2.0 | 4 | 0.36 | 0.5 | 5 | 82 | 128 | 7.59 | 1.64 |
| M397454 | | 0.14 | 0.04 | 2.3 | 7.01 | 84 | 780 | 1.2 | <2 | 1.83 | <0.5 | 6 | 16 | 37 | 2.35 | 1.73 |
| M397455 | | 0.32 | 0.31 | 5.1 | 3.64 | 1590 | 350 | 1.4 | 10 | 0.34 | <0.5 | 4 | 79 | 65 | 11.85 | 1.33 |
| M397456 | | 0.28 | 0.16 | 1.5 | 7.38 | 176 | 790 | 1.1 | 2 | 2.12 | <0.5 | 6 | 12 | 29 | 2.54 | 1.85 |
| M397457 | | 0.38 | 0.34 | 15.5 | 3.79 | 2150 | 1740 | 1.7 | 14 | 0.61 | <0.5 | 2 | 134 | 51 | 8.45 | 1.15 |
| M397458 | | 0.28 | 0.54 | 11.3 | 4.73 | 2480 | 2290 | 1.9 | 14 | 0.29 | <0.5 | 2 | 146 | 50 | 5.06 | 1.55 |
| M397459 | | 0.26 | 1.69 | 33.4 | 4.50 | 3790 | 1840 | 2.3 | 29 | 0.12 | <0.5 | 1 | 164 | 33 | 3.04 | 1.06 |
| M397460 | | 0.56 | 0.17 | 10.1 | 4.02 | 736 | 1530 | 1.1 | 7 | 0.51 | <0.5 | 2 | 103 | 23 | 2.92 | 1.12 |
| M397461 | | 0.48 | 0.23 | 42.0 | 5.17 | 1450 | 2180 | 1.5 | 7 | 0.58 | <0.5 | 2 | 131 | 29 | 3.51 | 1.55 |
| M397462 | | 0.30 | 0.14 | 8.7 | 3.68 | 1070 | 2160 | 1.4 | 5 | 0.40 | <0.5 | 1 | 128 | 19 | 3.22 | 1.46 |
| M397463 | | 0.34 | 0.14 | 7.0 | 3.83 | 618 | 2270 | 1.4 | 6 | 0.18 | <0.5 | <1 | 130 | 14 | 1.83 | 1.47 |
| M397464 | | 0.38 | 0.11 | 1.7 | 4.10 | 701 | 1640 | 1.4 | 4 | 0.38 | <0.5 | 2 | 101 | 16 | 1.90 | 1.45 |
| M397465 | | 0.44 | 0.30 | 4.6 | 4.53 | 3910 | 2760 | 1.2 | 24 | 0.36 | <0.5 | 1 | 115 | 36 | 2.87 | 1.57 |
| M397466 | | 0.52 | 0.73 | 2.8 | 3.18 | 6730 | 510 | 0.6 | 33 | 0.91 | <0.5 | 4 | 40 | 92 | 3.45 | 0.98 |
| M397467 | | 0.40 | 0.79 | 4.5 | 2.31 | 5240 | 600 | 0.8 | 82 | 0.13 | <0.5 | 1 | 53 | 53 | 2.49 | 1.05 |
| M397468 | | 0.06 | 1.23 | 0.8 | 3.93 | 3590 | 510 | 0.5 | 22 | 13.85 | <0.5 | 101 | 48 | 103 | 8.27 | 0.87 |
| M397469 | | 0.56 | 0.09 | <0.5 | 7.05 | 566 | 9090 | 1.1 | 8 | 2.31 | <0.5 | 7 | 13 | 22 | 2.17 | 1.72 |
| M397470 | | 0.54 | 0.26 | 2.6 | 8.17 | 2040 | 1690 | 4.0 | 44 | 0.37 | 1.1 | 5 | 38 | 48 | 4.37 | 2.50 |
| M397471 | | 0.44 | 0.96 | 4.9 | 5.22 | >10000 | 310 | 1.9 | 170 | 0.18 | 0.7 | 2 | 57 | 72 | 7.66 | 2.39 |
| M397472 | | 0.40 | 0.38 | 5.9 | 9.90 | 5730 | 2610 | 4.7 | 149 | 0.11 | 3.6 | 14 | 30 | 91 | 6.23 | 3.28 |
| M397473 | | 0.32 | NSS | 9.3 | 7.30 | 7980 | 1880 | 2.8 | 200 | 0.21 | <0.5 | 5 | 61 | 76 | 4.09 | 2.80 |
| M397474 | | 0.36 | 0.53 | 8.8 | 6.24 | >10000 | 1200 | 2.0 | 253 | 0.30 | <0.5 | <1 | 75 | 45 | 5.09 | 2.76 |
| M397475 | | 0.38 | 0.99 | 6.7 | 7.01 | 4480 | 2160 | 2.6 | 171 | 0.05 | <0.5 | <1 | 62 | 37 | 4.33 | 2.81 |

Comments: NSS is non-sufficient sample.



Project: Harlan

CERTIFICATE OF ANALYSIS VA06091273

| Sample Description | Method Analyte Units LOR | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | |
|--------------------|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|
| | | Mg % | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | S % | Sb ppm | Sr ppm | Ti % | V ppm | W ppm | Zn ppm |
| | | 0.01 | 5 | 1 | 0.01 | 1 | 10 | 2 | 0.01 | 5 | 1 | 0.01 | 1 | 10 | |
| M397451 | | 0.35 | 226 | 4 | 1.16 | 10 | 1220 | 16 | 0.07 | 8 | 264 | 0.32 | 154 | <10 | 65 |
| M397452 | | 0.60 | 360 | 3 | 2.37 | 8 | 810 | 13 | 0.06 | <5 | 547 | 0.27 | 71 | <10 | 51 |
| M397453 | | 1.07 | 382 | 8 | 0.29 | 25 | 2210 | 49 | 0.68 | 49 | 191 | 0.31 | 293 | <10 | 122 |
| M397454 | | 0.60 | 370 | 2 | 2.22 | 6 | 1090 | 10 | 0.08 | <5 | 529 | 0.24 | 63 | <10 | 51 |
| M397455 | | 0.63 | 523 | 13 | 0.39 | 11 | 4140 | 78 | 1.35 | 80 | 196 | 0.26 | 327 | <10 | 83 |
| M397456 | | 0.69 | 414 | 2 | 2.47 | 6 | 2340 | 11 | 0.05 | 6 | 589 | 0.26 | 71 | <10 | 51 |
| M397457 | | 0.31 | 110 | 15 | 0.14 | 10 | >10000 | 131 | 0.53 | 68 | 194 | 0.23 | 396 | <10 | 61 |
| M397458 | | 0.55 | 253 | 20 | 0.27 | 10 | 5320 | 247 | 0.55 | 146 | 177 | 0.41 | 539 | 10 | 58 |
| M397459 | | 0.63 | 154 | 15 | 0.25 | 4 | 6670 | 772 | 0.26 | 138 | 112 | 0.42 | 568 | 20 | 29 |
| M397460 | | 0.33 | 149 | 9 | 0.47 | 11 | 5720 | 193 | 0.27 | 55 | 162 | 0.38 | 274 | <10 | 44 |
| M397461 | | 0.53 | 228 | 14 | 0.55 | 15 | 3480 | 625 | 0.35 | 255 | 150 | 0.42 | 412 | 10 | 58 |
| M397462 | | 0.33 | 134 | 14 | 0.34 | 9 | 5220 | 330 | 0.59 | 138 | 88 | 0.29 | 471 | 10 | 36 |
| M397463 | | 0.26 | 85 | 13 | 0.20 | 9 | 1270 | 144 | 0.30 | 60 | 63 | 0.44 | 549 | <10 | 36 |
| M397464 | | 0.33 | 150 | 5 | 0.40 | 10 | 1010 | 61 | 0.08 | 33 | 82 | 0.42 | 407 | <10 | 44 |
| M397465 | | 0.35 | 168 | 17 | 0.38 | 10 | 960 | 82 | 0.30 | 60 | 82 | 0.46 | 448 | 10 | 47 |
| M397466 | | 0.46 | 176 | 11 | 0.73 | 8 | 2960 | 397 | 0.50 | 102 | 219 | 0.23 | 109 | <10 | 33 |
| M397467 | | 0.19 | 65 | 6 | 0.09 | 6 | 1630 | 208 | 0.51 | 102 | 89 | 0.20 | 148 | 10 | 21 |
| M397468 | | 1.87 | 3380 | 9 | 0.62 | 31 | 1140 | 15 | 0.87 | 15 | 303 | 0.19 | 106 | <10 | 146 |
| M397469 | | 0.80 | 375 | 2 | 2.38 | 6 | 820 | 17 | 0.28 | 9 | 628 | 0.26 | 74 | <10 | 46 |
| M397470 | | 0.70 | 411 | 7 | 0.22 | 20 | 1390 | 101 | 0.63 | 47 | 96 | 0.21 | 121 | <10 | 127 |
| M397471 | | 0.41 | 143 | 15 | 0.19 | 13 | 2370 | 150 | 1.78 | 108 | 101 | 0.20 | 166 | <10 | 89 |
| M397472 | | 0.47 | 1150 | 9 | 0.07 | 30 | 1690 | 233 | 1.04 | 93 | 130 | 0.17 | 87 | <10 | 236 |
| M397473 | | 0.47 | 240 | 9 | 0.27 | 8 | 1440 | 297 | 0.60 | 169 | 132 | 0.34 | 203 | 10 | 111 |
| M397474 | | 0.41 | 88 | 14 | 0.38 | <1 | 1980 | 170 | 1.09 | 217 | 175 | 0.39 | 239 | 10 | 43 |
| M397475 | | 0.35 | 90 | 10 | 0.09 | 8 | 2180 | 145 | 0.76 | 123 | 80 | 0.35 | 196 | 10 | 123 |

Comments: NSS is non-sufficient sample.



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: ALEXCO RESOURCE CORP.

2300-200 GRANVILLE ST

VANCOUVER BC V6C 1S4

Page: 1

Finalized Date: 2-OCT-2006

Account: ALERES

CERTIFICATE VA06091274

Project: Harlan

P.O. No.:

This report is for 59 Rock samples submitted to our lab in Vancouver, BC, Canada on 5-SEP-2006.

The following have access to data associated with this certificate:

MELANIE ROBERTS

MIKE STAMMERS

M. STAMMERS

SAMPLE PREPARATION

| ALS CODE | DESCRIPTION |
|----------|--------------------------------|
| WEI-21 | Received Sample Weight |
| LOG-24 | Pulp Login - Rcd w/o Barcode |
| LOG-22 | Sample login - Rcd w/o BarCode |
| CRU-31 | Fine crushing - 70% <2mm |
| SPL-21 | Split sample - riffle splitter |
| PUL-31 | Pulverize split to 85% <75 um |
| PUL-QC | Pulverizing QC Test |
| BAG-01 | Bulk Master for Storage |

ANALYTICAL PROCEDURES

| ALS CODE | DESCRIPTION | INSTRUMENT |
|----------|-------------------------------|------------|
| ME-ICP61 | 27 element four acid ICP-AES | ICP-AES |
| Au-AA25 | Ore Grade Au 30g FA AA finish | AAS |

To: ALEXCO RESOURCE CORP.

ATTN: MIKE STAMMERS

2300-200 GRANVILLE ST

VANCOUVER BC V6C 1S4

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

Signature:

Keith Rogers, Executive Manager Vancouver Laboratory



Project: Harlan

CERTIFICATE OF ANALYSIS VA06091274

| Sample Description | Method Analyte Units LOR | WEI-21 | Au-AA25 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 |
|--------------------|--------------------------|--------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | | Recvd Wt. kg | Au ppm | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | K % |
| | | 0.02 | 0.01 | 0.5 | 0.01 | 5 | 10 | 0.5 | 2 | 0.01 | 0.5 | 1 | 1 | 1 | 0.01 | 0.01 |
| P135601 | | 0.80 | 0.06 | <0.5 | 3.06 | 26 | 2270 | 0.9 | <2 | 0.03 | <0.5 | <1 | 49 | 8 | 0.45 | 1.17 |
| P135602 | | 0.64 | 0.24 | 5.0 | 0.43 | 28 | 260 | <0.5 | <2 | 0.01 | <0.5 | <1 | 35 | 4 | 0.28 | 0.15 |
| P135603 | | 0.62 | 0.19 | 1.6 | 0.27 | 33 | 220 | <0.5 | <2 | 0.01 | <0.5 | <1 | 24 | 3 | 0.33 | 0.09 |
| P135604 | | 0.58 | 0.67 | 2.3 | 0.51 | 2540 | 200 | <0.5 | <2 | 0.01 | <0.5 | <1 | 41 | 15 | 0.95 | 0.17 |
| P135605 | | 0.82 | 0.02 | <0.5 | 6.22 | 9 | 1440 | 3.2 | <2 | 1.40 | 0.5 | 1 | 7 | 2 | 1.63 | 3.06 |
| P135606 | | 0.74 | 0.04 | 1.7 | 1.42 | 170 | 850 | 0.6 | <2 | 0.01 | <0.5 | <1 | 33 | 7 | 0.36 | 0.56 |
| P135607 | | 0.96 | 0.01 | <0.5 | 7.79 | 98 | 1640 | 2.7 | <2 | 0.17 | <0.5 | <1 | 9 | 51 | 2.26 | 2.91 |
| P135608 | | 0.06 | 5.87 | 2.3 | 4.63 | 1090 | 350 | 0.5 | 6 | 13.30 | <0.5 | 49 | 42 | 205 | 8.83 | 0.91 |
| P135609 | | 0.56 | 0.08 | 0.9 | 0.48 | 60 | 360 | <0.5 | <2 | 0.03 | <0.5 | <1 | 30 | 6 | 0.31 | 0.18 |
| P135610 | | 0.90 | 0.03 | 0.9 | 2.05 | 46 | 1440 | 0.9 | <2 | 0.01 | <0.5 | <1 | 74 | 3 | 0.24 | 0.86 |
| P135611 | | 0.62 | 0.05 | 2.0 | 0.91 | 878 | 1000 | 0.6 | <2 | 0.01 | <0.5 | <1 | 49 | 33 | 2.62 | 0.35 |
| P135612 | | 0.66 | 0.13 | 5.1 | 1.06 | 169 | 510 | <0.5 | <2 | 0.01 | <0.5 | <1 | 35 | 11 | 0.64 | 0.34 |
| P135613 | | 0.74 | 0.12 | 1.2 | 1.30 | 34 | 1100 | 0.7 | <2 | <0.01 | <0.5 | 1 | 51 | 4 | 0.21 | 0.57 |
| P135614 | | 0.82 | 1.79 | 4.4 | 0.85 | 119 | 650 | <0.5 | <2 | 0.02 | <0.5 | <1 | 44 | 2 | 0.56 | 0.35 |
| P135615 | | 0.52 | 2.95 | 5.9 | 0.12 | >10000 | 50 | <0.5 | 54 | <0.01 | 0.5 | 36 | 31 | 185 | 22.3 | 0.09 |
| P135616 | | 0.72 | 0.17 | 1.2 | 1.55 | 6720 | 590 | 0.6 | 7 | <0.01 | <0.5 | 1 | 42 | 22 | 1.00 | 0.75 |
| P135617 | | 0.36 | 0.50 | <0.5 | 1.85 | 9750 | 1470 | 0.5 | <2 | 0.01 | <0.5 | 2 | 52 | 45 | 1.27 | 0.82 |
| P135618 | | 1.42 | 0.67 | 1.5 | 0.28 | >10000 | 480 | <0.5 | 46 | 0.01 | <0.5 | 9 | 31 | 120 | 2.78 | 0.13 |
| P135619 | | 0.76 | 1.10 | 5.7 | 1.74 | >10000 | 440 | 0.6 | 38 | <0.01 | 0.8 | 38 | 58 | 483 | 8.45 | 0.78 |
| P135620 | | 0.76 | 3.81 | 4.2 | 0.72 | >10000 | 40 | <0.5 | 24 | <0.01 | <0.5 | 47 | 27 | 280 | 17.40 | 0.35 |
| P135621 | | 0.82 | 0.08 | 3.7 | 0.95 | 1040 | 640 | <0.5 | <2 | <0.01 | <0.5 | <1 | 51 | 12 | 0.58 | 0.40 |
| P135622 | | 0.98 | 0.01 | 0.6 | 7.50 | 96 | 1640 | 3.7 | 3 | 0.83 | <0.5 | 3 | 9 | 21 | 2.07 | 3.54 |
| P135623 | | 0.80 | 0.02 | <0.5 | 5.63 | 187 | 2550 | 1.7 | <2 | 0.14 | <0.5 | 3 | 80 | 35 | 1.46 | 2.51 |
| P135624 | | 0.98 | 1.00 | 2.5 | 2.25 | 1350 | 600 | 1.4 | 4 | 0.03 | <0.5 | <1 | 71 | 7 | 1.40 | 0.65 |
| P135625 | | 0.72 | 0.01 | 2.9 | 0.63 | 129 | 360 | 0.5 | <2 | 0.02 | <0.5 | <1 | 38 | 11 | 0.66 | 0.24 |
| P135626 | | 0.76 | 0.04 | 3.2 | 0.79 | 290 | 440 | 0.6 | 2 | 0.02 | <0.5 | <1 | 46 | 13 | 0.56 | 0.32 |
| P135627 | | 0.90 | 0.08 | 0.7 | 1.36 | 662 | 400 | 0.7 | <2 | <0.01 | <0.5 | <1 | 82 | 4 | 0.71 | 0.63 |
| P135628 | | 0.74 | 0.05 | 0.6 | 7.40 | 130 | 1790 | 4.1 | <2 | <0.01 | <0.5 | <1 | 18 | 3 | 1.07 | 3.24 |
| P135629 | | 0.56 | 0.03 | 0.6 | 0.74 | 119 | 300 | <0.5 | <2 | <0.01 | <0.5 | <1 | 41 | 6 | 0.44 | 0.34 |
| P135630 | | 0.64 | 0.02 | 1.4 | 3.50 | 499 | 1740 | 1.3 | <2 | <0.01 | <0.5 | <1 | 119 | 7 | 1.01 | 1.48 |
| P135631 | | 0.06 | 1.27 | <0.5 | 4.03 | 3080 | 510 | 0.5 | 19 | 14.25 | <0.5 | 106 | 48 | 104 | 8.49 | 0.88 |
| P135632 | | 0.58 | 0.08 | 3.1 | 0.68 | 40 | 410 | <0.5 | <2 | 0.01 | <0.5 | <1 | 50 | 3 | 0.26 | 0.27 |
| P135633 | | 0.48 | 0.01 | <0.5 | 7.57 | 1050 | 2330 | 3.7 | <2 | 0.03 | 0.9 | 3 | 7 | 14 | 2.05 | 3.92 |
| P135634 | | 0.64 | 0.01 | <0.5 | 3.81 | 42 | 2630 | 1.3 | <2 | <0.01 | <0.5 | <1 | 58 | 5 | 0.33 | 1.50 |
| P135635 | | 0.64 | 0.09 | 2.4 | 1.04 | 52 | 790 | 0.5 | <2 | 0.01 | <0.5 | <1 | 49 | 3 | 0.20 | 0.42 |
| P135636 | | 0.86 | 0.03 | 1.5 | 0.78 | 49 | 790 | <0.5 | <2 | <0.01 | <0.5 | <1 | 57 | 7 | 0.25 | 0.29 |
| P135637 | | 0.76 | 0.04 | 5.5 | 0.96 | 79 | 1060 | 0.5 | 2 | <0.01 | <0.5 | <1 | 51 | 4 | 0.38 | 0.40 |
| P135638 | | 0.46 | 0.03 | 1.1 | 2.31 | 482 | 1240 | 0.8 | 2 | 0.01 | <0.5 | <1 | 87 | 5 | 0.76 | 0.88 |
| P135639 | | 0.86 | 0.04 | 2.0 | 1.00 | 612 | 450 | <0.5 | 3 | 0.01 | <0.5 | <1 | 72 | 7 | 1.00 | 0.42 |
| P135640 | | 0.90 | 0.01 | 4.2 | 0.89 | 48 | 620 | <0.5 | <2 | <0.01 | <0.5 | 1 | 39 | 3 | 0.18 | 0.36 |



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue
North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: ALEXCO RESOURCE CORP.
2300-200 GRANVILLE ST
VANCOUVER BC V6C 1S4

Page: 2 - B
Total # Pages: 3 (A - B)
Finalized Date: 2-OCT-2006
Account: ALERES

Project: Harlan

CERTIFICATE OF ANALYSIS VA06091274

| Sample Description | Method Analyte Units LOR | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | |
|--------------------|-----------------------------------|-----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|----------------|----------------|
| | | Mg % 0.01 | Mn ppm 5 | Mo ppm 1 | Na % 0.01 | Ni ppm 1 | P ppm 10 | Pb ppm 2 | S % 0.01 | Sb ppm 5 | Sr ppm 1 | Ti % 0.01 | V ppm 1 | W ppm 10 | Zn ppm 2 |
| P135601 | | 0.17 | 47 | <1 | 0.03 | 3 | 70 | 4 | 0.07 | 6 | 32 | 0.21 | 167 | <10 | 6 |
| P135602 | | 0.04 | 21 | <1 | 0.01 | <1 | 100 | 39 | 0.03 | 13 | 7 | 0.02 | 52 | <10 | 2 |
| P135603 | | 0.03 | 19 | <1 | 0.01 | 1 | 40 | 45 | 0.04 | 19 | 2 | 0.01 | 36 | <10 | <2 |
| P135604 | | 0.05 | 24 | 1 | 0.01 | <1 | 2020 | 17 | 0.08 | 32 | 5 | 0.03 | 89 | 10 | 4 |
| P135605 | | 0.17 | 368 | <1 | 1.30 | 1 | 380 | 10 | 0.17 | <5 | 143 | 0.13 | 16 | <10 | 24 |
| P135606 | | 0.07 | 13 | <1 | 0.02 | <1 | 300 | 7 | 0.08 | <5 | 3 | 0.07 | 70 | <10 | <2 |
| P135607 | | 0.45 | 198 | <1 | 1.55 | 8 | 500 | 24 | 0.01 | 6 | 222 | 0.18 | 39 | 10 | 28 |
| P135608 | | 1.66 | 3210 | 109 | 0.84 | 52 | 940 | 75 | 2.58 | 12 | 409 | 0.21 | 103 | <10 | 128 |
| P135609 | | 0.03 | 22 | 1 | 0.01 | <1 | 60 | 10 | 0.03 | 12 | 4 | 0.02 | 71 | <10 | 2 |
| P135610 | | 0.11 | 15 | <1 | 0.01 | <1 | 70 | 19 | 0.02 | 24 | 8 | 0.12 | 515 | 10 | 2 |
| P135611 | | 0.05 | 13 | 6 | 0.01 | 1 | 350 | 15 | 0.03 | 96 | 5 | 0.04 | 174 | <10 | 7 |
| P135612 | | 0.10 | 20 | 1 | 0.01 | <1 | 160 | 37 | 0.07 | 49 | 16 | 0.05 | 165 | <10 | 20 |
| P135613 | | 0.07 | 11 | <1 | 0.01 | <1 | 40 | 9 | 0.04 | 10 | 5 | 0.06 | 216 | <10 | <2 |
| P135614 | | 0.10 | 17 | <1 | <0.01 | <1 | 90 | 7 | 0.18 | 38 | 4 | 0.05 | 136 | <10 | <2 |
| P135615 | | 0.01 | 5 | 5 | 0.01 | 18 | 2520 | 17 | 3.62 | 505 | 1 | 0.02 | 42 | 10 | 20 |
| P135616 | | 0.11 | 15 | 8 | 0.01 | <1 | 350 | 50 | 0.12 | 72 | 1 | 0.09 | 127 | 10 | 4 |
| P135617 | | 0.10 | 16 | <1 | 0.01 | 7 | 670 | 9 | 0.27 | 25 | 4 | 0.10 | 146 | <10 | 3 |
| P135618 | | 0.02 | 16 | 1 | 0.01 | 34 | 830 | 20 | 0.37 | 88 | <1 | 0.03 | 34 | <10 | 11 |
| P135619 | | 0.11 | 13 | 3 | 0.01 | 31 | 2270 | 24 | 1.03 | 166 | <1 | 0.07 | 98 | 10 | 15 |
| P135620 | | 0.05 | 9 | 10 | 0.01 | 21 | 1140 | <2 | 7.77 | 219 | 2 | 0.03 | 38 | <10 | 9 |
| P135621 | | 0.05 | 13 | <1 | 0.01 | 1 | 300 | 21 | 0.21 | 31 | 4 | 0.04 | 162 | <10 | 3 |
| P135622 | | 0.26 | 310 | 1 | 1.50 | 6 | 460 | 20 | 0.44 | 5 | 185 | 0.13 | 17 | <10 | 26 |
| P135623 | | 0.43 | 78 | 2 | 0.20 | 25 | 450 | 7 | 0.13 | <5 | 105 | 0.34 | 205 | <10 | 33 |
| P135624 | | 0.27 | 31 | 4 | 0.09 | 2 | 2330 | 276 | 0.23 | 108 | 48 | 0.10 | 278 | <10 | 5 |
| P135625 | | 0.03 | 21 | 1 | 0.01 | 1 | 2790 | 29 | 0.02 | 19 | 9 | 0.03 | 93 | <10 | 2 |
| P135626 | | 0.04 | 21 | 4 | 0.01 | 1 | 980 | 22 | 0.05 | 47 | 8 | 0.05 | 135 | <10 | 2 |
| P135627 | | 0.07 | 19 | 17 | 0.01 | 2 | 630 | 5 | 0.15 | 24 | 4 | 0.08 | 287 | 20 | 2 |
| P135628 | | 0.27 | 39 | 2 | 0.04 | 2 | 240 | 26 | 0.21 | 45 | 12 | 0.14 | 21 | <10 | 5 |
| P135629 | | 0.04 | 19 | 1 | 0.01 | 2 | 510 | 6 | 0.07 | 17 | 7 | 0.03 | 141 | <10 | <2 |
| P135630 | | 0.16 | 20 | 13 | 0.04 | 1 | 180 | 8 | 0.05 | 75 | 11 | 0.20 | 703 | 10 | 3 |
| P135631 | | 1.93 | 3500 | 10 | 0.63 | 35 | 1180 | 15 | 0.89 | 17 | 310 | 0.19 | 113 | <10 | 149 |
| P135632 | | 0.04 | 23 | 1 | <0.01 | 2 | 30 | 6 | 0.01 | 10 | 6 | 0.03 | 113 | <10 | <2 |
| P135633 | | 0.19 | 114 | 1 | 0.15 | 7 | 510 | 15 | 0.02 | 11 | 50 | 0.15 | 21 | <10 | 58 |
| P135634 | | 0.21 | 30 | 1 | 0.03 | 2 | 100 | 4 | 0.04 | 10 | 37 | 0.29 | 215 | <10 | 5 |
| P135635 | | 0.05 | 15 | 1 | <0.01 | 2 | 110 | 13 | 0.02 | 14 | 22 | 0.06 | 148 | <10 | <2 |
| P135636 | | 0.04 | 18 | 2 | 0.01 | 1 | 40 | 5 | 0.02 | 11 | 12 | 0.05 | 155 | <10 | <2 |
| P135637 | | 0.05 | 14 | 3 | 0.01 | 2 | 60 | 8 | 0.06 | 15 | 7 | 0.04 | 129 | <10 | 2 |
| P135638 | | 0.17 | 22 | 1 | 0.05 | 3 | 2440 | 11 | 0.03 | 10 | 36 | 0.14 | 333 | <10 | 6 |
| P135639 | | 0.05 | 23 | 3 | 0.01 | 1 | 2840 | 7 | 0.09 | 18 | 12 | 0.03 | 186 | <10 | 3 |
| P135640 | | 0.03 | 11 | 1 | 0.01 | 1 | 50 | 26 | 0.02 | 30 | 10 | 0.05 | 129 | <10 | <2 |



ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
 ALS Canada Ltd.

212 Brooksbank Avenue
 North Vancouver BC V7J 2C1
 Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: ALEXCO RESOURCE CORP.
 2300-200 GRANVILLE ST
 VANCOUVER BC V6C 1S4

Page: 3 - A
 Total # Pages: 3 (A - B)
 Finalized Date: 2-OCT-2006
 Account: ALERES

Project: Harlan

CERTIFICATE OF ANALYSIS VA06091274

| Sample Description | Method Analyte Units LOR | WEI-21 | Au-AA25 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 |
|--------------------|-----------------------------------|-----------------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|----------|
| | | Recvd Wt. kg | Au ppm | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | K % |
| | | 0.02 | 0.01 | 0.5 | 0.01 | 5 | 10 | 0.5 | 2 | 0.01 | 0.5 | 1 | 1 | 1 | 0.01 | 0.01 |
| P135641 | | 0.48 | 0.30 | 1.3 | 1.06 | >10000 | 380 | <0.5 | 14 | 0.01 | <0.5 | <1 | 42 | 314 | 3.80 | 0.44 |
| P135642 | | 0.84 | 0.03 | 0.9 | 1.74 | 182 | 1120 | 0.6 | <2 | <0.01 | <0.5 | <1 | 52 | 4 | 0.44 | 0.77 |
| P135643 | | 0.62 | 0.01 | <0.5 | 8.04 | 645 | 2170 | 3.2 | 2 | <0.01 | <0.5 | <1 | 10 | 32 | 2.01 | 3.36 |
| P135644 | | 1.56 | 3.34 | 43.7 | 0.91 | >10000 | 590 | <0.5 | 367 | 0.01 | 0.8 | 3 | 43 | 107 | 2.21 | 0.45 |
| P135645 | | 0.48 | 4.25 | 19.5 | 3.21 | >10000 | 90 | 1.4 | 1040 | <0.01 | 2.3 | 53 | 65 | 155 | 7.32 | 1.36 |
| P135646 | | 0.38 | 2.32 | 2.8 | 0.71 | 4300 | 550 | <0.5 | 39 | <0.01 | <0.5 | 1 | 33 | 23 | 2.04 | 0.31 |
| P135647 | | 0.66 | 0.56 | <0.5 | 0.93 | 232 | 390 | <0.5 | 13 | <0.01 | <0.5 | <1 | 35 | 4 | 0.43 | 0.32 |
| P135648 | | 0.06 | 5.60 | 2.5 | 4.62 | 826 | 440 | 0.5 | 13 | 13.65 | <0.5 | 51 | 39 | 202 | 8.70 | 0.89 |
| P135649 | | 0.90 | 0.11 | 1.5 | 0.48 | 703 | 510 | <0.5 | <2 | 0.03 | <0.5 | <1 | 41 | 9 | 0.77 | 0.17 |
| P135650 | | 0.50 | 0.04 | 3.1 | 0.83 | 2480 | 410 | <0.5 | 5 | 0.01 | <0.5 | <1 | 44 | 16 | 1.39 | 0.27 |
| P135651 | | 0.40 | 0.30 | 1.4 | 2.06 | 598 | 720 | 1.3 | <2 | 0.01 | <0.5 | <1 | 78 | 5 | 0.99 | 0.94 |
| P135652 | | 1.02 | 0.05 | 4.5 | 1.28 | 1330 | 420 | 0.6 | 4 | 0.03 | 0.9 | <1 | 30 | 35 | 4.74 | 0.71 |
| P135653 | | 0.60 | 0.02 | 1.5 | 1.03 | 67 | 480 | 0.5 | <2 | 0.06 | <0.5 | 1 | 27 | 23 | 3.14 | 0.28 |
| P135654 | | 0.70 | 0.94 | 15.8 | 0.83 | >10000 | 410 | <0.5 | 132 | 0.01 | 0.8 | 4 | 37 | 100 | 4.47 | 0.36 |
| P135655 | | 0.48 | 0.07 | 1.9 | 0.70 | 778 | 610 | <0.5 | 5 | <0.01 | <0.5 | <1 | 40 | 11 | 1.28 | 0.30 |
| P135656 | | 0.48 | 0.03 | 3.5 | 7.05 | 632 | 410 | 2.7 | 9 | <0.01 | <0.5 | <1 | 5 | 23 | 3.00 | 3.02 |
| P135657 | | 0.82 | 0.27 | 3.6 | 0.79 | 4350 | 820 | <0.5 | 10 | 0.01 | 0.5 | <1 | 52 | 24 | 1.40 | 0.25 |
| P135658 | | 0.60 | 0.26 | 8.8 | 1.89 | 9700 | 1490 | 0.6 | <2 | 0.01 | 0.7 | 4 | 84 | 110 | 1.82 | 0.73 |
| P135659 | | 0.58 | 0.02 | 0.5 | 7.43 | 98 | 2320 | 3.2 | <2 | 0.66 | 0.8 | 3 | 10 | 10 | 1.87 | 3.31 |



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: ALEXCO RESOURCE CORP.

2300-200 GRANVILLE ST

VANCOUVER BC V6C 1S4

Page: 3 - B

Total # Pages: 3 (A - B)

Finalized Date: 2-OCT-2006

Account: ALERES

Project: Harlan

CERTIFICATE OF ANALYSIS VA06091274

| Sample Description | Method Analyte Units LOR | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | ME-ICP61 | |
|--------------------|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|
| | | Mg % | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | S % | Sb ppm | Sr ppm | Ti % | V ppm | W ppm | Zn ppm |
| | | 0.01 | 5 | 1 | 0.01 | 1 | 10 | 2 | 0.01 | 5 | 1 | 0.01 | 1 | 2 | |
| P135641 | | 0.12 | 17 | 5 | <0.01 | 1 | 1450 | 16 | 0.10 | 83 | 12 | 0.08 | 85 | <10 | 11 |
| P135642 | | 0.09 | 14 | 1 | 0.01 | 2 | 50 | 4 | 0.05 | 12 | 4 | 0.11 | 106 | <10 | 2 |
| P135643 | | 0.22 | 54 | 6 | 0.04 | 3 | 870 | 24 | 0.34 | 39 | 30 | 0.19 | 29 | <10 | 63 |
| P135644 | | 0.05 | 18 | 4 | 0.01 | 4 | 580 | 473 | 0.69 | 275 | 6 | 0.05 | 35 | <10 | 10 |
| P135645 | | 0.13 | 19 | 9 | 0.02 | 17 | 1650 | 322 | 3.04 | 674 | 8 | 0.13 | 215 | 20 | 23 |
| P135646 | | 0.06 | 19 | 1 | <0.01 | 2 | 1000 | 27 | 0.96 | 53 | 14 | 0.05 | 52 | <10 | 2 |
| P135647 | | 0.06 | 17 | 3 | <0.01 | 3 | 70 | 12 | 0.02 | 11 | 11 | 0.04 | 52 | <10 | 9 |
| P135648 | | 1.65 | 3300 | 110 | 0.87 | 52 | 930 | 78 | 2.71 | 13 | 427 | 0.22 | 100 | <10 | 126 |
| P135649 | | 0.03 | 26 | 1 | 0.01 | 3 | 670 | 5 | 0.24 | 11 | 14 | 0.02 | 51 | <10 | 4 |
| P135650 | | 0.09 | 17 | 3 | 0.02 | 1 | 2360 | 19 | 0.18 | 37 | 12 | 0.04 | 77 | <10 | 4 |
| P135651 | | 0.09 | 24 | 5 | 0.02 | 2 | 2160 | 64 | 0.16 | 37 | 37 | 0.09 | 293 | <10 | 6 |
| P135652 | | 0.12 | 25 | 4 | 0.01 | 2 | 1480 | 81 | 0.48 | 121 | 56 | 0.08 | 108 | <10 | 8 |
| P135653 | | 0.41 | 181 | 1 | 0.02 | 7 | 220 | 11 | 0.04 | 13 | 13 | 0.10 | 39 | <10 | 192 |
| P135654 | | 0.08 | 29 | 2 | <0.01 | 4 | 780 | 135 | 1.11 | 249 | 4 | 0.05 | 60 | 10 | 8 |
| P135655 | | 0.03 | 15 | 2 | <0.01 | 7 | 80 | 18 | 0.72 | 32 | 5 | 0.04 | 82 | <10 | 2 |
| P135656 | | 0.37 | 38 | 2 | 0.05 | <1 | 200 | 35 | 2.15 | 51 | 9 | 0.16 | 19 | <10 | 6 |
| P135657 | | 0.05 | 17 | 3 | <0.01 | 2 | 1270 | 25 | 0.11 | 64 | 20 | 0.05 | 128 | <10 | 68 |
| P135658 | | 0.11 | 17 | 23 | 0.02 | 57 | 1790 | 72 | 0.74 | 93 | 14 | 0.10 | 466 | <10 | 20 |
| P135659 | | 0.38 | 175 | 2 | 1.92 | 13 | 580 | 36 | 0.21 | <5 | 225 | 0.14 | 26 | <10 | 63 |

APPENDIX 6: Aurora Geophysical Report with CD



Whitehorse Office
108 Gold Road
Whitehorse, Yukon Y1A 3W2
Phone (867) 668-7672
Fax: (867) 393-3577

www.aurorageosciences.com
phil@aurorageosciences.com

MEMORANDUM

To: Mike Stammers
Alexco Resource Corp.

Date: 19 Sept 2006

From: Phil Jackson

Re: Field Report - Harlan Magnetic Survey

This memorandum is a field report describing the results of a total magnetic field survey conducted for Alexco Resource Corp. at the Harlan Property. The purpose of the survey was to test the magnetic response on the property in order to better define lithological discontinuities.

a. Personnel and equipment. The total magnetic field survey was conducted by the following personnel:

| | |
|------------------|-------------------------|
| Lauren Blackburn | Crew chief / technician |
| Ron Stack | Technician |

The crew was equipped with the following instruments and equipment:

| | |
|----------------------------|---|
| <u>Base Magnetometer</u> | 1 - Gem GSM-19 Overhauser magnetometers |
| <u>Mobile Magnetometer</u> | 2 - Gem GSM-19 Overhauser magnetometers |
| <u>Other:</u> | P-1.2GHz laptop 2 - VHF radios |

The project was conducted between August 18th and August 31st, 2006 inclusive.

b. Survey area and stations. A total of 7.32 line km of total field magnetic data was surveyed. The area is bounded by (UTM NAD27 Zone 9N) 366000E 7014000N to 367500E 7106000N. This area is centred on the Harlan Property with the station distribution designed to measure the property scale magnetic fields.

c. Survey specifications. The geophysical surveys were conducted according the following specifications with exceptions as noted:

TOTAL MAGNETIC FIELD SURVEY

Station spacing: 12.5 m

Base station: Installed at a fixed location in a magnetically quiet area on the grid and cycled at a three second interval throughout the survey period.

Registration: Data was registered to UTM coordinates (NAD27) using a nondifferential GPS receiver mounted on the rover magnetometer.

d. Data processing. Data processing included the following steps and procedures:

TOTAL MAGNETIC FIELD SURVEY

1. *Registration.* The total magnetic field data was registered to UTM coordinates by matching or interpolating locations in the track log to corresponding magnetic field readings based on their record times.

2. *Geomagnetic variation removal.* Base and rover magnetometers were synchronized to GPS time prior to each survey day. Temporal geomagnetic variation was removed by linear interpolation using the base station data. Data collected during periods in which geomagnetic variation exceeds 10 nT / 10 s were not included in the final data set; no data was rejected as being above this noise threshold.

e. Survey notes and data. An orthogonal levelling line was surveyed by the operator at the start of each survey day to serve as a datum for levelling the operators daily drift.

f. Results. A digital archive is included with this report on CD-ROM. This contains the following:

Final TFM data after all corrections (Geosoft gdb & xyz text file)
Images of the merged TFM maps (Geosoft maps & Geotifs).
Project Summary spreadsheets (.xls files).

Thank you for the opportunity to work with you on this interesting project. If you have any questions, please contact me directly in Whitehorse.

Respectfully submitted,
AURORA GEOSCIENCES LTD.

A handwritten signature in purple ink, appearing to read "Phil Jackson", with a long horizontal flourish extending to the right.

Phil Jackson, P.Geoph.
Geophysicist

/attach.

COST STATEMENT - HARLAN CLAIMS

Alexco Resource Corp. and 650399 BC Ltd.

CONTRACT GROUND GEOPHYSICAL SURVEYS

Contractor: Aurora Geosciences
Description: Ground Magnetics and Support

| | | |
|-------------------------------------|-----------------|-------------|
| Geophysical Charges: | \$9,800.00 | |
| Camp and Equipment Support Charges: | \$5,700.00 | |
| Food and Fuel | <u>\$500.00</u> | \$16,000.00 |

CONTRACT GEOLOGICAL MAPPING AND SAMPLING SURVEYS

| | | |
|-------------------------------------|-------------------|---------------------------|
| Wages: M. Roberts 20 days x \$350 | \$7,000.00 | |
| M. Stammers 3 days x \$500 | \$1,500.00 | |
| Trans North Helicopters | \$4,440.06 | |
| | \$5,178.80 | |
| | <u>\$2,412.77</u> | |
| Freight | \$123.41 | |
| Norcan | \$1,040.38 | |
| Stammers Expenses - Hotel/gas/meals | \$644.00 | |
| Roberts Expenses - Hotels,gas meals | \$391.00 | |
| Assays Soils - 25 | \$560.00 | |
| Rocks - 59 | <u>\$1,565.00</u> | <u>\$24,855.42</u> |
| Total Minimum Expenditures Applied: | | <u><u>\$40,855.42</u></u> |

Estimated Minimum Expenditure per Work Claim*: Cam 5, 6 \$12,256.63 each
*Pro-rated to 30% to Cam 5 & 6 and 20% to Cam 7 and 8 Cam 7, 8 \$8,171.08 each

