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MAP- Willow Creek Reservoir 7.5' Quadrangle Lat: 41° 10' N Long: 116° 35' W

TECHNICAL REPORT on the **IVANHOE CREEK PROPERTY** Ivanhoe Mining District Elko County, Nevada, USA

for

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and

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2 November 2005

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SUMMARY

At the request of Senator Minerals Inc ("Senator"), operator of the Ivanhoe Creek project, and Kent Exploration Inc ("Kent"), this evaluation and report has been made on the Ivanhoe Creek property (the "Property"), Ivanhoe Mining District, Elko County, Nevada, U.S.A. The report incorporates a summary of previous and current work, an appraisal of the exploration potential of the Property, and recommendations for further work. This report is based on a compilation and analysis of published and unpublished geological and geophysical reports prepared by cited persons, and field examinations by the writer, a "qualified person" within the meaning of National Instrument 43-101 of the Canadian Securities Administrators.

The Property comprises two non-contiguous claim blocks: one block of 50 unpatented lode mining claims; and one block consisting of a single claim fraction. All claims have been filed and recorded with Elko County and the U.S. Bureau of Land Management, and are unsurveyed. Claims total approximately 920 acres and are located 48 miles northwest of Elko, Nevada. Access is by paved Highways 225 and 226 for 46 miles, west on the graded dirt Midas-Tuscarora County Road for 36 miles and three miles southeast on the graded dirt Ivanhoe Mining District road.

The Property is in rolling, sagebrush-covered desert. The climate is favorable for year-round mining, with all supplies and services needed for a successful exploration program available in the area.

The Ivanhoe Creek property is situated along the Northern Nevada Rift ("NNR"), a Miocene-age structural zone that hosts several current and past producing mines, and one major development project. The largest of these are Newmont's Mule Canyon and Midas (Ken Snyder) mines, and the Great Basin Gold – Hecla Ivanhoe-Hollister deposit that is currently in development (John et al, 2000; John, 2001).

Exploration on the Ivanhoe Creek property has included surface prospecting, limited geochemical rock sampling and geophysical surveys consisting of ground magnetics, gravity, and CSAMT.

The observed surface indications are similar to subtle features found above high-grade vein systems in the Ivanhoe and Midas districts, and additional exploration is warranted.

Geophysical surveys carried out on the Ivanhoe Creek property in 2004 indicate north-south oriented deep-seated horst/graben structures controlling both basement topography and alteration in overlying volcanic rocks. Many volcanic-hosted gold deposits demonstrate spatial and/or genetic relationships to structural variations in the underlying basement.

Recent deep gold-silver discoveries at Ivanhoe-Hollister demonstrate that basement structures, as well as overlying volcanic rocks, can host significant gold deposits.

Previously recommended Stage 1 work on the Ivanhoe Creek property has produced results to implement Stage 2 drilling comprising a combination of reverse circulation and core drilling to test indicated structures at depth.

Stage 2 drilling is budgeted at US\$450,000.

4.0 INTRODUCTION AND TERMS OF REFERENCE

At the request of Senator Minerals Inc ("Senator"), operator of the Ivanhoe Creek project, and Kent Exploration Inc (the "Company" or "Kent"), this report has been prepared on the Ivanhoe Creek property (the "Property"), Ivanhoe Mining District, Elko County, Nevada, USA (Figure 1), to summarize previous and current work, appraise the exploration potential of the Property, and make recommendations for future work.

This report is based on geological and geophysical reports, a compilation of published and unpublished data, maps, and reports made by cited persons, and field examinations of the Property. The author is a "qualified person" within the meaning of National Instrument 43-101 of the Canadian Securities Administrators. The writer examined the geology and infrastructure of the Property on October 22 and 26, 2003, and on August 5, 7, 8 9 and October 4-5, 2004, and October 22, 2005.

The claims were originally staked by Richard R. Redfern of Spring Creek, Nevada (Redfern) and are now controlled by Senator Minerals Inc (Senator) through a mining lease option agreement dated and signed September 19, 2003.

Because the majority of the information about the property and surrounding areas is given in American terms and units, this report will use American terminology to maintain consistency. Metric units will be given as required for clarity.

5.0 **DISCLAIMER**

This report is based on a review of information provided by the property owner, published geologic reports, a geophysical report and observations made during the property examination and land status review. All interpretations and conclusions are based on the writer's research and personal examination of the Ivanhoe Creek property.

6.0 PROPERTY DESCRIPTION and LOCATION

The Ivanhoe Creek property comprises two non-contiguous claim blocks: one block of 50 unpatented lode mining claims, and one block consisting of a single unpatented lode claim fraction. Claims are listed in Appendix A. The claims are unsurveyed, total approximately 920 acres (372.32 hectares (ha)), and are located in the Ivanhoe Mining District, Elko County, Nevada, USA. All claims have been registered with the Elko County Recorder and the Bureau of Land Management (BLM).

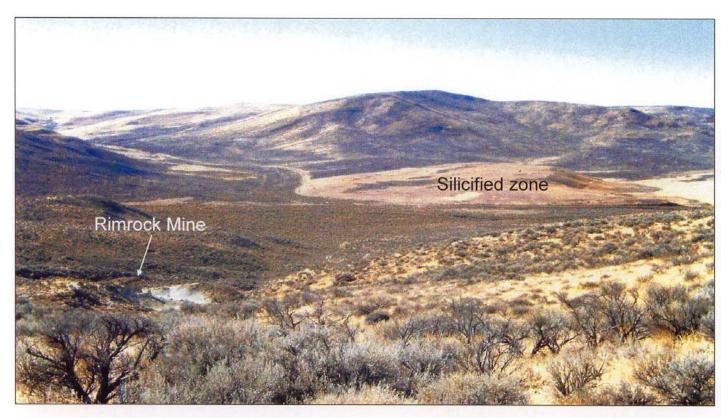


Photo 1: Looking southwest across the Ivanhoe Creek property toward the silicified zone center right.

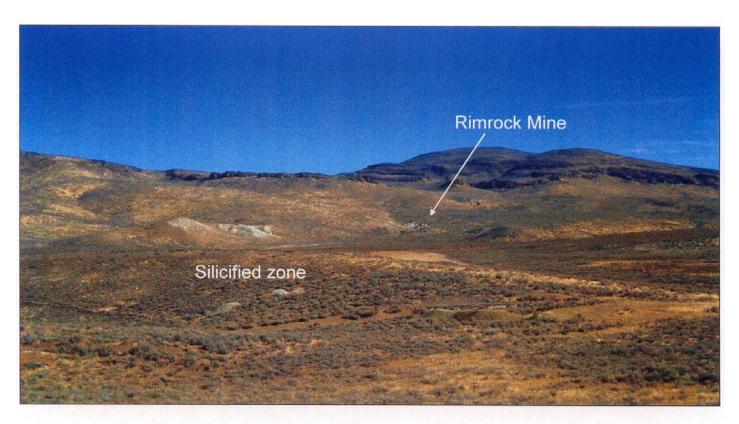
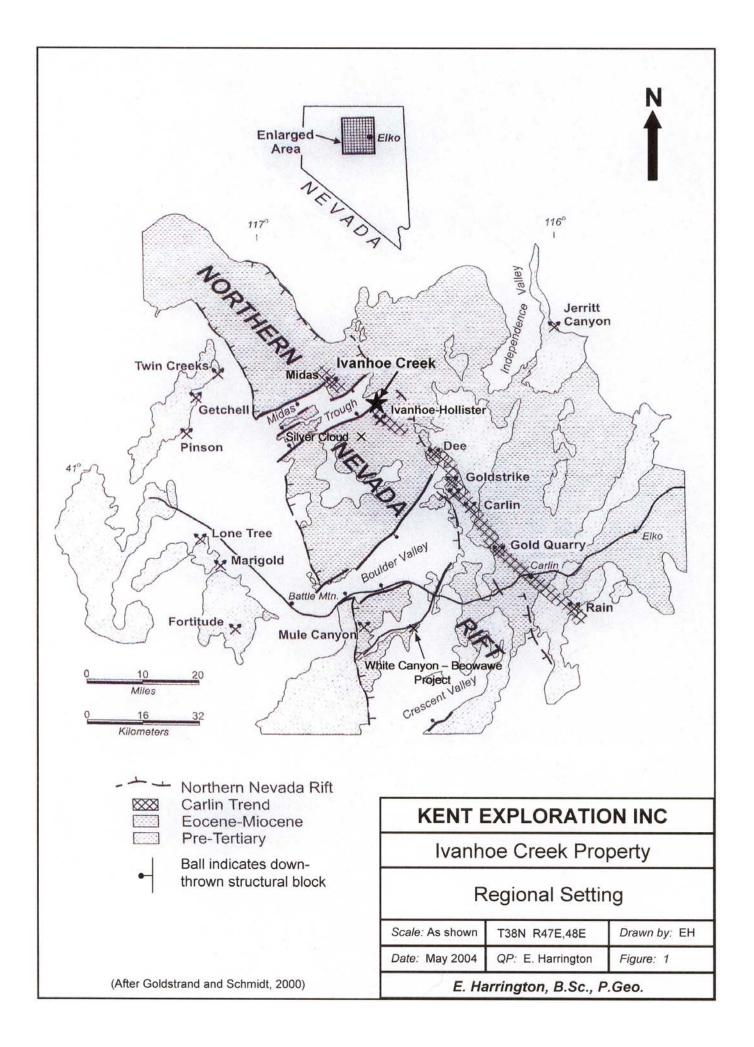
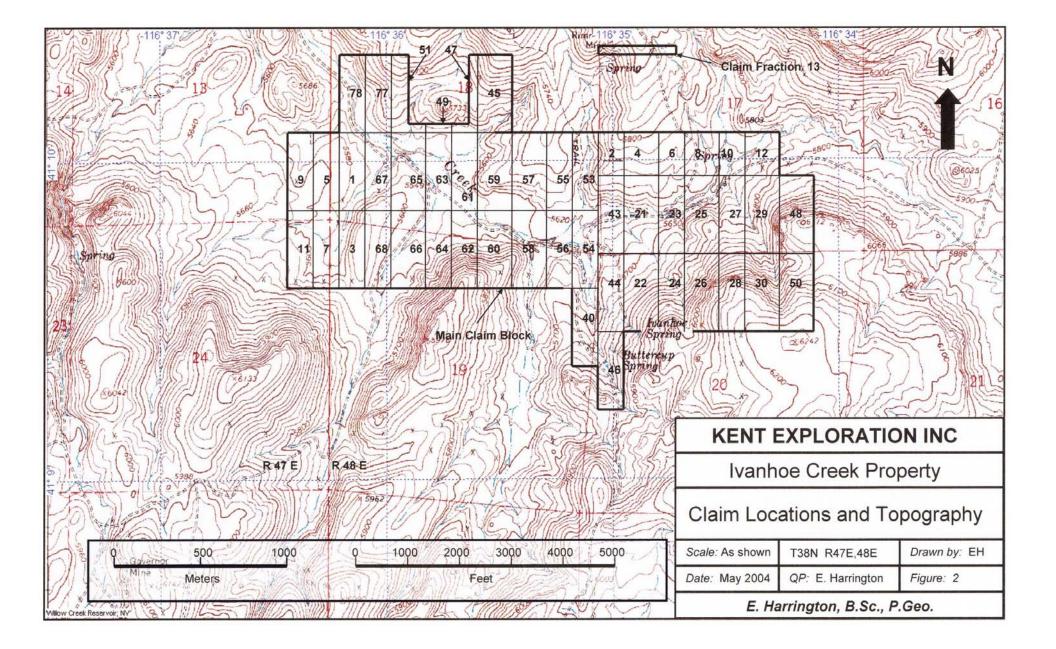


Photo 2: Looking northeast across the Ivanhoe Creek property toward the Rimrock mine.





The claims cover parts of Sections 17, 18, 19 and 20 in Township 38 North, Range 48 East and Sections 13 and 24 in Township 38 North, Range 47 East (Figure 2).

Kent can earn a 50% interest in the Ivanhoe Creek property by paying Senator a one-time fee of US\$25,000 and financing approximately US\$450,000 of exploration work through a trust account to be drawn down by Senator, the project operator.

Senator controls the claims through a Mining Lease Option dated September 19, 2003. The lease gives Senator an option, renewable yearly, to control 100% of the property, net of a 3% NSR, for a term of twenty years. Under the terms of the agreement, Senator paid Redfern an initial down payment of US\$10,000 upon execution of the lease agreement, with the balance of US\$15,000 paid to Redfern when the regulatory approval of the TSX Venture Exchange was received. Pursuant to the terms of the lease, Senator also reimbursed Redfern for the cost of perfecting and filing the claims. After the first year's payment, Senator is required to make annual payments to keep the lease in good standing. These requirements are listed in Table 1. The Property is subject to a three percent (3%) Net Smelter Return (NSR) royalty. The agreement also recognizes a one-mile area of interest (AOI) around the claims. Any properties acquired by either Senator or Redfern within the AOI are subject to the terms of the current lease excepting claims acquired from third parties. Any claims acquired within the AOI would be subject to a 1% NSR only, payable to Redfern.

Senator may terminate the lease at any time by giving Redfern thirty (30) days' notice. Senator must pay all claim filing and other related fees due for the year in which the lease is terminated. Senator may also release portions of the Property if it chooses. If Senator releases a portion of the Property, the lease remains valid and all lease payments and NSR royalty remain unchanged.

Lease Year	Payment Date	Lease payment
1	18 September 2004	\$25,000
2	18 September 2005	\$30,000
3	18 September 2006	\$35,000
4	18 September 2007	\$35,000
5 – 9	18 September 2008 - 2012	\$45,000
10-20	18 September 2013 – 2023	\$50,000

Table	1.]	Lease	pay	yments
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Kent Exploration Inc has signed an agreement with Senator whereby Kent can earn a 50% interest in the Ivanhoe Creek property by paying Senator a fee of US\$25,000 and placing US\$450,000 in trust for financing the recommended work programs. The trust monies can be drawn down only by Senator, the project operator.

7.0 <u>ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and</u> <u>PHYSIOGRAPHY</u>

The Ivanhoe Creek property is located 48 miles (77 km) northwest of Elko in the Sheep Creek Range. The Property is accessed from Elko, driving north on paved Highway 225 for 27 miles (43 km) and northwest on paved Highway 226 for 19 miles (30 km) to the graded dirt Midas-Tuscarora County Road for 36 miles (58 km), and 3 miles (5 km) southeast on the graded dirt Ivanhoe Mining District road. The claims can be accessed by unimproved "two track" dirt trails. Some minor work would be required for drilling access.

The Property is in rolling sagebrush-covered desert. Elevations in the area are between 5,549 feet (1,690 m) along Ivanhoe Creek and 6,200 feet (1,890 meters) in the southeastern corner of the larger claim block.

Mining and exploration in the region takes place year-round with only occasional weather-related difficulties. Winters are cool to cold, with moderate snowfalls. Summer days are warm to hot, with cool nights. The area is fairly dry, with infrequent rains during the summer. Most precipitation comes as winter snow and spring rains, although locally intense storms may develop any time of year.

Exploration may be conducted year-round, with some interruptions due to snow in the winter and muddy, unstable roads in the spring. Mining is conducted year-round in the area. Elko is the major supply center for the region and can provide almost any mining-related supply or service. The specific claims area is uninhabited. New exploration and development projects are welcomed by the majority of area residents. The topography does not impose any significant challenges for the construction of mining or milling facilities.

A work permit application for the recommended Ivanhoe Creek drilling program and the reclamation bond amount of US\$20,000 have been approved by the BLM. The necessary work permit will be issued upon payment of the reclamation bond. An inspection of the thirteen drill hole locations was made by the writer and a BLM representative, and minor cultural artifacts noted. When drilling commences, a further inspection by BLM personnel will be made to make minor adjustments to hole locations DDH 10 and DDH 12 in order to reduce the impact on cultural artifacts (arrowhead production sites).

8.0 <u>HISTORY</u>

8.1 Area History

Mercury was discovered in the Ivanhoe District in 1915. Most of the district's 2,180 flasks of mercury were produced between 1929 and 1943 (LaPoint et al, 1991) making the district the largest producer of mercury in Elko County. Of nineteen known mines and prospects in the district, all show mercury values, with eight also showing silver and/or gold mineralization. One of the mercury mines, the Rimrock or Homestake Mine, adjoins the Property immediately to the north.

From the late 1960s to the late 1990s, exploration and development in the district have primarily focused on shallow open-pit mineable volcanic-hosted gold-silver potential. Molybdenum and uranium potential have also been investigated, though with negative results. Since the late 1990s, exploration focus has changed to deep vein-hosted gold-silver mineralization similar to Newmont's Midas deposit located approximately twelve miles northwest of the Property.

The Silver Cloud property, a past-producing mercury mine now being explored for vein-hosted gold-silver, is located approximately seven miles south-southwest of the Ivanhoe Creek property.

The Ivanhoe-Hollister gold-silver mine, located three miles south of the Property, began open-pit production in October 1990 and is presently constructing a large diameter decline to access a high-grade Midas-style vein-hosted gold-silver deposit. For more details, see section 14.0 Adjacent Properties.

8.2 Previous Work

A minimal exploration program was carried out on the Ivanhoe Creek property by Newmont in 1994, with the objective of identifying shallow open-pit mineable gold targets. Results were not significant and to the writer's knowledge no drilling was undertaken on the Property. Between five and six shallow reverse-circulation holes, with estimated individual depths of approximately 100 feet (30 m), were drilled north of the Property to test areas of silicification and sinter (Figure 3).

In 2002 and 2003, geochemical rock sampling by the Ivanhoe Creek property owner, Redfern, consisted of four samples. Samples 153358 and 153359 were taken from the silicified zone in the southwest corner of the Property. Neither sample showed significant gold or silver results (5 and 2 ppb gold, 0.08 and 0.16 ppm silver respectively).

Mercury values were 0.52 and 40.2 ppm respectively. The elevated mercury value (40.2 ppm) suggests the presence of a mercury mineralizing system.

Select rock sample 10866 was taken from veined silica sinter float containing disseminated hematite and goethite. Select rock sample 10867 was taken from dump material from a small prospect pit at the same sinter horizon as the Rimrock mine (Redfern, personal communication). Sample 10867 consisted of hematized argillically altered tuff containing hematized cinnabar-sinter. Neither sample showed significant gold or silver results (4 and 3 ppb gold, 0.06 and 0.14 ppm silver respectively). Mercury values were 1.96 and >100 ppm respectively. Elevated mercury values (40.2 and >100 ppm) suggest the presence of a mercury mineralizing system.

Eight other rock samples were taken by Redfern from drill cuttings, zones of silicification, and sinter north of the Property. Sample 153360, taken from a north-northwest trending chalcedony veinlet crosscutting silicified tuff at the Rimrock mine, returned a high selenium value of 97 ppm.

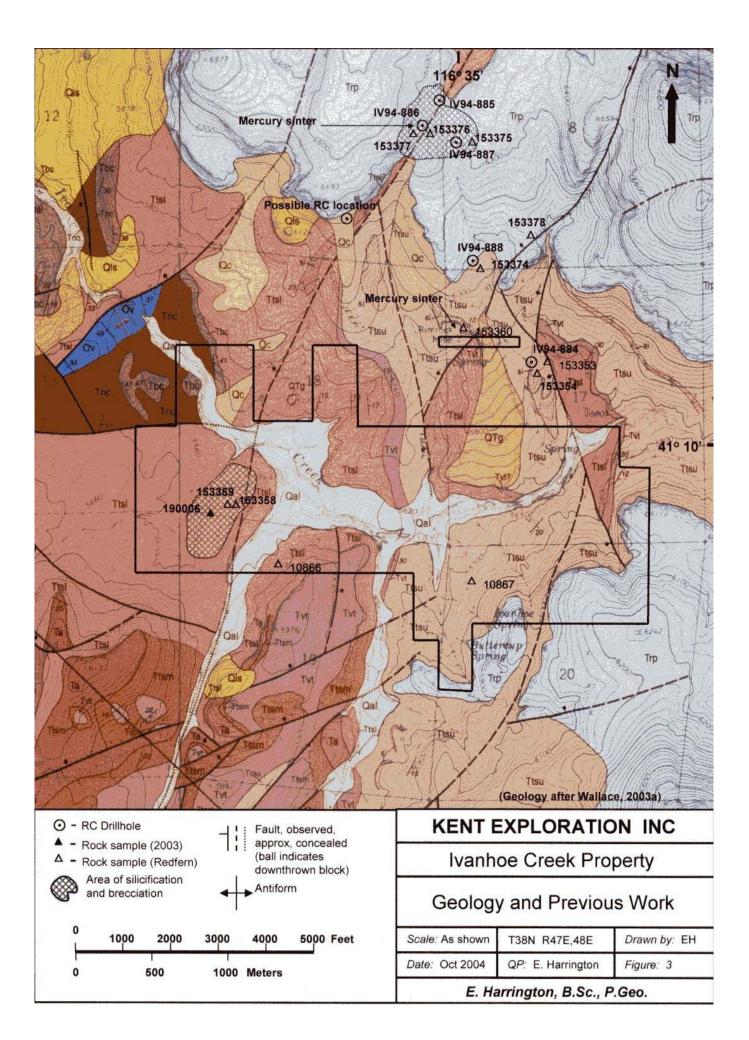
Two rock samples collected by Redfern and Abbott (2002) at the Silver Cloud Mine show elevated values for mercury, 59.3 and >100 ppm, associated with gold values of 19 and 37 ppb respectively. While gold values are not significant, they are detectable, suggesting that the hydrothermal system carried some gold in solution.

During the writer's property examination in 2003, one rock sample was taken from the silicified zone.

Sample No.	Туре	Width	Location	Description	
190006	select	-	533543E	Representative select sample taken from an area	
			4556820N of sinter, chalcedonic quartz, opaline q		
				possible hydrothermal breccia and silicified	
				rhyolitic tuff float.	

Table 2: Rock Sampling – 2003 Property Examination

Rock sample 190006 returned insignificant gold (0.01 g/mt) and silver (<0.1 ppm) values. However, mercury (34 ppm) and barium (788 ppm) values are elevated.



9.0 <u>GEOLOGICAL SETTING</u>

The Ivanhoe Creek property is located in the central part of the Great Basin province, on the eastern margin of the Northern Nevada Rift ("NNR") and along the southern margin of the Midas trough, on the northwestern projection of the Carlin gold trend.

Within the Great Basin province, exposed rock units range from late Pre-Cambrian meta-sediments to Pleistocene cinder cones. Tectonic events include alternating periods of continental scale compression, extension, and shearing. The Great Basin is most noted as an extensional terrain, with the eastern and western edges of the region, roughly the current sites of Reno, Nevada and Salt Lake City, Utah, having moved apart by some 100 kilometers in the past 40 million years.

Prior to this period of extensional movement, the region had seen at least three major periods of compression. Each of these events is evidenced by thrust faults which have stacked sheets of rock over one another that are age contemporaneous, but deposited in different sedimentary environments.

9.1 Regional Geology

The majority of the rocks in the Property area consist of Tertiary volcanic flows, domes, pyroclastic materials, and related reworked sediments that unconformably overlie a basement composed of Ordovician Vinini Formation. Subduction-related intermediate composition volcanic activity started approximately 41 million years (Ma) ago during the Eocene in the northeast corner of Nevada and progressed southwesterly until the Middle Miocene, about 16 Ma.

Later events are related to regional extension and crustal thinning starting about 17 Ma and the Northern Nevada Rift/Yellowstone Hot Spot events starting about 15.6 Ma. (John and Wallace, 2000).

Miocene volcanic rocks and related sediments fill extensional basins that started opening about 17 Ma and are still active, particularly in the western part of the state (Stewart, 1980). This episode of volcanism continued to about 6 Ma, mostly well to the north and west of the Property. A change in the extension direction, from east-northeast to northwest occurred at approximately 8 Ma. and resulted in a series of northeast trending grabens, which include the Midas trough (Goldstrand et al, 2000).

The Ivanhoe Creek Property is situated along the trend of the Miocene Northern Nevada Rift ("NNR") province between Newmont Mining's Midas gold-silver mine to the northwest, and the Mule Canyon gold mine to the south. Rhyolitic ash and tuff host the Rimrock mercury mine, which is located just north of the Property. The upper workings at the Rimrock mine are in a bed of opalized ash and tuff containing irregularly disseminated cinnabar and mercury chloride. The opalized unit is brecciated and contains fragments of silicified tuff and quartz crystals. Cream-colored tuff beds, underlying the opalite, are unsorted and contain matrix-supported lithic fragments. Mercury occurs in cavities and fractures in the massive opalite bed (LaPointe et al, 1991). North-northwest trending chalcedony veinlets up to 1 cm wide crosscut silicified tuff at the mine entrance.

Regional high-angle northeast- and northwest-striking faults cut all rock units in the district. These high-angle faults served as conduits allowing mineralized hydrothermal solutions to form mercury deposits in sinter and silicified tuffs, disseminated gold deposits in various Miocene rocks, and high-grade gold-silver veins in Paleozoic and deeply buried rhyolitic rocks (Wallace, 2003). Northwest-striking Miocene faults are consistent with the middle Miocene west-southwest extension direction (Zoback and Thompson, 1978; Zoback et al, 1994), and northeast-striking faults are related to younger (<8 Ma) northwest-directed extension (Zoback and Thompson, 1978; Wallace, 1991).

9.2 Property Geology

The Ivanhoe Creek property has not been the subject of published detailed geologic mapping. The rock descriptions and general stratigraphic relationships described below are taken from the published regional geologic map of the Willow Creek Reservoir 7.5 minute quadrangle (Wallace, 2003a).

9.2.1 Stratigraphy

The general stratigraphic framework of the area consists of Paleozoic sedimentary basement rocks overlain by Eocene volcanic rocks, with the majority of the exposed units consisting of multiple episodes of intermediate to felsic Miocene volcanic rocks and related fluvial and lacustrine sediments. In the Ivanhoe District, the Miocene sediments host hot spring sinter and massive silica replacement, indicating the sediments were deposited contemporaneously with the mineralizing event (Wallace, 2003a).

Paleozoic basement - Vinini Formation

The Tertiary volcanic pile was deposited on a basement of Ordovician quartzite, chert, and argillite of the Vinini Formation. These rocks are exposed a quarter mile northwest of the Property. The Vinini Formation is the host for most of the high-grade veins at the Great Basin Gold Ivanhoe-Hollister prospect (Wallace, 2003).

The Teck–Placer Dome drilling at the Silver Cloud mine reportedly encountered Vinini quartzite at approximately 1,000 feet below the surface (Abbott and Redfern, 2002).

Eocene volcanic rocks

Wallace (2003a) reports the presence of two Eocene-age volcanic units overlying the Vinini Formation northwest of the Ivanhoe Creek property. The same stratigraphic relationship was recognized in the Ivanhoe-Hollister Mine area, three miles south.

The lower part of the section consists of welded tuffs, likely erupted from the Tuscarora volcanic field located northeast of the Property. Two units are discernable; the 39.22 ± 0.1 Ma tuff of Big Cottonwood Canyon (Tbc); and the 39.42 ± 0.11 Ma Nelson Creek Tuff (Tnc). These units are overlain by trachyandesite flows and tuffs dated at 37.20 ± 0.1 Ma. In the northern part of the Ivanhoe District, these units are approximately 300 meters thick, but pinch out entirely to the south.

Miocene volcanic rocks

These tuffs and tuffaceous sedimentary rocks include subaqueously and subaerially deposited tuffs and lesser fluvial clastic sediments that form a conformable stratigraphic section representing continuous sedimentation. The lower tuff (Ttsl) is below the andesite (Ta); the middle tuff (Ttsm) is between the andesite and vitric tuff (Tvt); and the upper tuff (Ttsu) is above the vitric tuff. The upper, middle, and lower tuff units are practically indistinguishable, especially with typically poor exposures; undifferentiated unit (Tts) includes tuffaceous rocks (Ttsl, Ttsm, Ttsu) where neither the andesite nor vitric tuff is present to provide stratigraphic divisions, or where isolated exposures of tuff preclude inclusion in a specific unit. The sequence was deposited between about 16.5 and 14.4 Ma.

Quaternary Overburden

- Qal Unconsolidated alluvium comprising unsorted silt, sand and gravel.
- Qc Colluvium consisting of unconsolidated talus and down-slope wash.
- Qls Landslide deposits including chaotic to coherent slump blocks and megabreccia.

- Trp Rhyolite porphyry exposed in crystal-rich domes and flows. Rocks are reddish brown on weathered surfaces and gray-brown on fresh surfaces. The domes are composed of outward-dipping flows derived from central vents. The dome east of the mouth of Ivanhoe Creek was dated at 14.92±0.05 Ma.
- Ttsu Upper tuffs and tuffaceous sedimentary rocks include tan to gray, massive- to finely-bedded, very poorly exposed water-lain tuffs and tuffaceous sedimentary rocks. The basal units are composed of very thinly-bedded water-laid deposits. The age of the tuff bed near the base of the unit was estimated at 15.05±0.25 Ma. Unit Ttsu is correlative in part with the lower member of Carlin Formation exposed to the south and southeast, where it is 14.4-15.1 Ma. Total thickness of the unit in this area is unknown.
- Tvt Vitric tuff, dark-brown, gray, to black, rhyolitic, fine-grained, moderately welded vitric tuff. The groundmass is composed of flattened, black, porous vitric ash. On weathered surface, felsic mineral phenocrysts form a distinctive, white-on-black speckled pattern. Welding indicates primarily subaerial deposition. Age, based on 40Ar/39Ar date on sanidine, is 15.10±0.06 Ma.
- Ttsm Middle tuffs and tuffaceous sedimentary rocks are fine-grained and usually completely replaced by white chalcedonic silica masking most sedimentary features but making it a distinctive marker unit. As exposed in the Ivanhoe-Hollister Mine, the unit is composed of thinly-bedded, water-laid tuffaceous sediments. Thickness varies from a few to more than 10 meters.
- Ta Reddish to locally black subaerial andesite flow units range from low-silica andesite to lowalkali basaltic trachyandesite. The unit thins to the east, grading from massive red flows to thin vesicular black flows, and it is not present east of Ivanhoe Creek. The thickness varies from 3 to 30 meters, suggesting eruption onto an irregular paleosurface.
- Ttsl Lower tuffs and tuffaceous sedimentary rocks include interbedded subaqueous to subaerial airfall tuffs, reworked tuffaceous material, and minor sandstone and conglomerate. The unit unconformably overlies Eocene trachyandesite flow units (Tta) and Eocene welded tuffs (Tbc) along Ivanhoe Creek. The total thickness of the unit is obscured by faulting, but can exceed 200 meters. Plagioclase from a tuff bed near the middle of the section along the north shore of Willow Creek Reservoir produced a 40Ar/39Ar date of 15.84±0.10 Ma.

9.2.2 Structure

The published Willow Creek Reservoir 7.5-minute quadrangle map (Wallace, 2003a) shows at least two series of faults, north-northwest and northeast striking, west-dipping normal faults cutting the volcanic section. In the area of the Ivanhoe Creek property, faults are interpreted as being vertical to steeply west-dipping. According to Wallace's map, a fault cuts the silicified zone in the southwestern portion of the Property, extending 3,000 meters northeast where it passes through an area of silicification and mercury sinter.

The regional NNR structural zone also strikes north-northwest and is likely the root cause of the north-northwest fault alignment. As regional structure appears to influence mineralization, any structurally controlled mineralization or alteration on the Ivanhoe Creek property is likely to follow this same regional trend.

10.0 <u>DEPOSIT TYPE</u>

The principal target on the Ivanhoe Creek property is a low-sulfidation epithermal gold-silver deposit, typically found primarily as quartz-adularia-calcite veins in volcanic rock. Veins are the typical "bonanza" type, carrying significant gold and silver. Gold grades in the percent range have been recorded for select samples from this class of deposit, including the Midas and Sleeper deposits. By the end of 2002, the Midas deposit had produced over 800,000 ounces of gold and 9,000,000 ounces of silver (NBMG), and was reported to have a proven and probable mineral reserve of 2.16 million ounces of gold (Newmont website). Between 1986 and 1996, the Sleeper deposit produced more than 1,600,000 ounces of gold and 1,900,000 ounces of silver (NBMG).

Typically, veins fill open spaces and show rhythmic bands of quartz and adularia, with occasional bands of dark sulfides or selenides. Calcite may be present as individual bands or may be replaced by quartz. Bladed calcite, often replaced by quartz, is another common feature in these deposits and is thought to indicate boiling of the hydrothermal solution. Multiple episodes of brecciation and cementation with younger vein material are common. Breccias may show rotated blocks of banded vein material coated by new mineralization.

Deposits form at low temperatures, generally less than 200°C, although some deeper systems may show temperatures approaching 300°C. Mineralization often shows abrupt tops and bottoms, while identical barren quartz-adularia-calcite veins continue. The top of the hydrothermal system may be marked by siliceous sinter, typically barren in gold and silver but possibly anomalous in mercury, selenium, thallium, arsenic or antimony (Morris, 2003).

These veins rarely contain significant quantities of base metals, usually less than 200 ppm in total. Silver to gold ratios for the Midas-type veins are somewhat higher than for the sediment hosted gold deposits, running in the 2:1 to 12:1 range. Associated trace elements for the Midas type include arsenic, antimony, selenium and mercury +/- molybdenum, thallium and tungsten. While arsenic is usually present in the veins, it is found at much lower values than is seen in the sediment hosted deposits - a few hundred ppm at most. Selenium is a strong indicator for this type of system, as silver selenides such as naumannite are common in this type of vein but are rare on other types of deposits.

At Midas, veins occupy the same structures that host mafic dikes, with the veins commonly found in the footwall of the dikes. This arrangement is probably due to the mafic dikes acting as buttresses, maintaining open space as the faults continued to move. This spatial relationship between veins and dikes provides a targeting opportunity if the dikes are seen in outcrop or in ground magnetic surveys (Morris, 2003).

The significance of the relationship between gold and mercury mineralization, sinter deposits, and hydrothermal activity is illustrated by current work in the Beowawe area. Atna Resources Ltd operates the White Canyon-Beowawe project situated approximately 40 miles south of the Ivanhoe Creek property, four miles east of Mule Canyon and three miles southwest of the previously mined Red Devil mercury deposit (cinnabar in silicified Valmy Formation meta-sediments). The project area comprises one of the largest and hottest hot-spring systems in the Great Basin. Atna is testing for bonanza-style gold mineralization at depth.

Sinter deposits, occurring along four miles of the northeast-trending Malpais fault, show areas of intense silicification indicative of multiple hydrothermal events, and contain anomalous gold, mercury, arsenic, antimony, and bismuth. Atna reports that in 1984 an exploratory geothermal hole reportedly intersected 30 meters grading 10 g/t gold and 60 meters grading 6 g/t gold. Other shallow drill holes testing for a bulk-mineable target intersected sections of anomalous gold, including 502 ppb gold over 16.8 meters and 130 ppb gold over 106 meters

11.0 MINERALIZATION

The writer observed weak argillic alteration along the north-central portion of the Property toward the Rimrock mercury mine.

An area of silica veining and massive silica replacement of tuffs is located in the southwest corner of the Property. There is no outcrop in this area, but surface float shows buff-colored highly silicified and brecciated rhyolitic tuff healed with light gray to creamy white chalcedonic quartz. Rhyolite fragments are angular with very sharp corners and do not exhibit alteration on fracture surfaces. Observed breccia fragments range in size from 1 to 100 mm. Fragments of sinter and opaline quartz were also evident.

12.0 EXPLORATION

During 2004, exploration work consisted of two property examinations and limited geochemical sampling by the writer, and geophysical surveys consisting of ground magnetics, gravity, and CSAMT.

12.1 Rock Chip Geochemical Sampling

During the writer's property examinations on August 5, 7-9 and October 4 and 5, 2004, fourteen rock samples were taken (Figure 4). Sample descriptions and selected results are available in Appendix B. Significant results follow:

Sample	Туре	Location		Assay I	Description			
_		UTM	Au	Ag	Ba	Hg	Se	
335755	Select	534888E, 4555987N	0.001	1.08	110	1105	38.9	Waste dump. Sinter and silicified rhyolite with minor cinnabar. Weak to moderate hematite on fracture surfaces.
335762	Select	534336E, 4557038N	<0.001	0.11	2000	112.5	2.5	Float. Brecciated silicified rhyolite. Minor cinnabar. Multiple episodes of fracturing and quartz re-healing.
335769	Select	533995E, 4557485N	0.01	0.34	2070	605	3.3	Float. Strongly hematized quartz- healed silicified rhyolite.
335772	Select	533926E, 4557579N	0.016	1.4	1280	8390	30.8	Float. Silicified rhyolite, brecciated, multiple episodes of quartz healing, cinnabar.

Table 3: Rock Sampling – 2004 Property Examinations

Rock samples returned insignificant gold (< 0.16 g/mt) and silver (<1.08 g/mt) values. Samples 335755 and 335772 returned elevated values for mercury and selenium. Samples 335762, 335769 and 335772 returned elevated barium values.

12.2 Geophysical Surveys

In 2004, geophysical surveys consisting of ground magnetics, gravity and CSAMT (controlled-source audiofrequency magnetotelluric) were carried out.

A comprehensive report of the 2004 geophysical work including interpretation of collected geophysical data, conclusions and recommendations for further work, was prepared by James L. Wright, Consulting Geophysicist, 151 Spring Creek Parkway, Spring Creek, Nevada. Wright is a geophysicist with thirty years of work experience. Details of the geophysical surveys available in Appendix C.

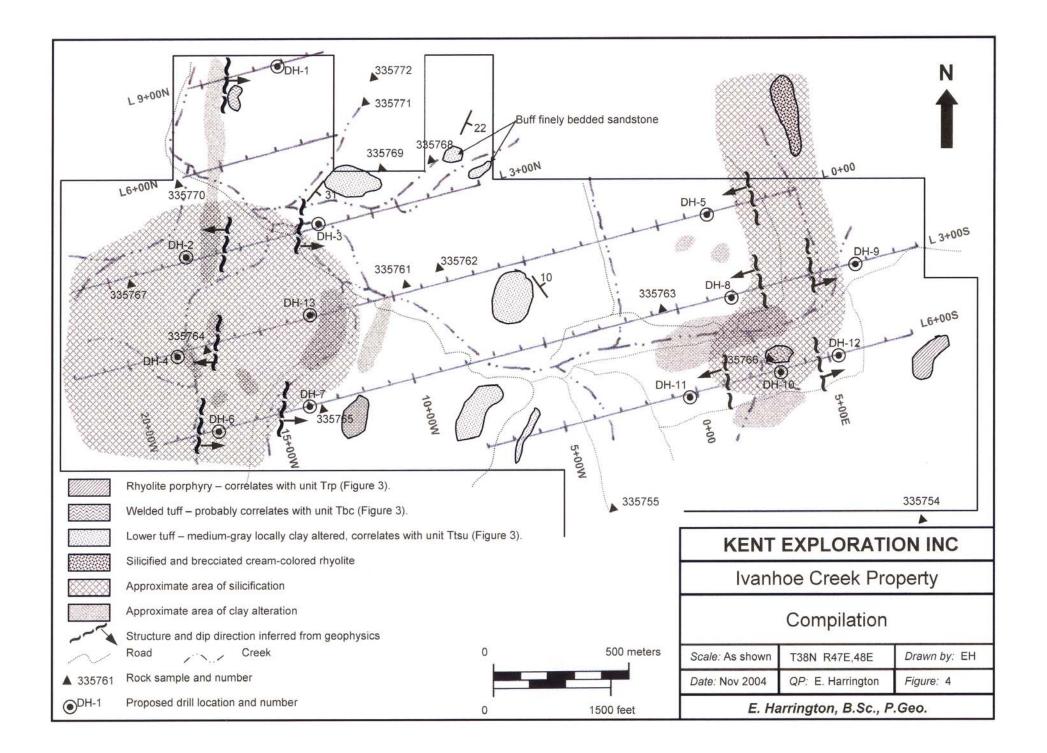
Christopher Magee, Consulting Geophysicist, 10075 Timberwolf Drive, Reno, Nevada, established 9.7 linekilometers of grid and carried out ground magnetic and gravity surveys from August 6-9, 2004. Lines were located only for control of the subsequent CSAMT survey. A total of 88 gravity stations were acquired using LaCoste & Romberg Model-G gravity meters, and 21.7 line-kilometers of ground magnetic data were acquired using a Geometrics Model G-858 Cesium Vapor magnetometer.

Zonge Geosciences Inc, 924 Greg Street, Sparks, Nevada, carried out 9.7 line-kilometers of CSAMT data acquisition from September 7-13, 2004, using a GDP-32 receiver and GGT-30 transmitter. The survey was supervised in the field by Keil Winchester, Geophysical Crew Chief, under Zonge job number 2004.72.

12.2.1 Summarized Geophysical Results

Geophysical surveys are interpreted to indicate north-south oriented deep-seated horst/graben faults controlling both Paleozoic basement topography and alteration in overlying Miocene-age volcanic rocks. Movement along basement faults has offset the volcanic package and four parallel major basement faults, two in the eastern portion of the Property and two in the western, have been identified with associated alteration and local silicification. (Figure 4).

Wright interprets the area at Line 6 S, 25 to 400 W, on the Ivanhoe Creek property, to have similar characteristics to Ivanhoe-Hollister's gold-mineralized Velvet Zone.



13.0 DRILLING

The Ivanhoe Creek property does not show any evidence of previous drilling.

14.0 SAMPLING METHOD and APPROACH

Recorded sampling of the Ivanhoe Creek Property is limited to a few reconnaissance scale rock chip geochemical samples discussed in Sections 8.2 and 12.1. No program has been initiated to systematically sample the property.

15.0 SAMPLE PREPARATION, ANALYSIS and SECURITY

Rock samples collected by the writer in 2004, and earlier by the property owner, were submitted to the Elko office of ALS Chemex. This facility receives and prepares samples for analysis in either the Reno or Vancouver ALS Chemex laboratories. Standard sample preparation for rock samples involves logging the sample into the laboratory sample tracking system, drying, crushing, and pulverizing the entire sample so that greater than 80% passes a 75-micron screen.

Analyses were performed by ALS Chemex laboratories in Reno, Nevada and Vancouver. Gold was analyzed with a fire-assay pre-concentration followed by dissolution of the resulting metallic bead in an aqua regia solution and final analysis by atomic absorption spectrophotometry. Trace elements were determined by leaching a sample aliquot in aqua regia with an analysis by inductively coupled plasma emission spectrometry and mass spectrometry.

ALS Chemex maintains an internal quality control program including the use of blank, duplicate, and standard samples inserted into the sample stream.

The rock sample taken by the writer during the Property investigation in 2003 was sent to International Plasma Laboratory Ltd (IPL), Vancouver, BC. Rock sampling was carried out by the author of this technical report, and the sample was maintained in locked storage until delivered to IPL for analysis.

IPL is officially registered with and certified by the BC Ministry of Environment, Lands and Parks (BCMOE) and the Canadian Association for Environmental Analytical Laboratories (CAEAL).

IPL's analytical procedures comply with the applicable requirements of the BCMOE, Environment Canada, American Society for Testing and Materials (ASTM), American Water Works Association (AWWA) and United States Environmental Protection Agency (USEPA).

Standard sample preparation for rock samples involves logging the sample into the laboratory sample tracking system, drying, crushing, and pulverizing the entire sample so that greater than 80% passes a 75-micron screen. Gold was analyzed with a fire-assay pre-concentration followed by dissolution of the resulting dore bead in an aqua regia solution with final analysis by atomic absorption spectrophotometry. Trace elements were determined by leaching a sample aliquot in aqua regia with an analysis by inductively coupled plasma (ICP) emission- and mass-spectrometry. International Plasma Laboratory maintains an internal quality control program including the use of blank, duplicate, and standard samples inserted into the sample stream. IPL sample preparation and analytical methods are deemed by the author to conform to reasonable data verification controls.

16.0 DATA VERIFICATION

Other than a review of the assay certificates, land status checks and the Property examinations, the writer did not verify available Property information. Limited mildly anomalous geochemical results did not warrant independent check sampling.

17.0 ADJACENT PROPERTIES

Three nearby properties, the Midas, Ivanhoe-Hollister, and Silver Cloud mines, offer good examples of district mineralization. The Midas mine is located approximately 12 miles (19 km) northwest of the Ivanhoe Creek property, the Ivanhoe-Hollister main deposit lies 3 miles (5 km) south and the Silver Cloud mine is located approximately 7 miles (8 km) south-southwest.

17.1 Newmont – Midas Mine

The Midas or Ken Snyder Mine, discovered in 1994, is a volcanic-hosted, low-sulfidation, selenium-rich, goldsilver bearing quartz-adularia vein deposit located in the Midas district of north-central Nevada, on the eastern flank of the NNR and on the northwest strike continuation of the Carlin trend. From 1998 until the end of 2003, the Midas mine produced a total of 1.04 million ounces of gold and 11.8 million ounces of silver (NBMG). Proven and probable reserves at the end of 2002 were reported to be 2.16 million ounces of gold and 26.0 million ounces of silver (Newmont website, accessed December 9, 2003).

Host rocks are mid-Miocene felsic tuffs, sediments and gabbro sills and dikes. Wall rock alteration is predominantly propylitic, and hydrothermal alteration is widespread. Vein mineralogy consists of gold and silver selenides (naumannite and aguilarite), electrum, rare lead-, copper- and iron-selenides, a gangue of banded quartz subject to at least eleven precipitation events, calcite, and adularia containing pyrite, marcasite, chalcopyrite, and sphalerite. Geochemical soil profiles in the Midas district indicate anomalous gold, silver, selenium, mercury, arsenic, and lead values. Deposit age is estimated to be 15.23+/- 0.05 Ma.

Fluid inclusion data indicate a mean temperature during ore formation of 240°C and very low salinities, possibly reflecting a strong groundwater influence on the epithermal system. The dominance of quartz, calcite, and adularia in the open-space filling veins is indicative of a low-sulfidation system (Goldstrand et al, 2000).

Known reserves on the main Colorado Grande vein occur over a strike distance of 6,500 feet (1,981 meters) and a vertical range of 1,700 feet (518 meters), exhibiting significant continuity (Goldstrand et al, 2000). Veining occupies faults oriented north-south to north-northwest and west-northwest, dipping steeply northeast. Mineable reserves have been defined on seven veins.

In the Midas district, siliceous sinters, always occurring in the Esmeralda mudstones and siltstones, are reported to overlie main mineralized structures. Examples of overlying Esmeralda sinters were examined and continuous laminations were noted. Although not conclusive, the laminations are thought to suggest that the sinters were the product of intense silica flooding of the Esmeralda mudstones and siltstones rather than being true hot spring sinters (Goldstrand et al, 2000).

Drilling at Midas continues to define a new vein of high grade gold mineralization discovered at a lower elevation than the main Colorado Grande vein. (Newmont Q3 2003 Results, October 29, 2003, website). The new vein has been intersected by four drill holes over a length of approximately 1,100 feet (335 m). A planned decline is designed to provide access 500 feet (152 m) below current mine workings (Newmont website, accessed December 9, 2003).

17.2 Great Basin Gold Ivanhoe-Hollister Project

The Ivanhoe-Hollister open-pit gold deposit developed by Touchstone Resources and mined by Newmont is approximately three miles south of the Property.

By 1992, a sediment-hosted disseminated gold resource of 18.5 million tons grading 0.038 opt had been developed. The gold deposit contains several orebodies that underlie mercury-bearing sinters and silicified zones.

Since acquiring the property in 1997, Great Basin Gold shifted the exploration emphasis on the property from bulk mineable targets to high-grade underground targets and has outlined:

- three high-grade vein systems investigated to a depth of 1,000 feet (300 meters), the Clementine, Gwenivere and South Gwenivere;
- a number of north-northwest trending vein systems similar in orientation to principal ore-bearing structures at Newmont's Midas mine; and
- vein-style and possibly disseminated mineralization below 1,000 feet depth.

Between 1999 and 2001, a high-grade vein-style gold-silver inferred resource of 719,000 tons with a grade of 1.29 opt gold and 7.0 opt silver was developed (Great Basin Gold website, 2005). The website indicates that the inferred resource estimate was prepared for Great Basin Gold by J. Currie, P.Eng, a qualified person.

In 2002, Great Basin Gold and Hecla Mining Company formed a joint venture to advance the Clementine-Gwenivere vein system to feasibility and production, with Hecla as operator.

Surface alteration on the Ivanhoe property consists primarily of strongly silicified (primary opal and chalcedony, not quartz) lakebeds and air-fall tuff with areas of disseminated mercury sulfide (cinnabar) mineralization (Wallace 2003b). Wallace attributes the silicification and mineralization to hot spring activity that occurred while sediments were being deposited. Wallace reports these sinters also contain trace levels of gold over the high-grade veins.

The veins are not exposed at the surface, as they lie beneath silicified sediments. The vein system has a strike length of approximately 6,500 feet (2,000 meters) and average vein widths of approximately 3 feet (1 meter). Veins strike 280-290^o and dip steeply. Mineralized veins consist of banded, vuggy quartz, adularia, and calcite with pyrite, marcasite, electrum, and silver selenides.

Higher-grade portions of veins also show quartz replacement of bladed calcite, often considered a sign of boiling. Alteration minerals are limited to sericite and kaolinite. Post ore-stage minerals fill open spaces around the mineralized veins. These minerals include Fe-Mg carbonate, barite, and quartz. It is probable that the same mineralizing fluids that formed the veins are also responsible for overlying mercury-silica mineralization.

Great Basin Gold and its joint venture partner Hecla Mining have begun work on the exploration decline intended to establish the mine feasibility. Bulk sampling and approximately 50,000 feet of underground diamond drilling are planned.

17.3 Silver Cloud Property

The Silver Cloud property is part of the low-sulfidation hydrothermal system within the Ivanhoe Mining District, which hosts the Midas and Ivanhoe-Hollister gold deposits. The primary target is high-grade vein-style gold-silver mineralization in Tertiary volcanics and underlying Paleozoic rocks at depths ranging from 200 to 600 meters. A secondary target is disseminated Carlin-style gold mineralization at depths below 1,000 meters.

In the early 1980s, Placer-Amex drilled 14 shallow holes exploring for mercury in the area of the Silver Cloud mercury mine. One drill hole intersected 10 feet of 197 ppb gold.

In 1989, Newmont and Touchstone Resources formed a joint-venture and carried out shallow drilling on the Silver Cloud property. One 5-foot intersection from drill hole SC-5 returned 3.1 g/t gold.

From 1999-2001, Teck-Cominco Resources drilled 13,335 feet (4,023 meters) in 10 holes. Their best intersection was 1.5 meters grading 145 g/t gold at a depth of 318.5 meters in sheared volcanics located beneath the Silver Cloud mine.

Placer Dome formed a joint-venture with Teck in late 2002 and drilled 12,565 feet (3,832 meters) in 11 holes. Their best intersection was 12.2 meters grading 5.53 g/t gold at a depth of 208.8 meters. The intersection occurred at the contact between a tuff and intrusive rhyolite porphyry, and is located one kilometer northwest of the Silver Cloud mine (Leavitt, 2005).

Geologix assumed Placer Dome's joint-venture position with Teck in late 2003 and is the current exploration operator. Since May of 2004, Geologix has been actively mapping, conducting geophysical and geochemical surveys, and drilling on the Silver Cloud property.

Mapping and geochemical surveys indicate that gold, silver, arsenic and selenium mineralization trend in an east-west fashion within broad zones of argillic alteration similar to mineralization on the Ivanhoe-Hollister property.

In 2005, Geologix carried out diamond drilling consisting of two drill holes totaling 1,603 meters (5,258 feet). Drilling shows areas of intense pervasive alteration, banded quartz veining, and geochemically anomalous structures including sulfide-rich hydrothermal breccias (Geologix website accessed October 2005).

Abbott and Redfern (2002) collected a sample of cinnabar-bearing sinter from an adit at the Silver Cloud Mine that assayed 19 ppb gold, 0.5 ppm silver, >100 ppm mercury, and low arsenic and antimony. They also reported that a sample of rotary drill cuttings from the Silver Cloud property, adjacent to the main road, assayed 37 ppb gold, 5.93% mercury, and low arsenic and antimony.

While mineralization suggested by information on the Midas, Ivanhoe-Hollister, and Silver Cloud deposits is not necessarily indicative of mineralization on the subject Ivanhoe Creek property, similarities indicate exploration potential.

18.0 MINERAL PROCESSING and METALLURGICAL TESTING

To the writer's knowledge, there has been no mineral processing or metallurgical testing conducted on the Ivanhoe Creek property.

19.0 MINERAL RESOURCE and MINERAL RESERVE ESTIMATES

No Mineral Reserves or Resources, as defined by C.I.M. terminology and acceptable under NI 43-101 standards of reporting, have been outlined on the Ivanhoe Creek property.

20.0 OTHER RELEVANT DATA and INFORMATION

No other relevant data and information is available on the Ivanhoe Creek property.

21.0 INTERPRETATION and CONCLUSIONS

21.1 Interpretation

Necessary conditions for a Midas-type high-grade bonanza-style gold-silver deposit include a well-developed fracture system and a physical and chemical environment that will permit efficient gold-silver precipitation sufficiently long enough to form an economic deposit.

Favorable host rock types will be competent (brittle) which, under faulting stresses, are more likely to form through-going upward-branching open fractures. Less competent rocks under similar stresses tend to form stockworks. The introduction of silica, as host rock replacement and as quartz gangue in vein and breccia fillings, is an important ground preparation event enhancing the host rock's ability to fracture and maintain open fissures.

The physical and chemical mechanisms under which gold-silver in solution will be deposited include oxidation, temperature decrease, and decrease in H_2S content. These changes can be brought about by the hydrothermal transporting solution reaching a boiling point or the mixing of the hydrothermal solution with cooler more oxygenated water.

Under hydrostatic conditions, the gold-silver solution (250°C at 3% wt. NaCl) would boil at a depth below surface of approximately 450 meters (Romberger, 1993). Given temperature, pressure and fluid composition variability, the possible hydrothermal solution boiling point, and subsequent gold-silver deposition, could range from 200 to more than 1,000 meters below paleosurface.

Carlin-type gold mineralization has been identified at the Ivanhoe-Hollister deposit, just south of the Ivanhoe Creek property.

Arehart, 2002, observed that bedded Paleozoic-age barite deposits, locally containing abundant organic matter, generally overlap Eocene-age Carlin-type deposits. The theory is that the bedded barite and organic matter are important in the development of bisulfide-bearing fluids which are capable of transporting unusually high concentrations of gold, and that the characteristic high Au:Ag ratio observed in Carlin-type deposits resulted from this extreme enrichment, relative to most hydrothermal fluids, in bisulfide. The bisulfide-enriched ground water either dissolved gold from surrounding rocks as it descended, or accepted gold from deep crustal sources (magmatic or metamorphic) upon ascent along crustal-scale faults.

The following statements are consistent with the above observations:

- The Ivanhoe Creek property is situated along the eastern edge of the north-northwest trending NNR megastructure, which hosts the world-class Midas low-sulfidation epithermal gold-silver deposit. Mineralization at Midas is in a vein system 200-300 meters below surface silica-mercury sinters. A suite of metallic gangue minerals and silica flooding of wall rock accompanies gold-silver mineralization;
- The Rimrock mercury mine, located approximately 400 meters north of the Property, contains a brecciated mercury-rich high-selenium sinter with crosscutting chalcedony veins. A related fault system cuts the mine area and merges into one of the main Ivanhoe Creek structures;
- Work being carried out by Geologix on the Silver Cloud property suggests gold-silver mineralization is overlain by a barren silica-mercury sinter;
- The Ivanhoe Creek property has silicified breccia containing fragments of sinter and opaline quartz, and is situated within 1,500 meters of two mercury sinters. Rocks exhibit silica replacement and brecciation healed by further silicification indicating competency suitable for hosting vein-style deposition;
- Fault systems have been identified on the Property, providing a possible plumbing system for the transport of mineralized hydrothermal fluids; and
- Enriched barite values in rock samples at Ivanhoe Creek may indicate the potential for highly enriched gold and silver mineralizing fluids that have traveled along deep-seated basement structures.

Geophysical surveys, consisting of ground magnetics, gravity, and CSAMT, carried out on the Ivanhoe Creek property in 2004 indicate north-south oriented deep-seated horst/graben structures controlling both basement topography and alteration in overlying volcanic rocks. Many volcanic-hosted gold deposits, including Hecla/Great Basin Gold's nearby Ivanhoe-Hollister deposit, as well as the Midway and Sleeper deposits, demonstrate spatial and/or genetic relationships to structural variations in the underlying basement. It is theorized that these basement structures act as feeders for the overlying gold deposits. Recent deep gold-silver discoveries at Ivanhoe-Hollister support this theory, demonstrating that basement structures, as well as overlying volcanic rocks, can host significant gold deposits.

Low-sulfidation epithermal veins are typically high-risk, high-reward exploration situations. The veins are often physically small, but occasionally are larger and high-grade, examples being Sleeper and Midas. Veins often do not show large alteration aureoles, and are generally completely hidden due to post-mineral cover. The potential

profitability of bonanza-type deposits makes them attractive targets.

At the Ivanhoe Creek property, work to date indicates scattered clay alteration and silicification associated with north-south to north-northwest trending basement structures, elevated barite values, and anomalous mercury values, possibly indicating the presence of a mineralizing system similar to those encountered at the Midas, Silver Cloud, and Ivanhoe-Hollister properties. These surface indications demonstrate the need to explore the Property at depth.

It should be recognized that this type of alteration may or may not be indicative of economic mineralization. The alteration and geochemical anomalies found on the property are not as pronounced as those at Midas, Silver Cloud, or Ivanhoe-Hollister, but these differences could be the effect of the height above the mineralized zone rather than the intensity of the mineralizing system.

21.2 Conclusions

The objective of this technical report is to assess the potential for the Ivanhoe Creek property to host lowsulfidation epithermal vein-style gold-silver mineralization similar to the nearby Midas and Ivanhoe-Hollister deposits. The Property is considered to have good potential to host an economic vein-style gold-silver deposit because:

- the Property exhibits argillic alteration, opaline and chalcedonic silica, sinter, and hydrothermal brecciation;
- mines and prospects in the Ivanhoe district have demonstrated gold-silver mineralization underlying siliceous mercury sinters at depth;
- geophysical surveys have identified four major north-south oriented basement structures controlling basement uplift as well as clay and silica alteration in overlying volcanic rocks;
- correlations between interpreted results of the CSAMT, gravity and magnetic geophysical surveys are consistent and supported by geological observations;
- structural features similar to the Velvet Zone of the Ivanhoe-Hollister gold deposit are interpreted to exist on the Ivanhoe Creek property;
- north-south and north-northeast trending faults identified on the Property could be the source(s) of mineralizing fluids;
- any structures in basement and overlying volcanic rocks that are conduits for gold-bearing fluids have potential to host gold deposition; and
- the Property is situated along the north-northwest trending North Nevada Rift, which hosts the Midas, Mule

Canyon, and Ivanhoe-Hollister low-sulfidation epithermal gold-silver deposits.

22.0 <u>RECOMMENDATIONS</u>

The previously recommended Stage 1 work program on the Ivanhoe Creek property has produced information on which to base the implementation of the following Stage 2 drilling program.

Stage 2

The Stage 2 program is estimated to cost approximately US\$450,000 and comprises 2,800 meters (9,184 feet) of reverse-circulation and core drilling as follows:

Drill	Location	Location	Azimuth	Hole Length	Hole Justification
Hole	UTM	Grid	and Dip	(meters est.)	
DH-1	533485E	L9+00N	075 ⁰ /-60 ⁰	200	To cut east-dipping fault under
	4557726N	13+25W			inferred siliceous zone
DH-2	533282E	L 3+00N	075 ⁰ /-60 ⁰	200	To cut west-dipping fault under
	4557051N	17+00W			possible siliceous zone
DH-3	533755E	L 3+00N	255 ⁰ /-60 ⁰	200	To cut east-dipping fault
	4557194N	12+00W			
DH-4	533213E	L 0+00	075 ⁰ /-45 ⁰	200	To cut east-dipping fault and
	4556721N	18+25W			possible siliceous zone in basement
					rock
DH-5	535182E	L 0+00	075 ⁰ /-60 ⁰	300	To cut west-dipping fault under
	4557251N	2+00E			inferred siliceous zone
DH-6	533384E	L 3+00S	255 ⁰ /-45 ⁰	200	To cut east-dipping fault under
	4556460N	17+50W			inferred siliceous zone
DH-7	533724E	L 3+00S	255 ⁰ /-45 ⁰	200	To cut east-dipping fault on edge of
	4556547N	14+00W			uplifted basement rock
DH-8	535270E	L 3+00S	075 ⁰ /-60 ⁰	200	To cut west-dipping fault on edge of
	4556968N	2+00E			uplifted basement rock
DH-9	535740E	L 3+00S	255 ⁰ /-45 ⁰	300	To cut east-dipping fault on edge of
	4557100N	6+50E			uplifted basement rock
DH-10	533440E	L 6+00S	Vertical	200	To cut surface siliceous zone and
	4556700N	3+00E			inferred uplifted basement rock
					(direct test of Velvet model)
DH-11	535100E	L 6+00S	075 ⁰ /-60 ⁰	200	To cut west-dipping fault and
	4556609N	0+50W			inferred siliceous zone on edge of
					uplifted basement rock
DH-12	535640E	L 6+00S	255 ⁰ /-60 ⁰	200	To cut east-dipping fault on edge of
	4556755N	5+00E			uplifted basement rock
DH-13	533640E	L 0+40N	255 ⁰ /-60 ⁰	200	To cut siliceous zone indicated by
	4556840N	13+00W			rock sampling

Table 4: Recommended Drill Hole Locations

22.1 Proposed Budget Stage 2

PROPOSED BUDGET, Stage 2 Exploration Program Ivanhoe Creek Property, Nevada

Ivannoe Creek Froperty, N	ALL US\$						
Project preparation Mobe/Demobe (incl freight, tra	\$		4,600 3,200				
Field Crew: Project Geologist	\$	<u>Rate</u> 480	<u>Days</u> 60	\$	<u>Totals</u> 28,800	2	28,800
Field Costs: Food & Accommodation Communications Shipping Supplies Vehicle Rental Other Rentals	\$	90 15 25 135 50	60 60 60 60 60		5,400 900 1,000 1,500 8,100 3,000	1	19,900
Assays & Analysis: Chip/Core Samples	\$	<u>Rate</u> 30	<u>Units</u> 1850			5	55,500
Contracts Site preparation Drilling - reverse circ Drilling - core Drill mobes, demobes, field cos Reclamation, incl refundable bo		18 50	6,232 2,952	\$	10,000 112,176 147,600 9,600 20,000	29	99,376
Report: Report preparation and editing Data Processing, copying, bind				\$	4,500 800		5,300
Administration, including Cont	racto	or Overhea	ads and Profit (8%)		2	33,334
					\$	45	50,010
Rounded to					\$	45	50,000

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GLOSSARY

Conversion Factors

To Convert From	То	Multiply By
Feet	Meters	0.305
Meters	Feet	3.281
Miles	Kilometers ("km")	1.609
Kilometers	Miles	0.6214
Acres	Hectares ("ha")	0.405
Hectares	Acres	2.471
Grams	Ounces (Troy)	0.03215
Grams/Tonne	Ounces (Troy)/Short Ton	0.02917
Ounces/Ton(opt)	Grams/Tonne (g/t)	34.2857
Tonnes (metric)	Pounds	2,205
Tonnes (metric)	Short Tons	1.1023

Mineral Elements

Au	Gold	Ce	Cerium	La	Lanthanum
Ag	Silver	Со	Cobalt	Р	Phosphorus
Cu	Copper	Ga	Gallium	Se	Selenium
Ва	Barium	Ge	Germanium	U	Uranium

Alluvium: Stream deposits of comparatively recent time.

- Argillic: Pertaining to clay or clay minerals. Disseminated precious metal deposits may exhibit "argillic" alteration characterized by the formation of the clay minerals kaolinite and montmorillonite. Epithermal precious metal deposits may exhibit "advanced argillic" alteration characterized by the clays dickite, kaolinite and pyrophyllite.
- **Chalcedony:** Quartz consisting of crystals that are extremely fine-grained. Grain texture is only visible using a microscope.
- **Colloform:** A textural term applied to finely crystalline, concentric mineral layering. Individual layers commonly feature radial crystal growth (example: chalcedony).
- **Colluvium:** Loose or incoherent deposits, usually at the foot of a slope or cliff and brought there chiefly by gravity.
- **Graben:** A block, generally long compared to its width, which is bounded by faults and is downthrown relative to rocks on either side.
- **Horst:** A block, generally long compared to its width, which is bounded by faults and is uplifted relative to rocks on either side.
- **Hydrothermal:** An adjective applied to heated or hot aqueous-rich solutions, to the processes in which they are concerned, and to the rocks, ore deposits and alteration products produced by them.
- **Ignimbrite:** A fine-grained rhyolitic tuff composed of viscous volcanic glass shards that when cooling wrapped around crystals of quartz, feldspar and occasionally amphiboles (hypersthene and/or hornblende) creating a "welded" texture.

Paleosurface: A ground surface that existed in the past.

- **Phenocrysts:** The relatively large crystals in a porphyritic rock. Size usually indicates a longer growing time, so phenocrysts are generally the first minerals formed in magma.
- Pluvial: Pertaining to deposits by rain water or ephemeral streams. Deposition due to the action of rain water.
- **Porphyritic:** A textural term igneous rocks in which large crystals (phenocrysts) are set in a finer groundmass which may be crystalline, glassy or both.
- **Propylitic:** Alteration characterized by the mineral assemblage chlorite + epidote + calcite. Due to the presence of the green minerals chlorite and epidote, propylitic alteration is usually easily recognized by its color. Often this zone is quite large, forming a halo around mineralization centers.
- **Pyroclastic:** A general term applied to volcanic materials that have been explosively or aerially ejected from a volcanic vent. Also, a general term for the class of rocks made up of these materials.

Sinter: A chemical sediment deposited by a mineral spring, either hot or cold.

Stockwork: A rock mass interpenetrated by small veins.

Subduction: Descent of one tectonic unit under another.

Vitrophyre: Porphyritic volcanic glass.

Xenolith: Rock fragments foreign to the body of igneous rock in which they occur. An inclusion.

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CERTIFICATE OF AUTHOR

I, Edward D. Harrington, do hereby certify that:

- 1. I graduated with a B.Sc. degree in Geology from Acadia University, Wolfville, Nova Scotia in 1971.
- 2. I am a Member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia, License #23328.
- 3. I have pursued my career as a geologist for over twenty years in Canada, the western United States, the Sultanate of Oman, and Mexico.
- 4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association as defined in NI 43-101, and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 5. I am responsible for the preparation of the technical report titled "Technical Report on the Ivanhoe Creek property, Ivanhoe District, Elko County, Nevada, U.S.A" and dated November 2, 2005 (the "Technical Report"). I inspected the Property on October 22 and 26, 2003, August 5, 7-9 and October 4-5, 2004, and October 22, 2005. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 6. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101 and I have not had prior involvement with the Property that is the subject of the Technical Report.
- 7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading. This report is based on geological assessment reports, raw assay data, personal interviews and fieldwork, and published and unpublished literature researched by me and/or in the Reliance Geological Services library and records, and I have visited the subject property personally.

8. I consent to the use of this Technical Report, only in its entirety, in a prospectus or any similar offering document, for presentation to any stock exchange or other regulatory authority, and for publication, including electronic publication accessible by the public. Any use of excerpts must be subject to my prior written consent.

Dated this 2nd day of November 2005.

Edward D. Harrington, B.Sc., P.Geo.

APPENDIX A

Claim Information

CLAIM NAME	LOCATION DATE	FILING DATE COUNTY	FILING NAME	FILE NO. COUNTY	FILING DATE BLM	FILE NO. BLM	SECTIO N	TWP.	RANG E
IC 1	09-Feb-03	26-Nov-03	R. R. Redfern	510776	12/1/2003	855303	18	38N	48E
IC 2	02-May-03	26-Nov-03	R. R. Redfern	510777	12/1/2003	855304	17, 18	38N	48E
IC 3	09-Feb-03	26-Nov-03	R. R. Redfern	510778	12/1/2003	855305	18,19	38N	48E
IC 4	02-May-03	26-Nov-03	R. R. Redfern	510779	12/1/2003	855306	17	38N	48E
IC 5	09-Feb-03	26-Nov-03	R. R. Redfern	510780	12/1/2003	855307	13	38N	47E
							18	38N	48E
IC 6	02-May-03	26-Nov-03	R. R. Redfern	510781	12/1/2003	855308	17	38N	48E
IC 7	09-Feb-03	26-Nov-03	R. R. Redfern	510782	12/1/2003	855309	13, 24	38N	47E
							18, 19	38N	48E
IC 8	02-May-03	26-Nov-03	R. R. Redfern	510783	12/1/2003	855310	17	38N	48E
IC 9	09-Feb-03	26-Nov-03	R. R. Redfern	510784	12/1/2003	855311	13	38N	47E
IC 10	02-May-03	26-Nov-03	R. R. Redfern	510785	12/1/2003	855312	17	38N	48E
IC 11	09-Feb-03	26-Nov-03	R. R. Redfern	510786	12/1/2003	855313	13, 24	38N	47E
IC 12	02-May-03	26-Nov-03	R. R. Redfern	510787	12/1/2003	855314	17	38N	48E
IC 13	28-Dec-02	26-Nov-03	R. R. Redfern	510788	12/1/2003	855315	17, 18	38N	48E
IC 21	09-Feb-03	26-Nov-03	R. R. Redfern	510789	12/1/2003	855316	17	38N	48E
IC 22	09-Feb-03	26-Nov-03	R. R. Redfern	510790	12/1/2003	855317	17, 20	38N	48E
IC 23	09-Feb-03	26-Nov-03	R. R. Redfern	510791	12/1/2003	855318	17	38N	48E
IC 24	09-Feb-03	26-Nov-03	R. R. Redfern	510792	12/1/2003	855319	17, 20	38N	48E
IC 25	09-Feb-03	26-Nov-03	R. R. Redfern	510793	12/1/2003	855320	17	38N	48E
IC 26	09-Feb-03	26-Nov-03	R. R. Redfern	510794	12/1/2003	855321	17, 20	38N	48E
IC 27	09-Feb-03	26-Nov-03	R. R. Redfern	510795	12/1/2003	855322	17	38N	48E

CLAIM NAME	LOCATION DATE	FILING DATE COUNTY	FILING NAME	FILE NO. COUNTY	FILING DATE BLM	FILE NO. BLM	SECTIO N	TWP.	RANG E
IC 28	09-Feb-03	26-Nov-03	R. R. Redfern	510796	12/1/2003	855323	20	38N	48E
IC 29	09-Feb-03	26-Nov-03	R. R. Redfern	510797	12/1/2003	855324	17, 20	38N	48E
IC 30	09-Feb-03	26-Nov-03	R. R. Redfern	510798	12/1/2003	855325	20	38N	48E
IC 40	16-Oct-03	26-Nov-03	R. R. Redfern	510799	12/1/2003	855326	19, 20	38N	48E
IC 43	09-Feb-03	26-Nov-03	R. R. Redfern	510800	12/1/2003	855327	19, 20	38N	48E
IC 44	09-Feb-03	26-Nov-03	R. R. Redfern	510801	12/1/2003	855328	19, 20	38N	48E
IC 45	09-Feb-03	26-Nov-03	R. R. Redfern	510802	12/1/2003	855329	18	38N	48E
IC 46	16-Oct-03	26-Nov-03	R. R. Redfern	510803	12/1/2003	855330	20	38N	48E
IC 47	09-Feb-03	26-Nov-03	R. R. Redfern	510804	12/1/2003	855331	18	38N	48E
IC 48	17-Oct-03	26-Nov-03	R. R. Redfern	510805	12/1/2003	855332	17	38N	48E
IC 49	09-Feb-03	26-Nov-03	R. R. Redfern	510806	12/1/2003	855333	18	38N	48E
IC 50	17-Oct-03	26-Nov-03	R. R. Redfern	510807	12/1/2003	855334	20	38N	48E
IC 51	09-Feb-03	26-Nov-03	R. R. Redfern	510808	12/1/2003	855335	18	38N	48E
IC 53	09-Feb-03	26-Nov-03	R. R. Redfern	510809	12/1/2003	855336	18	38N	48E
IC 54	09-Feb-03	26-Nov-03	R. R. Redfern	510810	12/1/2003	855337	18, 19, 20	38N	48E
IC 55	09-Feb-03	26-Nov-03	R. R. Redfern	510811	12/1/2003	855338	18	38N	48E
IC 56	09-Feb-03	26-Nov-03	R. R. Redfern	510812	12/1/2003	855339	18, 19	38N	48E
IC 57	09-Feb-03	26-Nov-03	R. R. Redfern	510813	12/1/2003	855340	18	38N	48E
IC 58	09-Feb-03	26-Nov-03	R. R. Redfern	510814	12/1/2003	855341	18, 19	38N	48E
IC 59	09-Feb-03	26-Nov-03	R. R. Redfern	510815	12/1/2003	855342	18	38N	48E
IC 60	09-Feb-03	26-Nov-03	R. R. Redfern	510816	12/1/2003	855343	18, 19	38N	48E
IC 61	09-Feb-03	26-Nov-03	R. R. Redfern	510817	12/1/2003	855344	18	38N	48E
IC 62	09-Feb-03	26-Nov-03	R. R. Redfern	510818	12/1/2003	855345	18, 19	38N	48E

CLAIM NAME	LOCATION DATE	FILING DATE COUNTY	FILING NAME	FILE NO. COUNTY	FILING DATE BLM	FILE NO. BLM	SECTIO N	TWP.	RANG E
IC 63	02-May-03	26-Nov-03	R. R. Redfern	510819	12/1/2003	855346	18	38N	48E
IC 64	02-May-03	26-Nov-03	R. R. Redfern	510820	12/1/2003	855347	18, 19	38N	48E
IC 65	02-May-03	26-Nov-03	R. R. Redfern	510821	12/1/2003	855348	18	38N	48E
IC 66	02-May-03	26-Nov-03	R. R. Redfern	510822	12/1/2003	855349	18, 19	38N	48E
IC 67	09-Feb-03	26-Nov-03	R. R. Redfern	510823	12/1/2003	855350	18	38N	48E
IC 68	09-Feb-03	26-Nov-03	R. R. Redfern	510824	12/1/2003	855351	18, 19	38N	48E
IC 77	09-Feb-03	26-Nov-03	R. R. Redfern	510825	12/1/2003	855352	18	38N	48E
IC 78	09-Feb-03	26-Nov-03	R. R. Redfern	510826	12/1/2003	855353	18	38N	48E

APPENDIX B

2004 Rock Sample Descriptions and Selected Results

Sample	Туре	Location		Assay 1	Results ((ppm)		Description
	• 1	UTM	Au	Ag	Ba	Hg	Se	
335754	Select	535736E 4556132N	0.001	0.03	270	0.36	0.9	Cryptocrystalline quartz in medium grained rhyolite flow. Fragments of fine- grained rhyolite breccia. Very siliceous.
335755	Select	534888E, 4555987N	0.001	1.08	110	1105	38.9	Waste dump. Sinter and silicified rhyolite with minor cinnabar. Weak to moderate hematite on fracture surfaces.
335761	Select	534275E, 4556973N	<0.001	0.01	360	4.18	0.2	Floast composite. Silicified rhyolite, chalcedonic quartz with local moderate hematization.
335762	Select	534336E, 4557038N	<0.001	0.11	2000	112.5	2.5	Float. Brecciated silicified rhyolite. Minor cinnabar. Multiple episodes of fracturing and quartz re-healing.
335763	Select	535080E, 4556910N	0.001	0.02	220	24.5	0.3	Float. Brecciated silificified rhyolite. Brick-red with minor quartz stringers.
335764	Select	533344E, 4557645N	< 0.001	0.02	530	3.58	0.4	Float. Brecciated red rhyolite, quartz healed
335765	Select	533784E, 4556541N	0.008	0.01	180	1.13	0.2	Float in pit. Brecciated rhyolite, very siliceous. Vuggy quartz stringers.
335766	Chip	535416E, 4556720N	<0.001	0.02	60	1.36	<0.2	1 m. chip sample. Cream-coloured rhyolite, very silicified. Most of original textures destroyed but occasional trace banding.
335767	Select	533049E, 4556985N	<0.001	0.04	570	25.6	0.6	Float. Weakly clay- altered red rhyolite. Showing minor brecciation.
335768	Select	534234E, 4557455N	<0.001	0.01	820	0.72	<0.2	Float composite. Silicified rhyolite.
335769	Select	533995E, 4557485N	0.01	0.34	2070	605	3.3	Float. Strongly hematized quartz-

Sample	Туре	Location	Assay Results (ppm)					Description
		UTM	Au	Ag	Ba	Hg	Se	
								healed silicified rhyolite.
335770	Select	533268E, 4557376N	0.001	0.1	1550	145.5	2.6	Float. Partially clay- altered rhyolite. Trace cinnabar.
335771	Select	534159E, 4557600N	<0.001	0.02	980	22	2.1	Float composite. Scattered shards of siliceous rhyolite and opaline quartz.
335772	Select	533926E, 4557579N	0.016	1.4	1280	8390	30.8	Float. Silicified rhyolite, brecciated, multiple episodes of quartz healing, cinnabar.