

Occurrence Details

Occurrence Number: 1150 188 Occurrence Name: Sheba Occurrence Type: Hard-rock Status: Showing Date printed: 6/14/2025 4:52:47 PM

General Information

Primary Commodities: gold Secondary Commodities: lead, silver Aliases: KSD, King Solomon's Dome Deposit Type(s): Vein Au-Quartz Location(s): 63°52'35.68" N - -138°56'38.8" W NTS Mapsheet(s): 115015 Location Comments: Coordinates provided by Klondike Gold Corp. in 2019. Hand Samples Available: No Last Reviewed:

Capsule

Work History

Staked as Banner, etc. cl (4575) in August, 1900 by A. Wildhaber, who explored with shallow trenches. Starting in August, 1902, it was gradually re-staked and consolidated into a 27 claim property Belfast, etc. (6025) by Mrs Margaret Mitchell. In 1911, development consisted of a 15.2 m drift from the bottom of a 25.6 m shaft at the Mitchell showing (MINFILE occurrence 1150 068), and numerous trenches and shallow shafts over the property. In 1912, the property was optioned by A.E. Garvey.

Re-staked as Agnes, etc. cl (57739) in July, 1952 by G. Murdock and G. Shaw and optioned in 1953 by Yukon Consolidated Gold Corporation Ltd. Re-staked as Alpha cl (79137) in August, 1962 by C. Henderson and associates, and later as Dominion cl 1-4 (86971) and King Soloman cl 1-7 (86975) in August, 1965 by Thornburg Mining Company (Orekon Syndicate. The showing was re-staked in November, 1980 as Sheba cl 1 (YA55109), Dominion cl 1-4 (YA55110) and King Solomon cl 1-36 (YA55114) by Orekon and Liidex Exploration Ltd., which performed rock geochemistry and data compilation in 1980.

Re-staked in April, 1987 as J.A.E. cl 1-27 (YA89000) by J.A.E. Resources Ltd, which mechanical trenched and drilled three reverse circulation holes in 1988.

In 1990, two Hughes-Lang companies (Klondike Reef Mines Ltd and Arbor Resources Ltd.) optioned the property and conducted induced polarization (5.79 line km), resistivity and magnetometer (3.84 line km) surveys and geochemical soil sampling.

In 1996, Barramundi Gold Ltd. optioned the J.A.E claims and in June, 1986 staked fractional J cl 1-13 (YB88033) around the J.A.E. claims. Barramundi staked Mojo cl 1-18 (YB94599) to the west in September, 1996. From May to late September, 1996, the company carried out mapping and geochemical sampling along road cuts, old trenches, and 1,000 m of new trenches on various claims in the area. The company also completed regional silt sampling, mapping, prospecting, and rock sampling programs over much of the Klondike region. At the end of 1997, Barramundi dropped the option on the J.A.E. claims.

In March, 1999 Barramundi completed a regional airborne magnetometer and VLF-EM survey over a 16 km x 24 km area centered about King Solomon Dome, an area which included this occurrence.

In 2000, J.A.E. Resources carried out further trenching and sampling around this occurrence. In 2004 and 2005, rock chip sampling of historical trenches (Sheba East) and prospecting was undertaken by J.A.E. Resources.

In 2006, Klondike Star Mineral Corp. (KSMC) undertook further sampling at the Sheba East Trench as part of an option agreement with J.A.E. Resources. Work by KSMC and J.A.E. Resources consisted of detail mapping, further trenching, four rotary percussion drill holes and bulk sampling from Sheba in 2007 and mapping and prospecting in 2008.

In 2010, Kestrel Gold Inc. optioned the J.A.E. claims from J.A.E. Resources Ltd. and performed IP ground geophysics and soil sampling in 2011. In 2017, Kestrel performed additional soil geochemical sampling which they added to in 2019. In 2020, the company did more soil sampling, prospecting, trenching and reverse circulation drilling. Regional & Property Geology

The Hunker Dome area is located within the Klondike region, which is underlain by the Permian Klondike Schist Assemblage of the Yukon-Tanana terrane (YTT). The Klondike Schist represents a transition from plutonism to arc volcanism that has undergone greenschist facies metamorphism and consists of metaplutonic Sulphur Creek orthogneiss in the west that transitions eastward to a package of metavolcanic and metasedimentary units including: felsic to mafic (quartz-mica ± chlorite) schist, graphitic schist, and quartz augen schist (PKf and PKs). Evidence of five deformation events (D1 to D5) are present in within the Klondike Schist Assemblage as a result of obduction and regional thrusting and faulting related to uplift, which have produced a visible S2 and S3 foliation fabric in the schist units.

The Sheba showing area is underlain dominantly by medium to dark green mafic schist (unit Psq) and tan weathering intermediate schist (muscovite and/or chlorite quartzite and quartz-muscovitechlorite schist unit Psq). Regional foliation trends north-northwest and dips are shallow to the southwest. Numerous structurally controlled mesothermal quartz veins cross-cut foliation. The veins are commonly white bull quartz, locally rusty, mineralized and typically 0.1 to 0.5 m wide on average. A few veins, such as the Sheba showing, are up to 1.5 m wide.

Mineralization & Results

The Sheba vein, located 850 m south of the Mitchell showing (MINFILE occurrence 1150 068), consists mainly of brittle, white quartz that contains abundant galena, chalcopyrite, euhedral pyrite up to 1 cm wide and up to 10,285 g/t Ag. Pyrite mineralization contains inclusions of pyrrhotite and gold. The Sheba vein is 1.5 m thick and strikes NNW and dips 41° east. The crest of the main ridge in the Sheba area has outcropping mafic (chlorite-muscovite-quartz) schist. The east side of the ridge becomes increasingly felsic with more mica-rich schist becoming prevalent. In the Sheba East, local sercitization and carbonate alteration of the wall rock peripheral to the quartz veining has destroyed much of the fabric of the schist. J. Mortensen obtained a K-Ar age of 140 Ma from sericite in the centre of the vein.

The 1980 geochemical survey in an overburden-covered area south of the Mitchell occurrence gave generally low gold values, but showed a continuous arsenic anomaly which appears to be related to stratigraphy. The IP response was flat, however, in 1990 Arbor outlined IP anomalies extending north from the Sheba vein and south from the Mitchell vein, suggesting that the veins may join. 1988 rotary drilling by J.A.E. Resources identified intervals of anomalous gold and silver from the Sheba vein, including: 25.28 oz/t Au over 0.61 m and 583 g/t Ag over 1.83 m in R88-01 and up to 0.22 oz/t over 0.61 m in R88-02.

Hoymann and Friedrich (1992) analyzed gold inclusions in pyrite from the Mitchell vein and found a mean silver content of 17.58 wt%. They identified three stages of mineralization in the Mitchell and Sheba veins: (1) quartz-carbonate-gold-arsenopyrite-pyrite-pyrite-pyrite-chalcopyrite-galena; (2) quartz-carbonate-chalcopyrite-sphalerite-tetrahedrite-freibergite-polybasite-polyagyrite-argentitepyrostilbnite-calena: (3) quartz-carbonate-gold. Fluid inclusions contain CO2 and have salinities ranging from 0 to 7.2 wt% NaCl equivalent. Homogenization temperatures range from 390°C down to 120°C. and show a systematic decrease from Stage 1 to Stage 3.

During the 1996 field season, Barramundi excavated, mapped and sampled several older trenches, as well as 5 of their own trenches, including: Sheba East, JAE Road, Orekon, Lower Road, and Mitchell North. Anomalous rock samples were taken from quartz veins and altered schists adjacent to quartz veins. The best rock sample returned 32.0 g/t Au over 0.1 m from an old trench of the Sheba Vein. A soil grid covering most of the JAE claims revealed several gold anomalies and outlined the Sheba and Mitchell occurrences as separate anomalies with a higher Pb signature in the Sheba.

Barramundi's airborne geophysical survey covered their intensive claim holding in the Klondike region. Although a report was filed for assessment it contained only general results. Results on specific anomalies/conductor were retained by the company.

J.A.E. Resources' 2000 field program was focused on newly discovered and known mineral showings surrounding the Mitchell and Sheba veins. Two trenches and two pits were excavated near the Sheba vein that returned up to 0.133 oz/t Au from rock chip samples. Resampling of these and other historical trenches in 2004-2006 returned values of up to 1.162 g/t Au over 3.1 m and 0.86 g/t Au over 8 m. Prospecting results returned grab samples with anomalous gold values of up to 348 ppb Au and 12.7 ppm Ag.

Klondike Star Mineral Corp. performed trenching in 2007 as part of an option agreement with J.A.E. Resources that returned chip samples of up to 1.32 g/t Au (Trench 07-01). Detailed mapping in the Sheba area trenches at this time discovered that quartz veins >5 cm thickness commonly exhibited a central zone of galena. Bulk sampling was also performed in the 07-01 and Sheba East trenches during the 2007 season. Higher grades were returned in the Sheba East trench of up to 0.725 g/t Au do. 504 g/t Au than in trench 07-01 (0.086 to 0.270 g/t Au). Bulk samples ranged from 2 tonnes to 5 tonnes of material. Four percussion drill holes with a 6" diameter were also drilled that encountered a maximum grade of 2.06 g/t Au over a true thickness of 0.52 m.

In 2011, Kestrel Gold performed soils as part of an option agreement with J.A.E. Resources that returned up to 4 g/t Au with an average of 23.9 ppb Au. The largest gold anomaly was noted over the Sheba vein with correlating zoned Ag and Pb patterns of up to 28.1 ppm and 3470 ppm, respectively.

Work History

Date	Work Type	Comment
7/1/2020	Trenching	
7/1/2020	Geochemistry	
7/1/2020	Geochemistry	
7/1/2020	Drilling	6 holes, 269.7 m
7/1/2020	Other	
7/1/2019	Geochemistry	
7/1/2017	Geochemistry	
12/13/2011	Geochemistry	
12/13/2011	Ground Geophysics	
12/13/2008	Geochemistry	
12/13/2008	Geology	
12/13/2007	Lab Work/Physical Studies	2-5 tonnes per sample.
12/13/2007	Geology	
12/13/2007	Drilling	Rotary percussion drilling of 4 holes.
12/13/2007	Trenching	
12/13/2006	Geochemistry	Chip sampling historical trenches.
12/13/2005	Trenching	
12/13/2005	Other	
12/13/2004	Geochemistry	Chip sampling historical trenches.
12/13/2004	Other	
12/13/2000	Trenching	Two trenches and two pits.
12/13/2000	Geochemistry	
12/13/1999	Airborne Geophysics	And EM.
12/13/1996	Geochemistry	
12/13/1996	Geology	
12/13/1990	Geochemistry	
12/13/1990	Geochemistry	
12/13/1990	Ground Geophysics	5.79 line kilometres of IP and resistivity.
12/13/1988	Geochemistry	
12/13/1988	Drilling	Three rotary drill holes.
12/13/1988	Trenching	

12/13/1980	Pre-existing Data	
12/13/1980	Geochemistry	
12/13/1911	Trenching	
12/13/1900	Trenching	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<u>097091</u>	2017	Geochemical, Geophysical & Airborne Survey Assessment Report: Soil Sampling, Prospecting, Dighem & Drone aerial survey - Hunker Gold Project	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Orthophoto - Airphotography, Rock - Geochemistry, Soil - Geochemistry		
<u>097124</u>	2017	Prospecting Report on the King Solomon's Dome Project	Cursory Property Visit - Other		
<u>096818</u>	2014	Prospecting Report on the Dominion Project	Rock - Geochemistry, Prospecting - Other		
<u>096879</u>	2014	Ground Magnetics, Orthophoto and Prospecting Report on the Dominion Project	Orthophoto - Airphotography, Magnetics - Ground Geophysics, Prospecting - Other		
<u>095977</u>	2011	2011 Soil Geochemistry Survey Program -KSD Property	Soil - Geochemistry		
<u>096242</u>	2011	2011 Induced Polarization Survey Program - KSD Project	IP - Ground Geophysics		
<u>095112</u>	2008	2008 Geological Mapping, Rock, and Soil Geochemistry on the Klondike Properties	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Hand - Trenching, Mechanical - Trenching		
<u>094882</u>	2007	Geological Mapping, Trenching, Rock Sampling, Bulk Sampling, and Grid Preparation on the JAE Property	Percussion - Drilling, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Surveying - Other, Backhoe - Trenching	4	182.88
<u>094782</u>	2006	Geological Mapping, Soil and Rock Geochemical Sampling, Trenching, and Bulk Sampling on the JAE Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Backhoe - Trenching		
<u>094681</u>	2005	Sampling Report on the JAE 1-27 and Tom 1-2 Quartz Claims	Rock - Geochemistry, Backhoe - Trenching		
<u>094479</u>	2004	Sampling Report on the JAE 1-27 and TM 1-2 Quartz Claims	Rock - Geochemistry, Prospecting - Other		
<u>094199</u>	2000	Trenching and Sampling Report on the J.A.E 1-27 and TM1-2 \mbox{Quartz} Claims	Rock - Geochemistry, Backhoe - Trenching		
<u>094021</u>	1999	Detailed Airborne Magnetics and VLF-EM over the Klondike District, Dawson City - 1999	ailed Airborne Magnetics and VLF-EM over the Klondike District, vson City - 1999 Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
<u>093711</u>	1996	JAE Mapping Report 1996 A Geological and Geochemical Report for the Hunker Dome Project Reck - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology			
<u>092974</u>	1990	Geophysical Report on Induced Polarization, Resitivity and Magnetic Surveys over Portions of the Jae and Dawson Claims	IP - Ground Geophysics, Magnetics - Ground Geophysics		
<u>092954</u>	1990	Geological and Geochemical Report on the Mitchell/Sheba Property	Rock - Geochemistry, Soil - Geochemistry, IP - Ground Geophysics, Magnetics - Ground Geophysics, Resistivity - Ground Geophysics		
<u>092517</u>	1988	1988 Assessment Work on the JAE Claims	Reverse Circulation - Drilling, Drill Cuttings - Geochemistry, Mechanical - Trenching	3	88.10
<u>092743</u>	1988	Geological Mapping and Trenching of the 1987 Soil Geochemical Anomalies on the Mackay, Dominion, Hunker, Dome, and King Solomon Dome Grids	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Mechanical - Trenching		
<u>091634</u>	1984	Report on the 1984 Exploration Program in Klondike Gold Fields	Electromagnetic - Airborne Geophysics, Percussion - Drilling, Drill Cuttings - Geochemistry, EM - Ground Geophysics	95	6900.67
<u>091384</u>	1980	Geological Report on the King Solomon, Dominion and Sheba Mineral Claims	Rock - Geochemistry, Data Compilation - Pre-existing Data		
<u>060149</u>	1972	Geological and Geochemical Report Yukon Quartz Mineral Claims	Silt - Geochemistry, Soil - Geochemistry		

Related References

Number	Title	Page(s)	Reference Type	Document Type
<u>05-009</u>	Sampling Report on the J.A.E. 1-27 and Tom 1-2 Quartz Claims		Yukon Government: Energy, Mines and Resources	YMEP Report
<u>1996-1(G</u> <u>)</u>	Geological Compilation Maps of the Northern Stewart River Area, Klondike and Sixtymile Districts (115N/15, 16, 115O/13, 14 and Parts of 115O/15, 16)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
<u>1992Geol</u> <u>Vol3_18</u>	Gold and sulphide mineralization in the Hunker Creek area, Yukon Territory, Canada		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
<u>1992Geol</u> <u>Vol3_15</u>	Preliminary observations on the geology and geochemistry of quartz veins in the Klondike District, west-central Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
<u>1991Rus</u> <u>hton</u>	A fluid inclusion and stable isotope study of mesothermal gold-quartz veins in the Klondike Schists, Yukon Territory		University of Alberta	MSc Thesis