J-Pacific Gold

BC Geological Survey Assessment Report 30071

# **J-Pacific Gold Inc**

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# Assessment Report on the

# 2007 DIAMOND DRILLING PROGRAM

# **BLACKDOME PROPERTY**

Clinton Mining Division, British Columbia

**Claims:** Blackdome claim group and leases

Location: 67 Km WNW of Clinton, B.C. Lat. 51° 19.2' N; Long. 122° 30'W UTM Zone10 535,400E; 5,685,700N NAD 83 NTS 0920/7&8

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### **1.0 INTRODUCTION**

The Blackdome Gold Mine is situated in the Chilcotin region of southwestern British Columbia approximately 67 kilometres west northwest of Clinton, B.C. The Blackdome property consists of 40 mineral claims, 11 Crown granted claims and two mining leases and covers an area of approximately 16,695 hectares.

Mining activity dates back over 60 years when placer gold was discovered on Fairless Creek. Soon after, gold and silver bearing quartz veins were discovered on the slopes of Blackdome Mountain. Silver Standard and Empire Valley Gold Mines conducted exploratory work including small-scale underground work in the 1950s. The property lay idle until 1977 when it was acquired by Barrier Reef Resources Ltd. Extensive exploration and development work took place primarily by Blackdome Mines until 1986 when a 200 tonne per day mine was commissioned. The mine operated until 1991 after having produced 7,000,000 grams of gold (225,000 oz) and 17,000,000 grams (547,000 oz) of silver. The mine was briefly reopened from late 1998 to mid 1999 and produced 203,631 grams of gold and 538,000 grams of silver (Gruenwald, 2002).

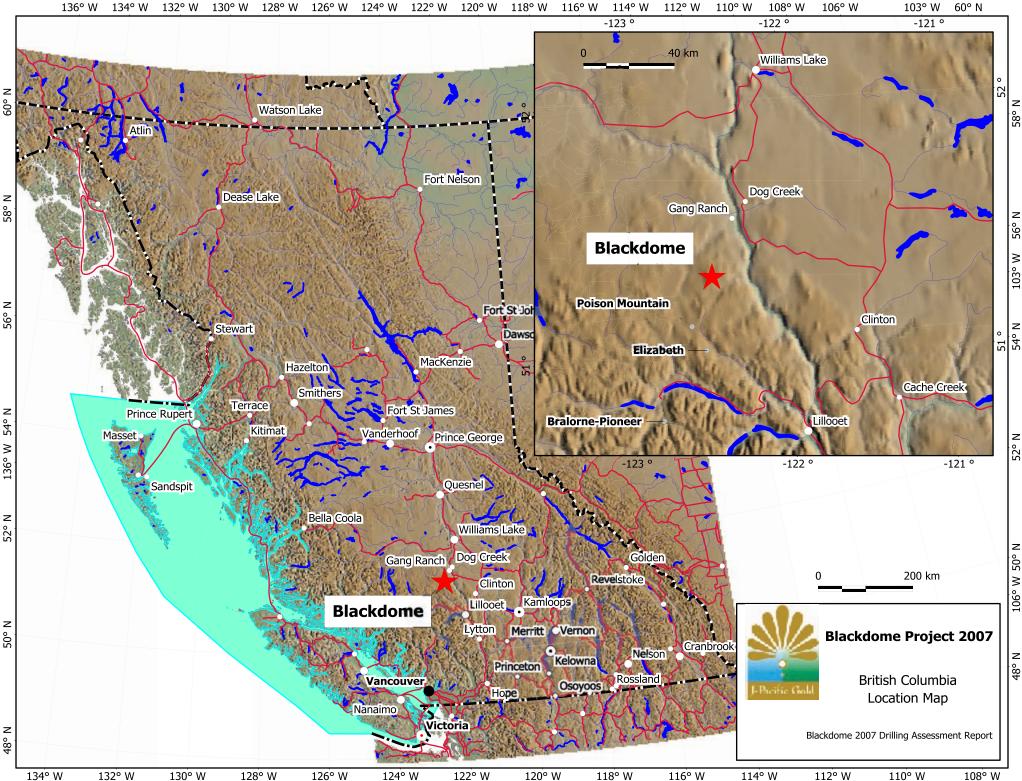
Gold and silver mineralization occurs in structurally controlled fault and vein systems within Eocene age volcanic rocks. These deposits are classed as epithermal and are believed to have resulted from the upward migration of hydrothermal fluids emanating from a buried intrusive rock source. The main mineralized system, known as the No.1 and 2 veins, has been traced for nearly four kilometres. Less than half of this system has been developed. Significant portions of the No.1 and 2 veins and numerous other undeveloped veins offer additional exploration and development potential. Current "drill inferred" resources stand at 124,120 tonnes averaging 12.8gm/t (0.37 oz/t) gold and 33.7 gm/t (0.98 oz/t) silver (SRK Consulting, 2001).

During October to December 2006, Full Force Drilling and Coast Mountain Geological Ltd conducted the first phase of a drilling programme designed to test targets identified by SRK (2001) and Rennie (2005). Phase II of the drilling programme commenced in 2007 and consisted of 13 holes, totalling 2,079.3 metres. Twelve of the 13 holes successfully reached their targets.

# **2.0 LOCATION AND ACCESS**

The Blackdome Mine is situated at an elevation of approximately 1925 metres in the Camelsfoot Range of the Fraser Plateau approximately 67 kilometres west northwest of Clinton, B.C. The mine is located at 51° 19.2' north latitude, 122° 30' west longitude on NTS Maps 92O/7 and 8 (Figure 1). UTM Coordinates are Grid Zone 10U 56857000N; 535400E (NAD 83).

Blackdome is accessible by the Meadow Lake road that heads west from Highway 97 approximately 16 kilometres north of Clinton, B.C. Travel is westerly for 80 km through Canoe Creek to the Gang Ranch Bridge over the Fraser River. Alternatively, the Gang Ranch Bridge may be accessed from from Williams Lake by taking the road south from the Bella Coola highway that goes through Springhouse, Alkali Lake and Dog Creek. William Lake airport is the closest with regularly scheduled flights. Heavy equipment (particularly log trailers) accessing the Blackdome cannot negotiate the turn onto that Gang Ranch Bridge and must cross the Fraser River on the Bella Coola highway before turning south and travelling through Gang Ranch to the start of the Empire Valley road. Travel is then southerly along the Empire Valley road for 18 km to the Blackdome mine road at Brown Lake. The camp and mine site is situated 32 km along this road on a ridge south of the summit of Blackdome Mountain.



136° W 134° W 132° W 130° W 128° W 126° W 124° W 122° W 120° W 118° W 116° W 114° W 112° W 110° W 108° W 106° W

### **3.0 HISTORY**

Placer gold was discovered nearly 60 years ago in Fairless Creek. This creek flows westerly to Churn Creek from Blackdome Mountain. Prospecting soon after led to the discovery of gold bearing quartz veins on the southwest slopes of Blackdome Mountain.

In the 1950s, surface work and two adits were completed by Empire Valley Gold Mines and Silver Standard Mines Ltd. The property lay dormant until 1977 when Barrier Reef Resources staked the area and completed programs of soil and rock sampling, trenching, drilling and underground development.

In 1978, Blackdome Mining Corporation was formed to continue development. During the next seven years Blackdome and Heath Steele Mines Ltd carried out extensive exploration and underground development work totaling \$8,000,000. By 1984, ore reserves of all categories were 222,500 tonnes grading 22.6 gm/t gold (0.61 oz/t) and 106 gm/t silver (3.6 oz/t). The 200-ton per day Blackdome mine commenced production in 1986 with an expenditure of \$10,000,000. When mining ceased in 1991 a total of 338,000 tonnes of ore had been milled at an average grade of 21.9 gm/ton (0.64 oz/ton) gold yielding 7,000,000 grams (225,000 oz) of gold and 17,000,000 grams (547,000 oz) of silver.

Claimstaker Resources reactivated the mine in November 1998. At the closure in May, 1999 a total of 203,631 grams (6,547 oz) gold and 538,000 grams (17,300 oz) silver were produced from 21,286 tonnes of ore. The inferred mineral resources are estimated at 124,120 tonnes averaging 12.8 gm/t (0.37 oz/t) gold and 33.7 gm/t (0.98 oz/t) silver (SRK Consulting, 2001). Approximately 90% of Blackdome's production came from the No.1 and 2 vein systems. Mining occurred over slightly more than a one kilometre strike length. Extensions of this major vein system and several other veins on the property remain largely undeveloped.

# 4.0 PROPERTY

The Blackdome property consists of 22 mineral claims, 10 Crown granted claims and two mining leases and covers an area of 9,329.6 hectares (see Figure 2, 3 and 4). The Blackdome property is held 100% by No. 75 Corporate ventures (FMC 133817), which is 100% owned by J-Pacific Gold Inc (FMC 104975). All claims and leases are recorded in the Clinton Mining Division. An additional 18 mineral claims in the southern portion of the property, covering an area of 7,365.61 hectares are owned 100% by J-Pacific Gold Inc.

### 4.1 Mineral Tenures of Blackdome Project

The mineral tenures are summarized in Table 1 and 2.

Tenure Number	Tenure Type	Owner	Good To Date	Area
209456	Mining lease	133817 (100%)	2009/mar/12	443.5
209457	Mining lease	133817 (100%)	2008/dec/08	544.8
509143	Mineral	133817 (100%)	2013/mar/17	20.19
509145	Mineral	133817 (100%)	2013/dec/27	484.51
509146	Mineral	133817 (100%)	2013/mar/17	20.19
509426	Mineral	133817 (100%)	2013/dec/27	565.42
509427	Mineral	133817 (100%)	2013/dec/27	605.42
509428	Mineral	133817 (100%)	2013/dec/27	605.47
509429	Mineral	133817 (100%)	2013/dec/27	726.95
509530	Mineral	133817 (100%)	2013/dec/27	606.64
509535	Mineral	133817 (100%)	2013/dec/27	363.60
509537	Mineral	133817 (100%)	2013/dec/27	606.22
509554	Mineral	133817 (100%)	2013/dec/27	485.12
509555	Mineral	133817 (100%)	2013/dec/27	282.83
509560	Mineral	133817 (100%)	2013/dec/27	323.24
509610	Mineral	133817 (100%)	2013/dec/27	181.88
509612	Mineral	133817 (100%)	2013/dec/27	404.32
509618	Mineral	133817 (100%)	2013/dec/27	161.57
509621	Mineral	133817 (100%)	2013/dec/27	242.28
511687	Mineral	133817 (100%)	2013/apr/26	60.58
525389	Mineral	133817 (100%)	2013/jan/13	322.95
525390	Mineral	133817 (100%)	2013/jan/13	403.67
539008	Mineral	133817 (100%)	2013/aug/09	504.88
539009	Mineral	133817 (100%)	2013/aug/09	363.34
DL7871	Crown Grant	133817 (100%)	2008/jun/30	
DL7872	Crown Grant	133817 (100%)	2008/jun/30	
DL7873	Crown Grant	133817 (100%)	2008/jun/30	
DL7874	Crown Grant	133817 (100%)	2008/jun/30	
DL7875	Crown Grant	133817 (100%)	2008/jun/30	
DL7876	Crown Grant	133817 (100%)	2008/jun/30	
DL7877	Crown Grant	133817 (100%)	2008/jun/30	
DL7878	Crown Grant	133817 (100%)	2008/jun/30	
DL7879	Crown Grant	133817 (100%)	2008/jun/30	
DL7880	Crown Grant	133817 (100%)	2008/jun/30	

Table 1: Mineral Tenures held by No. 75 Corporate Ventures

Tenure Number	Tenure Type	Owner	Good To Date	Area
535569	Mineral	104975 (100%)	2009/jun/13	505.73
535738	Mineral	104975 (100%)	2009/jun/14	242.56
535742	Mineral	104975 (100%)	2009/jun/15	505.73
535769	Mineral	104975 (100%)	2009/jun/16	242.58
535924	Mineral	104975 (100%)	2009/jun/19	485.53
535925	Mineral	104975 (100%)	2009/jun/19	485.88
535991	Mineral	104975 (100%)	2009/jun/20	323.62
535992	Mineral	104975 (100%)	2009/jun/20	505.73
535993	Mineral	104975 (100%)	2009/jun/20	485.71
535994	Mineral	104975 (100%)	2009/jun/20	485.71
535995	Mineral	104975 (100%)	2009/jun/20	485.71
535996	Mineral	104975 (100%)	2009/jun/20	485.89
539006	Mineral	104975 (100%)	2010/aug/09	405.35
539011	Mineral	104975 (100%)	2009/aug/09	242.12
541801	Mineral	104975 (100%)	2009/sep/21	303.05
541986	Mineral	104975 (100%)	2009/sep/26	405.07
541987	Mineral	104975 (100%)	2009/sep/26	465.84
541988	Mineral	104975 (100%)	2009/sep/26	303.81

Table 2: Mineral Tenures held by J-Pacific Gold Inc.

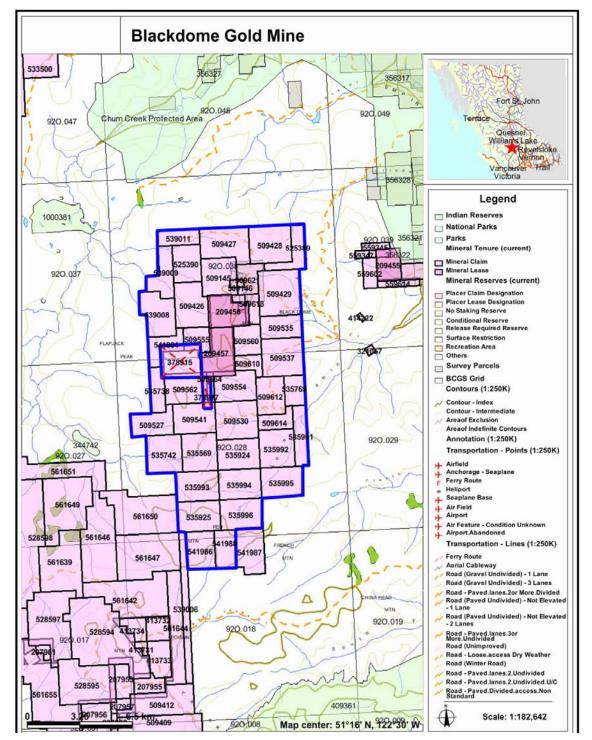


Figure 2: Claim map showing the location of the Blackdome Project, British Columbia.

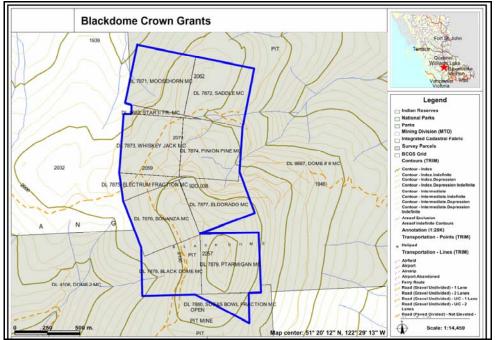


Figure 3: Claim map showing the Crown Granted Claims of the Blackdome Project, British Columbia.

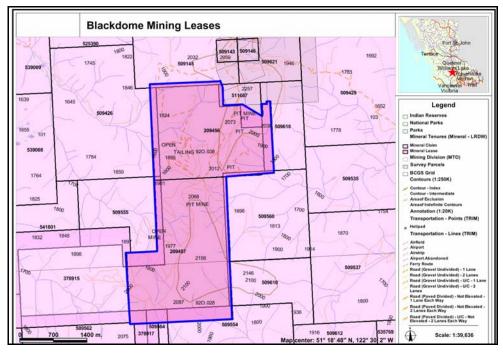
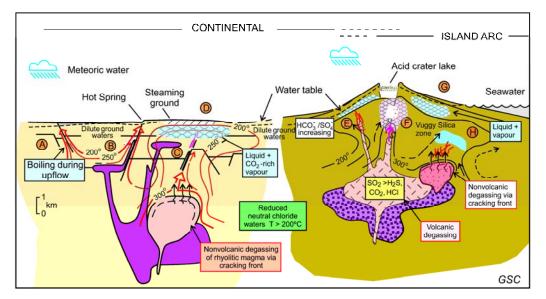


Figure 4: Claim map showing the Mining Leases of the Blackdome Project, British Columbia

## **5.0 GEOLOGY**

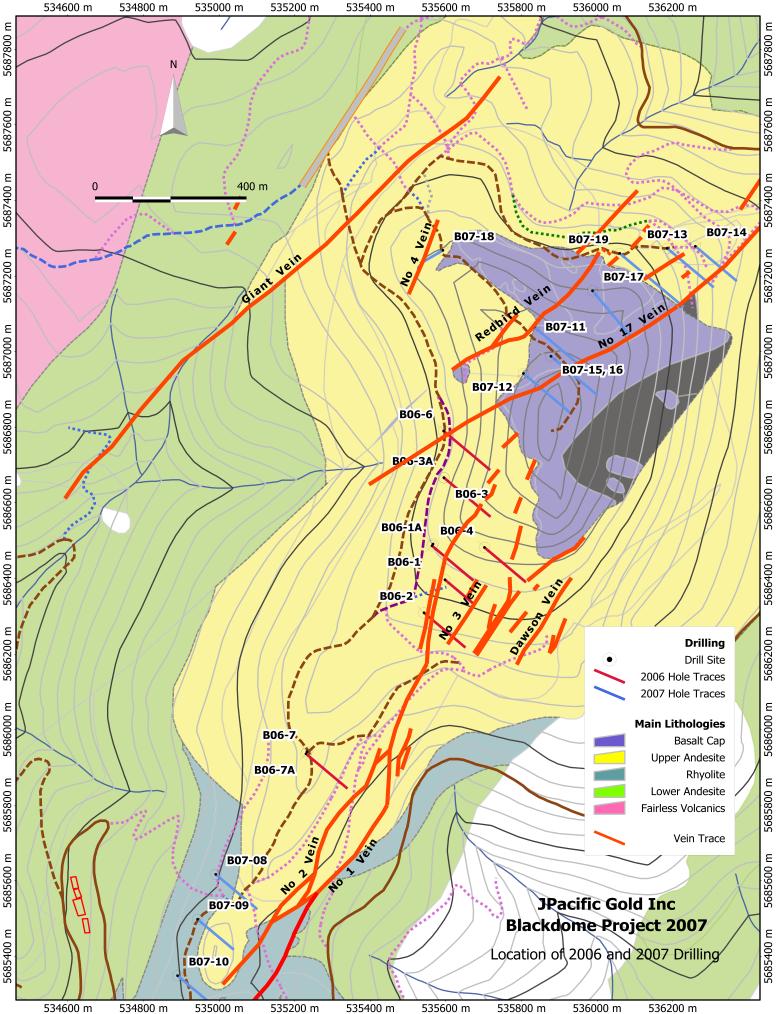
The Blackdome property is situated in a region underlain by rocks of Triassic to Tertiary age. Sedimentary and igneous rocks of the Triassic Pavilion Group occurring along the Fraser River represent the oldest rocks in the region. A large, Triassic age, ultramafic complex (Shulaps Complex) was emplaced along the Yalakom fault; a regional scale structure located some 30 kilometres south of the property. Sediments and volcanics of the Cretaceous Jackass Mountain Group and Spences Bridge/Kingsvale Formations overlie the Triassic assemblages. Some of these rocks occur several kilometres south of Blackdome.

Overlying the Cretaceous rocks are volcanics and minor sediments of Eocene age. These rocks underlie much of Blackdome and are correlated with the Kamloops Group seen in the Ashcroft and Nicola regions. Geochemical studies (Vivian, 1988) have shown these rocks to be derived from a "calc-alkaline" magma in a volcanic arc type tectonic setting (see Figure 4). Eocene age granitic intrusions at Poison Mountain some 22 kilometres southwest of Blackdome are host to gold bearing porphyry copper-molybdenum deposit. It is speculated that this or related intrusions could reflect the source magmas of the volcanic rocks seen at Blackdome. There is some documented evidence of young granitic rocks several kilometres south of the mine near Lone Cabin Creek. The youngest rocks present are Oligocene to Miocene basalts of the Chilcotin Group. These are exposed on the uppermost slopes of Blackdome Mountain and Red Mountain to the south.



*Figure 5: Geological and Hydrogeological Settings of Epithermal Deposits* Low-sulphidation system include A, B, C, and E. Blackdome is modelled in the setting of C in the diagram. (Taylor, 2007)

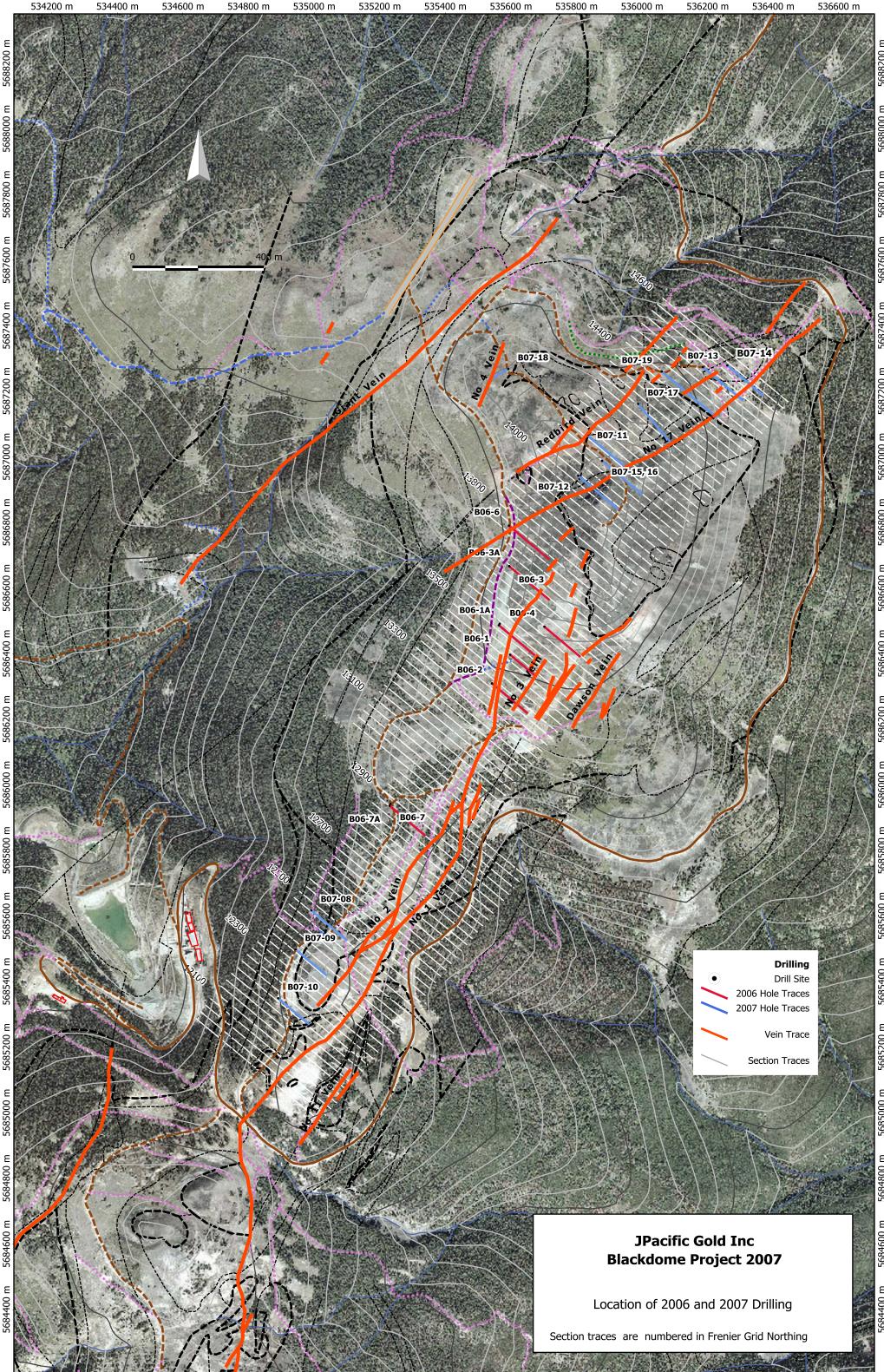
The stratigraphy of volcanic rocks on the property is well known and divided into five units. Within these units individual members are also identified. Some areas are underlain by thick homogeneous units, while other areas (such as on the north side of Blackdome peak) have diverse members that provide substantial geological record of the volcanics. The following stratigraphic description is taken almost verbatim from Rennie (2004). Units are described from oldest to youngest. Figure 5 shows the property geology of these lithology units.



534600 m

535600 m

536000 m



534200 m

534400 m

534600 m

534800 m

535000 m

535200 m

535400 m

535600 m

535800 m

536000 m

536200 m

536400 m

**Fairless Volcanics** – Exposed northwest of the mine, along Fairless Creek. The unit comprises grey to grey-green fine-grained (aphanitic) andesite flows, medium to dark grey basalt flows, rhyolite ash with minor tuffaceous sandstone and siltstone, rhyolite crystal-lithic tuff and lapilli tuff.

**Lower Andesite** – Largely consists of rhyolitic and basalt members with andesite flows. Lowermost component is the Watson Member, comprising dacite to rhyodacite tuff, lapilli tuff, and flows. Overlying the Watson Member is the 1870 Member, which consists of interlayered medium grey amygdaloidal to dark grey aphanitic basalt flows, medium grey sparsely porphyritic andesite flows, white massive and flow-banded rhyolite, and white to grey-green lapilli tuff with rhyolite and andesitic clasts.

**Rhyolite** – From top to bottom: buff to grey-green rhyodacite to dacite flows with minor lapilli tuff, white to grey-green lapilli tuff with rhyolite and andesite clasts, white to grey-green flow-layered and locally spherulitic rhyolite, lapilli tuff comprising rhyolite and dacite clasts, and undifferentiated lapilli tuffs and flows. There is a wide range of breccia textures, clast size, and relative proportion of lapilli in the volcanic sequence. The rhyolite flows are observed underground to be auto-brecciated in places. Individual components of the volcanic stratigraphy are sometimes complexly interlayered, indicative of a chaotic depositional environment typical of a rhyolitic volcanic centre (or centres). Fossilized graphitic remains of vegetation have also been reported in some localities within the tuffaceous members.

**Upper Andesite** – Comprises three members: the lowermost Lexington Member, which is a package of medium grey-green dacite flows; the Noranda Member, which consists of flow-layered dacite flows overlying a basal green and maroon dacitic tephra; and the uppermost Redbird Member, which is a basal lapilli tuff and volcanic breccia overlain by porphyritic dacite flows with hornblende granodiorite inclusions.

Basalt - Near the top of Blackdome Mtn., at the uppermost contact of the

Upper Andesite, is a rusty weathered erosional disconformity marking a 25 million year hiatus in volcanic activity. Above this contact lies the Miocene basalt, which consists of medium to dark grey aphanitic basalt, with red oxidized and grey unoxidized basaltic tephra. The Eocene erosion surface is strongly weathered to a reddish colour. At the contact between the basalt and Upper Andesite, it is possible to pry chunks of basalt off of the regolith and find pebbles and cobbles embedded in the basaltic lava. The Miocene flows are post-ore and obscure traces of the veins. However, fracturing associated with the faults that host the veins have been observed to progress upwards into the basalt (Read, 1989, and Lee and Michaud, 2004), which indicates that movement along these faults continued into the Miocene. Some veins, notably the Redbird Vein, are hosted in structures that contain basaltic feeder dykes presumably for the basalt cap. Since only a few of the structures host feeders it would seem likely that only these were still active during the Miocene.

The following table is taken from mapping by Read (1989). One member was added (M5ps) to cover the soil-like material encountered in some core below the basalt cap. Since Read's work was primarily based on surface mapping this member could be very difficult to identify since it would not typically survive in outcrop. However, it is quite possible that areas mapped as basalt tephra (M5t) may in places be residual material after the clay component has been washed out. Core logging attempted to keep surface mapped geology correlated with what was being logged. Additional fields were added to the GEMCOM database to support this as well. Previous work in the GEMCOM database seems to include subsurface interpretation of members mapped on surface, but this work was done graphically and apparently based on personal expert knowledge of the geologist doing the interpretation. By adding data fields subsurface interpretation will be easier to maintain.

#### QUATERNARY

PLEISTOCENE AND RECENT

Qs(3r) Unconsolidated sediments: glacial deposits, colluvium and alluvium; few if any outcrops; probable subcrop unit within parentheses.

#### MIOCENE

LOWER MIOCENE

#### **UPPER BASALT (UNIT 5)**

M5b	Medium to dark grey olivine basalt flows.
M5t	Red oxidized to locally grey unoxidized, crumbly basalt tephra.
M5ps	Red to yellow oxidized, clay rich soil containing lithic fragments. Below basalt unit and probably trapped paleosoil.
M5b	Dark grey aphanitic basalt intrusions; patterned.

#### EOCENE

MIDDLE EOCENE

#### **UPPER 'ANDESITE' (UNIT 4)**

#### **Redbird Member**

- 4Rd Porphyrytic plagioclase-rich (30-60%) dacite with chalky feldspar, chloritized hornblende phenocrysts, and cognate hornblende granodiorite inclusions; intrusions patterened.
- 4Rt Basal tephra: lapilli tuff and volcanic breccia.

#### Noranda Member

- 4Nd Plagioclase-sparse (5-15%) dacite flows locally flow-layered; intrusions patterned.
- 4Nt Basal green and maroon tephra: intercalated marron and grey contorted dacite flows.

#### Lexington Member

4Ld Medium grey-green, very sparse (less than 3%), fine (0.5 mm) plagioclaisebearing dacite flows; intrusions patterned.

#### "RHYOLITE" (UNIT 3)

- 3rd Buff to grey-green rhyodacite to dacite flows; minor lapilli tuff.
- 3ut Upper lapilli tuff: white with rhyolite clasts to grey-green with rhyolote and dacite clasts.
- 3r White, massive to flow-layered, locally spherulitic rhyolite flows.
- 3lt Lower lapilli tuff: white with rhyolite clasts, light green with rhyolite and dacite clasts, and green with dacite clasts.
- 3 Undivided: flows and lapilli tuff.

#### LOWER "ANDESITE" (UNIT 2)

#### 1870 Member

2Eua	Medium greu-green, sparsely porphyritic (plagioclase (less then 5%), hornblende andesite flows.
2Et	Medial lapilli tuff: white with rhyolite clasts to grey-green with rhyolite and andesite clasts.
2Er	White, massive to flow-layered rhyolite flows.
2Eub	Aphanitic grey-green amygdaloidal (calcite and chlorite) and dark grey basalt flows.
2Ela	Medium grey, sparsely porphyritic (plagioclase (less than 5%), hornblende) andesite flows.
2Elb	Dark grey aphanitic basalt flows.
2Ea	Undivided: medium grey to grey-green, sparsely porphyritic (plagioclase (less than 5%), hornblende) and esite flows
2Eb	Undivided: medium grey amygdaloidal to dark grey aphanitic basalt flows.
Watson Me	ember
2Wdt	Feldspar-rich dacite and rhyodacite tuff and lapilli tuff, grey-green fine

#### plagioclase and chloritized hornblende phenocryst-bearing flows. FAIRLESS VOLCANICS

- Fa Medium grey and grey-green, aphanitic andesite flows.
- Fub Medium to dark grey, locally amygdaloidal or diabasic basalt flows
- Fur Rhyolite ash; minor buff-weathering tuffaceous sandstone and siltstone.
- Flb Dark grey to black, porcellaneous basalt flows; minor volcanic breccia, amygdaloidal or diabasic flows.
- Flr Rhyolitic crystal-tuff and minor lapilli tuff.

In the interior of British Columbia widespread, but sparse prospects and deposits may be found that formed in similar Eocene or slightly earlier environments. If the range is expanded to include late Cretaceous to Eocene then a series magmatic and volcanic belts running through cordillera in British Columbia, Yukon and Alaska can be seen in Figure 6, which host epithermal and mesothermal vein systems in addition to intrusion associated gold occurrences.

A number of regional scale geologic structures are present. Major structures include the Fraser Fault, a north-northwest striking, right lateral, strike-slip fault

approximately 20 km to the east of Blackdome. The Yalakom Fault and Hungry Valley Fault are subsidiary structures to the Fraser Fault and are also primarily dextral movement, but with some dip-slip component. The latter fault occurs 5 km south of Blackdome peak and has displaced Lower Cretaceous sediments northward onto Upper Cretaceous and Tertiary rocks. The Yalakom Fault is thought to have controlled emplacement of the Shuswap Ultramafic complex. North to northeast trending extensional structures that were generated by the regional northwest trending faults are the host for gold mineralization at Blackdome.

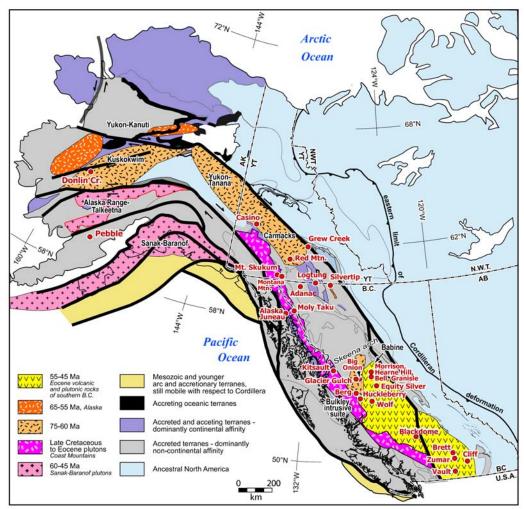


Figure 7: Late-Cretaceous to Eocene magmatism, volcanism and associated deposits/prospects in the cordillera of BC, Yukon and Alaksa.

## 6.0 ECONOMIC GEOLOGY

Blackdome is classified as a low-sulphidation, epithermal, Au-Ag type deposit. Gold and silver mineralization occurs in quartz veins and siliceous breccias which are believed formed from the upward movement of hot hydrothermal fluids in mid Eocene to early Oligocene time. Precious metal minerals include native gold, electrum, silver and several silver sulphides and sulphosalts. Accessory minerals include pyrite, chalcopyrite, galena and sphalerite. These minerals occur as fine to medium-grained disseminations and fracture fillings that generally represent  $\leq 1\%$  of the vein material. Visible gold is not unusual and gold values have significant nugget affects as evidenced by the >0.5 mm grains found in gravity concentrates during mining.

Veins are structurally controlled and occupy faults and extensional structures. Vein/fault systems generally strike north-northeast and dip 40-70° NW. The No. 1 and 2 veins are the major mineralized structures and have been traced for almost four kilometres. The vein/faults range from 0.5 to 3.0 metres wide and are comprised of variable amounts of clay gouge, solid quartz and gouge-vein mixtures. Work by Lee and Michaud (2001) identified two sets of structurally distinct veins at Blackdome. One set, includes the Redbird, Giant, and No 17 Veins, which are secondary structures of the Faser fault system with strike slip movement. Most of these have received little development work. The other set, which includes the No. 1 and No 2 Veins may have more dip-slip movement and are subordinate to the previous set. This set of veins has received the most attention and has produced the most ore. The ore zones are elongate, moderate to steeply plunging "bonanza shoots" associated with quartz rich sections of the fault zones. Very little gold and silver has been found in vein wall rock. Ore shoots are 30 to 50 metres long, 60 to 100 metres high and 0.5 to 3 metres wide. The majority of known stopes are located between the 1870 and 1920 metre elevations. Such depositional control

characteristics are not uncommon in epithermal deposits. However, the range of levels can vary along strike and within other mineralized zones.

### 7.0 MINING AND MILLING

Mining utilized cut and fill methods with the fill being comprised of waste rock until 1988. After this time, mill tailings mixed with cement were pumped into worked-out sections by the use of a backfill plant. Mining took place at 50 metre levels. Two of the major access points are the 1870 and 1920 metre levels. Trackless haulage equipment was used throughout the mine, with ore being hauled from the portals to the mill by dump trunks.

Blackdome ore has a relatively simple metallurgy with over 60% free gold. Milling consisted of a gravity circuit for the free gold and a flotation circuit to recover precious metal bearing sulphides. Gravity concentrates were refined into doré bars and the flotation concentrate was shipped to Japan for smelting. Gold recovery was reportedly over 90% during the life of the mine.

The mineralogically simple and benign nature of the ore resulted in tailings that posed little environmental impact. Tailings were discharged into a pond ~80 metres below the mill and were impounded by a rock and clay fill dam. Tailings water was monitored for heavy metal content and suspended solids and then passed through a settling pond.

### 8.0 PHASE II DIAMOND DRILLING PROGRAM

The primary objectives of the 2006 Blackdome drill programme were to gain a better understanding of mineralized structures under the Blackdome peak, to extend the principle producing veins northward along strike toward the dome, and to test the intersection of the No. 1 and No. 2 veins at depth. Due to poor ground conditions and extreme weather, the 2006 drill targets were only partially tested. Further northern extension (below the basalt cap on

Blackdome peak) and completion of testing the intersection of Nos 1 and 2 veins at depth was deferred to a later phase.

In 2007, the Phase II drilling programme completed planned testing of the 2006 targets. The 2007 drill program consisted of 13 holes, totalling 2,617 metres (see Table 3). Twelve of the 13 holes successfully reached their targets. One of the holes re-entered B07-07A and added an additional 61m to reach a total of 340.5m depth.

Drill hole collar locations were recorded using GPS receivers on several drill site visits and compared for consistency. These positions were then loaded into the project GIS and overlaid on the Blackdome orthophoto flown and constructed in 2006. The level of detail in the orthophoto acted as further confirmation of the collar position or that further GPS checks were warranted. Once the position of the collars were confirmed to what is believed to be within ±2 m horizontal accuracy they were overlaid on the 2006 DEM used to construct the orthophoto to establish elevation of the collar. (This DEM has 2m horizontal spacing.) Comparison of the Blackdome drillhole database with the 2006 DEM indicated an average difference of 6.1m between the two elevation models for collars, that is the 2006 DEM is 6.1m higher than the historical Blackdome collar data. When data was loaded into the GEMCOM database collar elevations in the logs and elsewhere in this report are adjusted to match the historical Blackdome survey elevation datum.

Hole #	UTM E	UTM N	Elev. (m)	Length (m)	Az	Dip
B07-07A	535212	5685927	2046	340.46	120	-61
B07-08	534991	5685617	1993	299.92	130	-55
B07-09	534943	5685498	2004	237.13	130	-60
B07-10	534890	5685349	1994	256.95	130	-60
B07-11	535986	5687159	2182	60.35	130	-50
B07-12	535820	5687036	2196	274.02	130	-50

Table 3: Blackdome Property 2007 Drill Statistics

B07-13	536190	5687249	2074	208.20	130	-50
B07-14	536273	5687310	2054	180.75	130	-55
B07-15	535878	5686988	2198	191.10	130	-50
B07-16	535878	5686988	2198	148.43	130	-65
B07-17	535988	5687161	2135	246.28	140	-52
B07-18	535592	5687268	2136	118.26	227.7	-44
B07-19	536060	5687268	2106	334.36	146.8	-45.5

### 8.1 Core Handling and Analysis

Drill core for the 2007 programme was logged and sampled on site in a core logging facility at the mill site. During the 2006 drilling this had been winterized to the extent possible and much of the logging was done inside the mill. During 2007, since the weather was more amenable, core was logged outside to take advantage of natural light and more space. Geological and technical support for the 2007 season was provided by Coast Mountain Geological Limited. Two styles of logging were used concurrently:

1. A descriptive log was recorded and formatted by a geologist in a word processor on site. The entire hole was divided into contiguous intervals of major lithological units. Sub-units and intervals of distinctive characteristics such as alteration were then added where needed using a format to indicate the intervals subordinate relationship to the major lithological unit. In addition, detailed notes of mineralization, veining and structural data were recorded in a format to indicate their scope. This style of logging enabled the geologist to be as descriptive as desired while providing language tools to reduce typographic errors in an easily legible record. Geologists were encouraged to use digital photography of details in the core and embed these photographs in the descriptive log. All major interval descriptions in the log begin with a photograph of a representative strip of core. Digital logging was an effective means of enabling onsite backups and transfer of data to the head office in Vancouver.

2. An attribute log was recorded and formatted by a geologist in a spreadsheet on site. This log contains a quantitative and categorical description of contiguous intervals for the full length of the hole. Intervals used for description were sample intervals except in sections of unsampled core where blocks (usually drill runs) and lithological breaks were used to create intervals. This style of logging does not allow for flexible descriptions but is much better than the descriptive log for importing into a database or other data processing software. In addition, the style encourages geologists to develop skills in the systematic categorization and quantification of alteration, mineralization, veining and brecciation. Digital attribute logging using a spreadsheet helped to reduce typographic errors, ambiguous entries and improved consistency between geologists when the geologist was reasonably experienced in using spreadsheets.

Drill core was quickly examined at the drill site and the position of contacts or vein intersections was noted. Since all drill core was transported to camp by 4-wheel drive pickup trucks over rough roads there was minor risk of a load being lost. Once in camp, drill core was handled in a five step process.

 Core was cleaned as needed before processing. Preliminary checking of block labels and position was conducted by a technician or geologist. (Wooden blocks had been placed in the core box by drillers each time they empties a core tube. With no interruption in production a run would be 10 feet.) Length of core between blocks was measured to determine recovery and detect misplaced blocks. Core was visually checked to identify and pieces or sections that may have moved in position or been reversed when removed from the core tube or during transport. Any such problems were resolved as soon as possible and before logging.

- Geotechnical logging was conducted by a technician when a suitably trained technician was available. Since much of the drilling was of a prospecting and exploratory nature, this stage was not always included.
- 3. Descriptive and attribute logging were conducted more or less concurrently. Since attribute intervals match sample intervals, drill core was also marked for sampling during this stage. Three part, water resistant sample tags were used with one part being stapled to the core box at the beginning of the sample interval. Detailed photography of core to capture vein styles, crosscutting relationships, mineralization and alteration styles was done at the end of this stage. These photographs were stored with drill log files for use in later interpretation or to insert into the final version drill log. Both sets of drill logs are provide in appendices.
- 4. Photography of core boxes was conducted after logging so that sample tags would be visible in the photographs. This enabled the photographic record to be used to help resolve sample interval discrepancies that might turn up later.
- 5. Sampling was then done of marked intervals. During the 2007 season core was split using an hydraulic splitter which was used to reduce sample loss due to blade width of a rock saw. While this may have succeeded in maximizing the amount of sample material available, the method is not recommended for future work since the saw provides greater control in representative splitting of the core. Half of the split core was returned to the box while the other half was placed in a polyethylene sample bag. The second of three sample tag parts was then added to the bag which was then sealed using a security strap. Collections pans and surfaces, and the splitter jaws were then brushed clean before the next sample was split.

Following processing, core boxes were labelled with aluminium tags and were placed on covered racks adjacent to the Blackdome Camp.

Analytical work was performed by Acme Analytical Laboratories Ltd. of Vancouver, Canada, an ISO 9001 certified company. Assay work is supervised by British Columbia Certified Assayers. Samples submitted to Acme were dried and crushed to 70 per cent passing through a 10 mesh screen (two-millimetre or smaller fragments). Splits of 500 grams were taken from this material and pulverized so that 95 per cent of the material passed through a 150 mesh screen. A 30 gram sample was taken for fire assay from the fine fraction. The entire coarse fraction was assayed. A weighted average was used to combine the results to represent the gold content of the 500 gram sample. For certain mineralized samples, two 500 gram samples of the initial crush were used to replicate the analysis. Some difference in gold levels is expected due to the natural gold variation within the samples. Variation between replicate samples was within expected ranges, however additional QA/QC work is currently underway. Replicate analyses were conducted by ALS Chemex of North Vancouver, Canada, an ISO 9001 certified company. Five samples had replicate pulps (fine fraction) analysed by fire assay and three replicate samples were analysed by fire assay with screening for metallics. The amount of sample remaining in the other two did not permit coarse fraction replicate analysis.

A total of 174 samples were delivered to Acme Analytical Laboratories Ltd., (an ISO 9001 accredited laboratory), in Vancouver, British Columbia who conducted analytical work under the supervision of a BC Certified Assay.

### **8.2 Drilling Results**

#### **NO. 17 VEIN**

The No. 17 Vein structure (see Table 4), generated the highlight intersection of the drilling season with 31.26 g/t Au over 0.3m drill width. This intersection is

high in the system at 2140m. Very little high grade gold is known above 2000m elevation, except in the Redbird vein which parallels the No 17 vein approximately 150m to the northwest. Some of the higher values from historical drilling in the Redbird vein are located in the section of vein adjacent to the B07-15 intercept on the No 17 vein. This provides encouragement for the possibility that adjacent prospective zones exist on the two veins.

Three holes (B07-13, 14 and 19), totalling approximately 723 metres, were drilled to test the No. 17 Vein from the southern extent of historical drilling to Blackdome's basalt cap. Two holes (B07-13 and 14) targeted the same level as the portal on the No. 17 Vein (1,950 metres ASL), and one went deeper (1,890 metres ASL). The width of alteration and stock-work veining increased in the most southerly hole (B07-19). Three intersections with gold grades greater than 1 g/t were encountered – two in B07-13 and one in B07-19.

Four holes (B07-12, 15, 16 and 17) totalling 844 metres were successfully drilled through the basalt cap. One hole (B07-11) was lost at approximately 61 metres, due to difficulties in deep overburden. The other four holes reached the No. 17 Vein, and at least two intersected what is believed to be the continuation of the No. 1 and No. 2 veins as they curve and disperse into the No. 17 Vein. As would be expected from historical underground experience the latter intersections of Nos 1 and 2 Veins were clayey and badly broken material.

Drilling under the basalt cap at the peak of Blackdome revealed that the No. 17 Vein continues through the peak and down the western side of the mountain, parallel to the Giant and Redbird veins. This results in a distinct change in the understanding of how the No 17 vein relates to the Nos 1 and 2 veins. Prior to 2007, No 17 vein was thought to likely be the continuation of the Nos 1 and 2 on the north side of the dome. The modest difference in orientation between the two veins was attributed to a flexure under the dome which presented a drill target. An intersection west of the basalt cap in the northernmost hole of the 2006 drilling (B06-06), intersected this vein, but lack of additional data prevented its association with the No. 17 Vein at that time.

A style of veining that has either not been previously noticed or has received little attention, was noted southeast of the No 17 Vein in B07-12, 15 and 19(?). Although the vein was not distinguished in core logging – which may explain why it has not been noted previously, the geochemical signature was clearly different than that of the majority of samples in other veins. Samples in this vein are characterized by high Ag, Cu and W. The correlation of Cu-Ag rather than Au-Ag, may be due to a Cu-Ag mineral. The distinctive geochemical nature of the vein suggests a separate pulse of activity or may reflect preexisting features. Its proximity to the results in B07-15 and higher grade sections in the adjacent Redbird vein add to the vein types interest and future work should monitor its pathfinders.

Drill	Sample Interval* (metres)					Assay ]	Results
Hole	Vein	From (m)	To (m)	Width (m)	Level (m)	Au (g/t)	Ag (g/t)
B07-12	No 17 Vein	94.9	95.35	1.1	2129	4.07	16.7
B07-12	No 17 splay?	99.0	99.7	0.7	2126	3.88	19.2
B07-13	No 17 Vein	190.0	192.0	2.0	1933	1.39	1.9
B07-13	No 17 Vein	192.7	194.0	1.3	1932	1.56	3.6
B07-14	No 17 Vein	126.2	127.0	0.8	1963	0.61	2.7
B07-15	No 17 Vein	82.8	84.6	1.8	2140	5.73	33.3
	including:	82.8	83.1	0.3	2140	31.26	148.1
B07-16	No 17 Vein	130.2	132.8	2.6	2085	2.58	18.6
B07-17	No 17 Vein	203.3	204.8	1.5	1980	1.07	2.6
B07-18	No 4 Vein	92.7	93.9	1.2	2069	1.43	3.2
B07-19	No 17 Vein	307.2	308.0	0.8	1876	1.19	4.4
* intervals reported above are core lengths; true widths will be shorter.							

Table 4: 2007 Drilling: Summary of Significant Results

### NO. 4 VEIN

A single short hole (B07-18, 118.3 metres in length) was used to test the No. 4

Vein at depth. The intersection in core returned 1.42g Au/t over 1.2 metres. This vein can be traced on the surface for about 250 metres and runs obliquely between the Redbird and Giant veins, parallel to the No. 1 and No. 2 veins. The intersection of the No. 4 and Giant veins is a target for a future drill program.

### NO. 1 AND NO. 2 VEIN INTERSECTION AT DEPTH

Four holes (B07-07A, B07-08, B07-09 and B07-10, 340.5, 299.9, 237.1 and 257.0 metres in length, respectively) were drilled to test the projected intersection of the No. 1 and No. 2 veins at depth. Hole B07-07A re-entered hole B06-07A and extended it by 38.8 metres. Testing of this target did not return any assays over 1g Au/t and no substantial vein was identified below where the two veins join (or intersect) at depth. No further field work is currently recommended on this target. However, the results are under evaluation to determine their contribution to understanding depositional controls of the gold mineralization.

### 8.3 Other Geochemical Results

During the drilling program the south-western extension of the Giant Vein was prospected where it is projected to turn south, possibly to connect with the Southwest and Watson veins. A vein was located in a road cut at approximately the 1860 level with additional quartz float distributed down

Description	Easting	Northing	Sample No	Au g/t
float at B21 (Airport Vein)	535091	5687690	36372	2.66
float at B21 (Airport Vein)	535091	5687690	36373	2.04
float at B05 qtz with jas, amy and sx (Giant? Vein)	534658	5686574	36375	9.32
grab from o/c B25 (Giant? Vein)	534621	5686646	36376	1.90
grab from above, some amy (Giant? Vein)	534621	5686646	36377	0.30
float from hand trench material at B23	534629	5686593	36374	2.99

slope. The vein was approximately 0.5m wide in outcrop and the quantity and dispersion of quartz found up to 100m down slope does not rule out the possibility of additional parallel veins. Samples taken from the outcrop and float returned values ranging from 0.30 to 9.32 g/t Au. This outcrop is on strike with the Giant Vein and is interpreted to be either that vein or one closely related. This is a very encouraging result as it is a step out of almost 1 km southwest from the edge of historical drilling on the Giant Vein. In addition, it is approximately 200m below gold found at the surface in the historical workings on the Giant Vein. The elevation of the outcrop is similar to the lower levels in the mine and indicates that although erosion may have removed substantial amounts of vein, there is still significant prospective volume left in the kilometre of Giant Vein strike length that has not been tested.

Two samples were also collected from float that is believed to come from what was known as the Airport Vein, northwest of the Giant Vein and airstrip. No outcrop of the vein was located. The two samples returned values of 2.66 and 2.04 g/t Au. As time permits in future programs this vein should be located for further testing.

### 9.0 CONCLUSIONS AND RECOMMENDATIONS

Sufficient testing of the intersection at depth of the No 1 and No 2 veins has been done to conclude that this target should no longer be considered prospective and no further drilling is recommended. The poor results on this target may be due to the level being deeper than the range of levels where significant gold occurs in the system, thus in spite of structurally prospective features, mineralization trapping features were lacking.

Drilling under the basalt cap revealed the relationship between the No 17 vein and the Nos 1 and 2 veins. The No 17 Vein appears to be the stronger and more mineralized structure under the dome. The proximity of high grade intersection in B07-15 and strong mineralization in the Redbird vein should be taken as encouragement for further testing under the dome. The high Ag-Cu-W style of veining seen in proximity to this area may with further work develop into a useful indication of geochemical zonation. Projection to the Giant Vein of the success in the No 17 Vein and the higher grade historical results in Redbird should be reviewed to determine if they reflect a cross structure or pre-existing feature that might have resulted in similar prospective zones on the Giant Vein.

Prospecting work on the Giant and Airport veins have indicated that further exploration work is warranted. The area where the outcropping vein (probably the Giant Vein) was located was previously identified as a priority target area for structural reasons. Sampling during 2007 has confirmed this as a priority target and further drilling of the 1 km southwest extension of the Giant Vein is warranted. This could in part be accomplished using a smaller, ATV trailer portable drill with a small foot print. This type of drill is able to reach 100m or more with BQ thinwall core. A program with this equipment could test the Giant Vein at shallow depth along strike.

Reviewing gold values in drill core has raised questions about what threshold(s) to use when deciding how significant intersections are in targeting and identifying proximity to ore zones. During mine life thresholds between 1 and 2 g/t Au were often contoured as the outer threshold surrounding areas of interest. These levels may be too high and the thresholds may vary between veins sets. In particular, work by Lee and Michaud (2001) suggests the veins associated with No 1 and No 2, and those associated with the Giant, Redbird and No 17 Veins may have distinct characteristics including different gold thresholds. As more data becomes available from phase 2 a review of gold thresholds by vein set is warranted.

Compilation continues to be an important area for off-season work. While there has been substantial progress in this area during work by Lee and Michaud (2001) and later by Rennie (2004), the majority of the data compiled has been from the mine. Exploration data collected before and during the mine life that is not already part of the compilation needs to be reviewed and added.

# References

- Gruenwald, W. (2002). Mine Tailings Sampling Program on the Blackdome Property, Clinton Mining Division, British Columbia, report for J-Pacific Gold Inc.
- Harrop, J., (2007). Assessment Report on the 2006 Phase I Diamond Drilling Program, Blackdome Property, report for J-Pacific Gold Inc.
- Lee, C., and Michaud, M. (2001). Geological Modeling, and Preliminary Review of the Resource Estimate for the Blackdome Gold-Silver Property, British Columbia, report by SRK (Canada) Inc. to J-Pacific Gold Inc (available on SEDAR), 88 pp.
- Nelson, J., and Colpron, M. (2007). Tectonics and metallogeny of the British Columbia, Yukon and Alaska Cordillera, 1.8 Ga to the present, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A synthesis of Major Deposit-Types, Districts, Metallogeny, the Evolution of Geological Provinces and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, pp. 755-791
- Read, P, 1989, Structural and Stratigraphic Study of Black Dome Mine and Adjacent Claim Blocks, Clinton Mining District, internal report to Blackdome Mining Corporation, 5 pp. and map.
- Rennie, D. (2004). Technical Report on the Blackdome Mine Property, report by Roscoe Postle & Associates for J-Pacific Gold Inc. (available on SEDAR), 68 pp.
- Taylor, B.E. (2007). Epithermal gold deposits, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A synthesis of Major Deposit-Types, Districts, Metallogeny, the Evolution of Geological Provinces and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, pp.13-139.
- Vivian, G.J. (1988). The Geology of the Blackdome Epithermal Deposit, B.C.; unpublished M.Sc. thesis, University of Alberta, 184 pp.

## **APPENDIX A – STATEMENT OF EXPENDITURES**

#### STATEMENT OF EXPENDITURE Blackdome, 2007 Prepared by J-Pacific Gold Inc. Management

	Days	\$
Geological	5	
J-Pacific Gold Inc.		
J Harrop (\$500 per day & fringe)		
2007 - 22 days (May - June 2007)		13,058.95
M Michaud (\$500 per day & fringe)		
2007 - 2 days (January 2007)		1,073.26
Sage Exploration		
Greg Austin (5 days plus travel expenses)		4,825.52
Coast Mountain Geological (June - Dec 2007)		
J Harrop (\$700 / day)	3.75	2,625.00
J Harrop (\$750 / day)	15.00	11,250.00
R Parish (\$700 / day)	4.00	2,800.00
H Samsom (\$600 / day)	37.00	22,200.00
W Fitzgeral (\$450 / day)	4.50	2,025.00
E Edwards (\$375 / day)	6.25	2,343.75
D Khan (\$350 / day)	14.00	4,900.00
Expenses (vehicle, camp and geological suppl	ies)	21,987.05
Drilling		
Full Force		541,372.07
13 holes, 2617 meters		
mob, demob, fuel, machine time and labour		
Assays		
ACME and ALS Chemex		8,234.00
174 Gold and ICP		
5 Gold		
Camp and Support		
J-Pacific Gold Inc.		
Eric Archie (\$250 / day plus fringe)	47	12,286.55
Chris Illidge (\$250 / day plus fringe)	12	3,136.99
Clara Camille (\$250 / day plus fringe)	45	11,763.72
Arnold Murphy (\$250 / day plus fringe)	47	12,286.55
Illidge Enterprises		1,250.21
Illidge Contracting and Blasting (Site Management)		7,875.86

J-Pacific Gold Inc 2007 Assessment Report on the Blackdome Project, British Columbia	June 2008
Camp and Support (con't)	
Fuel for camp	2,292.83
Polar Medical Services	19,995.00
Provisions	12,006.44
Road Improvements (Illidge Contracting and Blasting)	7,500.00
Other	
Equipement rentals	1,595.00
TOTAL	\$730,683.74

# **APPENDIX B – ASSAY CERTIFICATES**

ACM	E ANA	LYTIC	AL LA	BORATO	RIES	LTD.
				edited		

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716

#### ASSAY CERTIFICATE



J-Pacific Gold Inc. PROJECT Blackdome File # A703112 1440 - 1166 Alberni St., Vancouver BC V6E 3Z3 Submitted by: Nick Ferris

			· · · · ·	<u> </u>		 	
 SAMPLE#	S.Wt gm	NAu mg	-Au gm/mt	DupAu gm/mt	TotAu gm/mt	 	
36251 36252 36253 3625 <b>4</b> 36255	508 499 523 476 520	<.01 <.01 <.01 .01 <.01	.01 .01 .02 .22 .20		.01 .01 .02 .24 .20		
36256 36257 36258 36259 36260	503 474 487	<.01 <.01 <.01 <.01 <.01	.09 .17 .05 .06 .01	- - - -	.09 .17 .05 .06 .01		
36261 36262 36263 36264 36266	527 576 582	<.01 .05 <.01 <.01 <.01	.07 .06 .02 .01 .05	- - . 03	.07 .15 .02 .01 .05		
RRE 36266 36267 36268 36269 36270	502 471 573	<.01 <.01 <.01 <.01 <.01	.02 .02 .05 .04 .04	- - -	.02 .02 .05 .04 .04		
36271 36272 36273 36275 36275 36276	485 463 563	<.01 <.01 <.01 <.01 <.01	.10 .07 .04 .01 .03	- - -	.10 .07 .04 .01 .03		
36277 36278 36279 36280 36281	535 585 537	<.01 <.01 <.01 .02 <.01	.06 .07 .08 .64 .04	- - -	.06 .07 .08 .68 .04		
 36282 STANDARD SL20	562	<.01	.01 5.97	-	.01 5.97		

-AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -150 MESH. NAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY. - SAMPLE TYPE: DRILL CORE M150

Data FA

DATE RECEIVED: MAY 23 2007 DATE REPORT MAILED:.....

2037

ACLE ANALYTICAL LABORATORIES LTD. (ISO 9001 Accredited Co.)

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE



J-Pacific Gold Inc. PROJECT Blackdome File # A703112

1440 - 1166 Alberni St., Vancouver BC V6E 3Z3 Submitted by: Nick Ferris

SAMPLE#					~	Ni poprt		Mn ppm		As ppm									Са %		La ppm		Mg %	Ba ppm	Ti %	Ai %	Na %					hudda A			
G-1 36251 36252 36253 36253 36254	<2 ' <2 <2 2	2	23 14 11 12	61 68 60 60	<.5 <.5	6 15 13 11	4 15 13 12	730 727 663 708	2.25 4.06 3.57 3.55	<5 11 9	<20 <20 <20 <20 <20	<4 <4 <4 <4	7 6 4 4	783 457 332 229 153	<.4 .4 <.4 <.4	5 10 10	<5 <5 <5 7 8	46 97 87 75	2.48 2.98 2.26 2.14 1.31	.076 .125 .112 .105 .058	19 15	50 12 11 10 4	.56 .77 .68 .52 .31	989 887 911 854 84	.66 .59 .54	8.13	3.04 2.71 1,67	2.69 2.33 2.83	<4 <4 <4 <4	9	<2 <2 <2 <2 <2	14 14 13 12	22 11 10 10	3 2 2 2 1	6 11 11 10
36255 36256 36257 36258 36259	i 9 17 14 2	15 9 43	61 28 32 12	88 124 68 65	<.5 <.5 2.6 <.5	2 2 26 51	2 2 16 21	515 480 270	2.74 2.96 4.42 6.16	19 43 79 11	<20 <20 <20	<4 <4 <4	4 3 2 3	183 134 101 150 207	1.2 1.6 .4 <.4	6 13 31 <5	<5 6 <5 <5	25 24 72 146 70	1.27 .52 .31	.055 .050 .094	_	9 4 16 42 36	.11 .08 .22 1.04 .94	131 138 209 693 792	.31 .30 .60 .81	6.28 5.89 5.25 8.12 7.61	.16 .14 .08 .70	7.16 6.37 3.90 3.94 4.15	<4	110 71 52	<2 <2 <2 <2 <2 <2 <2	16 13	16 15 13 12 6		9 9 11 15 9
36260 36261 36262 36263 36264	2 : 9 : 5 6 5	5	23 15	69 74 70	.5 2.1 <.5 <.5	11 5 3	6	840 1224 390	3.32 3.71 3.39	22 44 240 37 33	<20 <20 <20	<4 <4 <4 <4 <4	2 4 3	163 49 78 100 114	<.4 <.4 <.4	24 36 10	<5 <5	48 11 7	1.91 .25 .31 .27 .27	.048 .047 .062 .065 .068	14 8 24 24 25	38 11 3 3 2	1.17 .34 .08 .06 .09	439 307 181 455 425	.25 .36 .39	7.60 3.77 6.91 7.34 7.22	.09 1.03 .79	4.30 2.00 4.15 5.58 5.69	5 9 6	84 61 101 117 122		18	6 5 20 20 20	1	9 6 12 12 12
36266 RE 36266 RRE 36266 36267 36268	4 5	31 30 31 21 19	59 61 18	76 79 73	<.5 <.5 <.5 <.5 <.5	2 2 2	3 3 4	1318 1401	3.85 3.79 4.10	11 12	<20 <20	<4 <4 <4	4 4 4	112 111 114 99 111	.4 .6	5	8 8 9	12 12 12 13 15	.26 .25 .26 .31 .79	.070 .068 .069 .079 .069	22 22 23 24 21	<2 3 3 2 2	.11 .10 .11 .11 .14	153 202 220 123 154	.38 .38 .39	7.59 7.43 7.52 7.69 7.55	.88 .89 1.35	6.69 6.89 6.76 5.71 6.74	4 4 <4	116 114 112 113 108	<2 <2 2 <2 <2 <2	18 18 20	20 20 20 22 19	1	11 12 12
36269 36270 36271 36272 36273	<2 2 8		13 17 24	75 86 79	<.5 <.5 <.5 1.2 <.5	2 10 11	2 10 14	608 631 1127	3.55 3.90 4.89	25 30 26 22 10	<20 <20 <20	<4 <4 <4	2 5 3	109 104 126 131 145	<.4 .5 <.4	8 6 8 5 7	5 5 <5	13 10 41 22 20	.24 .28 .28 .94 .90	.062 .068 .079 .064 .055	19 22 21 19 18	3 2 5 5 2	.09 .12 .23 .35 .23	129 159 561 160 597	.39 .45	7.12 7.52 7.09 6.44 6.26	1.23 .34 .42	6.63 5.56 6.37 5.53 5.97	4 7 <4	114 102 110	<2 <2	19		1 1 1 1 1	12 12 11
36275 36276 36277 36278 36279	<2 <2 9 8 3		16 18 20	77 82 65	<.5 <.5 <.5 <.5	3 4 6	5 4	138 179	3.63 2.69 2.26	5 15 46 54 28	<20 <20	<4 <4 <4	2 3 3	142 98 96 95 33	<.4 <.4 <.4	7 16 14	<5	10 12 14	.52 .58 .22 .17 .08	.061 .064 .055 .050 .020	25 24 18 17 8	<2 2 3 4 9	.23 .18 .08 .08 .04		.37 .33 .29	7.12 7.34 6.66 5.79 2.39	2.47 .63 .19		<4 7 5		<2 <2 <2 <2 <2 <2	16	18 19 18 16 7	2	10 12 10 10 4
36280 -36281 36282 STANDARD DS	2	5	11 22	65 72	<.5	<2 3	2 6	802 734	2.97 3.51	8	<20 <20	<4 <4	3 2	152 153 167 327	<.4 <.4	5 7	<5	14 24	.80 .83 .82 2.16	.038 .048 .058 .088	13 23 20 23	6 5 4 226	.14 .28 .34 1.01	109 670 1103 660	.31 .34	4.59 6.47 6.97 6.89	.25 1.11	4.58	<4 5	82 77 95 54	<2	15	11 17 17 10		7 10 10 12

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HN03-HCL-HF TO 10 ML. (>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED/VOLATILIZED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY. ANALYSIS BY ICP-ES. - SAMPLE TYPE: DRILL CORE M150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA DATE RECEIVED: MAY 23 2007 DATE REPORT MAILED:....

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	(ISO	9001	Accredited Co.)

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716

#### GEOCHEMICAL ANALYSIS CERTIFICATE



J-Pacific Gold Inc. PROJECT Blackdome File # A703112

1440 - 1166 Alberni St., Vancouver BC V6E 3Z3 Submitted by: Nick Ferris SAMPLE# Sample kg 36251 7.85 36252 3.46 36253 4.86 36254 4.1736255 5.40 4.82 3.51 36256 36257 3.60 36258 36259 5.90 36260 1.48 36261 1.65 36262 3.72 2.56 36263 2.50 36264 2.14 36266 RE 36266 \_ RRE 36266 \_ 4.10 36267 36268 4.46 36269 3.57 36270 5.12 36271 2.47 36272 4.18 36273 3.90 36275 5.27 36276 4.93 36277 3.46 36278 3.67 36279 1.32 i 36280 3.03 36281 4.32 36282 4.61 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB ÷ - SAMPLE TYPE: DRILL CORE M150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

DATE RECEIVED: MAY 23 2007 DATE REPORT MAILED:.....

ACME ANALYTICAL LABORATORIES LTD. 852 E. EASTINGS ST. VANCOUVER BC V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 ASSAY CERTIFICATE



>> (ISO 9001 Accredited Co.)

#### JPacific Gold Inc. PROJECT Blackdome Elle # A703437 1440 - 1166 Atberni St., Vancouver BD V6E 323 Submitted by: John Harrop



Page 1

100 July 100		SAMPLE#		S.W. NAU gm mg	-Au gm/mt	DupAu gm/mt	TotAu gm/mt		· · · · · · · · · · · · ·	• •=•==•••	 	
		36283 36284 36285 36285 36286 36287	rayor years a share of the second	480 <.01 478 <.01 522 <.01 450 <.01 482 .04	.23 .16 .03 .02 .08		-23 -16 -03 -02 -16	•				
and with the state of the second state of the		36288 36289 36290 36291 36292		453 <.01 453 .01 554 .53 501 .10 458 <.01	v.01 59 17		<.01 .08 1.55 .89 .17					•
a de la constante de la constan		36293 3629 <u>4</u> 36295 36295 36295 36296 36297		407 .13 565 .02 555 <.01 523 <.01 544 <.01	1.24 .06 .07 <.01 <.01		1.56 .10 .07 <.01 <.01	· .		. :		•
		36298 RRE 362 36299 36300 36301	98	536 <.01 577 <.01 516 <.01 451 <.01 562 <.01	.18 .18 .14 < 01 .29	-19 - - -	-18 .18 .14 <.01 .29				· · · ·	
		36302 36304 36305 36306 36306 36307	τις του	547 <.01 507 .02 494 .01 508 <.01 535 .14	.05 .16 .43 .18 .13		- 05 - 20 - 45 - 18 - 39					•
		36308 36309 36310 36311 36312	ан түүн түүн түүн түүн түүн түүн түүн тү	529 .02 443 .04 533 .01 450 <.01 467 .02	-27 -52 -34		-31 -36 -36 -127 -27	· · ·	•			
		36313 36314 36315 STANDAR	D SL20	537 <.01 461 .01 465 <.01	.09 .19 .07 6.06		.09 .21 .07 6.06	• • • • •				1

-AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -150 MESH. NAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY. - SAMPLE TYPE: DRILL CORE M150

Data FA

DATE RECEIVED: SUN 1 2007 DATE REPORT MAILED:

Raymond Ghai

J-Pacific Gold Inc. PROJECT Blackdome FILE # A703437

Page 2

ALM: ANALISINA.				ADME ABALYSTICAL
	SAMPLE#	S.WE NAU -Au Dur gm ng gm/nt gm/	oau Totau /mt gm/mt	
	36316 36317 36318 36319 36319 36320	500 e.01 .05 490 <.01 .07 490 <.01 .04 500 <.01 .58 500 .01 .08		
an a	36321 36322 36323 36324 36324 36325	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- .07 - .69 - .2.06 .33 .38	
	RRE: 36325 36327 36328 36329 36330 36330	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	34 06 08 38 - <.01	-
	36331 36332 36333 36333 36334 36334 36335	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	37 07 04 99	
n an	36335 36336 36337 36338 36339 36340	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	99 22 19 01 18 - 31.26	
	36341 36342 36343 36344 36344 36345	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 2.28 - 1.08 24 27 09	
¢	36346 36347 36348 STANDARD SL20	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 2.82 27 03 - 5.90	

Sample type: DRILL CORE M150.

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

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Data\_\_\_ FA

J-Pacific Gold Inc. PROJECT Blackdome FILE # A703437 <u>...</u>

Page 3

	 		SAMPI.E#	S.Wt. ga	NAu -Au mg gm/mt	DupAu gm/mt	TotAu gm/mt	ACC #4421504
والمحافظة والمحافظ	  		36349 36350 36351 36352 36353	500 500 500	<.01 .39 <.01 .09 <.01 .10 <.01 .22 <.01 .02		.39 .09 .10 .22 .02	
representative state of a property of the second			36354 36355 36356 36357 36357 36358	500	.04 .50 <.01 .26 <.01 .06 <.01 .14 .04 1.37	-	.58 .26 .06 .14 1.46	
مۇلەت <mark>قارىلىر</mark> ىتىنىيەر مەلەر يەرىپىرىكە بىرىكەر بىرىكەر يېرىكەر يېرىكەر يېرىكەر يېرىكەر يېرىكەر يېرىكەر يېرىكەر	•		36359 36360 36361 36362 RRE 36362	450	.66 1.17 <.01 4.15 .05 .61 <.01 .17 .01 .08	- 11	2.49 4.15 .72 .17 .10	
مار موجد میں ایک محمد محمد و محمد و مارد موجد محمد و ایک محمد و	 	 	36363 36364 STANDARD SL20	500 500	<.01 .24 <.01 .42 - 5.94		.24 .42 5.94	• 

Sample type: DRILL CORE M150

GROCHEMICAL ANALYSIS CERTIFICATE

J-Pacific Gold Inc. PROJECT Blackdome File # A703437

YTICAL LABORATORIES LTD.

(ISO 9001 Accredited Co.)

852 E. BASTINGS ST. VANCOUVER BC V5A 1R6 PHONE (604) 253-3158 FAX (604) 253-1/16

Page

Clarence Leo

			<u>88</u>	98 Q						49	116	6 AI	xertu	St.	, Va	incot	iver	364	16E 32.	S Su	antt:	st b	7	in Bari	rop 🖉										
SAMPLE#	Mo POE P				Ag PPE							Au Ppel i				•			Ca %		La i ppnip		Mg %	Ba ppn	Tī %	Al %	Na %						-Nb PDE		
6-1 36283 36284 36285 36286	4	16 21 18	12 14	54 73 66	1.6 <.5 <.5	13 10	13 10 11	341 364 459		387 152 104	<28 <20 <20	<4	344		< 4 < 4 < 4	21 16 15	<u> </u>	95 105 80	2.34 .33 .61 .45 .37	.075 .074 .110 .097 .092	13 19 15	21 14	.60 .39 .90 .76 .30	932 479 668 837 771	_44 _51 _46	8.23 6.04 9.66 8.01 8.13	.11 1.30 1.04	3.97	7 8 8	9 89 176 153 150	2 2	15 12 20 17 17	22 7 11 10 10	31222	6 9 11 10 9
36287 36288 36289 36290 36291	4 2	23 25 22	13 13	63 56 53	1.2 1.5	11 18	12 11 11	869 472 707	3,24 3,56 3,36 3,24 2,53	7 272 86	<20 <20 <20	<4 <4	N N N	105 - 107 - 80 - 75 - 66 -	<_4 <_4 <_4	<5 12 10	~~~~	84 67	-35 -38 -39 -31 -19	-884 -096 -093 -086 -052	17	13 11 9	-68 -86 -59 -55 -21	820 734 582 642 490	_44 _44 _42	6.93 7.74 7.40 6.85 3.96	-83 -14 -17	5_59 4.83 3.51 3.56 3.68	4 4 4	131 165 139 130 73	2 √2	15 18 16 14 8	9 10 10 9 5	1 2 2 2 1	8 9 8 5
36292 36293 36294 36295 36295 36296	2 2	36 28 26	15 12	39 : 58 57	1_0 _8	8	7 10 8	361 553 313	3.44 2.32 3.34 3.06 3.37	63 61 91	<20 <20 <20	<4 <4 <4	≪2 ™ 4	102 · 47 · 115 · 116 · 103 ·	<_4 <_4 <_4	16 8 5	Ś	45 68	-38 -21 -34 -34 -38	-182 -061 -089 -090 -095	10 13 15	10 11 11 10 10	-86 -32 -98 -51 -60	757 408 830 917 880	.27 .43 .42	7.39 4.82 7.35 7.73 7.93	.09 .34 .51	3-46 4-22 5-55 5-49 4-46	<4 <4 5		\$ ~ \$	16 9 15 16 16	10 6 9 9 10		9 5 9 9 9
36297 36298 RE 36298 RRE 36298 36299	5	21 20 20	12 13 11	61 48 48 50 70	1.9	8 7 8	8 7 7	516 509 525	3.32 2.92 2.93 2.95 3.47	133 134 137	<20 <20 <20	≺4 <4 <4	4 6 4	118 - 82 - 89 - 83 - 91 -	<.4 <.4 <.4	11 17		73 74 75 75 66	.41 .32 .32 .32 .32 .32	-092 -081 -080 -079 -083	15	10 10 10 9 7	-72 -41 -43 -41 -37	853 753 778 778 729	-41 -43	7.33 6.50 6.60 6.74 6.48	-38		7 4 <4	106 131 140 127 124	NAAAN	14 14 14 14	9 8 9 9 8	222222	8 8 10 8 8
36300 36301 36302 36384 36385	2 2 2	18 26 26 18 14	8 8 12		1.1 1.1 1.4		9 17 11	485 675 194	3.17 2.97 3.73 3.09 3.06	55 180 163	<20 <20 <28	≪ ≪ ≪	M 4 M	110 -	<.4 <.4 <.4	9 8 14 14 34	\$ \$	69 98 112	1.11 .31 .40 .26 .15	.899 .083 .096 .079 .057	14 15 14	10 11 14 15 13	-57 -84 -65 -33 -14	716 732 670 579 544	.43 .56 .47	7.42 6.60 6.73 7.27 6.22	.31 .13 .19	4.54 5.21	7 8 11	141 126 108 105 95		16 14 16 14 11	9 8 9 8 8	21221	9 8 10 10 9
36306 36307 36308 36309 36309 36510	F .	22	16 14 10	55 60	2.3 .7 .8 2.7 2.7	7	8 10 4	408 518 138	3.54 2.89 3.12 1.74 1.83	96 97 288	<20 <20 <28	<4 <4 <4	4 4 √2	143 · 127 ·	<_4 <_4 <_4		$\diamondsuit \Diamond \Diamond$	69	.32 .38 .36 .11 .13	.083 .094 .087 .030 .042	13 16 7	16 10 11 12 16	.36 .48 .70 .07 .12	505 812 717 333 321	_42 _43 _18	6.76 6.75 7.31 3.02 3.41	-57 -12	7.32 5.98 5.13 3.30 3.65	10 4 4		~2	13 15 15 7	8 9 4 4	en vi in in he	10 8 8 3 4
36311 36312 36313 36314 36315	V V	32	11 12 11	60 72	<.5	10	12 12 12	668 612 518	2.14 3.27 3.19 3.62 2.96	34 36 59	<20 <20 <28	<4 <4 <4	43	101 194 122 146 203	<.4 <.4 <.6		<5 <5	59 71 71 72 27	.17 .45 .33 .41 .32	-065 -092 -094 -105 -071	18 17 16	10 10 9 16 4	-22 -79 -58 .74 -17	605 786 730 695 1221	-46 -40 -44	6.75 7.59 7.54 7.56 7.25	. 14 . 13	4_44 5_32 5_64 6_89 5_80	<4 <4 5	125 139 136 128 329	<2	13 16 15 16 22	8 9 9 15		7 8 9 8
STANDARD DST6	12	122	38	160	<.5	31	12	943	3.81	24	<20	<4	5	325	5.8	4	5	102	2.14	-893	26 2	33	1.96	651	-38	7.13	1.59	1-46	8	63	7	16	10	4	12
																																	- (.e.		

GROUP 1E - 0.25 GN SAMPLE DIGESTED WITH HCLO4-HN03-HCL-HF TO 10 ML. (>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED/VOLATILIZED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY. ANALYSIS BY ICP-ES. - SAMPLE TYPE: DRILL CORE M150 Samples beginning 'RE' are Reguns and 'RRE' are Reject Reguns.

Data 🕻 FA

DATE RECEIVED: JUN 1 2007 DATE REPORT MAILED: / Me 28/07

J-Pacific Gold Inc. PROJECT Blackdome FILE # A703437

Page 2

AGE ANALYTECH	~			·	<u> </u>												-	<u> </u>															ACKÉ A	REYTER	AL_
SAMPLE#	Mo ppn	Cu ppm		Zn ppn	-	Nī ppe			Fe %	As ppœ	U ppm	Au ppa	Th ppn p	Sr pai p	ybaist Cq	SÍD I ERCIC	B† opni	V ppm	Ca %		La ppa		Mg %	Ba ppn	Ti %	Al %	Na %	K Z						Be : pos p	
6-1 36316 36317 36318 36319	N N N N N	2 15 18 13 15		67 72 77	<.5 <.5 1_3 <.5 1.1	3	4 7 4	208 580 533	2.55 2.63 2.98 2.96 2.89	186 46 44	<20 <26 <28	<4 <4 <4	78 63 52 54	04 20 07	.7 _6	12 5 5	হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ	25	2.57 -42 -30 -40 -27	.088 .069 .075 .088 .072	22 21 23	7 3 6 3 4	-71 -17 -22 -35 -21	1855 1446 1446 1364 1352	.38 .35 .37	8.47 8.15 7.89 8.23 7.13	Z-82	4_40 6_53	<4 7 6 4	6 244 250	V 17 V V	14 16 17 17	23 16 16 16 16 14		68787 87
36320 36321 36322 36323 36324	2 8 8 8 N	13 30 37 35 31		57 45 24	19.2 26.0	15 12 7	12 8 3	643 431 183	2.70	74 29 17		<4 <4 <4	41 31 41 24	58 < 07 < 61 <	< 4 < 4 < 4	11 16 19	<5. <5	71 53 28	_42 _20 _10	_077 _079 _055 _026 _067	21 12 8 3 9	3 17 14 9 17	.24 .84 .63 .27 .37	1549 649 514 260 639	_49 _32 _15	7.97 6.56 4.96 2.80 5.87	.64 .15 .07	6.63 5.30 4.82 2.74 5.20	<4 <4 <4	59	AAAAA	19 10 7 3 9	15 8 5 3 6	1	89738
36325 RE 36325 RRE 36325 36327 36328	AANAN		13	46 46	2.8 2.2	12 12 11 17 18	8 8 12	348 321 572	3.01 3.01 2.68 4.16 4.40	232 208 91	~20 ~20 ~20	<# <# <#	31	59 < 48 < 12	4 4 -7	21 11	<5 <5	71 68 100	-26 -26 -25 -41 -39	-868 -862 -858 -891 -896	7 7 16	14	.52 .52 .52 1.26 1.44	597 594 572 720 761	.37 .35 .55	5.14 5.31 4.96 7.65 7.93	.37 .35 .84	4.56 4.68 4.35 5.46 6.28	<4 <4	88	AAAAA		66699	2	7 8 7 11
36329 36330 36331 36332 36333	\$\$4V	37 18 24 34 22	22 12 25 10 13		4.5 1.7 2.6 2.5 3.2	16 19	-17 11 16	666 374 632	4.02 4.60 3.89 4.34 3.91	32 191 14	<20 <20 <20	≪4 ≪4	4 1 6 2 4 1 4 2 4 1	30 1 98 13	-2 -5 -6	7 10 7		151	-82 1-05 -85 -55 -81	-092 -114 -085 -092 -088	16 13 14	18	.77 1.15 .84 1.34 1.33	707 779 633 784 691	_60 _48 _59	7.87 8.43 6.79 7.43 7.53	1.39 1.20 1.00	4.29 4.98	6 5 4	91	<2 2	15 11	9 10 9 10 9	1 2 1 2 2 1 2 1	12 19 11
36334 36335 36336 36337 36338		56 8302 54 19 34	14 12 23 14 21	66 58		772 16 17	34 13 15	566 530 658	1.91 3.72 3.55 4.06 4.21	≺5 45 19		<4 <4 <4	2 4 4 5 1 5 1 4 1	08 < 32 < 81	_4 _4 _7	47 17 8	< <u>5</u>	61 81 102	-38 1.59 .37 .99 .36	-045 -069 -089 -092 -064	13 14	8 26 18 18 20	.64 1.11 .85 1.09 .95	390 1728 647 696 762	.44 .43 .52	3.82 6.26 6.23 7.53 7.80	1_11 _79 1_04	4.39	74	65 80 85	99		5 17 8 8	1 1 1 2 1	5 13 9 11
36339 36340 36341 36342 36343	9		22 37 18 17 24	21 82	29.2 148.1 21.6 10.4 31.6	5 29 23	6 19 14	122 724 418	4.67 1.45 3.79 3.54 3.78	67 175 245	<20 <20 <20	14 ≺4 ≺4	61 <2 41 51 61	26 < 18 25	.4 .7 .9	52 23 27	5	43 152 114	.15 .04 .31 .30 .40	.053 .012 .080 .078 .083	3 14	17 .7 18 16 16	-39 -06 -39 -44 -73	983 59 784 810 960	-08 -44 -42	7.16 1.68 6.78 6.75 7.12	.03 .14 .16	5.62 1.09 5.22 5.56 5.42	47 <4 13 <4 178	15 100 101	222	11 4 18 13 12	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2 2	10 2 9 9
36344 36345 36346 36347 36348	AAAAA	2.4.6	15 16 11 13 18	35	5.7 7.3	16 18 14	14 8 11	496 482 446	2.98 3.53 2.32 3.71 4.46	35 28 42	<20 <20 <20	≪4 ≪4	4 1 4 1 3 1 5 1	53 84 < 78	4 4 5	15 7	জ জ জ জ	43 86		.065 .074 .046 .081 .081	14 8 15	14 16 11 15 17	-62 -85 -46 -88 -98	570 733 378 794 843	.40 .21 .42	6.05 6.82 3.58 7.04 8.06	-51 -10 -69	5.43 5.37 3.16 5.77 6.00	<4 <4	70 39 68	2 2 2	11 11 7 30 14	6 8 4 8 7		79491
STANDARD	11	127	37	157	5	31	11	972	3.97	22	<20	<4	11 3	39 6	7	ক	<u>-5</u>	103	2,25	.094	28	241	1.07	691	-39	7.09	1.76	1.45	8	57	7	15	11	4 1	3.

Standard is STANDARD DSIG. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acue assumes the liabilities for actual cost of the analysis only.

Data 🖡 FA

J-Pacific Gold Inc. PROJECT Blackdome FILE # A703437

Data 🖡 FA

Page 3

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SAMPLE#	Мо С	u Pi	b Za	n A	i Ni	Co	Mn	Fe	AS	· IJ	Αu	Th	Sr	Cd	Şb	Bĭ	V	Ca	P	La	Сг	Mg	Ba	Τī	AL	Na	ĸ	¥	Zr	Sń	Y	ND	Be Sc
and the second second		a pp	a pp	a op		ppn (	pps	X.	DON	PDR	COR	DOM	ada	DDE	COR	ppa j	DDA	X	. %	ppn	COSÍ	2	com	%	%	%							
	1			3			<u> </u>														P							- Participant		opa	hànu r	<u>ភ្នំព</u> ័រ	
e-1	2	2 2	2 5	I <.5	5	47	769 2	46	<del>ا</del> ح	20	<4	7	747	<.4	5	-5	55	2.58	-084	.22	7		1076	-28	8.05	1 45	7 00			~			<b>-</b> ,
36349	5 25	-			-		618 4			<20	-			<.4				1.43	.115	15	29	1.32	1231	.58		2.65	3.09	-<4	5	2	13	22	5 6
36350	234		-				588 4	-						<.4				1.19	.090	-	18	1.24	853	.56	7.47		2.592		111	~2	14	9.	2 12
36351	27						704 4		11					<.4		<u>ج</u>		2.17	-089	16	21	1.55		.65		1.63	5.15>			2	14	11	2 12
36352	2 18						601 4							<_4			89			-			. 737		8_32		3.43			2	14	9	2 12
. عربان		. н	<u> </u>	22.0	5.00			-20	10	~~~~	~4	. د	290	<b>~_</b> 4	10	12	OX	-80	-085	15	.19	1.27	889	-60	7,29	1.50	5.52>	208	107	2	14	10	2 12
36353	23	1 19	64	1.2	16	14.	6174	റ	57	~70	~!.	7	774	2	Ż	Æ	70	4	007			a											
36354							443 3							.6			79.	1.20	-093	15	16	1.22	669	.56		1.21	5.93	<4		<2	14	8	2 11
		-				-				<20 20				< 4			57	-25	-863	10	17	-85	524	-38	+	.37	4.71	<4	68	<2	8	5	1 7
36355	2 1		• • •				453 3							<.4			82	.34	-089	13	16	1.02	, Elela	.48	6.69	.48	5.34	<4	95	<2	12	7	2 10
36356	24						562 4							<.4		57		.70	<b>_1</b> 62	16	19	1_03	792	-62	7.67	1.52	5_20	<4	104	3	13	9	2 12
36357	~ 3	2 14	4 7 <u>3</u>	5 1.5	19	15 4	680 4	•.54	.57	~20	~4	- 6	170	.4	7	<5 2	255	-58	-100	16	19	- 95	752	-61	8.05	-80	6.29	<4	103	2	15	9	2 12
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36358	14 2				-		209 3					3				-\$ °	143	-18	-863	8	16	-29	527	.41	5.41	.19	4.66	4	70	2	6	6	Z 8
36359	~2 4	/ 14					581 3							<_4		<5 '	110	-35	-075	12	16	.72	575	.45	6.32	.56	5,85	-<4	75	2	10	6	2 8
36360	25						398 2					2	101	< 4	11	5	95	-27	<b>.</b> 057	9	15	-53	431	-36	5.23	.49	4.62	<4	51	2	8	5	1 7
36361	24						501 3		38 ·	<20	~4	4	166	< 4	7	<5 '	173	<b>_6</b> 0	-089	14	17	-83	637	.54	6.91	1.11	5.55	<4	87	2	11	8	2 10
36362	<2 4	1 9	75	1.5	18	15 5	586 4	_27	- 8	<29	<4	5.	260	<.4	<5	5.	202	-94	.105	16	18	1.00	652	.62	7.95	1,50	5.85	4	102	2	14	õ,	2.12
			1.1	rta tagin	1911	200	5 (C. 17)	11.1	a t	1993	1 L.	<u> </u>	. 11 - I	÷.	1 e .	100	11.	41 H L	1.00		, n. 194	an a talah	1997 N	· · · ·						. <u> </u>			- 12
RE 36362	-2 4	1 13	3 74	5 1.5	18	15 5	5814	-36	÷ 9	<20	~4	5 5	254	< 4	ক্	57	206	-96	-105	16	18	1.02	661	.63	7.95	1.48	5.81	<4	106	2	14	0	2 12
RRE 36362	2 4	0 14	÷ 74	1.2	19	14	580 4	-28	<5 ·	<20	<4.	3	258	< 4	7	53	201	-95	.102	16	17	1.01	656	.61	7.97	1.47	5.78	<4		~2	14	ó	2 12
36363	<2 3	58	3 68	5 2.4	- 18	15 5	564 4	-20	9	<20	<4	5.3	222 -	<.4	9	57	44	-93	.097	15	18	1.03	637	.60	7.48	1 32	5.63	<4		2	13	5	2 42
36364	4 1	7 14	64	5.1	15	13 4	681 4	_07	155 -	<20	<4	3	128	< 4	11	-5		47	095	15	18	1.09	636	.57	7.40	.68	5.04		99	~2	12	7	2 11
STANDARD DST6	11 12	8 36	5 156	5	- 39	12 9	900 3	-93	21	<28	<4	5	308	5.9	<5	5		2.18	090	25		1.05	676	.40	6.94	1.63	1.43	-	37 57	~~		0	
	L										-				<u> </u>						<u> </u>				Q. 74	1.00	1.40	<u>~</u>	J£		14	9	4 12

Sample type: DRILL CORE M150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

#### GEOCHEMICAL ANALYSIS CERTIFICATE

852 E. HASTINGS ST. VANCOUVER BC V6A IR5 PHONE (604) 253-3158 #84 (504) 253-1120

Page 1

#### <u>J-Pacific Gold Inc. PROJECT Blackdome</u> File # A703437 1450 The Alberni St., Vancouver BC VeE 323 Submitted by John Barrop

TCAL LABORATORIES LTD.

50 9001 Accredited Co.)



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						• • •	· · ·	36283 36284 36285 36286 36286 36287	i da ay Anno - Anno			• .	*	. <b>2</b>		•	,	•	•			
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			•	· ·		•	•	36298 RE 36298 RRE 36299 36299 36300	8	3 3 = 16 7 4 0			-	,							-	
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an a			e jajentije	Marada		• •{:/•		36307 36308 36309 36310 36311		100000			•	•••	• •	· · · .		s	•.	• •		•
C								36312 36313 36314		10 10 10 10 10 10 10 10 10 10 10 10 10 1		-										

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AS > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: DRILL CORE M150 Samples beginning 'RE' are Refund and 'RRE' are Reject Refund.

Data FA



J-Pacific Gold Inc. PROJECT Blackdome FILE # A703437

Page 2

		<u> </u>								ACHE ANALYTECAL
			· · · · · · · · · · · · · · · · · · ·	SAMPLE#	Sample kg				······································	
			· ·	36316 36317 36318 36319 36320	1.7 5.2 3.2 2.6 2.9		<b>.</b> '			
		·		36321 36322 36323 36324 36325	1.5 1.5 2.2 1.2		•			
an di ta Maran Mjalin na	an an Shan b			RE 36325 RRE 36325 36327 36328 36329		•	· · · · ·			•
· · ·		•		36330 36331 36332 36333 3633 <u>4</u>	1.3693					
			. · · .	36335 36336 36337 36338 36338 36339	52 2.1 3.2 3.2					
an a	e e e e e e e e e e e e e e e e e e e			36340 36341 36342 36343 36344 36344	53565 12.565		y an trainight	. •••		•
			. <b>F</b>	36345 36346 36347 36348	2.9 2.5 2.6					

# J-Pacific Gold Inc. PROJECT Blackdome FILE # A703437

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Page 3

		the second s			ACINE ANALYTICA
	an an an Andrea an Anna Anna Anna Anna. Anna Anna Anna Anna Anna Anna Anna Anna		SAMPLE#	Sample kg	
			36349 36350 36351 36352 36353	_6 1.5 1.5 2.2 2.9	
			36354 36355 36356 36357 36358	1.4 1.9 5.3 3.0 1.9	
		an Ang ang tanàng ang taong ta	36359 36360 36361 36362 RE 36362	2.8 1.7 4.4 3.3	
		<u> </u>	RRE 36362 36363 36364	2.9 1.7	
Sampl	le type: DRILL C	<u>ORE M150. Sampl</u>	es beginning	'RE' are Reruns and 'RRE' are Reject Ren	ins.
	•				
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e de la setado de la setado Alterra de la setado de la seta Alterra de la setado	ta dia kaominina dia 4000 metatra. Ny INSEE dia mampikambana mampikambana mampikambana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fis				an na s
					· · · · · · · · · · · · · · · · · · ·

	SAMPLE#	S.Wt gm	NAu mg	-Au gm/mt	DupAu gm/mt	TotAu gm/mt			
	36365 36366 36367 36368 36368 36369	490 540 260	<.01 <.01 <.01 <.01 <.01	.01 .01 <.01 .03 <.01	- - .01	.01 .01 <.01 .03 <.01			
	RRE 36369 36370 36371 36385 36386	530 520 524	<.01 <.01 <.01 <.01 <.01	<.01 <.01 .01 .06 .69	- - - -	<.01 <.01 .01 .06 .69			
	36387 36388 36389 36390 ∦ 36391 NS	538 516 490 578 -	.02 .01 <.01 <.01	1.03 .51 .02 .22	- - - -	1.07 .53 .02 .22			
	36392 36393 36394 36395 36395 36396	548 532 490 532 530	.03 <.01 <.01 .14 .12	.44 .01 .12 1.22 1.16	- - - -	.49 .01 .12 1.48 1.39			
	STANDARD SL20		-	5.90		5.90			
-AU : -150 AU BY FIRE ASSAY FROM 1 - - SAMPLE TYPE: DRILL CORE M150 Pata FA DATE RECEIVE	A.T. SAMPLE. DUPAU: AU DUPLIC			~			E FIRE ASSAY.		
+ contaminate	I with grease whe	× N	invert	)				<u></u>	

.ICAL LABORATORIES LTD. 9001 Accredited Co.) 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

GEOCHEMICAL ANALYSIS CERTIFICATE

J-Pacific Gold Inc. PROJECT Blackdome File # A703870 1440 - 1166 Alberni St., Vancouver BC V6E 323 Submitted by: John Harrop

							:	<u> </u>							<u> </u>								· · · · ·			÷ · · · · · · · · · · · · · · · · · · ·	· · · · · ·	<u> </u>	<u></u>		<u></u>	<u> </u>		<u></u>
SAMPLE#	Мо	Cu	РЬ	Zn	Aq	Ni	Co	٨n	. ł	- Fe	As l	J J	۱u	Th	\$r	Cd	Sb	Bi V	Ca	P	ta	Cr	Mg Ba	Τi	Al	Na	K	H	Zr	Sn	Ŷ	Nb	Be	Sc
	ppm p				-				i i	% p	pin ppi		on p	DIII	ppm	ppm	ppm	ррл ррл	%	%	ррп	ppm	% ppm	%	%	%	×	ppm	ppm	ppm	ppm :	ppm :	ppm p	pm
			-1	1-1		<u></u>		<u> </u>	<b>_</b>		<u></u>							·· -·-			••	••					•	<u> </u>						<u> </u>
G-1	<2	2	<5	53	<.5	4	4	764	2.4	44	<5 <2	0 4	<4	9	757	.7	<5	<5 54	2.53	.080	33	5	.70 996	.27	8.24	2.56	2.90	4	7	2	14	22	3	6
36365	<2	66	<5	130	<.5	102	35	1020	7.6	52	<5 <2	0 4	<4	5	1365	.4	<5	<5 181	5.31	.256	30	249	4.21 487	1.82	7.58	1.79	.25	<4	204	4	16	17	2	20
36366	2	46	<5	112	<.5	85	32	986	7.1	13	<5 <2	0 4	<4	7	1473	<.4	<5	<5 163	5.53	.267	32	246	4.60 481	1.79	7.66	1.54	. 18	6	218	3	16	15	2	20
36367	<2	33	18	75	<.5	20	16	704	4.1	¥9	5 <21	0.	<b>c</b> 4	5	462	<.4	<5	8 121	3.49	.104	17	23	1.49 670	.58	8.42	2.57	1.73	<4	105	- 3	14	7	2	12
36368	2	36	14	74	<.5	17	15	719	4.1	40	5 <2	0 -	<4	4	444	.4	<5	<5 126	3.30	.100	16	16	1.43 650	.54	8.24	2.53	1.68	<4	101	5	14	7	2	12
		-																																
36369	2	32	16	77	<.5	19	15	679	4.6	57	7 <2	0 -	<4	5	466	.4	<5	<5 126	3.47	.110	16	17	1.37 655	.63	8.25	2.74	1.67	5	94	4	15	8	2	12
RE 36369	<2	32	11	77	<.5	19	16	680	4.7	72	5 <2	Q ·	<4	5	466	.4	- 7	<5 129	3.54	.111	17	17	1.38 668	.62	8.32	2.72	1.70	<4	98	3	15	7	2	12
RRE 36369	j 2	30	11	77	.6	19	16	663	4.6	53	7 <2	0 .	<4	4	458	.4	<5	<5 126	3.60	.108	17	17	1.41 655	.62	8.14	2.67	1.67	4	95	5	15	7	2	12
36370	2	32	8	75	<.5	18	15	694	4.6	46	6 <2	0 -	<4	4	449	<.4	- 7	<5 128	3.39	. 100	16	18	1.37 751	.58	8,26	2.68	1.69	4	95	3	14	6	2	12
36371	<2	29	8	-74	<.5	18	15	733	4.2	24	9 <2	0 -	<4	5	391	<.4	7	<5 121	3.07	.095	15	16	1.57 774	.56	8.00	2.29	1.76	5	93	4	13	7	2	12
	1																																	
36385	2	21	10	66	2.2	15	17	397	3.8	83 1	90 <2	0 1	<4	2	107	<.4	23	<5 107	.33		10		.70 596			.13		7	72	4	9	5	2	10
36386	9	24	12	42	4.0	6	2				'11 <2'	-	<4	3		<.4	40	<5 105			12		.30 400		6.43	.07	4.04	7	57	2	7	3	2	8
36387	9	30	9	46	2.6	6	21	250	-3.8	38 7	60 <2	0 1	<4	3	102		26	<5 111		.069	12		.41 474	.30	7.17	.08	3.42	5	61	3	7	4	2	9
36388	6	31	11	24	3.2						30 <2		<4	3		<.4	31	5 125				17	.33 549		6.72	.09	4.08	_	61	5	5	5	2	10
36389	2	31	7	66	.7	12	13	393	4.7	28 2	04 <2	0.	<4	4	156	<.4	13	<5 129	.35	.087	14	19	.75 639	.43	8.02	.11	2.32	6	69	4	8	6	2	11
	!						-							-					~~		~		<i></i>		(		a 71	~		_	-	,		~
36390	3	24	9	44	3.9	11	8	246	3.2	28 2	58 <2	Q.	<4	2	89	<.4	19	5 101	.29	.073	9	16	.64 549	.37	6.08	. 14	2.71	8	46	2	- 6	4	1	8
36391 IS	: <u>-</u>		-	-		-	-	-			-	-	ī	-					-	~ ~ ~	-	-		-		-		-	~	-	-	-	-	-
36392	_	16	9		2.9		.5				61 <2		<4	3		<.4	14	<5 81	. 13	.047	8		.37 613	.40	6.84	.12	2.41	8	65	<u>د</u>		Ş	1	, y
36393	-	23	8		5						28 <2		<4	4		<.4	19	<5 99		.096	11		.76 690		8.03	.11			71	4	8	ò		11
36394	i S	17	6	51	2.9	15	10	365	5.5	26 2	2< 203	ψ··	<4	4	89	-4	25	<5 112	.31	.086	11	18	.66 528	.32	6.99	••••	2.78	5	65	2	11	4	2	9
7/705	1 40		22	77	7 0	19	16	445	1 Z T	50 1	56 <2	n .	1	7	182	_4	9	<5 92	.37	. 107	16	18	1.08 968	.49	8.17	14	2.84	9	53	7	10	6	1	9
36395			22 13		3.9						50 <2 62 <2		<4 <4	3		-4 <_4	10	<5 103		. 109	16		1.48 799		7.86	.35			54	5	11	7	1	11
36396	2 12 1				2.8		12		3.9		25 2		<4 <4	8	342		۰۰ 5>	<5 103		. 092		215	1.10 668	.40	7.23	1.74	1.45	8	50	6	14	8		12
STANDARD DST6	12 1	17	וכ	127	• • (		12	900		77	23 2	`	<b>\4</b>	u	242	<b>U.</b> 4	0	S 107	2.20	.072	20	213	1.10 000		1.23	1.14	1.47		20	U	14		4	

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML. (>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED/VOLATILIZED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY. ANALYSIS BY ICP-ES. - SAMPLE TYPE: DRILL CORE M150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



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DATE RECEIVED: JUN 15 2007 DATE REPORT MAILED:.....



PHONE (604) 253-3158 FAX (604) 253-1716

.1CAL LABORATORIES LTD. 852 R. HASTINGS ST. VANCOUVER BC V6A 1R6

1

GEOCHEMICAL ANALYSIS CERTIFICATE

J-Pacific Gold Inc. PROJECT Blackdome File # A703870

1440 - 1166 Alberni St., Vancouver BC V6E 323 Submitted by: John Harrop

	SAMPLE#	Sample kg
	36365 36366 36367 36368 36368 36369	2.4 2.4 5.1 .3 4.4
	RE 36369 RRE 36369 36370 36371 36385	5.2 1.3 3.1
	36386 36387 36388 36389 36389 36390	2.1 3.2 2.6 2.6 1.5
	36391 36392 36393 36394 36394 36395	2.7 2.9 1.6 1.7 .8
	36396	1.5
ASSAY RECOMMENDED FOR ROCK AND - SAMPLE TYPE: DRILL CORE M150	36396 CORE SAMPLES IF CU P8 ZN AS > 1%, AG > 30 PPM	1.5 & AU > 1000 PPB



PHONE (604) 253-3158 FAX (604) 253-1716

	SAMPLE#	S.Wt NAu gm mg	-Au gm/mt	TotAu gm/mt	
	36372 36373 36375 36376 36377	520 .35 478 .20 476 .01 504 .01 500 <.01	9.30	2.04	
	LEX 1 LEX 2 LEX 3 Watson Area 1 Watson Area 2	432 <.01 524 <.01 504 <.01 478 <.01 476 .01	.01 .01 .03	.01 .01	
	STANDARD SL20	<u> </u>	5.80	5.80	
-AU : -150 AU BY FIRE ASSAY FRO - SAMPLE TYPE: ROCK M150 DataFA DATE REC	EIVED: JUN 15 2007 DATE REPOR			1 7 2007	
- SAMPLE TYPE: ROCK M150					
- SAMPLE TYPE: ROCK M150					
- SAMPLE TYPE: ROCK M150					

	IALYT O 90	ICA 01	L L Acc	ABO red	RA] ite	CORI	:o.)	). 	<u>cif</u>	<b>i.c</b>	Go	lđ	CH	EMI c.	CA PR	L 7 OJI	ANA ECT	LY B	COUVI SIS lack 66 323	CER dom	TIF e	TC Fi	le #	A7	038		)4) 25	3-31	58	FAX	<b>{60</b>	4)2			11.1 •
AMPLE#		Cu ppm		Zn ppn (	Ag ppm	Nī ppm	Co ppin	Mn ppm	Fe %	As ppn	U Dpm	Au ppm	Th ppm	Sr ppnn	Cd pm	Sb pm j	Bi pm	V N	Ca %	P %	La ppm	Cr ppm	Mg %	Ва ррт	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Sn ppill	Y ppm	Nb ppn: p		Sc ppm
-1	~	<2	<5	49	<.5	3	4	751	2.47	<5	<20	<4	8	788 -	<.4	<5	<5	55	2.59	.081	23	5	.70	987	.26	8.45	2.68	2.98	<4	7	z	13	19	3	6
372	14	17	<5	20 3	3.1	4	3	87	1.64	327	<20	<4	<2	46 .	<.4	51	<5	38	.05	.033	4	11	.08	227	.13	2.50	.05	1.84	4	31	2	5	2	1	2
373	16	16	7		1.4	Ĺ.	2	87	1.52		<20	<4	2	76 -	<.4	41	<5	65	.07	.045	14	10	.14	434	.29	4.35	.06	3.12	4	77	3	9	5	1	5
375	7	12	-5	17		ġ	3		1.66	24	<20	7	<2	35 ·	<.4	20	<5	23	.11	.018	3	15	.20	209	.07	1.53	.22	.81	<4	12	<2	2	<2	1	1
5376	20	17	9	26		15	7	516	1.77	44	<20	<4	2	56 ·	<.4	17	<5	33	.51	.028	6	18	.20	445	.13	2.65	.25	1.96	<4	30	<2	5	2	1	3
377	: 2	20	<b>~</b> 5	3	1.8	4	~	178	.67	15	<20	<4	<2	35 ·	<.4	19	<5	3	2.77	.002	<2	12	.02	15	<.01	.23	.02	.05	<4	<2	<2	-2	<2	1	<1
EX 1	29	12	<5	14		Q.	2	127	1.57	73	<20	<4	4	112 -	<.4	6	<5	28	.05	.027	9	24	.22	797	.11	3.93	.06	3.71	4	20	<2	3	<2	1	3
x 2	65	17	107		1.0	8	2	93	1.34	64	<20	<4	<2	11	<.4	7	<b>&lt;</b> 5	23	.05	.020	9	21	. 16	137	.06	3.22	.01	1.49	<4	15	<2	2	2	i	2
x 3	3	12	8		<.5	3	2	67	1.42		<20	<4	5	209 -	<.4	<5	<5	40	.06	.019	12	21	.31	2618	.21	7.55	.08	3.19	<4	54	<2	5	4	1	7
atson Area 1	9	6	10	. —	<.5	3	<2	43	.90		<20	<4	8	79	<.4	<5	<5	4	.03	.009	27	8	.02	496	.07	5.81	.68	2.52	4	76	<2	14	14	1	2
atson Area 2	3	4	8	20	<.5	5	<2	64	.88	20	<20	<4	7	76	<.4	<5	<5	3	.05	.007	28	5	.03	531	.07	6.08	.72	2.92		85	3	13	14	1	1
TANDARD DST6		119	31	159	.7	31	12	849	3.99	25	23	<4	8	342 +	6.4	<5	<5	107	2.20	.092	26	215	1.10	668	.38	7.23	1.74	1.45	8	50	6	14	8	- 4	12

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML. (>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED/VOLATILIZED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY. ANALYSIS BY ICP-ES. - SAMPLE TYPE: ROCK M150



(ISO 9001 Accredited Co.) ASSAY	T. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 CERTIFICATE <u>ECT Elizabeth</u> File # A704290 uver BC V6E 323 Submitted by: John Harrop
SAMPLE#	S.Wt NAu -Au TotAu gm mg gm/mt gm/mt
36401 36402 36403 36404 36404 36405	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
36406 36407 STANDARD SL20	500 <.01       .01       .01         520 <.01       .01       .01         -       -       5.92       5.92
-AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED - SAMPLE TYPE: DRILL CORE M150 DataFA DATE RECEIVED: JUN 27 2007 DATE REPOR	JUL 1 8 2007
1	Raymond Chan

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

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						<u>.u -</u>	Pac	144	0 -	1166	ALD	erni	St.	, Va	ncou	ver	BC Ve	5E 323	Sub	≟ xmitti		r: John												
SAMPLE#	Мо	Cu	Рb	Zn Ag	Ni	Со	Mn	Fe		U	Au	Th	Sr	Cd	Sb	Bi	V	Ca %	P %	La ppm	Сг поп	Mg %	Ba ppm	Ti %	Al %	Na %	K %	¥ maa	Zr Maga	n2 maa	Y ppm p		Be	
	ppm	ppm	ppm	ppm ppm	ppm	ppii	ррп	/0	ppu	ppii	hhii	ppin	ppin	ppin	ppm	ppm	ppii		70	ppin	PP							1.1			·····	<u> </u>		<u> </u>
G-1	<2	4	18	54 <.5	4	4	806	2.60	<5	<20	<4		832	1.1	<5	<5	53	2.72	.087	26	16	.73	1072	-26	8.86	2.93		<4	8	2	15	21	3	7
36401	<2	63	<5	64 <.5	11	9	321	3.17	95	<20	<4	_	576	-6	_<5_	<5	92	1.03	2085 2076	11	17 16	1.26	504 473	.34 1.28	8.58	3.91 2.47	1.54	) 11	7	4 3	2	2	1	5
36402	4	76	22	62 .6	13	9	259	3.18	507 42	<20 <20	<4 ~(	2	377	-8 - 2	<>`	<5 39	84 5	.57	<_002		22	.25		<.01	.31	.03	.08	<4	ź	<2	<2	~2	<1	<1
36403 36404	3 15	32 59	36	85 7.0 46 2.3	93	7	212		378	<20	<4 <4	2		<.4	35	6	50	.09	-028		47	3.59	48	.11	4.39	-09	1.23	9	10	<2	2	<2	1	3
36405	8	38	26	136 1.9	1255	67	1193	6.07	680	<20	<4	<2	84	.8	30	5	72	1.59	.008	4	914	14.45	38	-06	2.01	.03	.02	4	3	<2	2	<2	1	7
36406	<2	27	9	7 <.5	5	2	73	.72	27	<20	<4	5	152	<.4	<5	<5	15	-12	.017	7	8	-25	273	.06	7.31	4.88	.77	4	21	<2	2	<2	1	1
36407	<2	11	<5	40 <.5	11	5	220	1.99	14	<20	<4	5	277	<_4	<5	<5	50	-28	.049	12	12	.91	455	.18	7.93	4.07		9	19	2	5	4	1	5
STANDARD DST6	12	123	34	<u>162</u> <.5	31	12	931	3.95	20	<20	<4	8	331	6.4	<5	<5	100	2.18	-090	24	237	1.10	667	.38	6.99	1.68	1.43	. 11	56	1	14	<u> </u>		12
1																																		

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML. (>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED/VOLATILIZED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY. ANALYSIS BY ICP-ES. - SAMPLE TYPE: DRILL CORE M150

DATE RECEIVED: JUN 27 2007 DATE REPORT MAILED:..... JUL 2 6 2007



	SAMPLE#	Sample kg	
	36401 36402 36403 36404 36405	3.0 2.5 3.5 2.7 2.9	
	36406 36407	4.1 4.1	
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPL	ES IF CU PB ZN AS > 1%, AG > 30 P	PM & AU > 1000 PPB	
- SAMPLE TYPE: DRILL CORE M150	N 27 2007 DATE BEDADA 3/3 T	JUL 1 8 2007	
Data FA DATE RECEIVED: JU	IN 27 2007 DATE REPORT MAI	иви:	
			APARA N

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 ACME ANALYTICAL LABORATORIES LTD. (ISO 9001 Accredited Co.)

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ASSAY CERTIFICATE



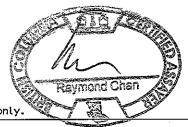
J-Pacific Gold Inc. PROJECT Blackdome File # A704291 1440 - 1166 Alberni St., Vancouver BC V6E 323 Submitted by: John Harrop

JUL 2 3 2007

SAMPLE#	S.Wt	NAu mg	-Au gm/mt	DupAu gm/mt	TotAu gm/mt	
36374 36378 36379 36380 36381	532 520 550 488 486	<.01	2.84 .01 .02 .01 .02		2.99 .01 .02 .01 .02	
36382 36383 36384 36397 36398	490 482 512 540 502	<.01 <.01 <.01 .02 .46	.01 .01 .02 .28 1.83	- - - -	.01 .01 .02 .32 2.75	
36399 36400 BD07-18-01 BD07-18-02 BD07-19-1	488 490 510 500 538	<.01 <.01 .01	.03 .05 .09 .54 .14		.04 .05 .09 .56 .14	
BD07-19-2 BD07-19-3 BD07-19-4 BD07-19-5 BD07-19-6	514 498 490 472 510	.01 .13	.04 .21 .32 .06 .13	- - - -	.04 .23 .59 .06 .23	
BD07-19-7 BD07-19-8 BD07-19-9 BD07-19-10 BD07-19-11	450 542 524 480 536	.01 .01 .08	.22 .18 .20 .46 .46		.26 .20 .22 .63 .93	
BD07-19-12 BD07-19-13 BD07-19-14 BD07-19-15 RRE BD07-19-15	460 472 450 520 470	.04 <.01 <.01	.29 .34 1.49 .12 .15	.12	.31 .42 1.49 .12 .15	
BD07-19-16 BD07-19-17 BD07-19-18 STANDARD SL20		<.01 <.01 <.01 -	<.01		.01 <.01 .05 5.95	

-AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -150 MESH. NAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY. - SAMPLE TYPE: DRILL CORE M150

DATE RECEIVED: JUN 27 2007 DATE REPORT MAILED: FA Data





nc. P	ROJECT B	lackd	lome H	FILE #	A704291	Page	2	<b>CC</b> ACME ANALYTICAL
	S.Wt gm	NAu mg	-Au gm/mt	DupAu gm/mt	TotAu gm/mt			

SAM	PLE# S.Wt gm	NAu mg	-Au gm/mt	DupAu gm/mt	TotAu gm/mt		
BD0 BD0 BD0 BD0	7-19-20 530 7-19-21 530 7-19-22 540	<.01 <.01 <.01 <.01 <.01	.13 .06 .04 <.01 .05		.13 .06 .04 <.01 .05		
BDO		<.01 <.01	.02 <.01 5.99		.02 <.01 5.99	 	

Sample type: DRILL CORE M150.

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ACME ANAL									).		li el	98 (G			190 (d)				COUVE					I	HON	E(604	4)253	1-315	8 F	AX (	604	)25	-3-1 #	716	
<b>AA</b>					Ĵ	<u>1-5</u>	<u>ac</u>	<u>if</u> i	<u>.c (</u> 14	<u>301</u> 40 -	d I	Enc		PRC	)JE	$\mathbf{CT}$	Bl	ack	3IS ( <u>cdom</u> 6E 3Z3	e I	7il	e #	A7	0429 n Harri	1 qo	Pa	ge 1						A T		
SAMPLE#	Mo ppm				Ag ppm						U ppm								Ca %		La ppm		Mg %	Ba ppm	Tī %	Al %	Na %						Nb ppm p		
G-1 36374 36378 36379 36380	<2 19 <2 3 <2	8	9	32 55 74	<.5 4.7 <.5 <.5 <.5	<2 2	<2 <2 <2	93 92 396	2.46 1.23 1.14 1.27 1.28	73 5 7		<4 <4 <4	4 8 9	804 104 77 82 87	_4 <_4 _4	<5	<5 11 13 15 8	55 12 5 5 5	2.72 .14 .14 .15 .16	.086 .030 .010 .010 .011	13 23 34	13 19 14 17 13	.05 .06 .05	1038 1555 1043 1037 1108	-24 *.10	5.47 6.75 6.89	1.80	6.02 3.35 3.81	<4 <4 <4	8 129 129 126 134	<2 2 3 3 2	14 10 22 26 20	21 13 15 13 15	3 1 2 2 2	6 7 4 4
36381 36382 36383 36384 36397	6 3 2 23 3	6 5 3	17 16 19	32 60 54	<.5 <.5 .6	<2 <2 2	<2 <2 <2	42 232 165	1.29 1.14 1.18 1.28 3.21	15 13	<20 <20 <20	<4 <4 <4	9 8 9	75		<5	<5 15 11 5 5	5 4 4 99	.09 .08 .15 .11 .37	.010 .010 .009 .011 .087	31 28 27	13 15 14 18 30	.04 .02 .07 .12 .66	1080 908 996 965 590	-09 -10 -10	6.28	1.88 2.38	3.34 3.41	<4 <4 <4	112 118	<2 2 2 3 3	21 19	14 14 14 15 8	1 1 2 1	4 4 3 4 8
36398 36399 36400 BD07-18-01 BD07-18-02	<2 <2 2	29 5 15 36 27	16 15 7 10 7	51 65 84	1.1	10 18 18	8 12 16	196 310 758	3.12 3.06 5.28 4.79 4.25	5 183 333 9 17	<20 <20 <20	<4 <4 <4	3 3 4	56 48 209	<.4	50 15	<5 <5 <5	105 72 73 115 88	.23 .35 .33 .62 .47	.065 .086 .071 .108 .107	15 15	21 22 21	.23 .45 .52 1.77 1.21	461 450 374 877 820	.52 .47 .67	5.97 8.32 7.70 8.56 8.39	.13 .06 .56	3.69 3.02 2.42 3.15 3.21	21 23	86 80 103		8 13 14 13 11	7 7 6 9 9	1 1 1 1	11 12
BD07-19-1 BD07-19-2 BD07-19-3 BD07-19-4 BD07-19-5	<2 3 2	27 11 13 12 20	18 19 20	47 81 77		8 2 2 7	<2 4 3	138 367 386	4.11 2.30 2.49 2.40 3.58	) 74 ) 44 ) 53	<20 <20 <20	<4 <4 <4	2 4 5	149 143 182	<.4 <.4 <.4 <.4 <.4	12 15 13	<5 9 <5	92 23 27 29 80	.53 .21 .27 .30 .43	.102 .050 .058 .063 .102	19 28 21	10 8 <2	.16	804 1320 1305 1151 703	.31 .36 .34	8.50 6.83 7.97 7.88 6.79	.53 .62 .18	3.41 3.96 3.56 3.40 2.95	6 8 7	132 110 107 117 91	<2 <2	12	10 12 14 13 9	2 1 1 1	10 5 6 8
BD07-19-6 BD07-19-7 BD07-19-8 BD07-19-9 BD07-19-10	<2 <2 <2	21	13	62 61 61	1.1 1.1 <.5 .8 1.9	7 7	10 10 13	669 679 557	2.79 3.43 3.35 2.86 1.99	5 68 5 10 5 18	<20   <20   <20	<4 <4 <4	3 5 5	124 143	<.4 <.4 <.4 <.4	15 6	<5	74 68 68	.33 .37 .35 .37 .27	.087	15 15 15	11 12	.65 .70 .98 .62 .25	690 769 698 681 591	.48 .47 .46	6.25 7.12 7.30 7.00 5.34	.14 .21 .13	3.06 3.08 3.34 3.38 3.28	<4 <4 6	88 85 77	3 <2 <2	12 11	8 8 9 9 6	1 1 1 1	7 8 7 5
BD07-19-11 BD07-19-12 BD07-19-13 BD07-19-14 BD07-19-15	2 2 12	21 31 75 28 26	12 14 14	82 13	7	8 10 <2	13 15 <2	929 694 56	3.45 3.98 3.65 1.68	3 6 5 30 3 249	5 <20 1 <20 2 <20	<4 <4 5	4 4 <2	176 160 149	<.4 .5 <.4	15	<5 <5 <5	91 84	.39 .95 .41 .13 .28	.097 .122 .117 .041 .136	16 19 9	15 9	.56 1.13 .53 .07 .09	736 716 787 424 786	.64 .63 .41	7.36 8.06 7.99 4.46 8.22	.44 .17 .08	3.72 3.39 3.07 3.29 3.14	<4 5 29	73 78 61		12 13 14 7 8	8 10 11 7 10	1 1 1 1	8 10 9 6 8
RE BD07-19-15 RRE BD07-19-15 BD07-19-16 BD07-19-17 BD07-19-18	18 <2 2	24 28	20 16 26	15 125 75	<.5 <.5	<2 15 10	2 17 18	83 92 536	4.09 4.20 1.21 4.05 2.19	) 734 7 524 5 176	<20 <20 <20	<4 <4 <4	4 3 4	198 38 70	<.4 .4 <.4	- 39	<5 <5 <5	98 120	.27 .53 .68	. 130 . 122 . 128 . 147 . 094	13 18 16	8 9		545	.68 .75 .84	7.79 8.00 8.19 8.99 8.19	.09 .03 .12	3.30 2.91 2.93 3.38 3.68	74 75 17	93 119	<2 <2	15 17	11 11	1 · 1 1 2 1	8 10 12
STANDARD DST6	13	123	43	164	<.5	31	11	945	3.92	2 20	) <20	<4	9	331	6.2	7	<5	102	2.22	.093	27	234	1.08	670	_41	7.14	1.73	1.44	10	57	6	15	10	3	12 -
GROUP 1E ATTACKED/ - SAMPLE	VOLAT	TILI	ZED .	RE CORE	FRAC M15	tory 0	AND <u>Sa</u>	GRA Sample	PHIT: s beg	IC S/	MPLE	S CA RE'	N LI are	MIT Reru	AUS <u>nsa</u>	olub nd 1	ILIT RRE'	Y. 4 ar <u>e</u>	ANALYSI Reject	SBY	ICP-I ns.	ES.	115. <u>2</u> 6 2		INER/	ALS MAN	r be pj	ARTIAL	LY	Í.	添へ			A COL	
Data ]	-		_						D:											· · · · ·	• • •	• • •	• • • •	•	he cr		only	- And -	<u>}</u>	Reyr	nonk	i Ch	an		1
<sup>®</sup> All results	are	con	side	red	the	conf	1 der	ntial	proj	erty.	ot	the	clie	nt.	ACME	assi	Jmes	<u>τne</u>	LIADIL	itles	TOP	actu	at COS		.ne ar	ia tysis	s onty.								



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J-Pacific Gold Inc. PROJECT Blackdome FILE # A704291



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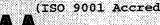
SAMPLE#	Mo Cu Pb Zn Ag Ni Co ppm ppm ppm ppm ppm ppm ppm	Min Fe As U Au ppm % ppm ppm ppm	Th Sr Cd Sb Bi V com pom pom pom pom	Ca P La Cr % % ppm ppm	Mig Ba % ppm	Ti Al Na %%%%	K W Zr Sn Y Nb Be Sc % ppm ppm ppm ppm ppm ppm
G-1 BD07-19-19 BD07-19-20 BD07-19-21 BD07-19-22	<pre>&lt;2 35 5 66 .7 23 7 &lt;2 30 &lt;5 98 &lt;.5 35 15</pre>	787       2.73       <5	13       816       .4       <5	2.80         .086         44         7           .27         .062         17         21           .36         .082         17         25           .47         .093         12         31           .44         .093         12         29	.33 515 .37 530 .48 560	.268.712.85.396.71.09.467.25.07.487.37.05.538.25.12	3.79 19 67 <2 13 8 2 11
BD07-19-23 BD07-19-24 BD07-19-25 STANDARD DST6	<pre>&lt;2 28 6 68 &lt;.5 31 18 &lt;2 26 &lt;5 63 &lt;.5 27 18</pre>	404 2.81 190 <20 <4 775 4.22 175 <20 <4 1001 4.61 45 <20 <4 963 4.07 25 <20 <4	5 128 <.4 23 16 109 5 157 <.4 29 11 115 4 265 <.4 11 13 114 9 328 6.3 6 15 117	.34 .089 11 27 .72 .103 14 32 .97 .099 13 29 2.25 .093 25 225	.51 1110 1.03 865 1.24 884 1.08 690	.55 7.72 .12 .58 8.66 .49 .56 8.60 1.32 .39 6.83 1.74	4.24 13 114 <2 16 10 2 13 3.71 6 111 <2 14 10 2 13

Sample type: DRILL CORE M150.

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GEOCHEMICAL ANALYSIS CERTIFICATE

E. HASTINGS ST. VANCOUVER BC V6A 1R6



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AUIDID CERIIFICAIE Lackdome File # 1701291

<u>J-Pacific Gold Inc. PROJECT Blackdome</u> File # A704291 1440 - 1166 Alberni St., Vancouver BC V6E 3Z3 Submitted by: John Harrop

Sample SAMPLE# kg .6 4.5 2.4 2.8 4.0 36374 36378 36379 36380 36381 4.34.53.71.62.036382 36383 36384 36397 36398 1.9 1.5 2.5 1.9 2.5 36399 36400 BD07-18-01 BD07-18-02 BD07-19-1 2.02.61.61.02.5BD07-19-2 BD07-19-3 BD07-19-4 BD07-19-5 BD07-19-6 2.6 3.6 2.4 1.5 1.6 BD07-19-7 BD07-19-8 BD07-19-9 BD07-19-10 BD07-19-11 BD07-19-12 2.4 2.0 BD07-19-13 2.0 BD07-19-14 BD07-19-15 2.ŏ RE BD07-19-15 \_ RRE BD07-19-15 2.0 1.5 2.1 BD07-19-16 BD07-19-17 BD07-19-18 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns. - SAMPLE TYPE: DRILL CORE M150 jul 2 3 2007 DATE RECEIVED: JUN 27 2007 DATE REPORT MAILED FA Data Raymond Chan 2



# J-Pacific Gold Inc. PROJECT Blackdome FILE # A704291

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SAMPLE#	Sample kg		
 BD07-19-19 BD07-19-20 BD07-19-21 BD07-19-22 BD07-19-23	1.4 1.2 2.0 1.5 2.1	2	
BD07 <b>-</b> 19-24 BD07 <b>-</b> 19-25	1.5 3.0		

Sample type: DRILL CORE M150.

# **APPENDIX C – DESCRIPTIVE DRILL LOGS**



# **Blackdome Project 2007**

Drill Hole Name: B07-08

Area: Intersection of No 1 and No 2 veins at depth

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 Blackdome DEM plus 6.1m to adjust to Blackdome Mine datum

# **Drill Log**

UTM Easting	534991	Drill Contractor	Full force Drilling	Pad Number	P06-18
UTM Northing	5685617	Mine Grid E	4766	Start Date	April 26, 2007
Elevation (m)	2000	Mine Grid N	12478	Finish Date	May 3, 2007
UTM Zone	10 U	Logged By	H. Samson	Reclaim Date	
Datum	NAD 83 Canada	Core Type/Size	NQtw	Log Date	April 29, 2007

Length (m) 299.92

Azimuth 130

Dip -55

Target Intersection of the #1 and #2 veins below the level of the mine workings.

Stopped for: Hit vein target; stopped in FW andesite of decreasing alteration.

Result Intersected one primary mineralized zone at depth 242.00 – 245.06 m, with altered HW and FW from 234.80 to 257.95

0	<b>1.20</b> m		Casing
			No core.
1.20	21.50	rhy	Rhyolite? Flows
			Flow banded, felsic volcanic (rhyolite to dacite?) flows. Light grey to cream colour, fine-grained groundmass with reddish-purple intervals of (hematite?) alteration. Weak to moderate argillic alteration Unit is weakly porphyritic with common medium-grained (0.5-2 mm) hornblende and quartz phenocrysts, and rare medium-grained feldspar phenocrysts. Fine grained, vuggy quartz replacements common, medium-grained-coarse-grained are rare. Primary texture and composition is very difficult to determine due abundant intervals of strong oxidation and limonite staining, in many cases overprinting up to 70 cm intervals of core. 1-5 mm thick, grey to dark grey quartz veins occur rarely throughout unit Several intervals of clay gouge, indicating faults. Silicification increases at depth within this unit.5.655.75Quartz vugs in veins and as replacements.13.5513.655-10 mm quartz vugs as replacements.
15.55	21.50		Strongly silicified interval of flow-banded volcanic (rhyolite?). Abrupt decrease in oxidation, however still occurs in quartz veins and near fractures. Cream to grey coloured groundmass with abundant quart replacements and quartz vugs. 1-2%, fine grained pyrite, occurring as disseminations and in quartz veinlets. 5-15 mm, grey quartz veins occur at 35-45 degrees to CA
			17.2517.5030 mm thick, grey vuggy quartz>pyrite vein occurring at 25 degrees to CA. Oxidized.19.9020.5020 mm thick, grey vuggy quartz>pyrite vein occurring at 35 degrees to CA.
21.50	22.50	FZ	Fault Zone
			THE FORMER THE STATE OF THE STA

and an and an

Moderately to strongly oxidized fault zone marked by several, up to 20 cm thick clay gouges intervals.

#### 22.50 88.60 vcbx Volcanic Breccia



Chaotic assemblage of strongly brecciated clasts of green to dark green lithic crystal tuffs (and/or andesite flows) and minor clasts (or possibly intervals) of bedded, medium grained to fine grained volcaniclastics. Weak to strongly silicified, weak to strongly hematite altered, purple to grey to light green groundmass. In some, up to several m intervals, clasts and lithic fragments within tuff/andesite are entirely replaced by grey to dark grey quartz and reddish-purple hematite. Thin chlorite stringers (2-5mm) and chlorite replacements commonly occur suggesting an increase in propylitic alteration in this unit. At the top of the unit, breccia textures and clast boundaries are hard to distinguish and are strongly obscured by alteration; however, visible clasts lower down show a rounded to sub-rounded habit. At top of unit, moderate oxidation and/or limonite stain commonly occurs along clast boundaries, veins, and fractures; however, does not overprint textures as in overlying unit. Fine grained to coarse-grained (up to 30 mm diameter) vugs occur rarely-commonly. Vugs are commonly filled with quartz and coxcomb quartz crystals.

STAND	A VI	The second se
A A A A A A A A A A A A A A A A A A A	Stand Mark	18

29.35	Moderate to strongly silicified interval of breccia. Abundant quartz replacements and strong, pervasive,
	purplish-grey hematite alteration of groundmass and clasts strongly obscure original textures. Rare, thin
	(1-2mm) black chlorite veins. This interval contains several small clay gouges and common fractures.
	Overall, oxidation and limonite stain is stronger than in lower unit. Solid grey quartz veins are thin (1-3
	mm) and occur rarely at 5 to 45 degrees to CA.
	29.35

# 29.35 37.60 Moderate to strongly, patchy silicified interval. There is a decrease in abundance of purplish hematite alteration, purplish-grey quartz replacement, and oxidation and an increase in abundance of dark-green to green andesite/andesite tuff clasts.



37.60 64.00

Overall, this interval is less altered than overlying units. Groundmass in unit changes to light green to apple-green and clasts and structure are more recognizable. Purple hematite alteration and quartz replacement further decreases from overlying unit; however, still occurs commonly in both groundmass and clasts. Silicification is weak and patchy. Chlorite replacements and veins increase moderately in abundance.

39.00	40.50	Several, up to 5 cm thick clay gouge and rubbly core intervals, indicating possible minor fault zone.
		zone.
47.10	47.60	Moderate to strongly oxidized interval of clay mineral-filled fracturing.
50.50	51.10	Strongly argillic altered interval. Groundmass is a light green-cream color. Minor clay gouges.
57.10	64.00	Increase in oxidation and limonite stain of interval. Clay alteration along fractures is more common and thicker.



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64.00 88.60
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Abrupt decrease in alteration occurs in this interval. The unit has a light green, fine grained groundmass and is clast supported with coarse-grained, commonly cm sized clasts. There are also minor intervals of matrix supported, bedded fine grained to medium-grained volcaniclastics. Common occurrences of epidote alteration halos around clasts and along fractures. Quartz replacements no longer occur and there are rare to common hematite-stained clasts throughout. Chlorite replacements of clasts still rarely occur; however, no chlorite veins occur. <<1 % pyrite occurs as disseminations.

68.15 70.90 Moderate to strongly oxidized core. Several clay altered fractures and minor intervals of clay gouge, indicating small faults.
72.75 73.85 Interval containing several cycles of normal graded beds. Top of beds are coarse-grained, with grain size up to 15 mm diameter, fining down to fine grained clasts.

# 75.30 79.00 Common overprinting of primary structures due to apple green, argillic (?) alteration of breccia. No hematite alteration of clasts present.

 88.60
 96.30
 And
 Fragmental Andesite Flow

 Image: Second Secon

# 96.30 151.00 and Andesite

Dark green to black, weakly porphyritic andesite (possibly basalt?). Groundmass is aphanitic. Feldspar and other unidentified phenocrysts are fine grained, 1-3 mm, and are strongly epidote altered and/or replaced. Common veins occur of epidote +/- hematite +/- calcite. These veins are dominantly 2-3 mm in width, but they occur up to 10 mm. <1% Pyrite occurs as fine grained disseminations and as medium-grained disseminations.

100.90	101.10	10 mm thick, vuggy quartz > hematite > epidote vein occurring at 80 degrees to CA.
102.25	102.40	Several cm size calcite >> epidote replacements

112.55 151.00 In this interval, hematite alteration increases to moderate-strong while epidote alteration decreases to subtle. Accordingly, phenocrysts are not altered or replaced by epidote and epidote veins, as well as calcite veins are rare. Conversely, the occurrence of hematite veins increases greatly and hematite alteration occurs along the majority of fractures. No pyrite is observed.

147.20 150.57 up to 10 mm quartz-calcite>hematite veins occurring rarely-commonly at 45 degrees to CA and less commonly at 20 degrees to CA

### 151.00 157.65 vcbx Volcaniclastic Breccia



Unit consists of interbedded intervals of strongly brecciated, coarse-grained volcanic clasts and intervals fine grained to medium-grained, bedded, poorly graded, volcaniclastics. Breccia intervals are up to 60 cm in thickness, and consist of coarse-grained, rounded to sub-rounded volcanic clasts in a fine grained, bluish-green matrix. The matrix is mostly hematite altered to a dark red. There are abundant hematite altered clasts within the breccia and chlorite altered/replaced occur commonly. The upper contact of the unit is sharp.

155.25157.65This interval contains several, up to 45 cm in length, megaclasts of the underlying andesite? Unit. Both<br/>megaclasts and breccia in unit are subtly calcite altered; however, while megaclasts of andesite? Are not<br/>hematite altered while the rest of the breccia is moderately to strongly hematite altered.

## 157.65 242.00 and Andesite



Porphyritic andesite flow. Groundmass is fine grained, green to light green. There are fine grained to medium-grained, euhedral to anhedral and lath-shaped phenocrysts of plagioclase and other minerals. The medium-grained phenocrysts are altered/replaced to epidote and quartz. Fine grained phenocrysts and grains in the groundmass are commonly replaced with green chlorite. The core is often propylitized, consisting of weak to locally strong, pervasive greenish alteration of groundmass to epidote +/- chlorite +/- quartz. White quartz +/- calcite veins occur rarely throughout the unit, the majority occurring at 35-45 degrees to CA. There are some discontinuous interval of weak to moderate silicification. This unit is clearly different than overlying andesite unit. It appears to be more felsic, and may in fact be dacitic in composition.

157.65 162.76 The upper contact of this unit is gradational with the overlying volcanic breccia. Fragments of the andesite occur within the breccia and the top of the andesite unit is fragmental and moderately fractured. In this interval, hematite alteration is weak to moderate. The groundmass is altered to a light green, suggesting weak argillic alteration.



162.76 187.00

Unit is not fragmental at this point. Groundmass gradually changes from light green to green as argillic alteration decreases. Hematite alteration also decreases in this interval and is only observed along fractures and rarely in veins. Rarely, narrow interval of hydrothermal breccias occur in the vicinity of quartz-cal +/- epidote +/ hematite veins.

166.10167.20Interval of several mm to cm size hematite +/- quartz +/- epidote veins. Includes 20 mm thick<br/>epidote>hematite>quartz vein/fracture fill.

178.10 178.25 2-4 cm diameter white quartz>epidote replacement.



187.00	193.55	Interval of moderate to strong hematite alteration of groundmass. Coinciding with the hematization is an
		increase in silicification, as well as the common appearance of green chlorite in chlorite +/ quartz-cal
		veins.

193.55203.30Hematite alteration of groundmass decreases to weak. Silicification and occurrence of chlorite veins also<br/>decreases. However, occurrence of

- 194.70195.053-5 mm thick quartz-cal-chlorite->epidote vein occurring at 35 degrees to CA. Around the vein is<br/>a 20 cm alteration halo of increased chloritization of phenocrysts and a bleaching of the<br/>groundmass to light green.
- 199.15199.7520 cm interval of hydrothermal? Breccia with fine grained to coarse-grained andesite clasts.<br/>Within the breccia, groundmass is strongly hematite altered. In the footwall and hanging-wall of<br/>the breccia, there are abundant, narrow (mm size) hematite veins at 35 degrees to CA.



202.30 203.30 2-4 cm thick, white quartz vein occurring at 10-15 degrees to CA. Minor epidote and hem occurs along vein boundaries. In footwall of vein, epidote veins occur commonly to abundantly for 70 cm.

203.30 234.80

Interval is moderately to strongly silicified. This increase in silicification coincides with an increase in abundance of hematite stringers throughout the unit. Hematite stringers occur commonly to abundantly, are thin (mm-scale), and are commonly oriented preferentially at 35-40 degrees to CA. Throughout this unit, there are also several patches of weak bleaching, likely indicating intervals of argillic alteration.



210.95	212.65	Interval containing abundant epidote veins. Some groups occur preferentially at 35 degrees to CA, while other veins occur at varying orientations.
222.80	228.00	Interval is weakly to moderately bleached, suggesting an increase in argillic alteration. Conversely, silicification becomes patchy, ranging from subtle to moderate.
228.60	234.80	Bleaching decreases to subtle to none. Silicification increases to

234.80 242.00 ALTERED HW. Hanging wall to vein. Alteration zone of a primary target vein structure. In the hanging wall of the vein, there is marked increase in silica and argillic alteration. Argillic alteration is indicated by the bleaching of the groundmass to light green to apple green. Additionally within the hanging wall, several hematite-silica cemented crackle breccias occur.

240.20 242.00 Crackle breccias occur to the primary vein. Sample # 36251, 36252, 36253

242.00 245.06 QV Primary vein zone.



Zone where the primary quartz veining, silicification, and pyrite mineralization occurs. Tr. PbS and chalcopyrite. The primary vein zone consists of several, white to grey quartz veins within a strongly silicified, breccia stockwork. The quartz veins consist dominantly of grey quartz, are 2-5 mm thick, and occur at 35-45 degrees to CA. There is one occurrence of a 5-15 mm thick, vuggy, grey quartz vein at 45 degrees to CA. The silicified breccia stockwork in which the veins are hosted is a crackle breccia, cemented by silica-epidote>hematite-chlorite. Within the vein zone and in the footwall, pyrite occurs as within veins, breccia cement, and as disseminations. Percentage pyrite concentrations for the primary vein interval are 5-10% and for the footwall, 2-3%. No pyrite is observed in the hanging wall. Sample # 36254, 36255

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
242.00	243.40	1.40	36254	17	21	0.7	38	7	27	1.31	84	<4	0.24
243.40	245.06	1.66	36255	9	15	<.5	19	6	25	1.27	131	<4	0.20

245.06 299.92 and Andesite

245.06 246.85 ALTERED FW of primary vein structure. The footwall of the vein is weakly to moderately silicified and consists of a hematite-chlorite>silica cemented crackle breccia. Common vugs and rare grey quartz veins also occur in the footwall. Sample #36256

246.85	248.50	FZ	Fault zone marked my rubbly core and several intervals of clay gouge. Fault cuts off footwall of primary
			vein, however, larger chunks still exhibit footwall alteration. Sample # 36257

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
245.06	246.85	1.79	36256	17	9	<.5	43	13	24	0.52	138	<4	0.09
246.85	248.50	1.65	36257	14	43	2.6	79	31	72	0.31	209	9	0.17

248.50 250.20 FZ Fault Zone with rubbly core and clay gouge intervals. Alteration decreases to subtle, however, minor intervals of mod alteration occur. Sample # 36258

250.20 252.60

Break in fault zone marked by more competent, weakly to strongly fractured core. End of footwall alteration zone. Sample # 36259

252.60 256.15 Strongly faulted interval consisting of rubbly core and clay gouge.

- 256.15 256.65 10 cm hematite stringer zone in faulted rock, containing 10% pyrite. Sample # 36260
- 256.65 257.95 Lower interval of major fault. More competent core and minor clay gouge/rubbly core.



#### 257.95 287.73

Below the mineralized zone and into the underlying fault zone, epidote alteration and replacement of phenocrysts gradually decreases further into unit until epidote replacement of phenocrysts is rare.
Occurrence of hematite+/-white quartz veins and hematite alteration of groundmass is rare. Conversely, propylitic alteration increases to moderate to strong. Groundmass is moderately chlorite altered and phenocrysts are commonly replaced with chlorite. Bleaching to light green/apple green is common in the vicinity of white quartz+/-hematite+/-chlorite+/-epidote.

		Stand 1
262.65	263.30	Several, 5-7 mm thick epidote-quartz +/-hematite veins occurring at 10-15 degrees to CA.
275.05	275.75	Interval with strongly fractured core and clay gouge, indicating minor fault. Minor white quartz>hematite veins at 55 degrees to CA.
278.20	278.30	2-3 cm thick quartz>>hematite vein at 45 degrees to CA.

287.73	299.92	Groundmass is strongly argillic altered and bleached. Color changes to light green to white. Phenocrysta are completely replaced by green to black chlorite. At bottom of hole, there is weak fracturing, cemente by green chlorite+/quartz.	
`		294.90295.60Phenocrysts are abundantly replaced with hematite.	
299.92		)H	



# Blackdome Project 2007

Drill Hole Name: B07-09

Area: Intersection of No 1 and No 2 veins at depth

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 Blackdome DEM plus 6.1m to adjust to Blackdome Mine datum

# **Drill Log**

UTM Easting	534943	Drill Contractor	Full force Drilling	Pad Number	P06-17?
UTM Northing	5685498	Mine Grid E	4805	Start Date	May 3, 2007
Elevation (m)	2010	Mine Grid N	12356	Finish Date	May 6, 2007
UTM Zone	10 U	Logged By	H. Samson	Reclaim Date	
Datum	NAD 83 Canada	Core Type/Size	NQtw	Log Date	May 4, 2007

Length (m) 237.13

Azimuth 130

Dip -60

Target Intersection of the #1 and #2 veins below the level of the mine workings.

Stopped for: Reached target; passed through to weakly altered andesite.

Result 211.50 to 215.45 vein with HW alteration 207.70-211.50; FW alteration 215.45 to 228.95 in two zones

0	0.75	Casing
		No core.
0.75	33.45	y Rhyolite? Flows
		Flow banded, felsic volcanic (rhyolite to dacite?) flows. Light grey to cream colour, fine-grained groundmass with reddish-purple intervals of (hematite?) alteration. Weak argillic alteration. Unit is weakly? porphyritic with common medium-grained (0.5-2 mm) hornblende and quartz phenocrysts, and rare medium-grained feldspar phenocrysts. Fine-grained, vuggy quartz replacements common, medium-grained-coarse-grained are rare. Primary texture and composition is very difficult to determine due abundant intervals of strong oxidation and limonite staining. However, flow banding is defined by distinct foliation of phenocrysts. 1-5 mm thick, grey to dark grey quartz veins occur rarely throughout unit. Several intervals of clay gouge and fractured/rubbly core, indicating faults. Silicification increases at depth within this unit. Strongly silicified intervals are much less oxidized and contain trace amounts of pyrite.
0.75	9.40	Subtle to weakly silica-hematite altered interval. Several clay gouges. Core moderately to (in places)strongly fractured and mod to strongly limonite stained. Rare disseminated pyrite. May have beenoxidized and is no longer visible.0.754.007.007.15Fault marked by rubbly core
9.40	28.15	Moderately to strongly silicified interval of flow-banded volcanic (Rhyolite?). Silicification is patchy and is commonly indicated by lack of oxidation. Marked decrease in oxidation, however, still overprints groundmass and occurs in quartz veins and near fractures. Cream to grey coloured groundmass with abundant quartz replacements and rare to common quartz vugs. Increase in purple, hematite replacement of phenocrysts. 0.5-1%, Fine-grained pyrite, occurring as disseminations and in quartz veinlets. 22.60 22.90 Possible fault marked by rubbly core.
28.15	33.45	Lower part of unit silica strongly silicified. Increase in the abundance of vugs to common. Likely has to

do with the vicinity to the lower contact. Vugs are Fine-grained to commonly coarse-grained (up to cm size). Near contact, vugs are abundant.

#### 33.45 79.80 vcbx Volcanic Breccia



Chaotic assemblage of strongly brecciated clasts of green to dark green lithic xl tuffs (and/or andesite flows) and minor clasts (or possibly intervals) of bedded, medium-grained to fine-grained volcaniclastics. Weak to strongly silicified, weak to strongly hematite altered, purple to grey to light green groundmass. In some, up to several m intervals, clasts and lithic fragments within tuff/andesite are entirely replaced by grey to dark grey quartz and reddish-purple hematite. These intervals are commonly vuggy. Thin chlorite stringers (2-5mm) and chlorite replacements commonly occur suggesting an increase in propylitic alteration in this unit. At the top of the unit, breccia textures and clast boundaries are hard to distinguish and are strongly obscured by alteration; however, visible clasts lower down show a rounded to subrounded habit. At top of unit, moderate oxidation and/or limonite stain commonly occurs along clast boundaries, veins, and fractures; however, does not overprint textures as in overlying unit. Fine-grained to coarse-grained (up to 30 mm diameter) vugs occur rarely-commonly. Clay alteration along fractures occurs occurs commonly. <1% pyrite occurring as very fine-grained disseminations.

33.4539.60Upper contact of unit is strongly to intensely silicified. Primary structures and composition are entirely<br/>overprinted by intense silica and hematite alteration and replacements of groundmass and clasts. Up to<br/>cm silica vugs are common to abundant. Weak to strong, patchy oxidation/limonite stain.

39.6051.31Decrease in silica and hematite alteration/replacement, as well as a decrease in silicification to weak. In<br/>this interval, it is possible to observe the breccia clasts due to decreased alteration.

46.00 46.60 Interval with strong limonite stain and clay alteration of fractures. Minor clay gouge may indicate fault.



51.31 60.60

Interval with an abrupt increase in argillic alteration to moderate. Groundmass is a cream-green to applegreen colour and unit is not silicified. Conversely, there is a further decrease in the intensity of quartz and purple hematite alteration/replacement of clasts and groundmass. Minor increases in abundance of thin chlorite stringers.

53.3053.80Strongly agrillized interval. Groundmass is a light, apple-green colour. 1-2 %, very fine-grained<br/>disseminated pyrite.

57.00 57.70 Weakly oxidized interval.



60.60 79.80

Decrease in argillic alteration. Groundmass is weakly hematite-chlorite altered and is bluish-green in colour. Silicification is patchy and subtle. Clasts are clearly visible due to marked decrease in alteration as compared to the top of the unit. Rounded to angular clasts occur. They are commonly medium-grained to coarse-grained, up to cm size, and weakly to strongly hematite>chlorite-silica altered. Minor beds occur of fine-grained to medium-grained, poorly graded volcaniclastic sandstone. Up to meter length intervals of brown to light brown, oxidized groundmass and clasts. These intervals occur in the vicinity of clay gouges (possibly indicating faults).

60.60	61.40	Moderate to strongly oxidized interval. Oxidation occurs on either side of minor fault, marked by clay gouge.
62.20	64.75	Subtly to moderately oxidized interval. Several, clay altered fractures within interval.
66.90	72.30	Weak to moderate argillic alteration of groundmass. Light green to cream green in color. Minor intervals of brown oxidation near thin clay gouges and clay altered fractures.
79.25	79.80	Moderately oxidized interval at lower contact.

#### 79.80 107.40 and Andesite



Greenish grey to dark grey, weakly porphyritic andesite (possibly basalt?). Groundmass is aphanitic. Feldspar and other unidentified phenocrysts are Fine-grained, 1-3 mm, and are weakly to strongly epidote altered and/or replaced. Common veins occur of epidote +/- hematite +/- calcite. These veins are dominantly 2-3 mm in width, but they occur up to 10 mm. Top of unit is fragmental. <1% Pyrite occurs as fine-grained to medium-grained disseminations and as veinlets.



#### 79.80 90.00

Fragmental top of unit. Foliation of fragments (?) suggest a flow origin. Fragments are medium-grained to coarse-grained and are weakly hematite altered and stained. Fragment boundaries are difficult to determine due to incorporation into flow. There are thin (mm scale) hematite and chlorite veins occurring rarely throughout unit. Chlorite replacements of crystals in groundmass also occur rarely to commonly. Pyrite, <1%, occurs as disseminated blebs throughout unit. Upper contact of unit (for 60 cm) is oxidized to brown and is moderately fractured. Other minor interval of clay altered fractures and weak oxidization occur commonly.

90.00	107.40	phenocrysts is mor	dark grey, non-fragmental andesite unit. Epidote alteration and replacement of ore common than overlying unit. mm to rarely cm size hematite+/-quartz+/- calcite veins occur rarely to commonly. <1% pyrite as disseminations.
		95.50 95.65	5 cm diameter, hematite>>quartz replacement.
		98.00 99.40	Several mm to cm thick hematite>quartz>chlorite veins occurring commonly throughout core. No preferred orientation.
		102.10 102.25	15-25 mm thick quartz vug/vuggy quartz vein.
		106.80 107.40	Lower contact of unit is weakly to moderately oxidized.

107.40 138.35 and Andesite



Porphyritic andesite flow. Groundmass is fine-grained, green to light green. There are fine-grained to medium-grained. It appears to be more felsic, and may in fact be dacitic in composition, euhedral to anhedral and lath-shaped phenocrysts of plagioclase and other minerals. The medium-grained phenocrysts are altered/replaced to epidote and quartz. Fine-grained phenocrysts and grains in the groundmass are commonly replaced with green chlorite. The core is often propylitized, consisting of weak to locally strong, pervasive greenish alteration of groundmass to epidote +/- chlorite +/- quartz. White quartz +/- calcite veins occur rarely throughout the unit, the majority occurring at 35-45 deg to CA. Common, thin chlorite veins occur. There are some discontinuous intervals of weak to moderate silicification. This unit is clearly different than the overlying andesite unit. Also, the phenocrysts are

larger and more abundant than in the previous unit.

		107.40 113.70	116.60 113.85	Upper contact of unit is a weakly to strongly oxidized interval. The interval is moderately fractures with several clay altered fractures and minor clay gouges. 5-7 cm thick, vuggy quartz vein at 45 deg to CA. Within vugs are well developed, up to 1 cm quartz crystals.
		120.95	121.55	Strongly oxidized interval around a minor clay gouge, possibly indicating a fault.
			and -	ALL PARTY
132.45 13	38.35	green to	light green. C	oderate argillic alteration of core. The color of the groundmass changes form dark onversely, silicification decreases to subtle/non-existent. The majority of the erval are completely replaced with epidote.
		135.70	138.35	Lower contact of unit. This interval is weakly fragmental. Hematite alteration increases and is commonly found cementing fragments of andesite.

138.35 147.80 vcbx Volcaniclastic Breccia



Unit consists of interbedded intervals of strongly brecciated, coarse-grained volcanic clasts and intervals Fine-grained to medium-grained, bedded, poorly graded, volcaniclastics. Breccia intervals are up to 1 m in thickness, and consist of coarse-grained, up to cm size, rounded to sub-rounded volcanic clasts in a fine-grained, bluish-green matrix. The matrix weakly to moderately hematite-chlorite altered, with subtle calcite alteration. There are abundant hematite altered clasts within the breccia and chlorite altered/replaced occur commonly. The unit is not silicified. The UC of the unit is sharp.

147.80	199.40	and	Andesite	



Porphyritic andesite flow. Appears to be same unit as below. Groundmass is Fine-grained, green to light green. There are fine-grained to medium-grained, euhedral to anhedral and lath-shaped phenocrysts of plagioclase and other minerals. The medium-grained phenocrysts are altered/replaced to epidote and quartz. In this interval, medium-grained phenocrysts are also altered to chlorite. Fine-grained phenocrysts and grains in the groundmass are commonly replaced with green chlorite. The core is often propylitized, consisting of weak to locally strong, pervasive greenish alteration of groundmass to epidote +/- chlorite +/- quartz. Additionally, weak to locally strong argillic alteration occurs throughout the unit. In the strongly argillized interval, silicification decreases. Lower in the unit, epidote > quartz >> cal veins occur commonly to abundantly. There are some discontinuous intervals of weak to moderate silicification. Additionally, the phenocrysts are slightly smaller throughout this unit as compared to overlying unit.

147.80154.10Upper contact of andesite is strongly argillized. Grains within the groundmass and phenocrysts are<br/>strongly altered/replaced with chlorite. Rare to common quartz-cal-hematite veins and replacements<br/>occur throughout this interval. No silicification present.



- 154.10170.60In this interval, there is a strong decrease in chlorite alteration/replacement as well as a slight decrease in<br/>argillic alteration. Conversely, epidote alteration increases strongly. Phenocrysts are commonly to<br/>abundantly epidote altered to completely replaced.
  - 154.55
     154.70
     Clasts of overlying breccia occurring within andesite. Fractures around clasts are filled with hematite>quartz-cal.

     162.40
     162.50
     Let us the filter time fracting filter time filter time
  - 163.40163.50Interval of hematite flooding/hematite vein?? Phenocrysts still visible within hematite flooded<br/>area. Interval contains 2-3% disseminated pyrite.
- 170.60 178.60 Increase in hematite alteration. This interval contains several regions of an (hematite) altered and

178.60	180.75	<ul> <li>moderately to strongly hematite altered groundmass. Additionally, there are numerous narrow bands (2-4 cm) of strong hematite alteration. Interval is subtly silicified</li> <li>172.75 174.60 Interval of strong argillic alteration. Groundmass is a light green to cream-green color.</li> <li>Interval of strong argillic alteration. Fine-grained phenocrysts and grains in groundmass are commonly to abundantly altered and replaced with hematite and chlorite.</li> </ul>
180.75	199.40	Increase in epidote alteration of phenocrysts and groundmass. Chlorite alteration/replacement is moderate. Common to abundant epidote-quartz>calcite veining occurring. Veins are commonly 2-3 mm in thickness, and rarely 5-10 mm. Weak hematite alteration of groundmass. Weak to locally strong,
		patchy silicification.180.75186.30Interval with common to abundant, 5-10 mm epidote-quartz>calcite veins occurring preferentially at 45 to 55 deg to CA.196.00199.40Silicification increases to strong to locally intense. Abundance of epidote veins increases.
199.40	211.50 and	

**199.40 211.50** and Andesite



Green to dark grey, weakly porphyritic andesite with aphanitic groundmass. Unit is strongly to intensely chlorite altered and moderately to intensely silicified. Phenocrysts are Fine-grained and are strongly altered/replaced with chlorite. Upper part of unit is heavily faulted and fractured. There are numerous intervals of clay gouge, and rubbly core. Common to abundant hematite +/- quartz veins occur. This unit

may be the hanging wall the primary vein. <1% pyrite as disseminations and hosted in hematite-quartz veins.

199.40207.70Strongly faulted upper region of andesite unit. Rubbly core, clay gouge and strongly fractured core.<br/>Competent chunks of core no more than 30 cm in length. Strongly to intensely chlorite altered. Weak to<br/>moderately hematite altered. <1% disseminated pyrite.</th>

199.80 202.65 Rubbly core and clay gouge fault zone

199.50200.355-7 cm thick, greyish-white, cloudy quartz vein. Immediately above the vein, there is a 25 cm<br/>interval of clay gouge with cm-size chunks of the quartz vein hosted within. 2-3% pyrite within<br/>gouge and quartz vein. Sample # 36261

207.70 211.50 ALTERED HW



HW alteration zone. Alteration zone of a primary target vein structure. In the hanging wall of the vein, there is marked increase in silica and hematite alteration. This zone has moderate, chlorite>hematite cemented fractures and moderate to strong silicification. Silicification and pyrite concentration increases towards the vein zone. Sample # 36263, 36264

208.60 209.70 Rubbly core and clay gouge fault zone

211.50 215.45 QV Primary vein zone.



The primary vein zone consists of several, commonly occurring quartz veins. These veins consists of

whitish-grey to grey quartz, are 5-10 mm thick, and occur at varying orientations to CA. They are commonly vuggy and rimmed by thin bands of red hematite and contain 1-3% pyrite. Surrounding the veins are bleached halos. The rest of the primary vein zone consists of a strongly to intensely silicified unit with common crackle breccias. These crackle breccias are cemented with quartz-hematite +/- chlorite. 3-7% pyrite occurs within quartz veins, within crackle breccia cement, as well as occurring as disseminations. Several vuggy, whitish-grey quartz veins in strongly to intensely silicified, brecciated andesite. Sample # 36266, 36267, 36268

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
211.5	0 212.55	1.05	36266	4	31	<.5	12	<5	12	0.26	153	<4	0.05
212.5	5 213.80	1.25	36267	5	21	<.5	12	6	13	0.31	123	<4	0.02
213.8	0 215.45	1.65	36268	2	19	<.5	21	6	15	0.79	154	4	0.05

#### 215.45 237.13 and Andesite



215.45	218.85	ALTERED FW. The footwall of the primary vein is weakly to strongly silicified, decreasing in intensity
		further from the vein zone. There is common hydrothermal brecciation, cemented with hematite>quartz,
		+/- chlorite and there are common hematite>quartz, +/- chlorite veins occurring. The footwall region
		contains 2-3 % pyrite hosted in hematite veins and as disseminations. The entire unit is strongly fractured
		and has several intervals of clay gouge and rubbly core, indicating it is heavily faulted. Hematite
		cemented crackle boxes. Decreasing silicification with depth. Sample #' 36269, 36270
218.85	224.75	Interval of weakly chlorite-hematite altered, subtle to weakly silicified rock. Minor hematite-quartz veins.
		Strongly fractured interval with clay gouges and rubbly core.

- 224.75228.95Second interval of strong footwall alteration. Strongly to intensely silicified, quartz>>hematite-chlorite<br/>cemented hydrothermal breccia. Minor, whitish grey to grey quartz veining. 1-2 % pyrite as<br/>disseminations and occurring within quartz veins. Sample # 36271, 36272, 36273
- 228.95 237.13 This interval is outside the FW alteration zone. The rock is moderately chlorite altered with commonly occurring, narrow quartz-cal veins and rarely occurring, pyrite-rich hematite veins. Additionally, 3-10

mm, epidote>quartz+/-calcite veins begin to occur. Interval is weakly silicified.

237.13 EOH



# Blackdome Project 2007

Drill Hole Name: B07-10

Area: Intersection of No 1 and No 2 veins at depth

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

# **Drill Log**

UTM Easting	534890	Drill Contractor	Full force Drilling	Pad Number	P06-16?
UTM Northing	5685349	Mine Grid E	4859	Start Date	May 7, 2007
Elevation (m)	2000	Mine Grid N	12207	Finish Date	May 10, 2007
UTM Zone	10 U	Logged By	H. Samson	Reclaim Date	
Datum	NAD 83 Canada	Core Type/Size	NQtw	Log Date	May 9, 2007

Length (m) 256.95

Azimuth 130

Dip -60

Target Intersection of the #1 and #2 veins below the level of the mine workings.

Stopped for: Reached target

Result 150.55 to 157.40 HW vein zone, altered; 157.40 to 159.30 Silicified vein; 159.30-162.65 FW to vein; altered.

# 0 2.13 Casing No core. No core. 2.13 25.90 rhy Rhyolite? Flows Image: Specific colspan="2">Image: Specific colspan="2" Image: Speci

Flow banded, felsic volcanic (rhyolite to dacite?) flows. Light grey to cream colour, fine-grained groundmass with reddish-purple intervals of (hematite?) alteration. Weak to moderate, patches of argillic alteration. Rare intervals of strong chlorite alteration. Unit is weakly? porphyritic with common medium-grained (0.5-2 mm) hornblende and quartz phenocrysts, and rare medium-grained feldspar phenocrysts. Fine-grained , vuggy quartz replacements common, medium-grained-coarse-grained are rare. Primary texture and composition is very difficult to determine due abundant intervals of strong oxidation, limonite staining +/- hematite +/- silica alteration, overprinting primary textures and compositions. However, flow banding may be defined by foliation of phenocrysts. Clay alteration of fractures occurs commonly. Several intervals of clay gouge and fractured/rubbly core occur, indicating much faulting within the unit. Rare to commonly occurring, thin chlorite veins. Silicification is weak and patchy. 0.5-1% disseminated pyrite. Unit may or may not be fragmental in places. It is hard to determine due to strong oxidation and alteration.

# 2.13 10.60 Interval with patches of moderate to intense silica-hematite alteration. This alteration is not pervasive. Within these strongly altered intervals, there is 1-2% disseminated pyrite occurring. Core is moderately to, in places, strongly fractured. Oxidation is moderate to strong.

- 2.50 3.10 Interval with intense hematite-silica alteration and replacements.
- 6.10 6.30 20 cm wide interval of intense hematite-silica alteration. 3-4% disseminated pyrite.
- 8.50 9.70 Interval of strong hematite-silica alteration and strong oxidation. Strong clay alteration of fractures.



10.60 25.90 Decrease in the intensity and occurrence of hematite-silica alteration. Groundmass is commonly cream colored and there is an increase in argillic alteration to moderate to strong. Interval is weakly to strongly fractured with clay alteration along fractures. Silicification is weak and patchy. Oxidation is weak to moderate.

22.25 25.90 Increase in fracturing to strong near the lower contact. Minor clay gouges.

25.90 58.10 vcbx Volcanic Breccia



Chaotic, heterolithic assemblage of strongly brecciated clasts of green to dark green lithic crystal tuffs and rhyolites (and/or andesite flows) occurring with minor intervals of bedded, medium-grained to fine-grained volcaniclastics. Patches of weak to moderate silicification occur throughout the unit. Weak to moderately hematite altered, purple to grey to light green groundmass. Thin chlorite stringers (2-5mm) and chlorite replacements commonly occur suggesting an increase in propylitic alteration in this unit. Intervals of strong to intense argillic alteration. At top of unit, moderate to intense oxidation and/or limonite stain commonly occurs along clast boundaries, veins, and fractures; however, does not completely overprint textures as in overlying unit and clasts are still visible. Clasts throughout within the breccia intervals are commonly medium-grained to coarse-grained, with rarely occurring, up to several cm in diameter, megaclasts. These clasts are commonly sub-rounded to rounded, with rarely occurring angular clasts. Hematite-chlorite alteration of clasts is common. Fine-grained to coarse-grained (up to 30 mm diameter) vugs occur rarely-commonly. Clay alteration along fractures occurs commonly. <1%

25.90	32.20	Interval of breccia. Moderately to strongly hematite-chlorite altered groundmass and clasts. Moderate to strong oxidation and several clay altered fractures.
		27.20 27.90 Interval of intense oxidation and minor clay gouges.
32.20	41.50	Weakly to strongly argillized interval. Groundmass is light green to apple green. Clasts are argillized to a cream-white color.
		35.1536.75Breccia interval without argillic alteration.
41.50	44.75	Interval of breccia with weak to moderate chlorite-hematite alteration. Minor, weakly argillized intervals.
44.75	54.45	Weakly to strongly agrillized breccia. Minor intervals with moderate chlorite-hematite alteration.
54.45	58.10	Grain size decreases in this part of the unit to a volcanic sandstone with minor clasts of breccia. Breccia clasts are up to cm-size; however, decrease in abundance with depth. Clasts are commonly fine-grained to medium-grained and the beds are not well sorted or graded. Weak to moderate chlorite-hematite alteration and argillic alteration.

58.10 125.85 and

Andesite



Porphyritic andesite flow. Groundmass is fine-grained, green to light green. There are fine-grained to medium-grained. euhedral to anhedral and lath-shaped phenocrysts of plagioclase and other minerals. The medium-grained phenocrysts are altered/replaced to epidote, quartz, chlorite, and hematite; however, the intensity and occurrence of this alteration/replacement varies greatly in intensity and type throughout the unit. Fine-grained phenocrysts and grains in the groundmass are commonly replaced with green chlorite. The core is commonly propylitized, consisting of weak to locally strong, pervasive greenish alteration of groundmass to chlorite +/- quartz +/-epidote. Chlorite-white quartz +/- calcite veins occur rarely to commonly throughout the unit, occurring at .There are commonly occurring bleached intervals around chlorite-quartz-cal veins. Oxidized intervals occur near fractures and clay gouges. Common, thin chlorite veins occur. Up to several cm thick, blood red hematite veins occur rarely throughout the unit. There are some discontinuous interval of weak to moderate silicification.

58.10	67.75	Unsilicified andesite interval. Interval is weakly argillized and weakly to strongly chlorite altered.
		Phenocrysts are commonly replaced with green chlorite +- hematite. Abundant, spider-web fracturing
		filled with chlorite>>quartz and thin chlorite veins.

65.00 65.70 Strongly oxidized interval with several clay altered fractures, + possible thin clay gouge.

67.75 81.05 Minor increase in silicification in this interval. Conversely, there is a decrease in argillic alteration. chlorite>hematite cemented crackle breccias occur lower in unit. May be associated with to large hematite vein.

74.0774.57Blood-red hematite>>quartz-chlorite vein. Vein is strongly silicified and contains up to 7% pyrite.<br/>Vein contains medium-grained, up to 5 mm vugs.



81.0592.00Increase in hematite alteration of matrix. Weak to moderate, red hematite alteration overprints<br/>groundmass. Clasts are commonly replaced with chlorite, +/- hematite. Silicification is weak and patchy.<br/>Common chlorite>quartz-calcite veins occur throughout interval.

86.9092.00Increase in chlorite alteration to strong. Decrease in hematite alteration of groundmass.<br/>Commonly occurring, narrow chlorite>>quartz veins.



 92.00
 117.05
 Moderately to patches of strongly chlorite altered andesite with a light green groundmass. Fine-grained phenocrysts are dominantly replaced with dark green chlorite +/- hematite. Rarely occurring chlorite-hematite veins.

 100.85
 117.05
 Increase in argillic alteration to weak to moderate. Groundmass is greenish-cream color.

 102.80
 105.90
 Moderately fractured interval. Weakly to moderately oxidized with minor clay alteration along fractures, or possibly small clay gouge.

 117.05
 125.85
 Interval of strongly chlorite altered rock. Groundmass is light green to green and phenocrysts are entirely

#### B07-10 Blackdome

5 of 11

replaced by dark green chlorite. The lower contact is a fault zone and there are several clay gouges and fractured intervals in the lower part of this unit. There is a decrease in argillic alteration and an increase in silicification to weak.

117.65 119.10 Moderately fractured interval with weak to moderate oxidation. There is a 20 cm brecciated interval with several cm-size rounded clasts/fragments of andesite, cemented by quartz-chlorite.

#### 125.85 134.10 FZ Fault zone



Strongly faulted interval. Several small to large clay gouge intervals. Strongly fractured core and intervals of rubbly core. Difficult to determine exact lithological contact. Minor intervals of hematite-cemented crackle breccias.

# 134.10 157.40 and Andesite

Porphyritic andesite. Unit contains a fine-grained to, in some places, aphanitic groundmass. Colour of groundmass ranges from light green to green and is weakly to moderately propylitized. Phenocrysts are commonly medium-grained with less common fine-grained occurrences. Phenocrysts are altered and/or replaced to quartz, epidote, hematite and chlorite, varying in occurrence and strength of alteration

throughout unit. Unit is weakly to strongly silicified and silicification is patchy. Narrow, mm-scale quartz +/- calcite +/- hematite veins occurring rarely. Several intervals within this unit are brecciated and/or fragmental. Brecciation is likely a result of hydrothermal processes as these intervals are quartz +/- hematite +/- chlorite +/- epidote cemented, commonly silicified, and exhibit moderate to strong bleaching in vicinity of fractures. <1% disseminated pyrite.

134.10143.20Interval with moderate to strong chlorite alteration of fine-grained phenocrysts and groundmass.<br/>Groundmass is fine-grained with minor aphanitic intervals. Larger phenocrysts are commonly altered or<br/>replaced with epidote. These factors indicate pervasive propylitic alteration. Interval is subtly to weakly<br/>silicified.



143.20150.55Brecciated and fractured interval. Fractures are cemented with epidote-chlorite-hematite-grey quartz.<br/>Strong silicification. Weak to moderate hematite alteration of groundmass. Phenocrysts are commonly<br/>altered/replaced with chlorite.

150.55157.40ALTERED HW. Alteration zone of a primary target vein structure. In the hanging wall of the vein, there<br/>is marked increase in silica and hematite alteration. This zone has moderate, chlorite>hematite cemented<br/>fractures and moderate to strong silicification. Hydrothermal breccias and fractures are common. These<br/>are cemented by quartz>hematite +/- chlorite +/- epidote. Silicification and pyrite concentration increases<br/>towards the vein zone. Moderately to strongly silicified. Several 2-5 mm, milky white quartz veins<br/>occurring at 60 to 70 deg to CA. Veins are rarely vuggy. Sample 36275, 36276, 36277, 36278

			0	<u> </u>				5 00	22				, ,
From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ba	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
154.60	156.10	1.50	36277	9	8	<.5	46	16	12	0.22	139	7	0.06
156.10	157.40	1.30	36278	8	14	<.5	54	14	14	0.17	134	5	0.07
		<b>.</b> 4 60	1	<b>C1</b>									

154.60 155.40 C

Clay gouge and rubbly core, indicating fault zone.

#### 157.40 159.30 QV Primary vein zone.



The primary vein zone consists of several, commonly occurring quartz veins. The quartz veins are milky white and up to several cm thick. They are rarely vuggy and contain 2-5% pyrite and trace chalcopyrite. This interval is strongly broken up and fractured with large rubbly intervals. Sample 36279, 36280

			U										
From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
157.40	158.35	0.95	36279	3	71	0.80	28	21	8	0.08	326	<4	0.08
158.35	159.30	0.95	36280	2	22	0.60	14	12	22	0.80	109	<4	0.68

159.30	184.85	and	Andesite
159.30	162.65		ALTERED FW. The footwall region contains 2-3 % pyrite hosted in hematite veins and as disseminations and rare chalcopyrite occurrences, only near to vein zone. The footwall of the primary vein is weakly to strongly silicified, decreasing in intensity further from the vein zone. There is common hydrothermal brecciation and fracturing, cemented with chlorite +/- hematite and there are common hematite>quartz, +/- chlorite veins occurring. The entire primary vein zone is strongly fractured and has several intervals of clay gouge and rubbly core, indicating it is heavily faulted. Sample 36281, 36282
162.65	167.55		<ul> <li>Below the footwall alteration of primary vein zone, silicification is patchy, weak to strong. The groundmass is light green to rarely green. Fine-grained phenocrysts are commonly altered/replaced to chlorite and medium-grained phenocrysts are abundantly quartz-hematite altered. Rarely to commonly occurring chlorite-hematite veins.</li> <li>162.15 165.95 Minor intervals of hematite cemented crackle breccia. Up to 10 cm.</li> </ul>

167.55	184.85		<ul> <li>Groundmass changes to green colour. Moderately to strongly silicified. Phenocrysts commonly are altered and replaced by epidote and chlorite, no longer by hematite. Fragmental intervals occur throughout, cemented by quartz-hematite-epidote. These are likely hydrothermal crackle breccias. Silicification is very patchy; however, strong in places. Silicification appears to be associated with hematite-cemented crackle breccias. Argillic alteration is subtle to locally strong.</li> <li>180.80 181.00 Interval with clay gouge and strongly fractured core. Minor fault.</li> </ul>
184.85	186.30	vcbx	Volcaniclastic Breccia
			N
			Poorly sorted breccia with volcanic clasts. Groundmass is dark grey and fine-grained. There are abundantly occurring medium-grained to coarse-grained clasts, up to 3 cm in diameter. Clasts are commonly sub-angular with minor sub-rounded and sub-angular clasts occurring. Clasts are weakly chlorite altered.
186.30	198.73	and	Andesite
100.00	170110	unu	
			te for the second

89.89

Same andesite as above unit (134.10-184.85). Porphyritic with chlorite altered/replaced phenocrysts. Rarely occurring epidote veins and epidote cementing of fractures. Top 1 m of unit is fragmental with hematite-quartz-epidote as cement for fractures/between fragments. Lower contact is strongly faulted. 189.75 198.73 Strongly faulted and fractured interval. Several intervals of clay gouge and rubbly core indicating a major fault.

198.73 256.95 and Andesite



Weakly porphyritic andesite unit. UC is a fault contact. Groundmass is commonly dark, greenish-grey with minor intervals of green to light green. Strong chlorite alteration of groundmass. Phenocrysts are medium-grained, occur rarely to commonly, and are rarely epidote altered. This andesite unit appears to be different than above units; however, it may be the same with different alteration. The reason is that there are some intervals, up to 50 cm, with what a appears to be weaker alteration, which are strongly porphyritic with abundantly occurring epidote-chlorite altered/replaced phenocrysts (similar to above unit). Epidote-quartz-calcite veins, as well as blood-red hematite veins occur rarely to commonly at varying orientations to CA. Hematite veins are up to several cm wide and are pyrite-rich.

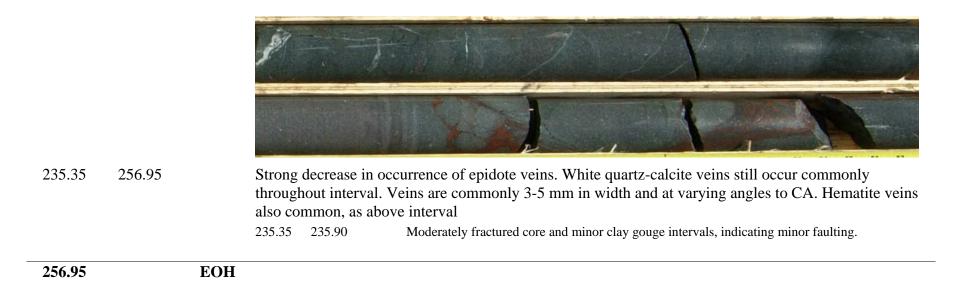
198.73235.35Strongly propylitic altered unit with commonly occurring epidote-quartz-calcite veins. Veins are<br/>commonly 5-10 mm in width, with rarely occurring cm-size veins. Hematite veins, up to several cm in<br/>size occur commonly. Up to cm-size, white quartz-calcite replacements occur rarely-commonly.

205.45 205.95

Hematite>>epidote>>quartz-calcite vein. Minor pyrite occurring within vein.



216.40216.65Blood-red hematite vein/replacement.220.37220.55Interval of strongly fractured core and minor clay gouge.





# **Blackdome Project 2007**

Drill Hole Name: B07-11

Area: Basalt Cap Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 Blackdome DEM plus 6.1m to adjust to Blackdome Mine datum

## **Drill Log**

UTM Easting	535986	Drill Contractor	Full force Drilling	Pad Number
UTM Northing	5687159	Mine Grid E	4492	Start Date May 10, 2007
Elevation (m)	2188	Mine Grid N	14131	Finish Date May 12, 2007
UTM Zone	10 U	Logged By	H. Samson	Reclaim Date
Datum	NAD 83 Canada	Core Type/Size	NQ	Log Date

Length (m) 60.35 Azimuth 130

Dip -50

Target

Stopped for: Lost hole in overburden.

Result Lost hole in overburden (Note: drillers records indicate 60.35m was the depth when the hole was abandonded.

#### 0 60.35 Overburden

Lost hole at 60.35m in the ultramafic till/rubble.

60.35 EOH



# Blackdome Project 2007

Drill Hole Name: B07-12

Area: Basalt Cap Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

## **Drill Log**

UTM Easting 535805	Drill Contractor Full force Drilling	Pad Number
UTM Northing 5686942	Mine Grid E 4549	Start Date May 13, 2007
Elevation (m) 2202	Mine Grid N 14018	Finish Date May 21, 2007
UTM Zone 10 U	Logged By H. Samson	Reclaim Date
Datum NAD 83 Canada	Core Type/Size NQ2	Log Date May 14, 2007

Length (m)		Target	
Azimuth			
Dip	-50		
		F	
		Stopped for:	
	[		
Result			

#### 0 1.83 Casing/Rubbly Core

Drill casing and rubbly core. No bedrock.

1.83 94.90 and Upper 'Andesite' Unit



Green to light green, to greenish-grey Upper Andesite. This flow is likely of the Redbird member. Unit is actually dacitic in composition; (however, is referred to as andesite in all previous reports and maps). Unit is porphyritic plagioclase-rich dacite. Medium-grained, chalky plagioclase-feldspar phenocrysts comprise 20-30% of the rock. Plagioclase phenocrysts are up to 4mm and are commonly anhedral with rarely-commonly occurring equant and lath-shaped, euhedral crystals. Fine-medium grained, +/- chloritized hornblende phenocrysts also occur abundantly. Hornblende phenocrysts are dominantly anhedral. Throughout the unit, there are rare locally to abundant lapilli-size lithic fragments. Lithic fragments are commonly andesite and rarely granodiorite. Weak hematite alteration of groundmass occurs rarely to commonly, interstitially to lapillis and in groundmass. Pervasive chlorite+/-epidote alteration of phenocrysts, groundmass, and lapillis, possibly suggesting regional propylitic alteration. Additionally, unit is weakly to locally strongly clay altered, indicating local argillic alteration. Rarely occurring jarosite? rims on phenocrysts. Up to several metre intervals of strong oxidation and limonite stain in the upper part of the unit. <<1% pyrite as disseminations.



1.83 5.60

Strongly oxidized interval with strong to intense, orange-red limonite stain. Oxidation and stain overprints primary textures and alteration.

		3.20 3.45 Interval with rubbly core
5.60	18.30	Green to olive green unit with lapilli size lithic fragments. Groundmass and lapillis are moderately to strongly chlorite-clay altered. In between lapillis, groundmass is commonly greyish-green, possibly due to weak hematite alteration.
		15.0015.50Tan to brown groundmass, due to oxidation.
18.30	26.52	Grey to tan colored, moderately to strongly oxidized interval. Moderately fractured with strong clay alteration along fractures. Several, up to cm size, blood red clay alteration (of hematite?) along some fractures and throughout core. Commonly occurring, up to several cm-size lapillis.
		Contraction of the first of the
		LES RE
26.52	41.75	Light green to green to tan, moderately chlorite-clay altered interval. Fractures and oxidized intervals are rare. Lapillis and lithic fragments occur rarely to commonly.
		37.30     37.80     Strongly oxidized and limonite stained interval. Clay alteration along fractures.
41.75	50.00	Olive green to red-stained interval. Abundantly occurring, red oxidized and limonite stained core. Oxidation and stain overprints primary textures, compositions, and alterations.
		48.90 49.10 Interval of clay gouge and rubbly core, indicating a minor fault
		Mar Nar
		IKBI NIAL BENK
50.00	86.50	Olive green to light grey green interval. Hematite alteration increases within this region of core. Chlorite-

		hemati	te altered mat	nts are distinguished by light green colour in a greyish, weakly to moderately crix. Common jarosite alteration, occurring as rims in chlorite-replaced hornblendes nocrysts. Minor intervals of rubbly core.							
		65.85	67.00	2 cm thick clay gouge, followed by interval with light green, moderately clay altered groundmass.							
		68.20	68.90	Moderately oxidized interval with tan-orange groundmass. 2-3% white quartz-calcite veins and mm-size veinlets.							
		75.30	76.10	Minor intervals of rubbly core							
86.50	91.60	along f	Groundmass changes to green to light green. There is a decrease in hematite alteration to weakly altered along fractures. Plagioclase phenocrysts comprise only 5-10% of the rock and core is moderately argillized.								
91.60	93.63			alteration of groundmass to weak-moderate. Groundmass is a greyish-green to grey use phenocrysts comprise 20-30% of rock. Increase in silicification to weak.							
93.63	94.90	white q by silic	juartz veins a	e hanging wall to main vein intercept contains abundant, mm to cm size, greyish- nd abundant, up to tens of cm thick, crackle brecciated stockwork zones, cemented ilicified with abundant quartz bands and silicified breccia stockwork (SBS) zones. 322							

#### 94.90 96.62 QV Primary vein intersection.



Likely the #17 vein. Interval is moderately to strongly oxidized with a tan-orange colored groundmass and it is strongly to locally intensely silicified. The hanging wall and footwall to the main vein intercepts contain abundant, mm to cm size, greyish-white quartz veins and abundant, up to tens of cm thick, crackle brecciated stockwork zones, cemented by silica. Quartz veins are commonly vuggy. The primary veins consist of opaque white quartz with cm-size, greyish-white, translucent, well-formed quartz crystals hosted within the white quartz. Vein intercepts are strongly fractured and locally rubbly.

94.90 95.35	Approximately 20 cm thick, rubbly white, vuggy quartz vein and SBS intervals. Sample #36323
95.35 96.00	Interval in between to quartz veins. Several vuggy quartz veins and SBS intervals. Sample #36324
96.00 96.62	Several cm-thick, rubbly, white quartz vein and commonly occurring SBS intervals and thinner quartz veins. Sample #36325

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
94.90	95.35	0.45	36323	<2	35	26	17	19	28	0.10	260	<4	6.97
95.35	96.00	0.65	36324	6	31	10.2	526	26	103	0.27	639	6	2.06
96.00	96.62	0.62	36325	2	15	2.7	226	17	70	0.26	597	<4	0.38

96.62 274.02 and Upper 'Andesite' Unit



96.62 97.95 ALTERED FW. Oxidized and strongly silicified footwall to the main quartz veins. Commonly occurring, vuggy greyish-white quartz veins and SBS intervals. Sample #36327, 36328

97.95 99.00 Subtly to non-oxidized, greenish-grey interval. Weakly to moderately silicified. Sample #36332, 36333

	99.00		99.67	Rubbly, white quartz vein. Sample #36334									
From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
99.00	99.67	0.67	36334	<2	56	19.2	16	23	52	0.38	390	72	3.88

99.67 201.40

Weakly to moderately chlorite-hematite altered, purplish-grey to greenish-grey groundmass. Rarely occurring, up to cm-size granodiorite inclusions. Clay altered intervals occur rarely and core is weakly silicified throughout. Plagioclase phenocrysts comprise 20-30% of rock and are rarely epidote altered. Several clay seams occur throughout this interval, up to several cm in size.

106.65	108.10	Rubbly core and clay seams. Sample #36351
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116.45 117.35 40 cm thick clay seam and rubbly core around the edges. Sample #36350

128.15128.45Rubbly core with minor quartz vein. Sample #36335. This rubbly core is followed by a 25 cm<br/>thick clay seam occurring at 128.55-128.85 m depth. Sample #36349

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ba	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
106.65	108.10	1.45	36351	<2	72	20.5	11	10	91	2.17	737	124	0.10
116.45	117.35	0.90	36350	2	341	96.3	14	13	85	1.19	853	>200	0.09
128.15	128.45	0.30	36335	<2	8302	>200	<5	47	61	1.59	1728	>200	0.99
128.55	128.85	0.30	36349	5	292	106.1	16	17	84	1.43	1231	>200	0.39



129.55	129.60	5 cm crackle box interval with several mm-size quartz-epidote-green chlorite veins.
139.29	142.10	Increase in epidote alteration of core and phenocrysts. Rarely occurring quartz-epidote veins.
146.60	147.25	Moderately to strongly oxidized, tan-orange interval with mm-size, vuggy, grey quartz veins and minor quartz-cemented crackle breccia stockwork. Sample #36329
147.25	147.75	Unoxidized, weakly silicified interval between oxidized, quartz-vein rich intervals. Sample #36330
147.75-	148.30	Weakly to strongly oxidized, tan-orange interval with mm-size, vuggy, grey quartz veins and minor quartz-cemented crackle breccia stockwork. Sample #36331

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
146.60	147.25	0.65	36329	6	37	4.5	315	10	122	0.82	707	7	0.38
147.25	147.75	0.50	36330	<2	18	1.7	32	7	151	1.05	779	6	<0.01
147.75	148.30	0.55	36331	4	24	2.6	191	10	157	0.85	633	5	0.37



151.80154.00Moderately to strongly fractured core with a 20 cm clay seam.199.80199.85Rubbly, clay gouge interval. Moderately oxidized.



#### 201.40 216.65

Change in groundmass color to a light green. Change in color is likely due to decrease in hematite alteration of phenocrysts and groundmass to subtle or nonexistent, as well as an increase in chloritic alteration (propylitic?). Towards the bottom of the interval, there is subtle epidote alteration of phenocrysts trace amounts of epidote in thin, white quartz>epidote veins. Granodiorite inclusions and hematite+/- quartz veinlets occur rarely to commonly. Interval is weakly silicified.

209.70 210.80 Fragmental interval with hematite veins and fracture fills cementing lapilli-size fragments of this unit.



- 216.65225.70Marked decrease in chlorite-epidote alteration of groundmass and phenocrysts. Conversely, there is a<br/>increase in pervasive, weak to moderate hematite alteration of the groundmass to a greyish-purple colour.<br/>Subtle to weak silicification.
- 225.70 238.35 Increase in epidote +/-chlorite alteration (propylitic) of groundmass and phenocrysts and a decrease in hematite alteration. Groundmass is dark green to green. Chlorite locally alters/replaces hornblende phenocrysts. Epidote alteration is pervasive and weak to moderate in strength throughout unit with epidote also occurring in thin, quartz>epidote veins. Interval is weakly silicified.



- 229.90 231.00 Strongly fractured core with intervals of rubbly core.
- 231.00 232.50 Interval is weakly to moderately oxidized to a tan-orange color. Commonly occurring thin, greyish white quartz veins and minor, up to 5 cm thick SBS interval. Rubbly core and quartz vein at top of interval. Sample #36336, 36337.

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
231.00	231.85	0.85	36336	<2	54	9.4	45	17	81	0.37	647	74	0.22
231.85	232.50	0.65	36337	<2	19	0.7	19	8	102	0.99	696	7	0.19

238.35247.50Decrease in epidote-chlorite alteration (propylitic). Rock is similar to interval from 216.65 to 225.70.239.30239.4010 cm thick clay seam. Seam consists of purple clay.

240.15 242.90 Interval with several, weakly oxidized fractures, +/- clay alteration along fractures



247.50 274.02 Increase in epidote +/- chlorite alteration of groundmass and phenocrysts. Possible propylitic alteration of core. Decrease in hematite alteration. Core is green in color.

274.02 EOH



### Blackdome Project 2007

Drill Hole Name: B07-13

Area: #17 Adit Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

### **Drill Log**

UTM Easting	536186	Drill Contractor	Full force Drilling	Pad Number	P06-9
UTM Northing	5687273	Mine Grid E	4631	Start Date	May 13, 2007
Elevation (m)	2080	Mine Grid N	14516	Finish Date	May 17, 2007
UTM Zone	10 U	Logged By	H. Samson	Reclaim Date	
Datum	NAD 83 Canada	Core Type/Size	NQtw	Log Date	May 14, 2007

Length (m) 208.20 Azimuth 130

Dip -50

Target Southward extension of number 17 vein

Stopped for: Reached target

Result

#### 0 5.00 ovbd Casing/Rubbly Core



Drill casing and rubbly core. No bedrock.

5.00 37.30 and Upper 'Andesite'



4Rd. Redbird Member. Light green, Upper Andesite. Unit is actually dacitic in composition; (however, is referred to as andesite in all previous reports and maps). Difficult to determine origin, i.e. flow or tuff, due to lack of clear unit boundaries and/or flow textures. Unit is a massive, porphyritic plagioclase-rich dacite. Medium-grained, chalky plagioclase-feldspar phenocrysts comprise 25-35% of the rock. Fine-medium grained, chloritized hornblende phenocrysts also occur abundantly. Throughout the unit, there are rarely occurring lapilli-size lithic fragments. Lithic fragments are commonly andesite tephra and rarely, up to several cm-size granodiorite inclusions. Weak hematite alteration occurs at the bottom of the unit, interstitially to lapillis and in groundmass. Pervasive chlorite alteration of phenocrysts, groundmass, and lapillis, possibly suggesting regional propylitic alteration. Additionally, unit is weakly to moderately clay altered (sericite), indicating regional argillic alteration. Rarely occurring, 3-7 mm quartz replacements and one occurrence of a vuggy quartz vein.

21.65 23.55 Moderately fractured interval with several minor gouges/rubbly core.
25.45 25.75 Interval containing a 5-7 cm, grey thick, vuggy quartz vein at 45 degrees to CA, as well as several, 3-7 mm quartz replacements in footwall.



clay



34.3537.30Fault zone. Possible lower contact. Marked by several, up to 30 cm intervals fractured core and<br/>intervals of clay gouge and rubbly core

37.30 69.00 and Upper 'Andesite'



4Rd? Likely the same unit as the above unit. Upper contact of interval is a fault zone. This dacitic unit is very similar to above unit; however, there are some significant differences which possibly? signify a new unit. i) there is a marked decrease in both size and abundance of lapillis/lithic fragments. There are still rare inclusions of granodiorite; however, they are much smaller - only up to cm size. ii) there is a slight decrease in abundance of plagioclase phenocrysts (15-25% of rock). iii) increase in hematite alteration to moderate. This hematite alteration is pervasive throughout this unit. iv) Rare-common occurrence of thin, mm-scale, calcite veins and replacements throughout the unit.

42.00 47.10 Interval containing several small clay intervals with rubbly core. Likely several small fault.

#### 69.00 107.45 and Upper 'Andesite'



4 Rd. Redbird Member. Unit is very similar to first andesite unit; Redbird Member (see above description). This unit has a decrease in occurrence of plagioclase phenocrysts to comprise 15-25% of

			rock. Granodiorite inclusions are up to cm-size, not larger. Rarely occurring, narrow clay gouges.109.50109.65Fault gouge and rubbly core
107.45	107.65	and	Andesite
			(Note* Don't know this unit? Cannot correlate on map. Don't think it's a dyke due to fragmental contacts.) Grey to greyish-green, porphyritic rock of intermediate composition. Groundmass is very fine-grained to aphanitic. Phenocrysts consist of feldspar, hornblende, and possibly? pyroxene. Feldspar phenocrysts are mg, commonly subhedral to rarely euhedral, equant to lath shaped and comprise up to 10% of rock. Hornblende phenocrysts are commonly altered to chlorite. Unit is weakly, to locally strongly silicified. Much of unit is strongly fractured and faulted with intervals of rubbly core. Upper and lower contacts are strongly fragmental. Upper contact contains angular inclusions of above andesite unit, as well as angular fragments of this unit. Lower contact is a breccia consisting of this unit and the underlying andesite.
107.65	109.45	QV	Quartz-vein zone.
			Contraction (1985)
			Weakly to strongly silicified interval with mm-size quartz veins and one, 10 cm wide, vuggy white quartz vein. Interval is clearly distinguished by the tan-orange, pervasive oxidation in the vicinity of the quartz veins. Quartz veins trend at 45 to 55 deg to CA. Sample 36283, 36302
109.45	118.95	and	Andesite

(Note\* Don't know this unit? Cannot correlate on map. Don't think it's a dyke due to fragmental contacts.) Grey to greyish-green, porphyritic rock of intermediate composition. Groundmass is very fine-grained to aphanitic. Phenocrysts consist of feldspar, hornblende, and possibly? pyroxene. Feldspar phenocrysts are mg, commonly subhedral to rarely euhedral, equant to lath shaped and comprise up to 10% of rock. Hornblende phenocrysts are commonly altered to chlorite. Unit is weakly, to locally strongly silicified. Much of unit is strongly fractured and faulted with intervals of rubbly core. Upper and lower contacts are strongly fragmental. Upper contact contains angular inclusions of above andesite unit, as well as angular fragments of this unit. Lower contact is a breccia consisting of this unit and the underlying andesite.

117.60 118.95

Brecciated lower contact of unit. Breccia consists of mg to cg, up to cm size, clasts of this unit and underlying andesite. Clasts are sub-angular to sub-rounded.

#### 118.95 131.35 and Upper 'Andesite'



4 Rd. Redbird Member. Feldspar-rich, porphyritic volcanic of intermediate composition. Unit is actually dacitic in composition. Unit is a massive, porphyritic plagioclase-rich dacite. Groundmass is light brownish green. Medium-grained, chalky plagioclase-feldspar phenocrysts comprise 25-35% of the rock. Fine-medium grained, chloritized hornblende phenocrysts also occur abundantly. Throughout the unit, there are rarely occurring lapilli-size lithic fragments. Lithic fragments are commonly andesite tephra. Moderate chloritic-argillic alteration of core. No granodiorite inclusions occur in core, as were observed in above intervals of this unit.

129.95 131.35 Lower contact of Redbird Member in Upper 'Andesite'. Interval consists of a basal tephra, with lapilli tuff and volcanic breccia. Lapillis and clasts are up to several cm in size, and rare commonly sub-angular to angular.

#### 131.35 137.95 and Upper 'Andesite'



4Nd. Noranda Member. Unit consists of plagioclase sparse, porphyritic dacite flows. Flows are locally flow banded. Groundmass is light green and is locally, weakly hematite altered. Plagioclase phenocrysts comprise 5-15% of the rocks, are mg (up to 4mm), and are commonly anhedral. Unit is weakly chlorite altered.

photo).

Lower contact of this unit is

fragmental and brecciated. There are several fractures cemented with brownish-grey, unknown mineral (see Flow banded Noranda Member

#### 137.95 182.00

dac

**Tephra and Dacite Flows** 

136.50 137.95



4Nt. Noranda Member. Basal unit of the Noranda Member. Consists of green to maroon tephra and welded tuffs with intercalated, grey to maroon, grey, contorted dacite flows. Dacitic flows are feldsparphyric with the majority of feldspars being plagioclase. Plagioclase phenocrysts are commonly euhedral with equant to elongate crystal shape. They are commonly mg, with a diameter, up to 5 mm. Unit contains abundant intervals of strongly fractured core and minor clay gouges. There are rarely occurring intervals, up to 50 cm wide, of brecciated volcanic clasts, in between flows and tuffs.

161.00	161.50	Strongly oxidized interval with minor clay gouges.
171.50	172.10	Strongly fractured interval with clay gouge and rubbly core

180.40 182.00 Strongly faulted and fractured Lower Contact of unit. Strongly fractured with rubbly core and clay gouge.

182.00	191.5	1 :	and L	ower 'A	Andesite' (o	r uppe	er and	esite?)	)							
					(			R	A.	E.Y	(			X	10	
						4 - 2 -						- 14	1		~	11
			s a a a	tratigrap ctually o nd less t nhedral,	phically.) Gro dacitic in con	eyish-g nposit plagic to gre	green t ion. G oclase en and	o gree roundr phenoo /or bla	n, wea nass is crysts. ck chl	kly ho fine-g Hornt orite. I	rnblen grainec blende Plagioc	de-phy l, with pheno clase p	yric int up to crysts henoci	termed 7-10% are fin tysts o	liate volo hornble e-graine ccur spo	es more sense canic. Unit is ende phenocrysts ed, up to 2 mm, radically
182.00	183.4	.5	W	vith oxic		est arc	ound q	uartz v	eins. A	-					-	a orange-tan color, alos occurring
183.45	191.5	1	o b to n	ccurring reccias. locally arrow c	g, greyish-wl The veins an strongly ox	nite, m re com idized t 187.	iilky qu monly with c 50, the	uartz+/ / narro commc ere is a	-chlor w, up only oc 2-3 cr	ite vei to 5-7 ccurrin n thick	ns, rep mm, a g, narr c, grey	olacem nd occ ow qu ish wh	ents, a cur at 4 artz-ch iite qua	nd qua 0-50 d ilorite artz ve:	artz-stocl leg to CA veins. N	eral, commonly kworks of silicified A. Core is weakly linor intervals of rring at 50 deg to
		From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au	
		m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm		ppm	ppm	gm/mt	
		188.75	190.00	1.25	36289	4	25	1.2	272	12	84	0.39	582	4	0.08	
		190.00	191.51	1.51	36290	2	22	1.5	86	10	67	0.31	642	4	1.55	

191.51 192.70 QV Main intercept of #17 vein.

The main 17 vein intercept is 1.20 m in width and consists of rubbly quartz vein with strongly fractured,

silicified breccia stockwork intervals. Rubbly quartz veins material with competent chunks of strongly silicified quartz-cemented breccia. Strongly oxidized interval. Sample #'s 36291, 36292



From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
191.51	192.00	0.49	36291	10	18	3.1	329	58	84	0.19	490	<4	0.89
192.00	192.70	0.70	36292	2	28	0.6	132	6	80	0.38	757	6	0.17

#### **192.70 206.00** and Lower 'Andesite' (or upper andesite?)

192.70203.10ALTERED FW. The footwall to the #17 vein contains narrow quartz+/-chlorite+/-hematite veins and one<br/>occurrence of silicified breccia stockwork zone. Throughout the zone alteration, quartz veins commonly<br/>contain 1-2% of very fine-grained disseminated pyrite. Moderately silicified and strongly chlorite altered<br/>interval. Rarely occurring narrow quartz veins and quartz-cemented breccias. Sample #'s 36293, 36294

	11	nor vur.	Rulely beeu	ing n	anow	quaitz	venno	und qu		ement		colus.	Jumpie	1550275,
From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au	
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt	
192.70	194.00	1.30	36293	4	36	3.6	63	16	45	0.21	408	<4	1.56	
	19	94.56	195.25	ceme	nted br	ntensely eccia sto uggy. S	ockworl	c. Quart					7%	
195.25 199.40			199.40	Continuation of footwall to 17 vein. Rare, narrow quartz-chlorite veins. Subtle to weak silicification. Sample #'s 36295, 36296, 36297									12/1	
199.40 201.65			deg t ceme	o CA. I	, vuggy n footw eccia sto and nea	all to ve ockworl	eins are ks. Inter	minor c ise oxid	uartz ation in	L	#17 V	ein. Samp	le # 36299	
	20	01.65	203.10			vall alter oxidized					l nite qua	rtz vein	s. Sample	36300

206.00 208.20

tuff Tephra and Welded Tuff



(4Nt? Basal unit of Noranda Member?) Strongly hematite altered, porphyritic welded tuff. Similar to basal unit of Noranda member. Unit has mg, plagioclase phenocrysts, comprising 5-10% of the rock. Commonly occurring chlorite-hematite>quartz veins at 50-55 degrees to CA. Several intervals of hematite cemented brecciated intervals. Clasts in breccias are rounded and fine-grained to cm-size.

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### Blackdome Project 2007

Drill Hole Name: B07-14

Area: #17 Adit Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

### **Drill Log**

UTM Easting	536260	Drill Contractor	Full force Drilling	Pad Number	P06-10
UTM Northing	5687279	Mine Grid E	4685	Start Date	May 17, 2007
Elevation (m)	2060	Mine Grid N	14567	Finish Date	May 20, 2007
UTM Zone	10 U	Logged By	H. Samson	Reclaim Date	
Datum	NAD 83 Canada	Core Type/Size	NQtw	Log Date	May 18, 2007

Length (m) 180.75 Azimuth 130 Dip -50 TargetSouthward extension of number 17 vein

Stopped for: Reached target

Result

#### 0 3.15 Casing/Rubbly Core

Drill casing and rubbly core. No bedrock.

3.15 21.10 and Upper 'Andesite'



4Rd. Redbird Member, actually dacitic in composition. Unit consists of greyish-green to reddish-purple, porphyritic dacitic tuff or a dacite flow. Groundmass is fine-grained and is commonly, moderate-strongly hematite altered to reddish-purple. Phenocrysts are medium-grained, white feldspars (likely plagioclase) comprising 5-15% of the rock. Hornblende phenocrysts are fine-grained to rarely medium-grained and are altered/replaced with chlorite. Pervasive propylitic alteration of core suggests regional alteration. 1-2% narrow (mm-size) white quartz-calcite veins at varying degrees to CA. There are small, commonly occurring <1cm granodiorite inclusions. No flow features present. Lower contact is fragmental over 1.5 meters with inclusions/clasts of underlying unit. These clasts are likely a basal volcanic tephra.



3.15	8.75	Interval with strongly hematite altered, reddish-purple groundmass. Weakly fractured with oxidized fractures.
		5.808.75Weak to strongly fractured with intervals of rubbly core and clay gouges, likely indicating fault zone. Moderately to strongly oxidized.
8.75	13.00	Decrease in hematite alteration of groundmass. Dark greyish-green colour. Rare, cm-size angular inclusions of another lithology (andesite?).

13.00	17.50	Increase in hematite alteration, same as 3.15-8.75. Oxidized fractures.
17.50	18.85	Decrease in hematite alteration. Groundmass is a greyish-green colour. Several bands of bleaching occur throughout the core.
18.85	21.10	Fragmental basal layer of this unit. Contains up to cm-size, sub-rounded clasts of underlying unit, increasing in abundance towards contact. Contact is gradational over 10 cm. Possible volcanic tephra layer.

21.10 27.25 dac Dacite Flow?



(Possibly Noranda Member. 4Nd?) Greenish-brown to tan coloured dacitic volcanic. Chaotic unit with several fragmental and lapilli-rich intervals. Groundmass is fine-grained to medium-grained and weakly to moderately clay altered (argillized) + or – silica. Chlorite altered hornblende-phenocrysts and white feldspar phenocrysts occur in varying proportions throughout the unit comprising up to 5-7% of the rock. There are rarely to locally commonly occurring quartz-chlorite + - hematite veins and replacements. Lower contact of unit is brecciated with a fine-grained, moderately to strongly hematite altered cement, and is also strongly faulted.

21.10 27.25

Moderately to strongly oxidized, tan to brown interval with rare lapilli size fragments. Common clay altered, oxidized fractures and several minor faults marked by clay gouges and strongly fractured core.



#### 27.25 32.65 QV Quartz vein-zone intercept?

Intensely silicified interval is strongly oxidized to tan, to tan-orange colour. Consists of commonly occurring fractures that have been re-healed by silica-chlorite-red hematite. Additionally, there are minor quartz-chlorite-hematite cemented breccia stockworks and vuggy

(sometimes), narrow quartz veins.

27.25	28.90	Strongly faulted core with common intervals consisting of clay gouge and rubbly core. Competent intervals are weakly to intensely silicified with occurrences of quartz-chlorite- hematite veins and quartz fragments within clay gouge. Sample #36304
31.20	32.65	Intensely silicified interval. Core is strongly fractured and re-healed with quartz-chlorite- hematite. Minor quartz veins. Very fine-grained pyrite assoc with veins and fracture fills. Sample #36305



From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ba	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
31.20	32.65	1.45	36305	2	14	1.90	295	34	87	0.15	544	10	0.45
32.65	34.50	1.85	36306	<2	17	2.30	349	22	106	0.32	505	7	0.18

32.65	43.70	dac	Dacite Flow?
32.65	34.50		ALTERED FW. Footwall to above system. Commonly occurring, 5-7 mm vuggy quartz veins and fracture fills. Sample #36306
34.50	39.55		Orange-tan to light green, weakly silicified interval. Groundmass is weakly to moderately hematite- chlorite altered and there are commonly occurring chlorite-altered hornblende phenocrysts. Fragmental intervals are cemented with a moderately to strongly hematite altered groundmass.

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39.55 43.70 (4Nt?) Fragmental and locally brecciated lower contact. Interval is locally strongly oxidized and strongly faulted with fractured core and several clay gouge intervals. Increase in hematite alteration to strong towards the basal contact. This is likely the basal unit of the Noranda Member. Maroon Tephra.

43.70 80.55 dac Dacite Flow



Aphanitic dacite flow. (Possibly Lexington Member) Dark grey to greenish grey, weakly porphyritic dacite flow. Fine-grained, chlorite altered and replaced phenocrysts comprise less than 5% of the rock. Unit is strongly silicified and moderately to strongly hematite altered. Flow bands are observed as preferentially oriented, discontinuous narrow pods of blood red hematite. 1-10 mm thick quartz-calcite-hematite + - chlorite veins occur throughout unit. These veins occur commonly at 40-55 deg to CA. Lower contact is gradational over 50 cm with underlying volcanic breccia.

44.90 47.20 Strongly to intensely silicified interval containing 5-7%, narrow, white quartz veins. These veins occur at 45 deg to CA and are locally amastamosing.

#### 80.55 92.50 teph Tephra



Chaotic assemblage of ungraded volcanic tephra. Groundmass consists of fine-grained to mediumgrained, strongly hematite + - chlorite altered volcaniclastics. Clasts are commonly up to cm-size with rarely occurring megaclasts of weakly chlorite-phyric, light green to grey dacite. The majority of clasts are sub-angular to sub-rounded, with more rare occurrences of rounded and angular clasts. Alteration of the clasts ranges from weak to strong by chlorite and hematite. Unit is not silicified.

#### 92.50 109.12 dac Tephra and Dacite Flows



Noranda? Member. Basal unit of the Noranda? Member. Consists of green to maroon tephra and welded tuffs with intercalated, grey to greyish-green, contorted dacite flows. Dacitic flows and tuffs are feldsparphyric with the majority of feldspars being plagioclase. Unit is +/- chlorite-phyric with fine-grained chlorite-altered phenocrysts of possibly? hornblende. Plagioclase phenocrysts are commonly euhedral with equant to elongate crystal shape. They are commonly medium-grained, with a diameter, up to 5 mm. Top of unit is weakly clay altered and unsilicified (argillic alteration?). Silicification increases at depth within unit. The upper contact with the tephra is gradational over 50 cm. The lower contact is marked by thick clay gouge and rubbly core, likely indicating a fault contact.

#### 109.12 126.20 and Andesite

		(1870 Member?) Weakly chlorite-phyric, grey to green andesite. Groundmass is fine-grained to locally very fine-grained and is weakly to strongly silica>chlorite altered +/- hematite alteration. Phenocrysts are fine-grained to medium-grained, chlorite replaced mineral (likely hornblende) and sporadically occurring, medium-grained feldspar phenocrysts. Top of unit contains a 50 cm rubbly quartz vein. Lower down in unit, an interval occurs with strong to intensely silicified, greyish-white quartz-cemented breccia stockwork. In the footwall to this interval, the rock is strongly to intensely silicified, moderately to strongly oxidized, and contains common, up to 1 cm thick, +/- vuggy +/-chlorite, quartz veins. Veins occur commonly at 40-50 deg to CA.
109.12	125.45	Light green to greyish-brown-green groundmass. Interval is weakly silicified with rarely occurring, mm- size quartz veins. Lower 50 cm of interval contains strongly fractured, oxidized core with clay gouge, possibly indicating a fault.
125.45	126.20	ALTERED HW. The upper region of this interval is the strongly silicified hanging-wall to the main quartz vein/SBS. 2-5 mm thick grey +/-vuggy quartz veins occurring at 40 deg to CA. Moderate to locally strong, tan-orange oxidation of core. Sample #36308

126.20 127.00 QV Main intercept o





The main area of interest is the intensely oxidized, intensely silicified stockwork breccia (SBS). This crackle breccia is cemented with grey to greyish-white quartz, which commonly has fine-grained vugs, with rarely, up to cm-size vugs. Core is strongly broken with intervals of rubbly core and clay gouge.

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From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
126.20	127.00	0.80	36309	7	19	2.70	288	55	49	0.11	333	4	0.61
127.00	127.90	0.90	36310	10	18	2.70	186	28	33	0.13	321	6	0.36

This intercept is sulfide-poor. Intensely silicified breccia stockwork. Sample #36309, 36310.

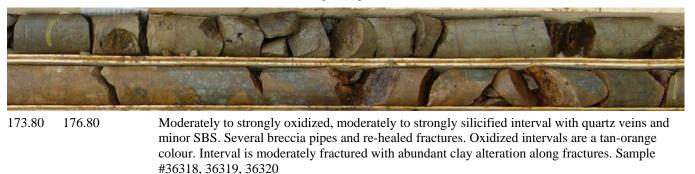
127.00	137.40	and	Andesite
127.00	128.93		ALTERED FW. The footwall to the vein is strongly to intensely silicified, and strongly oxidized to a tan- orange colour. Quartz-+/-chlorite, +/- vuggy veins occur at 40-50 deg to CA. Intensely silicified, green to dominantly tan-orange FW to SBS. 20 cm pipe breccia at 127.30 m depth and 20 cm interval of rubbly core and clay gouge. 3-5% grey quartz and green chlorite-quartz veins. Sample #36311.
128.93	131.85		Strongly silicified, mod-strongly oxidized, tan-orange FW to vein. Sample #36312, 36313
131.85	137.40		<ul> <li>Green to grey andesite. Slight decrease in silicification. Groundmass is +/- hematite alteration, +/- oxidation to tan-orange colour.</li> <li>136.45 137.40 Moderately to strongly oxidized interval with 1 cm-thick, vuggy quartz vein. Sample #36314</li> </ul>
137.40	180.75	dac	Tephra and Dacite Flows



Lexington Member? Basal unit of the Lexington Member? Consists of green to maroon tephra and welded tuffs with intercalated, rarely occurring, grey to greyish-green, contorted dacite flows. Dacitic flows and tuffs are feldspar-phyric with the majority of feldspars being plagioclase. Unit is +/- chlorite-

phyric with fine-grained chlorite-altered phenocrysts of possibly? hornblende. Plagioclase phenocrysts are commonly euhedral with equant to elongate crystal shape. They are commonly medium-grained, with a diameter, up to 5 mm, and +/- altered with a light green mineral (not epidote). The unit is strongly silicified throughout with rarely occurring, oxidized quartz +/- vuggy veins. The upper contact is brecciated over 15 cm. The lower part of the unit has a small intersection with oxidized quartz veins/SBS, which may be the #17 vein.

140.95	142.15	Intensely silicified, locally strongly oxidized interval with 3-5% vuggy, greyish-white quartz veins. Sample #36315
145.55	146.10	Intensely silicified interval with a 1-2 mm oxidized quartz vein occurring at 20 deg to CA. Halo around vein is intensely altered and bleached. Sample #36316
152.60	154.60	Intensely silicified, locally strongly oxidized interval with vuggy, greyish-white quartz veins and intense alteration and bleaching. Sample #36317



176.80	100 75	Weekly, evidined interval. Mederately freetyned and strongly silicified
1/0.00	100.75	Weakly oxidized interval. Moderately fractured and strongly silicified.

180.75

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### Blackdome Project 2007

Drill Hole Name: B07-15

Area: Basalt Cap Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

## Drill Log

UTM Easting 5	535878	Drill Contractor	Full force Drilling	Pad Number
UTM Northing 5	5686988	Mine Grid E	4576	Start Date May 22, 2007
Elevation (m) 2	2204	Mine Grid N	14100	Finish Date May 24, 2007
UTM Zone 1	10 U	Logged By	H. Samson	Reclaim Date
Datum N	NAD 83 Canada	Core Type/Size	NQ2	Log Date May 25, 2007

Length (m)	191.10	Target	
Azimuth	130		
Dip	-50		
		-	
		Stopped for:	

Result

0	4.20		Casing/Rubbly Core
			Drill casing and rubbly core. No bedrock.
4.20	6.00	bs	Basalt
			Son all all and all all all all all all all all all al
			Strongly weathered unit, likely a basalt; however difficult to absolutely identify due to strong, near surficial weathering to a brownish grey colour. Weathering obscures all primary compositions and mineralogies. Texturally, unit is vesicular, further indicating a basaltic lithology.
6.00	53.95	ps	Oxidized Soil
			Intensely oxidized and limonite stained soil unit. Unit contains up to several cm-size lithic fragmentstowards the base. Lower contact is gradational and difficult to determine due to intense weathering.44.5049.60Interval with peanut butter type clay cement.
53.95	82.80	and	Upper 'Andesite' Unit



Green to light green, to greenish-grey Upper Andesite. This flow is likely of the Redbird member. Unit is actually dacitic in composition; (however, is referred to as andesite in all previous reports and maps). Unit is porphyritic plagioclase-rich dacite. Medium-grained, chalky plagioclase-feldspar phenocrysts comprise 20-30% of the rock. Plagioclase phenocrysts are up to 4mm and are commonly anhedral with rarely-commonly occurring equant and lath-shaped, euhedral crystals. Fine-medium grained, +/- chloritized hornblende phenocrysts also occur abundantly. Hornblende phenocrysts are dominantly anhedral. Throughout the unit, there are rare locally to abundant autoclastic breccia and up to lapilli-size lithic fragments. Lithic fragments consist of granodiorite. Weak hematite alteration of groundmass occurs rarely to commonly, interstitially to lapillis and in groundmass. Pervasive chlorite+/-epidote alteration of phenocrysts, groundmass, and lapillis, possibly suggesting regional propylitic alteration. Additionally, unit is weakly to locally strongly clay altered, indicating local argillic alteration. Rarely occurring, up to cm-size white calcite replacements. <1%, narrow quartz-calcite veins at varying degrees to CA. Up to several metre intervals of strong oxidation and limonite stain in the upper part of the unit. <<1% pyrite as disseminations.



53.95 62.40

Strongly oxidized and limonite stained upper interval of dacite. Groundmass is stained to an orange-red colour. Common clay alteration of fractures. Interval is unsilicified.



62.40 80.60 Decrease in oxidation and limonite stain of unit. Oxidation and stain is weak to locally strong and patchy. Unoxidized groundmass is grey to greenish-grey. Strong clay alteration of fractures. Interval is unsilicified.

80.60 82.80 ALTEREED HW to main quartz veins. This interval is the alteration zone of the of the vein structure. The hanging wall to the vein is weakly to strongly oxidized with oxidation increasing towards the first main vein intercept. Oxidized core is a tan-orange colour and groundmass is +/- blood-red hematite altered and weakly silicified. In the HW, up to cm-thick, vuggy quartz>hematite veins occur at 40-50 deg to CA. Inside the vugs are coxcomb quartz crystals. Sulfide concentration increases to 2-3% in the vicinity of the first vein. HW is moderately to strongly fractured with minor intervals of rubbly core. Sample #36338, 36339,

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ba	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
80.60	81.75	1.15	36338	<2	34	3.5	18	12	92	0.36	762	24	0.01
81.75	82.80	1.05	36339	4	37	29	455	18	81	0.15	983	47	0.18

82.80 83.05 QV Primary vein intercept.



First main quartz vein intersection. The first main vein intercept is a ~20 cm thick, opaque, white quartz>>hematite vein. Within the opage, white veins are translucent, well-formed, up to 2 cm size quartz crystals. Blood-red hematite rims lines the edges of the vein. Unidentified, very fine-grained to fine-grained blackish-grey sulfides comprise 1-2% of the vein. Very fine-grained to fine-grained visible gold

#### (likely?) also occurs. Sample #36340.



@ 82.95 m depth

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ba	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
82.80	83.05	0.25	36340	9	32	148	67	52	43	0.04	59	<4	31.26

### 86.85 and Upper 'Andesite' Unit

Interval between 2 main quartz veins. There is a second white quartz vein intersection further down in the interval.

#### 86.85 87.15 QV Second main quartz vein intersection.

The second vein intersection consists of an ~ 20 cm thick, rubbly, opaque, white quartz vein. In between the two veins, the core is strongly oxidized to a tanorange colour and is moderately to strongly silicified. There are abundantly occurring, +/- vuggy quartz>hematite veins and several, up to 20 cm thick intervals of intensely silicified, quartz-cemented stockwork crackle breccias (SBS). Sample #36341, 36342, 36343, 36344, 36345, 36346.



Second main quartz vein intersection

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
83.05	83.55	0.50	36341	6	125	22	175	23	152	0.31	784	13	2.28
83.55	84.55	1.00	36342	9	108	10	245	27	114	0.30	810	<4	1.08
84.55	85.22	0.67	36343	2	114	32	98	17	94	0.40	900	178	0.24
85.22	85.83	0.61	36344	<2	19	0.8	27	14	72	0.30	570	10	0.27
85.83	86.85	1.02	36345	<2	22	5.7	35	8	73	0.34	733	17	0.09
86.85	87.15	0.30	36346	<2	23	7.3	28	15	43	0.20	378	<4	2.82

#### 87.15 191.10 and Upper 'Andesite' Unit

83.05



87.15 89.76 ALTERED FW to quartz veins. The footwall to the to vein intersections is weakly to moderately oxidized to a tan-orange color with oxidation decreasing with depth from lower vein intercept. +/- Vuggy quartz>hematite veins occur rarely to commonly and there is a 5-7 cm thick SBS interval. Sample #36347, 36348

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
87.15	87.98	0.83	36347	<2	19	3.1	42	7	86	0.36	794	<4	0.27
87.98	89.76	1.78	36348	<2	15	<.5	55	12	109	0.33	843	8	0.03

89.76 94.40 Interval below footwall to vein. Groundmass is weakly hematite altered and grey to greenish-grey in colour. Silicification is weak and there are patches of weak oxidation. Clay alteration of fractures. Quartz-hematite veins occur rarely.



94.40	106.45	Green to greenish-grey, weakly hematite-chlorite altered groundmass. Interval is not silicified and is weakly clay altered/possibly argillized. There are commonly occurring, mm to rarely cm-size quartz-calcite replacements throughout this interval. Additionally, interval is locally fragmental, with fragments cemented by a siliceous, grey, very fine-grained to fine-grained material.
106.45	115.70	Unit is similar to above interval, however, there is a decrease in chlorite +/-argillic alteration of groundmass and an increase in hematite-silica alteration. Core is a purplish grey-green colour.
115.70	118.65	Intensely silicified interval with oxidized, vuggy quartz veins and silicified, crackle breccia stockworks (SBS). Interval is not fragmental as previous unit. Oxidized intervals surround quartz veins and SBS intervals and are tan-orange in colour. Quartz veins are white to greyish-white, 5-15 mm thick, occur at

45 to 55 deg to CA, and have vugs filled with coxcomb quartz. SBS intervals are weakly vuggy and up to 20 cm in thickness.

	1	115.70	116.40	Weakly to moderately oxidized interval with up to cm-size, vuggy white quartz veins occurring at 40-50 deg to CA. Sample #36352												
	1	116.40	117.45	Unoxidized to locally weakly oxidized interval. Rare, narrow quartz veins. Strongly to intensely silicified. Sample #36353												
	1	117.45	118.05	5 Moderately oxidized interval with common, a 7 cm quartz veins and up 12 cm SBS interval Sample #36354									cm SBS intervals.			
	118.05 118.65 Moderately oxidized interval with 5 cm thick quartz vein and common, up to cm-size quartz veins. Sample #36355										o cm-size quartz					
From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au			
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt			
115.70	116.40	0.70	36352	<2	185	55.8	18	18	89	0.80	889	>200	0.22			
116.40	117.45	1.05	36353	<2	11	1.2	17	7	79	1.20	669	<4	0.02			
117.45	118.05	0.60	36354	<2	21	3.9	29	12	57	0.25	524	<4	0.58			
118.05	118.65	0.60	36355	<2	12	2.2	137	12	82	0.34	644	<4	0.26			

118.65 124.85

Massive dacite unit. Greyish-purple groundmass is moderately to strongly hematite-silica altered.

124.30 25 cm, purplish-grey clay seam. Minor rubbly core below clay.



#### 124.85 162.15

Decrease in silicification. Groundmass and phenocrysts are +/-, weakly chlorite altered. There are several, up to 1 m long intervals of grey, subtly silicified groundmass in which groundmass and phenocrysts are weakly to moderately chlorite altered.

132.50	133.20	Strongly fractured interval with rubbly core. 5cm thick calcite>quartz replacement.
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144.85 145.05 Purplish-grey clay seam.

124.05

153.10 154.50 weakly to moderately oxidized, strongly fractured interval. Clay alteration of fractures occurs.



162.15 177.80

Strongly to intensely silicified interval of massive dacite. Groundmass is variable in colour from purplish-grey to green to light green. Groundmass and phenocrysts are weakly to moderately, chlorite-hematite altered.

<sup>176.40 177.80</sup> Locally oxidized, strongly fractured interval. Strong clay alteration of fractures. Possible fault zone?



# 177.80191.10Greyish-dark green, massive dacite. Interval is strongly chlorite-silica altered, and is moderately hematite<br/>altered. Commonly occurring, 2-4 mm thick hematite>quartz-calcite veins.

191.10 EOH



### Blackdome Project 2007

Drill Hole Name: B07-16

Area: Basalt Cap Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

### **Drill Log**

UTM Easting 535878	Drill Contractor Full force Drilling	Pad Number
UTM Northing 5686988	Mine Grid E 4576	Start Date May 24, 2007
Elevation (m) 2204	Mine Grid N 14100	Finish Date May 26, 2007
UTM Zone 10 U	Logged By H. Samson	Reclaim Date
Datum NAD 83 Canada	Core Type/Size NQ2	Log Date May 28, 2007

Length (m)		Target	
Azimuth			
Dip	-65		
		-	
		Stopped for:	
Result			

### 0 3.20 Casing/Rubbly Core

### Drill casing/No core

3.20	9.30	bs	Basalt
			Strongly weathered unit, likely a basalt; however difficult to absolutely identify due to strong, near surficial weathering to a brownish-grey. Weathering obscures all primary compositions and mineralogies. Texturally, unit is vesicular, further indicating a basaltic lithology.
			5.18 9.30 Lower interval is intensely stained to a reddish-brown colour; likely to be limonite.
9.30	48.90	ps	Oxidized Soil
			and the the second second second second second
			Contraction of the Contraction o
			Intensely oxidized and limonite stained soil unit. Unit contains up to several cm-size lithic fragments towards the base. Lower contact is sharp.
48.90	148.43	and	Upper 'Andesite' Unit
			AN X P

Green to light green, to greenish-grey Upper Andesite. This flow is likely of the Redbird member. Unit is actually dacitic in composition; (however, is referred to as andesite in all previous reports and maps). Unit is porphyritic plagioclase-rich dacite with hornblende. Medium-grained, chalky plagioclase-feldspar phenocrysts comprise 15-25% of the rock. Medium grained, hornblende phenocrysts comprise 5-10% of the rock. Plagioclase phenocrysts are up to 4mm and are commonly anhedral with rarely-commonly occurring equant and lath-shaped, euhedral crystals. Fine-medium grained, +/- chloritized hornblende phenocrysts also occur abundantly. Hornblende phenocrysts are dominantly anhedral. Throughout the unit, there are rare locally to abundant lithic fragments less than 1 cm in diameter with seldomly occurring larger fragments. Lithic fragments are commonly andesite and rarely granodiorite. Varying degrees of hematite alteration of groundmass occurs throughout the lithology, interstitially to fragments and in groundmass. Chlorite alteration of groundmass occurs throughout, however, it is often negatively correlated to hematite alteration. Chlorite +/-epidote alteration of phenocrysts, groundmass, and fragments, possibly suggesting regional propylitic alteration. Additionally, unit is weakly to locally strongly clay altered, indicating local argillic alteration. Rarely occurring, up to cm-size white calcite replacements. <1%, narrow quartz-calcite veins at varying degrees to CA. Up to several metre intervals of strong oxidation and limonite stain in the upper part of the unit. <<1% pyrite as disseminations.



53.25 Strongly oxidized and limonite stained upper interval of the dacite unit. Groundmass is stained to a brownish-red. Clay alteration is prevalent throughout this interval.



53.25 82.88 Dacite is light grey-purple coloured due to strong hematite alteration of groundmass. Groundmass is unsilicified. The lithology on this interval exhibits a fragmental flow with a highly siliceous, hematite-altered, clayey cement. Chlorite alteration is rare, but preferentially alters hornblende phenocrysts.

48.90

66.76	67.10	Highly fractured, and clayey on this interval
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75.09 76.56 Predominantly highly fractured rock with clay on this interval. Some portions of intact rock remain.



## 82.88 100.00 Groundmass exhibits a moderate chlorite alteration with a subtle hematite alteration. Subtly silicified groundmass on this interval. Significant fracturing on this interval with a siliceous, clayey cement.



100.00127.30Unit is similar to above interval, however, there is a decrease in chlorite +/-argillic alteration of<br/>groundmass and an increase in hematite-silica alteration. Core is a purplish grey-green colour. Core is<br/>highly fractured with some intact stretches. Quartz-Calcite veins up to 3 mm thick occur infrequently on<br/>this interval.

106.23106.72Groundmass is oxidized to orange-yellow colour. Regions adjacent to oxidization are bleached to<br/>light green-grey.

123.64 127.10 Hematite occurs in distinct red bands; up to 6 mm in width. Quartz-hematite vuggy veins on this interval

127.30 130.20 ALTERED HW to vein. The hanging wall contains vuggy quartz-hematite veins up to 4 mm in width. The veins occur at 40-50 deg to the CA and coxcomb quartz crystals are growing in the vugs. HW has sections of strong hematite alteration as well as sections of strong chlorite alteration. Tan orange oxidation occurs in the hanging wall at 127.80 metres and the adjacent groundmass is bleached. The hanging wall is moderately fractured with alternating sections of fragments and intact rock. Sulfides appear to be absent. Samples #36356, 36357

130.20	132.7	5	QV	Primary	y vein interc	ept										
130.20	131.1	0		The inte degrees veins are crystals crackle l	vein intercep rcept is chara to the CA rar e opaque with growing insid preccia struct ent. Sample #	cterize nging i n cm-s de of th ures al	ed by c n widt ize vug hem. T long th	juartz h from gs that The ve	veins o 0.5 ci have o ins for	oriente m to 5 coxcor m stoo	d at 30 cm. 7 nb qua kworl	) The urtz K	xidized	l to an	orangey	y-brown colour.
131.10	132.0	5		<ul> <li>2<sup>nd</sup> main vein intercept. The second main vein intercept has a bleached, hematite-altered groundmass. It is slightly to moderately oxidized to a tan orange colour. This section has predominately thin vuggy quartz veins &lt;0.5 cm with one large 5 cm vuggy quartz vein with well-formed coxcomb quartz crystals. Occurring at 60 degrees to the quartz veins are reddish-purple hematite veins. Again, no visible sulfides are present. Sample #36359</li> <li>3<sup>rd</sup> main vein intercept. Third section of the main vein is moderately oxidized to tan orange colour. Hematite-lined quartz veins 2-4 mm thick run along the core axis in a semi-braided manner. Larger white vuggy quartz veins up to 3 cm thick are found at high angle to CA. Again, the vugs contain well-formed coxcomb quartz crystals.</li> <li>a<sup>rd</sup> 131.00 m depth</li> </ul>												
132.05	132.7	5														
		From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ba	W	Au	

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ba	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
130.2	131.10	0.90	36358	14	21	9.9	441	22	143	0.18	527	4	1.46
131.1	132.05	0.95	36359	<2	49	14	76	9	110	0.35	575	<4	2.49

132.75 148.43 and Upper 'Andesite' Unit

			2			1 1 1 2 A		A.					-Tooler		1000	
						(		K		1	() (R.)			-	1	
132.75	136.8	0	C		er scale vug											tered groundmas o CA. Samples
		From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au	
		m	m	М	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt	
		132.05	132.75	0.70	36360	2	58	35	110	11	95	0.27	431	<4	4.15	
		132.75	134.30	1.55	36361	<2	40	12	38	7	173	0.60	637	<4	0.72	
136.80	148.4	3	S	ame des	scription as	100.00	- 127	.30 exe	cept fo	or epido	ote rep	lacem	ent of	feldsp	ar pheno	crysts.
			14	45.40	145.90		ching. 7									adjacent sections of val at high angles to
148.43		E	ОН													



### Blackdome Project 2007

Drill Hole Name: B07-17

Area: Basalt Cap Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

### **Drill Log**

UTM Easting 535988	Drill Contractor Full force Drilling	Pad Number
UTM Northing 5687161	Mine Grid E 4550	Start Date May 27, 2007
Elevation (m) 2141	Mine Grid N 14303	Finish Date May ?, 2007
UTM Zone 10 U	Logged By H. Samson	Reclaim Date
Datum NAD 83 Canada	Core Type/Size NQ2	Log Date May 29, 2007

Length (m) 246.28 Azimuth 140 Dip -52 Target Number 17 vein continuation to the East of Blackdome Peak.

Stopped for:

Result Intersected alteration zone and likely intercepts of #17 vein.

#### 0 3.00 ovbd Casing/Rubbly Core

Drill casing/No core.

#### 3.00 24.75 ovbd Oxidized, Polymictic Soil



Strongly to intensely oxidized and red, limonite stained unit. Unit is a weakly consolidated, polymictic conglomerate, consisting of commonly occurring, up to several cm-size megaclasts and possible? intervals of limonite-stained, strongly vesicular, pumaceous basalt, as well as smaller clasts of varying other lithologies. Clasts of other lithologies are fine-grained to cg; however, intense limonite stain and oxidation makes lithology and other characteristics difficult to determine. In most areas, basalt is clearly clastic as clast boundaries are visible. However, in other areas, basalt may be continuous and it is possible that these intervals represent distinct flows.

On the whole though, the unit is very crumbly with abundant intervals of rubbly core

#### 24.75 29.10 ovbd Basalt? Dyke



Light grey to grey dyke with a fine-grained to very fine-grained groundmass. May be basaltic in

composition, but it is impossible to determine due to fine-grained nature. Unit is very weakly porphyritic with 3-4%, fine-grained, 1 mm phenocrysts which may be pyroxenes. Pyroxene? phenocrysts are partially to completely weathered out, creating a slightly pocked texture. Upper and lower contacts are difficult to distinguish due to rubbly core at the margins of the flow and in the surrounding soil. <<1% disseminated, very fine-grained pyrite.

#### 29.10 39.50 ovbd Oxidized, Polymictic Soil



Strongly to intensely oxidized and red, limonite stained unit. Unit is a weakly consolidated, polymictic conglomerate, consisting of commonly occurring, up to several cm-size megaclasts and possible? intervals of limonite-stained, strongly vesicular, pumaceous basalt, as well as smaller clasts of varying other lithologies. Clasts of other lithologies are fine-grained to cg; however, intense limonite stain and oxidation makes lithology and other characteristics difficult to determine. In most areas, basalt is clearly clastic as clast boundaries are visible. However, in other areas, basalt may be continuous and it is possible that these intervals represent distinct flows.

On the whole though, the unit is very crumbly with abundant intervals of rubbly core

#### **39.50 53.30 bd Basalt? Dyke**



Light grey to grey dyke with a fine-grained to very fine-grained groundmass. May be basaltic in composition, but it is impossible to determine due to fine-grained nature. Unit is very weakly porphyritic with 3-4%, fine-grained, 1 mm phenocrysts which may be pyroxenes. Pyroxene? phenocrysts are partially to completely weathered out, creating a slightly pocked texture. Upper and lower contacts are difficult to distinguish due to rubbly core at the margins of the flow and in the surrounding soil. <<1% disseminated, very fine-grained pyrite.

53.30 63.80 ps Limonite-Stained Soil



Very poorly consolidated, crumbly, limonite stained, red soil. Soil is intensely weathered obscuring all clasts/fragments. Core is crumbly with poor recovery. Rare megaclasts of resistant, vesicular basalt are present.

63.80 90.53 ps Brown Soil



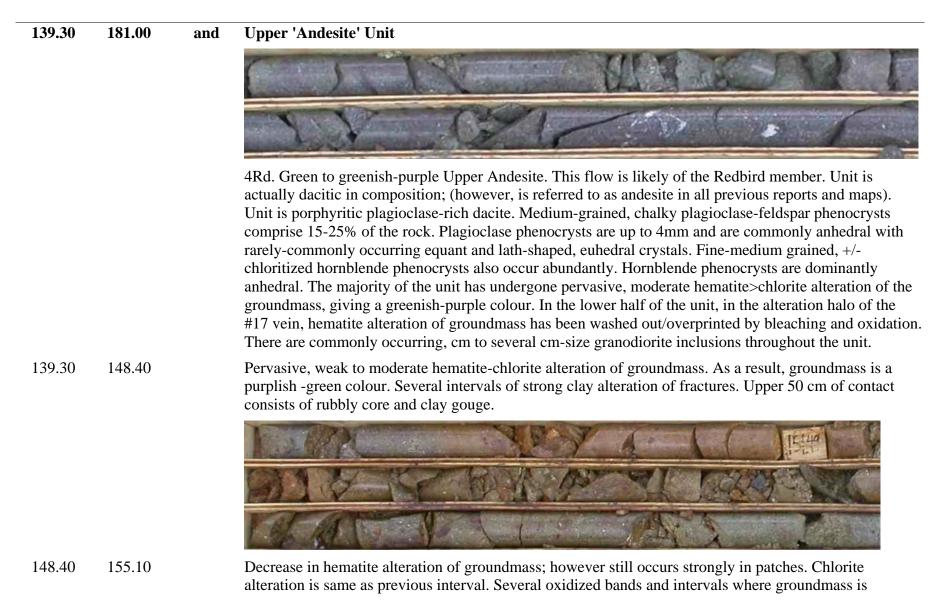
Reddish-brown to brown, poorly consolidated, polymictic soil. The majority of clasts are of vesicular basalt and are up to several cm in size. Other clasts are difficult to distinguish due to strong weathering and brown stain. The interesting thing about this soil section is that there is peanut butter-looking clay? mineral which infills around clasts boundaries and even infills in some basalt vesicles. It has been suggested that this may be associated with a hot-spring environment.

Core is commonly rubbly and recovery is poor.

90.53	130.25	ps	Semi-Consolidated, Polymictic Soil
			All Contraction of the second
			This unit is a poorly sorted semi-consolidated soil/rock? More competent than previous units. Unit contains abundant fine-grained to mg clasts with more rarely occurring cm to several cm-size megaclasts. Clasts have variable composition, consisting of dacites and other lithologies, and are +/- hematite altered. Peanut butter-like clay mineral occurs only rarely and towards the top of the unit.
130.25	131.80	md	Mafic Dyke
			11/1
			Dark grey, possibly basaltic in composition, mafic dyke. Dyke has sharp upper and lower contacts, occurring at 40-50 deg to CA. Groundmass is fine-grained and there are fine-grained, up to 1-2 mm in diameter, clinopyroxene and hornblende? phenocrysts.
131.80	139.30	ps	Semi-Consolidated, Polymictic Soil

This unit is a poorly sorted semi-consolidated soil/rock? More competent than previous units. Unit contains abundant fine-grained to mg clasts with more rarely occurring cm to several cm-size megaclasts. Clasts have variable composition, consisting of dacites and other lithologies, and are +/- hematite altered.

137.50139.30Faulted lower contact of unit. This interval consists of rubbly core and clay gouge that is likely a<br/>fault zone.



moderately to strongly stained to a tan-orange colour. Several, up to m long, oxidized intervals of rubbly core, clay alteration of fractures/clay gouge?

			IT53
155.10	181.00		Pervasive, weak to moderate hematite-chlorite alteration of groundmass. Silicification is subtle and patchy.
181.00	189.47		ALTERED HW to vein zone. This interval is oxidized, stained and/or bleached to a light orange-tan colour. This stain and bleaching overprints/washes out previous hematite alteration in most areas.
189.47	205.90	QV	#17 vein intersection.
			AR DE MARKEN
			There are narrow, mm-size, grey quartz stringers occurring in varying abundance, 1-10%, throughout r interval. These veins are commonly surrounded by up to decimeter size bleached halos. Greenish-blac mm-size chlorite stringers and up to cm-size chlorite disseminations occur commonly.
			<ul> <li>interval. These veins are commonly surrounded by up to decimeter size bleached halos. Greenish-blac mm-size chlorite stringers and up to cm-size chlorite disseminations occur commonly.</li> <li>189.47 190.41 Strongly bleached and oxidized interval with 2 occurrences of cm-size (5?) rubbly, chalky white the stringers of cm-size (5?) rubbly.</li> </ul>
			<ul> <li>interval. These veins are commonly surrounded by up to decimeter size bleached halos. Greenish-blac mm-size chlorite stringers and up to cm-size chlorite disseminations occur commonly.</li> <li>189.47 190.41 Strongly bleached and oxidized interval with 2 occurrences of cm-size (5?) rubbly, chalky whi quartz veins. Sample #36392</li> </ul>
			<ul> <li>interval. These veins are commonly surrounded by up to decimeter size bleached halos. Greenish-blac mm-size chlorite stringers and up to cm-size chlorite disseminations occur commonly.</li> <li>189.47 190.41 Strongly bleached and oxidized interval with 2 occurrences of cm-size (5?) rubbly, chalky whi quartz veins. Sample #36392</li> </ul>

202.15	203.10	Strongly oxidized interval with 3-5%, mm-size chalky-white, +/- vuggy quartz veins and minor crackle breccias. One occurrence of a 5 cm thick, chalky white quartz vein. Sample #36386
203.30	204.80	Strongly oxidized interval with a cm-size rubbly quartz vein followed by strongly clay altered rubbly core/gouge. Sample #36387
204.80	205.90	Strongly oxidized interval with 7-10%, cm-size red hematite>>quartz veins and hematite-quartz cemented crackle breccias. 1-2% sulfides in hematite veins. Sample #36388

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au
m	М	m	Sample ID	ppm	ppm	ppm	gm/mt						
202.15	203.10	0.95	36386	9	24	4	711	40	105	0.13	400	7	0.69
203.30	204.80	1.50	36387	9	30	2.6	760	26	111	0.18	474	5	1.07
204.80	205.90	1.10	36388	6	31	3.2	830	31	125	0.13	549	6	0.53

205.90 210.90 and Upper 'Andesite' Unit



205.90 208.50 ALTERED FW to vein zone. This interval is oxidized, stained and/or bleached to a light orange-tan colour. This stain and bleaching overprints/washes out previous hematite alteration in most areas.

- 205.90
   206.80
   Bleached and strongly fractured/locally rubbly FW to vein zone. Weak to strong oxidation/stain. Trace quartz veins. Sample #36389

   205.90
   200.50
   Mathematical Activity of the strong oxidation and the strong ox
- 207.68 208.50 Moderately oxidized/stained interval with 5-7%, narrow, whitish-grey quartz veins and crackle breccias. Strongly silicified. Sample #36390



#### 208.50 210.90

Decrease in tan-orange, oxidation/bleaching related staining. Rock is moderately to locally strongly chlorite +/- hematite +/- silica altered. Lower contact, over approximately 1.0 m, consists of autoclastic

breccia with several cm-size fragments. Cement between fragments is strongly hematite altered.

210.90	218.54	tuff	Basal Tephra/tuff
			E T MENN MANY A D
			La second and a se
			Possible basal layer to the above Redbird Member. Unit is moderately to locally strongly, pervasively hematite-chlorite-silica altered. Vesicles comprise 5-15% of the rock and are partially to completely filled with quartz +/- calcite.
210.90	215.15		Autoclastic breccia or fragmental tephra. Interval is strongly hematite>chlorite-silica altered. 1-2% disseminated pyrite.
215.15	217.32		Coherent, vesicular, grey to dark grey volcanic (possibly a basal tuff?). Decrease in hematite-chlorite- silica alteration to weak.
217.32	218.54		Clay and minor rubbly core. Unconsolidated. Sample #36391
218.54	222.60	and	Upper 'Andesite'
			4Nd? Likely the Noranda member. Unit is actually dacitic in composition. Groundmass is fine-grained and is strongly chlorite, +/- agrillicly? altered. Unit is porphyritic with chalky white, mg, up to 4mm, feldspar phenocrysts. These phenocrysts comprise 5-15% of the rock and are commonly euhedral and rarely lath-shaped. Additionally, fine-grained hornblende? phenocrysts comprise 2-4% of the rock. Hornblende? phenocrysts are commonly altered to chlorite. Unit is weakly to locally strongly bleached and weakly silicified. Lower contact is difficult to distinguish due to cave in the hole.
222.60	246.28	dac	Tephra and Dacite Flows

		Noranda? Member. Basal unit of the Noranda? Member. Consists of green to maroon tephra and we tuffs with minor occurrences of intercalated, grey to greyish-green, contorted dacite flows. Dacitic f and tuffs are feldspar-phyric with the majority of feldspars being plagioclase. Unit is +/- chlorite-ph with fine-grained chlorite-altered phenocrysts of possibly? hornblende. Plagioclase phenocrysts are commonly euhedral with equant to elongate crystal shape. They are commonly mg, with a diameter 5 mm. Unit is weakly to moderately silicified.	flows nyric
222.60	224.64	Interval of strongly fractured, rubbly core that is strongly clay altered, to gouge? There are 2 clay se 20 and 30 cm, occurring at 224.00 depth, respectively.	eams,
238.60	242.00	Interval is strongly bleached and moderately stained/oxidized to a light tan-orange colour. Bleachin overprints tan-orange colour. Feldspar phenocrysts are altered to a light green, possibly epidote? mi	
246.28		H	



## **Blackdome Project 2007**

Drill Hole Name: B07-18

Area: Basalt Cap Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

### **Drill Log**

UTM Easting 535592	Drill Contractor Full force Drilling	Pad Number
UTM Northing 5687268	Mine Grid E 4177	Start Date June 2, 2007
Elevation (m) 2141	Mine Grid N 14133	Finish Date June 3, 2007
UTM Zone 10 U	Logged By H. Samson	Reclaim Date
Datum NAD 83 Canada	Core Type/Size NQ2	Log Date June 21, 2007

Length (m) 118.26 Azimuth 227.7 Dip -44 Target New vein target, to the northwest of Blackdome Peak

Stopped for: Drilled through target vein structure

Result Intersected unnamed vein to the NW of Blackdome peak at depth 92.68 m.

0.00	3.05		Casing
			No core recovery
3.05	7.62	ovbd	Overburden
			ST.Y ISPAN
7.62	14.60	md	Mafic Dyke
			Fine-grained, dark grey mafic dyke or sill. Groundmass is very fine-grained to fine-grained. Fine-grained, up to 1 mm in diameter pyroxene and hornblende phenocrysts comprise 2-3% of the unit. Pyroxene phenocrysts are + or - altered to epidote. Upper and lower contacts of dyke consists of rubbly core over approximately 30 cm.
14.60	118.26	and	Upper Andesite
			Martin Starting

4Rd. Green to greenish-purple Upper Andesite. This flow is likely of the Redbird member. Unit is

actually dacitic in composition; (however, is referred to as andesite in all previous reports and maps). Unit is porphyritic plagioclase-rich dacite. Medium-grained, chalky plagioclase-feldspar phenocrysts comprise 15-25% of the rock. Plagioclase phenocrysts are up to 4mm and are commonly anhedral with rarely-commonly occurring equant and lath-shaped, euhedral crystals. Fine-medium grained, +/- chloritized hornblende phenocrysts also occur abundantly. Hornblende phenocrysts are dominantly anhedral. Core is pervasively, weakly to strongly chlorite + - hematite altered. There are patches of locally strong argillic alteration. Up to cm-size quartz-calcite replacements occur commonly throughout the unit. Granodiorite inclusions occur in varying proportions and size throughout the core. The majority of the inclusions are 0.5-2 cm in diameter, with rarely occurring decimeter size inclusions.



14.60	23.50	Groundmass exhibits, patchy, locally strong hematite alteration. Weak to moderate chlorite alteration of groundmass and phenocrysts is pervasive. As a result, the rock is a light green colour with patchy, red overprint. Interval is unsilicified. Top 70 cm is strongly oxidized to an orange-red colour.
23.50	24.80	Decrease in hematite alteration of groundmass and increase in clay alteration, possibly indicating argillization of core. Interval is a light green to apple green colour and exhibits, patchy, subtle silicification, and is moderately bleached.
24.80	37.80	Interval is weakly to moderately chlorite-hematite altered. Alteration is patchy and locally pervasive hematite alteration of the groundmass commonly overprints more widespread and consistent chlorite alteration. As a result, colour of core alternates between pale green in hematite-poor regions and greenish-purple in hematite-rich regions. 34.55 34.80 Several, up to 2-3 cm thick quartz-cal +/- chlorite veins occurring at 40 deg to CA.
		54.55 54.60 Several, up to 2-5 cm unck quarz-car +/- emotice vents occurring at +0 deg to CA.
37.80	40.90	Decrease in hematite alteration of groundmass. Groundmass is weakly to moderately bleached and very soft locally, possibly indicating clay alteration of groundmass. One clay altered fracture.



40.90 54.30

Similar to interval form 24.80 to 37.80. However, interval is weakly silicified.

52.60 53.85

20 cm thick, strongly fractured interval with clay alteration of fractures. This zone is surrounded by moderate bleaching, obscuring and/or washing out hematite alteration. Groundmass is light green in colour.



54.3079.50In this interval, hematite alteration of core is pervasive. Groundmass is a slightly greenish, purple colour.<br/>Interval is weakly silicified.

63.40	70.80	Interval containing 2, decimeter-size granodiorite inclusions. There is a strong increase in abundance of mm to cm-size granodiorite inclusions within this interval.
78.10	79.50	Interval of strongly fractured core with minor rubbly intervals. Epidote alteration occurs abundantly along fractures. Additionally, there is a 2 cm thick clay seam.



79.50 87.80

Interval is weakly to moderately chlorite-hematite altered. Alteration is patchy and locally pervasive hematite alteration of the groundmass commonly overprints more widespread and consistent chlorite alteration. As a result, colour of core alternates between pale green in hematite-poor regions and greenish-purple in hematite-rich regions.

86.40 86.60 2 cm thick, white quartz calcite vein occurring at 25 deg to CA.



87.00 87.40 2-3 cm thick quartz-calcite vein occurring at 5 deg to CA.

87.8091.65Decrease in hematite alteration of core to subtle to non-existent. Core is weakly to locally strongly<br/>bleached. Chlorite alteration is moderate and pervasive. Core is also weakly to locally strongly silicified.

91.65 92.68 ALTERED HW. Weakly oxidized, strongly silicified HW to vein. Hanging wall to vein is moderately to strongly bleached and silicified, both increasing towards vein. Additionally, there is oxidation of fractures and rarely occurring, mm-size grey quartz veins that are oxidized. Sample No. BD07-18-1.

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ba	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
91.65	92.68	1.03	BD07-18-1	2	36	1.1	17	15	115	0.62	877	<4	0.09

### 92.68 93.48 QV Main vein intercept.



The vein intercept consists of a strongly to intensely silicified interval with a minor, greyish-white quartz cemented crackle breccia. The footwall to the vein is strongly silicified and weakly oxidized. Oxidation and silicification decrease with distance to vein. Strongly oxidized, rubbly core and crackle box. Sample No. 36396.

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	gm/mt						
92.68	93.48	0.80	36396	2	29	2.8	62	10	103	0.39	799	8	0.56

### 93.48 118.26 and Upper Andesite



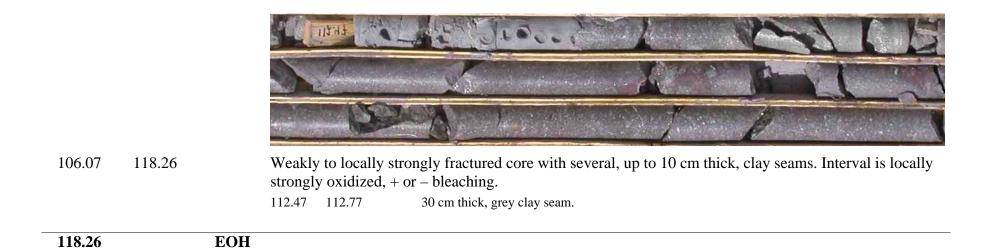
93.48 93.87 ALTERED FW. Strongly oxidized FW to vein. Strongly silicified with weak crackle box. Sample No. 36395

93.87 94.67 Moderately oxidized FW to vein. Strongly silicified with mm-size grey quartz-chlorite veins. Sample No. BD07-18-2

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au
m	m	М	Sample ID	ppm	ppm	ppm	gm/mt						
93.48	93.87	0.39	36395	10	22	3.9	156	9	92	0.37	968	9	1.48
93.87	94.67	0.80	BD07-18-02	7	27	1.9	76	12	88	0.47	820	<4	1.39



# 94.67 106.07 Increase in hematite alteration of groundmass. Similar to 79.50-87.80 m depth. Core is moderately fractured with minor (less than 5 cm thick) clay seams and rubbly core.





# Blackdome Project 2007

Drill Hole Name: B07-19

Area: Basalt Cap Area

Easting and Northing from GPS, referencing to 2006 Orthophoto; Elevation from 2006 DEM plus 6.1m to adjust to Blackdome Mine datum

### **Drill Log**

UTM Easting 536060	Drill Contractor Full Force Drilling	Pad Number
UTM Northing 5687260	Mine Grid E 4542	Start Date June 4, 2007
Elevation (m) 2112	Mine Grid N 14425	Finish Date June 9, 2007
UTM Zone 10 U	Logged By H. Samson	Reclaim Date
Datum NAD 83 Canada	Core Type/Size NQ2	Log Date June 21, 2007

Length (m)		Target	
Azimuth			
Dip	-45.5		
		_	
		Stopped for:	
Result			

0.00	1.00		Casing
			No core recovery
1.00	4.90	ovbd	Overburden
			C MARKEY WALL
			Rubbly, unconsolidated overburden.
4.90	36.75	dac	Dacite
			CASE PALARIE
			ALEN NO TALL
			Feldspar-hornblende phyric, intermediate volcanic. Likely of dacitic composition. Interval is commonly, bleached, oxidized, and silicified in varying degrees, up to intense. These alterations obscure primary textures and compositions in throughout much of the unit. Less bleached and oxidized intervals show a dark, greyish-green, very fine-grained to fine-grained groundmass with fine-grained to medium-grained hornblende and feldspar phenocrysts. Feldspar phenocrysts comprise 5-10% of the rock, are commonly medium-grained, sub- to euhedral, and up to 3 mm in diameter. Hornblende phenocrysts comprise 5-7% of the rock, are anhedral to subhedral, and are up to 2 mm in diameter. Hornblende phenocrysts are +/- altered to chlorite. Much of the unit contains intervals of strongly fractured core.
17.00	23.80		Moderately to locally intensely oxidized and bleached interval. Core is patchily unsilicified to strongly

17.00 23.80 Moderately to locally intensely oxidized and bleached interval. Core is patchily unsilicitied to strongly silicified. Unsilicified areas surround clay altered fractures. Core is moderately to strongly fractured with strong oxidation along fracture planes.

19.7520.55Strongly silicified, strongly to intensely oxidized interval with 3-4%, quartz-hematite veins.<br/>Sample #BD07-19-1

23.80	30.05	Groundmass is pervasively hematite-chlorite altered to a dark brownish-grey colour. Feldspar phenocrysts are chlorite-epidote altered, possibly indicating propylitic alteration of core. Mm size, blood-red hematite veins occur at varying degrees to CA and comprise 3-5% of the rock. Fracture planes are weakly oxidized.
30.05 36.75		Decrease in abundance of hematite veins to rarely occurring. Feldspar phenocrysts are +/- weakly epidote altered.
		30.95 33.00 Several, up to m long intervals of rubbly core and clay gouge. Gouge material is strongly oxidized.

36.75 45.2 and Upp

38.70

Upper 'Andesite' Unit

Redbird member and overlying dacite.



4Rd. Green to greenish-purple Upper Andesite. This flow is likely of the Redbird member. Unit is actually dacitic in composition; (however, is referred to as andesite in all previous reports and maps). Unit is porphyritic plagioclase-rich dacite. Medium-grained, chalky plagioclase-feldspar phenocrysts comprise 15-25% of the rock. Plagioclase phenocrysts are up to 4mm and are commonly anhedral with rarely-commonly occurring equant and lath-shaped, euhedral crystals. Fine-medium grained, +/- chloritized hornblende phenocrysts also occur abundantly. Hornblende phenocrysts are dominantly anhedral. Commonly <1 to 2 cm size granodiorite inclusions with rare, up to decimeter size occurrences. Upper contact of Redbird Member. Interval is fragmental/brecciated with up to decimeter size clasts of

38.70	44.60	Strongly to intensely bleached interval with strong to intense oxidation of fractures and along narrow
		chlorite stringers. Intensely bleached intervals are cream colour. There are commonly occurring, mm size
		chlorite stringers and chlorite disseminations. There are several decimeter size intervals of clay altered
		core, possibly indicating argillic alteration.

- 44.6045.20ALTERED HW. Hanging wall to main intercept. Strongly silicified, 3-5% chalky white quartz stringers.<br/>Sample #36397
- 45.20 46.10 QV Quartz vein intercept.

36.75



Strongly silicified strongly oxidized interval with a 60 cm thick, silicified, quartz-cemented breccia stockwork. Strongly silicified, quartz-cemented breccia stockwork. Quartz cement is chalky white, +/-vuggy. Sample #36398

From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ba	W	Au
m	М	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
45.20	46.10	0.90	36398	4	29	3.80	673	32	105	0.23	461	9	2.75

46.10	169.80	and	Upper	'Andesite'	Unit			
46.10	65.15		-	Weakly to moderately oxidized and bleached interval. Groundmass is a creamy-brown color. Weak, local chlorite alteration/replacement of groundmass and phenocrysts. Non-pervasive. Unit is not silicified.				
65.15	82.90		a brown	nish, pale o	ning and oxidation to subtle to weak. Oxidation of fractures commonly occurs. Core is live green colour. Core is weakly to locally moderately silicified. 1-2%, chalky white, ins occurring at high angle to CA.			
			72.00	74.70	Interval with strongly fractured core and minor clay gouges. Clay gouge and fractures are strongly oxidized. Possible fault zone?			
			77.70	78.00	Several, mm-size, chalky white and one, grey vuggy quartz vein. Additionally, there are 5-7%, blood-red hematite disseminated blebs and veins.			
82.90	96.60			Increase in oxidation to moderate to strong. Core is a orange-brown colour. Mm-size quartz veins occur rarely. Intensely oxidized and clay altered fractures are common.				
96.60	106.50		oblitera ground	Abundant intervals of strong to intense oxidation and bleaching. In these intervals, all structures are obliterated by the intense alteration. The intervals in between are subtly oxidized and silicified and the groundmass is a greyish-purple colour. Rock is unsilicified and is clay altered, possibly suggesting argillic alteration.				



106.50	110.70	Intensely oxidized and bleached interval. Disseminated blebs and fracture fill, blood-red hematite comprises 3-7% of the rock.							
		106.50107.30Blood-red hematite veins and fracture fill in intensely oxidized and bleached rock. Trace sulfides within pyrite. Sample #36399							
		107.30 109.30 Strongly to intensely clay altered, bleached and oxidized interval.							
		109.3010% blood-red hematite as fracture fills and crackle box fill. Sample #36400							
110.70	121.70	Strong decrease in oxidation and bleaching. This interval is sporadically, weakly to moderate bleached to a tan colour and fractures are oxidized and strongly clay altered. There are rarely occurring, cm-size quartz-calcite + or – hematite replacements. Unit is unsilicified and may be weakly argillized.							
121.70	150.00	Groundmass in this interval is dominantly hematite altered to a slightly greenish purple. The are minor, up to meter long intervals where core is moderately chlorite altered and hematite alteration has been washed out. In the chlorite altered intervals, feldspar phenocrysts are + or - weakly epidote altered. Clay alteration of fractures occurs commonly.							
		131.50136.25Possible fault zone marked by several intervals of strongly fractured and rubbly core, and up to 40 cm thick clay gouges. There are commonly occurring bleached halos around clay altered fractures and gouge intervals.							

150.00169.80Interval is weakly to moderately silicified and is not bleached. Groundmass is dark greenish-grey and is<br/>weakly to moderately chlorite + or -hematite + or - rarely epidote altered. There are commonly<br/>occurring, narrow, blood red hematite veins.

169.80	173.50	tuff	<b>Basal Tuff and Breccia</b>
--------	--------	------	-------------------------------



This is a basal unit to the above Redbird Member. Top 1.40 m of unit consists of intercalated, maroon, feldspar-phyric welded tuff and grey dacite flows. The lower part of the unit is strongly bleached and oxidized and consists of what appears to be a polymictic breccia, which may in fact be a tephra unit.

173.50 261.65 and Upper 'Andesite'



4Nd. Noranda Member. Actually dacitic in composition. Unit consists of plagioclase sparse, porphyritic dacite flows. Flows are locally flow banded. Groundmass is very fine-grained to fine-grained, light green to grey, however, in much of the unit, it is locally, weak-moderately hematite altered to greyish-purple to purple. Plagioclase phenocrysts comprise 5-15% of the rocks, are medium-grained (up to 4mm), and are commonly euhedral, with an equant to lath-shaped habit. Unit is weakly chlorite altered and moderately silicified.



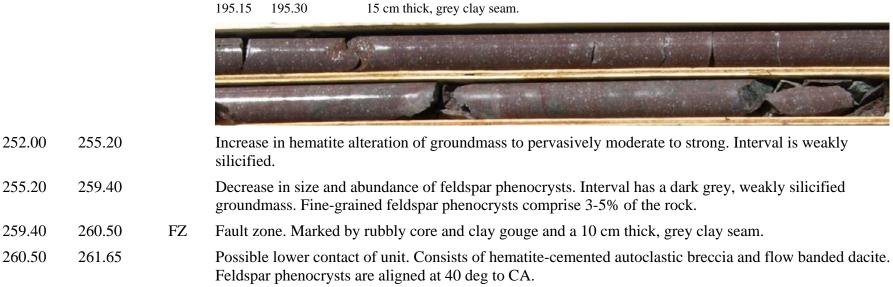
173.50 180.20

Alteration zone of a silicified, slightly quartz veined interval. Interval is pervasively bleached, from weakly to strongly and is moderately to strongly oxidized to a tan-orange colour. Unit is moderately fractured with commonly occurring, strong clay alteration along fractures.

175.87 176.61 Intensely silica flooded interval. Oxidized and bleached. 10%, narrow grey quartz veins and grey quartz replacements. 2-3%, fine-grained disseminated sulfide. Sample No. BD07-19-2

176.61	177.73	Intensely silica flooded interval. Oxidized and bleached. 10%, narrow grey quartz veins and grey quartz replacements. 2-3%, fine-grained disseminated sulfide. Sample No. BD07-19-3
179.75	180.40	Strongly silicified, oxidized and bleached interval containing 3-4%, vuggy grey quartz veins and replacements. Sample No. BD07-19-4

180.20Light green to grey, flow banded dacite flow(s). There are commonly occurring bands of hematite<br/>alteration which overprint core giving the rock a maroon to greyish-maroon colour, depending on the<br/>alteration intensity.



261.65 267.40 and Upper Andesite, 4Rd



4Rd. Likely the Redbird Member. Upper and lower contacts of unit are fault contacts marked by clay gouge and rubbly core. Therefore, may a fault wedge.

			Unit is feldspar>hornblende phyric with medium-grained feldspar and fine-grained hornblende phenocrysts in a green to pale green groundmass. Feldspar phenocrysts comprise 10-20% of the rock. Commonly occurring, up to cm-size granodiorite inclusions. Groundmass is weakly chlorite, +/- subtle hematite altered.
265.50	267.40		Faulted lower contact. Marked by clay gouge and rubbly core.
267.40	270.36	and	Upper Andesite, 4Nd
			4Nd. Likely the Noranda Member. Upper contact is a fault contact. Unit is moderately porphyritic with medium-grained, sub- to euhedral feldspar phenocrysts comprising 5-10% of the rock, + 2-4%, fine-grained hornblende phenocrysts. Weak chlorite alteration of groundmass and phenocrysts. Lower contact is sharp at 40 deg to CA.
270.36	271.80	tuff	Maroon Tuff
			Basal tuff to the Noranda Member? Consists of maroon to greyish-maroon, banded welded-tuff. Feldspar phenocrysts comprise 10-15% of the rock, are commonly euhedral, and are lath shaped. Phenocrysts are commonly aligned in bands.
271.80	298.75	and	Upper Andesite, 4Rd
			Likely the Redbird Member. Unit is feldspar>hornblende phyric with medium-grained feldspar and fine-

			grained hornblende phenocrysts in a green to pale green, to purplish-green groundmass. Feldspar phenocrysts comprise 10-20% of the rock. Commonly occurring, up to cm-size granodiorite inclusions. Groundmass is weakly chlorite altered, +/- subtle to locally moderate and pervasive hematite alteration. Rare to common, up to cm-size granodiorite inclusions. Upper contact is a fault contact. Lower contact is difficult to determine as it is somewhere in the intense alteration zone of the #17 vein. For the basis of this report, it has been placed past the most intense alteration, where it is possible to observe that there are no longer abundant feldspar phenocrysts.
271.80	276.45		Faulted upper contact of unit. Interval consists of strongly fractured rock and several, up to 30 cm intervals of clay gouge.
276.45	281.60		Interval of weak to moderate hematite alteration of groundmass. Groundmass is dark grey to greyish purple, depending on the intensity of the hematite alteration. Weakly silicified.
281.60	295.80		Decrease in hematite alteration to subtle to non-existent. Groundmass is greenish grey to green and is pervasively, moderately chlorite altered. Epidote alteration of groundmass and phenocrysts occurs locally and is weak. Weakly silicified. 284.00 290.40 Several, narrow intervals of clay gouge/clay alteration of fractures and moderately fractured core.
295.80	297.79		Increase in silicification of core to moderate. Subtle oxidation of groundmass and along fractures.
297.79	298.75		ALTERD HW. Alteration zone of #17 vein intercept. This interval stretches across lithological boundaries. The vein alteration zone consists of locally abundant, mm-size, up to 30 cm wide, grey to greyish-white, quartz, +/-vuggy, +/- hematite veins and quartz-cemented breccia stockworks. The alteration halos around strong veining are strongly to intensely silicified and oxidized to a tan-orange colour, +/- locally strong bleaching. In between strongly veined areas are intervals of dark greyish-green, strongly silicified rock which is rarely oxidized to a tan-orange colour. There are also several decimeter size intervals of strongly fractured core, +/- rare clay gouge. 297.79 298.20 1-2 cm thick, grey, vuggy quartz vein. Weakly oxidized alteration halo. Sample #BD07-19-5
298.75	303.80	QV	Quartz vein zone
298.75	299.95	~ '	Intensely silicified interval with +/- vuggy, whitish- grey,up to cm-thick quartz veins and quartz cemented breccia stockwork, +/- minor hematite. Sample #BD07 19-6

Sample #B07-19-06

299.95	300.	84			v oxidized, stro nple #BD07-19	0.	licifie	d inter	val wi	th 3-59	%, mm	i-size g	greyish	white	e quartz v	veins at 40 deg to
300.84	302.	25			rence of a 1 cm derately silicifi		00.		0	ey qua	rtz vei	n at 40	) deg to	o CA.	Interval	s is not oxidized
302.25	303.	.05	Moderately to strongly oxidized and strongly silicified. Sample #BD07-19-9													
303.05	303.	Intensely silicified and oxidized, ~20 cm thick quartz vein. Surrounded by quartz cemented breccia stockwork. 1-2% sulfides, pyrite? in vein. Bottom of vein and below is rubbly. Sample #BD07-19-10														
		From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ва	W	Au	
		m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt	
		298.75	299.95	1.20	BD07-19-6	<2	16	1.1	65	14	65	0.33	690	<4	0.23	
		299.95	300.84	0.89	BD07-19-7	<2	21	1.1	68	15	74	0.37	769	<4	0.26	
	300.84 302.25 1.41 BD07-19-8 <2 17 <.5 10 6 68 0.35 698 <4 0.20															
		302.25	303.05	0.80	BD07-19-9	<2	21	0.8	18	10	68	0.37	681	6	0.22	
	303.05 303.8 0.75 BD07-19-10 <2 25 1.9 96 17 64 0.27 591 9 0.63															

303.80 307.23 and Upper Andesite, 4Rd



303.80 304.40

ALTERED FW to vein. Moderately oxidized, strongly silicified. 3-4%, narrow, greyish-white quartz veins. Sample #BD07-19-11

				-										
From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Ca	Ва	W	Au	
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt	
303.80	304.40	0.60	BD07-19-11	2	21	0.50	62	14	78	0.39	736	10	0.93	
305.78 306.63 Weakly oxidized, strongly silicified interval with mm-size, isolated grey and greyish-white que veins at 35-45 deg to CA. Sample #BD07-19-12												greyish-white quartz		
306.63307.23Strongly oxidized and intensely silicified HW to a second, prim rarely cm-size, vuggy quartz veins. Sample #BD07-19-13										orimary	vein struc	cture. 5-7%, mm to		



Second primary vein intercept. 15 cm thick grey to greyish-white quartz vein surrounded by intensely brecciated rock with quartz cement. Intensely silicified and strongly oxidized. Trace sulfides, small yugs. Sample #BD07-19-14



		14901 00		1/11									
From	То	Width	Elements	Мо	Cu	Ag	As	Sb	V	Са	Ba	W	Au
m	m	m	Sample ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm/mt
307.23	308.03	0.80	BD07-19-14	12	28	4.40	249	52	51	0.13	424	29	1.49

**Upper Andesite**, 4Rd

308.03308.88ALTERED FW to second vein. Intensely oxidized and bleached. Patchy silicification. Likely rehealed,<br/>clay altered fractures. Sample #BD07-19-15308.88309.65Fragmental, grey rock. Weakly silicified and bleached. Sample #B07-19-16

310.00 334.36 and Upper 'Andesite', Lexington

and



310.00320.00Lexington Member. Hornblende-phyric, feldspar-sparse intermediate volcanic flow. Actually of dacitic<br/>composition. Hornblende phenocrysts are fine-grained to medium-grained and comprise 5-7% of the<br/>rock. Groundmass is fine-grained, +/- moderate hematite alteration.

311.60 312.25 One occurrence of a 1 cm thick, vuggy quartz vein at 50 deg to CA. Sample #B07-19-17

308.03

310.00

		312.87	313.68	Strongly oxidized and bleached fragmental interval with silica and hematite fracture-cement. Sample #BD07-19-18
		313.68	314.28	Strongly oxidized and bleached fragmental interval with silica and hematite fracture-cement and 7-10%, cm-thick, vuggy quartz veins. Sample #BD07-19-19
		314.28	315.03	Rubbly and clay altered core with quartz veins. Intensely bleached and oxidized. Sample #BD07- 19-20
		315.03	315.93	Fractured and clay alt core with quartz veins. Intensely bleached and oxidized. Sample #BD07-19-21
		( markete	125	
		13L	17	
		315.93	316.50	Rubbly and clay alt core with quartz veins. Intensely bleached and oxidized. Sample #BD07-19-22
		318.65 319.55	319.55 320.15	Strongly oxidized and silicified interval with 2-3%, grey quartz veins. Sample #BD07-19-23 Strongly oxidized core with rare, narrow quartz veins. Moderately silicified.
		e de la companya de l	1	CONTRACTOR OF STATES
320.00	327.40	Rubbly	core and min	nor clay gouges indicating a fault zone.
			15 A	
		Ć	- 3	
327.40	334.36	Interva purple		e to strong hematite alteration of groundmass and along fractures. Core is a greyish-
334.36	EC	ЭH		

# **APPENDIX D – ATTRIBUTE DRILL LOGS**

#### Sample Description Log

### Blackdome Project 2007

#### Lithology

ovb	overburden	VS	volcaniclastic sediments	
and	andesite	qtz	quartz vein	
dac	dacite	vcbx	volcaniclastic breccia	Hetrolithologic breccia with sediment matrix
rhy	rhyolite flows	bx	breccia	Hydrothermal or tectonic breccia
bas	basalt	vbx	volcanic breccia	Dominantly monolithologic breccia with fine grained lava matrix
lt	lapilli tuff			

#### Mineralization

% py	% pyrite, usually disseminated
Au/electrum	Gold or electrum
Ag min	Silver sulfides, sulfosalts

Alteration		Scale	Texture	Assemblage	Notes
	L1 L2 L3 L4	local (pervasive) local (pervasive) local (pervasive) local (pervasive)	replacement replacement replacement replacement	sericite+clay silica+adularia+sericite clay+/- sericite	bleaching , usually adjacent to qtz +/- adularia veins silicification,flooding, usually peripheral to quartz veining argillization
	L5 L6	local (pervasive) <i>Alteration intensity</i>	vein and replacement	feox hematite +/- silica	oxidation veins, replacement of phenocrysts, reaction rims around phenos, replacement of ground mass
		0 1 2	none subtle weak	3 4 5	moderate strong intense

#### Quartz veining % qtz vn % Quartz veining and Bx matrix

% adularia % Adularia in quartz veins

	-	n Log				Project 2											DDH: B07-
From (m)	To (m)	Sample No.	Description	Lith	% Py	Mineralization Au/electrum		L1	L2	Altera L3	ation L4	L5	L6	% qtz	% Quartz Vein % adularia	Recovery	Competance
0.00	1.2	0	Casing/No core														
1.20	3.8	1	Strongly oxidized, flow-banded rhyolite	Rhy	0.1	0	0	0	1	2	0	4	3	1.0	0.0	Poor-75%	Poor
3.81	10.3	6		Rhy	0.1	0	0	0	1	2	0	4	2	1.0	0.0	Good	Good
10.36	13.4			Rhy	0.1	0	0	0	1	2	0	4	2	1.0	0.0	Good	Good
13.41	15.5			Rhy	0.1	0	0	0	1	2	0	4	2	1.0	0.0	Good	Good
15.55	19.5		Strongly silicified, decrease in oxidation	Rhy	1.5	0	0	0	1	4	0	2	2	2.0	0.0	Good	Good
19.51	21.5			Rhy	1.5	0	0	0	1	4	0	2	2	2.0	0.0	Good	Good
21.50	24.0		Strongly si-hm alt volcanic bx	Vbx	0.1	0	0	1	1	4 4	1 1	4 4	3 3	2.0	0.0	Good	Good
24.08 27.13	27.1 30.1			Vbx Vbx	0.1 0.1	0	0	1	1	4	1	4 3	3	2.0 2.0	0.0 0.0	Good Good	Good Good
30.18	33.2			Vbx	0.1	0	0	1	1	2	1	3	2	2.0	0.0	Good	Good
33.22	36.2			Vbx	0.1	õ	0	1	1	2	1	2	2	2.0	0.0	Good	Good
36.27	40.8			Vbx	0.1	0	0	1	1	1	1	2	2	2.0	0.0	Good	Good
40.84	42.3			Vbx	0.1	0	0	2	1	1	2	2	2	1.0	0.0	Good	Good
42.37	45.4	2		Vbx	0.1	0	0	2	1	0	2	3	2	1.0	0.0	Good	Good
45.42	48.4			Vbx	0.1	0	0	2	1	0	2	2	2	1.0	0.0	Good	Good
48.46	51.5			Vbx	0.1	0	0	2	1	0	2	2	2	1.0	0.0	Good	Good
51.51	54.5			Vbx	0.1	0	0	2	1	0	2	3	2	1.0	0.0	Good	Good
54.56	57.6			Vbx	0.1	0	0	2	1	0	2	2	2	1.0	0.0	Good	Good
57.61 60.66	60.6 64.0			Vbx Vbx	0.1 0.1	0	0	2 2	1 1	0 0	2 2	2 2	2 2	1.0 1.0	0.0 0.0	Good Good	Good Good
64.00	66.7			Vbx Vcbx	0.1	0	0	2	0	0	2	2	2	0.0	0.0	Good	Good
66.75	69.8			Vcbx	0.1	0	0	1	0	0	1	2	1	0.0	0.0	Good	Good
69.80	72.8			Vcbx	0.1	õ	0	1	Ő	Ő	1	1	1	0.0	0.0	Good	Good
72.85	75.9			Vcbx	0.1	0 0	Õ	1	Ő	Ő	1	2	1	0.0	0.0	Mod-75%	Good
75.90	81.5			Vcbx	0.1	0	0	1	0	0	1	1	1	0.0	0.0	Good	Good
81.53	84.7	3		Vcbx	0.1	0	0	1	0	0	1	1	1	0.0	0.0	Good	Good
84.73	88.6	0		Vcbx	0.1	0	0	1	0	0	1	1	1	0.0	0.0	Good	Good
88.60	91.1		Fragmental And flow. Frags are mod hm altd	And	2	0	0	1	0	0	0	0	2	0.1	0.0	Good	Good
91.14	94.0			And	2	0	0	1	0	0	0	0	2	0.1	0.0	Good	Good
94.03	96.3		Dardy was as to black warmin And Dharman attribute an idente	And	2	0	0	1	0	0	0	0	2	0.1	0.0	Good	Good
96.30	100.2		Dark-green to black, porph And. Phenos atld to epidote	And	0.1	0	0	2	0	0	0	0	2	0.0	0.0	Good	Good
100.28 103.33	103.3 106.3			And And	0.1 0.1	0	0	2 2	0	0 0	0 0	0 0	2 2	1.0 0.0	0.0 0.0	Good Good	Good Good
105.33	110.9			And	0.1	0	0	2	0	0	0	0	2	0.0	0.0	Good	Good
110.95	114.0			And	0.1	õ	Ő	2	Ő	Ő	õ	õ	2	0.1	0.0	Good	Good
114.00	117.0			And	0	0	0	2	0	0	0	0	2	0.5	0.0	Good	Good
117.04	120.1			And	0	0	0	2	0	0	0	0	2	0.5	0.0	Good	Good
120.10	123.1	4		And	0	0	0	3	0	0	0	0	2	0.1	0.0	Good	Good
123.14	126.1			And	0	0	0	2	0	0	0	0	2	0.1	0.0	Good	Good
126.19	129.2			And	0	0	0	2	0	1	0	0	2	0.1	0.0	Good	Good
129.24	132.2			And	0	0	0	2	0	2	0	0	2	0.1	0.0	Good	Good
132.28	135.3			And	0 0	0	0	2 2	0	2 2	0 0	0 0	2 3	0.1	0.0	Good	Good
135.33 138.38	138.3 141.4			And And	0	0	0	2	0	2	0	0	3 2	0.0 0.0	0.0 0.0	Good Good	Good Good
141.43	141.4			And	0	0	0	2	0	0	0	0	2	0.0	0.0	Good	Good
144.48	147.5			And	0 0	õ	Ő	2	Ő	Ő	õ	õ	2	0.1	0.0	Good	Good
147.52	151.0			And	0	0	0	2	0	0	0	0	3	1.0	0.0	Good	Good
151.00	153.6		Graded beds and ploymictic breccia	Vcbx	0	0	0	3	0	0	0	0	3	0.1	0.0	Good	Good
153.62	157.6		Megaclasts of andesite	Vcbx	0	0	0	3	0	0	0	0	3	0.1	0.0	Good	Good
157.62	159.7		Fragmental Upper contact	And	0	0	0	4	0	0	0	0	2	1.5	0.0	Good	Good
159.72	162.7		Porphyritic And, phenos replaced with chlorite	And	0	0	0	4	0	0	0	0	2	1.0	0.0	Good	Strong fract
162.76	165.8			And	0	0	0	4	0	0	0	0	3	0.1	0.0	Good	Mod fract
165.80	168.8		Decrease in fract and hm altn	And	0	0	0	3	0	0	0	0	1	1.0	0.0	Good	Good
168.86	171.9			And	0	0	0	3	0	0	0	0	2	1.0	0.0	Good	Good
171.91	174.9			And	0 0	0	0	3 3	1 0	0	0	0 0	1 1	1.0	0.0	Good	Good
174.96 178.00	178.0 181.0			And And	0	0	0	3 3	0	0 2	0 0	0	1	1.5 2.0	0.0 0.0	Good Good	Good Good
181.05	181.0			And	0	0	0	3 2	2	2	0	0	2	2.0 1.0	0.0	Good	Good
184.10	187.1			And	0	0	0	2	0	2	0	0	2	1.0	0.0	Good	Good
		0		And	0 0	õ	Ő	3	•	-	-	-	3		0.0		Good

ample Des		<u> </u>				Project 2										_	<u> </u>
From (m)	To (m)	Sample No.	Description	Lith	% Py	Mineralization Au/electrum	n Ag min.	L1	L2	Altera L3	L4	L5	L6	% qtz	% Quartz Vein % adularia	Recovery	Competance
190.20	193.24			And	0	0	0	4	0	3	0	0	3	2.0	0.0	Good	Good
193.24	196.30			And	0	0	0	3	õ	3	õ	õ	3	1.5	0.0	Good	Good
196.30	199.34			And	ů 0	0	0 0	2	Ő	2	Ő	Õ	2	1.0	0.0	Good	Good
199.34	202.39		Cm-thick white atz vn	And	0 0	0	0 0	2	0	2	0	Ő	2	2.0	0.0	Good	Good
202.39	205.44			And	Ő	0	0 0	2	2	3	Ő	õ	3	2.0	0.0	Good	Good
205.44	208.46			And	0	0	0	2	2	3	0	0	3	0.1	0.0	Good	Good
208.46	211.53			And	0	0	0	2	0	3	0	0	3	0.1	0.0	Good	Good
211.53	214.58		Abundant epidote vns	And	0	0	0	3	1	3	0	0	2	1.0	0.0	Good	Good
214.58	217.63			And	0	0	0	2	2	3	0	0	3	0.1	0.0	Good	Good
217.63	220.68			And	ů 0	0	0 0	2	0	3	Ő	Õ	3	0.1	0.0	Good	Good
220.68	223.72			And	0	0	0	2	0	2	0	0	3	0.5	0.0	Good	Good
223.72	226.77			And	0	0	0	3	2	2	0	0	2	1.0	0.0	Good	Good
226.77	229.82			And	0	0	0	2	1	3	0	0	3	0.1	0.0	Good	Good
229.82	232.87			And	0	0	0	2	1	2	0	0	3	0.1	0.0	Good	Good
232.87	235.92			And	0	0	0	3	1	2	0	0	3	0.1	0.0	Good	Good
235.92	238.96	36251	Inc in bleaching entering HW	And	0	0	0	3	1	3	0	0	3	0.1	0.0	Good	Good
238.96	240.30	36252	···· ··· ·····························	And	0	0	0	4	2	3	0	0	4	1.0	0.0	Good	Good
240.30	242.00	36253	HW of vn. hm-cem crackle bx	And	0	0	0	4	3	5	0	0	4	1.0	0.0	Good	Good
242.00	243.40	36254	Primary vn, silicified breccia stockwork	And	5	0	0	4	3	5	0	0	3	1.0	0.0	Good	Good
243.40	245.06	36255	Hm-cemented crackle breccia footwall	And	3	0	0	4	3	4	0	0	3	7.0	0.0	Good	Good
245.06	246.85	36256	Strongly fractured footwall	And	2	0	0 0	3	3	3	Ő	õ	4	7.0	0.0	Good	Mod fract
246.85	248.50	36257	FW fault zone	And	2	0	Õ	3	3	2	Ő	0	3	3.0	0.0	Good	Poor-fit zone
248.50	250.20	36258		And	1	0	0	4	2	1	õ	õ	2	2.0	0.0	Good	Poor-fit zone
250.20	252.60	36259		And	0	0	0 0	4	2	1	2	Õ	2	2.0	0.0	Good	Poor-flt zone
252.60	254.20	00200		And	0 0	0	0 0	3	3	0 0	1	õ	2	2.0	0.0	Good	Poor-flt zone
254.20	256.15			And	0	0	0	3	2	0	1	0	1	1.0	0.0	Good	Poor-flt zone
256.15	256.65	36260	Hm-py vn	And	3	0	0	3	2	0	1	0	3	3.0	0.0	Good	Mod-minor fl
256.65	257.75	00200	Out of flt zone	And	Ő	0	0 0	3	2	1	1	õ	1	2.0	0.0	Good	Poor-flt zone
257.75	260.30			And	0 0	0	0 0	3	2	1	1	0	2	2.0	0.0	Good	Poor-fit zone
260.30	263.35			And	Ő	0	Ő	3	2	1	1	õ	1	2.0	0.0	Good	Good
263.35	266.40			And	Ő	0	0 0	3	3	1	1	õ	1	3.0	0.0	Good	Mod-minor fl
266.40	269.44			And	0	0	0	3	3	2	0	0	1	2.0	0.0	Good	Mod-minor fl
269.44	272.50			And	0	0	0	3	3	2	0	0	Ó	2.0	0.0	Good	Good
272.50	275.54			And	0	0	0	3	3	2	0	0	0	2.0	0.0	Good	Good
275.54	278.59			And	0	0	0	4	2	1	0	0	1	3.0	0.0	Good	Good
278.59	281.64			And	0	0	0	4	2	1	0	0	2	3.0	0.0	Good	Mod
281.64	284.68			And	0	0	0	4	1	2	0	0	1	3.0	0.0	Good	Mod-minor fl
284.68	287.73			And	0	0	0	3	1	2	0	0	1	2.0	0.0	Good	Good
287.73	290.78		Increase in argillic altn	And	0	0	0	3	1	0	0	0	1	2.0	0.0	Good	Good
290.78	293.83		č	And	0	0	0	3	1	0	0	0	1	2.0	0.0	Good	Good
293.83	296.88			And	0	0	0	3	1	0	0	0	2	2.0	0.0	Good	Good
296.88	299.92			And	0	0	0	3	1	0	0	0	1	2.0	0.0	Good	Good
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#### Sample Description Log

#### Blackdome Project 2007

#### DDH: B07-09

oumpier	Description Log		Dia	CAUO												DDII: DOI 00
From (m)	To (m) Sample No.	Description	Lith	% Py	Mineralizatio Au/electrum		14	L2	Alter L3	ration L4	L5	L6	% % qtz	Quartz Vein % adularia	Recovery	Competence
• • •	• • •	•				Ag min.	L1						•			Description of the stiffs
0.75	3.96	Strongly oxidized, limonite stain	Rhy	1	0	0	1	0	1	0	4	2	1.0	0.0	Mod-75%	Poor-strong fract/flt
3.96	7.01		Rhy	1	0	0	1	0	2	0	3	2	2.0	0.0	Good	Poor-strong fract/flt
7.01	10.06	Flow banded rhy	Rhy	1	0	0	1	0	3	0	3	3	2.0	0.0	Good	Mod-facturing
10.06	13.11		Rhy	1	0	0	1	0	3	0	3	3	1.0	0.0	Good	Mod-facturing
13.11	16.15		Rhy	2	0	0	1	0	4	0	2	3	1.0	0.0	Good	Mod-facturing
16.15	19.20		Rhy	2	0	0	1	0	3	0	3	3	1.0	0.0	Good	Good
19.20	22.24		Rhy	2	0	0	1	0	4	0	4	4	1.0	0.0	Good	Good
22.24	25.30		Rhy	2	0	0	1	0	4	0	4	4	2.0	0.0	Good	Good
25.30	28.35		Rhy	2	0	0	1	0	3	0	4	3	2.0	0.0	Good	Good
28.35	31.40		Rhy	1	Ő	õ	1	õ	4	õ	3	3	1.0	0.0	Good	Good
31.40	33.45	Increase in si altn and vug occurrence	Rhy	1	0	0	1	0	5	Ő	3	3	1.0	0.0	Good	Good
	37.50	÷		1		0	2	1	5	0	3	5	1.0			
33.45		Intense si-hm altn	Vbx		0	-	-	•						0.0	Good	Good
37.50	40.54		Vbx	0.5	0	0	3	1	4	0	4	4	1.0	0.0	Good	Good
40.54	43.59		Vbx	0.5	0	0	3	1	2	0	2	2	1.0	0.0	Good	Good
43.59	46.63		Vbx	0.5	0	0	3	0	1	1	2	1	1.0	0.0	Good	Mod-flt and fract
46.63	48.16		Vbx	0.5	0	0	3	0	1	1	3	1	1.0	0.0	Good	Good
48.16	51.21		Vbx	0.5	0	0	3	0	1	2	3	1	0.5	0.0	Good	Good
51.21	54.25	Increase in argillic altn	Vbx	1	0	0	4	0	0	2	2	1	0.5	0.0	Good	Good
54.25	56.54		Vbx	0.5	0	0	4	0	0	4	1	1	0.5	0.0	Good	Good
56.54	60.81		Vbx	0.1	0	0	3	0	0	3	2	1	0.5	0.0	Good	Good
60.81	65.84	Decrease in altn	Vbx	0.1	0	0	2	0	0	3	3	2	0.5	0.0	Good	Good
65.84	67.97		Vbx	0.1	0	õ	2	0	0	2	1	2	0.5	0.0	Good	Mod-fit and fract
67.97	71.02		Vbx	0.1	0	0	2	Ő	0	1	1	2	0.5	0.0	Good	Good
71.02	74.07		Vbx Vbx	0.1	0	0	2	0	0	2	2	2	0.5	0.0	Good	
					0	0	2	0	-							Mod-good-fract
74.07	77.11	<b>.</b>	Vbx	0.1	-	-	-	-	1	1	2	3	0.5	0.0	Good	Good
77.11	79.80	Oxidized and fractured at contact	Vbx	0.1	0	0	3	0	0	1	3	2	0.5	0.0	Good	Weak fract
79.80	83.21	Fragmental andesite at UC	And	1	0	0	3	1	1	0	3	4	1.0	0.0	Good	Weak fract
83.21	86.26		And	1	0	0	3	1	1	0	2	3	1.0	0.0	Good	Good
86.26	89.31		And	1	0	0	2	1	1	0	3	2	1.0	0.0	Good	Good
89.31	92.35	Non fragmental andesite	And	1	0	0	3	1	1	0	1	2	1.0	0.0	Good	Good
92.35	95.40	•	And	1	0	0	3	1	1	0	1	2	1.0	0.0	Good	Good
95.40	98.45		And	1	0	0	3	1	1	0	0	2	2.0	0.0	Good	Good
98.45	101.50	Hm vns abundant	And	1	0	0	3	0	1	0	0	4	2.0	0.0	Good	Good
101.50	104.55	Tim vna abundant	And	1	0	0	3	0	1	Ő	Ő	3	1.0	0.0	Good	Good
101.50		Contact with strength north with and asite	And	1	0	0	3	0	0	0	2	2	1.0	0.0		
	107.40	Contact with strongly porphyritic andesite			-	0	-	-							Good	Minor fits-mod
107.40	110.62		And	1	0	•	3	1	0	0	4	1	2.0	0.0	Good	Mod-facturing
110.62	113.69		And	0.5	0	0	4	1	1	1	3	1	2.0	0.0	Good	Mod-facturing
113.69	116.74		And	0.5	0	0	4	0	1	1	2	1	3.0	0.0	Good	Good
116.74	119.76		And	0.5	0	0	4	0	1	1	0	1	1.0	0.0	Good	Good
119.76	122.83		And	0.5	0	0	4	0	1	0	2	1	0.5	0.0	Good	Good
122.83	125.88		And	0.5	0	0	4	0	1	0	1	2	0.5	0.0	Good	Good
125.88	128.93		And	0.5	0	0	3	0	0	0	1	2	0.5	0.0	Good	Good
128.93	131.98		And	0.5	0	0	4	0	0	1	1	1	0.5	0.0	Good	Good
131.98	135.03		And	0.5	0	0	4	0	0	2	1	1	0.5	0.0	Good	Good
135.03	138.35		And	0.5	0	0	4	0	0	4	0	2	1.0	0.0	Good	Good
138.35	141.12	Volcaniclastic breccia w/hm altd clasts.	Vcbx	0.1	0	õ	3	õ	0	1	Ő	2	0.0	0.0	Good	Good
141.12	144.17	Ungraded beds	Vcbx	0.1	0	0	3	0	0	1	0	2	0.0	0.0	Good	Good
		oligiaded beds		0.1	0	0	3	0	0	1	0	2	0.0	0.0		
144.17	147.80	Marship and an and a star	Vcbx				-								Good	Good
147.80	150.27	Weakly chl-phyric andesite	And	0.1	0	0	4	0	0	1	0	0	2.0	0.0	Good	Good
150.27	153.31		And	0.1	0	0	4	0	0	1	0	0	1.0	0.0	Good	Good
153.31	156.36	Increase in epidote replacement phenos	And	0.1	0	0	4	0	0	1	0	1	2.0	0.0	Good	Good
156.36	159.41		And	0.1	0	0	4	0	1	1	0	1	1.0	0.0	Good	Good
159.41	162.46		And	0.1	0	0	4	0	0	1	0	1	2.0	0.0	Good	Good
162.46	165.51		And	0.1	0	0	4	0	0	1	0	1	1.0	0.0	Good	Good
165.51	168.55		And	0.1	0	0	4	0	0	1	0	1	1.0	0.0	Good	Good
168.55	171.60		And	0.1	0	0	4	0	0	1	0	2	2.0	0.0	Good	Good
171.60	174.65		And	0.1	õ	õ	4	ŏ	õ	4	õ	3	1.0	0.0	Good	Good
174.65	177.70		And	0.1	0	Ö	4	Ő	0	1	õ	3	1.0	0.0	Good	Good
174.05	180.75		And	0.1	0	0	4	0	0	3	0	3	1.0	0.0	Good	Good
				0.1	0	0	4	0	2	1	0	1	3.0	0.0		
180.75	183.79	Abodt apidata atz ypa	And			0	4	-	2		-				Good	Good
183.79	186.84	Abndt epidote-qtz vns	And	0.1	0	-		0		1	0	1	5.0	0.0	Good	Good
186.84	189.89		And	0.1	0	0	4	0	3	0	0	1	2.0	0.0	Good	Good
189.89	192.94		And	0.1	0	0	4	0	3	0	0	1	2.0	0.0	Good	Good
192.94	196.00		And	0.1	0	0	4	0	4	0	0	1	2.0	0.0	Good	Good

Sample [	Descriptio	on Log		Bla	ckdo	me Proje	ct 200	7									DDH: B07-09	
						Mineralization	า			Alte	ration			%	Quartz Vein	Recovery	Competence	
From (m)	To (m)	Sample No.	Description	Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia			
196.00	199.40			And	0.1	0	0	4	0	4	0	0	1	3.0	0.0	Good	Good	
199.40	200.35	36261		And	5	0	0	4	0	0	0	0	3	2.0	0.0	Good	Good	
200.35	202.65			And	3	0	0	4	0	0	1	0	3	2.0	0.0	Good	Good	
202.65	205.13			And	2	0	0	4	1	1	1	0	3	2.0	0.0	Good	Good	
205.13	207.70			And	2	0	0	4	1	1	1	0	3	3.0	0.0	Good	Good	
207.70	209.60	36262	Hw altn zone	And	2	0	0	4	1	2	0	0	3	3.0	0.0	Good	Poor, commom fract-fits	
209.60	210.35	36263		And	3	0	0	4	1	3	0	0	3	4.0	0.0	Good	Poor, commom fract-fits	
210.35	211.50	36264		And	3	0	0	4	1	4	0	0	3	4.0	1.0	Good	Poor, commom fract-fits	
211.50	212.55	36266	Primary vn zone	And	5	0	0	4	3	5	0	0	4	10.0	2.0	Good	Poor, commom fract-flts	
212.55	213.80	36267		And	5	0	0	4	3	5	0	0	4	10.0	1.0	Good	Poor, commom fract-fits	
213.80	215.45	36268		And	5	0	0	4	3	4	0	0	4	10.0	0.0	Good	Poor, commom fract-fits	
215.45	216.70	36269	Fw altn zone	And	3	0	0	3	1	4	0	0	4	3.0	0.0	Good	Poor, commom fract-flts	
216.70	218.85	36270		And	2	0	0	3	1	3	0	0	3	3.0	0.0	Good	Poor, commom fract-fits	
218.85	221.80			And	2	0	0	3	1	2	0	0	3	3.0	0.0	Good	Poor, commom fract-fits	
221.80	224.75		Decrease in altn	And	2	0	0	3	0	2	0	0	3	3.0	0.0	Good	Poor, commom fract-flts	
224.75	226.10	36271	Second, strongly silicified intvl	And	3	0	0	4	2	5	0	0	4	10.0	0.0	Good	Poor, commom fract-fits	
226.10	227.30			And	3	0	0	4	2	4	0	0	4	7.0	0.0	Good	Good	
227.30	228.95	36273		And	3	0	0	3	2	4	0	0	4	5.0	0.0	Good	Good	
228.95	231.05			And	2	0	0	3	0	2	0	0	2	3.0	0.0	Good	Good	
231.05	234.09		Abundant, epidote-qtz vns	And	2	0	0	3	0	2	0	0	2	3.0	0.0	Good	Good	
234.09	237.13		· · ·	And	2	0	0	3	0	2	0	0	2	3.0	0.0	Poor-mislatch	Good	
-	~																	

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Sample Description Log Blackdome Project 2007															DDH: B07	
		Bernsteller	1.141	0/ <b>D</b>	Mineralizatio					ration				Quartz Vein	Recovery	Competence
om (m) 0.00	To (m) Sample No. 2.13	Description Casing/no core	Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		
2.13	3.96	Strongly fractures, intensel hm-si altn	Rhy	1	0	0	3	1	5	0	4	4	0.5	0.0	Good	Poor-strongly fracture
3.96	7.01	3,	Rhy	0.5	0	0	3	2	2	0	3	2	0.5	0.0	Good	Moderately fractured
7.01	10.06		Rhy	1	0	0	2	1	4	0	4	4	0.5	0.0	Good	Moderately fractured
10.06	13.11		Rhy	0.5	0	0	3	2	2	1	3	2	0.5	0.0	Good	Poor-strongly fracture
13.11	16.15		Rhy	0.5	0	0	2	1	2	1	3	2	0.5	0.0	Good	Good
16.15	19.20		Rhy	0.5	0	0	2	1	3	1	2	3	0.5	0.0	Good	Good
19.20	22.25		Rhy	0.5	0	0	2	1	2	1	2	1	0.5	0.0	Good	Good
22.25	25.80	Abundt clay altd fractures	Rhy	0.5	0	0	2	1	2	1	2	1	0.5	0.0	Good	Good
22.20	20.00	Volvanic breccia with/rounded class. Strong oxidation and hm-chl		0.0		°,	-	•	-	•	-	·	0.0	0.0	0000	0000
25.80	28.35	atin	Vbx	0.1	0	0	3	0	2	0	5	3	0.0	0.0	Good	Poor-strongly fracture
28.35	31.39		Vbx	0.1	0	õ	4	õ	2	õ	2	3	0.0	0.0	Good	Moderately fracture
31.39	34.44		Vbx	0.1	0	0	3	0	1	2	2	3	0.0	0.0	Good	Good
34.44	37.49		Vbx	0.1	0	õ	2	0	1	2	2	4	0.0	0.0	Good	Mod-good-fractured
37.49	40.54		Vbx	0.1	0	õ	2	0	1	4	2	1	0.0	0.0	Good	Moderately fracture
40.54	43.59	Strong argillic altn	Vbx	0.1	0 0	0	2	Ő	2	2	2	2	0.0	0.0	Good	Good
43.59	46.63		Vbx	0.1	0	0	2	0	1	3	1	2	0.0	0.0	Good	Good
46.63	49.68		Vbx	0.1	0	0	3	0	0	3	2	2	0.0	0.0	Good	Good
40.03			Vbx		0	0	3	0	0	1	2	2	0.0			Good
	52.73	Valeenia eendetena miner Dy electe		0.1		-	4	0	-					0.0	Good	
52.73	55.78	Volcanic sandstone, minor Bx clasts	Vbx	0.1	0	0	-	-	0	1	2	2	0.0	0.0	Good	Good
55.78	58.10	•	Vbx	0.1	0	0	3	0	0	1	3	2	0.0	0.0	Good	Moderately fracture
58.10	61.82	Strongly chl altd, porphyritic andesite	And	0.5	0	0	4	3	0	0	2	1	2.0	0.0	Good	Good
61.82	64.92		And	0.5	0	0	4	3	0	0	2	2	2.0	0.0	Good	Good
64.92	67.97		And	0.5	0	0	3	3	1	0	3	2	2.0	0.0	Good	Good
67.97	71.02		And	0.5	0	0	3	1	1	0	2	2	2.0	0.0	Good	Moderately fracture
71.02	74.07	Inc in si-altn	And	0.5	0	0	2	1	2	0	2	2	2.0	0.0	Good	Good
74.07	77.11	20 cm hm>>qtz vn	And	2	0	0	2	3	2	0	2	2	2.0	0.0	Good	Good
77.11	80.16		And	0.5	0	0	2	1	0	0	3	3	2.0	0.0	Good	Good
80.16	83.21	Inc in hm altn of groundmass	And	0.5	0	0	3	1	0	0	2	3	2.0	0.0	Good	Good
83.21	86.26		And	0.5	0	0	3	2	0	0	3	3	2.0	0.0	Good	Good
86.26	89.31		And	0.5	0	0	4	2	0	0	2	3	1.0	0.0	Good	Good
89.31	92.35		And	0.5	0	0	3	1	0	0	3	3	1.0	0.0	Good	Good
92.35	95.40		And	0.5	0	0	3	1	0	0	3	3	1.0	0.0	Good	Good
95.40	98.45		And	0.5	0	0	3	1	0	0	2	2	1.0	0.0	Good	Good
98.45	101.50		And	0.5	0	0	3	1	0	3	3	1	1.0	0.0	Good	Good
101.50	104.55		And	0.5	0	0	3	1	0	3	4	1	1.0	0.0	Good	Moderately fracture
104.55	107.59		And	0.5	0	0	2	2	1	3	4	1	1.0	0.0	Good	Good
107.59	110.64		And	0.5	0	0	3	2	1	2	3	1	1.0	0.0	Good	Good
110.64	113.69		And	0.5	0	0	3	2	1	1	2	0	2.0	0.0	Good	Good
113.69	116.74		And	0.5	0	0	3	1	1	1	2	0	2.0	0.0	Good	Good
116.74	119.79		And	0.5	0	õ	3	1	1	1	2	õ	2.0	0.0	Good	Minor rubbly core
119.79	122.83		And	0.5	0 0	0	3	1	1	1	0	Ő	1.0	0.0	Good	Good
122.83	125.85		And	0.5	0	0	3	1	1	1	ő	0	1.0	0.0	Good	Minor rubbly core
125.85	134.10	Fault zone	Flt	0.5	0	0	3	0	0	0	Ő	2	1.0	0.0	Good	Poor-flt zone
134.10	138.07	r dur zong	And	0.5	0	0	4	0	0	0	0	2	1.0	0.0	Good	Moderately fracture
	138.07			1	0	0	4	0	1	0	0	2	1.0	0.0	Good	Good
138.07			And		0	0	4	0	1	0	0	2				
141.12	144.17		And	1	0	0	ა ∡	-	-				1.0	0.0	Good	Good Minor rubbly coro
144.17	147.22		And	1		-	4	1 1	2	0	0	1	2.0	0.0	Good	Minor rubbly core
147.22	150.60		And	1	0	0	4		2	0	0	2	3.0	0.0	Good	Good
150.60	152.65 36275	HW altn zone	And	2	0	0	4	1	3	0	1	4	3.0	0.0	Good	Moderately fracture
152.65	154.60 36276		And	3	0	0	4	1	3	0	1	4	3.0	0.0	Good	Moderately fracture
154.60	156.10 36277	<b>.</b>	And	3	0	0	4	1	4	0	0	4	5.0	0.0	Good	Poor-strongly fractu
156.10	157.40 36278	Primary vn zone	And	3	0	0	4	2	4	0	0	4	5.0	0.0	Good	Poor-strongly fractu
157.40	158.35 36279	Primary vn zone	And	5	0	0	4	3	4	0	0	4	20.0	0.0	Good	Poor-strongly fractur
158.35	159.30 36280		And	5	0	0	4	3	5	0	1	4	20.0	0.0	Good	Poor-strongly fractur
159.30	160.90 36281	FW to vn	And	3	0	0	4	2	5	0	0	4	5.0	0.0	Good	Good
160.90	162.65 36282		And	2	0	0	4	1	5	0	0	3	3.0	0.0	Good	Good
162.65	165.51		And	0.5	0	0	3	2	4	2	0	2	2.0	0.0	Good	Good
165.51	168.55		And	0.5	0	0	3	2	4	2	0	3	3.0	0.0	Good	Good
168.55	171.59		And	0.5	0	0	3	2	3	2	0	3	3.0	0.0	Good	Good
171.59	174.65		And	0.5	0	0	3	2	3	3	0	2	2.0	0.0	Good	Good
174.65	177.70		And	0.5	0	0	3	2	2	3	0	2	2.0	0.0	Good	Good
177.70	180.75		And	0.5	0	0	3	1	2	3	0	2	2.0	0.0	Good	Good
180.75	184.85			0.5	0	0	3				0	2	2.0	0.0		Good

Sample D	Description Log		Bla	ckdo	me Proje	ct 200	7									DDH: B07-10
					Mineralization	n			Alte	ration			%	Quartz Vein	Recovery	Competence
From (m)	To (m) Sample No.	Description	Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		
184.85	186.30		And	0.5	0	0	3	0	1	0	0	1	0.0	0.0	Good	Good
186.30	189.89	Poorly sorted breccia	Vcbx	0	0	0	3	0	0	2	0	1	3.0	0.0	Good	Good
189.89	192.94	Fragmental UC	And	0.5	0	0	3	0	4	1	0	1	2.0	0.0	Good	Poor-fltd
192.94	195.99	Flt zone	And	0.5	0	0	3	0	1	1	0	1	2.0	0.0	Good	Good
195.99	198.73	Flt zone	And	0.5	0	0	3	0	1	0	0	2	4.0	0.0	Good	Good
198.73	202.08	Abundant epidote-qtz vns	And	0.5	0	0	3	0	0	0	0	2	4.0	0.0	Good	Good
202.08	205.13		And	0.5	0	0	3	0	0	0	0	2	4.0	0.0	Good	Good
205.13	208.18	Py-rich hm vn	And	2	0	0	3	0	0	0	0	2	4.0	0.0	Good	Good
208.18	211.23		And	2	0	0	3	0	0	0	0	2	3.0	0.0	Good	Good
211.23	214.27		And	2	0	0	3	0	0	0	0	2	1.0	0.0	Good	Good
214.27	217.32		And	0.5	0	0	3	0	0	0	0	2	1.0	0.0	Good	Good
217.32	220.37		And	2	0	0	3	0	0	0	0	2	1.0	0.0	Good	Good
220.37	223.42		And	0.5	0	0	3	0	0	0	0	2	1.0	0.0	Good	Minor rubbly core
223.42	226.47		And	0.5	0	0	2	0	0	0	0	2	2.0	0.0	Good	Good
226.47	229.51		And	0.5	0	0	3	0	0	0	0	2	2.0	0.0	Good	Good
229.51	232.56		And	0.5	0	0	3	0	0	0	0	2	2.0	0.0	Good	Good
232.56	235.61		And	0.5	0	0	3	0	0	0	0	2	2.0	0.0	Good	Good
235.61	238.66	Decrease in propylitic altn, no epidote vns	And	0.1	0	0	3	0	0	0	0	2	2.0	0.0	Good	Minor rubbly core
238.66	241.71		And	0.1	0	0	3	0	0	0	0	2	2.0	0.0	Good	Good
241.71	244.75		And	0.1	0	0	3	0	0	0	0	2	2.0	0.0	Good	Good
244.75	247.80		And	0.1	0	0	3	0	0	0	0	2	2.0	0.0	Good	Good
247.80	250.85		And	0.1	0	0	3	0	0	0	0	2	2.0	0.0	Good	Good
250.85	253.90		And	0.1	0	0	3	0	0	0	0	2	2.0	0.0	Good	Good
253.90	256.95		And	0.1	0	0	2	0	0	0	0	2	2.0	0.0	Good	Good
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From (m) 0.00 1.83 5.60	To (m) Sample No.	Description												
0.00 1.83 5.60	1.83	Description	1 141-	0/ <b>D</b>	Mineralization				ation L4	L5		% Quartz Vein	Recovery	Competence
1.83 5.60		Casing/Rubbly Core	Lith	% Ру	Au/electrum Ag min.	L1	L2	L3	L4	LS	L6	% qtz % adularia	Deer	Poor
5.60		Upper 'Andesite'; Redbird Member	And	0.1		3	0	0	3	5	0	0	Poor Good	Poor Moderately fractured
	5.60 8.23	Opper Andesite, Redbird Member	And	0.1		3	0	0	3	0	0	0	Good	Good
8.23	11.28		And	0.1		3	Ő	õ	3	0	0	0	Good	Good
11.28	14.33		And	0.1		3	õ	Ő	3	Ő	Ő	0	Good	Good
14.33	17.38		And	0.1		3	0	0	2	0	1	0	Good	Good
17.38	20.42		And	0.1		3	0	0	2	0	1	0	Good	Moderately fractured
20.42	23.47		And	0.1		3	0	0	2	4	1	0	Good	Moderately fractured
23.47	28.52		And	0.1		3	0	0	2	4	1	0	Good	Moderately fractured
28.52	31.57		And	0.1		3	0	0	3	1	0	0	Good	Good
31.57	34.61		And	0.1		3	0	0	3	1	0	0	Good	Good
34.61	37.66		And	0.1		3	0	0	3	1	0	0	Good	Good
37.66	40.71		And	0.1		3	0	0	3	1	0	0	Good	Good
40.71	43.75	Oxidized intvls	And	0.1		3	0	0	2	1	0	0	Good	Good
43.75	46.80		And	0.1		3	0	0	2	4	0	0	Good	Good
46.80 49.85	49.85 52.88		And And	0.5 0.5		3 3	0 0	0 0	2 3	4 4	0 1	0 0	Good	Good
49.85 52.88	52.88 55.93	la sus sus in han alta	And	0.5		3	0	0	3	4	2	0	Good	Moderately good with minor fractures Good
52.88 55.93	55.93 58.98	Increase in hm altn	And	0.5		3	0	0	3	0	2	0	Good Good	Good
58.98	66.14	Light-green groundmass	And	0.5		3	0	0	3	0	1	0	Good	Good
66.14	69.19	Light-green groundmass	And	0.5		3	0	0	2	0	2	2	Good	Good
69.19	72.24		And	0.5		3	ő	0	1	2	2	0.5	Good	Good
72.24	75.29		And	0.5		3	Ő	0	1	0	2	0.5	85%	Moderately fractured
75.29	78.34		And	0.5		3	ŏ	õ	1	Ő	2	0.5	75%	Moderately fractured
78.34	81.38		And	0.5		3	õ	0	1	Ő	2	0.5	85%	Moderately rubbly intervals
81.38	84.43		And	0.5		3	õ	õ	1	Ő	2	0.5	Good	Moderately fractured
84.43	87.48		And	0.5		3	0	1	1	0	1	0.5	80%	Moderately fractured
87.48	90.53	Dec in plag pheno abundance	And	0.5		3	0	0	2	0	1	0.5	80%	Moderately fractured
90.53	93.63		And	0.5		3	0	1	1	0	2	0.5	Good	Moderately fractured
93.63	94.25 36321	HW to number 17? vn	And	0.5		3	2	4	0	4	1	10	Good	Moderately fractured and rubbly
94.25	94.90 36322		And	0.5		3	2	4	0	4	1	10	Good	Poor, rubbly vein
94.90	95.35 36323	#17 vn, 20 cm thick	And	0.5		3	2	5	1	4	1	75	Good	Good
95.35	96.00 36324		And	0.5		3	2	4	0	4	1	15	Good	Poor, rubbly vein
96.00	96.62 36325	#17 vn, 15 cm thick	And	0.5		3	2	5	0	4	1	75	Good	Moderately fractured
96.62	97.10 36327	FW to vn	And	0.5		3	2	4	0	4	1	10	Good	Moderately fractured
97.10	97.95 36328		And	0.5		3	2	3	0	3	1	2	Good	Good
97.95	99.00 36332	Unoxidized	And	0.5		3	0	3	0	2	1	1	Good	Poor, rubbly vein
99.00	99.67 36333	Rubbly qtz vn	And	0.5		3	0 0	4	0 0	1 0	1	50	Good	Moderately fractured
99.67 102.71	102.71	Clay agama	And	0.5 0.5		3	0	3 3	0	0	2 2	1 0.5	75% 75%	Poor, rubbly core and vein Poor, rubbly core and vein
	105.76	Clay seams	And			3	0	2	0	0	2	0.5	50%	
106.65 108.10	108.10 36351 108.81	Clay seams and rubbly core Clay seam	And And	0.5 0.5		3	0	2	0	0	2	0.5	Good	Poor, rubbly core and vein Moderately fractured
108.81	111.86	Ciay seam	And	0.5		3	0	2	0	0	3	0.5	Good	Moderately fractured
111.86	114.91		And	0.5		3	Ő	2	Ő	0	3	0.5	Good	Moderately fractured
116.45	117.35 36350	Clay seams and rubbly core	And	0.5		3	Ő	2	Ő	0	3	0.5	Good	Poor-clay seam
117.35	117.95		And	0.5		3	õ	2	Ő	Ő	3	0.5	Good	Good
117.95	121.00	40 cm clay seam	And	0.5		3	0	2	0	0	3	0.5	Good	Good
121.00	124.05		And	0.5		2	0	2	0	0	3	0.5	Good	Poor-rubbly vein
124.05	128.15		And	0.5		2	0	2	0	0	3	0.5	Good	Poor-clay seam
128.15	128.45 36335		And	0.5		2	0	2	0	0	3	0.5	Good	Poor-rubbly and fractured
128.55	128.85 36349	Clay seam	And	0.5		2	0	2	0	0	3	0.5	Good	Good
128.85	130.15	25 cm clay seam	And	0.5		2	0	2	0	0	3	0.5	Good	Good
130.15	133.20	Rubbly fractured core	And	0.5		2	0	2	0	0	3	0.5	Good	Good
133.20	136.55		And	0.5		2	0	2	0	0	3	0.5	Good	Good
136.55	139.29		And	0.5		2	0	2	0	0	3	2	Good	Good
139.29	142.34	Increase in epidote alteration	And	0.5		2	0	3	0	0	3	1	Good	Good
142.34	146.60 147.25 36329	Ovidation and quarter value	And	0.5		2	0	2 3	0 0	0 4	2	1 7	Good	Good
146.60 147.25		Oxidation and quartz veins	And	0.5		2 2	0	3	-	4 1	2	7 1	Good	Good Mederately freetured
147.25 147.75	147.75 36330 148.30 36331	Unoxidized, but with veins Oxidized with guartz veins	And And	0.5 0.5		2	0 0	2	0 0	1 4	2 1	1 5	Good Good	Moderately fractured
147.75	148.30 36331	UNIVIZED WILL YOUS	And	0.5		2	0	2	0	4	3	5 0.5	Good	Moderately fractured Good
148.30	151.50		And	0.5		2	0	2	0	0	3	0.5	Good	Good
154.53	157.58		And	0.5		2	0	2	1	0	2	0.5	Good	Good
157.58	160.63		And	0.5		2	0	2	0	0	2	0.5	Good	Good
160.63	163.68		And	0.5		2	Ő	2	1	0	2	0.5	Good	Good
163.68	166.73		And	0.5		2	ŏ	2	0	Ő	2	0.5	Good	Good

Sample [	ample Description Log Blackdome Project 2007														DDH: B07-12		
						Mineralizatio	n			Alter	ation			%	Quartz Vein	Recovery	Competence
From (m)	To (m) San	nple No.	Description	Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia	•	
166.73	169.78			And	0.5			2	0	2	0	0	2	0.5		Good	Good
169.78	172.82			And	0.5			2	0	2	0	0	2	0.5		Good	Good
172.82	175.87			And	0.5			2	0	2	0	0	2	0.5		Good	Good
175.87	178.92			And	0.5			2	0	2	0	0	2	0.5		Good	Good
178.92	181.96			And	0.5			2	0	2	0	0	2	0.5		Good	Good
181.96	185.01			And	0.5			2	0	2	0	0	2	0.5		Good	Good
185.01	188.06			And	0.5			2	0	2	0	0	2	0.5		Good	Good
188.06	191.10			And	0.5			2	0	2	0	0	3	0.5		Good	Good
191.10	194.15			And	0.5			2	0	3	0	0	3	2		Good	Good
194.15	197.20			And	0.5			2	0	2	0	0	2	1		Good	Good
197.20	200.24			And	0.5			2	0	2	0	1	2	0.5		Good	Good
200.24	203.29		Groundmass changes to light green	And	0.5			2	0	2	0	0	1	0.5		Good	Good
203.29	206.34			And	0.5			2	0	2	0	0	1	0.5		Good	Good
206.34	209.39			And	0.5			2	0	2	0	0	1	2		Good	Good
209.39	212.44		Increase in epidote alteration	And	0.5			2	0	2	1	0	3	1		Good	Good
212.44	215.49			And	0.5			2	0	2	1	0	1	1		Good	Good
215.49	218.53		Increase in hematite alteration	And	0.5			2	0	2	0	0	2	1		Good	Good
218.53	221.58			And	0.5			2	0	2	0	0	3	0.5		Good	Good
221.58	224.63			And	0.5			2	0	2	0	0	3	0.5		Good	Good
224.63	227.67		Increase in epidote alteration, green core	And	0.5			2	0	2	0	0	2	0.5		Good	Good
227.67	231.00		Rubbly, fractured core	And	0.5			2	0	2	0	0	1	0.5		Good	Strongly fractured
231.00	231.85 3	36336	Oxidation and guartz veins	And	0.5			2	0	4	0	3	3	8		Good	Rubbly core
231.85	232.50 3	36337	Oxidation and guartz veins	And	0.5			2	0	3	0	3	1	5		Good	Good
232.50	236.82		·	And	0.5			2	0	2	0	0	3	0.5		Good	Good
236.82	239.87		10 cm clay seam, decrease in epidote alteration	And	0.5			2	0	2	0	0	2	0.5		Good	Good
239.87	242.92		Weakly oxidized, moderately fractured core	And	0.5			2	0	2	0	1	1	0.5		Good	Moderately fractured
242.92	245.98		··· , ··· , ··· , ··· , ··· ·· ·	And	0.5			2	0	2	0	0	2	0.5		Good	Good
245.98	249.02			And	0.5			2	1	2	0	0	2	0.5		Good	Good
249.02	252.07			And	0.5			2	0	2	0	0	1	0.5		Good	Good
252.07	255.12			And	0.5			2	0	2	0	0	1	0.5		Good	Good
255.12	258.17			And	0.5			2	0	2	0	0	1	0.5		Good	Good
258.17	261.22			And	0.5			2	0	2	0	0	1	0.5		Good	Good
261.22	264.27			And	0.5			2	0	2	0	0	1	0.5		Good	Good
264.27	267.31			And	0.5			2	0	2	0	0	1	0.5		Good	Good
267.31	270.36			And	0.5			2	0	2	0	0	1	0.5		Good	Good
270.36	274.02			And	0.5			2	0	2	0	0	1	0.5		Good	Good
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Sample Description Log Blackdome Project 2007																	DDH: B
					Mineralization					ration				Quartz Vein		Recovery	Competence
om (m)	To (m) Sample No		Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		700/	
0.00 5.00	5.00 8.53	Casing/Rubbly Core Redbird Member, rhyelite including plagioglase	And	0.1	0	0	3	0	0	3	1	1	0		0	70% Good	Poor, rubbly Moderately fractured
8.53	11.58	Redbird Member, rhyolite including plagioclase Porphyritic	And	0.1	0	0	3	0	0	3	1	0	0		U	Good	Moderately fractured Good
11.58	14.63	Folphynic	And	0.1	0	0	3	0	0	3	1	0	0			Good	Good
14.63	17.68		And	0.1	õ	ő	3	0	õ	3	1	Ő	0			Good	Good
17.68	20.73		And	0.1	õ	ő	3	0	õ	3	1	1	0			Good	Good
20.73	23.78		And	0.1	0	0	3	0	0	3	1	1	0			Good	Good
23.78	26.83	Vuggy Quartz vein	And	0.1	0	0	3	0	0	3	1	0	3			Good	Good
26.83	29.88	667	And	0.1	0	0	3	0	0	3	1	0	0			Good	Good
29.88	34.35		And	0.1	0	0	3	0	0	3	1	0	0			Good	Good
34.35	37.30	Fault zone	And	0.1	0	0	3	0	0	3	1	1	0			Good	Poor, fault zone
37.30	42.01	New unit, hematite alteration. Less lapilli and Rhyolite	And	0.1	0	0	3	0	0	2	3	1	0			Good	Good
42.01	47.10	Small faults	And	0.1	0	0	3	0	0	2	3	1	0			Good	Medium-small faults
47.10	51.21		And	0.1	0	0	3	0	0	2	3	1	0			Good	Good
51.21	54.25		And	0.1	0	0	3	0	0	2	3	1	0			Good	Good
54.25	57.30		And	0.1	0	0	3	0	0	2	3	0	0			Good	Good
57.30	61.87		And	0.1	0	0	3	0	0	2	3	0	0			Good	Good
61.87	64.92		And	0.1	0	0	3	0	0	2	3	0	0			Good	Good
64.92	69.00		And	0.1	0	0	3	0	0	2	3	0	0			Good	Good
69.00	74.06	Redbird member – 15% -25 plagioclase phenocrysts%	And	0.1	0	0	3	0	0	3	2	0	0			Good	Moderately fractured
74.06	77.11		And	0.1	0	0	3	0	0	3	2	0	0			Good	Good
77.11	80.15		And	0.1	0	0	3	0	0	3	1	0	0			Good	Good
80.15	83.21		And	0.1	0	0	3	0	0	3	1	1	0			Good	Good
83.21 86.26	86.26 89.31		And And	0.1 0.1	0	0	3 3	0	0	3 3	1	1 0	0			Good Good	Good Good
80.20 89.31	92.35		And	0.1	0	0	3	0	0	3	0	1	0			Good	Good
92.35	95.40		And	0.1	0	0	3	0	0	3	0	1	0			Good	Good
95.40	98.45		And	0.1	0	0	3	0	0	3	0	1	0			Good	Good
98.45	101.49		And	0.1	õ	ő	3	0	õ	3	Ő	1	0			Good	Good
101.49	104.54		And	0.1	0	Ő	3	0	Ő	3	0	1	0			Good	Moderately fractured
104.54	107.45		And	0.1	õ	õ	3	Ő	õ	3	1	1	10			Good	Moderately fractured
107.45	107.65	Fragmented upper contact	And	0.1	0	0	3	0	2	0	3	0	0			Good	Moderately fractured
107.65	108.65 36302	5	And	0.1	0	0	3	0	2	0	3	0	0			Good	Moderately fractured
108.65	109.45 36283	Oxidized, white quartz veins	And	0.1	0	0	3	2	4	0	4	0	0			Good	Moderately fractured
109.45	110.63		And	0.1	0	0	3	0	3	0	3	0	0			Good	Strongly fractured and faulte
110.63	113.68		And	0.1	0	0	3	0	2	0	1	0	0			Good	Strongly fractured and faulter
113.68	116.73		And	0.1	0	0	3	0	2	0	1	0	0			Good	Good
116.73	118.95		And	0.1	0	0	3	0	2	0	1	0	0			Good	Good
118.95	122.83	Redbird member	And	0.1	0	0	3	0	0	2	1	0	0			Good	Good
122.83	125.88		And	0.1	0	0	3	0	0	2	1	0	1			Good	Good
125.88	128.93		And	0.1	0	0	3	0	0	2	1	0	0			Good	Good
128.93	131.35	Fragmented basal unit	And	0.1	0	0	3	0	2	0	1	3	0			Good	Good
131.35	135.02	Naranda member – 5%-15%	And Desits Flam	0.1	0	0	3	0	2 3	0	1	3	0			Good	Strongly fractured and faulte
135.02	137.35	Fragmented and Bx lower interval	Dacite Flow	0.1	0	0	3 3	0	3	0	1 1	4 4	0			Good	Good
137.35 141.12	141.12 144.17	Intercalated lapilli tuffs and dacite flows	Dacite Flow Dacite Flow	0.1 0.1	0	0	3	0	3	0	1	4	0			Good Good	Good Good
141.12	144.17		Dacite Flow	0.1	0	0	3	0	2	0	3	3	0			Good	Good
147.22	150.20		Dacite Flow	0.1	0	0	3	0	2	0	1	1	0			Good	Good
150.20	153.32		Dacite Flow	0.1	0	0	3	0	2	0	1	1	0			Good	Good
153.32	156.36		Dacite Flow	0.1	0	0	3	0	2	Ő	1	1	0			Good	Good
156.36	159.41		Dacite Flow	0.1	0	0	3	0	2	Ő	1	1	0			Good	Good
159.41	162.46		Dacite Flow	0.1	0	0	3	0	3	Ő	3	1	0			Good	Poor, fractured and faulted
162.46	165.51		Dacite Flow	0.1	õ	Ő	3	0	3	õ	1	1	0			Good	Good
165.51	168.56		Dacite Flow	0.1	Ő	õ	3	Ő	2	Ő	1	1	Ő			Good	Good
168.56	171.60		Dacite Flow	0.1	0	0	3	0	2	0	3	1	0			Good	Poor, fault zone
171.60	174.65		Dacite Flow	0.1	0	0	3	0	2	0	1	1	0			Good	Poor, fault zone
174.65	177.70		Dacite Flow	0.1	0	0	3	0	2	0	2	1	0			Good	Good
177.70	182.00	Fault zone	Dacite Flow	0.1	0	0	3	0	2	0	2	1	0			Good	Good
182.00	183.45	Faulted upper contact	And	0.1	0	0	3	2	2	0	3	1	1			Good	Good
183.45	184.45 36284	Hanging wall to 17 vein	And	0.1	0	0	3	2	2	0	3	1	2			Good	Good
184.45	185.32 36285	Weak to strong oxidation	And	0.1	0	0	3	2	2	0	3	1	3			Good	Good
185.32	186.30 36286		And	0.1	0	0	3	2	2	0	3	1	3			Good	Good
186.30	187.20 36287		And	0.1	0	0	3	3	2	0	3	1	3			Good	Good
187.20	188.75 36288	2-3 cm Quartz vein at 50 degrees to core axis	And	0.5	0	0	3	3	3	0	4	1	4			Good	Good
	190.00 36289		And	0.1	0	0	3	2	2	0	3	1	3			Good	Good
188.75 190.00	191.51 36290		And	0.5	0	0	3	3	3	0	3					Good	Good

## Sample Description Log

## Blackdome Project 2007

DDH: B07-13

						Mineralization	ı			Altera	ation			%	Quartz Vein	Recovery	Competence
From (m)	To (m)	Sample No.	Description	Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		
191.51	192.00	36291	17 vein, rubbly quartz and SBS	And	2	0	0	3	3	5	0	5	1	5		Good	Good
192.00	192.70	36292	18 vein, rubbly quartz and SBS	And	2	0	0	3	3	5	0	5	1	30		Good	Poor - rubbly core
192.70	194.00	36293	Footwall to vein	And	0.5	0	0	3	2	3	0	3	1	30		Good	Poor - rubbly core
194.00	194.56	36294		And	0.5	0	0	3	2	2	0	3	1	5		Good	Good
194.56	195.25	36301		And	1	0	0	3	2	2	0	3	1	5		Good	Good
195.25	196.85	36295		And	0.5	0	0	4	2	2	0	3	1	3		Good	Good
196.85	198.10	36296		And	0.1	0	0	3	2	2	0	2	1	3		Good	Good
198.10	199.40	36297		And	0.1	0	0	3	2	2	0	3	1	15		Good	Moderately fractured
199.40	200.50	36298	SBS and 1-3 cm quartz veins	And	2	0	0	3	3	5	0	2	2	15		Good	Moderately fractured
200.50	201.65	36299	SBS and 1-3 cm quartz veins	And	2	0	0	3	3	5	0	3	2	2		Good	Good
201.65	203.10	36300		And	0.1	0	0	3	1	1	0	3	1	2		Good	Good
203.10	206.00			And	0.1	0	0	3	0	1	0	1	1	5		Good	Good
206.00	208.20		Purple hematite welded tuff and BXS	Welded Tuff	0.1	0	0	2	0	3	0	1	4	5		Good	Good
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						Mineralizatior				Alte	ration				Quartz Vein	Recovery	Competence
om (m)		ample No.	Description	Lith	% Ру	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		
0.00	3.15		Casing/Rubbly core	Dec		0	•	2	~	2	0	~	4			0	D
3.15 7.01	7.01 10.06		1870 Member-Lower 'Andesite'	Dac	0.1 0.1	0	0	2	0 0	2	0	2 3	4	1.0 1.0	0.0	Good	Poor-fltd Poor-fltd
10.06	10.06			Dac Dac	0.1	0	0	3	0	2	0	3 1	3	2.0	0.0 0.0	Good Good	Good
14.63	14.63			Dac	0.1	0	0	3	0	2	0	1	4	2.0	0.0	Good	Mod-minor fract
14.63	21.10		Francisco III	Dac	0.1	0	0	3	3	2	1	3	4	1.0	0.0		
21.10			Fragmental LC		0.1	0	0	3	3 2	0	2	3	3 1	2.0	0.0	Good	Mod-minor clays
	25.30			Dac (Tuff)		0	0	3 2	2	1	2	4 5	1			Good	Mod-minor clays
25.30	27.25	00004		Dac (Tuff)	0.1	0	0	2		1	2		1	2.0	0.0	Good	Mod-minor fract
27.25 28.90	28.90 31.20	36304	Clay seam w/qtz	Dac (Tuff) Dac (Tuff)	0.1 0.1	0	0	2	3 2	4	2	5 5	1	5.0 2.0	0.0 0.0	Good Good	Poor-clay gouge Good
		36305	Interprety alligitized attach hm comparted fractures			0	0	3	2	4 5	2	5	2	7.0			
31.20 32.65	32.65 34.50	36305	Intensely silicified, qtz-chl-hm cemented fractures	Dac (Tuff)	0.5 0.5	0	0	2	2	5	2	4	2	5.0	0.0 0.0	Good Good	Good
32.05	34.50	30300	Same	Dac (Tuff) Dac (Tuff)	0.5	0	0	2	2	1	2	4	2	1.0	0.0	Good	Good Good
34.50 37.49	40.54			( )	0.1	0	0	2	1	0	2	4	2	1.0	0.0		
40.54	40.54		By and faulted lower contact, inc in hm alth	Dac (Tuff)		0	0	3	1	1	2	4	4	1.0	0.0	Good	Poor-fit, clay gouge
			Bx and faulted lower contact, inc in hm alth	Dac (Tuff)	0.1	0	0	3 2	0	3	2	4	4			Good	Poor-flt, clay gouge
43.70 46.63	46.63 49.68		Oriented hbl lenses, possibly flow banding	Dac (Flow)	0.1 0.1	0	0	2	1	3	0	4	3	5.0 7.0	0.0 0.0	Good Good	Good
46.63 49.68	49.68 52.73			Dac (Flow)			0	2	0	4	0	0	4	7.0 3.0	0.0	Good	Good
49.68 52.73				Dac (Flow)	0.1 0.1	0 0	0	4	0	4	0	0	4	3.0 3.0	0.0	Good Good	Good
52.73 55.78	55.78 58.82			Dac (Flow) Dac (Flow)	0.1	0	0	4	0	4	0	0	4	3.0 3.0	0.0	Good	Good Good
						0	0	3	0	4	0		4	3.0 3.0			
58.82 61.87	61.87 64.92			Dac (Flow) Dac (Flow)	0.1 0.1	0	0	3	0	4	0	0	4	3.0 3.0	0.0 0.0	Good Good	Good Good
61.87 64.92	64.92 67.97			Dac (Flow) Dac (Flow)	0.1	0	0	3	0	4	0	0	4	3.0 3.0	0.0	Good Good	Good
67.97	71.02				0.1	0	0	3	0	4	0	0	4	3.0	0.0		
71.02	71.02			Dac (Flow) Dac (Flow)	0.1	0	0	3	0	4	0	0	4	3.0	0.0	Good Good	Good Good
74.07	74.07			Dac (Flow)	0.1	0	0	3	0	4	0	0	4	3.0	0.0	Good	Good
74.07	80.55			Dac (Flow)	0.1	0	0	3	0	4	0	0	4	3.0	0.0	Good	Good
80.55	83.21		Gradational UC over 60 cm			0	0	2	0	1	0	0	3	0.1	0.0	Good	
83.21	85.65		Fragmental volcanic tephra	Tephra Tephra	0.1 0.1	0	0	2	0	1	0	0	3	0.1	0.0	Good	Poor-clay gouge & fra Poor-clay gouge & fra
85.65	88.70		Fragmental volcanic teprita	Tephra	0.1	0	0	2	0	1	0	0	3	0.1	0.0	Good	Good
88.70	92.50		Valaania tankra and arov daaita flowa	•	0.1	0	0	2	0	1	0	0	3	0.1	0.0	Good	
	92.50 95.40		Volcanic tephra and grey dacite flows	Tephra		0	0	2	0	2	0	0	3	0.1			Good
92.50 95.40	95.40 98.45			Tephra & Dac		0	0	2	0	2	0	0	3	0.5	0.0 0.0	Good Good	Good Good
95.40 98.45	98.45 101.50			Tephra & Dac Tephra & Dac		0	0	2	0	2	0	0	4	0.5	0.0	Good	Good
96.45 101.50	101.50			Tephra & Dac		0	0	2	0	3	0	0	4	0.5	0.0	Good	Good
101.50	104.55			Tephra & Dac		0	0	2	0	3	0	0	4	0.5	0.0	Good	Poor-clay gouge & rub
104.00	100.00		Clay, gouge?	Tephra & Dac		0	0	2	Ő	0	0	1	4	0.5	0.0	Good	Poor-clay gouge & rub
100.00	109.12	36307	Qtz vn	Dac	0.5	0	0	3	0	1	0	1	0	50.0	0.0	Good	Poor-rubble
109.62	113.69	30307	Grey-green, chl-phyric andesite	Dac	0.5	0	0	3	0	1	0	1	0	0.1	0.0	Good	Poor-frac & rubble
113.69	115.09		Grey-green, chi-phyric andesite	Dac	0.1	0	0	3	0	1	0	1	0	0.1	0.0	Good	Good
116.74	119.78			Dac	0.1	Ő	0	3	Ő	1	0	1	1	1.0	0.0	Good	Good
119.78	122.83			Dac	0.1	0	0	3	0	1	0	1	1	1.0	0.0	Good	Good
122.83	125.45		Intvl with rubbly core	Dac	0.1	0	0	3	1	1	Ő	2	2	1.0	0.0	Good	Mod-small rubble
125.45	126.20	36308	HW to main vn	Dac	0.5	0	0	3	2	4	Ő	3	1	5.0	0.0	Good	Good
125.45	120.20	36309	Silicified Breccia Stockwork (SBS) intvl	Dac	2.0	0	0	3	2	5	0	5	1	30.0	0.0	Good	Poor-rubble
127.00	127.90	36310	SBS	Dac	1.0	0	0	3	3	5	0	5	1	30.0	0.0	Good	Good
127.90	128.93	36311	FW to vn, oxidized with qtz vns	Dac	0.5	0	0	3	2	5	0	4	1	5.0	0.0	Good	Mod-clay intvl (small
128.93	130.65	36312	FW to vn, oxidized with qtz vns	Dac	0.5	õ	0	3	3	4	Ő	3	1	4.0	0.0	Good	Good
130.65	131.85	36313	FW to vn, oxidized with qtz vns	Dac	0.1	õ	Ő	3	2	4	ŏ	4	1	3.0	0.0	Good	Good
131.85	136.45		··· , · ····· ··· ··· ···	Dac	0.1	0	õ	3	2	4	Ő	2	1	3.0	0.0	Good	Good
136.45	137.40	36314		Welded Tuff	0.1	0	0 0	3	2	4	Ő	3	2	4.0	0.0	Good	Good
137.40	140.95		Hm altd, silicified welded tuff and grey dacite	Welded Tuff	0.1	Ő	0	2	0	4	ŏ	3	4	1.0	0.0	Good	Good
140.95	142.15	36315		Welded Tuff	0.1	0	0	2	0	4	0	1	4	1.0	0.0	Good	Good
142.15	145.55			Welded Tuff	0.1	0	0	2	0	4	0	1	4	1.0	0.0	Good	Good
45.55	146.10	36316	Oxidized atz veins	Welded Tuff	1.0	0	0	2	0	5	0	4	4	5.0	0.0	Good	Good
146.10	148.74		н	Welded Tuff	0.1	0	Ő	2	õ	4	Ő	1	4	1.0	0.0	Good	Good
48.74	152.60			Welded Tuff	0.1	0	0	2	0	4	0	1	4	1.0	0.0	Good	Good
152.60	154.60	36317	Oxidized qtz veins	Welded Tuff	2.0	0	0	2	0	5	0	4	4	3.0	0.0	Good	Mod-fract
154.60	159.41		ц	Welded Tuff	0.1	0	õ	2	Õ	4	Ő	1	4	1.0	0.0	Good	Strong-fract
59.41	163.98			Welded Tuff	0.1	0	0 0	2	Ő	3	Ő	1	4	1.0	0.0	Good	Good
163.98	167.03			Welded Tuff	0.1	0	õ	2	Õ	3	Ő	1	4	1.0	0.0	Good	Good
167.03	170.08			Welded Tuff	0.1	0	0	2	0	3	0	1	4	1.0	0.0	Good	Good
170.08	173.80			Welded Tuff	0.1	0	õ	2	Õ	3	Ő	1	3	1.0	0.0	Good	Good
	174.80	36318	HW to vn	Welded Tuff	0.5	0	0 0	2	Ő	4	Ő	4	2	4.0	0.0	Good	Mod-fract
173.80																	

Sample Description Log		Blac	ckdo	me Proje	ect 200	)7									DDH: B07-14
				Mineralizatio	n			Alte	ration			%	Quartz Vein	Recovery	Competence
From (m) To (m) Sample No.	Description	Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		
175.80 176.80 36320 FW to vn		Welded Tuff	0.5	0	0	2	0	4	0	4	2	4.0	0.0	Good	Mod-fract
176.80 180.75		Welded Tuff	0.1	0	0	2	0	3	0	3	3	1.0	0.0	Good	Mod-fract
EOH															

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DDH: B												107	jeci zi	lome Pro	Iachu	DI			LUY	escriptio	
Competence	Recovery		ıartz Vein	% Q	ç			on	eratio	Alte				Mineralization							
			6 adularia	tz	% qtz	L6	L5	_4	L4	L3	L2	L1	Ag min.	Au/electrum	% Py		escription Lith	•	ample No.	. ,	m (m)
Good	Good																	Casing/Rubbly Core		4.20	0.00
Moderate	Good	0			0	0	3		0	0	0	0	0	0	0.0		Basa	Weathered basalt		6.00	4.20
Poor	Good				0	0	5		0	0	0	0	0	0	0		Soil	Oxidized/stained paleosoil		53.95	6.00
Weak, fractured	Good				0	0	5	0	0	0	0	2	0	0	0.5	e	Dacit	Redbird member		57.00	53.95
Weak, fractured	Good				0	0	4	0	0	0	0	2	0	0	0.5	e	Dacit	Strongly oxidized upper core		60.04	57.00
Good	Good			5	0.5	1	4	0	0	0	0	2	0	0	0.5	e	Dacit			63.09	60.04
Good	Good			5	0.5	1	3	0	0	0	0	2	0	0	0.5	e	Dacit			66.14	63.09
Good	Good			5	0.5	2	2	0	0	0	0	2	0	0	0.5	e	Dacit			69.18	66.14
Good	Good			5	0.5	2	3	0	0	0	0	2	0	0	0.5	e	Dacit			72.23	69.18
Good	Good			5	0.5	2	4	0	0	0	0	2	0	0	0.5	e	Dacit			75.28	72.23
Weak, fractured	Good			5	0.5	2	2	0	0	1	0	2	0	0	0.5	e	Dacit			78.33	75.28
Weak, fractured	Good			5	0.5	2	2	0	0	1	0	2	0	0	0.5	e	Dacit			80.60	78.33
Strongly fractured	Good				2	3	4	0	0	3	0	2	0	0	1	e	Dacit	Hanging wall	36338	81.75	80.60
Strongly fractured	Good				3	4	4	0	0	4	0	2	0	0	2	e	Dacit	Oxidized hanging wall	36339	82.80	81.75
Moderately fractured	Good				75	3	4		0	5	0	2	0	0	4		Dacit	Main vein	36340	83.05	82.80
Moderately fractured	Good				10	3	4		Ő	4	2	2	0	0 0	2			SBS and cm-mm sized veins	36341	83.55	83.05
Weak, fractured	Good				10	3	4	-	0	4	2	2	0	0	2			SBS and cm-mm sized veins	36342	84.55	83.55
Weak, fractured	Good				10	3	4		0	4	2	2	0	0	2			SBS and cm-mm sized veins	36343	85.22	84.55
	Good				10	3	4		0	4	2	2	0	0	2				36343	85.83	85.22
Weak, fractured							•				-		-	-				SBS and cm-mm sized veins			
Good	Good				10	3	4		0	4	2	2	0	0	2			SBS and cm-mm sized veins	36345	86.85	85.83
Poor, rubbly vein	Good				40	4	4		0	5	2	2	0	0	4		Dacit	Main vein	36346	87.15	86.85
Strongly fractured	Good				3	3	4		0	2	1	2	0	0	2		Dacit	Footwall to vein	36347	87.98	87.15
Moderately fractured	Good				2	2	3		0	2	0	2	0	0	0.5		Dacit		36348	89.76	87.98
Clay-altered, fractured - we	Good				1	2	2		0	2	0	2	0	0	0.5		Dacit			93.58	89.76
Good	Good				2	2	0		0	1	0	2	0	0	0.5		Dacit			96.63	93.58
Good	Good				2	2	0	-	0	1	0	2	0	0	0.5	e	Dacit			99.68	96.63
Good	Good				2	2	0	-	0	1	0	2	0	0	0.5		Dacit			102.71	99.68
Good	Good				2	3	0	1	1	1	0	2	0	0	0.5	e	Dacit			105.76	102.71
Good	Good				1	3	0	1	1	2	0	1	0	0	0.5	e	Dacit			108.81	105.76
Good	Good				1	3	0	1	1	2	0	1	0	0	0.5	e	Dacit			111.85	108.81
Good	Good				1	2	0	0	0	3	0	1	0	0	1	e	Dacit			115.70	111.85
Good	Good				10	2	3	0	0	5	1	1	0	0	3	e	B Dacit	Oxidized, vuggy quartz veins	36352	116.40	115.70
Good	Good				2	2	1	0	0	5	0	1	0	0	3	e	Dacit		36353	117.45	116.40
Good	Good				25	2	3	0	0	5	1	1	0	0	3	e	Dacit	SBS and veins	36354	118.05	117.45
Good	Good				25	3	3	0	0	5	1	1	0	0	3	e	Dacit	5 cm quartz veins	36355	118.65	118.05
Good	Good				1	3	0	0	0	4	0	1	0	0	1		Dacit			121.00	118.65
Good	Good				1	2	0	0	0	4	0	2	0	0	0.5		Dacit			124.05	121.00
Clay and rubbly core	Good			5	0.5	2	0	0	0	2	0	2	0	0	0.5	e	Dacit			127.10	124.05
Minor rubbly core	Good				0.5	2	0		0	2	0	3	0	0	0.5		Dacit			130.14	127.10
Good	Good				0.5	2	0	1	1	2	0	2	0	0	0.5		Dacit			133.19	130.14
Good	Good				0.5	2	õ	1	1	2	0	2	õ	0	0.5		Dacit			136.24	133.19
Good	Good				0.5	2	õ		1	2	0	2	Ő	0	0.5		Dacit			139.29	136.24
Good	Good				0.5	2	õ	•	0	2	ñ	3	õ	0	0.5		Dacit			142.34	139.29
Good	Good				0.5	2	0		0	2	0	3	0	0	0.5		Dacit			145.38	142.34
Minor clay seam	Good				0.5	2	0		1	2	õ	2	0	0 0	0.5		Dacit			148.42	145.38
Good	Good				0.5	2	0		0	2	0	2	0	0	0.5		Dacit			151.47	148.42
Good	Good				0.5	2	2		0	2	0	2	0	0	0.5		Dacit			154.52	151.47
Strongly fractured	Good				0.5	2	2		1	2	0	2	0	0	0.5		Dacit			154.52	151.47
Good	Good				0.5	2	0		1	2	0	2	0	0	0.5		Dacit			160.61	154.52
					0.5	1	0		1		0	2	0	0	0.5						
Good	Good									2 5	-	2	0	-			Dacit			163.66	60.61
Poor, fractured and faulted	Good				0.5	1	0		0		0			0	0.5		Dacit			166.70	63.66
Good	Good				0.5	2	0		0	5	0	2	0	0	0.5		Dacit			169.75	66.70
Good	Good				0.5	2	0		0	4	0	3	0	0	0.5		Dacit			172.80	169.75
Good	Good				0.5	3	0		0	4	0	3	0	0	0.5		Dacit			175.84	72.80
Strongly fractured	Good				0.5	3	2		0	4	0	4	0	0	0.5		Dacit			178.89	75.84
Good	Good				0.5	3	0		0	4	0	4	0	0	0.5		Dacit			181.94	178.89
Good	Good				0.5	3	0		0	4	0	4	0	0	0.5		Dacit			184.99	81.94
Good	Good			5	0.5	3	0	0	0	4	0	4	0	0	0.1	e	Dacit			188.04 191.10	184.99
Good	Good				0.5	3	0		0	4	0	4	0	0	0.1		Dacit				188.04

	•	<u> </u>				ckdome			-								
						Mineralizatio					ration				Quartz Vein	Recovery	Competence
From (m)	To (m)	Sample No.	Description	Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		
0.00	3.20		Casing/Rubbly Core									_					
3.20	9.30		Oxidized and stained vesicular basalt	Basalt	0.0	0	0	0	0	0	0	5	0	0	(	0 Moderate	Moderate
9.30	48.90		Oxidized, silty-clayey soil	Soil	0	0	0	0	0	0	0	5	0	0		Not good	Not good
48.90	53.95		Plagioclase > dacite flow redbird	Dacite	0.5	0	0	2	0	0	0	4	3	0		Good	Moderate, clay-alterated fractures
53.95	56.99		Hematite alterated cement between fragments	Dacite	0.5	0	0	2	0	0	0	0	3	0		Good	Weak, fractured
56.99	60.04			Dacite	0.5	0	0	2	0	0	0	0	3	0.5		Good	Good
60.04	64.62			Dacite	0.5	0	0	2	0	0	0	0	2	0.5		Good	Good
64.62	69.19		Oxidized and clay-altered interval	Dacite	0.5	0	0	2	0	0	0	2	2	0.5		Good	Good
69.19	72.24			Dacite	0.5	0	0	2	0	0	0	0	2	0.5		Good	Good
72.24	75.28			Dacite	0.5	0	0	2	0	1	0	0	2	0.5		Good	Moderate, clay-alterated fractures
75.28	78.32		Strongly fractured with clay-alteration	Dacite	0.5	0	0	2	0	1	0	0	3	0.5		Good	Good
78.32	81.38			Dacite	0.5	0	0	2	0	1	0	2	2	0.5		Good	Good
81.38	84.43			Dacite	0.5	0	0	3	0	1	0	0	2	3		Good	Good
84.43	87.47		Increase in chlorite alteration, decrease in hematite	Dacite	0.5	0	0	3	0	0	0	0	1	75		Good	Good
87.47	90.52		Gray, silicious cement between fragments	Dacite	0.5	0	0	3	0	0	0	0	1	10		Good	Good
90.52	93.57			Dacite	0.5	0	0	3	0	0	0	0	1	10		Good	Good
93.57	96.62			Dacite	0.5	0	0	3	0	1	0	0	1	10		Good	Good
96.62	99.66			Dacite	0.5	0	0	3	0	1	0	0	1	10		Good	Good
99.66	102.71		Increase in silica, hematite alteration. Increasing epidote alteration	Dacite	0.5	0	0	3	0	2	0	0	3	10		Good	Good
102.71	105.76			Dacite	0.5	0	0	3	0	2	0	0	3	40		Good	Moderate – fractured
105.76	108.81		Rare, oxidized, vuggy quartz veins	Dacite	0.5	0	0	2	0	3	0	2	2	3		Good	Good
108.81	111.86			Dacite	0.5	0	0	2	0	2	0	1	2	2		Good	Good
111.86	114.91			Dacite	0.5	0	0	2	0	2	0	1	2	1		Good	Good
114.91	117.96			Dacite	0.5	0	0	2	0	3	0	0	2	2		Good	Good
117.96	121.00		Strongly silicified	Dacite	0.5	0	0	2	0	4	0	0	2	2		Good	Poor – rubbly core intervals
121.00	124.05		Increase in hematite > quartz veins	Dacite	0.5	0	0	3	2	4	0	1	2	2		Good	Good
124.05	127.30			Dacite	0.5	0	0	3	0	4	0	0	3	2		Good	Good
127.30	129.00		Hanging wall; thin vuggy quartz veins	Dacite	0.5	0	0	2	1	4	1	2	2	1		Good	Good
129.00	130.20	36357	Hanging wall; thin vuggy quartz veins	Dacite	0.5	0	0	2	1	4	1	2	1	1		Good	Good
130.20	131.10	36358	Main vein intercept – quartz veins and SBS	Dacite	1	0	0	2	3	5	1	5	1	1		Good	Moderately fractured
131.10	132.05		Quartz veins and SBS	Dacite	1	0	0	2	3	5	1	4	1	10		Good	Moderately fractured
132.05	132.75		Quartz veins and SBS	Dacite	1	0	0	2	3	5	1	4	1	2		Good	Moderately fractured
132.75	134.30		Footwall to vein – up to 3 cm thick vuggy quartz veins	Dacite	0.5	0	0	2	2	4	1	3	1	25		Good	Good
134.30	135.55			Dacite	0.5	0	0	2	1	4	1	1	2	25		Good	Good
135.55	136.80		Oxidation decreasing	Dacite	0.5	0	0	2	1	4	1	1	2	1		Good	Good
136.80	139.29		Increase in epidote alteration	Dacite	0.5	0	0	2	0	4	1	0	2	1		Good	Good
139.29	142.33			Dacite	0.5	0	0	3	0	4	1	0	2	0.5		Good	Strongly fractured and rubbly core
142.33	145.45			Dacite	0.5	0	0	3	0	4	1	0	2	0.5		Good	Good
145.45	146.15		Oxidized quartz veins	Dacite	0.5	0	0	3	3	5	1	4	2	0.5		Good	Good
146.15	148.43			Dacite	0.5	0	0	3	0	4	1	0	2	0.5		Good	Good

EOH

	Description Log			Biut	ckdome		1 20	07								DDH:
om (m)	To (m) Sample No.	Description	Lith	% Py	Mineralizatio Au/electrum		L1	L2	Alter L3	ration L4	L5	L6	% qtz	6 Quartz Vein % adularia	Recovery	Competence
0.00	3.00	Casing/Rubbly Core		<i>,</i> ,,,		, ig							70 q.=	,o uuununu		
3.00	21.75	Oxidized, polymictic soil		0.0	0	0	0	0	0	0	0	0	0	0.0	Cave	Cave
21.75	24.75	Rubbly, poorly consolidated		0	0	0	0	0	0	0	5	0	0	0.0	50-75%	Poor
24.75	29.10	Basalt dike, more competent		0.5	0	0	0	0	0	0	0	0	0	0.0	Good	Moderately fractures
29.10	39.50	Same as 21.75-29.1		0	0	0	0	0	0	0	0	0	0	0.0	Good	Moderately good
39.50	53.30	Basalt dike, more competent		0.5	0	0	0	0	1	0	0	0	0	0.0	50-75%	Poor
53.30	63.80	Intensely limonite stained. Very poorly consolidated		0	0	0	0	0	0	0	5	0	0	0.0	Good	Moderately consolidated
63.80	90.53	Pumaceous basalt clasts, abundant peanut butter-like cement		0	0	0	0	0	0	0	4	0	0	0.0	Good	Moderately consolidated
90.53	93.57	Polymictic conglomerate, better consolidation		0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
93.57	96.62			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
96.62	99.67			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
99.67	102.72			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
102.72	105.77			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
105.77	108.81			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
08.81	111.86			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
11.86	114.91			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
14.91	117.95			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
17.95	121.00			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
21.00	124.05			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
24.05	127.10			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
27.10	130.25			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
30.25	131.80	Dark grey, fg mafic dyke	Maf. Dyke	0	0	0	0	0	0	0	1	0	0	0.0	Good	Moderately consolidated
31.80	136.25			0	0	0	0	0	0	0	2	0	0	0.0	Good	Moderately consolidated
36.25	139.30	Faulted? Lower contact		0	0	0	0	0	0	0	2	0	0	0.0	Good	Poor-rubbly with gouge
39.30	142.34	Redbird Member	4Rd	0.5	0	0	3	0	2	0	0	3	0.5	0.0	Good	Poor-fltd UC
142.34	145.39		4Rd	0.5	0	0	3	0	2	0	0	3	0.5	0.0	Good	Poor-rubbly core and gouge intvi
145.39	148.44		4Rd	0.5	0	0	3 3	0	2	0	0 2	3	1	0.0	Good	Moderately fractured
48.44	151.49		4Rd	0.5	0	0	-	-	1	0	_	1	0.5	0.0	Good	Moderately fractured
51.49	154.53 157.58		4Rd 4Rd	0.5 0.5	0	0	3 2	2 2	1	0	3	1	0.5 0.5	0.0 0.0	Good	Fractured and rubbly core Gouge and weakly fractured
154.53 157.58	167.58		4Rd 4Rd	0.5	0	0	2	2	1	0	2	2 3	0.5	0.0	Good Good	Moderately fractured
160.63	163.68		4Rd 4Rd	0.5	0	0	2	0	1	0	1	3	1	0.0	Good	Moderately fractured
163.68	166.73		4Rd 4Rd	0.5	0	0	2	0	1	0	1	3	1	0.0	Good	Good
166.73	169.77		4Rd 4Rd	0.5	0	0	2	1	1	0	2	2	1	0.0	Good	Moderately fractured
169.77	172.82		4Rd 4Rd	0.5	0	0	2	0	1	0	1	3	1	0.0	Good	Good
172.82	175.87		4Rd 4Rd	0.5	0	0	2	2	1	1	1	2	1	0.0	Good	Minor clay alth of fracs
175.87	178.91		4Rd 4Rd	0.5	0	0	2	2	1	1	1	2	1	0.0	Good	Moderately fractured
178.91	181.96		4Rd 4Rd	0.5	0	0	2	1	1	1	2	2	1	0.0	Good	Good
181.96	185.01	Start of altn zone of 17 vn. Oxidized/stained core	4Rd 4Rd	0.5	0	0	2	1	1	0	2	1	1	0.0	Good	Good
185.01	189.47	Start of alth 2016 of 17 VII. Oxidized/staried core	4Rd	0.5	0	0	2	2	1	0	3	1	1	0.0	Good	Good
189.47	190.41 36392	Cm-size, rubbly qtz vns	4Rd	0.5	0	0	1	2	2	0	4	1	7	0.0	Good	Good
191.00	191.73 36393		4Rd	0.5	õ	Ő	1	2	2	ő	4	1	1	0.0	Good	Rubbly core
191.73	193.75		4Rd	0.5	0 0	õ	1	2	1	ő	3	1	2	0.0	Good	Minor rubbly core
193.75	194.57 36394	Silicified crackle bx	4Rd	0.5	õ	0	1	2	3	0	4	1	5	0.0	Good	Good
94.57	197.21		4Rd	0.5	õ	Ő	1	2	1	ő	2	1	2	0.0	Good	Good
97.21	201.05		4Rd	0.5	0	0	1	2	1	0	4	1	2	0.0	Good	Moderately fractured
01.05	202.15 36385	Otz vns and crackle bx	4Rd	0.5	0	0	2	3	4	0	4	1	7	0.0	Good	Moderately fractured
02.15	203.10 36386	Mm-size vns and bxs	4Rd	0.5	õ	0	2	3	4	0	4	1	5	0.0	Good	Moderately fractured
03.30	204.80 36387	One, cm-size qtz vn	4Rd	0.5	0	0	2	3	2	0	4	1	5	0.0	Good	Moderately fractured
204.80	205.90 36388	qtz>>hm vns with sulfides	4Rd	2	õ	Ö	1	2	3	Ő	4	1	10	0.0	Good	Rubbly core
205.90	206.80 36389	Fw to 17 vn zone	4Rd	0.5	õ	õ	1	2	4	Ő	3	2	2	0.0	Good	Rubbly and/or gouge core intvls
206.80	207.68		4Rd	0.5	õ	Ő	1	1	1	Ő	2	2	2	0.0	Good	Rubbly and/or gouge core intels
207.68	208.50 36390	Silicified crackle bx	4Rd	0.5	õ	õ	1	1	4	Ő	3	2	6	0.0	Good	Rubbly and/or gouge core intels
208.50	210.90		4Rd	0.5	õ	Õ	1	1	1	Ő	2	2	2	0.0	Good	Moderately fractured
10.90	212.45	Basal tuff/tephra of Redbird Member		2	õ	Õ	3	0 0	4	Ő	0	4	1	0.0	Good	Good
12.45	215.50	Fragmental with strong hm altn		2	0	0	3	0	4	0	0	4	1	0.0	Good	Moderately fractured
15.50	217.32	Coherent tuff		0.5	õ	õ	1	õ	3	Ő	Ő	2	0	0.0	Good	Moderately fractured
17.32	218.54 36391	Clay altd rubble		0	0	0	0	0	0	0	0	0	0	0.0	N/A	Poor
18.54	222.60	Noranda Member Dacite	4Nd	0.5	0	õ	4	3	3	0	2	2	1	0.0	Good	Good
22.60	224.64	Intercalated grey dacite and maroon welded tuff	Maroon Tuff	0.5	õ	0	2	Ő	3	1	0	2	0.1	0.0	Good	Rubbly and/or gouge core intvls
24.64	227.69		Maroon Tuff	0.5	0	0	2	0	3	1	0	3	0.1	0.0	Good	Clay seam
27.69	230.74		Maroon Tuff	0.5	0	0	2	0	3	0	0	3	0.1	0.0	Good	Minor clay
30.74	233.78		Maroon Tuff	0.5	0	0	2	0	3	0	0	2	0.1	0.0	Good	Moderately fractured
33.78	238.60		Maroon Tuff	0.5	0	0	2	0	3	0	0	2	0.1	0.0	Good	Good
38.60	242.00	Strongly bleached and moderately oxidized intvl	Maroon Tuff	0.5	0	0	3	4	3	0	2	1	0.1	0.0	Good	Good
42.00	246.28	orongry broadied and moderatery oxidized inter	Maroon Tuff	0.5	0	0	2	0	3	0	0	3	0.1	0.0	Good	Moderately fractured
	OH		maroon run	0.0			~				~		0.1	0.0	0000	moderatory maduled

Sample [	Description Log			Bla	ckdome	Projec	t 20	07								DDH: B07-18
					Mineralizatio	n			Alter	ation			%	Quartz Vein	Recovery	Competence
From (m)	To (m) Sample No.	Description	Lith	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		
0.00	3.05	Casing-No core														
3.05	7.62	Overburden														
7.62	11.58	Mafic Dyke		0.1	0	0	2	0	1	0	0	0	0	0.0	Good	Good
11.58	14.60	Upper 'Andesite'. Redbird Member	4Rd	0.5	0	0	3	0	0	0	1	2	1	0.0	Good	
14.60	17.68	Patchy hm, pervasive chl altn	4Rd	0.5	0	0	2	0	0	0	0	2	1	0.0	Good	
17.68	20.73		4Rd	0.5	0	0	3	0	0	0	0	2	1	0.0	Good	
20.73	23.77		4Rd	0.5	0	0	2	0	0	0	0	2	1	0.0	Good	
23.77	26.82	Decrease in hm altn, inc in bleaching	4Rd	0.5	0	0	3	2	1	2	0	1	1	0.0	Good	
26.82	29.87	Patchy hm, pervasive chl altn	4Rd	0.5	0	0	3	0	1	0	0	2	1	0.0	Good	
29.87	32.92		4Rd	0.5	0	0	3	0	1	0	0	3	1	0.0	Good	
32.92	35.97		4Rd	0.5	0	0	3	0	1	0	0	2	3	0.0	Good	
35.97	39.01	Bleached, possibly argillized core	4Rd	0.5	0	0	3	2	0	2	0	0	1	0.0	Good	
39.01	42.06		4Rd	0.5	0	0	3	1	0	1	0	0	1	0.0	Good	
42.06	45.11	Weakly silicified intvl with patchy hm altn	4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
45.11	48.16		4Rd	0.5	0	0	3	0	1	0	0	2	1	0.0	Good	
48.16	51.21		4Rd	0.5	0	0	3	0	2	0	0	2	1	0.0	Good	
51.21	54.25		4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
54.25	57.30	Pervasive hm altn of core.	4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
57.30	60.35		4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
60.35	63.40		4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
63.40	66.45	Common, up to decimeter size granodiorite inclusions	4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
66.45	69.49		4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
69.49	72.54		4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
72.54	75.59		4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
75.59	78.64		4Rd	0.5	0	0	2	0	2	0	0	3	1	0.0	Good	
78.64	81.69	Epidote altn along fractures	4Rd	0.5	0	0	3	0	1	0	0	2	1	0.0	Good	
81.69	84.73		4Rd	0.5	0	0	2	0	1	0	0	3	3	0.0	Good	
84.73	87.78		4Rd	0.5	0	0	3	0	1	0	0	2	3	0.0	Good	
87.78	90.83		4Rd	0.5	0	0	3	0	1	0	0	1	1	0.0	Good	
90.83	91.65	Start of vn altn halo	4Rd	0.5	0	0	3	1	2	0	1	0	2	0.0	Good	
91.65	92.68 BD07-18-1	Weakly oxidized, silicified hanging wall	4Rd	0.5	0	0	2	2	4	0	2	0	3	0.0	Good	
92.68	93.48 36396	Rubbly vn intercept and oxidized qtz stockwork	4Rd	1	0	0	2	3	4	0	4	0	7	0.0	Good	
93.48	93.87 36395	Strongly oxidized FW to vn, weak qtz stockwork	4Rd	1	0	0	2	3	4	0	4	0	5	0.0	Good	
93.87	94.67 BD07-18-2	Moderately oxidized, silicified footwall to vn	4Rd	0.5	0	0	3	2	3	0	3	0	3	0.0	Good	
94.67	96.92	Pervasive hm altn of core	4Rd	0.5	0	0	2	1	2	0	1	2	1	0.0	Good	
96.92	99.97		4Rd	0.5	0	0	2	1	2	0	0	3	1	0.0	Good	
96.92	103.02		4Rd	0.5	0	0	3	1	2	0	0	3	1	0.0	Good	
103.02	106.07		4Rd	0.5	0	0	2	1	2	0	0	3	1	0.0	Good	
106.07	109.12		4Rd	0.5	0	0	2	2	0	1	3	3	1	0.0	Good	
109.12	112.17	Mod to strongly fractured core	4Rd	0.5	0	0	2	2	0	1	3	3	1	0.0	Good	Mod to strongly fractured core
112.17	115.22	30 cm thick clay seam	4Rd	0.5	0	0	2	2	0	1	3	3	1	0.0	Good	Mod to strongly fractured core
115.22	118.26		4Rd	0.5	0	0	2	2	0	1	3	3	1	0.0	Good	Mod to strongly fractured core
E	ОН															

imple	Description	Log			DI	ackdome	Proje	CLZ	007								DDH:
						Mineralization				Alter					Quartz Vein	Recovery	Competence
n (m) 0.00	To (m) Sau 1.00	mple No.	Description Casing-No core	Lithcode	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia		
1.00	4.90		Overburden														
4.90	8.23		Felds-hbl phyric volcanic	Dac	0.5	0	0	2	3	2	1	3	1	0.5	0.0	Good	
8.23	11.28			Dac	0.5	0	0	2	3	1	1	3	1	0.5	0.0	Good	
11.28	14.33			Dac	0.5	0	0	2	3	1	1	3	1	0.5	0.0	Good	
14.33	19.75 BE	D07-19-1	3-4% qtz, hm vns	Dac	0.5	0	0	1	3	4	0	5	0	4	0.0	Good	
14.33	17.38			Dac	0.5	0	0	2	3	2	1	3	1	0.5	0.0	Good	
17.38 20.55	20.55 23.48		Local, strong oxidation and clay altd fracts	Dac	0.5	0	0	2 2	4 4	1	1	4	1	0.5	0.0 0.0	Good	
20.55 23.48	23.48 26.53		Pervasive hm-chl altn of grndmass. Ep altn of phenos	Dac Dac	0.5 0.5	0	0	2	4	2	0	4	1	0.5 0.5	0.0	Good Good	
26.53	29.58		Pervasive nin-chi alti ol gridinass. Ep alti ol prienos	Dac	0.5	0	0	3	2	2	0	1	3	0.5	0.0	Good	
29.58	32.63		Weak ep altn	Dac	0.5	0 0	õ	2	2	0	õ	1	2	0.5	0.0	Good	
32.63	36.75			Dac	0.5	0	0	2	2	0	0	1	2	0.5	0.0	Good	
36.75	38.73		Redbird Member-Brecciated UC	4Rd	0.5	0	0	3	2	0	2	2	2	0.5	0.0	Good	
38.73	41.78		Strongly Bleached	4Rd	0.5	0	0	3	4	0	2	4	0	0.5	0.0	Good	
41.78	44.60			4Rd	0.5	0	0	3	4	1	2	4	0	0.5	0.0	Good	
44.60		36397	HW to vn intercept	4Rd	0.5	0	0	1	4	4	0	4	0	2	0.0	Good	
45.20		36398	Silicified, qtz cemented bx stockwork	4Rd	0.5	0	0	1	0	5	0	4	0	10	0.0	Good	
46.10 50.93	50.93 53.98			4Rd 4Rd	0.5 0.5	0	0	2 2	2 2	0	1	2	0	0.5 0.5	0.0 0.0	Good Good	
50.93 53.98	53.98 57.03			4Rd 4Rd	0.5	0	0	2	2	0	1	2	0	0.5	0.0	Good	
57.03	60.08			4Rd	0.5	0	0	2	2	0	1	2	0	0.5	0.0	Good	
60.08	63.13			4Rd	0.5	0	0	2	2	Ő	1	2	Ő	0.5	0.0	Good	
63.13	66.18			4Rd	0.5	0	0	2	2	0	1	2	Ō	0.5	0.0	Good	
66.18	69.23		Increase in si altn, pale olive green color	4Rd	0.5	0	0	2	1	2	0	1	0	2	0.0	Good	
69.23	72.28			4Rd	0.5	0	0	2	1	2	0	1	0	2	0.0	Good	
72.28	75.33		Possible flt zone marked by fract core	4Rd	0.5	0	0	2	1	2	0	1	0	1	0.0	Good	Strongly fractured core
75.33	78.38			4Rd	0.5	0	0	2	1	2	0	1	0	2	0.0	Good	
78.38	81.43		Other also Quidies di sere	4Rd	0.5	0	0	2	1	2	0	1	0	0.5	0.0	Good	
81.43 84.48	84.48 87.53		Strongly Oxidized core	4Rd 4Rd	0.5 0.5	0	0	1	0	1	0	4	0 0	0.1 0.1	0.0 0.0	Good Good	
87.53	90.58			4Rd	0.5	0	0	1	0	1	0	4	0	0.1	0.0	Good	
90.58	93.63			4Rd	0.5	0	õ	1	õ	1	õ	4	õ	0.1	0.0	Good	
93.63	96.68			4Rd	0.5	0	0	1	0	1	0	4	0	0.1	0.0	Good	
96.68	99.73		Intvls of intensely oxidized and bleached core	4Rd	0.5	0	0	1	4	0	2	4	1	0.1	0.0	Good	
99.73	102.78			4Rd	0.5	0	0	1	4	0	2	4	1	0.1	0.0	Good	
102.78	106.50			4Rd	0.5	0	0	1	4	0	2	4	1	0.1	0.0	Good	
106.50		36399	Intensely bleached and oxidized. Hm vns and fracture fills	4Rd	2	0	0	0	5	0	4	5	1	0	0.0	Good	
107.30 109.30	109.30	00400		4Rd 4Rd	0.5	0	0	0 0	5 5	0	4 4	5 5	1	0	0.0	Good	Qued
109.30	109.96 114.91	36400	10% hm vns and fracture fills	4Rd 4Rd	2 0.5	0	0	1	3	0	4	2	1	0.1	0.0 0.0	Good Good	Good Good
114.91	117.96		Decrease in oxidation and bleaching	4Rd	0.5	0	0	1	2	0	2	2	1	0.1	0.0	Good	Good
117.96	121.00			4Rd	0.5	0 0	ŏ	1	3	õ	3	2	1	0.1	0.0	Good	Good
121.00	124.05		Dominantly, pervasive hm altn of groundmass	4Rd	0.5	0	0	2	0	1	0	0	3	0.5	0.0	Good	Good
124.05	127.10			4Rd	0.5	0	0	2	0	1	0	0	3	0.5	0.0	Good	Moderately fractured
127.10	130.15			4Rd	0.5	0	0	2	0	1	0	0	3	0.5	0.0	Good	Moderately fractured
130.15	133.19		Bleached halos around clay altd fracts	4Rd	0.5	0	0	2	2	1	0	0	3	0.5	0.0	Good	Possible fault zone-clay gouge and fract
133.19	136.24			4Rd	0.5	0	0	2	2	1	0	0	3	0.5	0.0	Good	Possible fault zone-clay gouge and frac
136.24 139.29	139.29 142.34			4Rd 4Rd	0.5	0	0	3 2	0 0	1	0	0	2 3	0.5 0.5	0.0 0.0	Good Good	Good Good
139.29	142.34 145.38			4Rd 4Rd	0.5 0.5	0	0	2	0	1	0	0	3	0.5	0.0	Good	Good
142.34	145.36			4Rd 4Rd	0.5	0	0	2	0	1	0	0	3	0.5	0.0	Good	Minor rubbly core
148.43	150.00		Increase in silicification. Homogeneous colored groundmass	4Rd	0.5	0	0	3	0	2	õ	0	1	0.5	0.0	Good	Good
150.00	154.53			4Rd	0.5	0	õ	3	Ő	2	Ő	Ő	1	0.5	0.0	Good	Good
154.53	157.58			4Rd	0.5	0	0	3	0	2	0	0	1	0.5	0.0	Good	Good
157.58	160.62			4Rd	0.5	0	0	3	0	2	0	0	1	0.5	0.0	Good	Good
160.62	163.67			4Rd	0.5	0	0	3	0	2	0	0	1	0.5	0.0	Good	Good
163.67	166.72			4Rd	0.5	0	0	3	0	2	0	0	1	0.5	0.0	Good	Strongly fractured intvls
166.72 169.80	169.80		Decel Tuff and braccic (nearible tracher)	4Rd	0.5	0	0	3	0	2	0	0	1	0.5	0.0	Good	Good
169.80 173.50	173.50 175.87		Basal Tuff and breccia (possibly tephra)	4Nd	0 0.5	0	0 0	1	1 4	2 1	1	2	0	0	0.0 0.0	Good Good	Abundt clay altd fracts Abundt clay altd fracts
175.87	175.87 176.61 BE	707-19-2	Noranda Member dacite. Strongly bleached and oxidized Strongly si flooded, bleached and oxidized intvl with grey qtz	4Nd 4Nd	0.5	0	0	1	4 5	5	0	4	0	10	0.0	Good	Adunat clay and fracts Moderately fractured
176.61	177.73 BE		Intensely si flooded intvl with grey qtz	4Nd	2	0	0	1	5	5	0	4	0	10	0.0	Good	Moderately fractured
177.73	179.75			4Nd	1	0	0	1	4	4	õ	3	0	10	0.0	Good	Moderately fractured
179.75	180.40 BE	07-19-4		4Nd	1	0	õ	1	3	4	õ	4	0	4	0.0	Good	Good
180.40	185.01			4Nd	0.5	0	õ	1	Ő	3	Ő	0	2	0.5	0.0	Good	Minor fractured core
185.01	188.06		Light green to grey, +- hm altd dacite	4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
188.06	191.11			4Nd	0.5	0	0	1	0	3	0	0	3	0.5	0.0	Good	Good
191.11	194.15			4Nd	0.5	0	0	1	0	3	0	0	3	0.5	0.0	Good	Good
194.15	197.20		20 cm thick grey clay seam	4Nd	0.5	0	0		0	2	1	0	2	0.5	0.0	Good	Minor clay seams

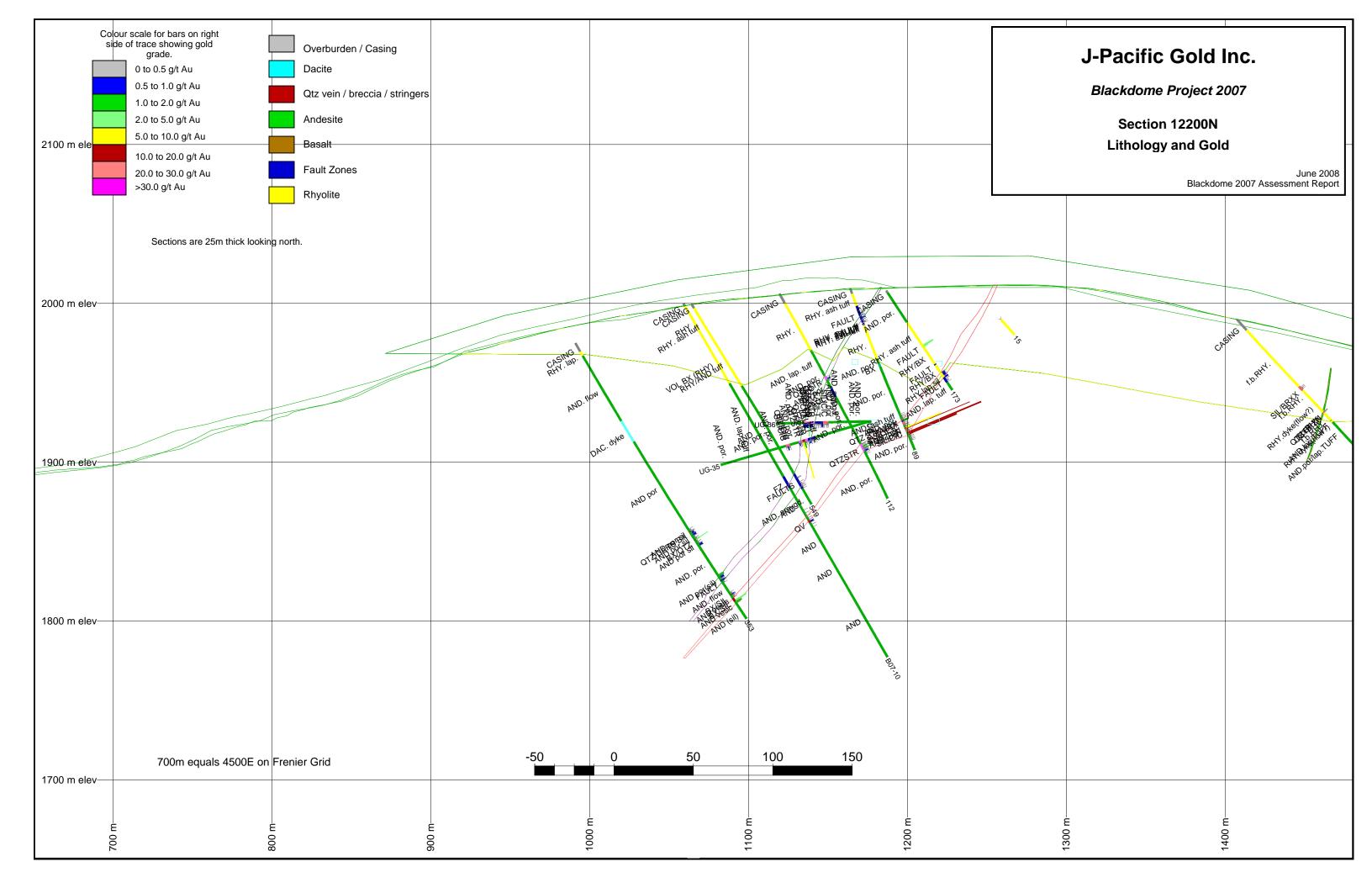
Sample	Description Log	
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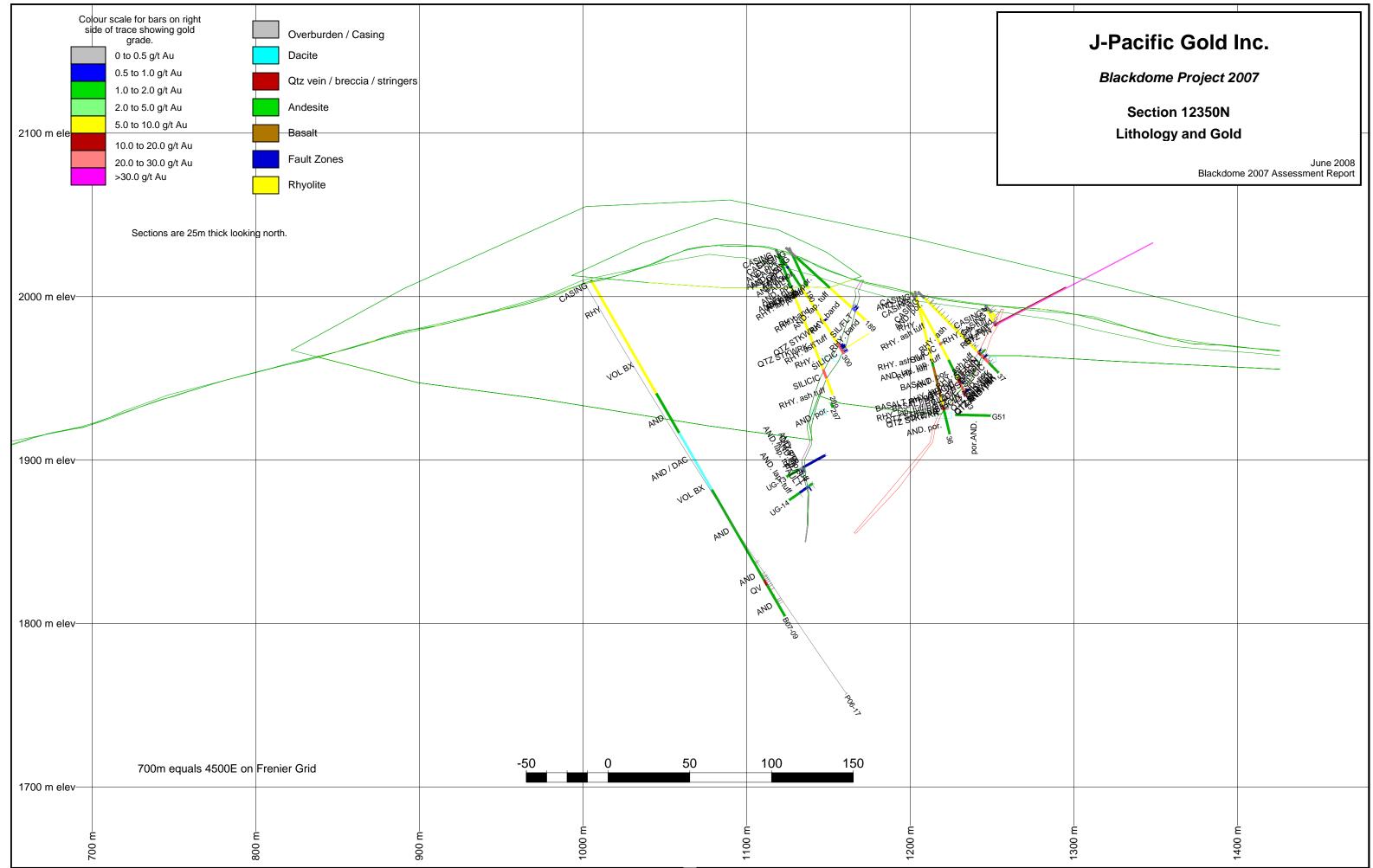
Blackdome Project 2007

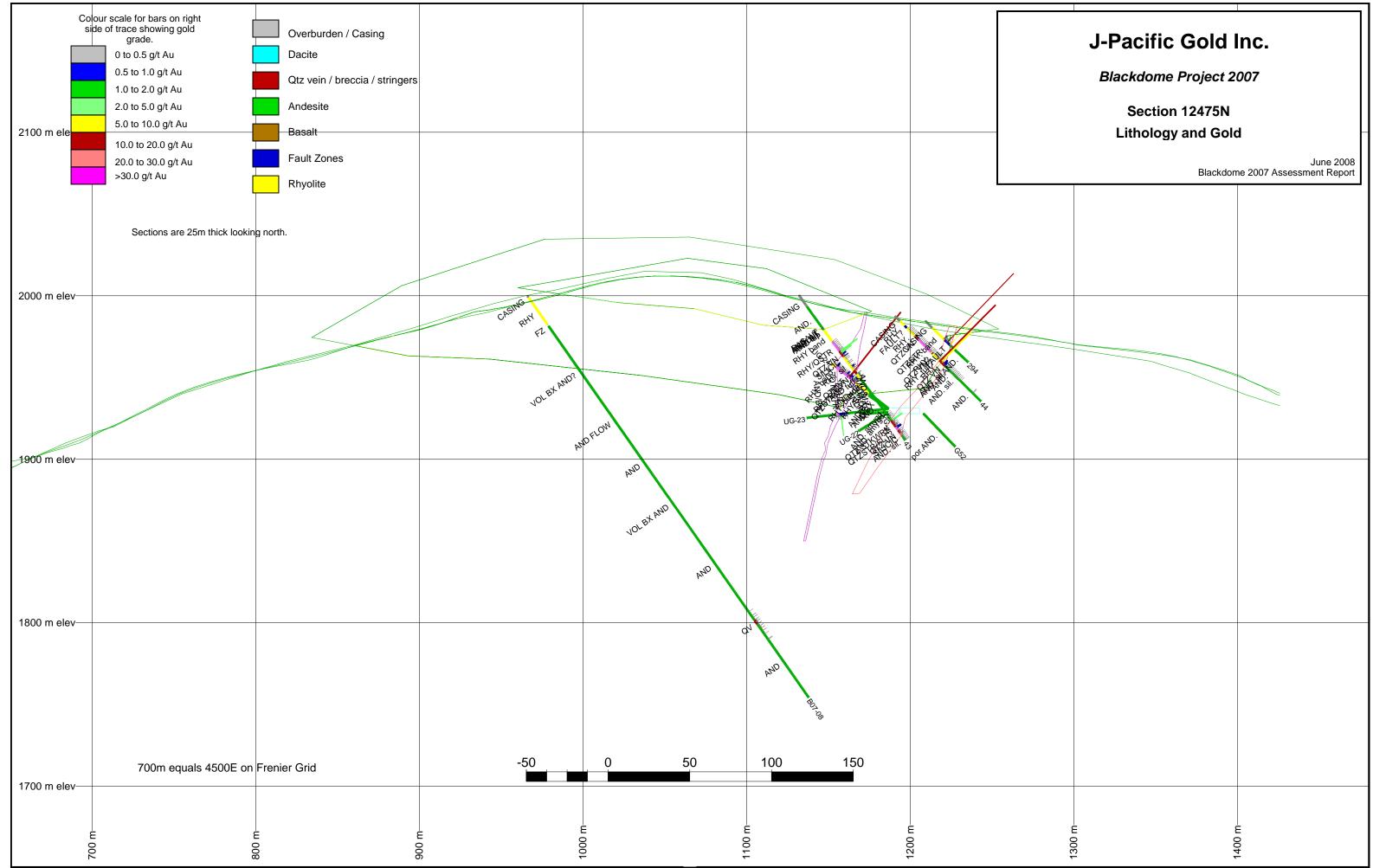
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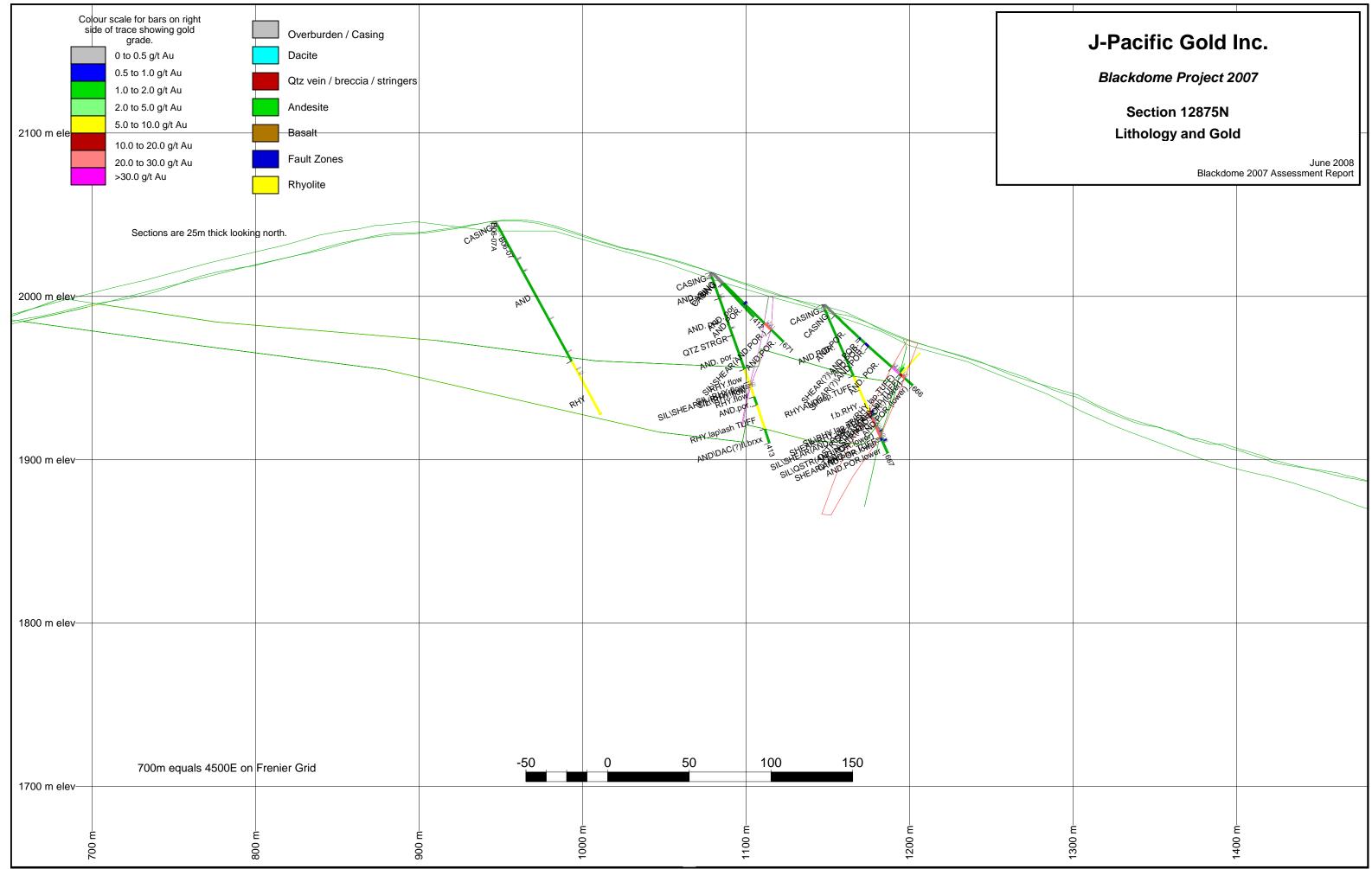
					Mineralizatio	n				ation			%	Quartz Vein	Recovery	Competence
om (m)	To (m) Sample No.	Description	Lithcode	% Py	Au/electrum	Ag min.	L1	L2	L3	L4	L5	L6	% qtz	% adularia	Recovery	Competence
197.20	200.25		4Nd	0.5	0	ο	1	0	3	0	0	2	0.5	0.0	Good	Good
200.25	203.30		4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
203.30	206.34		4Nd	0.5	0	0	1	0	3	0	0	3	0.5	0.0	Good	Good
206.34	209.39		4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
209.39	212.44		4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
212.44	215.49		4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
215.49	218.54		4Nd	0.5	õ	õ	1	Ő	3	õ	õ	2	0.5	0.0	Good	Good
218.54	221.57		4Nd	0.5	õ	ő	1	Ő	3	Ő	õ	2	0.5	0.0	Good	Good
221.57	224.63		4Nd	0.5	ő	ő	1	ő	3	ő	õ	2	0.5	0.0	Good	Good
224.63	227.68		4Nd	0.5	ő	0	1	0	3	0	õ	2	0.5	0.0	Good	Good
227.68	230.73		4Nd	0.5	ő	ő	1	0	3	ő	õ	2	0.5	0.0	Good	Good
230.73	233.78		4Nd	0.5	ő	0	1	0	3	0	õ	2	0.5	0.0	Good	Good
233.78	236.82		4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
236.82	239.87		4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
239.87	242.91		4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
242.91	245.96		4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good
245.96	249.01		4Nd	0.5	0	0	4	0	3	0	0	2	0.5	0.0	Good	
245.96 249.01	252.06		4Nd 4Nd	0.5	0	0	1	0	3	0	0	2	0.5	0.0	Good	Good Good
252.06	255.11		4Nd 4Nd	0.5	0	0	1	0	3 1	0	0	2	0.5	0.0	Good	
		Decrease in size and chundance of folds shares			0	0	1	0	1	0						Good
255.11	258.15	Decrease in size and abundance of felds phenos	4Nd	0.5	0	0	2 2	0		0	0	2	0.5	0.0	Good	Good
258.15	261.65	Minor flt zone	4Nd	0.5	-	-	-	-	2	•	-	2	0.5	0.0	Good	Minor flt zone
261.65	267.40	Redbird member, fltd UC and LC	4Rd	0.5	0	0	2	0	2	0	0	1	0.5	0.0	Good	Flt zone
267.40	270.36	Noranda Member	4Nd	0.5	0	0	2	0	2	0	0	1	0.5	0.0	Good	Good
270.36	271.80	Maroon tuff	Tuff	0.5	0	0	0	0	2	0	0	2	0.5	0.0	Good	Flt zone
271.80	276.45	Faulted UC of unit, Redbird Member	4Rd	0.5	0	0	2	0	1	0	0	1	0.5	0.0	Good	Flt zone
276.45	281.60	Weak to mod hm altn groundmass	4Rd	0.5	0	0	2	0	2	0	0	3	0.5	0.0	Good	Good
281.60	295.80	Decrease in hm altn, local epidote altn	4Rd	0.5	0	0	3	0	1	0	0	1	0.5	0.0	Good	Minor gouge intvls
295.80	297.79	Increase in silicification	4Rd	0.5	0	0	2	0	3	0	1	0	1	0.0	Good	Good
297.79	298.20 BD07-19-5	1-2 cm thick, vuggy grey qtz vn	4Rd	0.5	0	0	1	1	4	0	2	0	2	0.0	Good	Good
298.20	298.75		4Rd	0.5	0	0	1	0	3	0	2	0	1	0.0	Good	Good
298.75	299.95 BD07-19-6	Qtz vns and breccia stockwork	4Rd	0.5	0	0	1	3	4	0	4	0	7	0.0	Good	Good
299.95	300.84 BD07-19-7	Ptahy oxidation, minor gtz vns	4Rd	0.5	0	0	1	1	4	0	3	0	4	0.0	Good	Good
300.84	302.25 BD07-19-8	1 cm thick, vuggy qtz vn	4Rd	0.5	õ	õ	1	1	4	õ	2	õ	2	0.0	Good	Good
302.25	303.05 BD07-19-9	Minor qtz vns and breccia	4Rd	0.5	0	ő	1	2	4	Ő	3	0	3.0	0.0	Good	Good
303.05	303.80 BD07-19-10	20 cm thick gtz vn	4Rd	2	0	0	4	3	5	0	4	0	40.0	0.0	Good	Rubbly qtz vn
			4Rd 4Rd	0.5	0	0	4	2	4	0	4	0	4.0			
303.80	304.40 BD07-19-11 305.78	FW to vn	4Rd 4Rd	0.5	0	0	4	2	4	0	4	0	4.0	0.0	Good	Good
304.40		lastated and she at the			•	•		•	-	•		-			Good	Good
305.78	306.53 BD07-19-12	Isolated, mm-size qtz vns	4Rd	0.5	0	0	1	2	4	0	2	0	4.0	0.0	Good	Good
306.53	307.23 BD07-19-13	HW to vn intercept	4Rd	0.5	0	0	1	3	5	0	4	0	7.0	0.0	Good	Good
307.23	308.03 BD07-19-14	15 cm thick qtz vn and breccia	4Rd	1	0	0	1	3	5	0	4	0	50.0	0.0	Good	Good
308.03	308.88 BD07-19-15		4Rd	0.5	0	0	1	5	4	0	5	0	7.0	0.0	Good	Good
308.88	309.65 BD07-19-16	Fragmental grey rock	4Rd	0.5	0	0	0	3	3	0	0	0	1.0	0.0	Good	Good
309.65	311.60		4Nd	0.5	0	0	1	1	3	0	0	2	1.0	0.0	Good	Moderately fractured
311.60		Cm-thick, vuggy qtz vn	4Nd	0.5	0	0	1	2	3	0	0	0	3.0	0.0	Good	Good
312.25	312.87		4Nd	0.5	0	0	1	1	3	0	0	1	1.0	0.0	Good	Good
312.87	313.68 BD07-19-18	Strongly oxidized and bleached with hm-si cemented fracs	4Nd	0.5	0	0	1	4	4	0	4	2	5.0	0.0	Good	Good
313.68	314.28 BD07-19-19	Cm-size vuggy qtz vns	4Nd	0.5	0	0	1	3	4	0	3	1	10.0	0.0	Good	Clay altd fractures
314.28	315.03 BD07-19-20	Rubbly and clay altd core with qtz vns	4Nd	0.5	0	0	1	5	1	4	0	0	5.0	0.0	Good	Rubbly and clay
315.03	315.93 BD07-19-21	Fractured and clay altd core with qtz vns	4Nd	0.5	0	0	1	5	1	4	0	0	5.0	0.0	Good	Rubbly and clay
315.93	316.50 BD07-19-22	Rubbly and clay altd core with qtz vns	4Nd	0.5	0	0	1	5	1	4	0	0	5.0	0.0	Good	Rubbly and clay
316.50	318.65	, ,	4Nd	0.5	0	0	2	1	2	0	0	1	1.0	0.0	Good	Good
318.65	319.55 BD07-19-23	Grey qtz vns	4Nd	0.5	0	õ	1	1	4	õ	4	0	3.0	0.0	Good	Good
319.55	320.15 BD07-19-24	Rare gtz vns	4Nd	0.5	õ	0	1	1	3	Ő	2	õ	2.0	0.0	Good	Moderately fractured
320.15	327.40	Rubbly core, fit zone	4Nd 4Nd	0.5	0	0	2	1	2	2	1	1	0.5	0.0	Good	Poor-fit zone
320.15	334.36	Pervasive, hm stained Noranda Dacite	4Nd 4Nd	0.5	0	0	2	0	2	2	0	3	0.5	0.0	1.5 m missing	Good
021.4U	0.04.00	FEIVASIVE, DUI STAIDEU NOTADUA DACITE	4110	0.5	U	0										

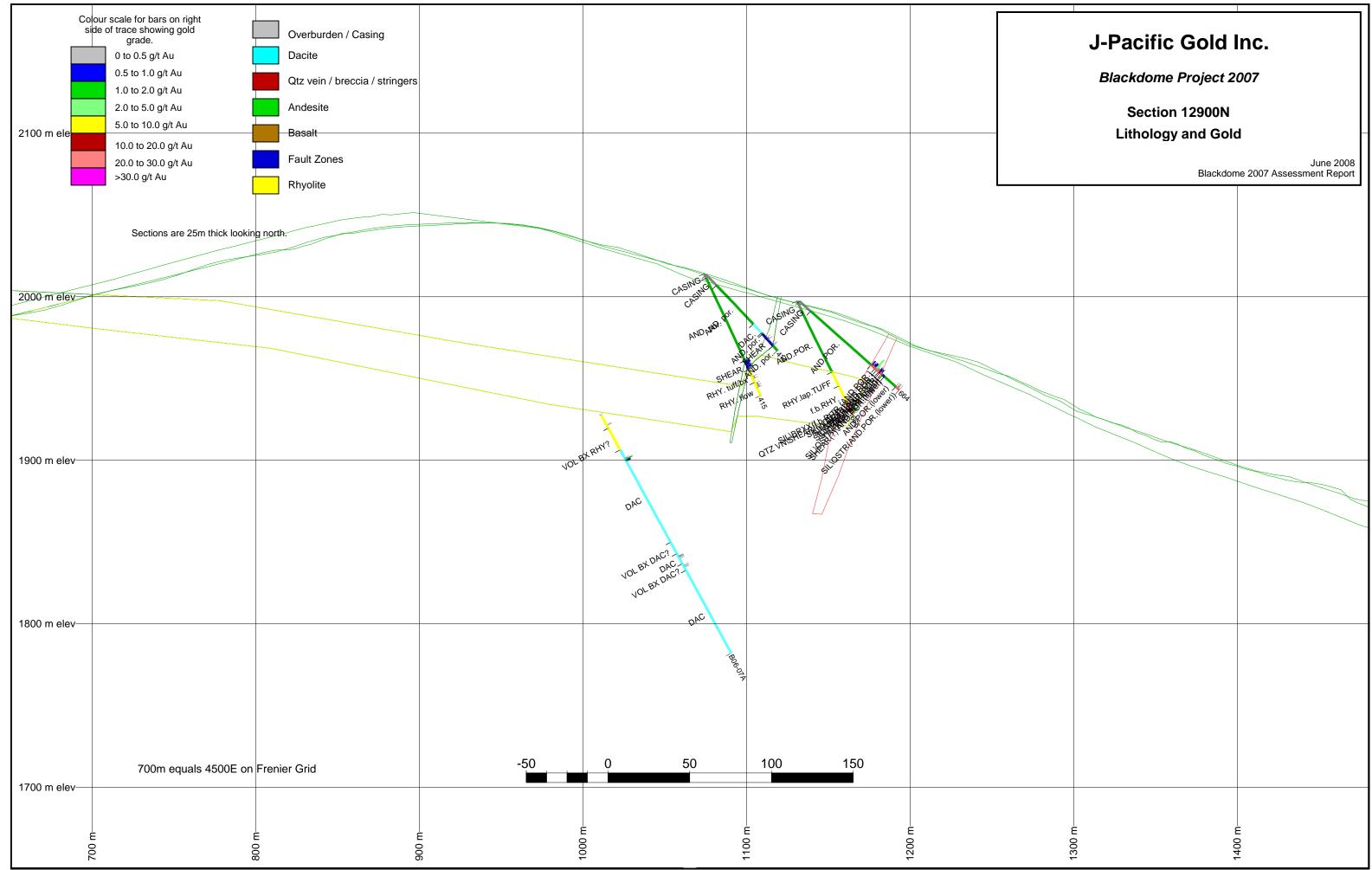
## **APPENDIX E – CROSS SECTIONS**

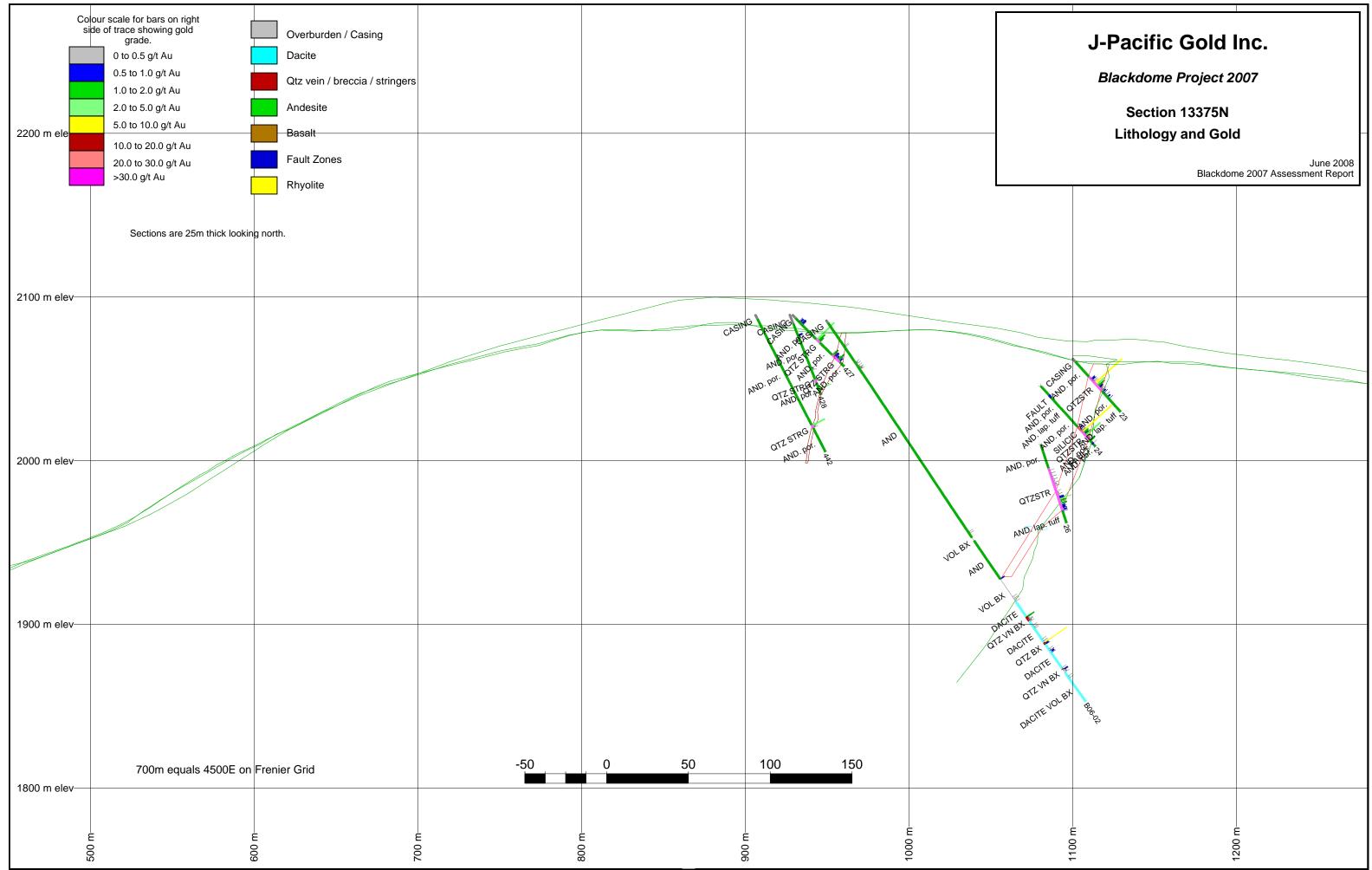


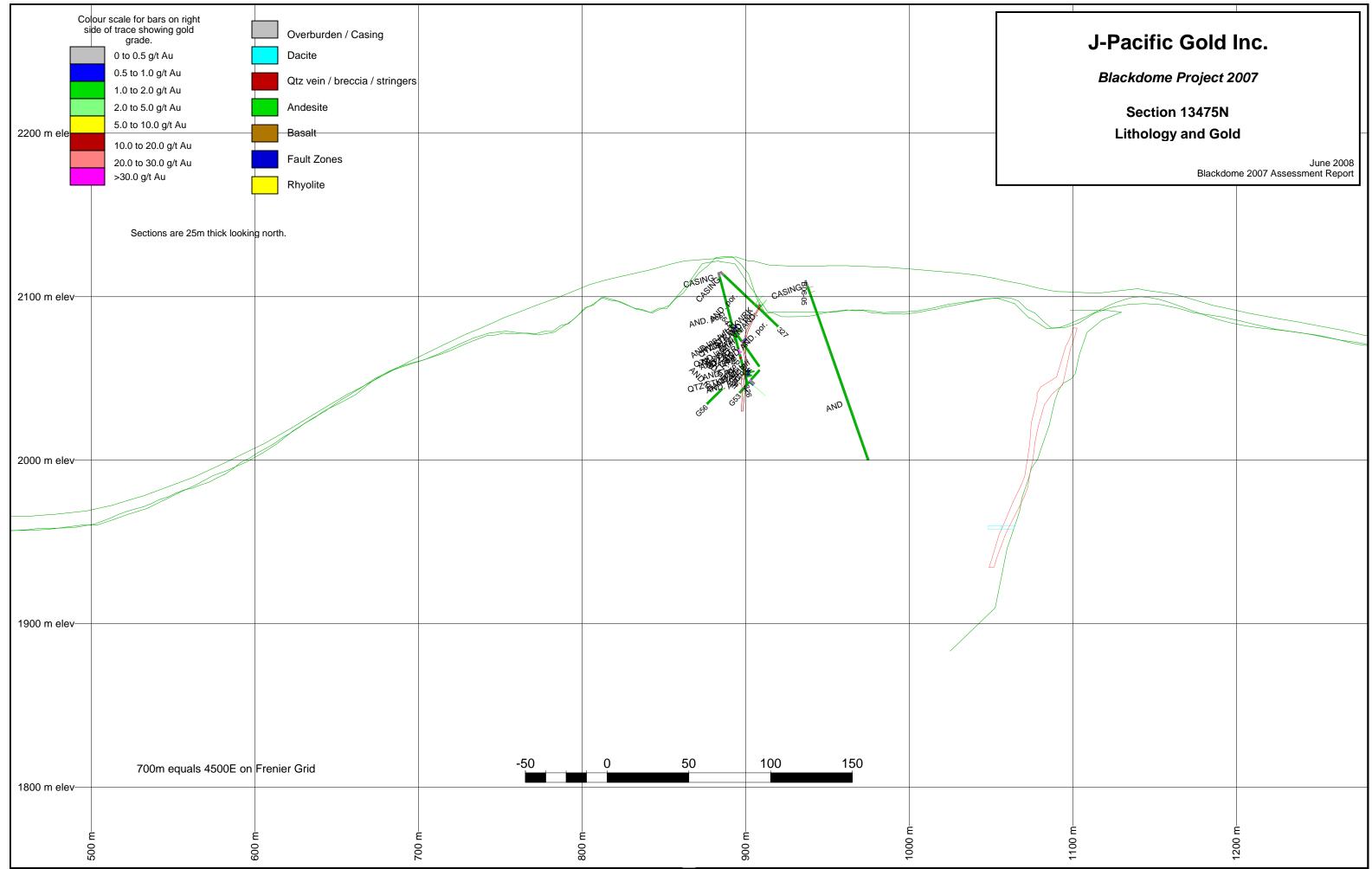


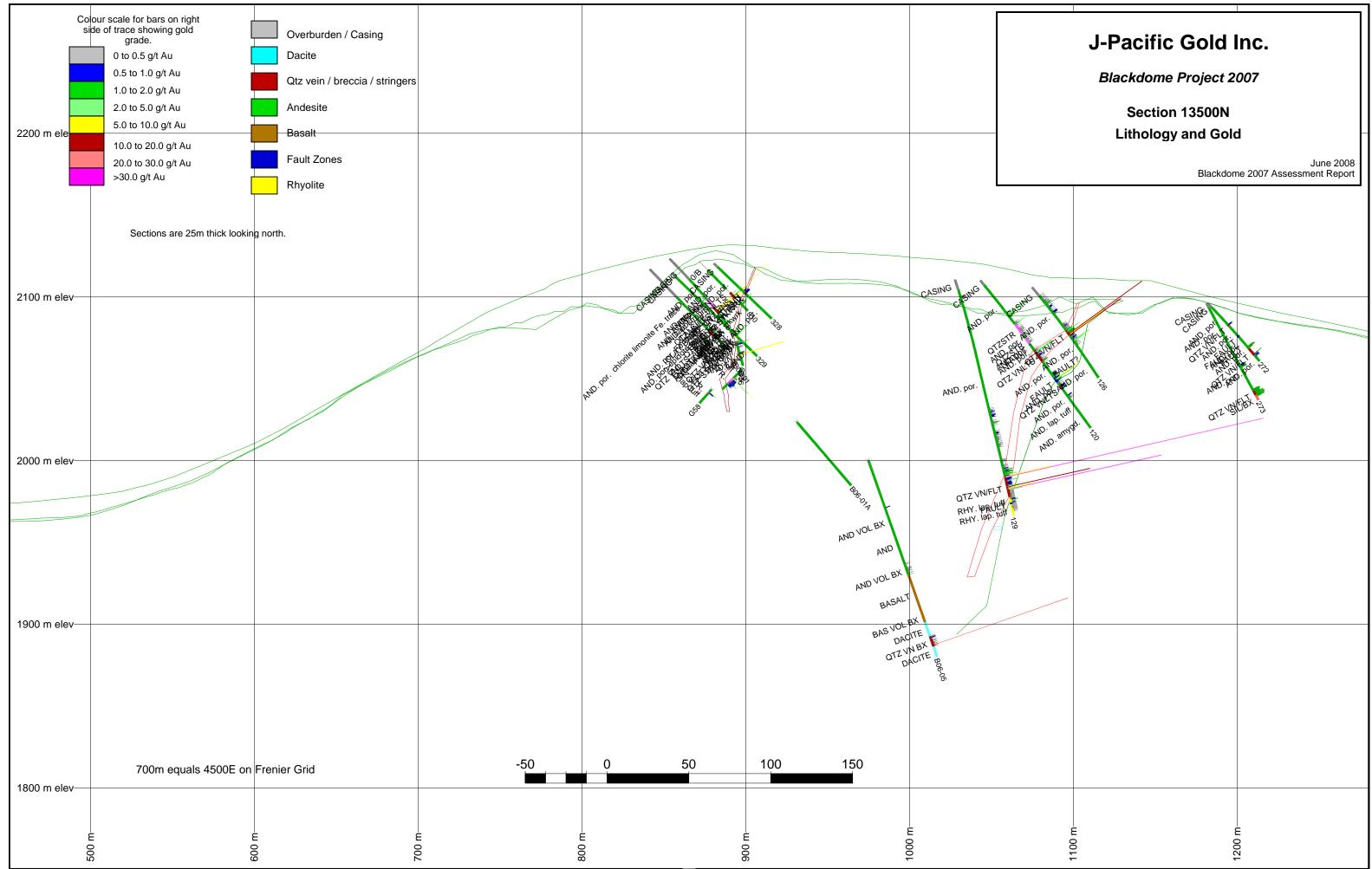


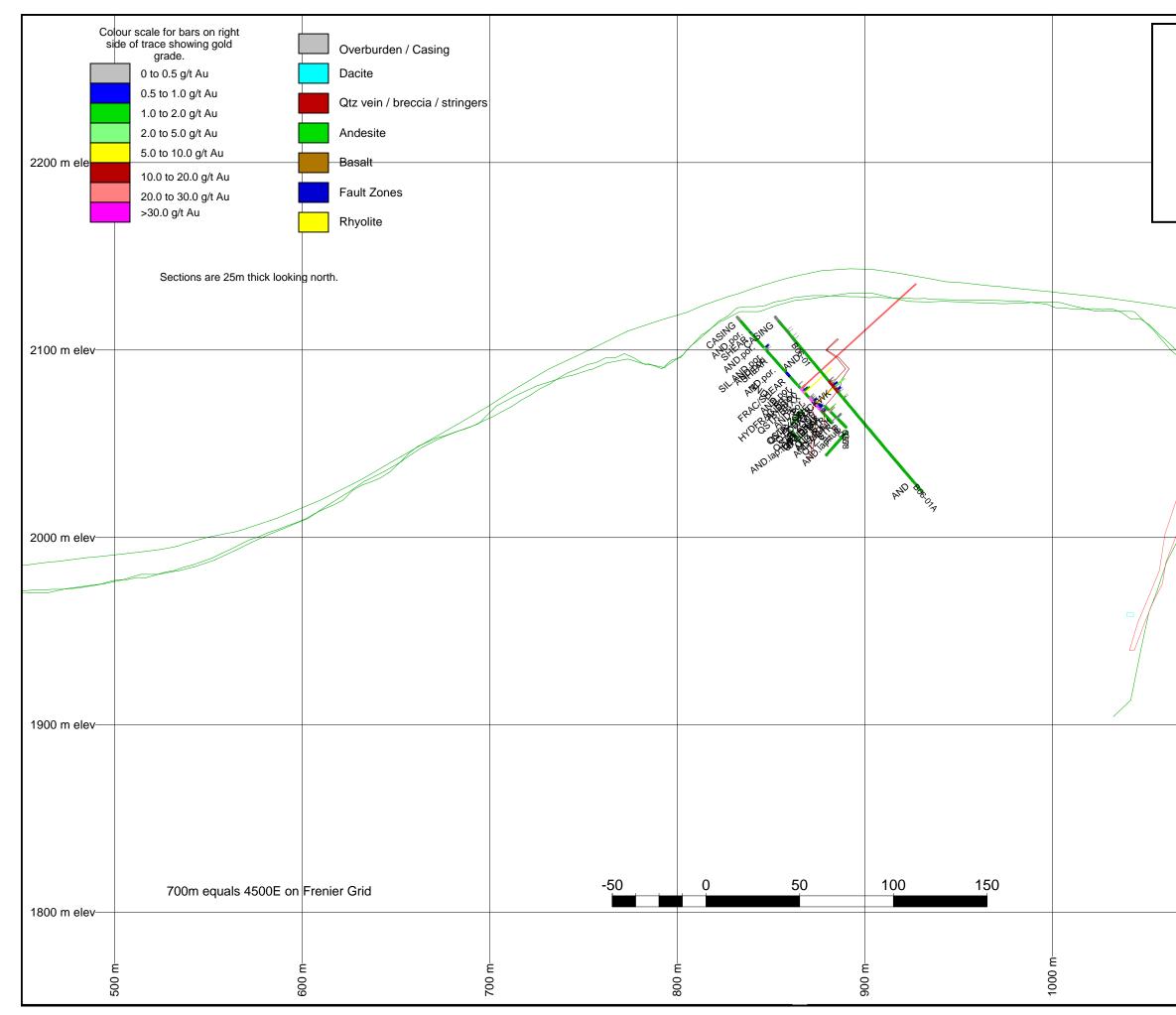




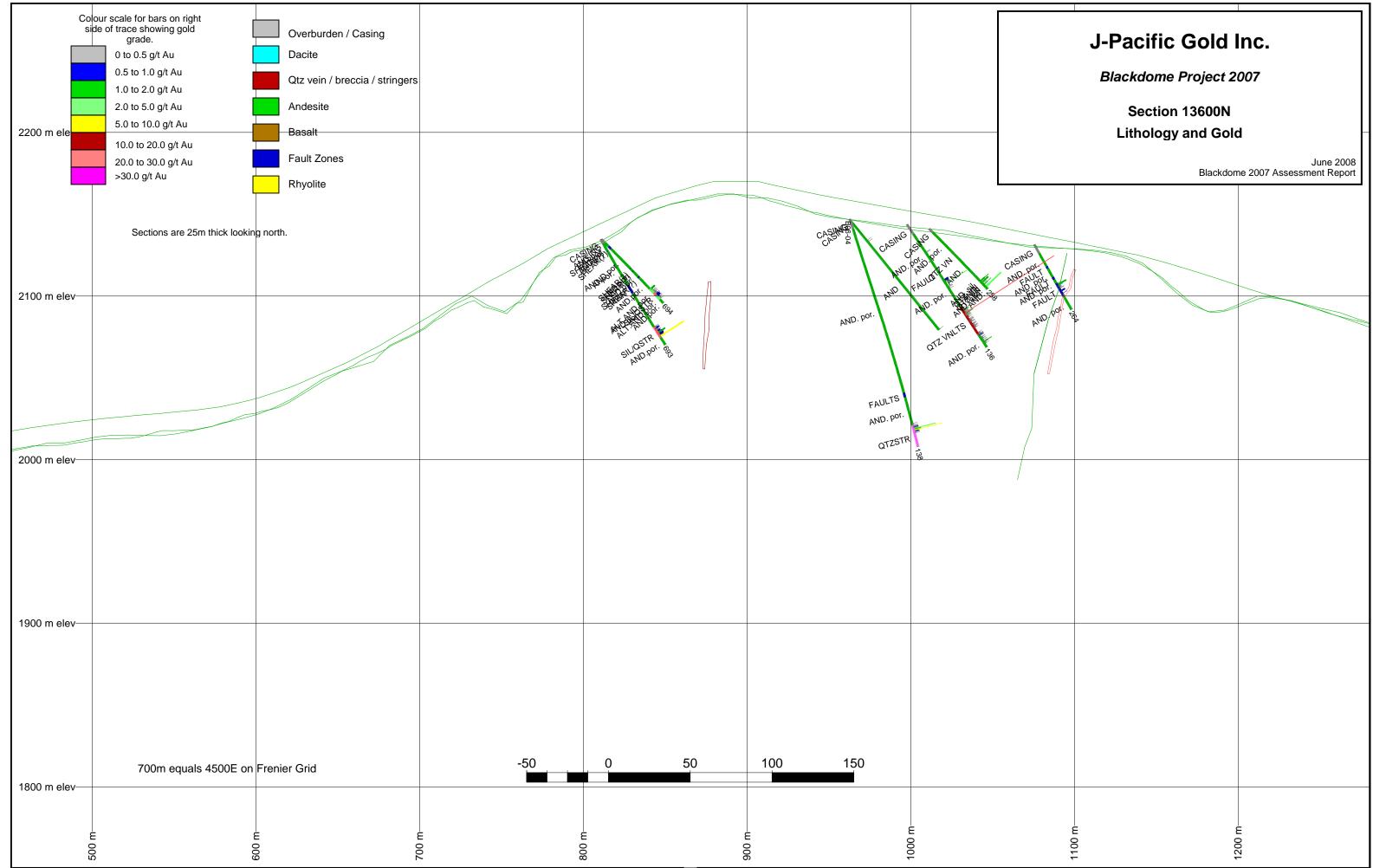


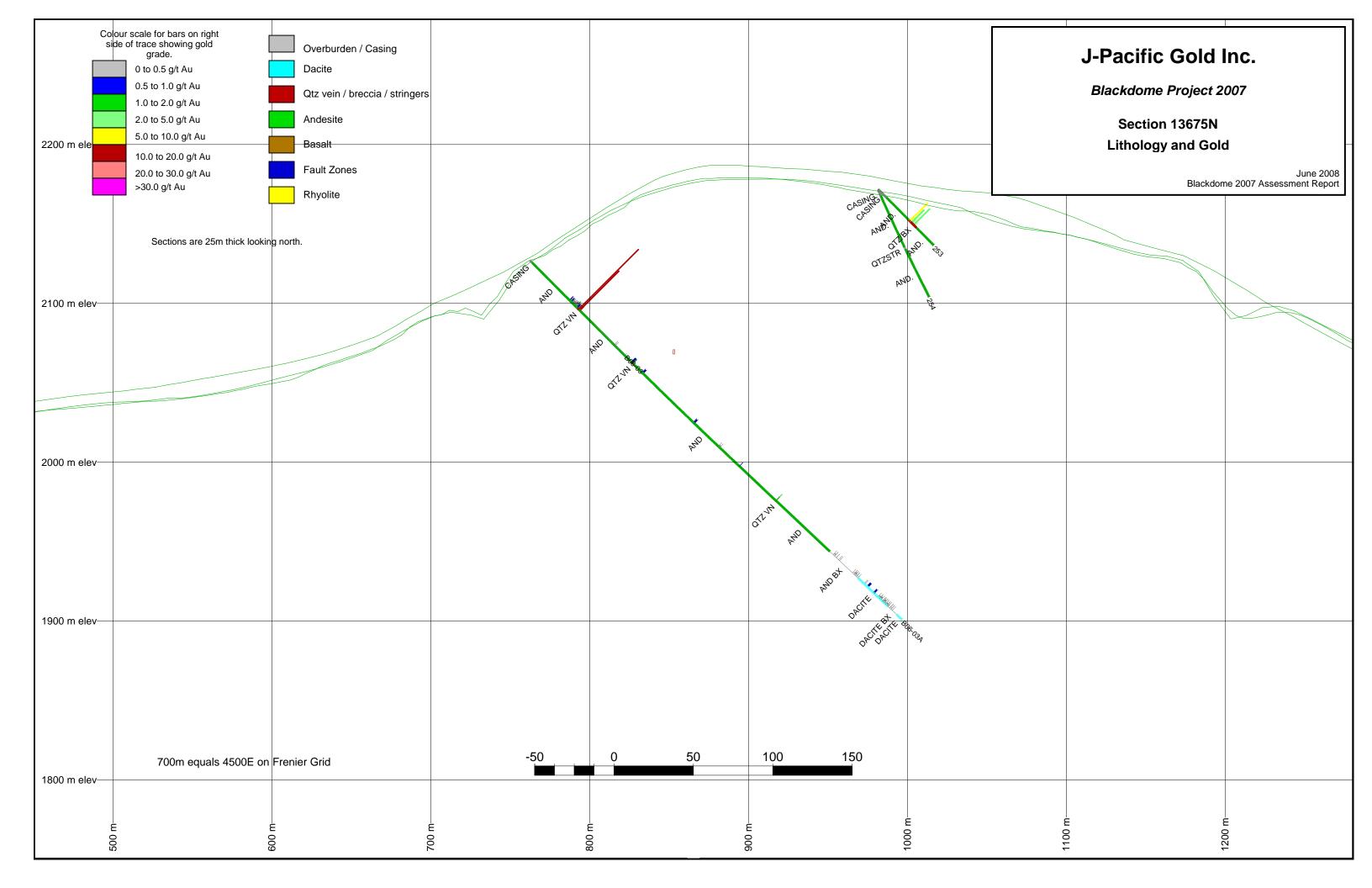


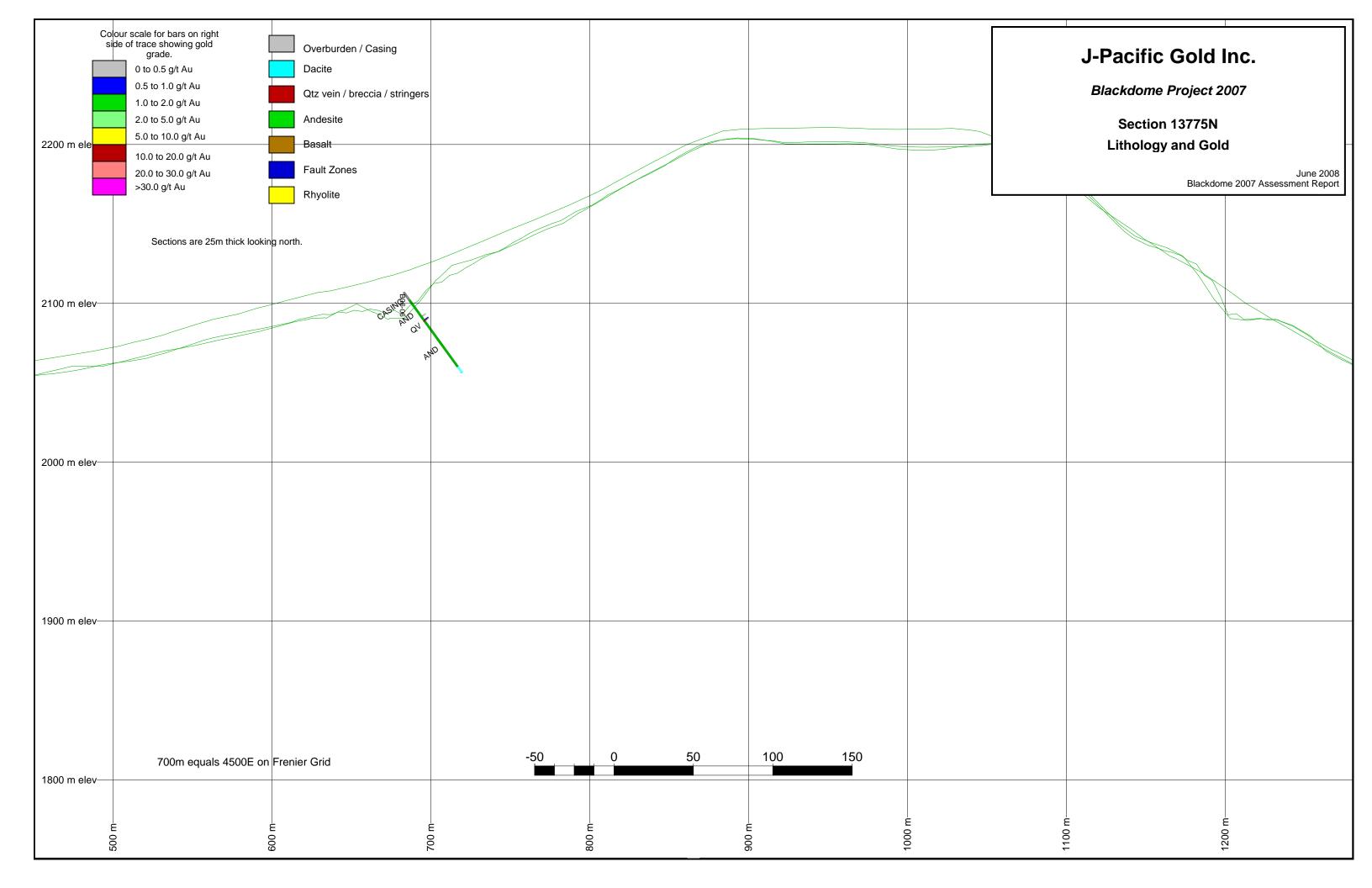




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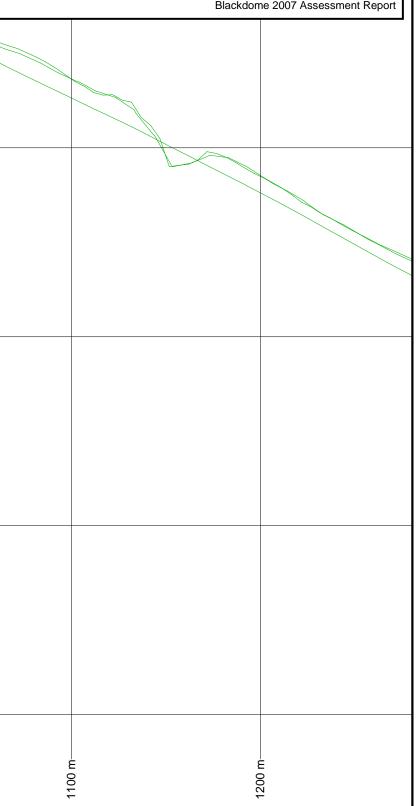
Co	our scale for bars on right					
S	our scale for bars on right ide of trace showing gold grade.	Overburden / Casing				
	0 to 0.5 g/t Au	Dacite				
	0.5 to 1.0 g/t Au	Qtz vein / breccia / stringers				
	1.0 to 2.0 g/t Au					
	2.0 to 5.0 g/t Au	Andesite				
2200 m ele	5.0 to 10.0 g/t Au	Basalt	JQ I			
	10.0 to 20.0 g/t Au	Fault Zones	Enc			
	20.0 to 30.0 g/t Au >30.0 g/t Au					
	-30.0 grt Au	Rivolite				
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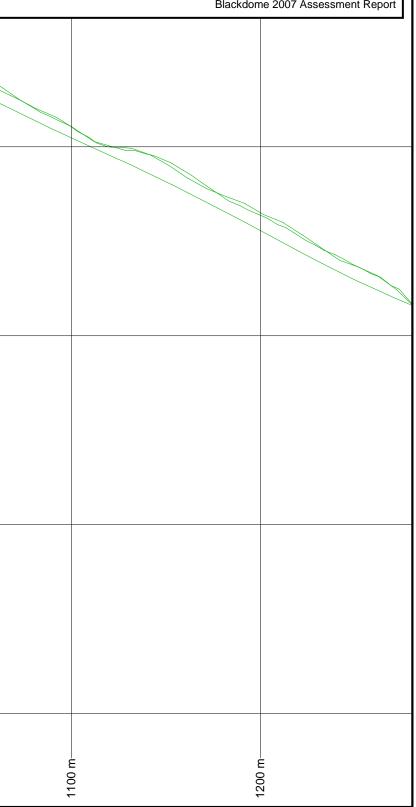
2200 m ele	bur scale for bars on right de of trace showing gold grade. 0 to $0.5 \text{ g/t} \text{ Au}$ 0.5  to  1.0  g/t  Au 1.0  to  2.0  g/t  Au 2.0  to  5.0  g/t  Au 5.0  to  10.0  g/t  Au 10.0  to  20.0  g/t  Au 20.0  to  30.0  g/t  Au	Overburden / Casing Dacite Qtz vein / breccia / stringers Andesite Basalt Fault Zones Rhyolica John Contection Shifted Product of the string Shifted Product of the string Shifted Product of the string Shifted Product of the string Shifted Product of the string Shifted Product of the string Shifted Product of the string Shifted Product of the string Shifted Product of the string Shifted Product	ot. ez PALEOSOIL - BASAL TO BASAL TO BASAL PALEOSOIL - BASAL TO BASAL TO BASAL PALEOSOIL - BASAL TO BASAL TO BASAL			
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# J-Pacific Gold Inc.

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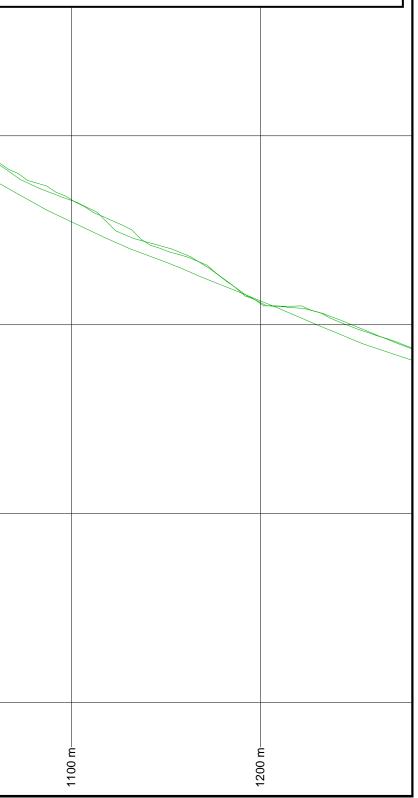
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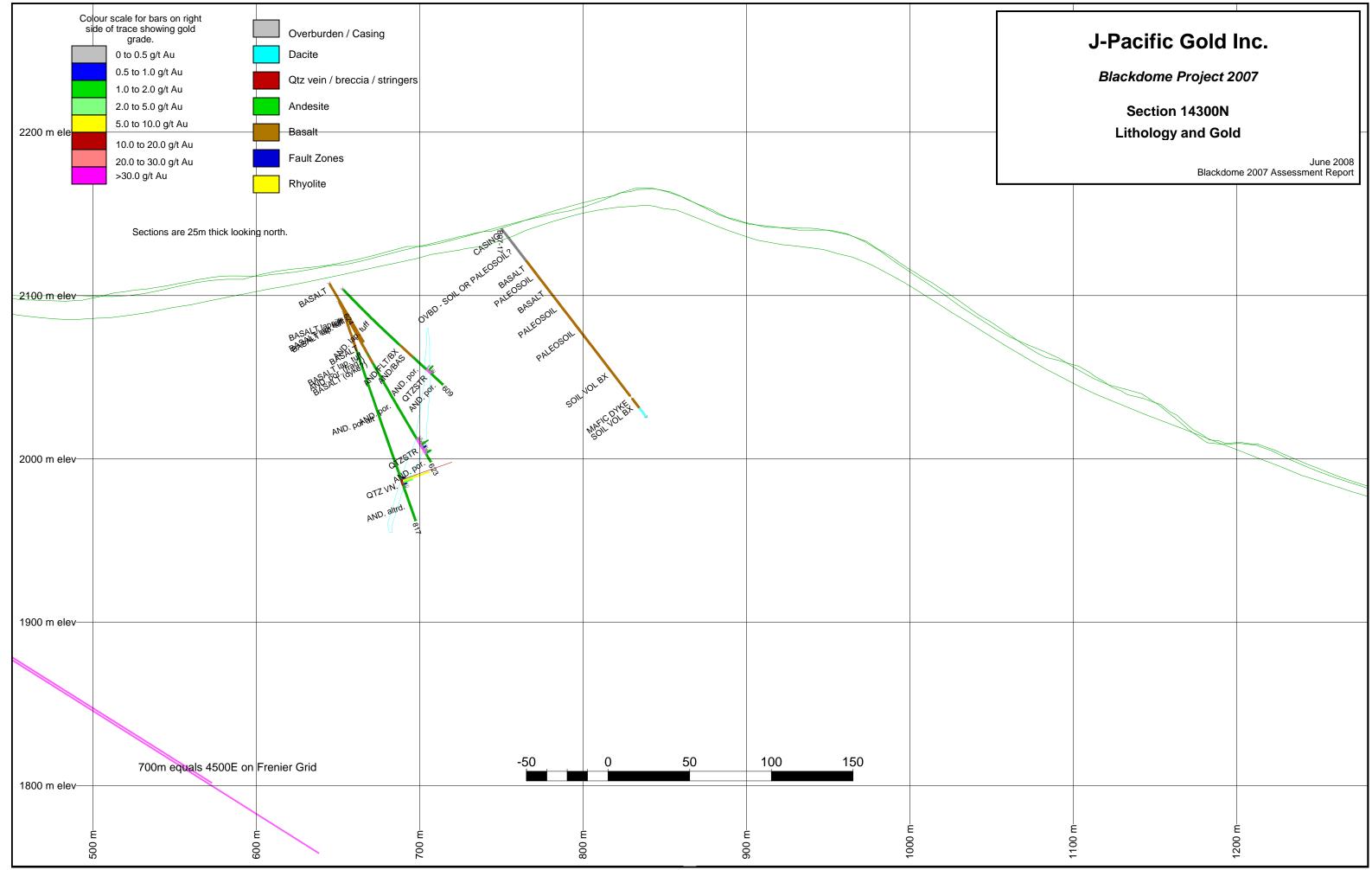
## J-Pacific Gold Inc.

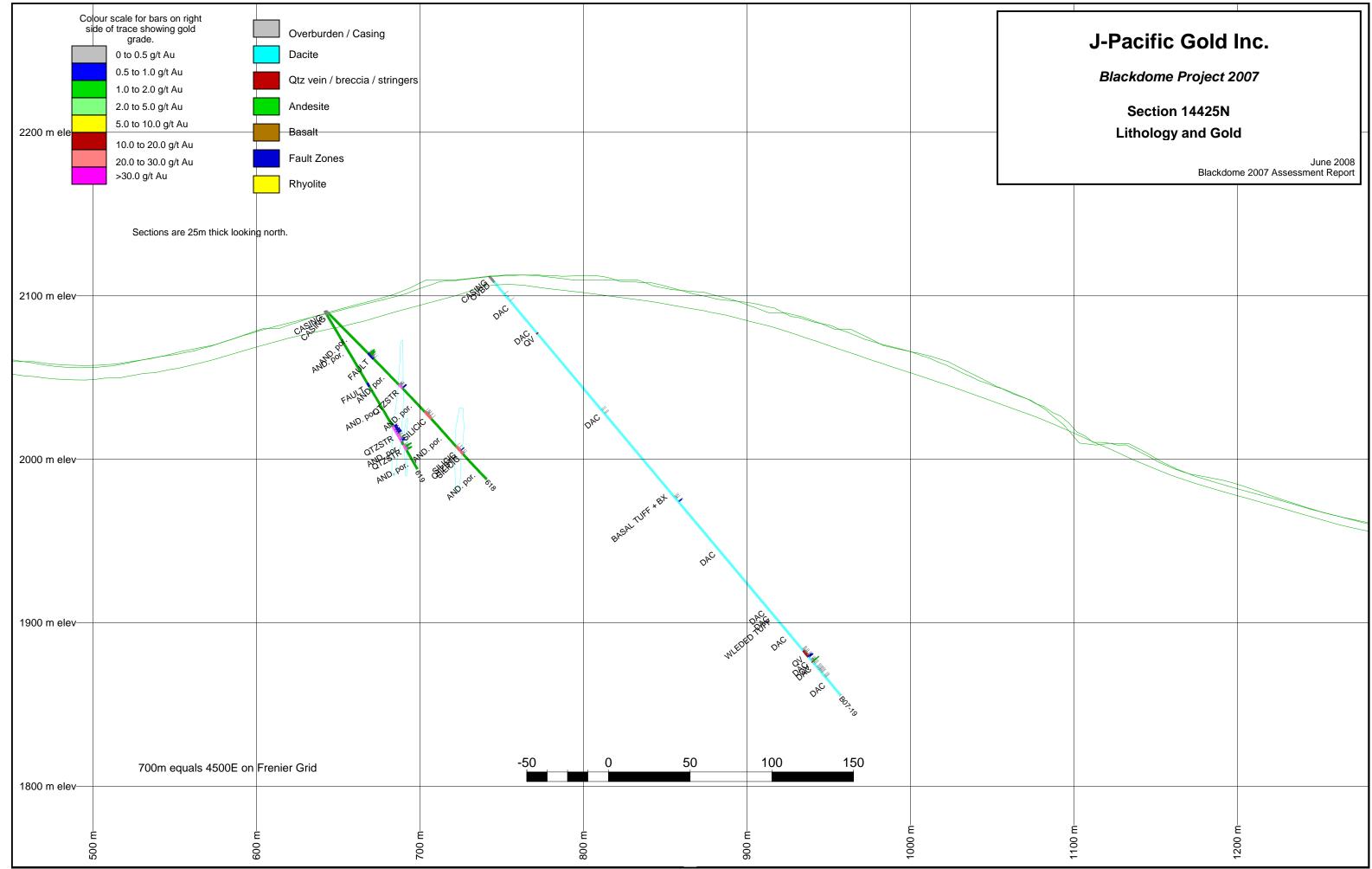
Blackdome Project 2007

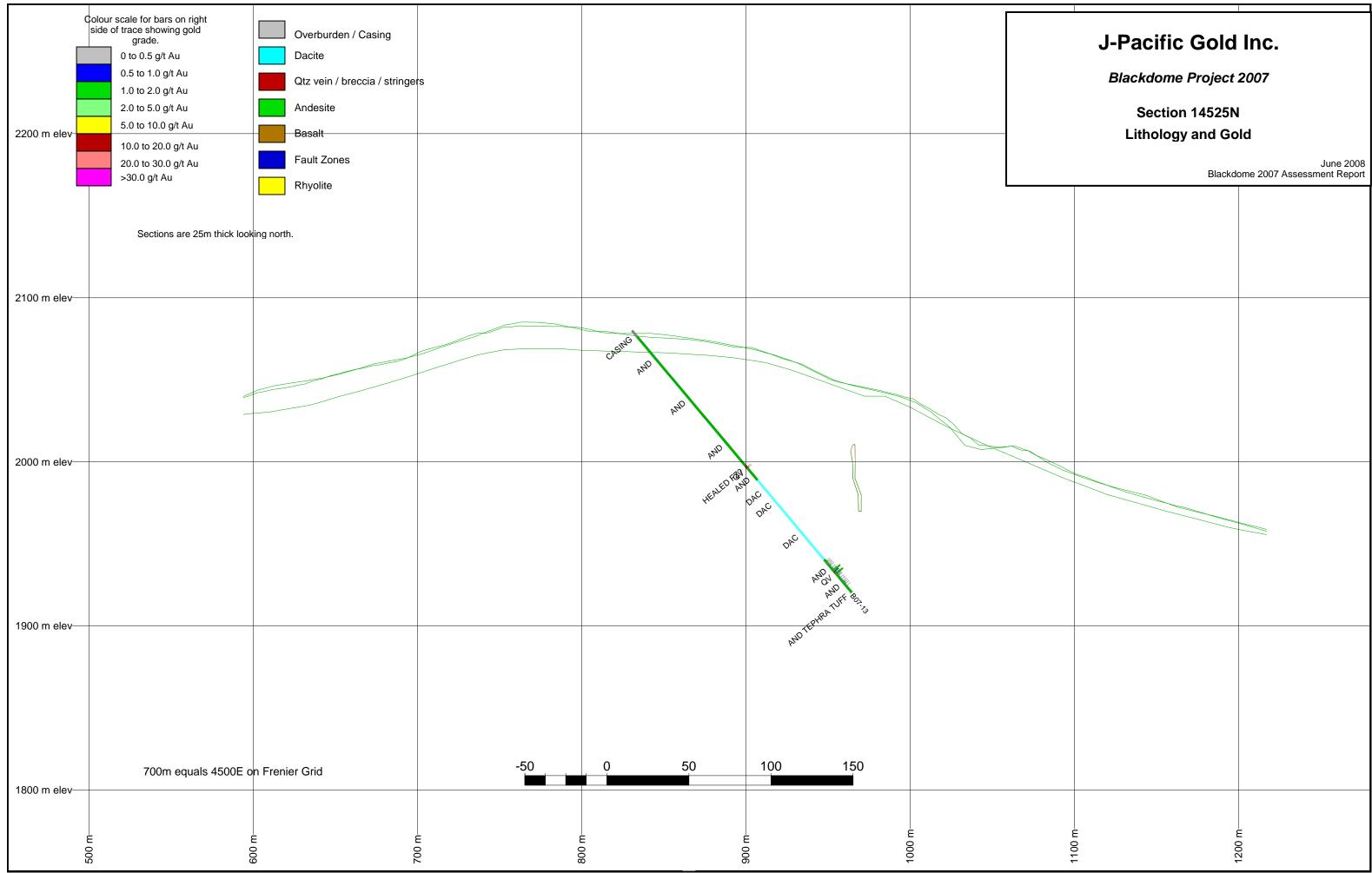
Section 14275N Lithology and Gold

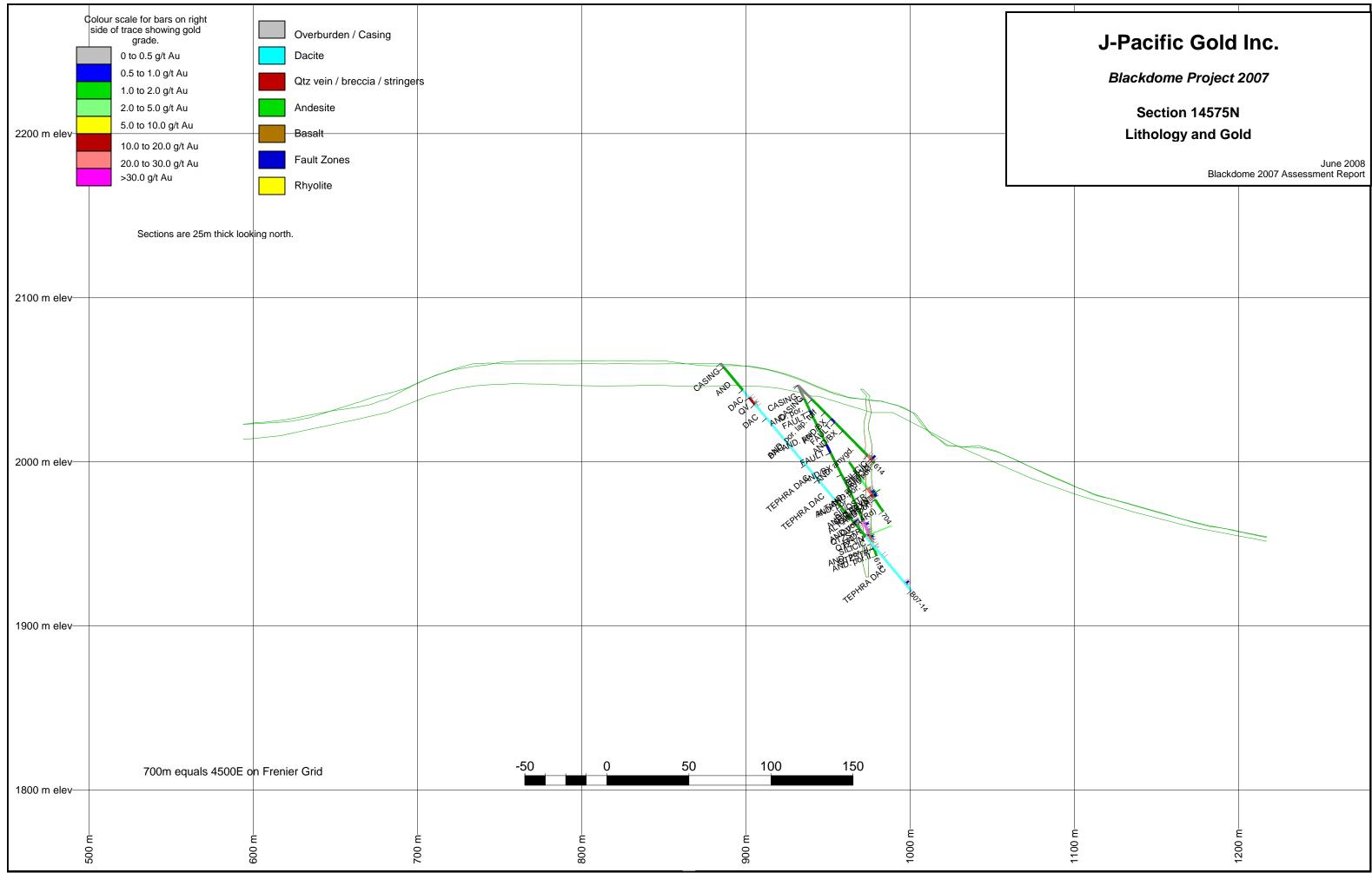
> June 2008 Blackdome 2007 Assessment Report











## **APPENDIX F – CERTIFICATE OF QUALIFICATIONS**

I, John Harrop, residing at 1 – 2978 Walton Ave, Coquitlam, British Columbia do hereby certify that:

1. I am a Geologist with J-Pacific Gold Inc. with an office at Suite 802, 1166 Alberni Street, Vancouver, British Columbia, Canada and Coast Mountain Geological Ltd with and office at Suite 620, 650 West Georgia Street, Vancouver, British Columbia.

2. I graduated of the University of British Columbia with a BSc. in Geological Sciences in 1983, and have practised my profession continuously since then;

3. I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of the province of British Columbia.

4. I am not aware of any material fact or material change with respect to the subject matter of the technical report, which is not reflected in the technical report, the omission to disclose which makes the technical report misleading.

5. I, as the qualified person, am not independent of the issuer as defined in Section 1.5 of National Instrument 43-101. I am an employee of J-Pacific Gold Inc. and Coast Mountain Geological Ltd

6. I have had prior involvement with the property that is subject to the technical report.

8. I visited the Blackdome Project at numerous times between 2004 and 2007.

9. I was the author of the report.

John Harrop, PGeo Vancouver, British Columbia 24 June 2008