# YMEP PROJECT #21-009 PLACER MODULE

### **2021 SUMMARY REPORT**

#### FELLHAWK ENTERPRISES LTD. - BONANZA EXPLORATION PROJECT



Claims: Sandy (P 43241), Dandy (P 38412), Handy (P 38413), 13BD (37912), 14BD (37896), Jock's Kingdom (P 01496), Tagish 2 (P 00402), Dax 1 (P 00403), Dax 2 (P 00404)

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#### **SUMMARY**

The 2021 Yukon Mineral Exploration Program (YMEP) on Bonanza Creek (Bonanza Exploration Project #21-009) was successfully completed by Fellhawk Enterprises Ltd., and Northern Sonic Drilling and Consultants Inc. under the YMEP Placer Module in mid-September 2021. The exploration program area included nine of 21 contiguous placer claims (the' Project Site') co-owned by Ronald Berglund (50%) and Dan Trudeau (50%), which are permitted for exploration activities under placer mining water licence PM13-051 and Class 4 Mining Land Approval AP13051. The 2021 YMEP project activities were undertaken at the Project Site by Fellhawk Enterprises Ltd. through a separate lease agreement with Berglund / Trudeau.

The results of the 2021 YMEP project provided excellent insight into historic placer mining operations within the Project Site through the use of sonic drilling to assess three exploration targets. The 2021 exploration project took a total of six days to complete 20 sonic drill holes down to bedrock, including the logging of drill cores and gold analysis of select core material samples.

Sonic drill core logs and sampling results demonstrated that historic dredging operations within the Project Site conducted by Dredge #5 (circa. 1913 – 1914) were able to excavate and process placer gravels down to bedrock in areas of up to 77 ft in depth. It was previously believed that operational limitations of Dredge #5 had prevented it from excavating more than 26 ft below water level, leaving placer gravels in place near the bedrock surface (Target 1).

Sonic drill core logs and sampling results identified a very promising economic discovery of high placer gold concentrations in an area of virgin ground that had been previously covered by tailings and fill/waste material from historic dredging and hydraulic mining activities (Target 2). This discovery was located along the western extent of the Dredge #5 operation. It was also identified that areas with limited concentrations of placer gold are still present in slide rock layers adjacent to the Bonanza Creek valley walls (Target 2), however; these areas are small in scale and not considered economically viable to mine without further assessment.

Sonic drilling was also conducted within the historic Bonanza Creek channel area of the Project Site known as the 'Poverty Bar' to assess for the existence of a false bedrock layer. Previous theories had identified the potential of an underlying paleo-channel below a false bedrock layer, which could extend the length of the Bonanza Creek valley. However, drill core logs demonstrated component underlying bedrock throughout the Project Site and that a false bedrock layer could not be identified (Target 3).

It is recommended that Fellhawk Enterprises focus operations in the 2022 mining season in the area of economic discovery identified beneath the historic tailings as part of the Target 2 exploration activities. In additional, future sonic drilling activities near known dredge limits, and within and under historic hydraulic tailing fans may identify additional economic discoveries.



#### 1 INTRODUCTION

DC Environmental Solutions ('DCES') was retained by Fellhawk Enterprises Ltd. ('Fellhawk') to prepare the summary report for the 2021 YMEP #21-009 project on Bonanza Creek, completed by Fellhawk and Northern Sonic Drilling and Consulting Inc. (NSDC) under the YMEP Placer Module.

This report has been prepared by DCES in accordance with the requirements identified in Condition 7.1.4 of YMEP Transfer Payment Agreement #21-009 between Government of Yukon and Fellhawk Enterprises Ltd. This report outlines the results of the sonic exploration drilling work performed under the 2021 YMEP project conducted between September 13 – 17 & 22, 2021, and includes the following information:

- General description of the project site.
- Associated placer claim information.
- List of applicable permits, licenses, authorizations, and agreements in place during the 2021 YMEP project activities.
- Summary of regional, local and surficial geology of the project area.
- History of previous exploration investigations at the Project Site.
- Summary of the 2021 YMEP project activities.
- Summary of results and findings from the 2021 YMEP project.
- Summary of the 2021 YMEP project expenditures.
- Conclusions and recommendations.

Relevant tables, figures and maps have been included in this document to further supplement the information presented herein.

#### 2 PROJECT SITE DESCRIPTION

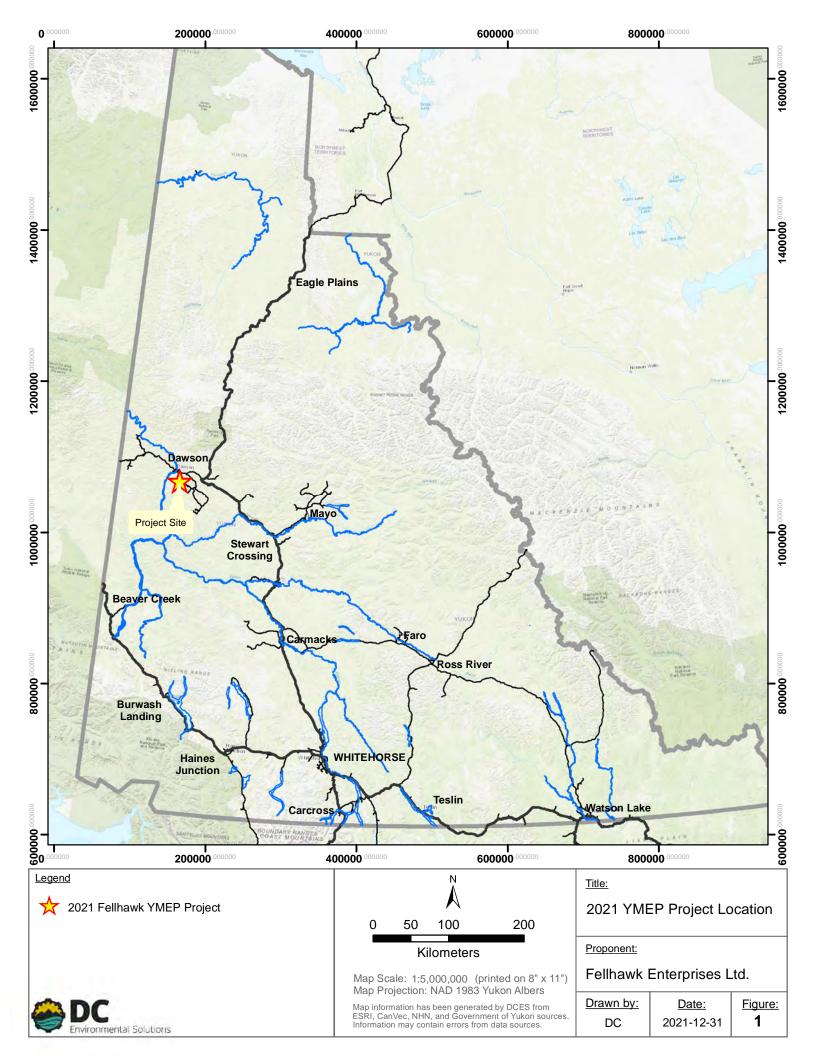
The Bonanza Creek property ('Project Site') is located in the Klondike Gold Fields, within the Dawson Mining District. The Project Site is located, approximately 16 km south of Dawson City, Yukon and approximately 13 km down the Bonanza Rd. (Route #302) south of the North Klondike Highway intersection (Figure 1). The site is situated on Bonanza Creek, approximately 2.3 km downstream of the confluence of Upper Bonanza Creek and Eldorado Creek, and approximately 200 m upstream of the Parks Canada – Dredge #4 Historic Site. The coordinates for the centroid of the Project Site and associated NTS map sheets are provided below.

#### **Project Coordinates:**

Centroid Latitude: 63° 56` 18.258`` N Centroid Longitude: 139° 19` 54.200` W

NTS Map Sheet: 115014h, 115014i

The Project Site is co-owned by Ronald Berglund (50%) and Dan Trudeau (50%), and consists of 21 contiguous placer claims and 1 outlying placer claim to the north which are all permitted under placer mining water licence PM13-051, Class 4 Placer Mining Land Use Approval (MLUA) AP13051, and the Fisheries and Oceans Canada (DFO) Klondike River Watershed placer mining authorization (08-HPAC-PA5-00051-2).





The Berglund/Trudeau placer mining operation at the Project Site underwent an environmental assessment through the *Yukon Environmental and Socio-economic Assessment Act* (YESAA) in 2013, which was required in order to obtain the necessary permits, licences and authorizations to conduct placer mining activities on site, and which allowed the 2021 YMEP project activities to take place.

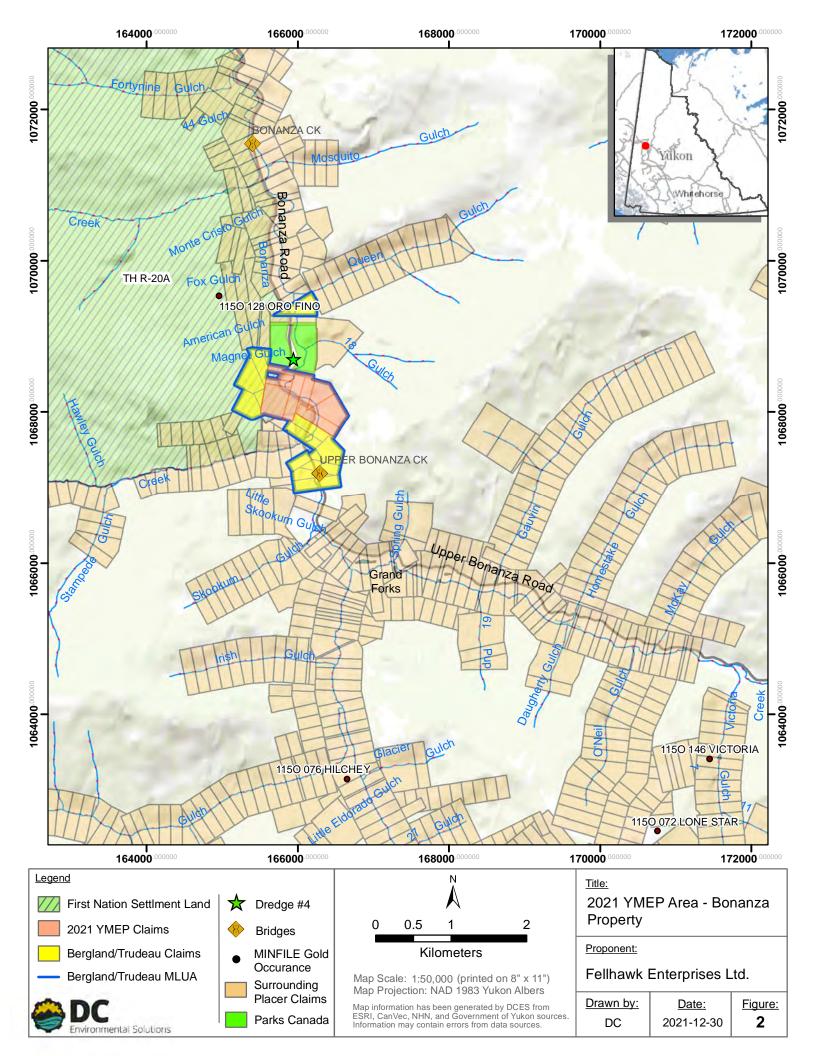
The Project Site is surround by staked placer claims to the north, south and west, and which are permitted by other placer mining operations. The Project Site is situated within the Traditional Territory of the Tr'ondëk Hwëch'in First Nation. Several placer claims included in the Berglund/Trudeau water licence / Class 4 MLUA (PM13-051/AP13051) overlap Settlement Land Parcel TH-R20A; however, these claims were staked between 1964 and 1991, prior to the settling of land claims under the Yukon Umbrella Final Agreement (UFA).

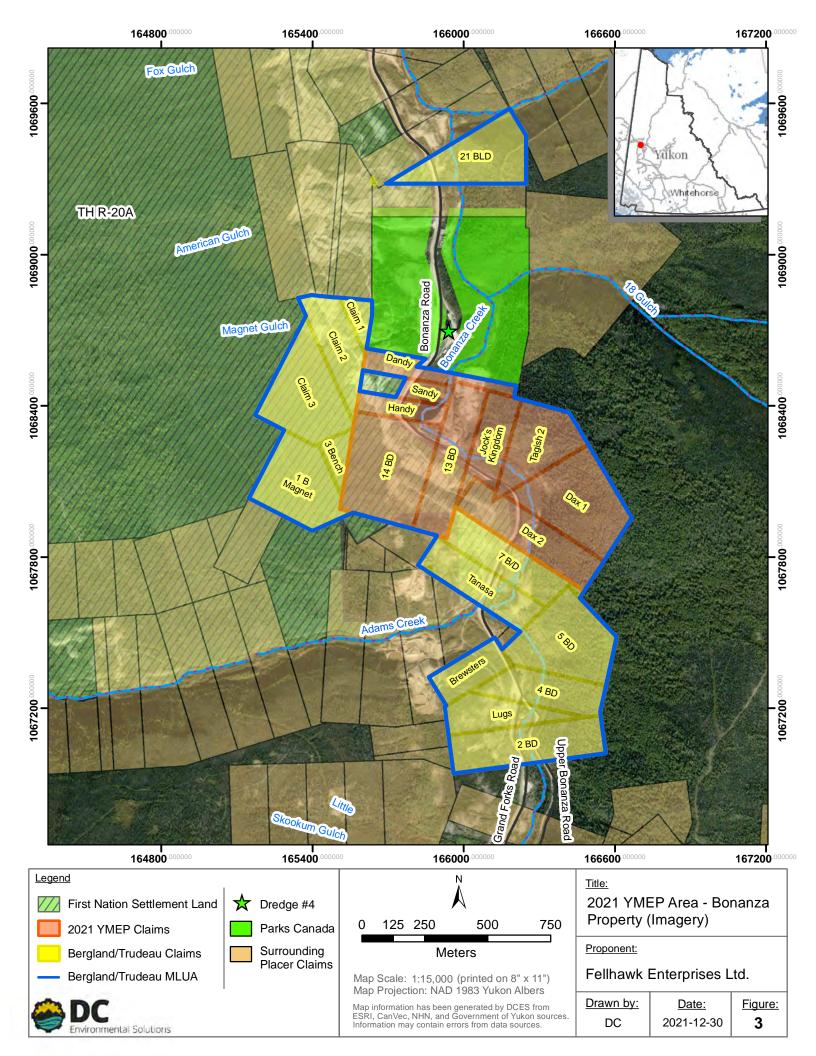
#### 3 CLAIM INFORMATION

Exploration drilling activities under the 2021 YMEP project took place on 9 of the 21 contiguous claims listed in PM13-051/AP13051 through a separate lease agreement between Fellhawk and Berglund/Trudeau, whereby Fellhawk was allowed to operate under the existing regulatory authorizations. The 9 claims included the 2021 YMEP project are identified in Table 1, and highlighted in Figure 2 and Figure 3, along with adjacent placer mining claims and the location of nearby First Nation Settlement Land parcels. An up-to-date claim status report for all claims included in PM13-051/AP13051 is provided in Appendix A, with the 9 claims included in the 2021 YMEP project highlighted in yellow.

Table 1. List of Claims Included in the 2021 YMEP Project (#21-009)

Claim Name	Claim Number	Ownership
SANDY	P43241	Roland Berglund - 50%, Daniel B. Trudeau - 50%
DANDY	P38412	Roland Berglund - 50%, Daniel B. Trudeau - 50%
HANDY	P38413	Roland Berglund - 50%, Daniel B. Trudeau - 50%
13 BD	37912	Roland Berglund - 50%, Daniel B. Trudeau - 50%
14 BD	37896	Roland Berglund - 50%, Daniel B. Trudeau - 50%
JOCK'S KINGDOM	P01496	Roland Berglund - 50%, Daniel B. Trudeau - 50%
TAGISH 2	P00402	Roland Berglund - 50%, Daniel B. Trudeau - 50%
DAX 1	P00403	Roland Berglund - 50%, Daniel B. Trudeau - 50%
DAX 2	P00404	Roland Berglund - 50%, Daniel B. Trudeau - 50%







#### 4 PERMITS, LICENCES, AUTHORIZATIONS AND AGREEMENTS

The following permits, licences, authorizations and agreements identified in Table 2 were in place during the 2021 YMEP project activities, which allowed the work to proceed as proposed in the Fellhawk 2021 YMEP application.

Table 2. List of Applicable Permits, Licences, Authorizations and Agreements

YG Department, Branch or Company	Legislation	Approval/Authorization/ Licence/Permit/Agreement							
Federal Government Agency									
Yukon Environmental and Socio-economic Assessment Board (YEASB)	Yukon Environmental and Socio- economic Assessment Act (YESAA) and Regulations	Consolidated Decision Document 2013-0137							
Fisheries and Oceans Canada (DFO)	Fisheries Act and Regulations	Klondike River Watershed Placer Mining Authorization (08-HPAC-PA5-00051-2)							
Territorial Agency									
YG Executive Council Office, Yukon Water Board	Yukon Waters Act and Regulations (Schedule 6 – Placer Mining Undertaking)	Type B Water Licence PM13-051							
YG Energy, Mines and Resources (EMR), Minerals Branch	Placer Mining Act and Regulations	Class 4 Placer Mining Land Use Approval for Operating Plan AP13051							
YG EMR Yukon Geological Survey	-	YMEP Transfer Payment Agreement # 21-009							
	Private Agreement								
Fellhawk Enterprises Ltd	Berglund/Trudeau	Lease Agreement to perform exploration work under PM13-051/AP13051							



#### 5 BIOPHYSICAL PROPERTIES AND CLIMATE

The Project Site is located within the Klondike Plateau Ecoregion, which is part of the Boreal Cordillera Ecozone. The Boreal Cordillera Ecozone covers sections of northern British Columbia and Southern Yukon, and is an extension of the boreal forest zone that stretches across the continent (Smith et al., 2004).

The Klondike Plateau Ecoregion is part of the eastern most Beringia, and has been exposed to long periods of weathering which has resulted in extensive upland boulder fields, V-shaped valleys and deep soil weathering. The Project Site location in relation to the area and boundary of the Klondike Plateau Ecoregion is presented in Figure 4.

The climate of the Klondike Plateau Ecoregion is strongly continental with warm summers and very cold winters. Mean annual temperatures within the ecoregion are near -5 °C, which also show a strong seasonal variation. Mean January temperatures typically range between -23 °C to -32 °C, while mean July temperatures range from 10°C to 15°C. Extreme temperatures in the lower valleys can range from -60 °C to 35 °C over the course of a year (Smith et al., 2004).

Precipitation within the ecoregion typically ranges from 300 mm to 500 mm annually. Stream flow is typically characterized by a rapid increase in stream flow discharge in May and peaking in June due to snowmelt. However, summer rains can produce secondary flow peaks and sometimes the annual maximum, especially from mountainous regions (Smith et al., 2004).

The Klondike Plateau Ecoregion is in a zone of widespread discontinuous permafrost, with permafrost generally present on north and east facing slopes and thicker packages of stream beds (Mitchell et al., 2014).

#### 6 GEOLOGICAL CONDITIONS

#### **6.1** REGIONAL GEOLOGY

The bedrock geology of the Klondike Plateau Ecoregion constitutes a large part of the Yukon-Tanana (YT) Terrane which extends from Alaska to the Southern Yukon and British Columbia (Figure 4). The YT-Terrane is a composite of medium to high-grade, poly-deformed Paleozoic metasedimentary rock (i.e., Klondike Assemblage and Nasina Assemblage) and meta-igneous rocks (Lowey, 2006). The medasedimentary rocks are intruded and overlapped by granitic and volcanic rocks, overlain by fault-bound slices of serpentinized ultramafic rock of the Slide Mountain Terrane (Smith et al., 2004, Lowey, 2006).

The Klondike Assemblage and Nasina Assemblage consist mainly of quartz–chlorite schist, quartz–muscovite schist, micaceous quartzite, graphitic quartzite, quartz–feldspar–augen schist, amphibolite and orthogneiss, and the Slide Mountain Terrane consists mostly of greenstone and serpentinite (Mortensen et al., 2016).

Rock units in the Klondike District have generally recorded five separate deformation events identified as D1 – D5 (Mackenzie et al., 2008a). Strong ductile deformation of middle green schist to locally lower amphibolite facies occurred during the D1 and D2 events in the late Permian period (Mortensen et al., 2016). The D3 event included thrust imbrication, emplacement of greenstone and serpentinite bodies of



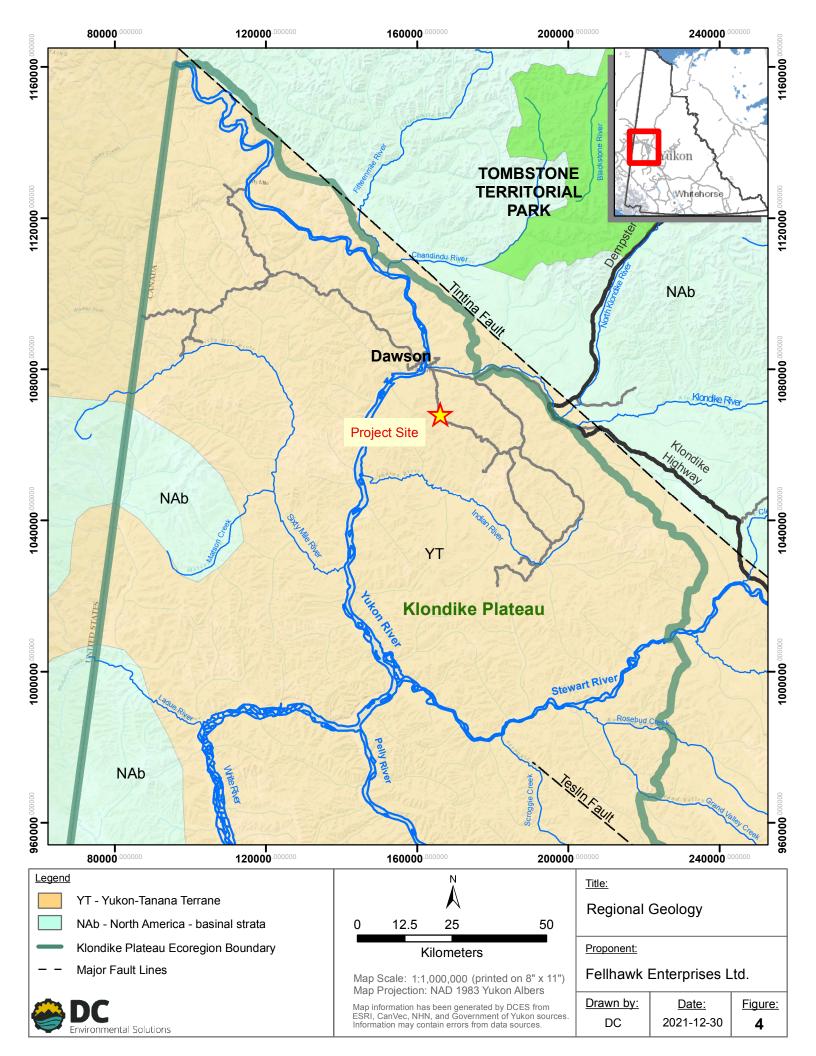
the Slide Mountain assemblage, folding of the dominant schistosity and development of a spaced cleavage. The vast majority of quartz formation occurred as early segregation veins (containing neither gold or sulphides) that are parallel to the compositional layering in the schistose lithologies, and are interpreted to have formed during the ductile deformation associated with the D1/D2 and D3 events (MacKenzie et al., 2008a).

The D4 event produced localized, mainly north- and northwest-trending zones of kink folds and high-angle reverse faults. Mesothermal gold vein formation is interpreted to have formed late in, or immediately following the D4 event in the later Jurassic period. These gold veins were localized into post-metamorphic compressional structures in the Klondike Schist after the rocks were uplifted through the brittle-ductile transition of the D1 – D3 events, and before extensional normal faulting of the D5 event (MacKenzie et al., 2007, MacKenzie et al., 2008a).

Mesothermal gold veins formed individual veins up to 3 m in width as well as swarms of veins at various orientations, but typically with an overall north or northwest trend consistent with the D4 deformation. Rock units of the Klondike Assemblage that host gold-bearing veins in the northwestern Klondike District are mainly comprised of felsic metavolcanic rocks (variably pyritic quartz-muscovite schist), as well as metaporphyry (quartz ± feldspar augen schist) and metaplutonic rocks. Most known lode gold occurrences in the northwestern part of the Klondike are concentrated in the Lone Star Ridge area between Upper Bonanza Creek and Eldorado Creek (MacKenzie et al., 2008b).

The D5 deformation event is characterized by extensional normal faulting with abundant gouge development which locally overprint and offset the gold bearing quartz veins of the D4 deformation event, which occurred as part of the Cretaceous extension (Mortensen et al., 2016).

The Klondike Plateau Ecoregion is largely unglaciated during the last 3 million years, except for local glaciers that emanated from the headwaters of the Sixty Mile River valley, local peaks in the eastern Dawson range, and the Kluane ranges into the Wellesley basin. Surface deposits over much of the ecoregion are composed of colluvium, with alluvium and glacial outwash terraces (Smith et al., 2004). The unglaciated period had a profound impact on the ecoregion, which allowed for the evolution and preservation of a well-developed landscape with rounded summits and valley systems and their contained placer deposits (Mitchel et al., 2014).





#### 6.2 LOCAL GEOLOGY

The immediate area of the Project Site is dominated by quartz-mica Klondike schist. The Klondike schist and contained mesothermal quartz veins are interpreted to be the major source of the Klondike gold field's placer deposits in the project area. A concentration of gold-bearing veins has been recognized at the head of rich placer ground on Upper Bonanza Creek and Eldorado Creek upstream of the project site, including the Lone Star zone (Yukon MINFILE 115O 072) southwest of Upper Bonanza Creek and the Nugget zone (Yukon MINFILE 115O 080) northeast of Eldorado Creek (Mackenzie et. al, 2008b).

The depth to bedrock at the Project Site varies from 20 ft on the sides to 50 ft - 60 ft or more in the main Bonanza Creek channel. The width of the Bonanza Creek deposit varies from 150 ft - 300 ft. Previous drilling and resistivity results at the Project Site demonstrated that the depth to bedrock is in the range of 40 ft - 60 ft and that the ground is predominantly not frozen, which is partially attributed to disturbance by pervious mining operations (Mitchel et al, 2014).

#### 6.3 SURFICIAL GEOLOGY

Placer gold occurs in two main settings in the Klondike. Much of the gold was initially concentrated in sinuous paystreaks within the lower few meters of the "high-level" White Channel Gravel unit of Pliocene age, which was deposited in mature, broad, flat-bottomed valleys formed by braided streams. The erosional surface on which the White Channel Gravel was deposited is referred to as the White Channel "strath". Over time, erosional down cutting led to the incision of modern stream channels into the older drainage system, with the beds of present streams lying up to 70 m below the White Channel strath. Gold in these younger streams (e.g. Bonanza Creek) includes gold that has been reworked and re-concentrated from eroded paystreaks within the White Channel Gravel, as well as gold that has been newly eroded directly from bedrock sources (Mortensen et al., 2016).

Almost all of the placer gold in the Klondike (including both the White Channel Gravel deposits and those in younger streams) was deposited in fluvial settings; however, colluvial gold is also present, especially immediately downslope from lode gold occurrences near the headwaters of some placer streams such as Upper Bonanza Creek and Eldorado Creek, and their associated tributaries (e.g. French Gulch).

The Project Site contains four sub-types of placer deposits, all of which have been profitably been mined during the long history of the placer claims (Mitchel et al., 2014). The four sub-types of placer deposits are included in the numbered list below and depicted in a general schematic of placer deposits in the Bonanza Creek area in Figure 5 (modified from Lowely, 2006).

#### **Project Site Placer Deposits**

- 1. Bonanza Creek Gravel (Placer Deposits)
- 2. High Channel Deposits (White Channel Gravels)
- 3. Side Hill Deposits
- 4. Historic Tailings



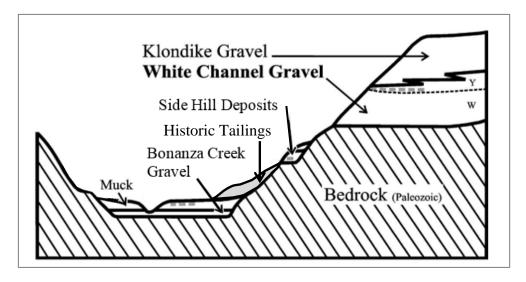


Figure 5. Schematic Cross-Section of General Bonanza Creek Stratigraphy

#### 6.3.1 Bonanza Creek Gravel (Placer Deposits)

The Bonanza Creek placer deposits include those gravels within the Bonanza Creek valley which have been reworked and re-concentrated from eroded paystreaks within the White Channel Gravel, as well as that eroded directly from more recently exposed bedrock sources.

These deposits have been the target of historical works on Bonanza Creek, including the operation of Dredge #5 within the Project Site between 1913 and 1914 (Yukon Government, 2021). However, it has been identified that the smaller Dredge #5 was likely unable to reach more than 26 ft below the channel bed (Mitchell et al., 2014). As the main channel is known to extend 50 – 60 ft or more below grade, gold deposits near the bottom of the channel/bedrock contact are anticipated to remain untouched.

#### 6.3.2 HIGH CHANNEL DEPOSITS (WHITE CHANNEL GRAVELS AND KLONDIKE GRAVELS)

The high channel gravels deposits usually form prominent, continuous terraces, up to 1 km wide and several kilometers long, ranging from 10 m to 200 m above present creek and river levels in the Klondike Gold Fields. These high channel deposits are locally subdivided into (1) White Channel Gravel which is characterized by abundant quartz particles and a light grey alteration of the matrix, and (2) the overlying Klondike Gravel which is characterized by chert particles (Mitchell, 2014).

The White Channel Gravel is common along Bonanza, Hunker and Quartz Creeks and along the Indian River. White Channel Gravel is locally subdivided along Bonanza and Hunker creeks into a lower White Gravel (W) unit and an upper Yellow Gravel (Y) unit (Figure 5).

White Channel Gravel deposits within the Project Site are located to the west of Bonanza Creek on adjacent bedrock benches on American Hill, Magnet Hill, and Adams Hill. The White Channel Gravel deposits on Cheechako Hill were almost completely mined out in the early 1900's and only the large tailing fans remain on the Project Site (Mitchel et al., 2014).



#### 6.3.3 SIDE HILL DEPOSITS

Side hill placer deposits occur on both sides of Bonanza Creek in the weather fractured Klondike schist bedrock, soils and some gravels. The fluvial processes of Bonanza Creek eroded down the ancient overlying White Channel Gravels and side hill soils to give the creek its current elevation. During this process, some of the gold was left trapped in the fractured bedrock and remaining overlying materials. In some side hill areas, additional gold was likely deposited by hydraulic mining (Mitchel et al., 2014).

#### 6.3.4 HISTORIC TAILINGS

There are significant historical tailings on the Project Site and some of these may still contain significant quantities of placer gold. The most important of these are the fans that were created by hydraulic mining of the White Channel Gravel deposits. Hydraulic mining methods were generally efficient at moving large volumes of White Channel material but not always efficient in recovering gold (Mitchel et al., 2014).

There are three significant tailings fans present below Cheechako Hill, Adams Hill and Magnet Hill. The tailing fans blanket much of the side hills to the west of Bonanza Creek and in some locations, into the creek itself. The tailing fans consist of all the material that was monitored off the above White Channel Gravel deposits. Due to inefficient gold recovery and ease of access to these materials, some tailing fans have been profitably mined in the recent past on the Project Site, and may also cover previously unmined gravels (Mitchel et al., 2014).

#### 7 SUMMARY OF PREVIOUS MINING AND INVESTIGATIONS

The following section highlights the available history of exploration and mining activities within and around the Project Site, which used to help identify the 2021 YMEP project targets.

#### 7.1 EARLY WORKS

The Bonanza Creek and Eldorado Creek were completely staked by 1897. The majority of the gold was contained in the lowest 2 to 4 ft above bedrock with varying amounts of overlying frozen ground. Early mining in the area of the Project Site was accomplished by either open cut methods where the depth of bedrock was less than 15 ft, or shafting through 10 ft to 60 ft of overlying frozen material to reach rich pay gravels and decomposed gold bearing bedrock below. Evidence of early activities found on the Project Site include shafts and drifts encountered in mining cuts (Mitchel et al., 2014), as well as available information on the YG Historic Placer Data online viewer (Government of Yukon, 2021).

#### 7.2 HISTORIC DREDGING OPERATIONS

Larger scale mechanized operations became the mining method of choice and/or required method to mine lower grade ground. The first dredge in the Klondike came into operation on Bonanza Creek in 1902. Extensive drilling programs were conducted on Bonanza Creek in the early 1900's to establish the path and limits of profitable pay gravels along the creek valley to best direct dredge operations. Historic dredging within the Project Site was completed in 1913 and 1914 using smaller dredges (e.g. Dredge #5) which could only operate to an estimated depth of 26 ft below the channel bed, whereas the depth to bedrock has been estimated to be up to 60 ft or more in the Bonanza Creek channel.



#### 7.3 BERGLUND AND TRUDEAU (2003 – 2020)

Much like the previous owners of the Bonanza Creek Property (Bob Cattermole and Art Fry), current owners Ronald Berglund and Dan Trudeau have been conducting placer mining operations at the Project Site since 2003 using modern mechanical methods using heavy equipment. This has also included conducting exploration activities such as stripping and pitting, auger drilling, reverse circulation (RC) drilling and resistivity surveys. Table 3 outlines the various exploration activities undertaken on the project site between 2003 and 2014 by Berglund and Trudeau (Mitchel et al., 2014).

Table 3. Summary of Historic Exploration Activities by Berglund / Trudeau (2003 – 2014)

Exploration Activity	Year Conducted	Summary of Results				
Stripping and	2002 2014	<ul> <li>Main exploration activity used to guide mining operations through bulk testing and processing.</li> </ul>				
Pitting	2003 – 2014	<ul> <li>Mining operations continued in areas where bulk testing produced good results.</li> </ul>				
		Used in areas not amenable to testing by excavator such as thick     White Channel deposits on Adams, Magnet and American Hills.				
Auger Drilling	2003 – 2014	<ul> <li>Estimated 25 - 30 auger holes were drilled on the Project Site to guide mining activities using the operator's own drill rig.</li> </ul>				
		Auger hole information was typically not recorded.				
Reverse Circulation (RC) Drilling	2007	<ul> <li>Five holes were drilled using RC drill methods on Claim 14 BD in the area known as the 'Poverty Bar'.</li> <li>The location was selected as it was believed there could be depths to bedrock greater than the maximum depth of recovery of Dredge #5.</li> <li>Drill hole results identified the depth of gravel/bedrock interface between 39 ft - 56 ft below grade and gold was recovered in 4 of the 5 holes.</li> </ul>				
Resistivity 2007 Survey 2009		<ul> <li>Resistivity results demonstrated:         <ul> <li>depth to bedrock on Claim 14 BD was identified as</li> <li>46 ft - 66 ft below grade (comparable with RC drilling results).</li> <li>Gravels lie under varying upper materials types,</li> <li>Two possible paleo channels exist that cross the survey profile.</li> </ul> </li> </ul>				

A record of exploration activities on the Project Site from 2015 to 2020 is currently unavailable; however, Yukon Placer Industry reports for 2015 - 2017 (Van Loon and Bond, 2018) and 2018 - 2020 (Van Loon and Bond, 2021) indicate ongoing mining activities by Berglund/Trudeau within existing claim boundaries included in PM13-051/AP13051. Mining activities focused on White Channel Gravel deposits on left limit benches on Adams, Magnet and American Hills (2015 - 2017) and right limit of Adams Creek (2018 - 2020).



#### 8 SUMMARY OF 2021 YMEP PROJECT ACTIVITIES

The following section provides a summary of the 2021 YMEP project activities conducted by Fellhawk and NSDC within the 9 claims identified in Table 1. The digitized extents of historic Dredge #5 operations within the Project Site relative to current claim boundaries and the 2021 sonic drill hole locations are presented in Figure 6. Other historic workings (e.g. open excavations and shafting/drifting) also took place within the Project Site and within the area of the 2021 sonic drilling program; however, digitized information was not available for mapping at the time figures were developed, but were reviewed through the YG Historic Placer Data online viewer (Government of Yukon 2021).

#### 8.1 YMEP PROGRAM OBJECTIVES

Three target areas were identified as part of the 2021 YMEP project conducted on the Project Site, which are described in further detail below:

#### 8.1.1 TARGET 1 - BONANZA CREEK GRAVEL

Target 1 included the use of sonic drilling to collect intact samples of the material below the estimated vertical extents (26 ft) of the previous Dredge #5 operations within the Project Site.

Through a review of historical documents, previous exploration activities and word of mouth, it is believed that Dredge #5 operations on Bonanza Creek within the Project Site area between 1913 - 1914, did not have the capability to excavate deep enough to reach and recover Bonanza Creek pay gravels at the bedrock surface. The excavation depth of other historic workings (open cuts) is suspected to be no deeper than 15 ft; however, it was not possible to confirm this through the 'Other Historic Workings' layer on the YG Historic Placer Data online viewer.

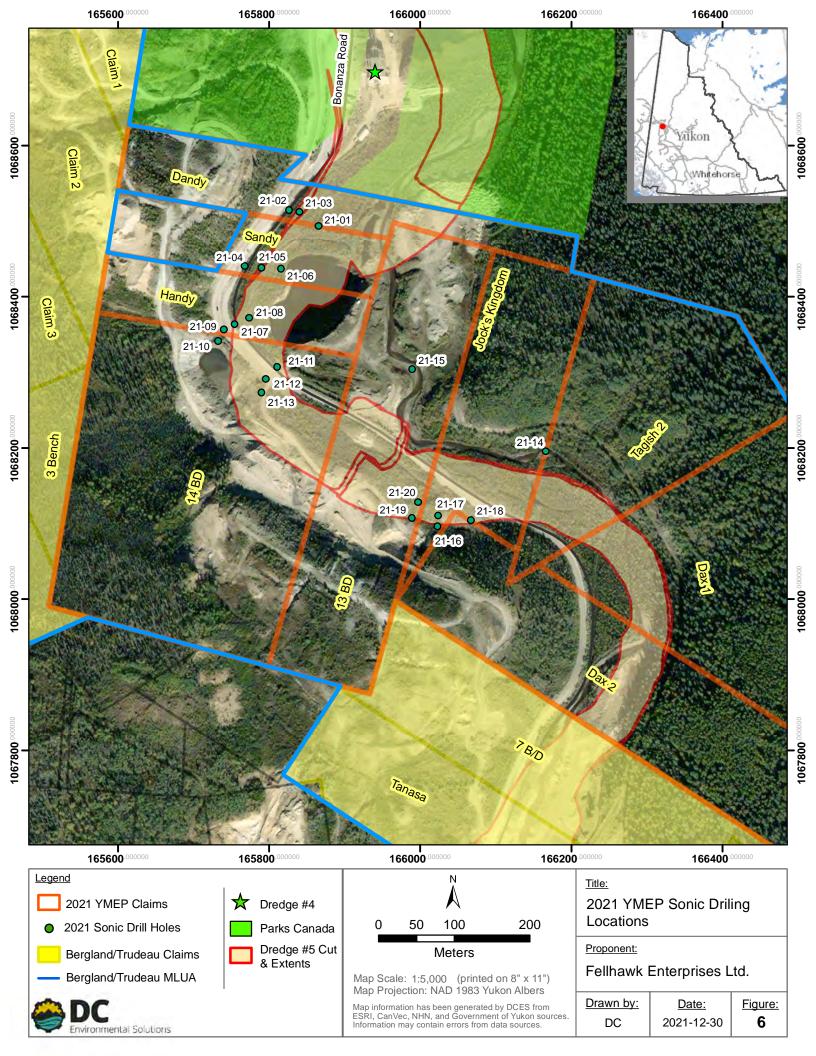
#### 8.1.2 TARGET 2 – SIDE HILL DEPOSITS AND HISTORIC TAILINGS

Target 2 included the use of sonic drilling for exploration along the valley limits and Dredge #5 limits to assess gold values and the economic viability of excavating and processing side hill deposits, and materials within and below layers associated with historic mining operations. Historic dredging activities, hand mining operations, and hydraulic tailings fans within the Project Site are believed to have left considerable amounts of pay materials along the limits of the valley and dredge operations.

#### 8.1.3 TARGET 3 – FALSE BEDROCK LAYER

Target 3 included the use of sonic drilling to investigate three locations near the 'Poverty Bar' area within the Project Site for the potential of a false bedrock layer within the Bonanza Creek valley. It has been speculated that a previously undocumented paleo-channel may exist below a false bedrock layer, potentially extending the length of the Bonanza Creek valley.

There is a historic news article detailing the theory and attempt of a gentleman in 1902 to dig beneath what was thought to be a false layer of bedrock in the Eldorado Creek valley and uncover a deeper channel of pay gravels. One such layer was thought to have been encountered around the 90 ft mark, which was below the known level of bedrock of Eldorado Creek where mud, trees, caribou jaw, etc., had been documented by the miner. An artesian-well or flooding of the excavation shaft prevented further excavation at the time of the article.





#### 8.2 2021 YMEP PROJECT ACTIVITIES

NSDC was retained by Fellhawk to conduct sonic drilling on the Project Site between September 13 - 17 & 22, 2021. Fellhawk provided field support to NSDC during the drilling program. A total of 20 boreholes were drilled over the course of the work (Figure 6).

A summary of the activities performed by NSDC and Fellhawk are provided below. A list of general 2021 YMEP project activities and dates are provided in Table 4.

#### Northern Sonic Drilling and Consulting Activities

- Mobilization of equipment and three staff members
  - o Terra Sonic TSi 150c sonic drill and 6 inch diameter auger
  - Foremost TVS1000 support vehicle
  - o Ford F350 Pick Up Truck for transportation
- Fuel supply
- Meals and lodging in Dawson City
- Drilling of 20 boreholes 1,136 ft (346 m) in total depth
- Drill core logging
- Sample processing and gold recovery analysis

#### Fellhawk Enterprises Ltd. Activities

- Mobilization of equipment and 2 staff members
  - o D8N CAT Dozer
  - o ATV
  - Truck and lowbed trailer
- Meals / daily expenses
- Trail construction
- Drill pad construction
- Reclamation
- Miscellaneous labour and support

Table 4. General List of 2021 YMEP Project Activities

Activities	Dates	Employees/Contractor
Mobilization, Drill Holes 21-01 to 21-04	September 13, 2021	Fellhawk, NSDC,
Drill Holes 21-05 to 21-09	September 14, 2021	Fellhawk, NSDC,
Drill Holes 21-10 to 21-15	September 15, 2021	Fellhawk, NSDC,
Drill Holes 21-16 to 20-19	September 16 & 17 2021	Fellhawk, NSDC,
Drill Hole 21-20, Demobilization	September 22, 2021	Fellhawk, NSDC,



Trail and drill pad construction at the various drill hole locations was conducted by two Fellhawk staff members (Will Fellers and helper) to support the drilling program. Trail and drill pads were constructed based on site specific needs using a D8N CAT dozer. Trails and drill pads were constructed to the minimum width necessary to mobilize the sonic drill rig and equipment to the drill hole location.

A Terra Sonic TSi 150c sonic drill and a Foremost TVS1000 support vehicle were used by NSDC to complete the drilling program. A Ford F350 pickup truck was used to transport NSDC crew to and from the Project Site. Samples were processed on site as they were drilled using a custom built sample trailer designed to minimize cross contamination of samples and allow for accurate core analysis.

The NSDC sample trailer included a 12 ft long trough where the drill core was recreated and laid out for photographs and measurements. The core was then broken up and washed through a trommel with a scrubber section to further break up clay and organic materials. The trommel screened the material to 1/4" in size. The screened material was then concentrated on a "LeTrap" sluice box liner. The concentrate was sieved with a #8 screen and panned down to be weighed. The pan tailings were then panned a second time to confirm nothing was missed. As an additional check, the total project pan tailings were run through the trommel and panned again.

Drill holes were back filled and compacted immediately after completion and mobilization of the drill rig in order to minimize potential impacts to wildlife. Removed organics at drill pad locations (where required) were spread back over the pad area after completion of the works to minimize erosion and promote natural revegetation.

#### 8.3 Sonic Drilling Results

A summary of the drill hole results, including drill hole number, depth to bedrock, total depth of borehole, description of frozen conditions, and gold values obtained during sample processing are included in Table 5 below for all 20 boreholes. Table 5 also identifies the various exploration targets evaluated for each drill hole. Drill hole locations over the Project Site, as well as gold value results and depths to bedrock are presented in Figure 7, Figure 8 (north Project Site) and Figure 9 (south Project Site). A summary of drill hole results, including geospatial coordinates for each drill hole location is included in Appendix B, while the NSDC drill logs and sample logs are included in Appendix C.

#### **8.4** Discussion of Target Evaluations

#### 8.4.1 TARGET 1 – BONANZA CREEK GRAVEL

Target 1 focused on the Bonanza Creek gravel materials below the estimated vertical limits of the previous Dredge #5 operations within the Project Site, which was estimated to be below 26ft. These drill holes were located within the estimated area of the dredge operation extents based on historical YCGC records digitized by the Yukon Geological Survey (YGS).

Drill hole results for Target 1 generally demonstrate that historic Dredge # 5 operations or other historic mining activities within the Project Site were able to reach bedrock within the Bonanza Creek valley. Drill core logs identified the presence of mud/muck layers on existing bedrock within the dredge operating extents (e.g. Drill hole logs: 21-01, 21-02, 21-05 - 08, and 21-10 - 13) where gravels should have been present based on historic YCGC drilling results.



Table 5. Summary of 2021 YMEP Sonic Drilling Results

Drill Hole	Target	Bedrock Depth (ft)	Total Depth (ft)	Frozen	Gold (mg)	Additional Details
21-01	1	59	63	No	Trace	Mud on bedrock, previously mined area.
21-02	1, 2	45	55	No	0	Mud on bedrock, previously mined area.
21-03	1, 2	54	61	No	15	Shallow gravel layer at bedrock (~1ft).
21-04	1, 2	38	62	No	8	Possible slide rock (Klondike Schist) on bed rock. Gold present in upper slide rock layer material.
21-05	1, 2	54	61	No	52	Mud on bedrock, previously mined area. Gold present in fractured bedrock material.
21-06	1	57	60	No	Trace	Mud on bedrock, previously mined area. Weathered bedrock.
21-07	1, 2	59	64	No	Trace	Mud on bedrock, previously mined area. Weathered bedrock, competent bottom.
21-08	1, 3	54	58	No	Trace	Mud on bedrock, previously mined area. Hard bedrock.
21-09	1, 2	55	57	No	23	Slide rock layer on bedrock under Bonanza Rd. Gold present in slide rock material at bedrock.
21-10	1, 2	63	70	No	Trace	Mucky slide rock on bedrock, previously mined area.
21-11	1, 3	54	57	No	0	Mud/silt/sand at bedrock. Muddy bedrock fragments, previously mined area. Hard bedrock.
21-12	1	57	60	No	Trace	Mud with some fines on bedrock, previously mined area. Fractured bedrock.
21-13	1	57	61	No	Trace	Mud on bedrock, previously mined area. Hard bedrock.
21-14	2	22	26	No	6	Mucky slide rock layer on bedrock. Hard bedrock. Valley limit.
21-15	3	6	15	No	0	Angular gravel on bedrock. Hard, fractured bedrock. Valley limit.
21-16	1, 2	31	37	No	680	Sand & gravel layers over bedrock, covered by historic fill/waste and original muck/peat.
21-17	1, 2	60	70	No	34	Gravel layer on bedrock, covered by historic fill/waste and muck/peat. Fractured bedrock.
21-18	1, 2	42	51	No	535	Gravel layer on bedrock, covered by historic fill/waste and muck/peat. Fractured bedrock.
21-19	1, 2	59	63	No	214	Gravel layer on bedrock, covered by historic fill/waste and tailings. Fractured bedrock.
21-20	1, 2	77	78	No	6	Gravel and mud on bedrock, previously mined.

<sup>\*\*\*</sup> See Appendix C for drill log result details



Sampling results typically generated zero or trace concentrations of placer gold within the drill cores (Figure 7, Figure 8 and Figure 9) particularly at or near the bedrock surface within the dredge limits, with the exception of drill hole 21-05 where 52 mg of gold was recovered from fractured bedrock material below an overlying mud layer. These results indicate that historic dredging operations or other historic works generally extended to bedrock and placer gravels had been previously mined. The drill core results also indicate that the current Bonanza Creek valley stratigraphy within the Project Site is comprised of layers of reworked coarse and fine historic tailings, as well as various layers of fill, waste/muck material overlying existing bedrock.

#### 8.4.2 TARGET 2 – SIDE HILL DEPOSITS AND HISTORIC TAILINGS

Target 2 focused on the valley limits to assess gold values and the economic viability of excavating and processing materials at and below historic dredging and hydraulic mining operations, or at the limits of the valley where Dredge #5 was not able to access.

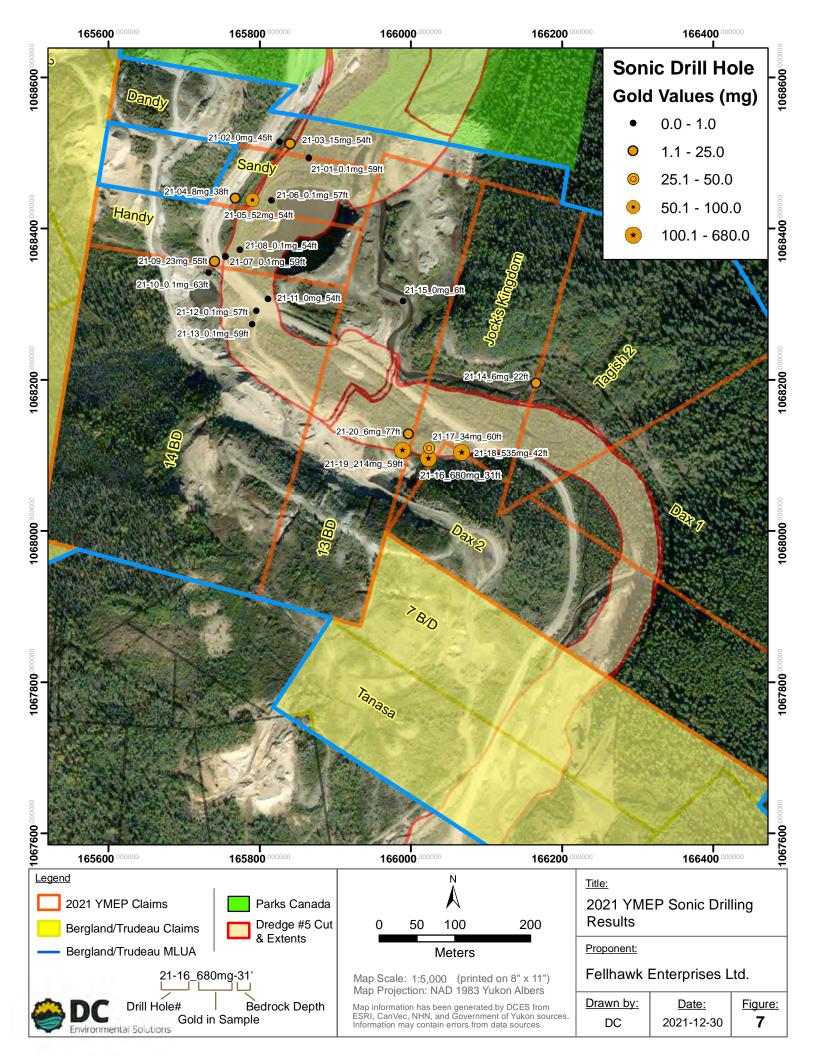
Sampling results and drill log data for Drill Holes 21-03, 21-04, 21-05 and 21-09 along the northwestern limit of Dredge #5 operations within the Project Site (Figure 7 and Figure 8), and Drill Hole 21-014 along the eastern valley edge demonstrated limited concentrations of placer gold within layers of slide rock material from valley walls of Bonanza Creek, or in fractured bedrock. It appears at the northwestern area drill holes that a localized band of gold bearing material was not assessable by the dredge, possibly due to the presence of slide rock material which may have forced the dredge to operate further to the east, or due to higher economic gold values in the channel to the east. Sampling results from adjacent drill holes to the east support this notion as drill hole results from 21-01, 21-06, 21-07 and 21-08 produced either zero or trace concentrations of placer gold, and the presence of mud on bedrock in the various core samples indicates that dredging or other operations extended down to bedrock in this area.

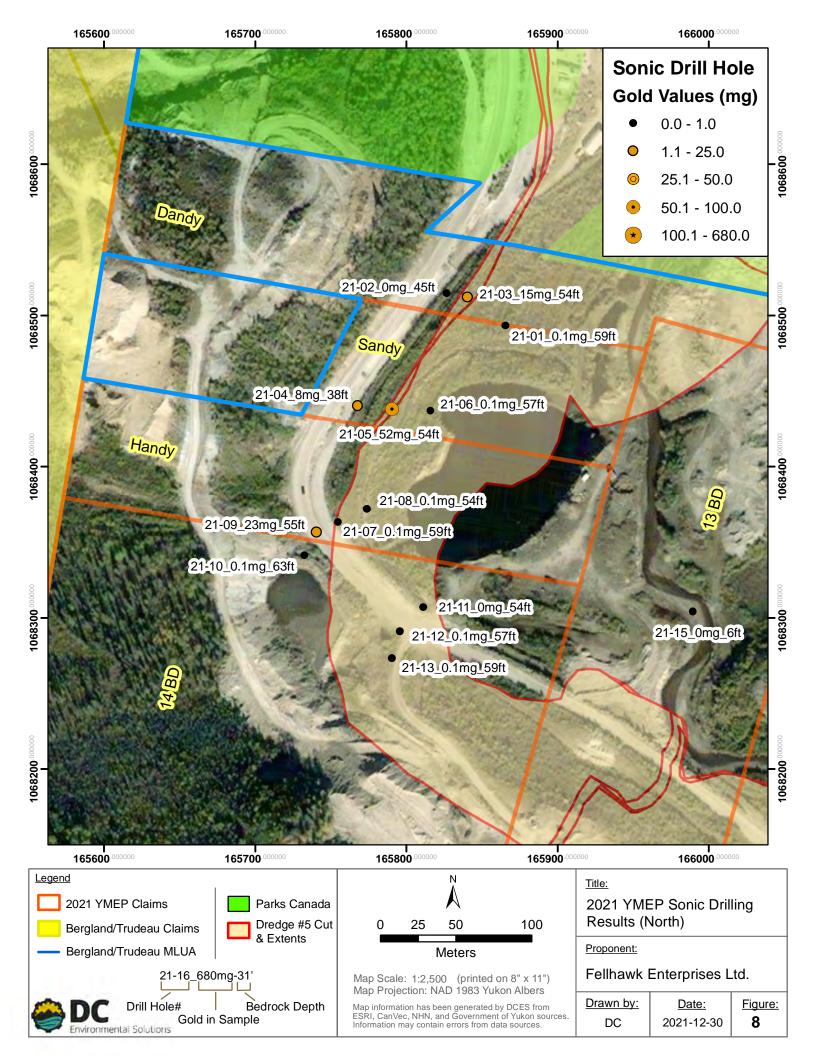
Sampling results and drill log data for Drill Hole 21-016 to 21-020 demonstrate a very promising economic discovery of placer gold (up to 680 mg in 21-016) at the bedrock contact that was not historically mined by Dredge #5 (Figure 7 and Figure 9). Drill log data indicates that historic tailings from dredging and/or hydraulic monitoring of White Channel Gravels, and stripped organic/overburden material was placed over top of this area, therefore preventing access to pay gravels by dredging operations. Drill holes 21-016, 21-018 and 21-019 located along the western limits of Dredge #5 produced gold values of 680 mg, 535 mg and 214 mg, respectively. Fellhawk intends to target this discovery as part of the 2022 mining season through an agreement with Berglund / Trudeau.

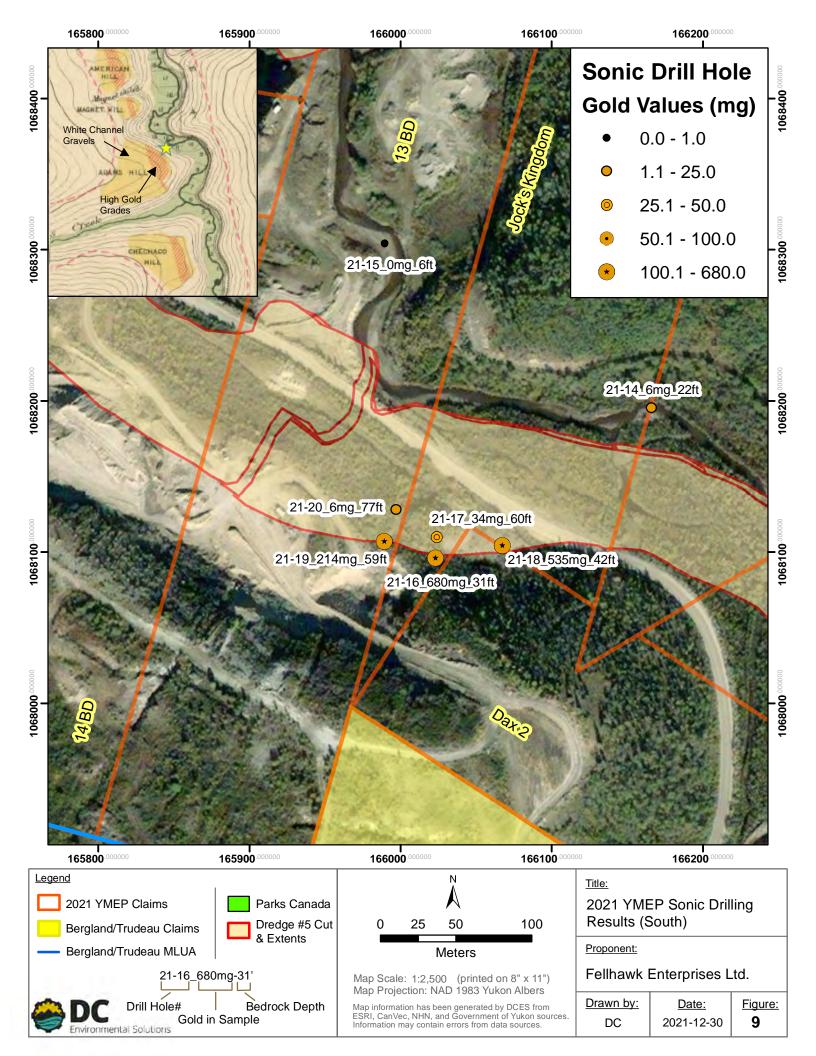
#### 8.4.3 TARGET 3 – FALSE BEDROCK LAYER

Target 3 included three drill holes (21-08, 21-11 and 21-15) in an area near what is referred to as the 'Poverty Bar' to determine whether a false bedrock layer exists within the Bonanza Creek valley that might contain previously unknown pay gravels below, which may extend the length of the valley (Figure 7, Figure 8 and Figure 9).

Drill log results for Target 3 did not demonstrate the existence of a false bedrock layer. Bedrock conditions were found to consist of hard, competent material below fractured bedrock. Attempts to drill through the bedrock were unsuccessful and no evidence suggested that conditions would change with additional depth. Drill core logs from Target 1 and Target 2 exploration activities yielded similar results.









#### 8.5 RECOMMENDATIONS FOR NEW EXPLORATION TARGETS

It is recommended that Fellhawk Enterprises focus operations in the 2022 mining season in the area of the economic discovery identified beneath the historic tailings as part of the 2021 YMEP Target 2 exploration activities (Figure 7 and Figure 9).

In addition, two new targets are identified for future exploration programs (Target A and Target B) and are presented in Figure 10.

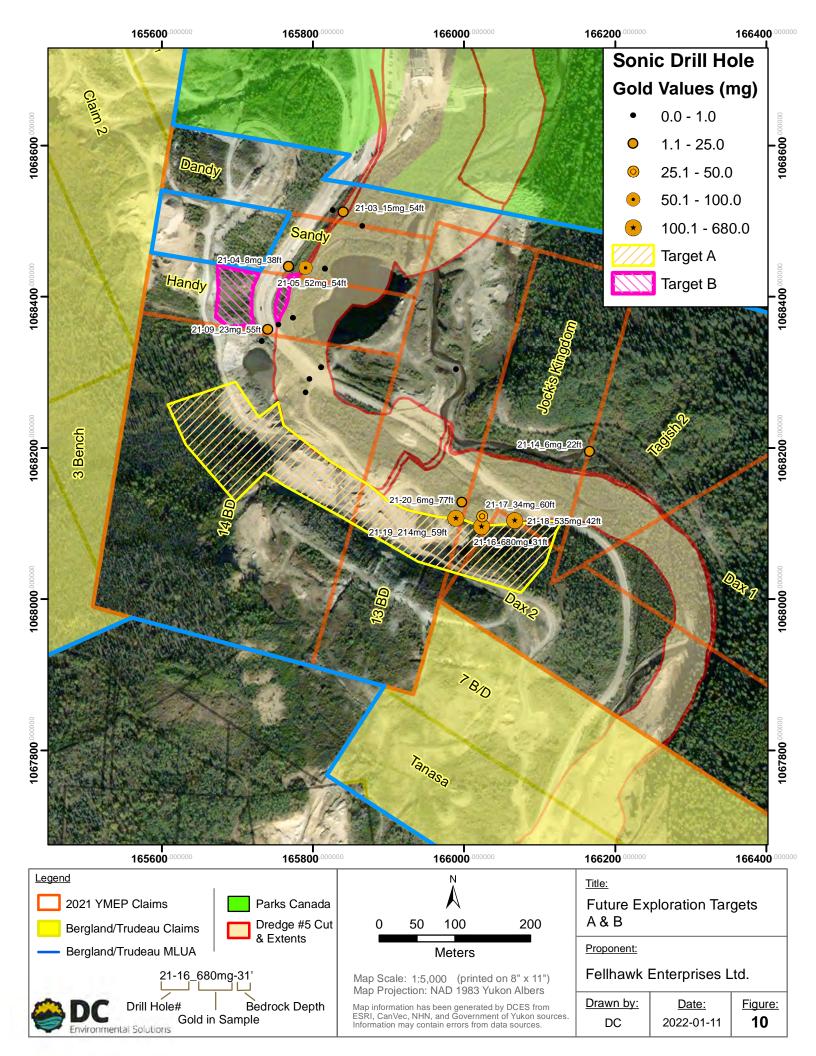
#### 8.5.1 TARGET A – HYDRAULIC TAILINGS FANS

Additional exploration drilling is recommended at Target A along the western edge of the dredge extents near the area of Drill Holes 21-16, 21-18 and 21-19, and extending further west into the thicker area of the hydraulic tailing fans on Claims 13 BD and 14 BD. As the sluicing equipment from historic hydraulic mining operations was known to have poor gold recovery, it is anticipated that gold may be contained in the tailings through the entire depth of the layer, therefore drill core samples should be analyzed for gold throughout the entire sample length. As hydraulic tailing fans may have also shielded a portion of the Bonanza Creek bed from later dredging operations, areas containing gold bearing gravels similar to those identified in the 2021 YMEP Project may be discovered, particularly at underlying bedrock terraces and significant reductions in bedrock slope.

#### 8.5.2 TARGET B – BONANZA RD/HANDY CLAIM

A second target (Target B, Figure 10) identified for follow-up exploration work is located on the Handy claim on the east and west sides of the Bonanza Road. Gold values were identified during the 2021 YMEP Project at three locations in the general area to the west of the dredge limits. It is possible that gold values remain under or adjacent to the road bed, and 2021 drill results demonstrate a significant change in bedrock slope between Drill Holes 21-04, 21-05 and 21-09 and are located outside of the known dredge limits. Further exploration will help to delineate this area.

Although not identified specifically as a third target, additional drilling on the east side of the dredge limits is suggested for further consideration in future exploration programs to evaluate the potential of gold bearing gravels in areas where Dredge #5 was unable to access, similar to Target B.





#### 9 SUMMARY OF EXPENDITURES

The expenditures incurred by Fellhawk during the 2021 YMEP project included drilling contractor services provided by NSDC, equipment rentals/supplies and daily expenses/wages provided by Fellhawk, and report preparation by DCES. A summary of the total 2021 YMEP project expenses are outlined in Table 6 below. A copy of the YMEP Project Status Report submitted to the YG EMR – YMEP Program on October 11, 2021 is included in Appendix D.

Table 6. Summary of Expenditures

Company	Expense	Description	Cost
Northern Sonic Drilling and Consulting Inc.	Drilling Services	<ul> <li>Mobilization/Demobilization/Travel</li> <li>20 drill holes (1,136 ft total) using Sonic drill rig</li> <li>Sample processing</li> <li>Meals and Lodging</li> <li>Fuel</li> </ul>	\$ 61,407.78
	Equipment	• D8N CAT Dozer (18 hr @ \$350/hr)	\$6,300.00
	Rentals/Supplies	• ATV (5 days @ \$40/day)	\$ 200.00
	Labour	• Will Fellers (7 days @ \$250/day)	\$ 1,750.00
Fellhawk	Labout	• Helper (5 days @ \$250/day)	\$ 1,250.00
Enterprises Ltd.	Daily Expenses	• Will Fellers (7 days @ \$100/day)	\$ 700.00
	Daily Expenses	Helper (5 days @ \$100/day)	\$ 500.00
	Travel	• 50 km/day x 7 days x \$0.60/km	\$ 210.00
	Mobilization	Lowbed for Northern Sonic equipment	\$1,500.00
DC Environmental Solutions	Summary Report	Reporting, Interpretation & Consulting	\$ 2,000.00
	\$ 75,817.18		

#### 10 CONCLUSIONS

The 2021 Yukon Mineral Exploration Program (YMEP) project #21-009 on Bonanza Creek (Bonanza Exploration Project) was successfully completed by Fellhawk Enterprises Ltd., and Northern Sonic Drilling and Consultants under the YMEP Placer module. The program provided excellent insight into historic placer mining operations within the Project Site through the use of sonic drilling equipment to assess three exploration targets. The 2021 YMEP project took a total of six days to complete 20 sonic drill holes down to bedrock, including the logging of drill core samples and gold analysis of select core sample materials.



Drill core logs and sampling results demonstrated that historic dredging operations within the Project Site by Dredge #5 in 1913 – 1914 was able excavate and process pay gravels down to bedrock. It was previously believed that depth limitations of Dredge #5 had left gravels in place near the bedrock surface (Target 1).

Drill core logs and sampling results identified a very promising economic discovery of placer gold in an area of virgin ground that had been covered by historic dredging and hydraulic mining operations (Target 2) near the western limits of Dredge #5 activities. It was also identified that areas with limited concentrations of placer gold are still present in slide rock layers adjacent to the Bonanza Creek valley walls (Target 2).

Drilling was also conducted within the Bonanza Creek valley to assess the potential of a false bedrock layer within the Project site and the potential presence of an additional gravel layer below; however, drill core logs demonstrated component underlying bedrock material throughout the Project Site, and that a false bedrock layer was not likely present (Target 3).

It is recommended that Fellhawk Enterprises focus operations in the 2022 mining season in the area of economic discovery identified beneath the historic tailings as part of the Target 2 exploration activities. In additional, future sonic drilling activities near known dredge limits, and within and under historic hydraulic tailing fans may identify additional economic discoveries.

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# Appendix A Claim Status Report



# Claim Status report



2022-01-04 04:37 PM

Claim status	Claim name and number	Grant number	Claim expiry date	Claim owner	NTS Map	Grouping number	Notification Approval	Total Excess Credit
Active	21 BLD	00311	2029-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14h	GD00956	LP00919	4
Active	Brewsters	29121	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14i	GD00956	LP00919	41
Active	Claim 2	29452	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14i	GD00956	LP00919	54
Active	Claim 1	37729	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14i	GD00956	LP00919	55
Active	(14 BD)	37896	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	(115O14i)	GD00956	LP00919	47
Active	2 BD	37902	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14h	GD00956	LP00919	50
Active	5 BD	37904	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14h	GD00956	LP00919	42
Active	4 BD	37907	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14h	GD00956	LP00919	49
Active	(13 BD)	37912	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14h	GD00956	LP00919	47
Active	7 B/D	42389	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14i	GD00956	LP00919	36
Active	Lugs	42617	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14h	GD00956	LP00919	37
Active	Tagish 2	P 00402	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14h	GD00956	LP00919	35
Active	Dax 1	P 00403	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	(115O14i)	GD00956	LP00919	35
Active	Dax 2	P 00404	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	(115O14i)	GD00956	LP00919	35
Active	Jock's Kingdom	P 01496	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	(115O14i)	(GD00956)	LP00919	35
Active	Claim 3	P 07789	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14i	GD00956	LP00919	45
Active	3 Bench	P 07790	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14i	GD00956	LP00919	45
Active	1 B Magnet	P 14603	2024-11-30	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14i	GD00956	LP00919	45
Active	Tanasa	P 31049	2024-06-26	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14i	GD00956	LP00919	4
Active	Dandy	P 38412	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	(115O14i)	GD00956	LP00919	35)
Active	(Handy)	P 38413	2024-10-17	Roland Berglund - 50%, Daniel B. Trudeau - 50%	115O14h	GD00956	LP00919	35





Active Sandy P 43241 2024-12-04 Roland Berglund - 50%, Daniel B. Trudeau - 50% GD00956 LP00919 32

Criteria(s) used for search: Regulation type = Placer, Claim status = Active, Mining district = Dawson, Notification or approval number = LP00919.

Total claims selected: 22

This claim status report has been generated using the mining claims database online application https://apps.gov.yk.ca/ymcs/. This site uses a copy of the mining recorder data and is refreshed nightly. Contact the specific district for more information on a claim.

Dawson.mining@yukon.ca 867-993-5343 Mayo.mining@yukon.ca 867-996-2256 Watson.mining@yukon.ca 867-536-7366 Whitehorse.mining@yukon.ca 867-667-3190

# Appendix B Drill Hole Locations and Results

Appendix B - 2021 YMEP (#21-009) Fellhawk - Drill Hole Coordinates and Data Summary

Drill Hole	Latitude	Longitude	Bedrock Depth (ft)	Total Depth (ft)	Gold (mg)
21-01	63.941611	-139.336857	59	63	0.1
21-02	63.941763	-139.337693	45	55	0.0
21-03	63.941755	-139.337408	54	61	15.0
21-04	63.941045	-139.338723	38	62	8.0
21-05	63.941048	-139.338259	54	61	52.0
21-06	63.941062	-139.337739	57	60	0.1
21-07	63.940346	-139.338817	59	64	0.1
21-08	63.940443	-139.338451	54	58	0.1
21-09	63.940274	-139.339094	55	57	23.0
21-10	63.94013	-139.339218	63	70	0.1
21-11	63.939899	-139.337551	54	57	0.0
21-12	63.939744	-139.337827	57	60	0.1
21-13	63.93958	-139.337896	57	61	0.1
21-14	63.939247	-139.330101	22	26	6.0
21-15	63.940047	-139.333921	6	15	0.0
21-16	63.938228	-139.332783	31	37	680.0
21-17	63.938351	-139.332798	60	70	34.0
21-18	63.938343	-139.331906	42	51	535.0
21-19	63.938294	-139.333499	59	63	214.0
21-20	63.938486	-139.333382	77	78	6.0

Trace Gold - 0.1 mg

# Appendix C Northern Sonic Drilling and Consulting Drill Logs



							Drill Ho	le Log				v1.2-01/5/18
Ī		Fell-Ha	uK //B	Manza	Lin	e spacing			Driller	Lian		
1	Line #	1210				e Spacing			Helper	NICK		NORTHERN SONIC
ļ	Date 13 <sup>th</sup> _ Sample Diameter				6" Seni	د	Logger	Lion				
-	11-1-4		- 1	Interva						gs		Notes
-	Hole #	Muck	2 - 82	Gravel	Bedrock	Total	Sampled	Frozen?	Qty.	Colour	1-1-1-1	
	21-1	2	7- 27	32-48	59	£3'	54-65	No	5	green		thrown and /12-32 grey Sand muck 48-52 fine lails 52-57AK
1.00	2.	0	0-30	45-53	53	57	45-	No		lime	0-70 light Brown Sand 20-	24 course tails 24-30 fine tails
41	21-2	U				J †	55	110	10	Men	30-34 murk 34-40 til	5 40-45 Huck 45-57 Force BR BF
	21-3	1	1-35	54 -	57	61	61 -	No	7	Red		Sent 35-42 course tails 42-30 Sen
-			10-30	57			<del>                                     </del>	14-		Di /	50-54 mack 54-57 grave	16-30 sand grand 312-55 Slide nock
	21-4		10 - 90		55	62'	367	No	14	white	55-6) Hurs OR	
Lina	21-5	/	0-46	/	54	61	52-	No	5	pink	0-10119ht brown Sand/10-46	grey sme/ 46-54 muck
+2		=1-	- >-	25 26	*		54	708	>	1	BR 84-61	y Sne, 25-76 Cows fails
**	21-8	51-50	E-25 Soul	25-36 CC0220	57	60	55 - 60	No	3	Bluck	56-50 Fines 50-57	
•		25-30	8-25	30 -	59	64	5E -			yellow	0-8 road Fill /8-25' Sad /	25-30 Muck /30-36 grave
	21-7	46.56	36 46	36	31	61	64	No	4	dot	36+46 5md/graves/2600-1	46.59 MULK/BR59-64
Lina	21-0		40-45	35-40	54	58	53-	No	4	red/ while	0-35 Soud /35-40 roase	
#3	71-8	45-54		Lails		3,0	58				45-54 Muck 54-58	
	21 - 9	<b>26-</b> 32	10 -20	0-10	507.	57	37.57	No	8	orange	0-10 road Fill /10-20 gra	race ? sille? 145-50 slid Blesso
	/-2	22-26	#1181 EX131	0-22		289	50			lime	0-22 Gill/22-126 Murky	26-56 Mulky Slide rock with
~	21-10		26-56	56-633	63	70	- 70	No		green	organics , 56-63 muck	y gravet:/slite 63- RR
LINE	21-11	48-	45	54.53	54	57'	51-	No	3	green	32-45 grey sill/sand 53	54-57 UK
114	21-12	27-30 50-56	30-36	1	57	60'	54-	No	3		UK 5 7-60'	127-30 Muck/30-36 gieg Sand
	21-13		and decide			62	56-	20	3	red while	0-10 dione (10-583	5and / 28-30 muck 46 course / 46-50 BR@59

Abbreviations: Bedrock (BR), Decomposed (DC), Fractured (Frac), Angular (AN), Hard (HD), Sandy (SD), Clay (CL), Frozen (F), Thawed (TH), Wet (WT), Muck (MK), Gravel (GR), Cobble (Cob), Boulder (Bld)



v1.2-01/5/18

Project Bononza	Line spacing	Driller Gan	T
Line #	Hole Spacing	Helper Nic K	
Date 15/09/21	Sample Diameter 6" Sonic		



Date	ie 15/09/21			Sample Diameter 6" Son			Logger Lian		Lun	
			Interva	l (feet)				Ва	igs .	Notes
Hole #	Muck	Sand	Gravel	Bedrock	Total	Sampled	Frozen?	Qty.	Colour	
21-14	0-14	/	51182/gra	221	26	19-26	N	4	orange det	0-10 graves/10-14 Muck/14-20 wet sorpy stide with graves/20-22 dry mucky stide BR@ 22 (had)
21-15	/	/	0-6	6	16	5-15	No			5-15 Hard blocky bedrock, No sign of false bottom
21-16	ા\$-18	30-31	28-31	31	40	27-37	No	7	مر الاس	0-15 light brown Fill 15-28 Muck/peat/31-3850, rave) 35-40 Hard BD
21-17	40-56	1	56-63	65	70	60-70	No	12	rec	56-63 Black gravel / 63-65 BR frac / 65-70 HD BR
21-18	22-35		0-10 (f.u) 35-46	46	51	36-51	No	10	oranga	35-46 91 av / 15:2 frac. / Have Bit 12 46
21-19	45-50			60	63	50-63	16	5+10	Hue/ white	0-35 Fill/waste/saved 45-50 to wash 50-56 Sand 156-60 gravel 160-63 BR
21-20	75-76	Go-70	0-56 (waste)	76	78	50-56 76- 78	No	5	INK/ white	0-56 Fill/waste (Lagres of white channel) 56-60 while channel, 60-63 (carse tolls, 63-70 fines 70-76 Mark BRG 76
						>-				
			£							

Abbreviations: Bedrock (BR), Decomposed (DC), Fractured (Frac), Angular (AN), Hard (HD), Sandy (SD), Clay (CL), Frozen (F), Thawed (TH), Wet (WT), Muck (MK), Gravel (GR), Cobble (Cob), Boulder (Bld)

## Placer Drilling Sample Log

v2.1-17/04/2020

Project Fell hank Bonanza	Washer Adam
Line #	Panner : Adm
Date 13/09/2021	Method tramme - Le' trap



	Dute	12/27	HOA			THE THOM THOM ME - LE PROP				
		Inte	rval			Bedrock	Tier.	Gravel		Gold
	Hole #	Тор	Bottom	Depth	Qty.	Notes	Qty	Notes	Weight (mg)	
	21-01	54	63	59'	4'	Black, fractured	5'	Mud on Beltock	trace	
Α	21-02	45	55'	輸出	'19'	fractured & ground up BRQ 45 Quartz Rich white from 49-5	5 Brai	ga above	2	
В	21-028	33'	36	PORT.	0'			Mud on Bolvak	* trace	
	21-03	52'	61'	54	7	Brown Fractural weatherel BR Gravel pocket (Sluff?) 50	-57	zimud on BR	15	1945
A	21-04	52'	62'		10	Schistion top (Slite mak?)	K		trace (4mg)	2.00
B	21-04	41	52'	-	11	(micaceous) Quarte Rich	lite,		Q	
C	21-04	32"	411	38'	3'	* 38' - 53' appears to be slike rack of BR (klendile Shis	6'	G' of slile rock with mul (Blacky talus)	8	
	21-05	52.	61'	54.	7'	fractured Bedrock	2	muck with anywlar BR frequent(	52	
	21-06	55	60'	57'	3'	weathered, fractured BR	2	mud on BR	trace	
	21-07	58'	64'	59	51	Weathard BR, campokental	1	mud	trace	
	21-08	53'	58	54	4	Hard BR	1.	mus	frace	10.74
A	21-09	9547	57	55	2	marther of BD	8	Slide rock, Some Rounded class	23	Cara Seem
	21-09	38'	47'	MA	0		11,	Slide rock with some	trace	•

Abbreviations: Bedrock (BR), Decomposed (DC), Fractured (Frac), Angular (An), Hard (HD), Sandy (SD), Clay (CL), Boulders (Bld), Cobble (Cob) Frozen (FR), Thawed (TH), Wet (WT), Clean (Cln)

Project Line # Date	Fell Hav	K B01	Jan Za		Panner Alam Method trame / Le trap	Panner Alam			DNIC LETTURE
7 7 199		erval	THE T		Bedrock		Gravel		Gold
Hole #	Top 59'	Fo'	Depth 63	Qty.	DCBR (greenish grey)	Qty 4'	Slide rock with mu	Weight (mg)	70.0€
21-11	51	57	54'	3`	Grey Hard, Broken up BR	3'	muly BR frags 53'-5		
21-12	54	60	57'	3	Grey Fractured BR	3	Muck with some fine	es trace	00.
21-13	56'	61'	57	4	Brown wothers BR	1	muck on BR	trace	0.
21-14	30,	26'	22,	4		2'	angular grave	trace (6.)	(0)
11-15	3	15'	6	9'	Brey Fractured Had BR Dark grey frak Land BD	3	2' of vet black loose (	0 8	
21-16	27'	37.	31	6		4	on BR 2' of Sand who	ne 680	
21-17	57	70'	60'	10	Grey hard trac BR	3	Black genel with go	* 34	S. O. S. C.
21-17	25	36	MA	12	2' of fractures BR with	11	Cupper Gravels)	trace	N
21-18	36'	51'	40-	711	provel mixed composant BR	Indoor 4'	Savly gravel, Quartz 1	535	
1-19	50,	63'	58%	4%	58%-60, DCBK Compotent BK@ 60.	8/2	Black grave   with 3:1t and sand on top Upper gravels	214	
11-19	36'	45'	N/A	0		9'	upper gravels	trace	
bbreviations	Bedrock (Bit	Detompi	9		S), Sandy (SD), Class (CL), Boulde * (Bld		t (WT), Clean (Cin		5

	Placer Drilling Sample Log	v2.1-17/04/2020
onen 3a	Washer Asam	

Project Fell Hawk - Bonan 3a	Washer Asam	
Line #	Panner Adam	NORTHERN SONIC
Date 25/09/2021	Method trampel /Le trap	7

	Inte	erval			Bedrock		Gravel	Gold	
Hole #	Тор	Bottom	Depth	Qty.	Notes	Qty	Notes	Weight (mg)	
21-20	50'	56	N/A	0	* Upper Gravels *	6	Brown gravel with Quartz Clasts	trace	
21-20	76'	78'	77'	1,	* Upper Gravels * Brown Decomposed BR	1,	Black /down grey gravel?	6	8
	14								
									# # 1

Abbreviations: Bedrock (BR), Decomposed (DC), Fractured (Frac), Angular (An), Hard (HD), Sandy (SD), Clay (CL), Boulders (Bld), Cobble (Cob) Frozen (FR), Thawed (TH), Wet (WT), Clean (Cln)

# Appendix D YMEP Project Status Report – Oct. 11, 2021

## YMEP Project Status Report -

Yukon Mineral Exploration Program

Box 2703 (K102), Whitehorse, Yukon

Energy, Mines and Resources

Government of Yukon

102 - 300 Main Street

Y1A 2C6



## Submit completed form by September 30 to:

YMEP no:	Q1-00a	Applicant name	Fell hawk Er	H. Ltd	project name:	Bonanza		
Address	Bayl	070 S	Jonson City	Yakon	module:			
	701	3160			type:	Placer		
phone 1:	867-	993 - 3	3627 phone 2:					
date submit	tted:	Qet 11	/2021	2021 email: goldmine@no				
				_	•	date. We need to kee en now and January 3	•	
Has the pro	ogram sta	rted:	yes					
			e	stimate total	expenditures	to date as of Sept 30	75,000	
					estimate p	ending expenditures	3-4.000	
				estim	ate total expe	enditures for program	\$79,000	
				Is the field	portion of the	program completed?	Yes	
			no					
- 直			will it proceed	yes				
						when will it start		
				maybe	2			
		100				when will you know		
				no				
				4	are you withoution a	drawing from this agreement?		
Comments								

email: ymep@gov.yk.ca

toll free (in Yukon): 1-800-661-0408

tel: 867-456-3828

fax: 867-667-3198