

Operation and Resource Valuation Report

**Canyon Gold and Gravel Inc.
Lucky Thirteen
Placer and Aggregate Operation**

January 23, 2022

**Submitted to: Brian Hauff
Canyon Gold and Gravel Inc.**



HOLMES MINING CONSULTANTS

Table of Contents

1.0 INTRODUCTION	3
1.1 PURPOSE AND OBJECTIVES	3
1.2 EXECUTIVE SUMMARY	3
2.0 RESOURCE ANALYSIS	4
2.1 SITE OWNERSHIP AND PHYSICAL LOCATION	4
2.2 DESCRIPTION OF OPERATIONS	5
2.3 PERMITTING AND AUTHORIZATION	6
2.3.1 AGRICULTURAL LAND COMMISSION	7
2.3.2 MINISTRY OF ENERGY, MINES AND LOW CARBON INNOVATION	8
2.4 LOCAL FEATURES MAP AND MINE DEVELOPMENT PLAN	9
LOCAL FEATURES MAP	9
MINING DEVELOPMENT PLAN	10
2.5 RECLAMATION	11
2.6 IMPACT OF SLOPES, SETBACKS AND WATER TABLE	12
3.0 CASH FLOW FACTORS	12
3.1 CAPITAL COSTS	12
3.2 PRODUCTION DATA	13
3.3 REVENUE FACTORS	14
3.3.1 AGGREGATE	14
3.3.2 GOLD	15
3.3.3 CLEAN FILL	15
4.0 DISCUSSION	16
4.1 ASSUMPTIONS	16
4.2 OTHER EXPERT REPORTS	17
4.3 VALUATION METHOD	17
4.4 DISCOUNT	18
4.5 RESIDUAL LAND VALUE ANALYSIS	18
TABLE 1	20
4.6 CONCLUSION	20
5.0 CLOSURE	21

5.1 COMPETENCY	21
<u>APPENDIX VALUATION MODEL.....</u>	<u>21</u>

1.0 Introduction

1.1 Purpose and objectives

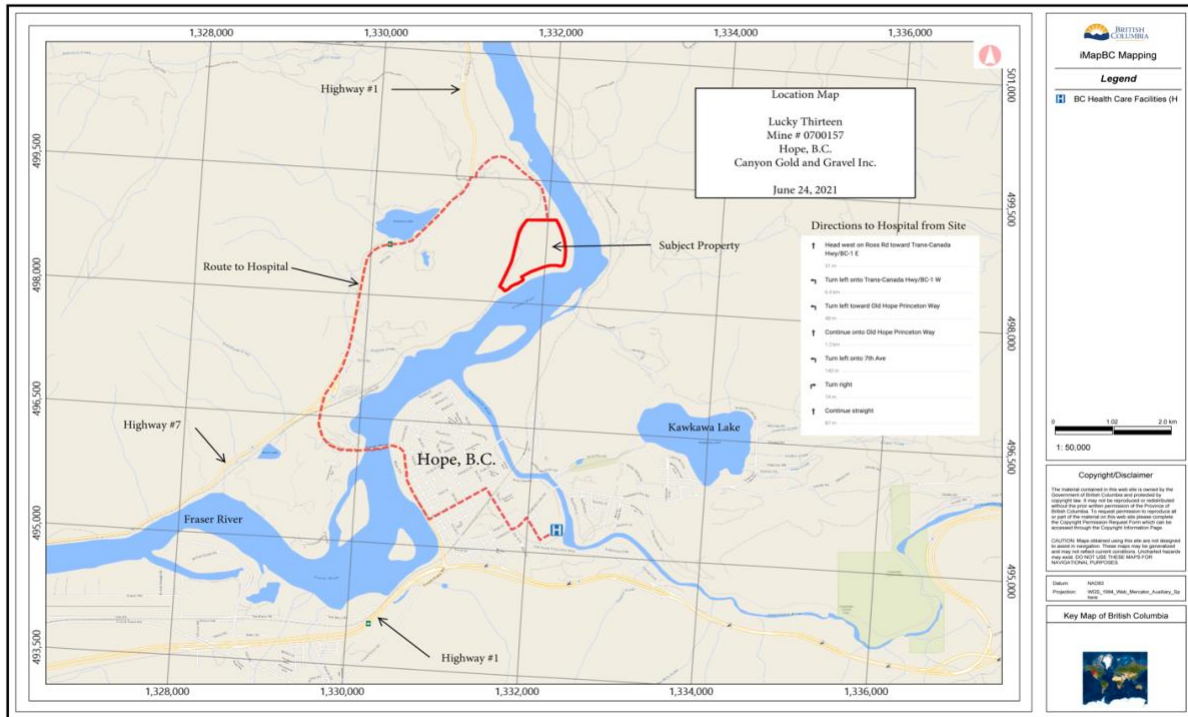
Holmes Mining Consultants Ltd. (HMC) has been retained by Canyon Gold and Gravel Inc. (CGG) to evaluate their proposed sand and gravel extraction along with gold recovery operation (the Project) near Hope, B.C. The purpose of this report is to provide an analysis of the Project and develop a cash flow model (Model) to determine an overall enterprise value. In doing so, various expert reports have been relied upon as well as site visits and information provided by CGG.

1.2 Executive Summary

Based on a total available resource of nearly twenty million tonnes of aggregate including recovery of nearly 63,000 oz of gold over a 33 year operational life, the Project has a net present value based on future cash flows of \$CDN 35,783,746. Residual land value based on comparison of agricultural land in the Fraser Valley of \$100,000 per acre or \$12,500,000 gives a total company valuation of \$48,283,746. A full analysis of the operation and Model and land comparisons is provided in this report along with relevant references.

2.0 Resource Analysis

2.1 Site Ownership and Physical Location



Location Map

Directions to Site: The property is accessed by travelling North on the Trans Canada Highway #1 for a distance of approximately 4.0 km from the town of Hope BC. Turn right at the Hope Refuse Transfer Station and proceed through the lower gate. An existing exploration road travels East from this point for approximately 600 m to the CPR tracks.

The Lucky Thirteen project site (Site) is owned in fee simple by CGG. The legal description of the lands is:

PID: 014-776-880

DISTRICT LOT 57, YALE DIVISION OF YALE LAND DISTRICT, EXCEPT PLAN 286

A Placer Lease over the lands are also held by CGG allowing the company to extract and sell minerals recovered from the site in accordance with the Mineral Tenure Act (MTA).

Placer Lease as follows:
1079782

2.2 Description of Operations

(Based on the 2021 Notice of Work)

The Operation is proposed as a permitted sand and gravel operation with gold recover permit (Permits) that are to be obtained by CGG from the Ministry of Energy, Mines and Low Carbon Innovation (EMLI). The permit application process is ongoing at the time of this report but according to CGG is expected to be finalized in 2022 with production beginning in 2023.

The proposed operation will see sand and gravel materials containing gold resource excavated from CGG's fee simple lands located near Hope, BC. and on the Fraser River. The excavations will proceed to a depth of 2m of the high groundwater level in the area. This excavation level is a generally accepted practice in the industry and avoids complicated ground and surface water modelling details that an excavation in groundwater near a river.

The full operational details are provided in the Notice of Work (NoW) but based on the understanding of HMC will generally consist of the following activities:

1. Clearing, stripping and grubbing of the vegetation and overburden;
2. Access road construction;
3. Railway crossing;
4. Excavation of pit run gravel and transport of the gravel to the processing plant;
5. Screening and washing the aggregate to separate the gold bearing fractions of the gravel and extraction of the gold from the aggregate;
6. Loading screened and washed aggregate on trucks for sale and transport off-site;

7. Acceptance of clean fill materials to replace excavated aggregate from the site and use of the clean fill along with topsoil and overburden salvaged on site for use in reclamation; and
8. Decommissioning and closure.

These activities are consistent with standard aggregate operations that HMC has knowledge of and in the opinion of this author are an accurate description of the scope of the Project.

2.3 Permitting and Authorization

Aggregate and placer operations require permits and authorizations to operate in BC. These permits and authorization may include, but not limited to, the following:

- Road use permits, private and otherwise
- Highway access permits
- Licence to cut trees
- Soil removal permits
- Mines Act permits
- Environmental discharge permits
- Environmental Assessment permits
- Environment Management Act permits

HMC makes no judgement on whether all of the above noted permits and authorizations may be required, however it is our experience that authorization from the Agricultural Land Commission (ALC) for removal of material from lands within the Agricultural Land Reserve (ALR) requires a non-farm use permit and a mining permit from EMLI are two of the key authorizations required and some discussion of each is warranted.

2.3.1 Agricultural Land Commission

Aggregate extraction from Lands within the ALR in excess of 500m³ requires authorization from the ALC. A reclamation plan submitted to the Commission should include the following:

- A detailed soil survey and agricultural capability analysis of the land(s) impacted, including potential soil bound crop options, and any affected or potentially affected neighbouring properties at an appropriate scale (as per ALC Policy P-10). All existing resource information such as government soil survey and agricultural capability mapping must be included and discussed in the context of the detailed survey.
- An inventory and description of the existing land use on the subject land(s) and surrounding lands.
- Detailed site preparation, operating and reclamation activities in-line with the Agricultural Land Commission's Best Management Practices for Aggregate Extraction (Appendix A). This should include, but is not limited to, the following elements:
 - Plans and sections showing original undisturbed grades, current grades (if different from undisturbed grades), final grades in relation to adjacent natural grades, volume of aggregate to be removed, and proposed slope gradient (%) drawn at an appropriate scale and prepared by a Professional Engineer or Registered BC Land Surveyor;
 - A topsoil management plan addressing stripping, storage and replacement of soil;
 - A plan for phased operations and reclamation (if applicable);
 - If backfilling pit areas with fill imported from offsite is being proposed, fill certification procedures and site control measures to ensure that only clean fill material is accepted;
 - Erosion control measures;
 - A weed management plan;
 - A plan for crop/agronomic vegetation establishment;

- Detailed drainage plans for the rehabilitated site to ensure optimum surface and subsurface drainage conditions;
- Final proposed agricultural capability; and,
- Closure procedures and certification of the work.

Reclamation plans are reviewed by the ALC staff for consistency with these requirements and therefore require proper care and attention prior to submission.

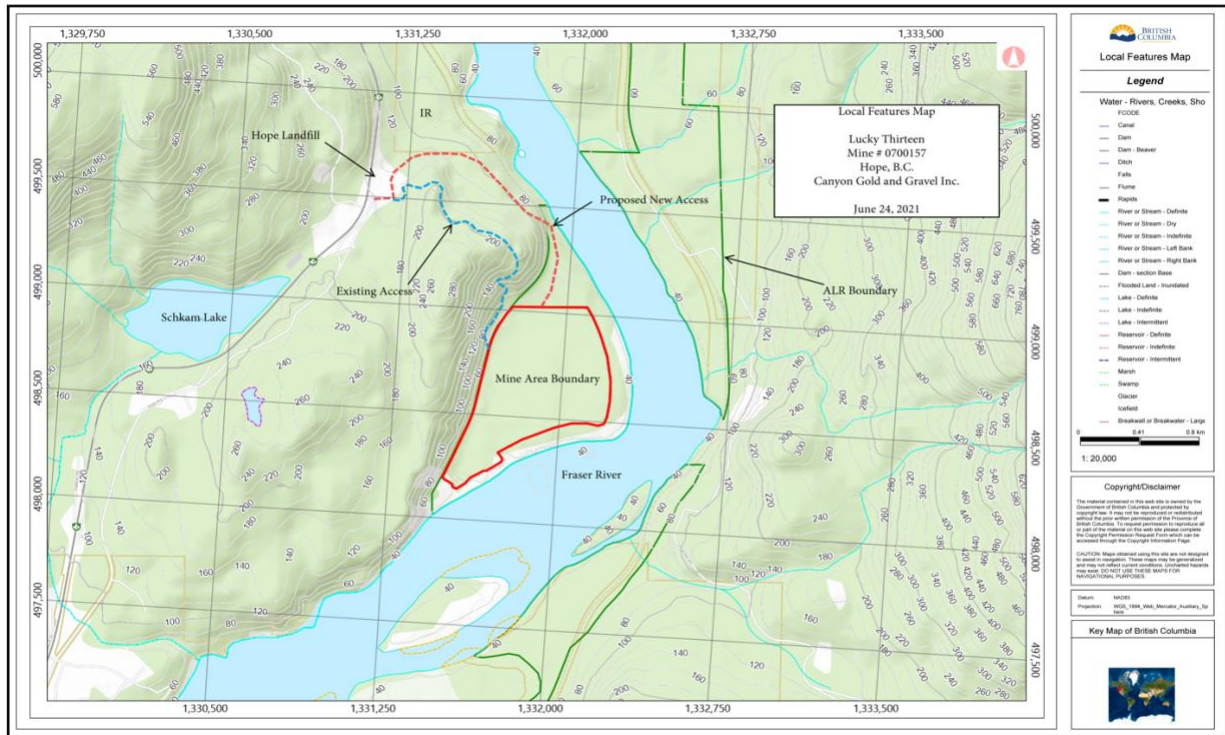
2.3.2 Ministry of Energy, Mines and Low Carbon Innovation

HMC understands that the Notices of Work for the Placer and Aggregate portions of the NoW have been submitted and under active review. Authorization typically take two years to complete so finalization of permits with EMLI in 2022 is reasonable according to CGG.

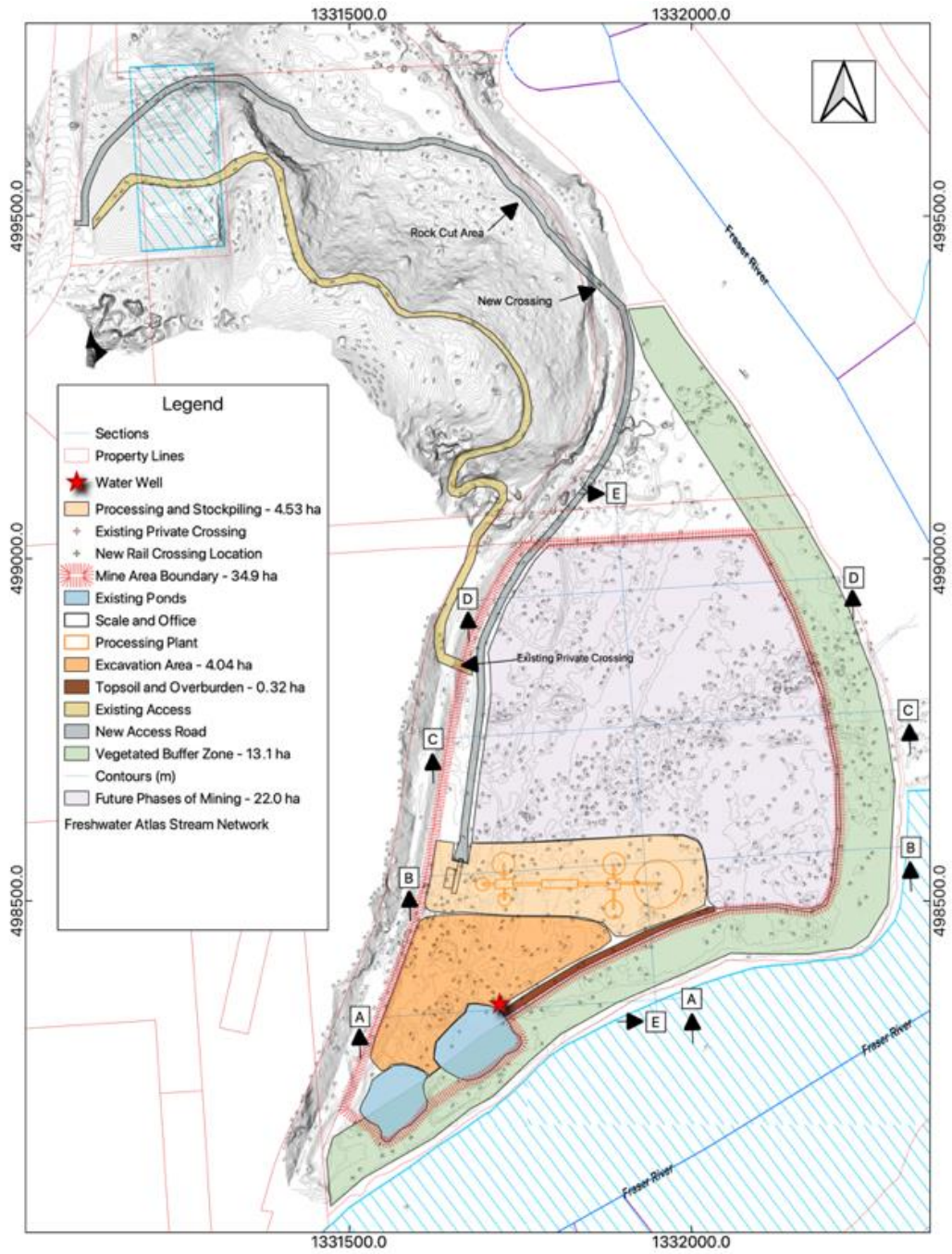
Reclamation objectives for the pit are consistent with existing zoning and designation in the ALR so it is not expected that permit issuance will stumble for technical reasons.

2.4 Local Features Map and Mine Development Plan

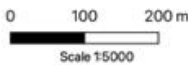
Local Features Map



Mining Development Plan



Mine Development Plan
 Lucky Thirteen
 Mine # 0700157
 Canyon Gold and Gravel Inc.
 June 23, 2021



2.5 Reclamation

Reclamation activities would follow Part 10 of the HSRC consistent with end land use objectives permitted by the ALC. Key reclamation guidelines pertaining to the Property are listed below:

- Sec 10.7.4 – Land Use
- Sec 10.7.5 – Capability
- Sec 10.7.6 – Long Term Stability
- Sec 10.7.9 – Landforms

Reclamation will consist of backfilling the excavation with clean fill and then spreading the topsoil and overburden that was existing on site over the area and seeding. One of the unique features of the operation is that clean, approved fill (excavation materials) will be imported and used to grade the site and fill in the excavation created by removing the gold and aggregate. This reclamation method also has the following advantages:

- Provides a backhaul for aggregate leaving the site, therefore reducing transportation costs;
- Creates a unique revenue stream in addition to gold and aggregate;
- Allows progressive reclamation of the site; and
- Virtually eliminates the reclamation liability expense to the company.

Fill revenue is calculated as a separate line item even though it is directly related to the material excavated in the Model. Fill revenue has only been accounted for in Year 2 of operations to allow time for a hole to be developed where trucks can efficiently arrive on site loaded with fill, dump in the hole, load with aggregate and leave the site. It may be possible to begin this flow of material sooner which would only increase the cash flow potential. The 1 year delay in fill revenue is therefore conservative.

2.6 Impact of Slopes, Setbacks and Water Table

EMLI regulations based on the Health, Safety and Reclamation Code for Mines in British Columbia, April 2021 (HSRC) Part 10 specify permitting, reclamation and closure requirements and conditions for mines. Specific requirements such as a 5 meter setback from property boundaries (HSRC, 10.5.8) and best practices such as a 2 meter excavation buffer to the high groundwater table and practical final reclamation slopes of 25% minimum have been accounted for in the volume calculations. Final excavation volume as determined by Machibroda was 20 million metric tonnes.

3.0 Cash Flow Factors

The Model contains a number of factors that have an effect on the cash flow from operations. These factors and variables are linked to one another so that as the Model is developed, and new information is presented it can be adjusted without lengthy changes. A number of key factors are described below. A further section outlining assumptions is also included in this report.

3.1 Capital Costs

The Project is proposed as a simple extraction and processing operation, relatively speaking. Minimal plant and equipment is required to produce a single fraction of aggregate for sale and recovery of gold from the aggregate. Triple “O” Contracting (Triple O) has provided HMC with a list of mobile and stationary equipment that will be used for the operation and HMC has made assumptions based on experience for the operating costs of the capital equipment along with the production schedule and product pricing.

Capital costs for the equipment have not been verified and are assumed to be accurate based on information provided by Triple O. Operational costs for the equipment are based on generally accepted “Blue Book” rates as published by the Province of British Columbia. Replacement of capital equipment has not been

contemplated in the Model because the analysis is based on an hourly rate which has been extrapolated to a cost per tonne of aggregate produced and sold. As the Project progresses longer hours will be run to account for increases in production which do not require additional capital equipment as the utilization rates for the equipment has been factored in.

Total capital costs of \$6.45 million dollars total have been used based on the Siga Resources report which includes operational equipment by Triple O.

3.2 Production Data

Production data has been developed for the Model based on a starting annual production and sales volume of 250,000 tonnes per year with a 160 day working year. Mine permits require updates every five years based on regulations in the Health, Safety and Reclamation Code for Mines in BC, 2021 (HSRC). During the mine plan updates, changes to the production levels can be applied for and authorized by EMLI in conjunction with other updates to the authorized activities on site. HMC, for the purposes of the Model, has assumed based on experience that production increases of 30% would be applied for and granted at each 5 year mine plan update period. Slow, stepwise increases in production are a good way to increase the site activity in predictable, methodical fashion.

As production levels increase over life of mine to an eventual level of 1,000,000 tonnes per year, where production increases cease, no changes to the capital equipment are required as the capacity of the equipment changes only by the hours of operation required daily. Final production levels for the Model contemplate the same equipment used on day one except 240 day per year operations with 22 hour production days.

Utilization rate for the equipment increases over time and as the utilization rates exceed the hours in a production day then either the production day is lengthened (to a maximum of 22 hours) or an additional piece of equipment is added and the capital cost is logged in the Model.

3.3 Revenue Factors

There are three cash flow streams from the Operation:

1. Sale of aggregate;
2. Recovery and sale of gold; and
3. Importation and placement of fill.

3.3.1 Aggregate

The sale of aggregate is based on a single product, pit run gravel, being sold to existing markets in Abbotsford where that material will then be mixed and processed in to finished products for sale. There are a number of reasons for selling a single product on site:

1. A dedicated backhaul with fill can be organized from the receiving site;
2. Requires minimal processing equipment and simple loading of trucks;
3. There is no waste material generated;
4. Market factors such as product requirements don't change; and
5. No imbalance of final product ratios that may slow production.

The starting selling price was determined from working backwards from the selling price in Abbotsford for washed concrete products of \$18.50 per tonne and subtracting additional processing and freight.

Freight of \$7.72 per tonne to Abbotsford was calculated as 65% of the actual cost to account for the backhaul of fill that will be transported on round trips.

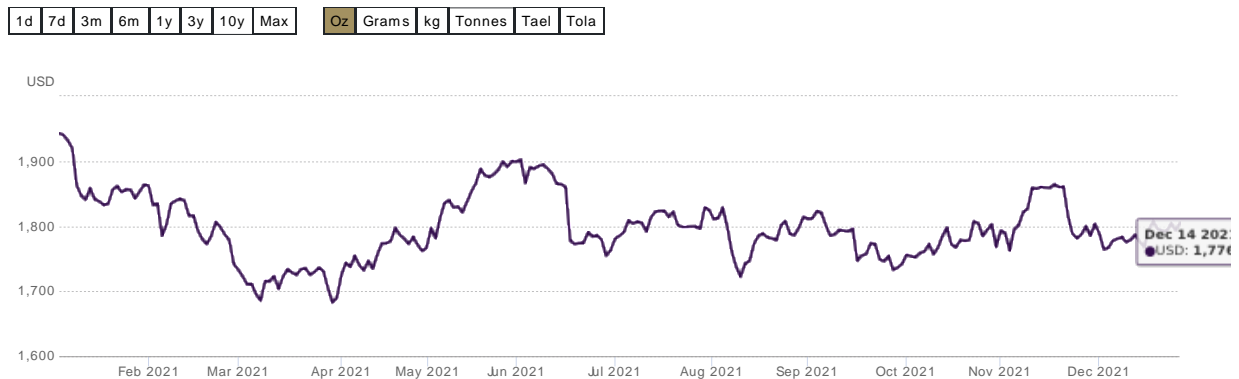
Changes to the selling price over time were only accounted for where the price of aggregate is likely to beat inflation. This has been a moving target in the past but with increased consolidation and depletion of sand and gravel resources in the Fraser Valley it is expected that aggregate prices will beat inflation by 1.5% in the long run.

3.3.2 Gold

An analysis of gold prices for 2021 have shown varied pricing from highs of over \$USD 1900 to under \$USD 1700 with an average of \$USD 1800 for the year.

GOLDHUB

Gold prices



USD

Data as of 10 January, 2022

Sources: FastMarkets, ICE Benchmark Administration, Thomson Reuters, World Gold Council; [Disclaimer](#)

While debate about gold prices and future earnings from gold could be discussed in a standalone report some assumptions to the price for the purposes of the Model were a made:

1. Fixed price of \$USD 1800 for the life of project
2. \$CDN to \$USD exchange rate of 1.25
3. Recovery of gold is fixed at 1 ounce per 200 yards of gravel “in-situ”.

3.3.3 Clean Fill

Importation of clean fill was discussed previously in this report but some further assumptions for the Model are detailed here:

- Fill is being generated in greater volumes than ever before driven by demand for development area in Metro Vancouver;
- Enough fill will be available for 1:1 replacement of aggregate removed from the site;
- Price for fill will beat inflation by 2.5% over the long run; and

- Freight for fill will cover a large portion of the backhaul expense of the aggregate removal.

A starting price of \$0.79 per tonne for clean fill has been assumed to begin with which equals \$10 per box (three boxes on a transfer truck). This number has been worked back from the average cost to dump fill in Abbotsford and then re-load and transport that material to CGG's Project site.

4.0 Discussion

4.1 Assumptions

The Model contains a number of assumptions and has relied on expert reports in it's development. The primary assumption is that all permits have been obtained to allow the Operation, as described, to proceed. Without mining permits and those ancillary permits required for mining to occur, there is no Project. Other assumptions such as the price of aggregate and demand for the product as also important but far less risky as the markets for all of the revenue streams are mature. HMC does not place a great deal of risk to the Operation once permitted and this is reflected in other parts of the Model described below.

Other general assumptions include:

- Gravel is used in every construction project;
- Demand for gravel from the Property will increase over time;
- The price for gravel from the Property will increase over time;
- Royalties payable to the owners will increase over time;
- Permitting new aggregate pits will be more costly and take longer to approve in the future;
- Existing permitted and operating pits are appreciating in value as a result of increased permitting difficulty;

- Amending a Mines Act Permit and expanding an existing aggregate operation is common practice as development of the mine progresses;
- A single gravel product will be sold; and
- The fill and gravel will be transported 1 for 1 as backhaul to an Abbotsford pit location.

4.2 Other Expert Reports

1. Lucky Thirteen Summary and Preliminary Economic Analysis, Siga Resources, 2011;
2. Metallurgical Test Work on Jig Concentrate, Met-Solve Laboratories Inc., November 22, 2011;
3. Preliminary Report on the Possible In-Situ Gravel and Sand Geological Reserves of the Union Bar Gravel and Sand Deposit, P. Machibroda Engineering Ltd., March 28, 1996;
4. Aggregate Prequalification, Metro Testing Group, October 2011; and
5. Lucky Thirteen Technical Report PC 523082, Peter Osha, January 26, 2013.

4.3 Valuation Method

The most reliable way to determine the enterprise value is by analysis of the long term cash flow stream that it generates. This cash flow stream contains a number of generally accepted accounting principles (GAAP) that are standard for the industry. The Model contains the following elements:

- Annual Production along with increases
- Remaining Aggregate Reserves
- Revenue from Gold, Gravel and Fill
- Gross Revenue
- Capital Costs and Depreciation
- Operating Costs (cost of goods sold (COGS))
- Gross Margin
- Selling General and Administration Expenses (SG&A)

- Earnings Before Interest and Tax (EBIT)
- Tax (26%)
- Net Profit After Tax (NPAT)

The valuation is based on the net present value of the net profit after tax. Additionally a residual land value will be applied to the total to determine an overall enterprise value.

4.4 Discount

The discount rate which is used in financial calculations is usually chosen to be equal to the cost of capital. The cost of capital, in a financial market equilibrium, will be the same as the market rate of return on the financial asset mixture the CGG uses to finance capital investment. Some adjustment may be made to the discount rate to take account of risks associated with uncertain cash flows, with other developments.

Risk free rates are very low at the moment analyzing the 10 year Government of Canada Bond yield rate of approximately 1.65%. Other factors such as Beta and equity market risk premium also play key roles in determining the chosen discount.

The key factor, however, is the relative risk of the investment compared with the risk free rate and in the opinion of HMC this investment, once permitted, will be a reliable cash flow producer with little risk. Dividend yields to the investor would be reliable and consistent meaning that the investment is safe leading to a low discount rate.

A discount rate of 8% was used for the calculations.

4.5 Residual Land Value Analysis

The subject property, the Union Bar, gravel bar is located on DL 57, PID014-776-880, 147 acres (59.5ha), Fee Simple, with over 1,000 meters of river front on the Fraser River and is strategically located 1,500 meters from the town center of

Hope, BC, in the District of Hope. Its location is approximately 1hour 40 minutes from Metro Vancouver, BC via HWY 1.

Access is through the Hope Transfer Station via HWY 1, down a recently built temporary road access on the Canyon Gold and Gravel Property which crosses the CPR tracts on the outer edge of the southern boundary of the property. A new road with Bridge over rail tracks will be built in the next 6 months with a less than 6-degree grade to accommodate heavy equipment and tandem trucks.

The Fraser valley is comprised of six municipalities including the city of Abbotsford, city of Chilliwack, District of Mission, District of Hope, District of Kent, and the Village of Harrison Hot Springs. The Fraser Valley is one of the most intensively farmed areas in Canada, generating the largest annual farm receipts of any region in British Columbia. Proximity to large markets (Metro Vancouver 2.5 million population) in combination with high quality soil, favorable climate and accessible water are contributing to ever increasing property values. Adding to this price pressure are diversity of the sector and proximity to research and educational institutions, making the Fraser Valley a superior center for Agricultural production and innovation.

Climate is characterized by mild winters, warm summers and a narrow range of temperatures that only occasionally drop below zero.

The Fraser Valley Population is approximately 300,000 people, growing by 6.6% annually since 2011. Abbotsford, Chilliwack, and Mission make up approximately 90% of the total population.

Land Comparisons for the purpose of this valuation are done within the Fraser Valley Municipalities of which Hope is a member of and adjusted for its infrastructure conditions.

Table 1

Address	Sale Price	Land Size	\$/acre	Land Type
62600 Flood Hope Road	\$6,900,000	63.75 acres	\$109,020	Agriculture
21437 Haig Station	\$2,400,000	7.5 acres	\$324,000	Ag Dev. Potential
8450 Gibson Road	\$4,600,000	34.79 acres	\$132,222	Cranberry
2894 Cameron Road	\$7,950,000	57.57 acres	\$138,092	Cranberry
59710 Lougheed Hwy	\$2,300,000	31.58 acres	\$72,830	Ag Land
Harrison Mills	\$1,498,000	14.4 acres	\$104,027	Ag Land

Based upon the available market data within the Fraser Valley, taking those municipalities closest to Hope along with the water, timber, and infrastructure available at the Property, including the 1,000 meters of Fraser River waterfront a residual value based upon unit price would be approximately: \$100,000 per acre times usable land of 125 acres or \$12,500,000.

4.6 Conclusion

Final enterprise value has been determined using a discounted cash flow analysis of the operation and additional of residual land value at conclusion of operations. NPAT was used to determine the cash flows over the life of mine estimated at 33 years given the known reserves on site. An 8% rate of return was used to determine the discount which gives the company's future cash flow stream a value of \$CDN 35,783,746. Residual land value of \$100,000 per acre or \$12,500,000 gives a final company valuation of \$48,283,746.

5.0 Closure

We trust that this report meets your immediate needs. Should you have any questions or concerns, please do not hesitate to contact the undersigned at 604-309-3028.

5.1 Competency

I, Derek Holmes of 21170 4th Avenue in Langley, B.C., am responsible for the contents of this report. I am currently an independent consultant for numerous clients, both Government and non-government organizations, in the aggregate industry. I previously worked for over 9 years at BURNCO Rock Products Ltd. as manager of Lands and Resources in the Province of B.C. I have been extensively involved in the aggregate industry throughout B.C. for the past 20 years with specific emphasis on permitting, compliance and valuations of aggregate operations. I am Past President of the British Columbia Stone, Sand and Gravel Association and currently act as its Executive Director.

Holmes Mining Consultants Ltd.



Derek Holmes, B.Sc., MBA, P.Chem

Appendix Valuation Model

Capital Costs

Rolling Stock

Item	Model	Cost	Op Cost / Hr
Excavators	Cat 375	\$ 250,000.00	\$ 323.45
	Cat 345	\$ 200,000.00	\$ 244.50
	Komatsu 228	\$ 100,000.00	\$ 145.15
Off Road Trucks	Komatsu HM 400-2	\$ 100,000.00	\$ 217.75
	Komatsu HM 400-2	\$ 100,000.00	\$ 217.75
Wheel Loaders	Cat 980	\$ 250,000.00	\$ 252.25
	Cat 980	\$ 250,000.00	\$ 252.25
Dozer	Cat D8	\$ 250,000.00	\$ 256.68
Total Rolling Stock		\$ 1,500,000.00	

Stationary Equipment

Item	Model	Cost	Rent/month
Screening Plant	Feeder		
	Screen Decks		
	Conveyors		
	Dewatering Screw	\$ 1,500,000.00	
	Generator Set 350kw		
	Water Pumps		
	Slurry Pumps		
Placer Recovery System	Jig Bank		
	Ball Mill		
	Magnets	\$ 500,000.00	
	Floatation System		
	Gold Boom		
Truck Scale	80t Deck	\$ 100,000.00	
Total Stationary Equipment		\$ 2,100,000.00	
Grand Total Equipment		\$ 3,600,000.00	

Operating information	2023-2027	2028-2032	2033-2037	2038-2042	2043-20247	2048-End
Total Annual Tonnage	250000	325000	464750	604175	785428	1000000
Operating Days per year	160	160	200	200	240	240
Tonnes per day	1563	2031	2324	3021	3273	4167
Operating Hours per day	10	12	16	20	20	24
Production Hours per day	8	10	14	16	16	22
Production tonnes per Hour	195.3	203.1	166.0	188.8	204.5	189.4
Highway Truck Haul in Tonne:	38	38	38	38	38	38
Trucks per day (Transfers)	41.1	53.5	61.2	79.5	86.1	109.6
Trucks per Operating Hour	4.1	4.5	3.8	4.0	4.3	4.6
Bank tonnes / m3	2.2	2.2	2.2	2.2	2.2	2.2

Production Cost \$ 5.89

Based on 250,000 tonnes per year

Productivity (based on Cat Handbook https://wheelercat.com/wp-content/uploads/2018/07/SEBD0351_ED48.pdf)							
	Cat 375	Cat 345	Komatsu 228	Komatsu HM 400-2	Cat D8	Cat 980	Total
Capacity (m3)	4	2	1	23	11.8	6	
Cycles per hour	120	120	120	10	30	60	
Productivity (m3/hr)	480	240	120	230	354	360	
Efficiency	83%	83%	83%	83%	83%	83%	
Actual Productivity (m3/hr)	398.4	199.2	99.6	190.9	293.82	298.8	
Tonnes per hour	876.48	438.24	219.12	419.98	646.404	657.36	
Required Hours	1.78	3.57	7.13	3.72	2.42	4.75	
Cost per day	\$ 576.61	\$ 871.74	\$ 1,035.04	\$ 810.12	\$ 620.45	\$ 1,199.16	\$ 5,113.12
Cost per Tonne	\$ 3.27						

Screening Plant
200 tph
Gold Recovery
17% of total pro
200 tph
\$ 2.62

Based on 325,000 tonnes per year

Productivity (based on Cat Handbook https://wheelercat.com/wp-content/uploads/2018/07/SEBD0351_ED48.pdf)							
	Cat 375	Cat 345	Komatsu 228	Komatsu HM 400-2	Cat D8	Cat 980	Total
Capacity (m3)	4	2	1	23	11.8	6	
Cycles per hour	120	120	120	10	30	60	
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Tonnes per hour	876.48	438.24	219.12	419.98	646.404	657.36	
Required Hours	2.32	4.64	9.27	4.84	3.14	6.18	
Cost per day	\$ 749.60	\$ 1,133.26	\$ 1,345.55	\$ 1,053.16	\$ 806.59	\$ 1,558.91	\$ 6,647.06
Cost per tonne	\$ 3.27						

Based on 464,750 tonnes per year

Productivity (based on Cat Handbook https://wheelercat.com/wp-content/uploads/2018/07/SEBD0351_ED48.pdf)							
	Cat 375	Cat 345	Komatsu 228	Komatsu HM 400-2	Cat D8	Cat 980	Total
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Tonnes per hour	876.48	438.24	219.12	419.98	646.404	657.36	
Required Hours	2.65	5.30	10.60	5.53	3.59	7.07	
Cost per day	\$ 857.54	\$ 1,296.45	\$ 1,539.30	\$ 1,204.81	\$ 922.74	\$ 1,783.39	\$ 7,604.24
Cost per tonne	\$ 3.27						

Based on 604,175 tonnes per year

Productivity (based on Cat Handbook https://wheelercat.com/wp-content/uploads/2018/07/SEBD0351_ED48.pdf)							
	Cat 375	Cat 345	Komatsu 228	Komatsu HM 400-2	Cat D8	Cat 980	Total
Capacity (m3)	4	2	1	23	11.8	6	
Cycles per hour	120	120	120	10	30	60	
Productivity (m3/hr)	480	240	120	230	354	360	
Efficiency	83%	83%	83%	83%	83%	83%	
Actual Productivity (m3/hr)	398.4	199.2	99.6	190.9	293.82	298.8	
Tonnes per hour	876.48	438.24	219.12	419.98	646.404	657.36	
Required Hours	3.45	6.89	13.79	7.19	4.67	9.19	
Cost per day	\$ 1,114.80	\$ 1,685.39	\$ 2,001.10	\$ 1,566.25	\$ 1,199.56	\$ 2,318.41	\$ 9,885.51
Cost per tonne Rolling Stock	\$ 3.27						

Based on 785,428 tonnes per year

Productivity (based on Cat Handbook https://wheelercat.com/wp-content/uploads/2018/07/SEBD0351_ED48.pdf)							
	Cat 375	Cat 345	Komatsu 228	Komatsu HM 400-2	Cat D8	Cat 980	Total
Capacity (m3)	4	2	1	23	11.8	6	
Cycles per hour	120	120	120	10	30	60	
Productivity (m3/hr)	480	240	120	230	354	360	
Efficiency	83%	83%	83%	83%	83%	83%	
Actual Productivity (m3/hr)	398.4	199.2	99.6	190.9	293.82	298.8	
Tonnes per hour	876.48	438.24	219.12	419.98	646.404	657.36	
Required Hours	3.73	7.47	14.94	7.79	5.06	9.96	
Cost per day	\$ 1,207.70	\$ 1,825.84	\$ 2,167.85	\$ 1,696.78	\$ 1,299.52	\$ 2,511.61	\$ 10,709.30
Cost per tonne Rolling Stock	\$ 3.27						

Based on 1,000,000 tonnes per year

Productivity (based on Cat Handbook https://wheelercat.com/wp-content/uploads/2018/07/SEBD0351_ED48.pdf)							
	Cat 375	Cat 345	Komatsu 228	Komatsu HM 400-2	Cat D8	Cat 980	Total
Capacity (m3)	4	2	1	23	11.8	6	
Cycles per hour	120	120	120	10	30	60	
Productivity (m3/hr)	480	240	120	230	354	360	
Efficiency	83%	83%	83%	83%	83%	83%	
Actual Productivity (m3/hr)	398.4	199.2	99.6	190.9	293.82	298.8	
Tonnes per hour	876.48	438.24	219.12	419.98	646.404	657.36	
Required Hours	4.75	9.51	19.02	9.92	6.45	12.68	
Cost per day	\$ 1,537.64	\$ 2,324.64	\$ 2,760.09	\$ 2,160.32	\$ 1,654.54	\$ 3,197.77	\$ 13,635.00
Cost per tonne Rolling Stock	\$ 3.27						

