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HIGHBANK RESOURCES LTD.

NI 43-101 TECHNICAL REPORT ON A PRELIMINARY ECONOMIC ASSESSMENT FOR SWAMP POINT NORTH AGGREGATE PROPERTY, NORTHWEST BRITISH COLUMBIA, CANADA

NTS 103O/8

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1.0 SUMMARY

Micon International Ltd. (Micon) was retained by Highbank Resources Ltd. (HRL) to prepare a Technical Report summarizing its Preliminary Economic Assessment (PEA) of the aggregate resources of HRL's Swamp Point North (SPN) property (the Property) located about 50 km south of Stewart, British Columbia, Canada.

This PEA is based on the resource estimate published in "Technical Report on Portland Canal Aggregates Corporations Swamp Point North Property, British Columbia, Canada" prepared by Associated Geosciences Ltd (AGL), now DMT Geosciences Ltd. (DMT), in 2007.

1.1 LOCATION, PROPERTY DESCRIPTION AND OWNERSHIP

The Swamp Point North (SPN) property is located in northwestern British Columbia on the east side of the Portland Canal, immediately north of Swamp Point and the mouth of Donahue Creek at about Latitude 55º 28' North / Longitude 130º 03' West (UTM/NAD83 Zone 9 6148000N / 434000E)(see Figure 1.1).

The property covers the northern portion of the delta of Donahue Creek which enters Portland Canal from the east. Where it has cut through bedrock, Donahue Creek is narrow and steep-walled. The overlying alluvial sediments have formed an elongate delta that extends for about 1.5 km to both the north and south of the creek. Near the mouth of the creek the shoreline is a low bank of sand and gravel lined with boulders. Immediately inland of the shore the topography rises steeply to a plateau about 150 m amsl. The top of the plateau is flat to gently sloping and contains several small muskeg swamps.

The SPN project is wholly-owned by HRL, notwithstanding a 5% royalty payable to past owners of the property.

1.2 GEOLOGY AND MINERALIZATION

The SPN Project is described as a glacial outwash complex, ranging in thickness from 2 m to 90 m with an average thickness of about 37 m. Drill logs and sampling analyses indicate that this unit is composed primarily of gravel and sand, with minor amounts of silt, clay, and water-bearing layers. Exploration of the project includes ten vertical drill holes that were cored in 2006 along with two seismic refraction surveys that were undertaken between 2005 and 2006. The results of the drilling program confirmed the presence of aggregate material within the project area, while the seismic refraction surveys successfully mapped the depth to bedrock. Additional exploration includes five test pits that were dug on the property in 2005 to obtain representative samples of aggregate. The samples were delivered to a testing laboratory where standard ASTM aggregate quality tests were carried out. Also, the topography at the SPN Project has been captured as 1 m contour mapping obtained from 1:5,000 GPS controlled and targeted photogrammetry. A model for the SPN aggregates deposit was created using Dassault Systèmes-Surpac™ software.

Figure 1.1
Location Plan of Swamp Point North Aggregate Property in Northwestern British Columbia.

Figure provided by HRL, prepared by AGL, November, 2007.

The resource estimate for SPN is summarized in Table 1.1.

Table 1.1
Industrial Mineral Resource Estimate for Swamp Point North

Area	Classification	Volume (m^3)	Specific Gravity	Mass (t)
License Area	Measured	13,618,365	2.17	29,551,852
	Indicated	1,848,388	2.17	4,011,002
	Measured and Indicated	**15,466,753**	**2.17**	**33,562,854**
	Inferred	203,772	2.17	442,185
Extension Area	Measured	15,384,804	2.17	33,385,025
	Indicated	2,195,467	2.17	4,764,164
	Measured and Indicated	**17,580,271**	**2.17**	**38,149,189**
	Inferred	831,465	2.17	1,804,279
Combined (License + Extension)	Measured	29,003,169	2.17	62,936,877
	Indicated	4,043,855	2.17	8,775,166
	Measured and Indicated	**33,047,024**	**2.17**	**71,712,043**
	Inferred	1,035,237	2.17	2,246,464

1. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, sociopolitical, marketing, or other relevant issues.
2. The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as an indicated or measured mineral resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.
3. The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council November 27, 2010.
4. The specific gravity value of 2.17 used to convert volumes to tonnes is the value used by BC government to assess extraction tonnages for royalty revenue purposes.

1.3 MINING METHODS

The mine has been designed to extract approximately of 108,300 m^3 (235,000 t) of run of mine sand and gravel per year over the period covered by the Notice of Work.

The pit will be developed from the top down in 5 m high lifts with a 2H:1V back slope to the east and day-lighting the bench to the west. A berm will be retained at the edge of the bench to prevent debris from falling down the outside slope while machinery is working close to the edge and subsequently removed and a new berm formed as each bench is taken down.

Mining excavations will be carried out by conventional mining equipment consisting of a D8N dozer, 2 excavators (Link-Bell 290LX and Terex TXC 225), 1 front-end loader (Komatsu WA 380) and two (2) 35-tonne rear dump trucks (Case 330B). The dozer will grade the back-slope to the current bench where it will be lifted by the loaders in 2.5 m lifts either into a truck or directly to the wash-plant hopper. The maximum height of any vertical face will be 2.5 m.

As the working level descends, a 10 m wide haul road at a gradient of 10% will be established to the wash plant with a side safety berm to meet Code requirements. The relatively slow rate of production will allow aggregate to be loaded directly by loader from the pit to the wash-plant hopper, or taken by a single truck to a small stockpile for re-handling into the plant.

1.4 Recovery Methods

The installation of a crushing, triple deck screen and washing plant (CSWP) is proposed to prepare saleable product from the mined aggregate. The CSWP will initially operate at 200 t/h of raw feed through the plant, estimated to produce 128 tonnes of gravel, 72 tonnes of sand and silt per hour, however, the plant has a design throughput rate of up to 500 t/h, depending on the proportion of sand contained in the feed. Silt will be mixed with soil in the stockpile and used for reclamation.

The CSWP will be located on the 70 m bench along with the settling and clarification ponds, which will supply the water required. Water pumped from sumps on the descending levels will be pumped up to the settling pond. Portable pumps will be installed as required to prevent any uncontrolled flooding. Some product may be shipped without washing, if sufficient water is unavailable during short periods of time and if acceptable to the client. Product may be stored as it is produced at a stockpile adjacent to the barge load-out to maintain adequate space around the plant.

A conveyor belt system from the processing plant to the barge loadout site will be installed to reduce or eliminate the need for a haul road from the plant to the loadout. The barge loader consists of a shore located hopper into which the material will be placed by front-end loader (or conveyor) directly from the processing plant area. From the hopper the conveyor runs over water for approximately 69 m to the discharge point which discharges the product into the barge through a retractable, flexible chute.

Barges of up to 5,000 tonne capacity will be positioned alongside five strategically placed mooring dolphins using tugs. Empty barges will be positioned at the same time as the loaded barges are removed for transportation. Barges to be loaded will be winched between dolphins during loading to ensure uniform distribution of the product.

1.5 Market Studies and Contracts

No definitive off-take agreements have been reached covering the forecast period. However, Micon has reviewed the available information and concludes that there is potential for the SPN project to deliver aggregates to several potential large-scale infrastructure projects in British Columbia, at a competitive price, and that it is therefore reasonable to expect there will be a market for the forecast aggregate production.

1.6 CAPITAL AND OPERATING COSTS

1.6.1 Capital Costs

As of December 31, 2014, HRL had already incurred much of the capital expenditure necessary to bring the property into production. Approximately $8.9 million has been invested in plant and mobile equipment, trenching and drilling, sampling, analyses, mine planning, environmental studies, bonds, permitting, and site preparation.

The remaining pre-production capital expenditure totals approximately $0.50 million, with a further $0.54 million to be spent during the operating phase, as shown in Table 1.2.

Table 1.2
Summary of Remaining Capital Expenditure

Item	Pre-Production ($'000)	Ongoing ($'000)	Expansion ($'000)
Barge	20.0		
Fuels and Lubes	40.7		
Labour costs	126.0		
Logistics	28.4		
Ancillary equipment, vehicles	215.3		
Camp fittings	5.5		
Miscellaneous	34.1		
Contingency	25.0		
Light Vehicles, etc.		35.5	
Studies and Permits			500.0
TOTAL	**495.0**	**35.5**	**500.0**

1.6.2 Operating Costs

A summary of the unit and annual cash operating costs is shown in Table 1.3.

Table 1.3
Summary of Cash Operating Costs

Item	LOM (Years 1-3) Total ($'000)	Unit Cost ($/t Product)
Site Management	3,070	1.00
Production Labour	2,702	0.88
Equipment Operating	6,386	2.08
Labour – Camp & Support	982	0.32
Power Generation (diesel)	768	0.25
Equipment Spares	2,824	0.92
Stewart Apartment + Site Camper Rental	83	0.03
Terminal Aggregate Storage	461	0.15
Environmental Monitoring & Supplies	230	0.08
Local Office Support Costs	1,535	0.50
Product Shipping	20,262	6.60

Item	LOM (Years 1-3) Total ($'000)	Unit Cost ($/t Product)
Contingency	9,826	3.20
Sub-total Direct Costs	**49,128**	**16.00**
Indirect - Corporate Overhead	2,160	0.71
Total	**51,288**	**16.71**

It is notable that, among the direct cash costs of $16.00/t, product shipping comprises the largest component, exceeding the combined total of site labour and equipment operating and maintenance costs. This highlights the importance of delivery costs in determining the operating margins for the project. The delivery cost estimate is based on letters of intent received by HRL.

In addition to the above cash operating costs, royalties totalling $2.35/t are payable on material sold from the SPN site.

1.7 ECONOMIC ANALYSIS

1.7.1 Basis of Evaluation

The objective of the study was to assess the current economic potential of the proposed aggregate production plan to exploit the SPN deposit. The 3-year production plan described in this PEA contains only measured and indicated resources; there are no inferred resources within the permitted pit. Subsequent to the initial 3-year period described in this PEA, however, production could include some inferred resources, which comprise 1% of all resources in the extension area. Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves.

In order to assess the current economic potential, the cash flow arising from the base case has been forecast, enabling a computation of the NPV to be made. The sensitivity of this NPV to changes in the base case assumptions is then examined.

It is common for the internal rate of return (IRR) and payback period of the net cash flow to be computed also, as an additional indicator of the project's financial robustness. In this case, since most of the pre-production capital expenditure has already been invested, the calculation of an IRR is problematic and does not convey any meaningful information. Therefore, no IRR or payback has been presented in this report.

1.7.2 Macro-Economic Assumptions

Unless otherwise stated, all results are expressed in Canadian dollars ($ or CAD).

Cost estimates and other inputs to the cash flow model for the project have been prepared using constant, first quarter 2015 money terms, i.e., without provision for escalation or inflation.

For the purposes of this PEA, Micon has selected a real discount rate of 8% as appropriate to the SPN project.

The project is subject to taxation in BC and estimates of the Federal and Provincial income and mining taxes relevant to this jurisdiction have been applied in forecasting after-tax net cash flows.

Provincial and non-crown royalties amounting to $2.35 per tonne of aggregate sales have been provided for, comprising $0.65/t sold plus 5% of gross revenue, which equates to another $1.70/t.

1.7.3 Production and Sales

The production plan calls for the processing and sale of sand and washed aggregates at up to 100,000 tonnes per quarter. Stockpiling is utilized to lessen seasonal variation in production.

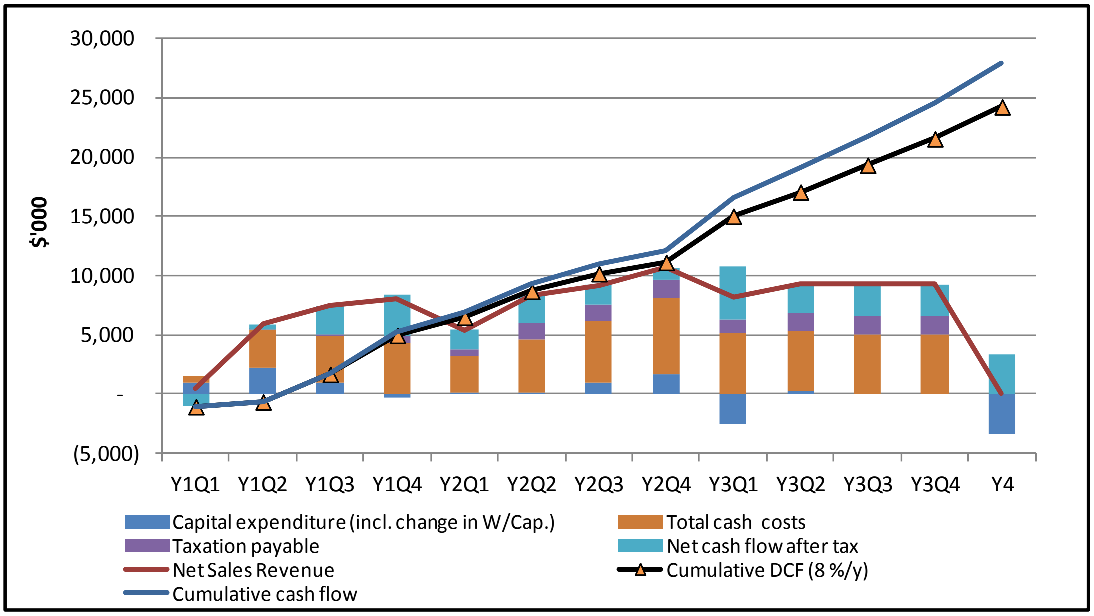
1.7.4 Base Case Evaluation

The base case cash flows forecast for years 1-3 are summarised in Table 1.4 and Figure 1.2.

Table 1.4
Summary Cash Flow Forecast

		LOM ($ million)	NPV @ 8% ($ million)	Unit cost ($/t)
Revenue	Gross Sales	98.9	87.7	32.23
less	Royalty	7.2	6.4	2.35
	Net Sales Revenue	91.7	81.3	29.88
Operating Costs	Mining Costs	39.3	34.8	12.80
	Processing Costs	9.8	8.7	3.20
	G&A costs	2.2	1.9	0.70
	Total cash operating costs	51.3	45.5	16.71
Net Cash Operating Margin		40.5	35.8	13.18
Capital Expenditure	Initial/expansion capital	0.5	0.5	0.17
	Sustaining & Closure	0.6	0.5	0.18
Changes in Working Capital		-	0.6	-
Net cash flow before tax		39.4	34.1	12.82
Taxation payable		11.4	9.9	3.71
Net cash flow after tax		**27.4**	**24.3**	**9.11**

Figure 1.2
Quarterly Cash Flow (Years 1-3)



This preliminary economic assessment is preliminary in nature and there is no certainty that the preliminary economic assessment will be realized. Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves.

Revenue forecasts are based on achievement of an average price of $34.00/tonne FOB Prince Rupert, except for coarse material which is sold at an average of $21.45/tonne.

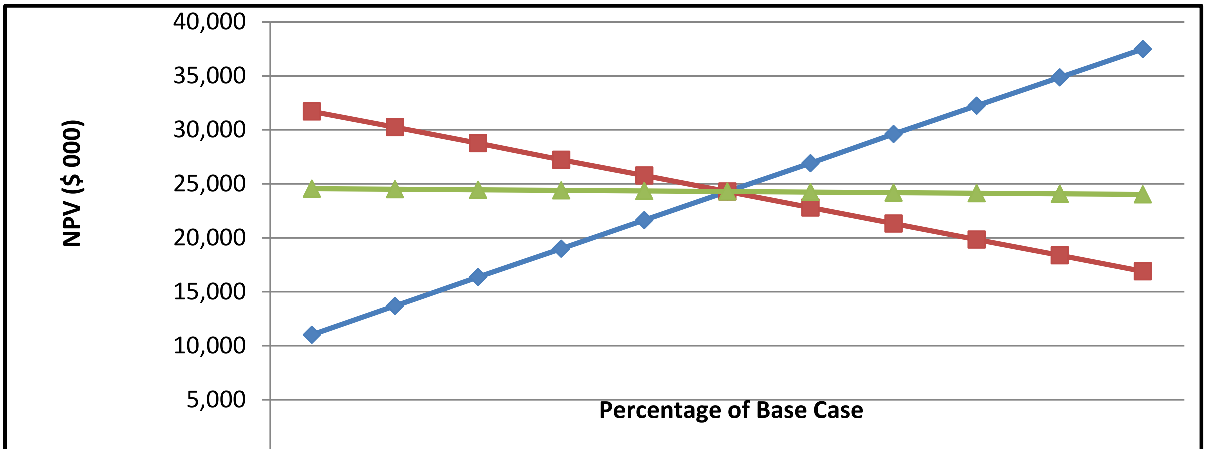
Overall, with a total cash operating cost of $16.71/tonne and royalties of $2.35/tonne, this production provides an operating margin of around 44%. At an annual discount rate of 8%, the base case cash flow for the three operating years evaluates to an NPV of $24.3 million. For the reasons discussed earlier, no IRR or payback periods are calculated as they are not meaningful in this case.

1.7.5 Sensitivity Analysis

The sensitivity of project returns to changes in all revenue factors (including, yields, prices and exchange rate assumptions) together with capital and operating costs was tested over a range of 25% above and below base case values. Figure 1.3 presents the results of this analysis.

As may be expected, the project is most sensitive to changes in revenue drivers. For an adverse change of 25%, NPV_8 is reduced to less than half its base case value. The project is also moderately sensitive to operating costs, with an adverse change of 25% reducing NPV_8 by approximately one third. The project is least sensitive to capital costs, mainly due to most of the required capital investment having taken place prior to the start of the cash flow period.

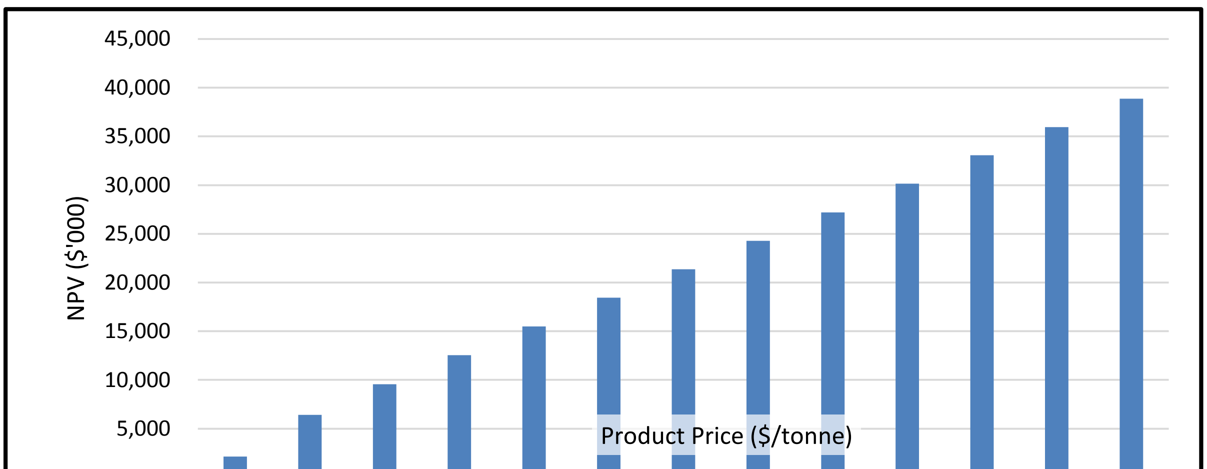
Figure 1.3
NPV Sensitivity to Product Price



	75%	80%	85%	90%	95%	100%	105%	110%	115%	120%	125%
Revenue drivers	11,001	13,683	16,367	18,998	21,638	24,280	26,915	29,609	32,233	34,853	37,472
Operating costs	31,702	30,237	28,760	27,235	25,757	24,280	22,805	21,308	19,833	18,364	16,894
Capital costs	24,549	24,495	24,442	24,388	24,334	24,280	24,227	24,173	24,119	24,065	24,012

Figure 1.4 presents the results of a separate sensitivity analysis in which the product price was raised in increments of \$2.00/t between \$20.00/t and \$44.00/t. It will be seen that each \$2.00/t increment adds approximately \$3.0 million to the after-tax NPV_8.

Figure 1.4
NPV Sensitivity to Incremental Product Price



	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0	36.0	38.0	40.0	42.0	44.0
NPV	2,146	6,407	9,549	12,527	15,490	18,449	21,344	24,280	27,208	30,160	33,060	35,960	38,861

Micon also considered the sensitivity of project NPV to an extension of the operating period to exploit parts of the aggregate resource not currently included in the mine design and production plan. Should such an extension of operations be permitted, it is estimated that continuing operations at the targeted rate of 100,000 t/month for, say, another three years could potentially increase the project NPV from $24.3 million to $38.0 million.

1.8 CONCLUSIONS AND RECOMMENDATIONS

Micon concludes that there is potential for the economic development and operation of the Swamp Point project, subject to success in future permitting and marketing initiatives.

Accordingly, Micon and DMT recommend that HRL commences operation to fully assess the marketability of the product and to secure initial off-take agreements for its product, in parallel with the site works presently underway.

Micon does not have, nor has it previously had, any material interest in HRL or related entities or interests. The relationship with HRL is solely a professional association between the client and the independent consultant. This report is prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

This report includes technical information which requires subsequent calculations or estimates to derive sub-totals, totals and weighted averages. Such calculations or estimations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, Micon does not consider them to be material.

This report is intended to be used by HRL subject to the terms and conditions of its agreement with Micon. That agreement permits HRL to file this report as an NI 43-101 Technical Report with the Canadian Securities Administrators pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report, by any third party, is at that party’s sole risk.

The conclusions and recommendations in this report reflect the authors’ best judgment in light of the information available to them at the time of writing. The authors and Micon reserve the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to them subsequent to the date of this report. Use of this report acknowledges acceptance of the foregoing conditions.

2.0 INTRODUCTION

Micon International Ltd. (Micon) was retained by Highbank Resources Ltd. (HRL) to prepare a Technical Report summarizing its Preliminary Economic Assessment (PEA) of the aggregate resources of HRL's Swamp Point North (SPN) property (the Property) located about 50 km south of Stewart, British Columbia, Canada.

The purpose of the report is to disclose the resource assessment, preliminary economic analysis and other relevant technical information on the property in accordance with Canadian National Instrument (NI) 43-101.

The resource estimate is unchanged from that first disclosed in a technical report by Associated Geosciences Ltd (AGL) (now DMT Geosciences Ltd.(DMT)) dated 10 November, 2007 and filed on SEDAR on 3 December, 2007. Mr. Keith McCandlish, P.Geo., DMT's Director of Engineering and Consulting, was the qualified person for that report and has also taken responsibility for that estimate in this report.

Mr. David Makepeace, P.Eng., a Senior Geologist and Environmental Engineer with Micon, visited the site on 19 February, 2015. During his visit he confirmed the presence on-site of mining and processing equipment and infrastructure as well as reviewing the environmental work and permitting status of the Property.

2.1 PREVIOUS WORK

This PEA is based on the resource estimate published in "Technical Report on Portland Canal Aggregates Corporations Swamp Point North Property, British Columbia, Canada" prepared by DMT in 2007. That resource estimate is based on the results of seismic refraction surveys and core drilling undertaken on the property in 2005 and 2006. Geophysicists and geologists from DMT conducted the geophysical surveys and have examined the core and core logs obtained subsequently.

In 2007, the geological modeling and aggregate resource estimation was completed by Susan O'Donnell, Geol.I.T., under the direction of Mr. Keith McCandlish, P.Geo., using the Dassault Systèmes-Surpac™ suite of geological modeling applications.

The mine planning was completed by Eric Beresford, P.Eng., under the direction of Peter Cain, Ph.D., P.Eng., DMT's Director , Engineering and Consulting and Head of Mining Engineering.

2.2 SOURCES OF DATA

Sources of information used in this report include available public domain information and personally acquired data.

- Research of Minfile data at http://www.em.gov.bc.ca/Mining/Geolsurv/Minfile/default.htm

- Research of mineral titles at http://www.em.gov.bc.ca/Mining/Geolsurv/MapPlace and http://www.mtonline.gov.bc.ca

- Review of company reports filed with the Ministry of Energy and Mines and Canadian Securities Administrators (CSA).

- Review of other proprietary company data.

- Review of the news releases and website of Highbank Resources Ltd.

- Review of geological maps and reports completed by the British Columbia Geological Survey or its predecessors and the Geological Survey of Canada.

- Published scientific papers on the geology of the region, aggregate deposits and mineral deposits.

2.3 UNITS AND CURRENCY

All measurement units in this report conform to metric usage within the context of the International System of Units (SI) except where stated otherwise. Currency amounts are expressed in Canadian Dollars unless otherwise stated.

2.4 EFFECTIVE DATE

The effective date of the mineral resource estimate presented in this report is November 30, 2007. The effective date of the PEA is April 23, 2015.

2.5 ABBREVIATIONS

A list of abbreviations, used in the report is provided in Table 2.1.

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Table 2.1
List of Abbreviations

Term	Abbreviation	Term	Abbreviation
Associated Geosciences Limited.	AGL	Licence of Occupation	LOC
Above mean sea level	amsl	Life of Mine	LOM
American Society for Testing and Materials	ASTM	Metre(s)	m
British Columbia	BC	Millimetres	mm
Canadian dollar	CAD or $	Millimeters per year	mm/y
Canadian Institute of Mining, Metallurgy and Petroleum	CIM	Mine Permit Application	MPA
Canadian Securities Administrators	CSA	Ministry of Energy and Mines	MEM
Screen and Washing Plant	CSWP	National Instrument 43-101	NI43-101
Cubic meter(s)	m^3	Net Present Value	NPV
Degree(s)	^{o}	Portland Canal Aggregates Corporation	PCAC
Degrees Celsius	^oC	Petrographic Number	PN
DMT Geosciences Ltd.	DMT	Million	M
Digital Terrain Model	DTM	Million years old	Ma
Environmental Assessment application	EAA	Minute(s) (geographical)	‘
Geographic information system	GIS	North American Datum	NAD
Global positioning system	GPS	Notice of Work	NOW
Gallon	Gal	Quality assurance/quality control	QA/QC
Internal Rate of Return	IRR	Screen and Washing Plant	CSWP
Hectare(s)	ha	Second (geographical)	“
Highbank Resources Ltd.	HRL	Swamp Point North	SPN
High Water Mark	HWM	Tonne(s)	t
Kilogram(s)	kg	Tonnes per hour	t/h
kilograms per cubic metre	kg/m^3	Tonnes per year	t/y
Kilometre(s)	km	Universal Transverse Mercator	UTM
Litre (s)	L	Weight	Wt.
Litre per second	L/s	Year	Y

3.0 RELIANCE ON OTHER EXPERTS

Micon and DMT have prepared the report based on their field observations.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 PROPERTY LOCATION

The Swamp Point North (SPN) property is located in northwestern British Columbia on the east side of the Portland Canal, immediately north of Swamp Point and the mouth of Donahue Creek at about Latitude 55º 28’ North / Longitude 130º 03’ West (UTM/NAD83 Zone 9 6148000N / 434000E) (Figure 4.1).

Figure 4.1
The Location of Swamp Point North Aggregate Property in Northwestern British Columbia.

Figure provided by HRL, prepared by AGL, November, 2007.

The property was previously known as the Swamp Point property but, since Ascot Resources Ltd opened an aggregate pit about 1 km to the south (currently on care and maintenance) which is also designated Swamp Point, the property is now referred to as SPN or the HRL property.

The nearest community of note is Stewart, at the end of Portland Canal, about 50 km to the north. The area is covered by Government of Canada 1:50,000-scale topographic map 103P/5, Observatory Inlet. The property has been surveyed by air to produce topographic maps by photogrammetric methods.

The location of HRL's Licence of Occupation (LOC) and Foreshore Tenure with respect to the Ascot's Swamp Point property is shown in Figure 4.2. This figure also shows the locations of mineral claims and crown-granted claims with respect to the property. Gravel tenures are unaffected by mineral claims other than the fact that mineral claim owners have certain rights of access.

In addition to the 55.18 ha Licence area and 7.0 ha Foreshore tenure, HRL has also secured a Modification Agreement dated November 15, 2013. This Agreement extends the Licence of Occupation an additional 119.01 ha (total 174.19 ha.). The Licence area and the "Extension Area" are shown in Figure 4.2.

4.2 PROPERTY DESCRIPTION

The SPN property is situated within the Coast Mountain Range, an approximately 1,600 km long by 200 km wide mountain range that covers the western shore of the North American continent. The Coast Mountain Range is characterized by broad valleys separated by steep chains of mountains that rise to about 1,500 m amsl.

The Portland Canal itself is an elongate, steep-walled fjord, typical of a drowned coastline. Elevations on the property range from sea level to about 150 m amsl. Immediately east of the property, elevations rise to about 1,300 m amsl.

The property covers the northern portion of the delta of Donahue Creek which enters Portland Canal from the east. Where it has cut through bedrock, Donahue Creek is narrow and steep-walled. The overlying alluvial sediments have formed an elongate delta that extends for about 1.5 km to both the north and south of the creek. Near the mouth of the creek the shoreline is a low bank of sand and gravel lined with boulders. Immediately inland of the shore the topography rises steeply to a plateau about 150 m amsl. The top of the plateau is flat to gently sloping and contains several small muskeg swamps.

Figure 4.2
The Location of the HRL Properties with Respect to the Ascot Property and Adjacent Mineral Claims

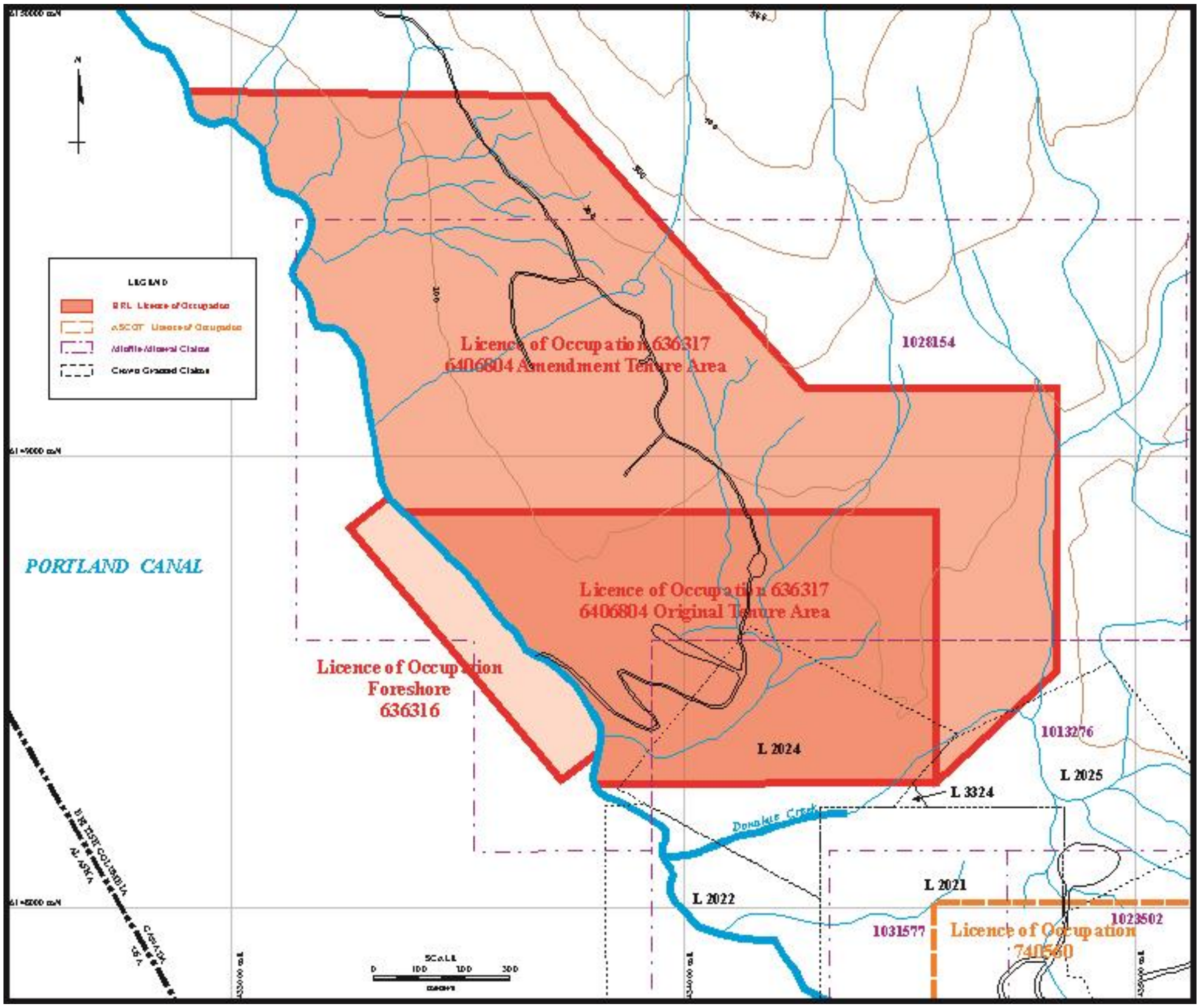


Figure prepared by Micon, March 2015.

4.3 LICENSES, PERMITS AND LIABILITIES

The lands reported on in this technical report are referred to as the “Portland Canal Aggregates Corporation property”, the “PCAC property” or the “Swamp Point North property”. The lands and associated licences and permits include:

- A five-year, renewable Licence of Occupation (Licence Number 636317, File Tenure Management Number 6406804), commencing on November 15, 2013, and comprising approximately 174.19 ha. The original Licence of Occupation was 635281 and comprised 55.18 ha. It expires March 5, 2017.

- A Foreshore Licence of Occupation (Licence Number 635856, File Tenure Management Number 6406877), approximately 7 ha in size, and commencing on March 05, 2003. It expires March 5, 2017.

All Licences, Tenure Offers and Permits are held by HRL.

The only known liability associated with the property is the removal and reclamation of the camp structures owned by HRL, the reclamation of the current road system and cleared production area.

4.4 AGREEMENTS

PCAC and HRL entered into an agreement whereby HRL can earn a 100% working interest in the PCA project by fulfilling certain work expenditure obligations (up to $1.3 million) and by making certain payments of up to two million common shares of HRL; the work commitment has been fulfilled and the shares issued to PCAC.

Upon completion of those obligations and in the event that commercial production and sales of aggregate was achieved, HRL was further obliged to pay a 5% royalty on sales revenue to PCAC.

HRL was also required to pay a finder's fee to Dieter Schindelhauer in the form of 150,000 common shares of HRL in connection with the acquisition of the property; this fee has been paid.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

Some of the information included in the following section has been reproduced from the Technical Report on Portland Canal Aggregates Corporation's Swamp Point North Property, British Columbia, Canada, prepared by Mr. K. McCandlish, P.Geo and dated November 30, 2007.

The HRL property is remote and is accessible by air (helicopter or float-equipped fixed wing) or by boat. Small barges can unload equipment on the current beach landing. There are no roads with the exception of an overgrown logging road on the property itself that leads from the shore to the northern boundary of the licence area. No direct road access to the site is currently planned.

The area has a maritime climate characterized by mild winters, cool summers, and abundant precipitation. The climate allows year-round extraction operations.

The community of Stewart, at the head of the Portland Canal 50 km to the north, has average temperatures of -4ºC in January and +15ºC in July. Average annual precipitation is about 1,800 mm with the majority falling as rain in the fall months (September to November). The average annual snowfall is about 540 mm. Precipitation at Stewart can be very high at times, with the record 24-hour rainfall being 124 mm and the record snowfall being 1,050 mm.

Winter snow pack depth varies year by year, because some years the average temperatures are above freezing for much of the winter. The average snow pack depth in Stewart is approximately 1 m (www.climate.weatheroffice.ec.gc.ca). An automated weather station was installed at Ascot's Swamp Point property in January, 2005. Observations indicate that snow levels at Swamp Point are lower than at Stewart.

There are no communities in the immediate area of the property; the nearest community is Kitsault, at the head of Alice Arm, 30 km to the east. Prince Rupert is the nearest major center, and is located about 130 km to the south. All equipment and materiel has been barged to the site and operations are being supported by a small camp to house the staff and workforce.

The site lacks any electrical infrastructure and operations are being supplied by generators. The provision of a power line has not been evaluated on either economic or practical terms.

There is abundant wood, water, and aggregate in the immediate property area that could be exploited in support of a quarrying operation.

The sides of the Portland Canal support tree cover up to 1,000 m amsl. The property has been logged in part and the logging access roads are now overgrown with alder. The logged areas support mixed coniferous and deciduous growth.

6.0 HISTORY

Information included in the following section has been reproduced from Wardrop's 2005 Technical Report.

According to BC Government "Minfile" records, between 1916 and 1922 about 250,000 t of limestone were quarried from a location south of Donahue Creek as a source of flux for the copper smelter at Anyox, on Observatory Inlet about 12 km due east of the Property.

The British Columbia Geological Survey Open File 2001-19 identified the possible occurrence of sand and gravel in the Swamp Point area.

Ascot and HRL are the first serious evaluations of aggregate resources in the area.

The Ascot property has been closed on a care and maintenance basis while the company looks for a potential buyer of that property.

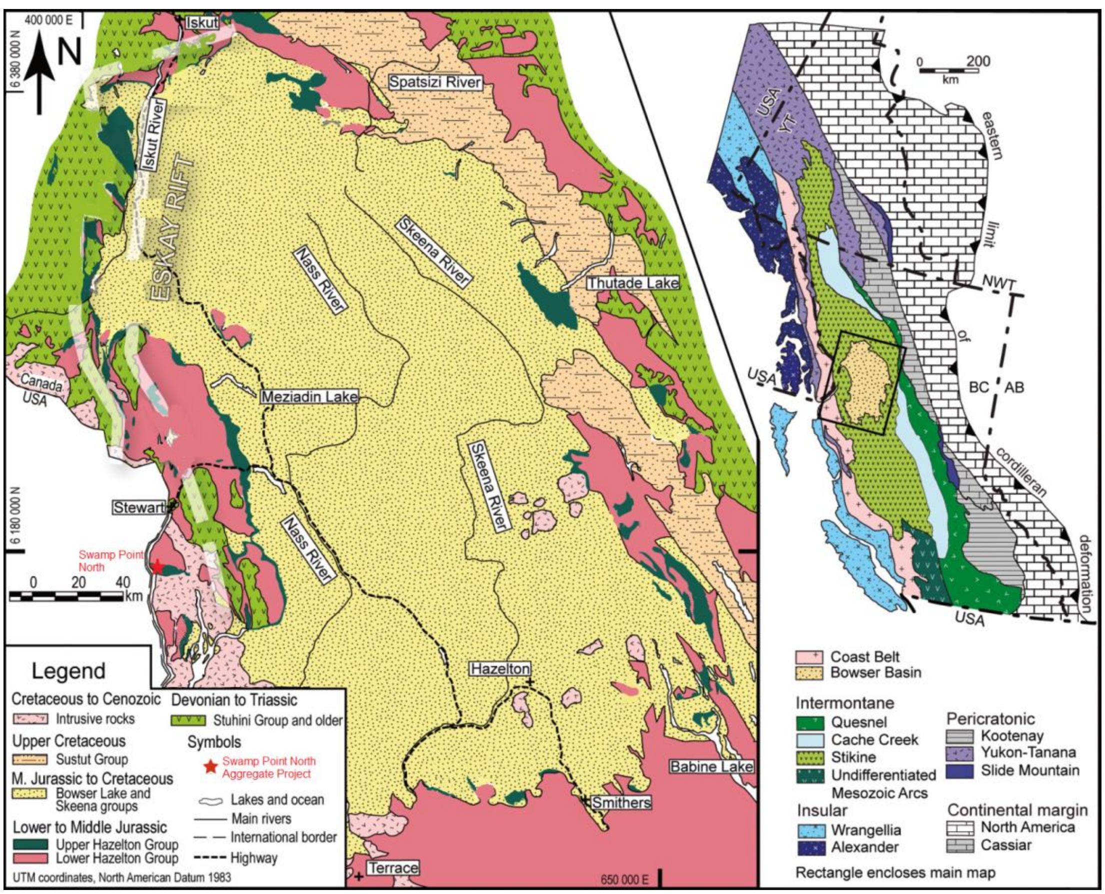
7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

Information included in the following section is compiled from scientific papers (Gagnon, J. et al, 2012), maps and data on the British Columbia Geological Survey (http://www.empr.gov.bc.ca/mining/geoscience/pages/default.aspx) and from Wardrop's 2005 Technical Report.

The SPN Project is located in the Coast morphogeological belt, part of the Canadian Cordillera (Figure 7.1). The area is underlain by the western margin of a roof pendant within the Tertiary-age Coast Plutonic Complex. Rocks in the roof pendant are comprised of volcanics of andesite-dacite composition, interbedded with felsic tuff, siltstone, argillite, limestone and fine-grained sandstone, and have been correlated with Hazelton Group of Jurassic age. Strata strike northerly and dip steeply to the east. Regional greenstone metamorphism and deformation have caused variable alteration, from chloritization to the development of chlorite-hornblende schist.

Figure 7.1
Simplified Regional Geological Map



Source: Gagnon, J. et al (2012), modified by Micon, March 2015. (Coordinate system NAD83, UTM grid zone 9).

Very little information about the Quaternary history of this specific area has been obtained. The general area was covered by an ice sheet that is estimated to have exceeded one kilometre in thickness. Ice-flow directions were predominantly south and westward, but were also locally controlled and enhanced by pre-existing bedrock patterns. It can reasonably be inferred that ice movement was southward down Portland Canal, as well as westward from the bordering mountains. Therefore, glacial material deposited at the Swamp Point North may have been derived both from the north and east, although the shape of the delta at the mouth of the Donahue Creek, and apparent northward diminution in thickness of outwash material, suggest that the predominant source direction was along the Donahue Creek drainage basin from the east.

7.2 PROPERTY GEOLOGY

The surficial geology of the SPN Property is described as a glacial outwash complex.

The glacial outwash unit ranges in thickness from 2 m to 90 m with an average thickness of about 37 m. Figure 7.2 shows the thickness of the outwash unit over the property. Drill logs and sampling analyses indicate that this unit is composed primarily of gravel and sand, with minor amounts of silt, clay, and water-bearing layers.

Figure 7.2
View of the Aggregate Material in the Pit Wall, Swamp Point North Project, BC

Picture taken during the Micon's site visit on February 19, 2015.

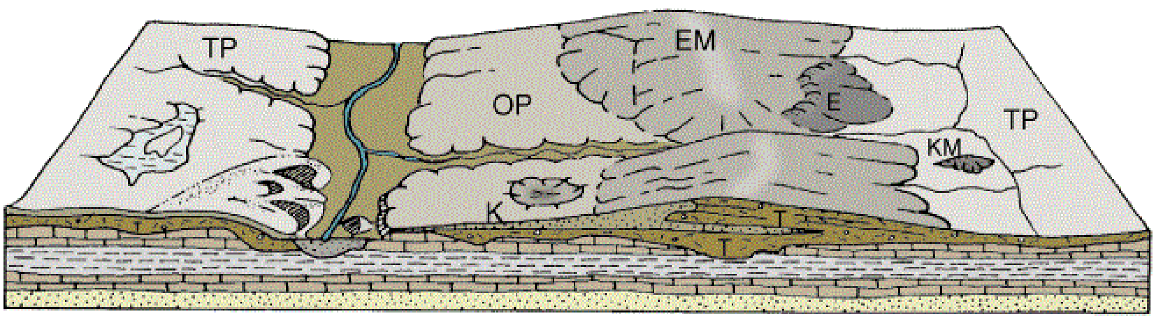
Very little outcrop of the HRL project's glacial outwash is visible on surface due to soil and tree coverage throughout the area. The aggregate material is covered by an estimated 1 m thick layer of organic material.

Bedrock exposure is evident as a ridge to the east of the property and also along the shoreline. Mapping of the bedrock on a local scale has not been undertaken within the SPN project area.

8.0 DEPOSIT TYPE

The SPN is a glacial outwash deposit. Glacial outwash deposits are described as broad, relatively flat plains formed in front of one or more glaciers by the deposition of debris from meltwater streams (Figure 8.1). Outwash material is often highly rounded due to the transportation and erosion of grains within the glacier and also from within the flowing meltwater. Ice-proximal materials are typically quite stratified and sorted, containing mainly sand-size and gravel-size particles, while materials further away from the ice tend to be less stratified and contain higher concentrations of sand and pebbles. Outwash deposits are generally loose in consistency.

Figure 8.1
Block Diagram showing the Geomorphological Features after the Melting of the Glaciers



OP-outwash plain, (contains the sand and gravel outwash deposits), TP-till plain, L-shallow marshy lake, EM –end moraine, K- a small hill (kame). Source: www.isgs.illinois.edu/outreach/geology-resources/quaternary-glaciations-illinois

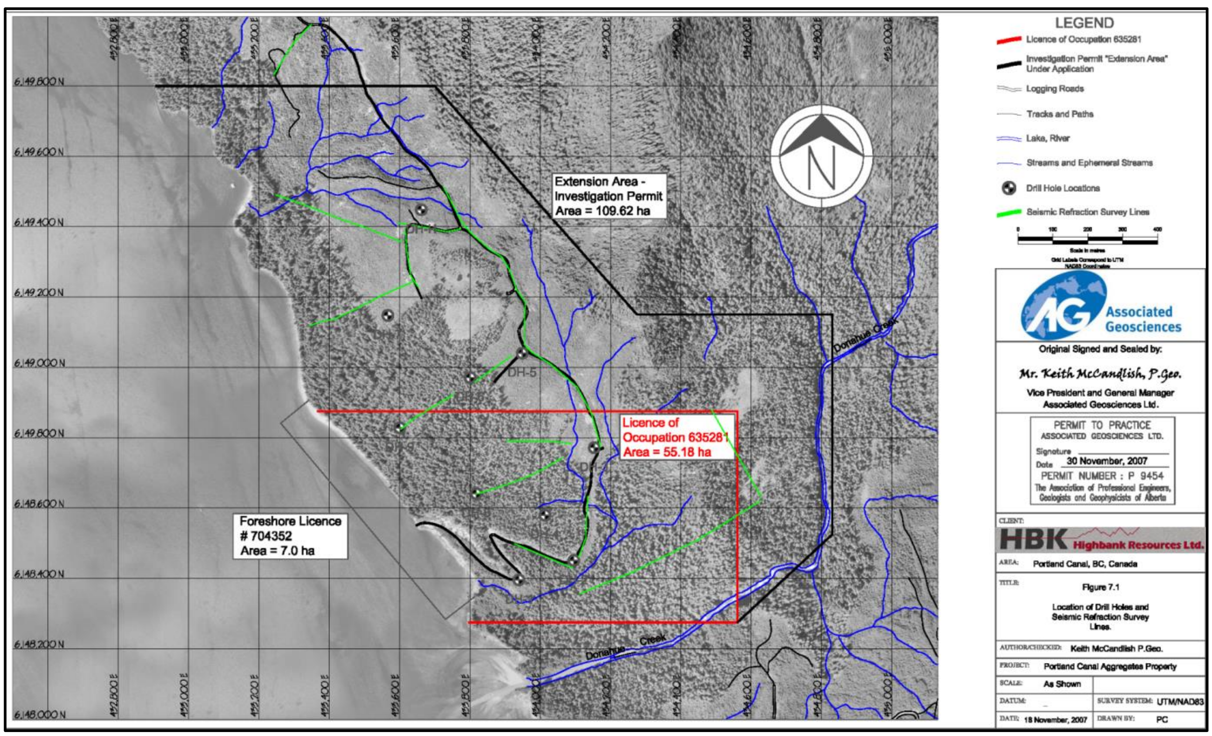
9.0 EXPLORATION

The following section regarding the 2005-2006 exploration activities was primarily derived from the November, 2007, Technical Report prepared by AGL (McCandlish, 2007) and updated for the current report where applicable.

9.1 SEISMIC REFRACTION SURVEYS

Two seismic refraction surveys for the Swamp Point North project were undertaken by Associated Mining Consultants Ltd. (now DMT). The first survey was completed in 2005 and the second in 2006.

Figure 9.1
Location of the Drill Holes and Layout of Survey Lines



Source: Technical Report prepared by AGL (McCandlish, 2007)

The objective of both surveys was to delineate the depth to bedrock over an area covering approximately 1,000 m by 2,000 m. The layout of survey lines was dictated by the rugged topography as well as terrain access, and is shown in Figure 9.1.

The principles of seismic refraction are based on Snell's law of reflection and refraction: when seismic waves propagating through a given medium encounter a boundary with another medium of varying acoustic impedance (the product of acoustic velocity and density of the material), they change their direction of propagation. Critical refraction occurs when the angle of incidence and the acoustic impedance contrast are such that the incoming seismic wave is refracted along the boundary at the velocity of the second medium (Sacchi, 2012).

In seismic refraction surveying, a seismic event is produced by an acoustic source with the resulting arrivals as a time series at locations arrayed in some known configurations around that source. Using Snell's law and well-founded assumptions about the geometry of the seismic wavepath, the location of acoustic boundaries can be determined from signal travel time gathered at the surface. Vertical resolution is dependent on the geophone spacing (the smaller the spacing, the finer the resolution) and on the magnitude of the velocity contrast.

The seismic velocities in water saturated overburden sediments do not present contrasts significant enough to allow the differentiation of clay, silt, sand and gravel. In the seismic profiles generated from both surveys, the nature of the overburden may be heterogeneous even though the seismic velocities may show a uniform layer.

Swamp geophones firmly planted 200 to 500 mm into the ground were used for both surveys. The dynamite was fired from the surface, which created an air blast but provided sufficient energy into the ground to enable mapping of the bedrock surface.

The land surveying was undertaken during the survey by the field crew with a Trimble X Pro GPS system and corrected in post processing. Every shot location was surveyed and the geophone locations in-between were interpolated from those points. Given the rugged topography of the site, poor satellite geometry in some cases and the interpolation process, the elevation data is not very accurate. However, this does not influence the depth to bedrock values, as these are all measurements from surface to bedrock regardless of elevation.

9.1.1 2005 Survey

In total, 2,024 line-metres of seismic refraction data were collected between November 5th and 12th, 2005. The survey was hampered by inclement weather and limited daylight hours, as well as a time consuming daily mobilization from Steward to site (6 hour return trip by boat). Table 9.1 describes the 2005 survey parameters.

Table 9.1
2005 Survey Parameters

Acquisition system	Geometrics Geode
Number of channels	24
Geophone spacing	8 m (single phone per channel)
Energy source	Dynamite (1kg per shot on average)
Shot spacing	48 m (every 6 geophones) + offset shots approximately 100 m off
Sample interval	0.125 milliseconds
Record length	256 milliseconds

The data quality was good with the exception of the northern most line that was shot after a snow fall, due to the constant background seismic noise generated by the melting snow running into a nearby creek. Despite the background seismic noise, it was still possible to map depth to bedrock along the northern most line.

9.1.2 2006 Survey

In total, 2,640 line-metres of seismic refraction data were collected between September 5th and 12th, 2006. Table 9.2 describes the 2006 survey parameters. The crew stayed at a camp set up directly at the site. The data quality was generally good. For a portion of Line 1 noise from the camp facilities resulted in reduced data quality but it was still possible to interpret depth to bedrock in this area.

Table 9.2
2006 Survey Parameters

Acquisition system	2 Geometrics Geode
Number of channels	48
Geophone spacing	5 m (single phone per channel)
Energy source	Dynamite (1kg per shot on average)
Shot spacing	30 m (every 6 geophones) + offset shots approximately 100 m off
Sample interval	0.125 milliseconds
Record length	256 milliseconds

9.1.3 Results and Discussion of Seismic Survey

The seismic refraction surveys successfully mapped the depth to bedrock at the aggregates investigation site. The interpretation of data indicates that the depth to bedrock could reach 80 m and has the potential for thick aggregates sequences within the overburden. A low seismic velocity zone in bedrock has been correlated from line to line that appears to define a structural trend related to the depositional history of the deposit. Elsewhere, bedrock velocity is generally high which would reflect the lack of a weathered bedrock layer above competent bedrock.

The seismic refraction surveys conducted for this study, although successful in mapping depth to bedrock and consequently overburden thickness, do not allow the ability to distinguish whether or not the overburden sequence is completely composed of aggregates as can be seen at surface. The fact that the bedrock appears to plunge below water level on one profile is an indication that marine sedimentation could also have occurred which may result in finer sediments: silt and clay.

9.2 TEST PITS

Four large test pits (Numbers 1, 2, 3 and 5) were dug on the property in 2005 using a tracked excavator to obtain representative samples of aggregate. About one tonne of sample was collected from each test pit.

The samples from the tests pits were delivered on July 13, 2005 to the Levelton Consultants Ltd. testing laboratory in Richmond B.C. Standard ASTM aggregate quality tests were carried out on representative samples taken from each large sample. The large samples were then combined for crushing and petrographic evaluation of crushed material.

9.3 PHOTOGRAMMETRY CONTOUR MAPPING

The topography at the Swamp Point North has been captured as one metre contour mapping obtained from 1:5,000 GPS controlled and targeted photogrammetry. Aero Geometrics Limited, of Vancouver, B.C., was responsible for the photogrammetry and mapping. The topography survey and the date of photo was June 10, 2006.

9.4 OFFSHORE DIVE ASSESSMENT

G3 Consulting Limited, of Burnaby, B.C., was retained on behalf of Portland Canal Aggregates Corporation to complete a dive assessment on the eastern shore of Portland Canal, BC. The objective of the dive assessment was to complete a biophysical assessment of marine foreshore adjacent to the proposed development side of dock and barge loading facilities. It was conducted June 4, 2002.

The scope of work of the dive assessment included reconnaissance SCUBA dives and depth soundings to delineate study area, foreshore and upland assessment of shoreline, biophysical surveys along dive transects and collection of video and photographic data of emergent and submerged marine habitat.

10.0 DRILLING

10.1 DRILLING

During September 2006, ten vertical drill holes (Table 10.1) were drilled across the Swamp Point North project. The distribution of drill holes included six drill holes within the license area, and the additional four holes within the extension area. The drilling was carried out under the supervision of a geologist. The geologist logged the cores and recorded the details into WellSight Systems™ (www.wellsight.com), which is a commercial Windows-based drill hole logging program for geologists and drilling engineers. In general, the drilling procedures were as follows:

- Drill holes were located over the project area as close as it was possible to the seismic lines by a geophysicist using a Trimble X Pro GPS survey system.
- Drill pads were created as close as was practical to the projected locations.
- Rig spudded and cored to or until penetration was refused.
- Drill core was logged by a geologist in the field, using the following lithological units that were differentiated in the core: gravel, sand, silt, clay/clay lumps, water bearing layers, gravel boulder layers, till, pulverized rocks, and bedrock.
- Logging information was transferred into WellSight Systems™ software, and lithology strip logs were printed.
- All drill holes were vertical.
- The core is stored in an equipment yard in Terrace, British Columbia.

Table 10.1
Drill Hole Details

Hole ID	Easting	Northing	Elevation (m)	Total Depth (m)
DHL 1	433939.4	6148395.8	31.0	62.8
DHL 2	434095.5	6148451.0	82.0	36.9
DHL 3	434153.5	6148771.6	80.0	17
DHL 4	434013.5	6148579.7	78.0	41.8
DHL 5	433948.8	6149041.5	134.0	22
DHL 6	433801.0	6148971.0	139.0	41.5
DHL 7	433566.8	6149147.5	127.0	44.2
DHL 8	433818.0	6148641.0	40.0	37.8
DHL 9	433601.0	6148828.0	72.0	23.2
DHL H	433662.0	6149448.0	145.0	52.2

10.2 DRILL HOLE VERIFICATION

Mr. Keith McCandlish, P.Geo. an independent "Qualified Person" for the mineral resource technical report, visited the site June 6-7, 2007. A general site assessment was conducted at this time. Drill hole coordinates were evaluated using a handheld GPS unit, and drill cores were observed. Verification of the drill collars was made at that time.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

11.1 Sampling Method and Approach

In 2005 five representative aggregate bulk samples were obtained from four test pits (1, 2, 3 and 5). A sample of silty material was obtained from Test Pit 4.

Standard ASTM aggregate quality tests were performed by Levelton Consultants Ltd. (www.levelton.com) on each test pit sample. The test pit samples (except the Test Pit 4 sample) were combined for the purposes of petrographic examination of crushed aggregate material, again performed by Levelton Consultants Ltd. The testing was conducted in order to determine the properties of the aggregate material, and whether selective screening and crushing would improve the quality of aggregate from the samples, as measured by Petrographic Analysis.

No testing has been conducted on core samples.

11.2 Sample Preparation, Analyses and Security

11.2.1 Sample Preparation

The procedure for petrographic examination of crushed aggregate material was as follows (Place, 2005):

> Approximately fifty kilograms of material was taken from each of the large samples and screened over a #4 (4.75 mm) screen, removing approximately fifty-five per cent of the original material as sand (based on previous testing). One portion was crushed to a nominal size of 12.5 millimetres and the other portion was crushed to 25 millimetres. A jaw type crusher was used for this procedure. The crushed materials were then screened again over the #4 screen and the two types of material retained on the screen were evaluated separately.

11.2.2 Analysis

In BC many of the deposits produce high quality aggregates, however, the price of the aggregates depends on the physical properties and should meet the industry specifications.

Unlike Ontario and some other provinces, where aggregate quality testing protocols are very detailed and at very high level, the BC aggregate testing protocols are less stringent. Test methods that are widely used and accepted in BC and the other areas of Canada are recommended by the Canadian Standard Association (CSA), British Columbia Ministry of transportation (BCMoT) and American Society for Testing and Materials (ASTM). Most of the CSA tests have equivalent corresponding tests in ASTM and in other standards. Typical CSA and BCMoT tests include:

- Sieve Analysis
- Organic Impurities
- Sulphate Soundness (Sodium or Magnesium Sulphate).
- Los Angeles Abrasion
- Relative Density
- Absorption, Flat and Elongated particles and Accelerated Mortar Bar Test.

The analyses, performed to evaluate of the physical properties of aggregate from Swamp Point North project in Levelton Consultants Ltd Laboratory in Richmond, BC are listed in Table 11.1.

Table 11.1
Tests and Analyses for the Aggregate Samples from Swamp Point North Project, British Columbia

Test or Analyses	Code	Location
Bulk Density of Aggregates	ASTM C-29	Pit1, Pit 2, Pitt3, Pit 5
Sulphate Soundness	CSA A23.2-9A	Pit1, Pit 2, Pitt3, Pit 5
Sieve Analysis		Pit1, Pit 2, Pitt3, Pit 5
Clay Lumps in Friable Particles in Aggregate	ASTM C-142	Pit1, Pit 2, Pitt3, Pit 5
Low Density Granular Material	CSA A23-2-4A	Pit1, Pit 2, Pitt3, Pit 5
Detection of Alkali Silica Reactive Aggregate by Accelerated Expansion of Mortars Bars	ASTM C1260 (CSA A23.2-25A)	Pit1, Pit 2, Pitt3, Pit 5

11.2.3 Chain of Custody - Security

The Swamp Point North project is located in a remote area in Northern BC. The samples were taken and delivered to the laboratory by company representatives, following a standard chain of custody protocols.

Micon representatives did not visit the Levelton Consultants Ltd and were not present during either the sampling or the laboratory testing. Micon has reviewed information from PCAC and the reports of the consultants (Place, 2005) retained to perform the testing for details of both the sampling and testing results.

Levelton Consultants Ltd. (www.levelton.com) is a multidisciplinary firm of consulting engineers, scientists, and technologists, independent from HRL and PCAC. In support of its engineering and scientific practices, Levelton operates 10 offices and laboratories in BC and Alberta and provides testing services related to construction materials, soils, aggregates, air, and water.

12.0 DATA VERIFICATION

Mr. Keith McCandlish, P.Geo. an independent "Qualified Person" for the mineral resource technical report, visited the site June 6-7, 2007. A general site assessment was conducted at this time. Drill hole coordinates were evaluated using a handheld GPS unit, and drill cores were observed. Verification of the drill collars was made at that time.

Micon's Environmental Engineer Mr. David Makepeace, P.Eng visited the SPN Project site in Cassiar District, BC on 19 February, 2015. Mr. Makepeace visited the area of the test pits, the quarry wall, the equipment and the constructed infrastructure. Discussions were held with the HRL staff on the deposit model, current and future mining and environmental programs, the exploration potential of the mineral licenses and the infrastructure, plant and equipment capacities in the area.

Mr. Makepeace assisted HRL in the Notice of Work permit application and the application process in 2013, helped develop the environmental management plans for HRL and subsequently has been kept abreast of the permit status and the project development timeline by HRL.

The land tenure was verified using the information provided on the British Columbia Mining Titles Online web application (https://webmaps.gov.bc.ca/imf5/imf.jsp?site=mem_mto_min-view-title).

Mr. Christopher Jacobs, CEng., MIMMM reviewed forecast operating costs and capital cost estimates provided by HRL, and prepared the economic analysis section of this report, working under the supervision of Mr. Makepeace.

Ms. Tania Ilieva, P.Geo. researched the product specifications and the aggregate market in BC. The data about the current infrastructure projects in BC and in North America West Coast was acquired directly from governmental sources or from the web pages of potential consumers.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 AGGREGATE PROPERTIES

The SPN deposit has been characterized using a combination of laboratory testing procedures, petrographic analysis, and an analysis of drill logs.

While the drill holes and test pits are considered representative samples for the deposit as a whole, it should be noted that aggregate material is by nature heterogeneous, and that the actual composition of aggregate material within the deposit may vary significantly between areas. For example, the core logs indicate that on average gravel represents roughly 62-69%, while sieve analysis yields a value of 54.9%.

13.1.1 Core Data

Logs from ten vertical core holes drilled on the property (Table 13.1) have been analyzed to determine average composition of the aggregate material.

Table 13.1
Distribution of Materials Based on Core Logs

Rock Type	Meterage logged (m)	Percentage of core (%)
Gravel boulder layers	19.35	5.1
Clay, clay lumps	23.01	6.1
Gravel	235.15	62.2
Pulverized rock	10.06	2.7
Sand	22.25	5.9
Silt	35.2	9.3
Slickensides	1.83	0.5
Till	6.86	1.8
Water bearing layers	24.54	6.5
Totals	**378.25 m**	**100.0 %**

*Note: bedrock unit cored is not shown above or calculated as a percentage of aggregate material since it serves as a bounding bottom layer for the aggregate material.

A simplification of Table 13.1, which groups larger particles into gravel and smaller particles into fines, is shown as Table 13.2. Reviewing the results of both tables, the core logs indicate that the percentage of gravel material contained in the deposit is 62% –69%.

Table 13.2
Simplified Distribution of Materials

Particle Type	Percentage of core (%)
Gravel	69.1
Fines	23.9
Water bearing	6.5
Other	0.5
Total	100.0 %

13.1.2 Quantification and Qualification Based on Sieve Analysis

Levelton Consultants Ltd reported on the results of a suite of CSA and ASTM standard aggregate tests on bulk samples from five test pit locations in September 2005. The testing report was provided to AGL by HRL. The size distribution of aggregate material in the SPN deposit, derived from sieve analysis of three test pit samples, is shown in Table 13.3.

Table 13.3
Size Distribution of Test Pit Samples Based on Sieve Analysis

Particle Type	Test Pit	Percentage (%)	Average Percentage (%)
Gravel	1	56.4	54.9
	2	50.1	
	3	58.1	
Sand	1	38.9	38.5
	2	39.7	
	3	37.0	
Silt	1	4.7	6.6
	2	10.2	
	3	4.9	

*Note: Due to sieve sizing, particle sizes used in the determination of the table above vary slightly from the standardised sizing rules. In the case of the table above, silt is understood to include all material smaller than 0.075 mm, sand is understood to include all material ranging from 0.075 to 4.75 mm, and gravel is understood to include all material larger than 2.36 mm.

13.1.3 CSA/ASTM Standard Aggregate Tests

Table 13.4 presents the test results for the other standard tests completed by Levelton Consultants.

Table 13.4
Summary of CSA/ASTM Standard Aggregate Test Results

Test Description			Test Pit 1	Test Pit 2	Test Pit 3	Test Pit 4	Standard
Sulphate Soundness Test – CSA A23.2-9A, magnesium sulphate							
	+4.25 mm	%wt loss	2.4%	8.2%	1.93%		<12%
Mg sulphate	+0.3 mm	%wt loss			10.15%		<16%
Clay Lumps in Friable Partleles In Aggregates – ASTM C 142							
ASTM C 142	+4.25 mm	%wt loss	0%	0%	0%	0%	<0.25%
	+1.18 mm	%wt loss	0%	0%	0%	0%	<1.0%
Low-Density Granular Material In Aggregate – CSA A23.2-4A, zinc chloride							
	Coarse		-	-	-	-	<0.5 to 2.5%
	Fine		0%	0%	0%	0%	<0.5 to 2.5%

Test Description			Test Pit 1	Test Pit 2	Test Pit 3	Test Pit 4	Standard
Alkali Silica Reactive Aggregate – ASTMC1260, CSA A23							
	16 day	coarse	0.12%	0.10%			<0.20%
	16 day	fine	0.09%	0.10%			<0.20%
	20% fly ash	coarse			0.03%	0.02%	<0.20%
	20% fly ash	fine			0.03%	0.02%	<0.20%

13.1.4 Petrographic Analysis

PCAC (now HRL) engaged Levelton Consultants Ltd to conduct petrographic analysis of the bulk samples from five test pit locations in December 2005. The purpose of the petrographic testing procedure was to determine whether selective screening and crushing would improve the quality of aggregate material. Petrographic Number (PN) calculations for the aggregate material were determined for both a 25 mm material crush and a 12.5 mm material crush.

For the purposes of petrographic analysis, representative samples were taken from Test Pits #1, #2, #3, and #5 and were subsequently combined to make up a test sample.

The petrographic analyses showed that the aggregate in the bulk samples from the Swamp Point North is composed of rock types that outcrop to the north and east of the aggregate source area. Tectonic plate collisions, volcanic eruptions, and igneous intrusion have created a mixture of many rock types over a short area. Most of the rock has been altered by heat and pressure from intrusion of the granodiorite rock that is prevalent in the area and makes up a significant portion of this aggregate (~45%). Most of the altered rock is durable and strong but a small portion of it is weak.

Highly metamorphosed igneous rock called orthogneiss is very prevalent in this aggregate source (~22%). It is likely that its source is the contact zone between older gabbro and the younger intrusive granodiorite. The aggregate made from this rock type is dark coloured and durable.

Fine grained volcanics and intrusives ranged from the Hazelton Group Basalt to Andesite and Felsite rock which was generally strong and un-weathered. Selective screening and crushing did not significantly affect the proportion of these rock types in the aggregate. A small portion of weathered volcanic rock remained in the crushed product.

Granodiorite was a significant proportion of the un-crushed samples. It is coarse grained and varies from strong and durable to easily broken by hand. Moderately high proportions of biotite mica affected the strength of some of the particles. Crushing and screening reduced the proportion of Granodiorite in the samples by shattering the weaker rock into sizes smaller than 4.75 mm.

Medium grade metamorphic rock described generally as phyllite was the other significant poor quality rock in the original (un-crushed) samples. Crushing greatly reduced the amount of poor quality phyllite, particularly in the coarse gravel portions.

The weighted average PNs for the 25 mm and 12.5 mm crushes were 130.4 and 121.7, respectively. Suggested PN limits for aggregate quality classifications are shown in Table 13.5.

Table 13.5
Suggested PN Limits for Aggregate Quality Classifications (after Levelton)

Product Type	PN Limits
Concrete Class C1, C2, F1	125 maximum
Other Concrete Classes	140 maximum
Shotcrete	125 maximum
Railroad Ballast	125 maximum
Granular Base	150 maximum
Select Granular Sub-base	160 maximum

Micon and DMT have reviewed the reported petrographic analyses and consider the results to be accurate and reliable.

13.1.5 Bulk Density

The average bulk density value of aggregate material determined by Levelton Consultants Ltd. for the Swamp Point North is 1,759 kg/m^3 (Table 13.6).

The average bulk density determined by Levelton (1,759 kg/m^3) applies to samples retrieved from test pits and differs from the bulk density used by the Government of British Columbia (2,170 kg/m^3) to determine in-place tonnages. In AGL's opinion the higher density used by the government probably more closely represents the actual density of in place undisturbed material and as such has been used to determine tonnages for the purposes of the mineral resource estimate.

Table 13.6
Bulk Density Values from Laboratory Testing by Levelton Consultants Ltd.

Test Pit	Bulk Density (kg/m^3)
1	1,744
2	1,742
3	1,740
5	1,810
Average bulk density	**1,759**

13.2 MINERALIZATION

Not Applicable.

14.0 MINERAL RESOURCE ESTIMATES

14.1 GEOLOGICAL DATA

The following information regarding the geological modeling and resource estimate was extracted from the "Technical Report on Portland Canal Aggregates Corporation's Swamp Point North Property, British Columbia, Canada", prepared by Associated Geosciences Ltd., now DMT Geoscience Ltd. (DMT), dated on November 30, 2007. Mr. Keith McCandlish, P.Geo., is the independent "Qualified Person" for the 2007 Technical report, prepared in compliance with the best exploration practices and National Instrument 43-101 of the Canadian Securities Administrators.

14.1.1 Drill holes

All 10 drill holes from the September 2006 drilling program have been incorporated into a modeling database that includes collar, survey, and lithological tables. The drill hole distribution is illustrated in Figure 9.1.

14.1.2 Digital Terrain Model

The model is bounded at surface by a digital terrain model obtained by aerial photogrammetric survey. The one-metre contour mapping from 1:10,000 GPS controlled and targeted photogrammetry was filtered into a 5 m major contour interval file and was subsequently imported into Dassault Systèmes-Surpac™ and utilized to generate a digital terrain model (DTM).

14.1.3 Seismic Refraction Survey

The 2,640 line-metres of seismic refraction data collected in September 2006 have been incorporated into the Swamp Point North modeling dataset. The seismic survey generated overburden thicknesses, which correlate to gravel thicknesses, as well as bedrock elevation data (bottom of gravel resource).

Survey ground lines are illustrated in Figure 9.1. The accuracy of seismic refraction data is ±1 m for depths up to 10 m and ± 10% of the depth for greater depths. The relatively lower accuracy at shallow depths comes mainly from the greater statistical error in determining the first layer velocity from fewer data points. The accuracy of the overburden thickness calculation is deemed to be generally good.

Given the rugged topography of the site, poor satellite geometry and in some cases the interpolation process, the bedrock elevations determined by the seismic refraction survey are not very good. Elevations errors are potentially up to 5 m. Since there is a greater degree of confidence in the measurement of overburden thickness than in the bedrock elevation measurement, AGL chose to utilize the overburden thickness measurements for modeling purposes.

Seismic refraction ground lines were pressed onto the topographic surface using Dassault Systèmes-Surpac™. The difference between original elevations compared with pressed elevations ranged from 0 to 48.7 m, with the average difference being 5.9 m. Percentages of the dataset within certain elevations are illustrated in Table 14.1. Since the majority of the dataset is within acceptable survey error, DMT considers it an acceptable practice for an aggregate deposit at this stage of exploration to press the seismic ground lines onto the topographic digital terrain model.

Table 14.1
Elevation Differences between Seismic Refraction Ground Lines and the DTM

Differences in Elevation	Dataset Points Represented	Percentage of Dataset
>5 m	427	58.30%
>10 m	626	85.50%
>20 m	700	95.60%
>40 m	723	98.80%
>50 m	732	100%

Once the seismic refraction ground line data points were pressed onto topography, overburden thicknesses (supplied by the seismic survey) were subtracted from the ground data point elevations to produce a series of bedrock elevations.

14.1.4 Offshore Dive Report

Some overburden thicknesses along the west shore of the deposit were taken from 2002 Dive Assessment report. The results of offshore dive transects which indicated the presence of aggregate to at least a depth of 5 m along the foreshore were included in the modeling dataset.

14.1.5 Slope Gradient Map

Field observations and a slope gradient map generated from the topographic data were used to infer the surface limit of the gravel deposit against bedrock topography. Slopes with a gradient of more than 40º were assumed to be too steep to sustain an aggregate cover. A limit line was hand drawn on the slope gradient map and digitized as a line of points with eastings, northings, and elevations (X, Y, Z co-ordinates) and a resource thickness of zero.

14.1.6 Bedrock Digital Terrain Model

The model is bounded on the bottom by a bedrock digital terrain model. Various data points were used to construct a set of bedrock surface points, including the modified seismic refraction data, bedrock intersection points derived or inferred from drill holes, the slope gradient map of zero resource thickness, the offshore dive assessment, as well as surface contours in areas determined to have zero aggregate thickness (Figure 14.1).

Once the bedrock surface points were compiled, they were contoured with Dassault Systèmes-Surpac™ using inverse distance method to estimate grid values.

14.2 Geological Modelling

14.2.1 Principles

The Swamp Point North model was created in Dassault Systèmes-Surpac™ using an upper topographic digital terrain model and a lower bedrock digital terrain model. Various boundary files were applied in order to compute volumes of aggregate material between the two surfaces in a process analogous to using cookie cutters.

Figure 14.1
Slope Gradient Map with Zero Resource Thickness

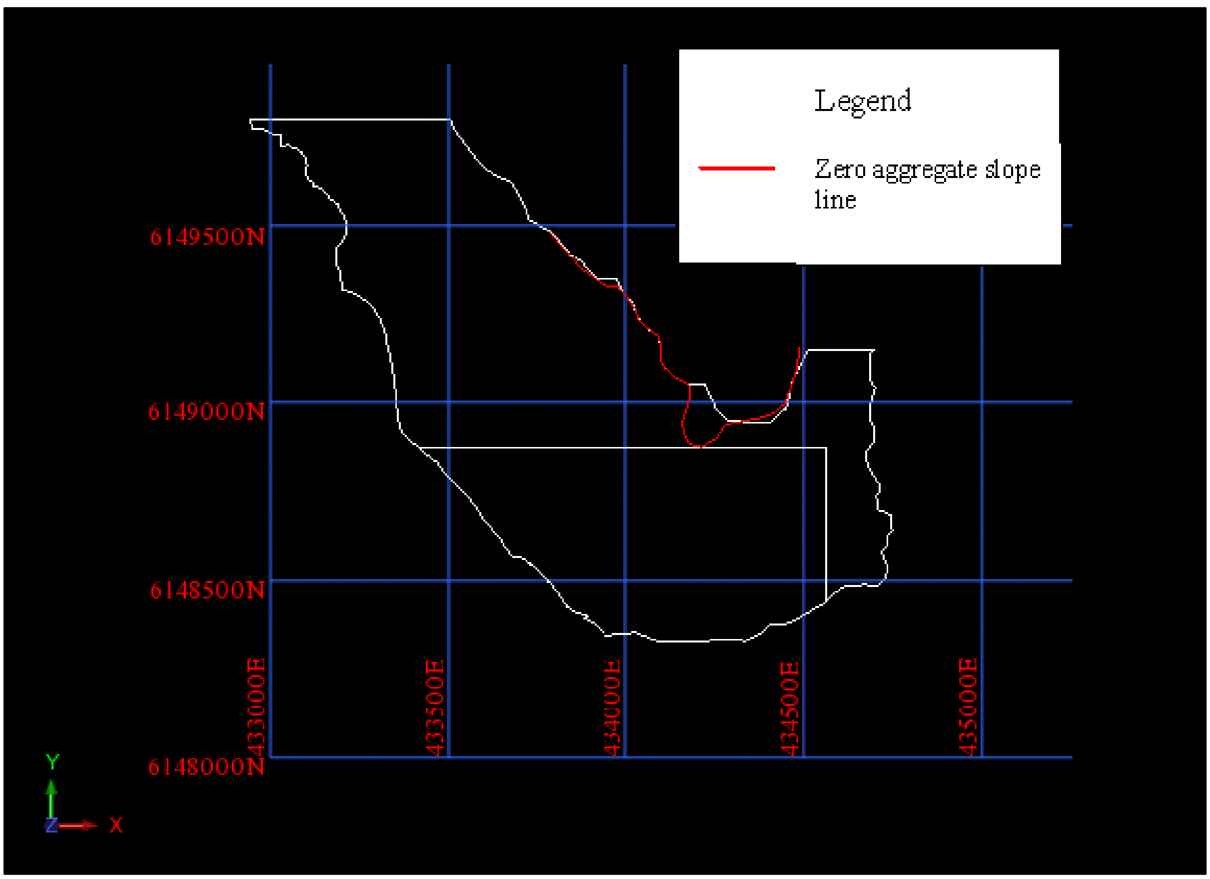


Figure provided by HRL, prepared by AGL, November, 2007.

Modeling was done as two separate parts:

1. The license area,
2. The extension area.

Resource figures from the two separate areas were then summed to provide a total resource for the SPN.

14.2.2 Model Limits

In addition to the zero aggregate thickness limits derived from slope gradient maps, other limits consistent with mining and environmental regulations in British Columbia were applied prior to the resource calculation. The limits, illustrated in Figure 14.2, are as follows:

- Material occurring within 30 m of the high water mark (HWM) was eliminated; there is a regulated offset from the HWM for minerals extraction.
- Material occurring within 5 m of the license boundaries was not included in the estimate as there is a prohibition against working closer than 5 m to the license boundary in the BC mining code.
- Material occurring within a band 15 m on either side of the crest of the banks of Donahue Creek was eliminated; working within these limits is forbidden under BC's environmental code.

Figure 14.2
Licence and Resource Limits

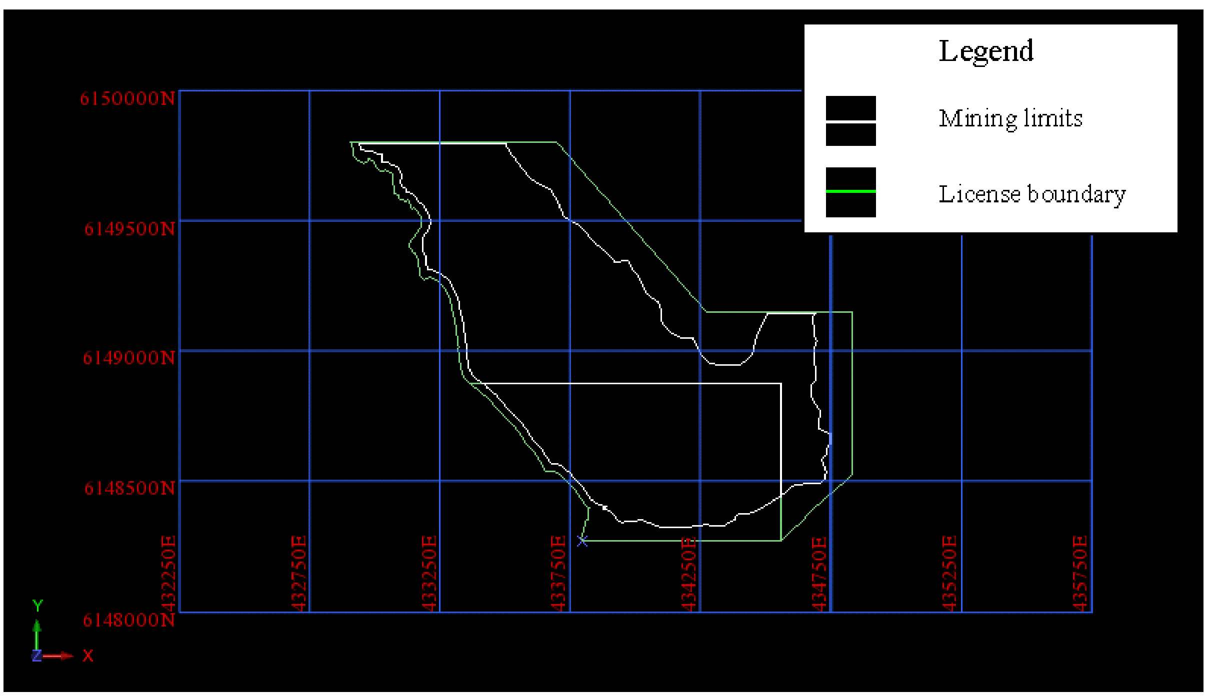


Figure provided by HRL, prepared by AGL, November, 2007.

14.2.3 Waste Overburden

A continuous, one metre thick unit of waste overburden is interpreted from field observations to exist across the entire SPN. Volumes of waste overburden have been calculated for each 'cookie cutter' area, using the surficial area multiplied by the thickness (one metre), and subtracted from the total resource figures.

14.3 Discussion

The bedrock digital terrain model was generated from a compilation of data that did not entirely cover the mining area. Where possible, minimum gravel thicknesses were inferred from the available data. However, DMT was unable to extrapolate the bedrock surface across the entire mining area. In some instances the bedrock contouring program, as a function of limited data, modeled the bedrock surface to be level with topography or higher.

In all areas where the bedrock digital terrain model was found to be higher than topography, the resource area has been adjusted to eliminate the possibility of incorporating negative volumes into the resource estimate. Very few adjustments had to be made to the southern portion of the resource but a significant area to the north has been omitted from the resource estimate for this reason. There is the potential for additional volumes of aggregate material to exist in the northern portion of the extension area.

Figure 14.3
Adjusted Resource Area

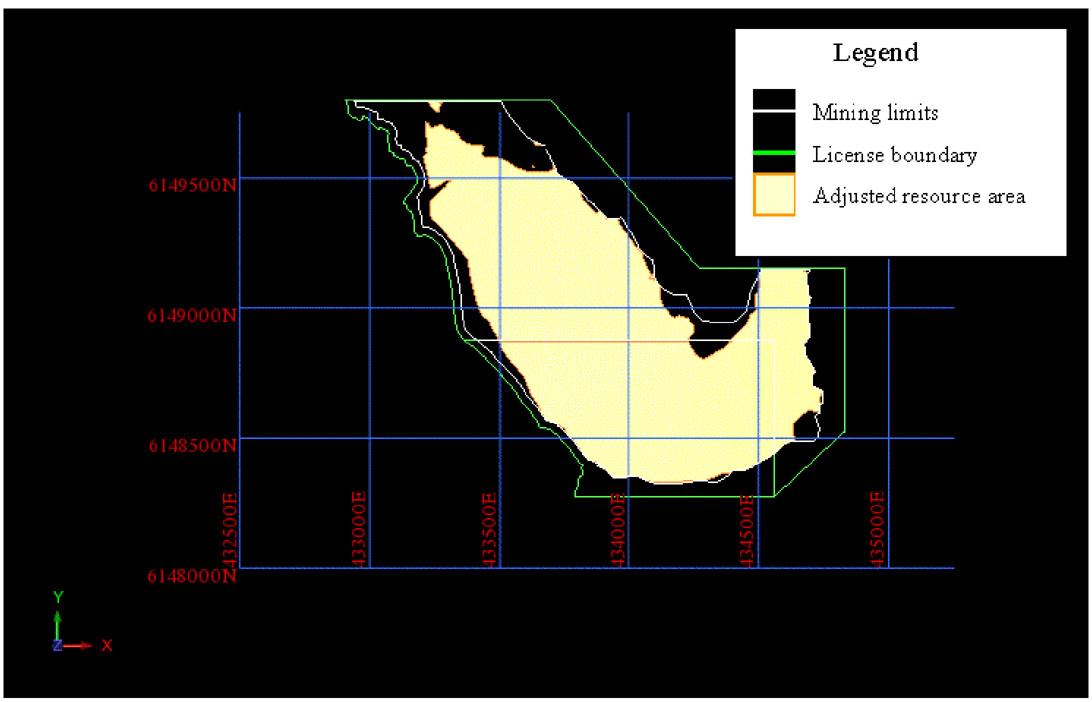


Figure provided by HRL, prepared by AGL, November, 2007.

Figure 14.3 shows the adjusted resource area highlighted in orange.

14.4 MODEL VALIDATION

Two additional methods of calculating volumes were compared as a check against the Dassault Systemes-Surpac™ model. Overall, the volumes listed in this report are deemed to be within an acceptable range of error with the checks.

The first validation involved analyzing a report previously done by AGL employees based on the 2005 and 2006 seismic refraction surveys, using the Surfer™ software grid utility package. The resource volumes listed in the older report are approximately 8% higher than the resource volumes detailed in current report; however, this is deemed to be acceptable since some of the boundaries have been re-defined, and also since the older report did not take into account a waste overburden unit.

The second method of validating the Dasssault Systemes-Surpac™ model was by comparing the volumes utilized for mine planning with the volumes listed in this report. Cross-sections at 100-metre spacing throughout both the license and extension areas were supplied to Eric Beresford, P.Eng. Mining pits were designed on the sections, and volumes calculated based on the cross sections. The volumes calculated based on the cross-sections ended up being approximately 15% smaller than the resource volumes listed in this report, which is deemed to be within acceptable limits since not all the material is planned to be mined, and also pit wall slopes dictate that some of the resource is lost. The SPN project has a permit for 250,000 t/y and the open pit, was designed to constrain a production schedule for the purposes of this PEA. It does not preclude the remainder of the resource from reasonable prospects of eventual exploitation.

14.5 MINERAL RESOURCE INTRODUCTION

According to the CIM Definition Standards on Mineral Resources and Mineral Reserves, a mineral resource is:

> *"A concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic exploitation. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge."*

In the same standards, aggregates are classified as an industrial mineral:

> *"An Industrial Mineral is any rock, mineral, or other naturally occurring substance of economic value, exclusive of metallic ores, mineral fuels and gemstones; that is, one of the non-metallic minerals."*

Under the CIM Definition Standards on Mineral Resources and Mineral Reserves and Best Practices Guidelines adopted by reference in National Instrument 43-101, a mineral occurrence must have "reasonable prospects of economic exploitation", or it must be "demonstrated as being capable of profitable exploitation" in order to be classified as a mineral resource. In particular, industrial minerals cannot be classified as a resource unless there is an existing market for them based on the cost of extraction and transportation and the value of the product, or unless a market can be reasonably developed. The market for aggregates in BC remains strong with potential growth in demand as a consequence of several potential large scale infrastructure projects, proposed for the Prince Rupert area. More information is provided in Section 19.0. The SPN project has reasonable prospects to compete, both in the current and potential markets for its product.

14.6 MINERAL RESOURCE ESTIMATE AND CLASSIFICATION

After the completion of 2005-2006 geophysical survey and drill program PCAC and HRL engaged DMT to prepare a resource estimate for SPN aggregate project in BC. The geological modeling and aggregate resource estimation was undertaken by Susan O'Donnell, Geol.I.T. at the time of the resource estimation. Ms. O'Donnell was supervised by Keith McCandlish, P.Geo. The Mineral Resource was assessed by Associated Geosciences Ltd (now DMT Geosciences www.dmtgeosciences.ca) and the effective date of the mineral resource estimate presented in this report is September 11, 2007, the QP for the resource estimate is Mr. McCandlish.

Within the mining and resource limits, the classification of the industrial mineral resources of the SPN deposit has been based on an analysis of both drill hole and geophysical data. It was not possible to correlate individual drill hole data across the property. AGL is, however, satisfied with the continuity of the aggregate resources consistent with the glacial outwash nature of the deposit.

Material located within 250 m of a drill hole and complemented by geophysical data has been classified as measured, while material located outside the 250 m radius of a drill hole but still within 125 m of a geophysical data point has been classified as indicated. Inferred resources encompass all additional material located outside the optimum range to which the data can reasonably be projected, but within the limits of mining. The definitions of measured, indicated and inferred resources, from the CIM Definition Standards on Mineral Resources and Mineral Reserves are provided below:

> *A "Measured Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as*

outcrops, trenches, pits, workings, and drill holes that are spaced closely enough to confirm both geological and grade continuity.

An "Indicated Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed."

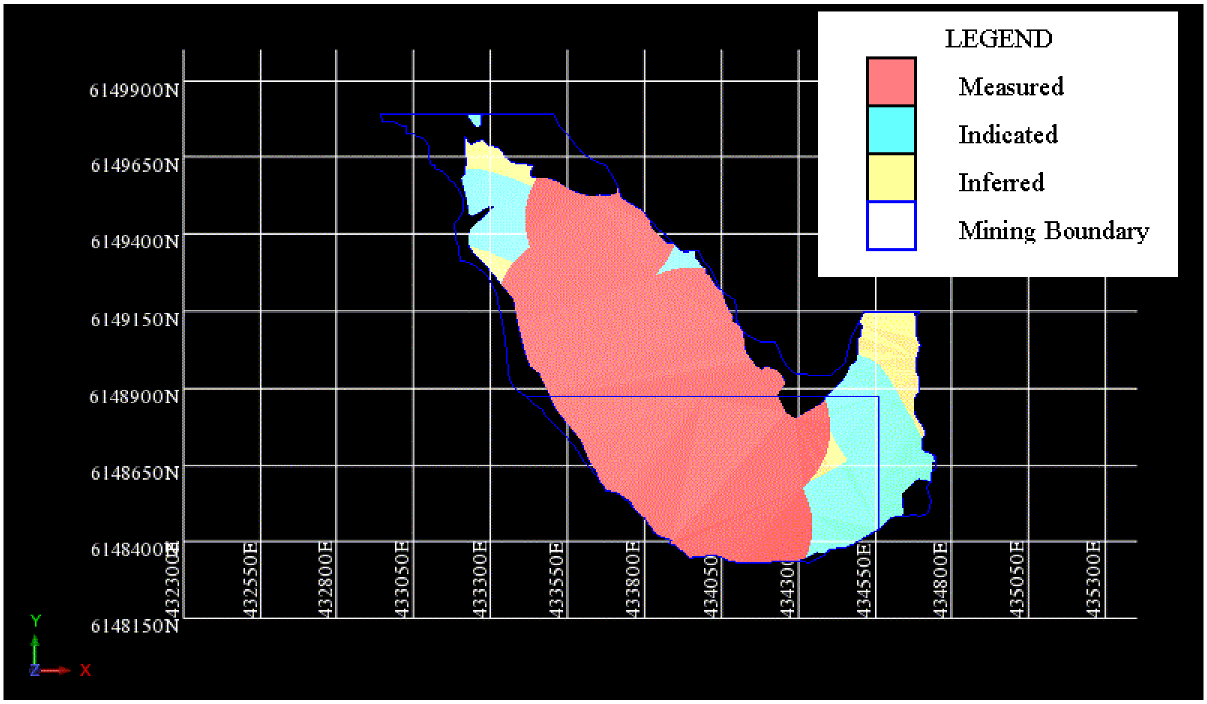
An "Inferred Mineral Resource" is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling data and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes."

The relationships between each resource category and the project boundaries are shown in Figure 14.4. The market for aggregate in the Lower Mainland and the Pacific Northwest remains robust which provides support for mine planning and the economic viability of the deposit. The 2007 mineral resource estimate is current since no further exploration has been conducted on the property since the 2007.

The resource estimate table (Table 14.2) provides resource volumes and tonnes for two separate areas, and a third summary table. The separate areas represent the current License area held by HRL and the area (the "extension area") for which an Investigation Permit issued by the BC government is held by HRL.

DMT cautions that a proportion of the resources described lie below sea level.

Figure 14.4
Relationship between Mining Boundaries and Resource Classification Limits



Source: Figure provided by HRL, prepared by AGL, dated November, 2007.

Table 14.2
Industrial Mineral Resource Estimate for Swamp Point North

Area	Classification	Volume (m^3)	Specific Gravity	Mass (t)
License Area	Measured	13,618,365	2.17	29,551,852
	Indicated	1,848,388	2.17	4,011,002
	Measured and Indicated	**15,466,753**	**2.17**	**33,562,854**
	Inferred	203,772	2.17	442,185
Extension Area	Measured	15,384,804	2.17	33,385,025
	Indicated	2,195,467	2.17	4,764,164
	Measured and Indicated	**17,580,271**	**2.17**	**38,149,189**
	Inferred	831,465	2.17	1,804,279
Combined (License + Extension)	Measured	29,003,169	2.17	62,936,877
	Indicated	4,043,855	2.17	8,775,166
	Measured and Indicated	**33,047,024**	**2.17**	**71,712,043**
	Inferred	1,035,237	2.17	2,246,464

1. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, sociopolitical, marketing, or other relevant issues.
2. The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as an indicated or measured mineral resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.
3. The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council November 27, 2010.
4. The specific gravity value of 2.17 used to convert volumes to tonnes is the value used by BC government to assess extraction tonnages for royalty revenue purposes.

15.0 MINERAL RESERVES

At this time, there are no mineral reserves for the SPN aggregate project.

16.0 MINING METHOD

16.1 MINE PERMIT APPLICATION

The HRL Notice of Work application was submitted to the Ministry of Energy and Mines (MEM), April 29, 2013 (Micon, 2013). It included the mine plan, the processing plant, barge landing and foreshore development, water management, First Nation consultation and reclamation plan.

The MEM approved of the plan and granted a mining permit G-1-140 (Mine No. 1650080) on March 19, 2014.

16.2 MINE PLAN

Mr. P. Cain, on behalf of DMT, developed the mine plan for the permit application and was re-drawn at the request of MEM by DMT. The mine has been designed to extract approximately of 108,300 m^3 (235,000 t) of run of mine sand and gravel per year over the period covered by the Notice of Work. The following plans illustrate the mine plan throughout the present life of mine. Figure 16.1 is a plan section of the mine while Figures 16.2 to 16.3 are cross sections through the mine.

Figure 16.1
Swamp Point North Mine Plan Section

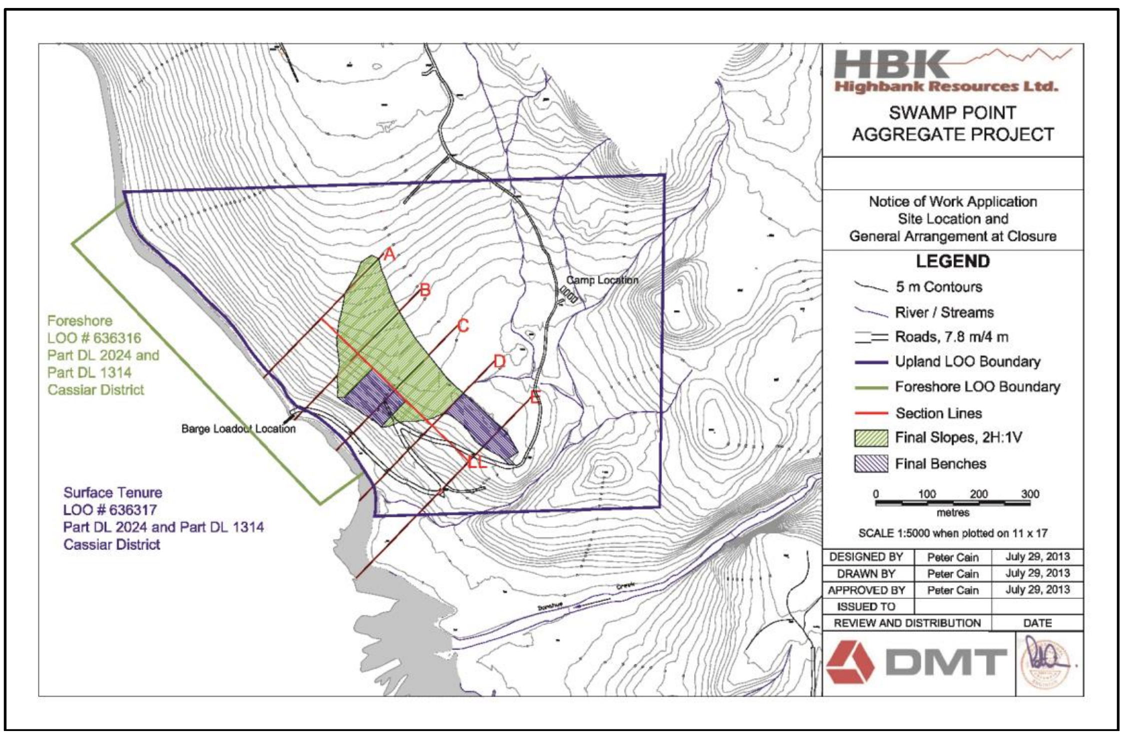


Figure 16.2
Swamp Point North Mine Cross Sections A, B and C

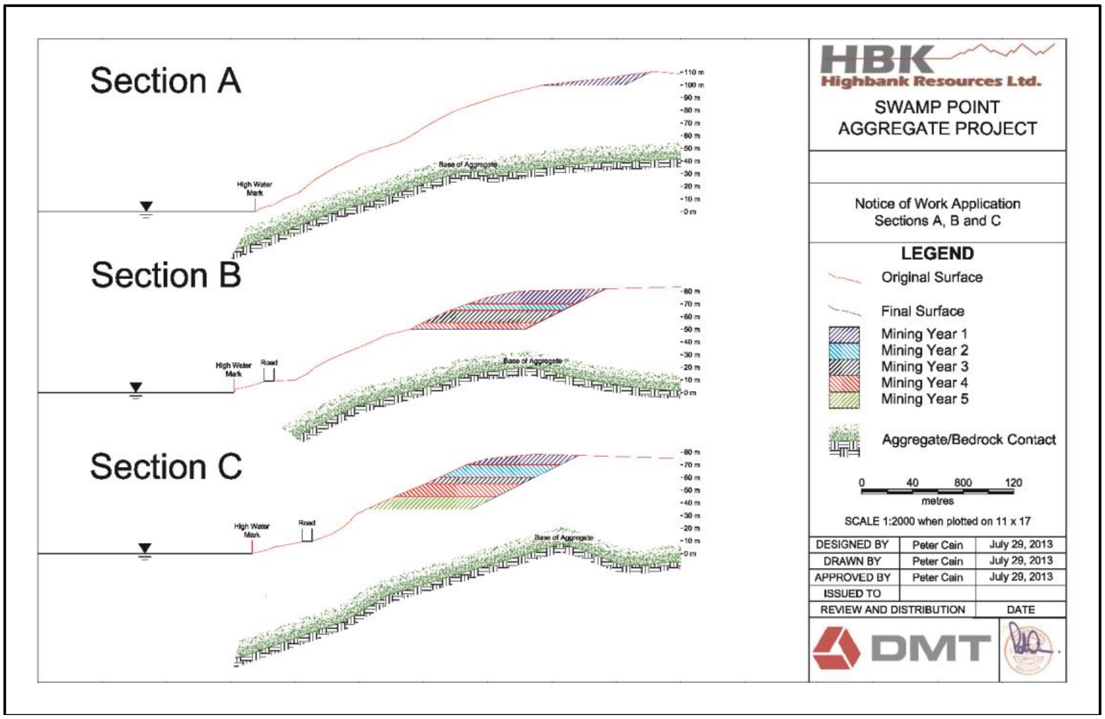
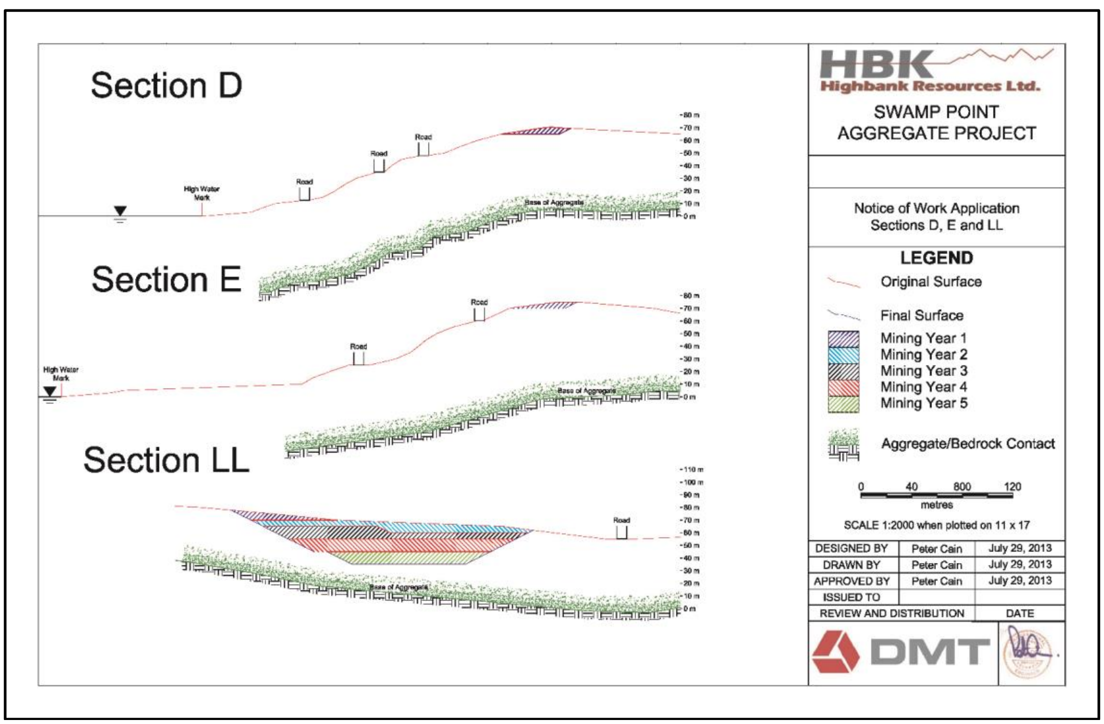


Figure 16.3
Swamp Point North Mine Cross Sections D, E and LL



16.3 Mine Development Plan

The initial Year 1 pit will generate the largest disturbance because a combination of the pit location and the rising topography requires a long back-slope to achieve the desired slope gradients of 2H:1V (27°). This slope gradient will ensure permanent stability and eliminate the need for re-sloping during reclamation. The back-slope ends within the northern limit of the current licence area, which was the major factor in determining the location of the pit. Vegetation will be removed 2 m back from the edge of excavations for safety.

The pit will be developed from the top down in 5 m high lifts with a 2H:1V back slope to the east and day-lighting the bench to the west. A berm will be retained at the edge of the bench to prevent debris from falling down the outside slope while machinery is working close to the edge and subsequently removed and a new berm formed as each bench is taken down.

Mining excavations will be carried out by conventional mining equipment consisting of a D8N dozer, two excavators (Link-Bell 290LX and Terex TXC 225), one front-end loader (Komatsu WA 380) and two 35 tonne rear dump trucks (Case 330B). The dozer will grade the back-slope to the current bench where it will be lifted by the loaders in 2.5 m lifts either into a truck or directly to the wash-plant hopper. The maximum height of any vertical face will be 2.5 m.

As the working level descends, a 10 m wide haul road will be established at a gradient of 10% from the working level to the wash plant with a side safety berm to meet Code requirements. The relatively slow rate of production will allow aggregate to be loaded directly by loader from the pit to the wash-plant hopper, or taken by a single truck to a small stockpile for re-handling into the plant.

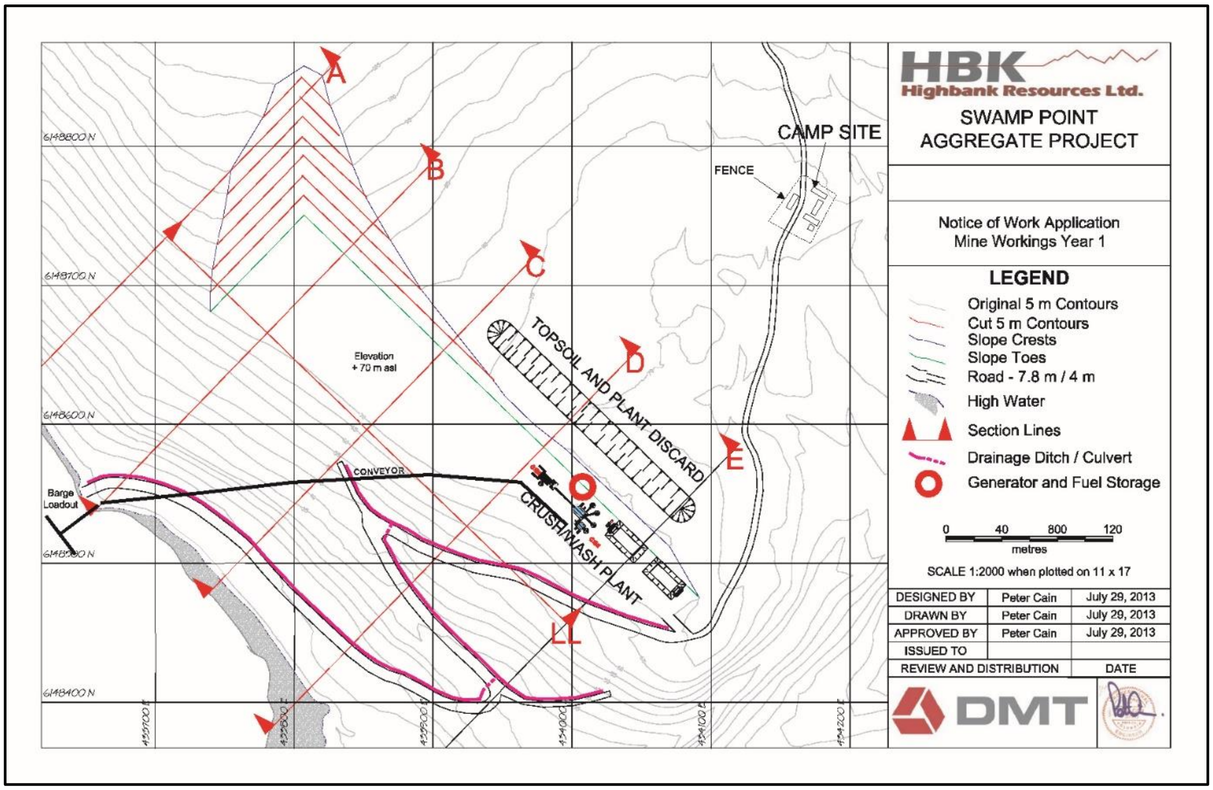
The western run-out lane will eventually be lost to the extraction in the later stages. In lieu of a run-out lane, a median berm will be installed to provide for arresting of a truck in the event of brake failure.

16.4 Stripping

Initial clearing will fell trees and brush, salvaging as much timber as possible. A Special Use permit or Licence to Cut and Remove Timber (L49931) was obtained from BC Ministry of Forests Lands and Natural Resource Operations on May 23, 2014. Dozers and backhoes will be used to strip the cover soils and load trucks will move the cover soils to the stockpile (Figure 16.4). The soil stockpile will be sloped and seeded to prevent as much run-off as possible, although it will be added to as mining progresses. As and when possible over the life of the mine, cover soil will be spread on the cut slopes and the slopes seeded. Tree planting will wait until final closure.

The depth of stripping is expected to average less than 0.25 m across the site; drilling results indicate very shallow cover soils. The cover soil volume anticipated totals about 14,000 bcm. The stockpile as designed will accommodate 18,000 bcm.

Figure 16.4
HRL Year 1 Mine Plan - Stripping



17.0 RECOVERY METHODS

The installation of a crushing, triple deck screen and washing plant (CSWP) will prepare saleable product from the mined aggregate. The CSWP will initially operate at 200 t/h of raw feed through the plant, estimated to produce 128 tonnes of gravel, 72 tonnes of sand and silt per hour, however, the plant has a design throughput rate of up to 500 t/h, depending on the proportion of sand contained in the feed. Silt will be mixed with soil in the stockpile and used for reclamation.

The CSWP will be located on the 70 m bench along with the settling and clarification ponds, which will supply the water required. Water pumped from sumps on the descending levels will be pumped up to the settling pond. Portable pumps will be installed as required to prevent any uncontrolled flooding. Some product may be shipped without washing, if sufficient water is unavailable during short periods of time and if acceptable to the client. Product may be stored as it is produced at a stockpile adjacent to the barge load-out to maintain adequate space around the plant.

The water balance (Section 20.2) calculated for the wash-plant shows that the raw feed moisture into the plant plus a make-up of 3.3 m^3/h equals the moisture shipped with the product. The washing and screening process uses 17.9 m^3/h of water and the settling and clarification ponds will provide a residence time of more than 24 hours with the wash water usage at a maximum, plus flood storage and freeboard.

A berm will be constructed around the stockpiled material such that any drainage will either exfiltrate through the gravel or divert into the settling ponds.

A dedicated diesel generator will power the CSWP. All diesel storage will be in double walled tanks within a bermed containment area and monitored daily for leakage. A spill kit for handling any loss of diesel will be located adjacent to the tank and generator.

The mine and plant will operate in daylight hours only, up to 12 hours per day, 7 days per week for approximately nine months of the year. The facility will then be partially mothballed, maintaining the ability to load barges and continue production depending upon the weather. Given its remote location and the fact that nothing of value will remain at the camp, full-time security will not be provided. A reduced staff will be retained for security, monthly environmental monitoring visits and to produce and/or load aggregates as noted above.

18.0 PROJECT INFRASTRUCTURE

18.1 ROADS

The existing access road from the foreshore barge loadout site to the pit area is approximately 750 m. It will be widened and re-habilitated to meet the BC Code for a truck haul road/access road. The width the road will be increased to 7.8 m incorporating a roadside ditch. Bank sloping will widen the road width, and a Code-compliant safety berm (3/4 wheel height of largest vehicle) will be built on the outside edge.

The road will exceed the guidance gradient of 5% given in the Health Safety and Reclamation Code, and will therefore require run-out lanes. The road will be surveyed as the project moves into construction.

For approximately 250 m from the plant, the roadside ditch gradient will be about 12%. The lower portion of the ditch, approximately 500 m, will have a gradient of 6%. As appropriate, ditch erosion will be minimized with silt fences, straw bales, settling ponds, and possibly heavy duty polyethylene sheeting held in place with wooden stakes on steeper sections.

Thousand-year return, maximum 24-hour precipitation at Stewart is 177 mm (Ascot, 2005). The drainage area for the road ditch ranges from close to zero at the exit of the pit and wash plant area to approximately 5.5 ha at tidewater. Maximum discharge therefore is estimated to be 0.114 m^3/s. The ditch will be constructed to pass 110% of peak flows.

A conveyor belt system from the processing plant to the barge loadout site will be installed this summer, which will reduce or eliminate the road being used for a haul road.

18.2 BARGE LOAD-OUT

The facility consists of a shore located hopper into which the material is to be placed by front-end loader or an overland conveyor system directly from the processing plant area. From the hopper the conveyor runs over water for approximately 69 metres to the discharge point which dumps material through a retractable, flexible chute. The conveyor is presently not covered. If a dust issue arises, a hemispherical cover over the conveyor length will prevent dust losses. A solid apron has been attached to the system to collect any spillage. Any accumulated spillage will be reclaimed onto the conveyor, as required. The conveyor system is equipped with an emergency trip cord and guarded in accordance with the latest safety regulations. Figure 18.1 illustrates the barge load-out structure which was observed during the site visit.

Figure 18.1
Swamp Point North Aggregate Project Barge Load-Out

Barges of up to 5,000 tonne capacity will be positioned alongside five strategically placed mooring dolphins using tugs and at a sufficient depth to accommodate all tidal fluctuations. Empty barges will be positioned at the same time as the loaded barges are removed for transportation. Barges to be loaded will be winched between dolphins during loading to ensure uniform distribution of the product. Barge loading and unloading will not proceed if weather conditions preclude safe operations.

The barge load-out area has life buoys, crew flotation vests, life preserver rings, poles and ropes for rescuing anyone who is working near water. It is compliant with Part 3.3.3 of the BC Health, Safety and Reclamation Code (HSRC). Spill kits will be provided.

Signs indicating restricted public access and associated hazards will be posted.

18.3 CAMP

The original camp has been refurbished and is now operational. A new trailer has been installed to provide rooms for first aid, laundry and washrooms. The camp consists of the following:

- A sleeping quarter trailer,
- A toilet/shower trailer (his and hers),
- A kitchen/dining/office/first aid trailer and laundry.
- A storage/workshop trailer,

- A 40kW generator shed,
- An underground septic tank,
- An auxiliary storage shed,
- Lubricant storage area, and
- An electrified perimeter fence and gate

Figure 18.2
HRL Camp – Layout

Figure 18.3
HRL Camp – Living Quarters

The camp includes a first aid room with the necessary equipment for triage purposes, if required. A qualified first aid attendant is present on the site at all times. The company also has other emergency equipment as mandated under MEM regulations including:

- A boat capable of evacuating the entire complement of the camp,
- A satellite phone,
- A radio network covering the site.

Figure 18.4
Highbank Resources Ltd.'s Emergency Boat

There are two 5,000 gallons (22,700 litres) double-lined diesel fuel tanks with integral spill containment berms. Spill kits are located at the tank and at the camp.

Two areas have been established as temporary helicopter pads. A helicopter pad is to be staked out and marked according to legislated requirements during the summer of 2015.

19.0 MARKET STUDIES AND CONTRACTS

Aggregates are an important portion of the mining industry in British Columbia and Canada. Approximately 15 billion tons of aggregate is produced worldwide each year, primarily in the United States, the European Union, China, Russia, Japan and Canada (Langer, 2006).

In 2013, Canadian production of sand and gravel was 228,010 kilotonnes (CDN$1,748 billion). This volume excludes shipments of sand, gravel and stone to Canadian cement, lime and clay plants (Natural Resources Canada, 2014). The aggregate production in British Columbia is reliant on near surface, easy to locate and cheap to extract unconsolidated sediments, which are abundant due to the geological settings and physiography in some areas. The combination of mountainous terrain and recent glacio-fluvial activities created deposits of sand and gravel, located near to the areas in which aggregates were required.

Construction aggregates are low-cost, high volume and bulk minable commodities and they can be produced from naturally occurring unconsolidated sediments or a variety of solid bedrock (i.e. limestone quarries). The most common uses of aggregate include: concrete in building construction; road stone; railway track ballast; or mortar (Hack and Bryan, 2006). Generally, aggregates should be strong, hard, tough and sound materials with low porosity (Langer, 2006; Brown et al., 2013). Important properties to consider include rock type, shape, size, orientation, along with mineral grain proportions, contacts, layering, and porosity.

19.1 ENGINEERING QUALITY OF AGGREGATE (SAND AND GRAVEL)

Industrial minerals are influenced by a number of factors such as: particular physical and chemical characteristics; mineral quality issues; marketability of the product; and transportation costs.

HRL completed an internal study of the existing aggregate supply in the Prince Rupert area, BC. Prince Rupert area, including Kaien Island, Ridley Island and Tsimpsean Peninsula are underlain by schists, which are soft medium grade metamorphic rocks. This type of rock was excavated and quarried for general construction purposes, but the aggregates produced in the schist quarries contain a lot of mica and does not usually meet the durability or chemical stability requirements of high quality stone or aggregate specification. Concrete aggregate and high strength stone products are shipped by truck or barge from areas east or south of Prince Rupert as far as Terrace and (occasionally) the Strait of Georgia. SPN aggregate property is located in an area, underlain by different geological formations from Prince Rupert and contains sand and gravel, that is a result of the erosion of durable and chemically stable igneous rocks.

The sand and gravel from SPN project was tested in 2005 in Levelton's Laboratory in Richmond, BC, Canada. More information on the test work is provided in Section 9 of this report. Levelton operates comprehensive laboratories and provides testing services related to construction materials, soils, aggregates, air, and water in BC and Alberta and is independent from HRL and from Micon.

Micon reviewed the test results from 4 pits and concluded that the aggregates from the SPN project meet the applicable product specifications.

19.2 PRICING

It should be noted that no aggregate price data were integrated into the resource estimate presented in this Technical Report.

The prices of the aggregates vary and depend on the location and the quality of the product. In Table 19.1, prices of some common aggregate products (sand and gravel) from Fraser Valley Aggregates, based in Abbotsford, BC and Sharecoast Rentals and Sales, based in Nanaimo, BC, are shown. The prices for the first vendor are net per Free on Board FOB at the gate of the mine.

The sand and gravel prices Free on Board (FOB) at mine gate prices ranged between $6.00/tonne and $20.50/tonne. The cost of producing aggregate on-site is fairly consistent. A more significant factor affecting the delivered cost to the final consumer is the cost of transportation. Truck transport costs are in the order of $0.20 per tonne-km, which depends on a number of factors. Truck transport can easily double or triple the cost of aggregate for the customer at haul distance between 50 to 80 kilometers. Transportation of aggregate by barge or ship offers substantial cost advantages over trucking.

The market research for similar commodities show that transportation costs significantly affect the final aggregate cost. Long-haul rail, trans-loading, storage and trucking to the project site can add $100-180/tonne. For example, a 2011 PEA report estimated that the cost to deliver a tonne of frac sand to a well site in the Montney Basin (northeast British Columbia) ranges from $110.80/tonne to $283.50/tonne (Benjamin et al., 2011).

Table 19.1
An Example of Net Aggregates Prices in British Columbia

Product	Size	Fraser Valley Aggregate	Sharecoast Rentals & Sales	Description
	mm	$/tonne	$/tonne	
Bank Sand	NA	6.00		
Concrete Sand (coarse)	<5	15.50	19.00	washed, coarse sand
Gravel Drain Rock (3/4”-1/2” to 1”)	20	10.50	24.00	round rock gravel, used for drainage
Pea gravel (1/2”)	12.5	20.50	28.00	gravel for exposed aggregate concrete and playgrounds
Road Base (3/4”)	20	10.50	24.00	mixture of rock and sand made for use under paving stones (under paving sand)
Bedding sand		11.50	12.00	coarse, general purpose sand
Masonry Sand (3/8”)	9	15.00	22.00	clean and fine sand, could be used with cement for brick laying or
Sand Birdseye (3/16”)	5	18.00		Clean sand
#4 Sand	NA	12.00		Coarse grained

Source: the prices are provided by Fraser Valley Aggregates www.fvagg.com and Sharecoast Rentals and Sales (www.sharecoast.ca) on 5 March, 2015.

The aggregate price (sand and gravel price) fluctuates with demand. Usually the demand for sand and gravel will increase with the development of large-scale infrastructure projects, such as the LNG Projects reportedly planned for the Prince Rupert area

19.3 POTENTIAL REGIONAL INFRASTRUCTURE PROJECTS

Private companies and governments (British Columbia and Canadian) have planned several large-scale infrastructural projects in northwest part of the province. Projects that are relatively close to the SPN property are the expansion of the Prince Rupert Fairview Container Terminal, the Westcoast Connector Gas Transmission Project, the Pacific NorthWest LNG project which includes a Prince Rupert LNG facility and export terminal.

19.3.1 Expansion of the Prince Rupert Fairview Container Terminal

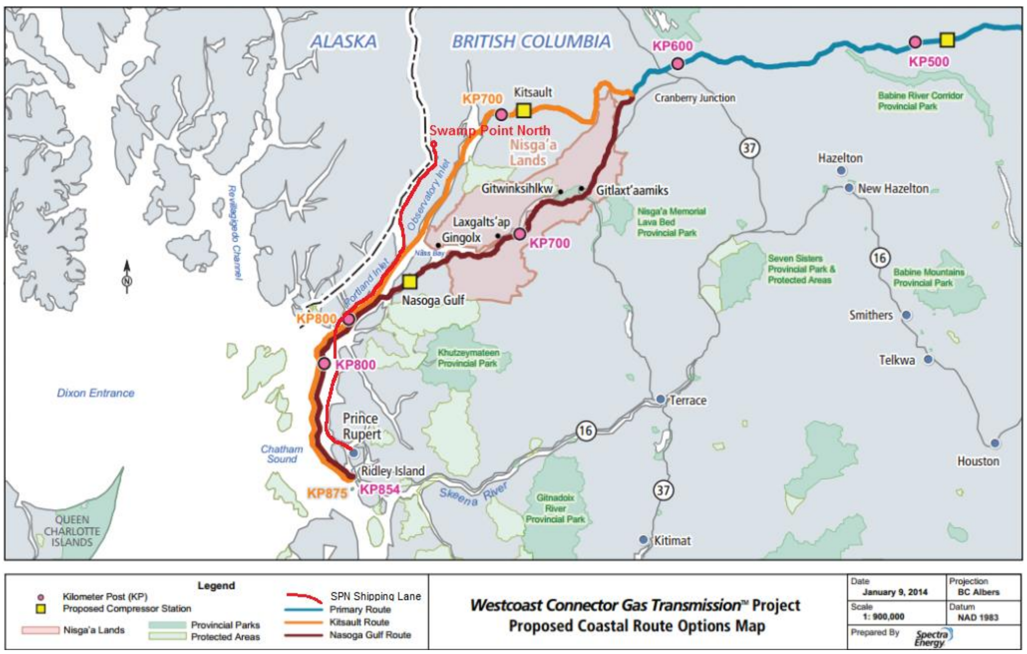
HRL has not completed detailed market studies; however Prince Rupert is the closest major North American port to Asia with direct on-dock access to the entire CN Rail network.

Maher Terminal Holding Corporation, the operator of the Port of Prince Rupert’s Fairview Container Terminal, announced its decision to proceed with the expansion of the 7 year-old facility on March 10, 2015 (www.cn.ca/en/media/news/news-articles). The purpose of the expansion is to accommodate the growing container volume of Trans-Pacific trade, in North America.

19.3.2 Westcoast Connector Gas Transmission Project

The main project partners for the Westcoast Connector Transmission Project are British Gas Canada (BG Canada), part of British Gas (BG) Group Plc. and Spectra Energy Corporation (Spectra Energy). The project will consist of a new natural gas pipeline starting from the Cypress area in northeast BC, traversing south west across the province to the Prince Rupert area. The approximate length of the pipeline is 850 km and the project will have 5 compressor stations (Figure 19.1). The project has an issued Environmental Assessment Certificate and is expected to be in service in 2019 (www.princerupertlng.ca).

Figure 19.1
Location of the Swamp Point North Property and the proposed Westcoast Gas Transmission Project



Source: the map was prepared by Spectra Energy and published by Prince Rupert LNG (www.princerupertlng.ca) and modified by Micon in March, 2015.

19.3.3 Pacific NorthWest LNG

Pacific NorthWest LNG is a partnership between Progress Energy Canada Limited (PETRONAS) and Japan Petroleum Exploration Company Limited. It purposes to build an LNG export facility on Lelu Island, within the District of Port Edward, British Columbia, on land administered by the Prince Rupert Port Authority. The project has an approved Environmental Assessment Certificate. The anticipated final investment decision will be made in 2015 and the completion is expected in 2018.

The planned project includes a significant upgrade of the present infrastructure, the building of new compressor stations, extending the Port of Prince Rupert and building an LNG export terminal on Ridley Island, part of the port of Prince Rupert.

There are several producers and suppliers of aggregates in Terrace, BC. The distance between Terrace and Prince Rupert via Highway 16 (Yellowhead Highway) is approximately 145 km. The aggregate materials from Terrace would be delivered using trucks.

The SPN property is located 167 km from the Port of Prince Rupert. The access route is via the Portland Canal, Portland Inlet and Chatham Sound (Figure 19.1). HRL is planning to deliver aggregate to its customers using water (barge) transport. The barge is considered to be one of the most cost and energy efficient modes of transportation. This way, the total price of the aggregate delivered at the Prince Rupert Port is estimated by HRL to be around CAD34.00/tonne. This price is based on preliminary negotiations with potential customers.

Currently HRL does not have any forward contracts or agreements in-place.

The adjacent Swamp Point aggregate project owned by Ascot Resources Ltd. commenced shipping aggregates in April, 2007 to aggregate markets in British Columbia. Ascot also had plans to barge aggregates to the west coast of the USA where there was a shortage of aggregates for the construction industry. The recession in 2008-2010 which affected the housing and construction market in US, led to Ascot Resources Ltd. putting its entire project on hold in 2011 and is currently seeking a buyer. All equipment was demobilized from the site.

Currently, the Prince Rupert area in BC has potential for several large-scale infrastructure projects; therefore, Micon has a reasonable expectation that there will be a market for gravel production from SPN.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

The SPN aggregate project is a glacial outwash complex. Exploration has shown that the glacial outwash unit ranges in thickness from 2 m to 90 m with an average thickness of approximately 37 m. The unit is composed primarily of gravel and sand, with minor amounts of silt and clay.

The property was previously logged. Harvested logs were transported offsite using the existing road network to the shoreline and then barged to the nearest mill in Prince Rupert.

20.1 OFFSHORE DIVE ASSESSMENT

G3 Consulting Limited, of Burnaby, B.C., was retained on behalf of Portland Canal Aggregates Corporation to complete a dive assessment on the eastern shore of Portland Canal, BC. The objective of the dive assessment was to complete a biophysical assessment of marine foreshore adjacent to the proposed development side of dock and barge loading facilities. It was conducted June 4, 2002.

The scope of work of the dive assessment included reconnaissance SCUBA dives and depth soundings to delineate study area, foreshore and upland assessment of shoreline, biophysical surveys along dive transects and collection of video and photographic data of emergent and submerged marine habitat.

20.2 WATER MANAGEMENT

Average annual precipitation in Stewart is 1,867 mm (Canadian Climate Norms 1981-2010). A thousand-year return period, maximum 24-hour precipitation at Stewart is 177 mm (Ascot, 2005).

A 2005/2006 exploration drilling program comprising 10 cored drill holes showed groundwater present in all of the holes. Piezometers were also installed in some of the holes to determine the ground water interface.

The working face of the gravel pit will no doubt have ground water seeps throughout the excavation area and this water will be channeled through the work area into ad hoc sumps on the pit floor. A drainage collection ditch and pond will be constructed at the 35 m elevation to collect water that can be pumped up to the wash plant settling ponds for make-up water as needed or drain downslope where it will be intercepted by the road ditch system. The water collection ditch may be plastic lined, would only need to be constructed once for all five years of pit development and would provide an added buffer for storm water runoff from the pit.

A ditch and collection pond will also be constructed on the west side of the road leading from the camp to the wash plant. Collected water may be pumped to the wash plant settling ponds for make-up water or exfiltrate from the pond.

No creeks will be diverted or used by the mine development.

Start-up and makeup water for the plant will be obtained from site runoff and groundwater seeps collected in the ditches, collection ponds and wash plant settling ponds. Once the wash plant is operating, the only water requirement will be that associated with the shipped products, a net loss in the system of approximately 3.3 m^3/h. If there is insufficient water for washing operations then the plant will produce unwashed aggregate or be shut down until sufficient quantities of water have been restored.

If dry screened product only is required then the wash plant settling ponds water will overflow after clarification into the road drainage ditch. A typical washing and screening process for this operation uses approximately 17.9 m^3/h of water and the settling and clarification ponds will provide a residence time of more than 24 hours with the wash water usage at a maximum, plus flood storage and freeboard.

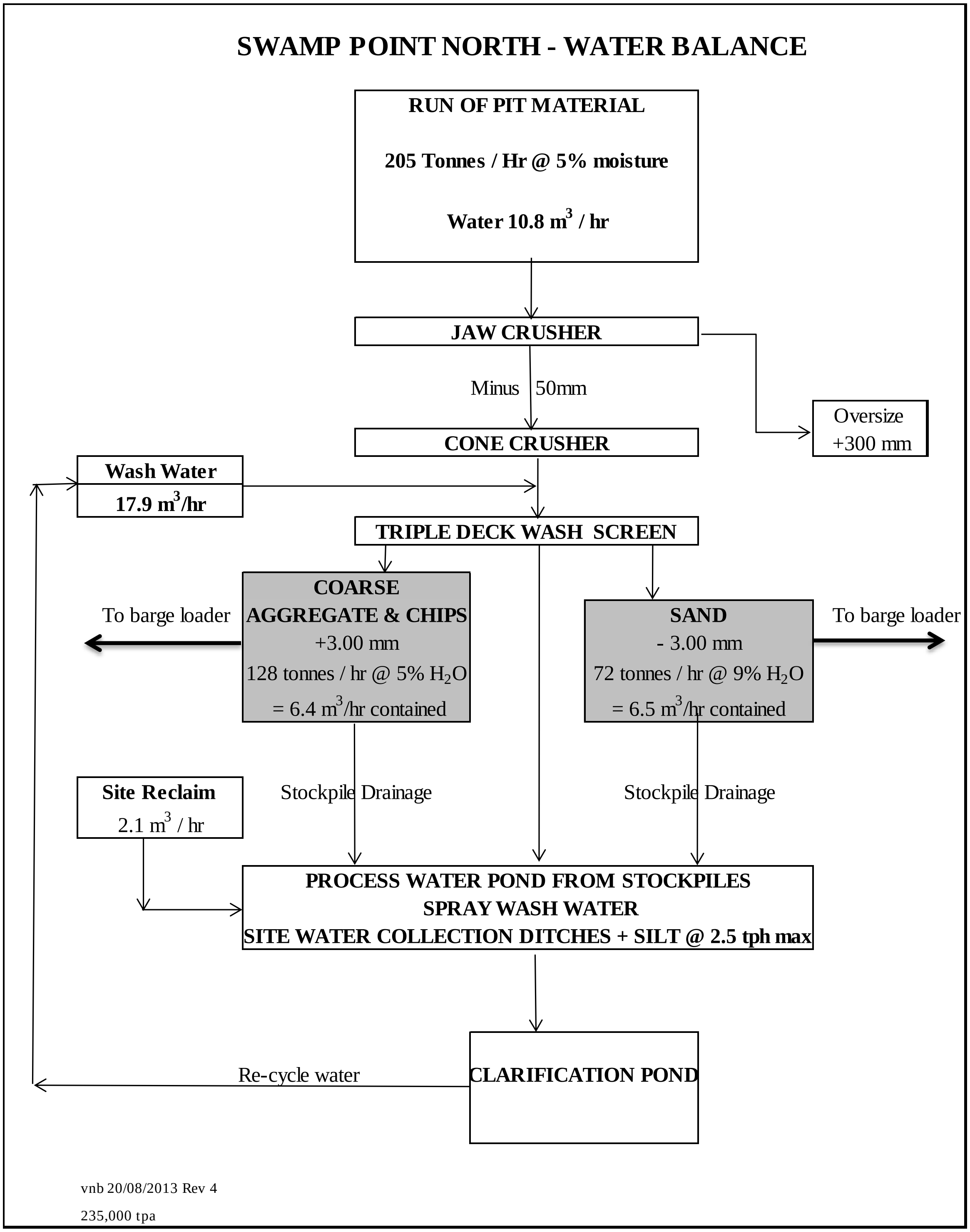
The sediment control pond at the barge load-out will discharge to the environment. It is the only proposed settling pond on the property that discharges to a water body with aquatic life.

Water contaminants associated with construction and operation of aggregate operations are generally restricted to suspended sediments, assuming effective implementation of a hydrocarbon spill prevention and response plan. Turbidity (<15 NTU) is proposed as the monitoring parameter target to ensure compliance and protection of the receiving environment. A water management plan prepared by Knight Piésold formed part of the approved permit submission, and this plan is being implemented. A Waste Management Act permit has been obtained for the project discharge.

It is proposed that groundwater from existing drill holes be used to provide a water supply for the camp water (i.e. toilets and showers).

Figure 20.1 presents the preliminary site water balance. From the preliminary water balance, the wash water requirements are estimated at 17.9 m^3/h with 2.1 m^3/h makeup water expected to be collected from site from retention ponds. Wash water will vary with the amount of fines in the material being excavated at the time.

Figure 20.1
HRL Swamp Point North Preliminary Water Balance



Source: the figure was prepared by HRL, dated 20 August, 2013.

20.3 ENVIRONMENTAL PLANS

A series of Environmental Health and Safety Management System (EHSMS) plans have been developed for the SPN property. The plans are required as part of the Notice of Work application to MEM. The management plans follow the Aggregate Operators Best Management Practices Handbook for British Columbia (MEM, 202). They include:

- Occupational Health and Safety Plan
- Mine Emergency Response Plan
- Sediment and Erosion Control Plan
- Hazardous Materials Handling Plan
- Fuel Management and Spill Contingency Plan
- Water Management Plan
- Waste Management Plan
- Reclamation Plan
- Road Design
- Mine Development Plan
- Traffic Plan
- Invasive Species Management Plan
- Barge Load-out and Marine Safety Plan
- Chance Find Procedure

Details of each plan have been filed with MEM, this is a necessary requirement to obtain approval for aggregate extraction.

The Water Management Plan requires water quality samples be taken on the property on a monthly basis. The results are shared with the MEM and other interested parties.

20.4 FIRST NATIONS

An Archeological Preliminary Field Reconnaissance was completed in July 2013 by Kleanza Consulting Ltd. No archeological materials, features or areas of potential archeological significance were observed during the site visit or desktop study. The site was deemed to have low archeological potential. No further surveys or monitoring were recommended; however, a chance find procedure is in place as part of the Licence of Occupation and the Mine Permit.

HRL has had numerous consultations concerning the project with the two First Nations in the area over the years.

HRL signed a Co-Operation Agreement on November 05, 2012 with the Metlakatla First Nation and the Metlakatla Development Corporation in the development of the SPN aggregate project.

The Agreement provided the Metlakatla with the opportunity to participate in the economic benefits arising from the development of the property within their traditional territory. In the Agreement the Metlakatla undertakes and do not object or oppose regulatory applications or approvals, Federal or Provincial sought by HRL with respect to the Swamp Point North Aggregate operations.

The other First Nations Band in the SPN area who have aboriginal rights for hunting and fishing, are the Nisga'a First Nations. Discussions have been taking place over the years to ensure they are fully aware of the plans for partial development of the area.

20.5 PERMITTING

The project is currently permitted to extract up to 500,000 t/y over 2 years. However, this PEA envisages mining at a higher extraction rate that will require additional permitting.

HRL submitted the Notice of Work application in October 29, 2013. The MEM approved the Notice of Work and associated EHSMS plans and granted HRL "A Sand and Gravel Permit" (G-1-140) on March 19, 2014. The mine number for the permit is 1650080 and is for the Licence of Occupation numbers 636316 and 636317.

HRL received an Occupant Licence to Cut and Remove Timber L49931 from the Ministry of Forests, Lands and Natural Resource Operations, BC on May 23, 2014. The Licensee (HRL) is authorized to cut and remove Crown timber from the area that is necessary to cut in order to facilitate the operations or the use of the Crown land within the Licence area. The licence L49931 is valid until March 5, 2017. The licence can be renewed.

Transport Canada, Pacific Region issued an authorization 2008-500280 (8200-08-8265) to operate a barge and the barge facilities, located on the Portland Canal on July 10, 2014. The work is permitted under section 9(1)-Placement of the Navigation Protection Act, Transport Canada.

Additional permits that may be required during construction and operation include:

- DFO Habitat Alteration, Disruption or Destruction (HADD) Authorization
- Waste Management Act permit for surface water runoff, sediment control ponds
- Ministry of Environment, Waste Management permit for inert waste landfill
- Health Permit for camp operations

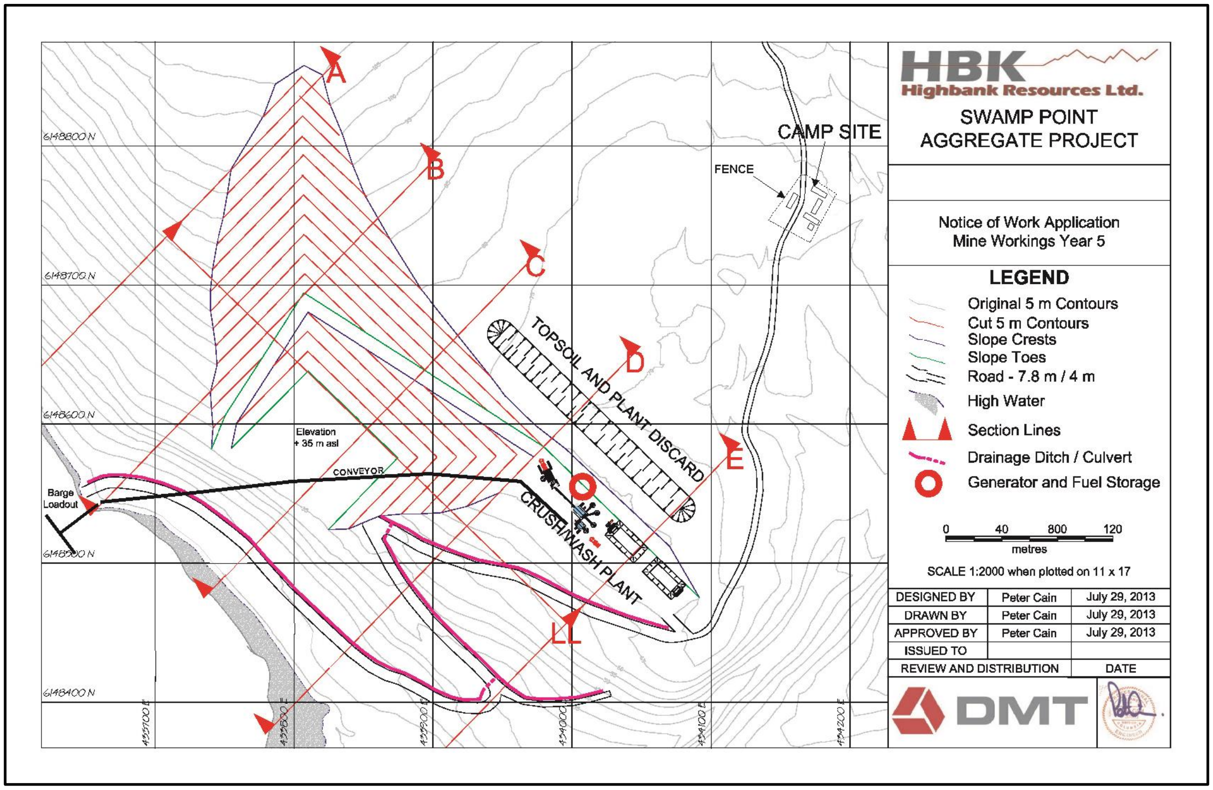
On-going discussions with each of these permitting agencies have been maintained.

20.6 RECLAMATION PLAN

The end land use objective is wildlife habitat and forestry. The existing forest is dominated by Western Hemlock and Sitka Spruce.

A plan of the Year 5 mine workings is illustrated in Figure 20.2.

Figure 20.2
HRL Swamp Point North Year 5 Mine Plan



At the end of mining, the wash plant and camp site facilities will be dismantled and removed from site. Hazardous materials and residual fuels and tanks will be removed from site and sold or transferred to other sites. Hazardous wastes and any contaminated soils will be removed from site and disposed of at appropriate hazardous waste facilities. Existing heavy equipment on site will be used for regrading slopes. Water management structures such as culverts, ponds, and ditches will be removed, graded and revegetated to allow for long-term stable drainage of the site.

Reclamation will comprise of the spreading of topsoil on cut slopes and benches, seeding with an approved seed mix and tree planting (pre-mining species of Western Hemlock and Sitka Spruce). As and when possible over the life of the mine, cover soil will be spread on the cut slopes and the slopes seeded. Road and camp areas would be scarified and seeded to grass with trees planted.

The five year mine development plan has been divided into yearly phases and a reclamation cost estimated for each phase, as if the mine had to be reclaimed at that time is presented in Table 20.1. The equipment on site will be used to reclaim the land and no additional equipment will have to be brought in.

The total area required to be tree-planted is 5.5 ha. Targeting 1,200 saplings/ha gives 6,600 saplings at about $0.90 including labour and accommodation costs (at the camp).

The processing facility, camp and mobile equipment will be moved off site. Demobilisation costs are estimated at $25,000.

The total reclamation cost after five years, including de-mobilisation and a 15% contingency is estimated at $75,000.

Table 20.1
Reclamation Cost Estimate

Area	Hectares (approx)	Reclaim to Seed @ $5,000/ha	Trees	Sapling and Labour	Cumulative Total
Camp & Common Areas	1.1	$5,500	1320	$1,188	$6,688
Year 1 Disturbance	3.9	$19,500	4680	$4,212	$30,400
Year 2 Disturbance	0.4	$2,000	480	$432	$32,832
Year 3 Disturbance	0.4	$2,000	480	$432	$35,264
Year 4 Disturbance	0.4	$2.000	480	$432	$37,696
Year 5 Disturbance	0.4	$2,000	480	$432	$40,128
Equipment Removal				$25,000	$65,128
15% Contingency				$9,770	$74,898

In the event of temporary shut-down, the site will be mothballed by draining fuel tanks and locking out all equipment and vehicles left on site.

Ministry of Energy and Mines, BC requested a reclamation bond of $ 189,500, which HRL has posted.

21.0 CAPITAL AND OPERATING COSTS

This section of the Technical Report was prepared by Micon's mining economist, Christopher Jacobs, CEng, MIMMM, working under the supervision of David Makepeace, M.Eng., P.Eng.

21.1 CAPITAL COSTS

As of December 31, 2014, HRL had already incurred much of the capital expenditure necessary to bring the property into production at the rate forecast in this PEA. Approximately $8.9 million has been invested in plant and mobile equipment, trenching and drilling, sampling, analyses, mine planning, environmental studies, bonds, permitting, and site preparation.

The remaining pre-production capital expenditure totals approximately $0.50 million, with a further $0.54 million to be spent during the operating phase, as shown in Table 21.1

Table 21.1
Summary of Remaining Capital Expenditure

Item	Pre-Production ($'000)	Ongoing ($'000)	Expansion ($'000)
Barge	20.0		
Fuels and Lubes	40.7		
Labour costs	126.0		
Logistics	28.4		
Ancillary equipment, vehicles	215.3		
Camp fittings	5.5		
Miscellaneous	34.1		
Contingency	25.0		
Light Vehicles, etc.		35.5	
Studies and Permits			500.0
TOTAL	**495.0**	**35.5**	**500.0**

21.2 OPERATING COSTS

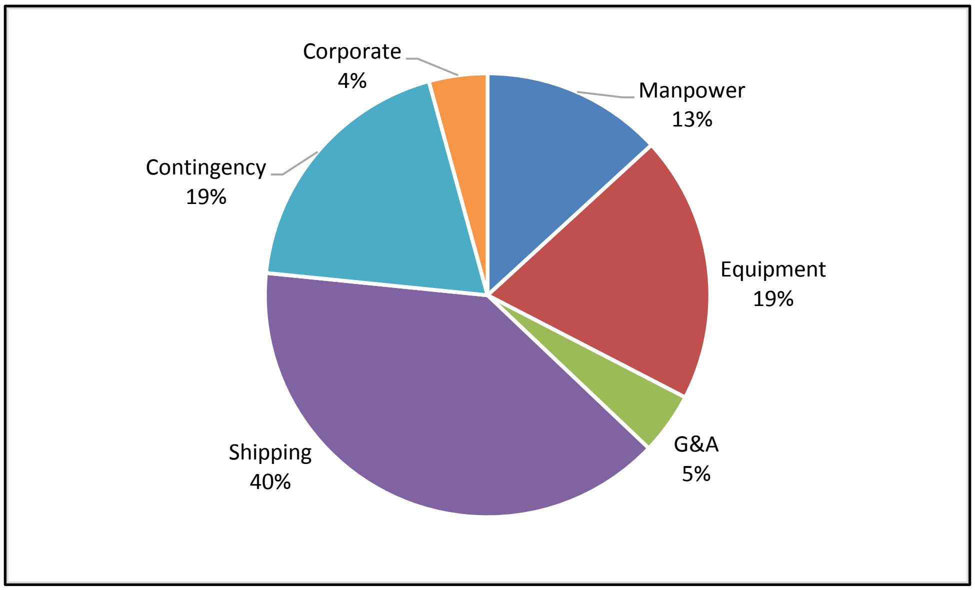
A summary of the unit and annual cash operating costs is shown in Table 21.2 and in Figure 21.1 (over).

It is notable that, among the direct cash costs of $16.00/t, product shipping comprises the largest component, exceeding the combined total of site labour and equipment operating and maintenance costs. This highlights the importance of delivery costs in determining the operating margins for the project.

Table 21.2
Summary of Cash Operating Costs

Item	LOM (Years 1-3) Total ($'000)	Unit Cost ($/t Product)
Site Management	3,070	1.00
Production Labour	2,702	0.88
Equipment Operating	6,386	2.08
Labour – Camp & Support	982	0.32
Power Generation (diesel)	768	0.25
Equipment Spares	2,824	0.92
Stewart Apartment + site camper rental	83	0.03
Terminal Aggregate Storage	461	0.15
Environmental Monitoring & Supplies	230	0.08
Local Office Support Costs	1,535	0.50
Product Shipping	20,262	6.60
Contingency	9,826	3.20
Sub-total Direct Costs	**49,128**	**16.00**
Indirect - Corporate Overhead	2,160	0.71
Total	**51,288**	**16.71**

Figure 21.1
Cash Operating Costs Breakdown



In addition to the above cash operating costs, royalties totalling $2.35/t are payable on material sold from the SPN site.

22.0 ECONOMIC ANALYSIS

This section of the Technical Report was prepared by Micon's mining economist, Christopher Jacobs, CEng, MIMMM, working under the supervision of David Makepeace.

22.1 BASIS OF EVALUATION

Micon has prepared its assessment of the Project on the basis of a discounted cash flow model, from which Net Present Value (NPV), payback and other measures of project viability can be determined. Assessments of NPV are generally accepted within the mining industry as representing the economic value of a project after allowing for the cost of capital invested.

The objective of the study was to assess the current economic potential of the proposed aggregate production plan to exploit the SPN deposit. The PEA production plans, contains measured and indicated resources. Subsequent to the initial 3-year period, that the PEA is based on, there could be an insignificant amount of inferred mineral resources. These inferred mineral resources are not included in this economic analysis. Inferred resources on the east side of the creek are likely to be left. Inferred resources in the extension area amount to 1% of the total resources. There are no inferred resources within the PEA-based permitted pit. Inferred resources are too speculative geologically to have economic considerations applied to them and there is a risk that a preliminary assessment may not be realized.

In order to assess the current economic potential, the cash flow arising from the base case has been forecast, enabling a computation of the NPV to be made. The sensitivity of this NPV to changes in the base case assumptions is then examined.

It is common for the internal rate of return (IRR) and payback period of the net cash flow to be computed also, as additional indicator of the project's financial robustness. In this case, since most of the pre-production capital expenditure has already been invested, the calculation of an IRR is problematic and does not convey any meaningful information. Therefore, no IRR or payback has been presented in this report.

22.2 MACRO-ECONOMIC ASSUMPTIONS

Unless otherwise stated, all results are expressed in Canadian dollars ($ or CAD).

Cost estimates and other inputs to the cash flow model for the project have been prepared using constant, first quarter 2015 money terms, i.e., without provision for escalation or inflation.

In order to find the NPV of the cash flows forecast for the project, an appropriate discount factor must be applied which represents the weighted average cost of capital (WACC) imposed on the project by the capital markets. The cash flow projections used for the valuation have been prepared on an all-equity basis. This being the case, WACC is equal to the market cost of equity. For the purposes of this PEA, Micon has selected a real discount rate of 8% as appropriate to the Swamp Point project.

The project is subject to taxation in BC and estimates of the Federal and Provincial income and mining taxes relevant to this jurisdiction have been applied in forecasting after-tax net cash flows.

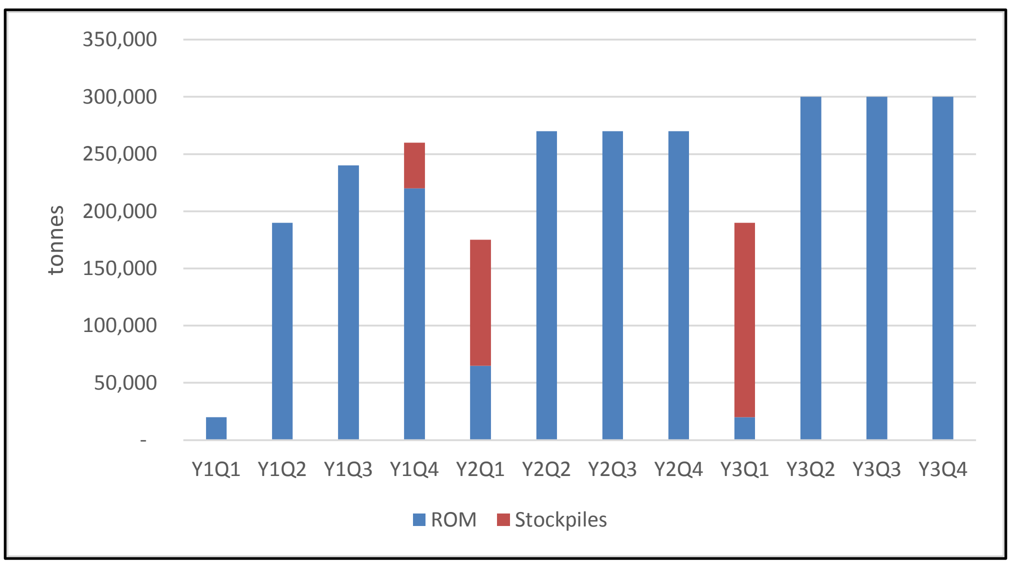
Provincial and non-crown royalties amounting to $2.35 per tonne of aggregate sales have been provided for, comprising $0.65/t sold plus 5% of gross revenue.

22.3 Production and Sales

The production plan calls for the processing and sale of sand and washed aggregates at up to 100,000 tonnes per quarter.

As shown in Figure 22.1, production in the first quarter of each year depends largely on treating raw material from stockpiles.

Figure 22.1
Quarterly Production (Years 1-3)



22.4 Base Case Evaluation

The base case cash flows forecast for years 1-3 are summarised in Table 22.1 and Figure 22.2. The quarterly cash flow forecast is given in Table 22.2.

Revenue forecasts are based on achievement of an average price of $34.00/tonne FOB Prince Rupert, except for coarse material which is sold at an average of $21.45/tonne.

Overall, with a total cash operating cost of $16.71/tonne and royalties of $2.35/tonne, this production provides an operating margin of around 44%. At an annual discount rate of 8%, the base case cash flow evaluates to an NPV of $24.3 million.

For the reasons discussed earlier, no IRR or payback periods are calculated as they are not meaningful in this case.

Table 22.1
Summary Cash Flow Forecast

		LOM ($ million)	NPV @ 8% ($ million)	Unit cost ($/t)
Revenue	Gross Sales	98.9	87.7	32.23
less	Royalty	7.2	6.4	2.35
	Net Sales Revenue	91.7	81.3	29.88
Operating Costs	Mining Costs	39.3	34.8	12.80
	Processing Costs	9.8	8.7	3.20
	G&A costs	2.2	1.9	0.70
	Total cash operating costs	51.3	45.5	16.71
Net Cash Operating Margin		40.5	35.8	13.18
Capital Expenditure	Initial/expansion capital	0.5	0.5	0.17
	Sustaining & Closure	0.6	0.5	0.18
Changes in Working Capital		-	0.6	-
Net cash flow before tax		39.4	34.1	12.82
Taxation payable		11.4	9.9	3.71
Net cash flow after tax		**27.4**	**24.3**	**9.11**

This preliminary economic assessment is preliminary in nature and there is no certainty that the preliminary economic assessment will be realized. Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves.

Figure 22.2
Quarterly Cash Flow (Years 1-3)

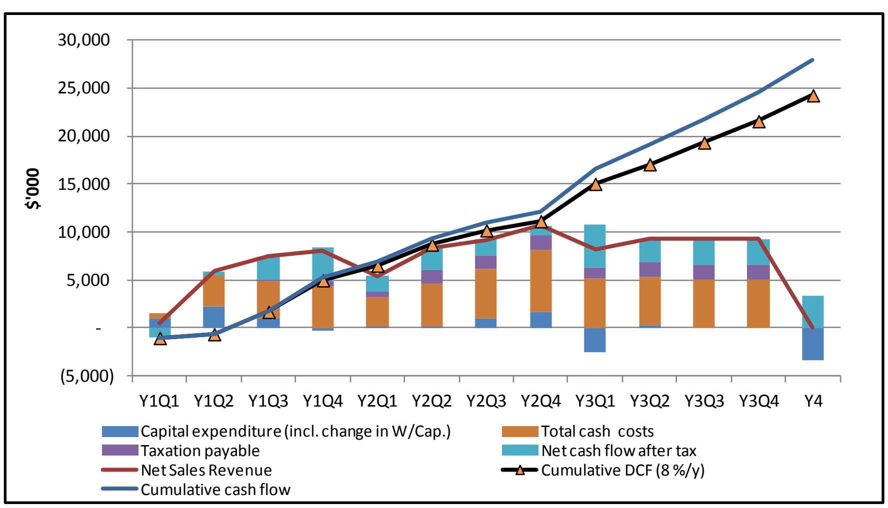


Table 22.2
Quarterly Cash Flow Forecast

		TOTAL	Y1Q1	Y1Q2	Y1Q3	Y1Q4	Y2Q1	Y2Q2	Y2Q3	Y2Q4	Y3Q1	Y3Q2	Y3Q3	Y3Q4	Y4
Stripping	tonnes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aggregate tonnes sold	tonnes	2,785,000	20,000	190,000	240,000	260,000	175,000	270,000	270,000	270,000	190,000	300,000	300,000	300,000	-
Aggregate from stockpile	tonnes	320,000	-	-	-	40,000	110,000	-	-	-	170,000	-	-	-	-
Material mined to plant	tonnes	2,465,000	20,000	190,000	240,000	220,000	65,000	270,000	270,000	270,000	20,000	300,000	300,000	300,000	-
Coarse material sold	tonnes	285,000	-	-	-	-	-	-	45,000	120,000	120,000	-	-	-	-
Sand	$/t	33.95	**26.50**	**34.00**	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00
Aggregate	$/t	33.95	26.50	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00
Coarse	$/t	21.45							20.84	21.57	21.57				
Royalty (0.25+0.40+5% gr	$/t		1.98	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35

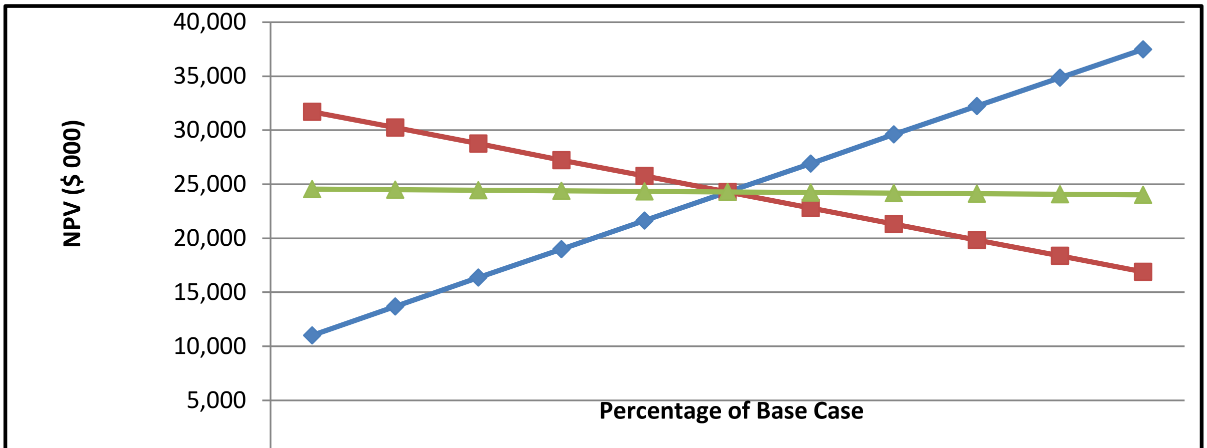
		CAD 000	Y1Q1	Y1Q2	Y1Q3	Y1Q4	Y2Q1	Y2Q2	Y2Q3	Y2Q4	Y3Q1	Y3Q2	Y3Q3	Y3Q4	Y4
Revenue	Gross Sales	98,950	520	6,344	8,013	8,681	5,843	9,014	9,952	11,603	8,932	10,016	10,016	10,016	-
less	Royalties	7,207	40	447	564	611	411	635	740	917	729	705	705	705	-
	Net Sales Revenue	91,743	481	5,897	7,449	8,070	5,431	8,380	9,212	10,686	8,203	9,311	9,311	9,311	-
Cash op. costs	Direct	39,302	256	2,432	3,072	3,329	2,240	3,457	4,033	4,993	3,969	3,841	3,841	3,841	-
	Contingency	9,826	64	608	768	832	560	864	1,008	1,248	992	960	960	960	-
	Indirect	2,160	180	180	180	180	180	180	180	180	180	180	180	180	-
	Total cash costs	51,288	500	3,220	4,021	4,341	2,980	4,501	5,221	6,421	5,141	4,981	4,981	4,981	-
Net Cash Operating Margin (EBITDA)		40,455	(19)	2,677	3,428	3,729	2,451	3,879	3,991	4,265	3,063	4,330	4,330	4,330	-
Capital Expenditure	Initial/expansion capital	531	425	106	-	-	-	-	-	-	-	-	-	-	-
	Sustaining capital	500	-	250	250	-	-	-	-	-	-	-	-	-	-
	Closure Provision	60	60	-	-	-	-	-	-	-	-	-	-	-	-
	Changes in Working Capital	-	530	1,850	680	(340)	170	170	938	1,651	(2,588)	340	-	-	(3,400)
Net cash flow before tax	0%	39,364	(1,034)	471	2,498	4,069	2,281	3,709	3,053	2,615	5,651	3,990	4,330	4,330	3,400
Taxation payable		11,385	-	62	80	580	628	1,292	1,384	1,528	1,105	1,566	1,576	1,583	-
Net cash flow after tax	0%	27,979	(1,034)	408	2,418	3,489	1,653	2,417	1,669	1,087	4,546	2,424	2,754	2,747	3,400
Cumulative cash flow			(1,034)	(626)	1,792	5,281	6,934	9,351	11,020	12,107	16,654	19,078	21,832	24,579	27,979
Payback period on undiscounted cash flow (qtrs)		2.3	1.00	1.00	0.26	-	-	-	-	-	-	-	-	-	-
Discounted Cash Flow (8 %/y)		24,280	(1,034)	400	2,327	3,293	1,531	2,195	1,487	950	3,898	2,039	2,272	2,223	2,699
Cumulative DCF (8 %/y)			(1,034)	(634)	1,693	4,986	6,517	8,712	10,200	11,150	15,047	17,086	19,359	21,581	24,280

22.5 Sensitivity Analysis

The sensitivity of project returns to changes in all revenue factors (including grades, recoveries, prices and exchange rate assumptions) together with capital and operating costs was tested over a range of 25% above and below base case values. Figure 22.3 presents the results of this analysis.

As may be expected, the project is most sensitive to changes in revenue drivers. For an adverse change of 25%, NPV_8 is reduced to less than half its base case value. The project is also moderately sensitive to operating costs, with an adverse change of 25% reducing NPV_8 by approximately one third. The project is least sensitive to capital costs, mainly due to most of the required capital investment having taken place prior to the start of the cash flow period.

Figure 22.3
NPV Sensitivity to Product Price

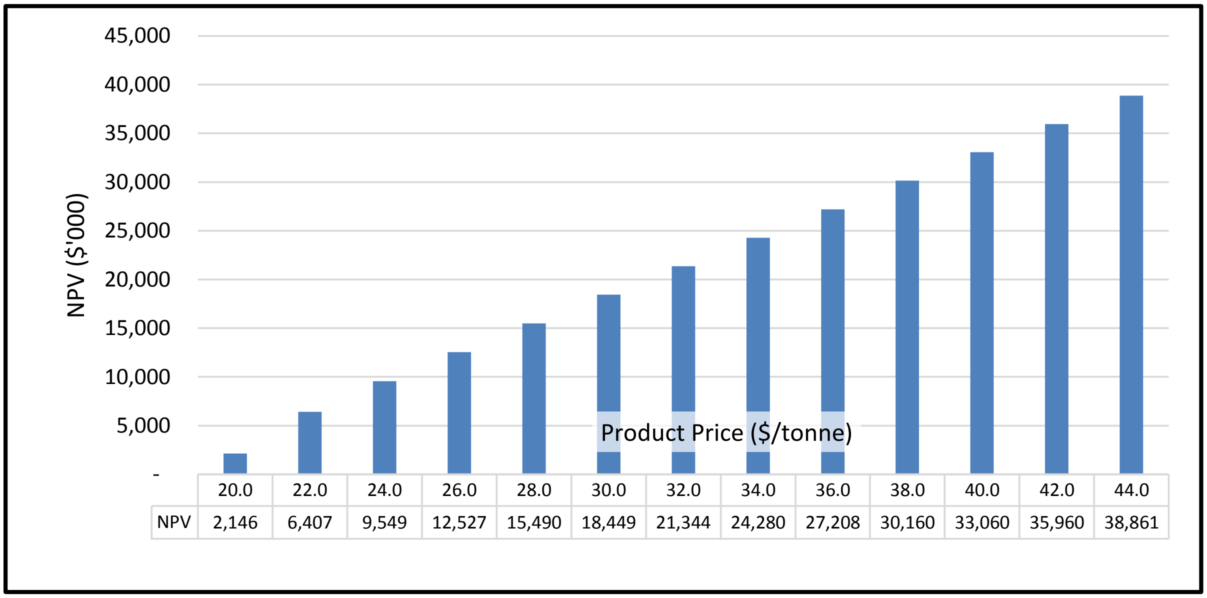


	75%	80%	85%	90%	95%	100%	105%	110%	115%	120%	125%
Revenue drivers	11,001	13,683	16,367	18,998	21,638	24,280	26,915	29,609	32,233	34,853	37,472
Operating costs	31,702	30,237	28,760	27,235	25,757	24,280	22,805	21,308	19,833	18,364	16,894
Capital costs	24,549	24,495	24,442	24,388	24,334	24,280	24,227	24,173	24,119	24,065	24,012

Figure 22.4 presents the results of a separate sensitivity analysis in which the product price was raised in increments of \$2.00/t between \$20.00/t and \$44.00/t. It will be seen that each \$2.00/t increment adds approximately \$3.0 million to the after-tax NPV_8.

Micon also considered the sensitivity of project NPV to an extension of the operating period to exploit parts of the aggregate resource not currently included in the mine design and production plan. Should such an extension of operations be permitted, it is estimated that continuing operations at the targeted rate of 100,000 t/month for, say, another three years could potentially increase the project NPV from \$24.3 million to \$38.0 million.

Figure 22.4
NPV Sensitivity to Product Price



22.6 CONCLUSION

Micon concludes that there is potential for the economic development and operation of the Swamp Point project, subject to success in future permitting and marketing initiatives.

23.0 ADJACENT PROPERTIES

The information from this section is mainly from the Ascot Resources web page (http://www.ascotresources.ca/s/SwampPoint.asp) and geological and land tenure information publicly available on SEDAR or from the Ministry of Energy and Mines, BC (http://www.empr.gov.bc.ca/Titles/MineralTitles/mto/Pages/default.aspx).

Ascot Resources Ltd. was developing an aggregate property immediately to the south of Donahue Creek (Figure 23.1). Geophysical, drilling and trenching programs were carried out on the Ascot property in 2004. This work resulted in an inferred resource of about 66 million tonnes of material, published in a "Technical Report (43-101)*[sic]* for Swamp Point Aggregate Project", prepared by Hatch, Golder Associates Ltd. and Hains Technology Associates, dated 17 January, 2006 (Shrimer, et. al., 2006).

Figure 23.1
Swamp Point North Property and Adjacent Properties and Mineral Claims

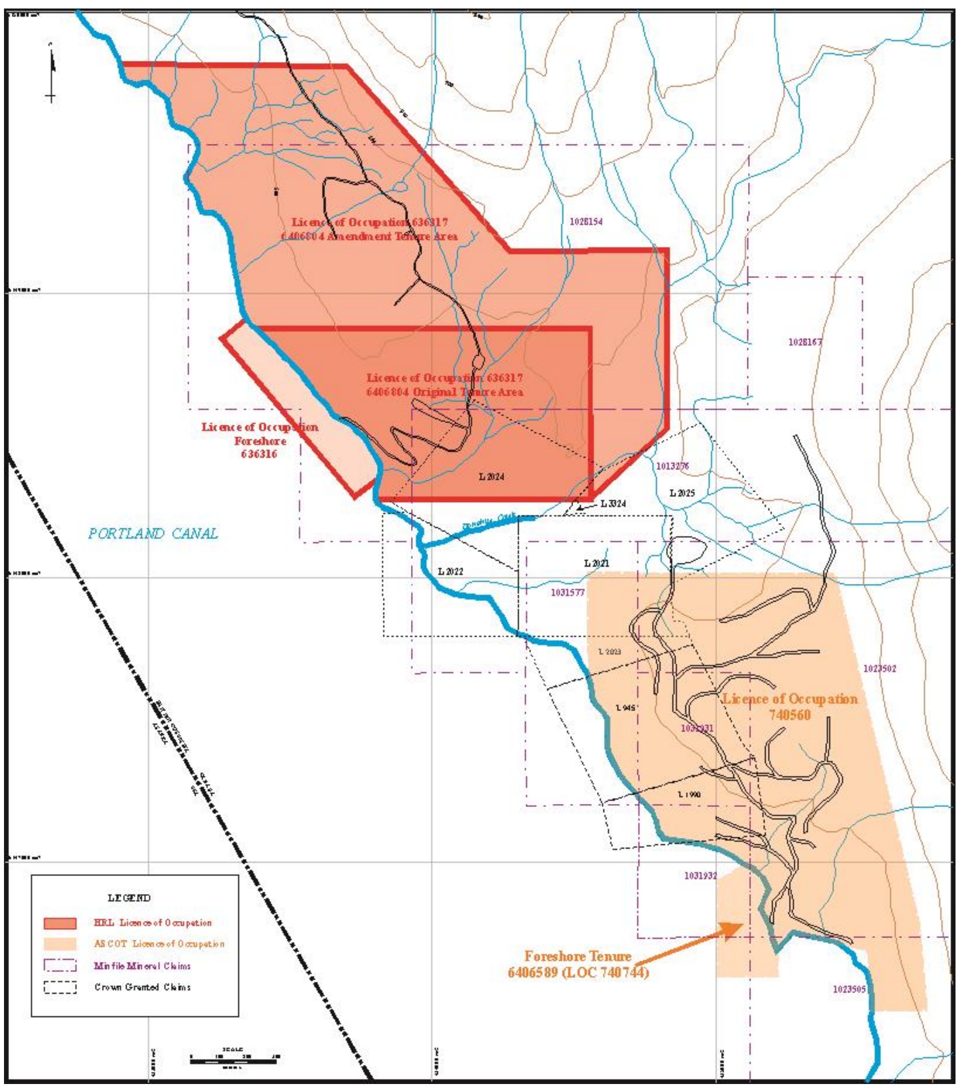


Figure prepared by Micon, March, 2015.

Grain size analysis of material recovered from drill holes indicated a distribution of 51% sand, 44% gravel, and 5% silt. Tests conducted on this material indicate that the sand and gravel was suitable for production of aggregate that meets or exceeds typical Canadian and American specification requirements.

Ascot shipped the first barges of aggregate from the property to southern BC in 2007 and intended to export aggregates to California on completion of the shipping infrastructure at the site. Approximately 3,000 tonnes of sand were transported to customers in Prince Rupert and Stewart, BC.

In January, 2008, the final engineering design for the ship-loader support structures and attendant marine and earth works was completed. During the period February to June, 2008 a permanent bridge over South Beach Creek, a permanent fuel storage, ship-loader structure and accommodations upgrade were completed in 2008. On July 11, 2008, the Company announced the suspension of construction of the ship loading facility at Swamp Point. This was in reaction to the downturn in the United States housing market which had a negative effect on the demand for aggregate products at that time. In June, 2011, in order to further reduce its costs at Swamp Point, the Company closed its camp at the mine site and removed most of the associated equipment.

There are a minor number of structures on the site, a small diesel tank farm and dock facilities at the Ascot property that were observed from the helicopter during the recent HRL site visit.

The information for the Swamp Point aggregate project (Shrimer et. al., 2006) is geologically similar to the Highbank's SPN project.

The qualified person (QP) has been unable to verify the information for Swamp Point aggregate project and that the information is not necessarily indicative of the mineralization on the Swamp Point North property.

24.0 OTHER RELEVANT DATA AND INFORMATION

Micon is not aware of any other data or material information required in order to make this Technical Report not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

No definitive off-take agreements have been reached covering the forecast period. However, Micon has reviewed the available information and concludes that there is potential for the SPN project to deliver aggregates to several potential large-scale infrastructure projects in British Columbia at a competitive price, and that it is therefore reasonable to expect there will be a market for the forecast aggregate production.

Micon concludes that there is potential for the economic development and operation of the SPN project, subject to success in future permitting and marketing initiatives.

26.0 RECOMMENDATIONS

The results of this study demonstrate that the Swamp Point North Project in BC has potential for economic development and production.

Accordingly, Micon and DMT recommend that HRL commences operations to fully assess the marketability of the product and to secure initial off-take agreements for its product, in parallel with the site works presently underway.

27.0 DATE AND SIGNATURE PAGE

"David Makepeace" {signed and sealed}

David Makepeace, M.Eng., P.Eng.
Senior Geologist April 23, 2015

"Richard M. Gowans" {signed and sealed}

Richard M. Gowans, B.Sc. P.Eng.
President April 23, 2015

"Tania Ilieva" {signed and sealed}

Tania Ilieva, Ph.D., P.Geo.
Senior Geologist April 23, 2015

DMT GEOSCIENCES LTD.

"Keith McCandlish" {signed and sealed}

Keith McCandlish, P. Geo.
Managing Director April 23, 2015

"Peter Cain" {signed and sealed}

Peter Cain, P.Eng.
Managing Director April 23, 2015

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Canadian National Railway Company www.cn.ca/en/media/news/news-articles

Canadian Standards Association www.csa.ca/en/canada/page/home.

DMT Geosciences Canada www.dmtgeosciences.ca

Fraser Valley Aggregates www.fvagg.com

Government of British Columbia www.engage.gov.bc.ca/lnginbc/lng-projects/westcoast-connector-gas-transmission

University of Illinois www.isgs.illinois.edu/outreach/geology-resources/quaternary-glaciations-illinois

Levelton Consultants Ltd. www.levelton.com

Maher Canada Corp. www.mahercanada.com/default.html

Prince Rupert LNG Corporation www.princerupertlng.ca/

Spectra Energy Corporation www.spectraenergy.com/Operations/New-Projects-and-Our-Process/New-Projects-in-Canada/Spectra-Energy-and-BG-Natural-Gas-Transportation-System

Sharecoast Rentals and Sales www.sharecoast.ca

Statistics Canada www.statcan.gc.ca/pub/26-201-x/26-201-x2006000-eng.pdf

29.0 CERTIFICATES

CERTIFICATE OF AUTHOR
KEITH MCCANDLISH, P. GEO.

As the co-author of this report entitled "NI 43-101 Technical Report on a Preliminary Economic Assessment for Swamp Point North Aggregate Property, Northwest British Columbia, Canada" dated April 23, 2015 (the "Technical Report"), I, Keith McCandlish, do hereby certify that:

1. I am employed by and carried out this assignment for:

   DMT Geosciences Ltd.,
   Suite 415 – 708 11th Avenue SW,
   Calgary, Alberta, T2R 0E4, Canada.
   Telephone: (403) 264-9496
   Fax: (403) 263-7641

2. I am a registered member of the:
   - Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), Licence - 31222.
   - Association of Professional Engineers and Geoscientists of Alberta (APEGA), Member – 45717
   - Northwest Territories Association of Professional Engineers and Geoscientists (NAPEG), Licence-12528.

3. I have the following work experience:
   - Over thirty-five years of consulting geological and engineering experience in minerals, oil sands/heavy oil, precious stones, coal and industrial minerals. In 1988 I joined Associated Mining Consultants Ltd. (AMCL) In 2006 AMCL was renamed Associated Geosciences Ltd. (AGL) and in 2008 AGL was acquired by DMT GmbH & Co. KG and renamed DMT Geosciences Ltd. where I am now Managing Director focusing on corporate finance, due diligence and technical audits.
   - I have been actively involved on due diligence evaluations of mining projects covering a range of mineral commodities and have had extensive experience in exploration property valuations, mineral resource estimates, analysis of project economics, exploration logistics, assaying and project management. Detailed evaluations have been conducted on a number of industrial minerals and related mining operations and exploration projects, internationally, including valuation of aggregate project in northeast BC for a National Energy Board Hearing.
   - I have specific experience in regional exploration and assessment of silica sand resources across the Pacific Northwest and BC for National Silicates.
   - I participated in valuation of the gravel quarries of the Cewe Company in Port Coquitlam and on Bowen Island as part of a legal case heard in BC Supreme Court.
   - I conducted silica sand and aggregate exploration in the Horn River Basin for the LaPrairie Group of Companies and in silica sand exploration in the Peace River deposit which resulted in the acquisition and development of the project by the Laprairie Group of Companies.
   - I participated in the exploration of the Portland Canal aggregate deposit.

4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with professional associations

(as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for this report for the purposes of NI 43-101.

5. I am responsible for Sections 9, 10, 11, 12 and 14, and the parts of Section 1, 2, 25 and 26 derived therefrom.

6. I visited the property in June, 2007. There has been no material change in the geological information since that date.

7. I am independent of Highbank Resources Ltd. applying all the tests in section 1.5 of NI 43-101.

8. As of the effective date of the technical report, to the best of my knowledge, information and belief that the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading

9. I am not aware of any material fact or material change in the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report in anyway misleading.

10. I have read NI 43-101, Companion Policy 43-101CP and Form 43-101FI, and the Technical Report has been prepared in compliance with that instrument, companion policy and form.

Dated at Calgary, AB. this 23th Day of April, 2015.

"*Keith McCandlish" {signed and sealed}*

Keith McCandlish, P.Geo.
Managing Director
DMT Geosciences Ltd.

CERTIFICATE OF AUTHOR
PETER CAIN, PH.D., P.ENG.

As the co-author of this report entitled "NI 43-101 Technical Report on a Preliminary Economic Assessment for Swamp Point North Aggregate Property, Northwest British Columbia, Canada" dated April 23, 2015 (the "Technical Report"), I, Peter Cain, do hereby certify that:

1. I am employed by and carried out this assignment for:

   DMT Geosciences Ltd.,
   Suite 415 – 708 11th Avenue SW,
   Calgary, Alberta, T2R 0E4, Canada.
   Telephone: (403) 264-9496
   Fax: (403) 263-7641

2. I hold the following academic qualifications:
   - Bachelor of Science – University of Wales, University College Cardiff, 1977
   - Doctor of Philosophy – University of Wales, 1982

3. I am a registered member of the:
   - Association of Professional Engineers and Geoscientists of British Columbia, Licence - 37663.
   - Association of Professional Engineers, Geologists and Geophysicists of Alberta, Member - 63684.
   - Association of Professional Engineers and Geoscientists of Saskatchewan, Licence - 25843.

4. I have worked as a mining engineer for a total of 38 years since my undergraduate degree from university. I have worked in grassroots to advanced stage mining projects. I have experience with underground and open pit and quarry operations from the pre-production stage to closure. I have experience in industrial minerals.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with professional associations (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for this report for the purposes of NI 43-101.

6. I am responsible for Sections 15, 16 and the parts of Section 1, 2, 25 and 26 derived therefrom.

7. I assisted in the MEM Notice of Work and the Environmental, Health and Safety Management System Plans for Highbank Resources Ltd. in 2013.

8. I am independent of Highbank Resources Ltd. applying all the tests in section 1.5 of NI 43-101.

9. As of the date of this certificate, to the best of my knowledge, information and belief that the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading

10. I am not aware of any material fact or material change in the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report in anyway misleading.

11. I have read NI 43-101, Companion Policy 43-101CP and Form 43-101FI, and the Technical Report has been prepared in compliance with that instrument, companion policy and form.

Dated at Calgary, AB. this 23th Day of April, 2015.

"*Peter Cain" {signed and sealed}*

Peter Cain, Ph.D., P.Eng.
Director, Engineering and Consulting
DMT Geosciences Ltd.

CERTIFICATE OF AUTHOR
DAVID K. MAKEPEACE, P.ENG.

As the co-author of this report entitled "NI 43-101 Technical Report on a Preliminary Economic Assessment for Swamp Point North Aggregate Property, Northwest British Columbia, Canada" dated April 23, 2015 (the "Technical Report"), I, David K. Makepeace, M.Eng., P.Eng., do hereby certify that:

1. I am employed by and carried out this assignment for:

   Micon International Limited,
   Suite 205 – 700 West Pender Street,
   Vancouver, British Columbia, Canada V6C 1G8.
   Telephone: (604) 647-6463
   Fax: (604) 647-6455.

2. I hold the following academic qualifications:
   - Bachelor of Applied Science - Geological Engineering, Queen's University at Kingston, Ontario, 1976,
   - Master of Engineering - Environmental Engineering, University of Alberta, 1994.

3. I am a registered member of the:
   - Association of Professional Engineers and Geoscientists of British Columbia, licence - 14912.
   - Association of Professional Engineers, Geologists and Geophysicists of Alberta, licence - 29367.

4. I have worked as a geological and environmental engineer for a total of 36 years since my undergraduate degree from university. I have worked in grassroots to advanced stage exploration projects. I have extensive experience with both underground and open pit and quarry operations from the pre-production stage to closure. I have been in-charge of environment assessments and audits for several mines. I have experience in industrial minerals I have provided consulting services on the Swamp Point North property (Highbank Resources) over the last 3 years. I have worked on other sand and gravel operations such as St. Vincent Bay Aggregate near Saltry Bay, British Columbia. I have worked on numerous gravel pits and rock quarries associated directly for use at several mine operations as borrow material.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with professional associations (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for this report for the purposes of NI 43-101.

6. I am responsible for Sections (Items) 3, 4, 5, 6, 18, 20, 23 and 24 of the Technical Report and also supervised the preparation of Sections (Items) 21 and 22. I am responsible for the parts of Sections (Items) 1, 2, 25, 26 derived therefrom.

7. I visited the property on February 19, 2015.

8. I assisted in the MEM Notice of Work and the Environmental, Health and Safety Management System Plans for Highbank Resources Ltd. in 2013.

9. I am independent of Highbank Resources Ltd. applying all the tests in section 1.5 of NI 43-101.

10. As of the date of this certificate, to the best of my knowledge, information and belief that the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading

11. I am not aware of any material fact or material change in the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report in anyway misleading.

12. I have read NI 43-101, Companion Policy 43-101CP and Form 43-101FI, and the Technical Report has been prepared in compliance with that instrument, companion policy and form.

Dated at Vancouver, B.C. this 23th Day of April, 2015.

"*David K. Makepeace" {signed and sealed}*

David K. Makepeace, M.Eng., P.Eng.
Senior Geologist, Micon International Limited,

CERTIFICATE OF AUTHOR
RICHARD GOWANS, P.ENG.

As the co-author of this report entitled "NI 43-101 Technical Report on a Preliminary Economic Assessment for Swamp Point North Aggregate Property, Northwest British Columbia, Canada" dated April 23, 2015 (the "Technical Report"), I, Richard Gowans, P.Eng. do hereby certify that:

1. I am employed by, and carried out this assignment for, Micon International Limited, Suite 900, 390 Bay Street Toronto, Ontario, Canada M5H 2Y2, tel. (416) 362-5135 fax (416) 362-5763 e-mail: rgowans@micon-international.com .

2. I hold the following academic qualifications:

B.Sc. (Hons) Minerals Engineering, The University of Birmingham, U.K., 1980

3. I am a registered Professional Engineer of Ontario (membership number 90529389); as well, I am a member in good standing of the Canadian Institute of Mining, Metallurgy and Petroleum.

4. I have worked as an extractive metallurgist in the minerals industry for over 30 years. This experience includes project management, plant design and costing of a number of industrial mineral projects, including adalusite, petalite, phosphate, carnallite, ilmenite, rutile, zircon, feldspar, sand and gravel, and aggregates. I am also very familiar with the materials handling, crushing, screening and washing unit processes commonly used in the aggregate business.

5. I do, by reason of education, experience and professional registration, fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes the management of technical studies and design of numerous metallurgical testwork programs and metallurgical processing plants.

6. I have not visited the project site.

7. I am responsible for the preparation of Sections 13 and 17 of this report and the parts of Sections 1, 2, 25 and 26 derived therefrom.

8. I am independent of Highbank Resources Ltd., as defined in Section 1.5 of NI 43-101.

9. I have read NI 43-101 and the portions of this report for which I am responsible have been prepared in compliance with the instrument.

10. As of the date of this certificate, to the best of my knowledge, information and belief, the sections of this Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make this report not misleading.

Dated this 23th Day of April, 2015.

"Richard Gowans" {signed and sealed}

Richard Gowans, B. Sc., P.Eng.
President, Micon International Limited

CERTIFICATE OF AUTHOR
TANIA ILIEVA, P. GEO.

As the co-author of the report entitled "NI 43-101 Technical Report on a Preliminary Economic Assessment for Swamp Point North Aggregate Property, Northwest British Columbia, Canada" dated April 23, 2015 (the "Technical Report"), I, Tania Ilieva do hereby certify that:

1. I am employed as a Senior Geologist by, and carried out this assignment for, Micon International Limited, Suite 900, 390 Bay Street, Toronto, Ontario M5H 2Y2, tel. (416) 362-5135, fax (416) 362-5763, e-mail tilieva@micon-international.com.

2. I hold the following academic qualifications:
   B.Sc. (Geology) Institute of Mining and Geology, Sofia, Bulgaria 1986
   Ph. D (Geology) University of Mining and Geology, Sofia, Bulgaria 2000

3. I am a registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of Ontario (membership # 1259); as well, I am a member in good standing of several other technical associations and societies, including the Canadian Institute of Mining, Metallurgy and Petroleum (Member # 149800).

4. I have worked as a geologist in the minerals industry for 25 years. I have participated in market research studies for different commodities including research for crushed stone, gravel and manganese ore in Guyana, South America. I have participated in historical price analyses and market research for a silica sand project in Bulgaria. In addition I was involved in due diligence reviews, including price analyses and market research for a lithium clay project in Nevada, USA.

5. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes 6 years as an exploration geologist, more than 10 years as a research scientist, 6 years as a consulting geologist. I have worked on several projects for industrial minerals, including Beliya Kamak, a silica sand project, located in Trun Manucipality, Bulgaria. I am still helping the new owner Magstroy Ltd., Sofia, Bulgaria in their efforts to find an investor to develop the project. As a consulting geologist for St. Eugene Mining Corporation (now Satori Resources Inc.) I provided geological services related to obtaining a Casual Quarry Permit for crushed stone on the Tartan Lake Mine project in Manitoba. The crashed stone, mined from the quarry was used for the maintenance of the road from the mine office to the tailing pond and other access roads on the property.

6. As of the date of this certificate to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this report not misleading.

7. I have not visited the project site.

8. I am independent of the parties involved in the property for which this report is required, other than providing consulting services;

9. I have read the NI 43-101 Instrument and this Technical Report has been prepared in compliance with this Instrument.

10. I am responsible for the preparation of Sections 7, 8, 19 and 28 of this Technical Report dated April 23, 2015.

Dated this 23th Day of April, 2015

"Tania Ilieva" {signed and sealed}

Tania Ilieva, Ph. D., P. Geo
Senior Geologist, Micon International Limited