

Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

**Assessment Report
Title Page and Summary**

TYPE OF REPORT [type of survey(s)]: Assessment

TOTAL COST: \$3,600.00

AUTHOR(S): J. T. Shearer, M.Sc., P.Geo.

SIGNATURE(S): 

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK:

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5504204 & 5513245

PROPERTY NAME: Suquash Coal

CLAIM NAME(S) (on which the work was done):

COMMODITIES SOUGHT: Coal

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Nanaimo Mining District

NTS/BCGS: 9L/1E (092L.064)

LATITUDE: 50 ° 37 '59" LONGITUDE: 127 ° 15 '06" (at centre of work)

OWNER(S):

1) Electra Gold Ltd. 2) _____
J. T. Shearer

MAILING ADDRESS:

Unit 5 - 2330 Tyner Street
Port Coquitlam, BC V3C 2Z1

OPERATOR(S) [who paid for the work]:

1) Same as above 2) _____

MAILING ADDRESS:

Same as above

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Coal seams intercalated with shale and siltstone occur in Nanaimo Group Sedimentary Rock in a relatively small basin
between Port Hardy and Port McNeill, coal thickness up to 3 metres

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

Assessment Reports 2009 drilling

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	_____	_____	_____
Photo interpretation	_____	_____	_____
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	_____	_____	_____
Electromagnetic	_____	_____	_____
Induced Polarization	_____	_____	_____
Radiometric	_____	_____	_____
Seismic	_____	_____	_____
Other	_____	_____	_____
Airborne			

GEOCHEMICAL (number of samples analysed for...)			
Soil	_____	_____	_____
Silt	_____	_____	_____
Rock	_____	_____	_____
Other	_____	_____	_____
DRILLING (total metres; number of holes, size)			
Core	_____	_____	_____
Non-core	_____	_____	_____
RELATED TECHNICAL			
Sampling/assaying	_____	_____	_____
Petrographic	_____	_____	_____
Mineralographic	_____	_____	_____
Metallurgic	_____	_____	_____
PROSPECTING (scale, area)			

PREPARATORY / PHYSICAL			
Line/grid (kilometres)	_____	_____	_____
Topographic/Photogrammetric (scale, area)	_____	_____	_____
Legal surveys (scale, area)	_____	_____	_____
Road, local access (kilometres)/trail	_____	_____	_____
Trench (metres)	_____	_____	_____
Underground dev. (metres)	_____	_____	_____
Other	_____	_____	_____
TOTAL COST:			\$3,600.00

**ASSESSMENT REPORT
ON THE
SUQUASH PROJECT**

**BC Geological Survey
Assessment Report
34958**

**Port Hardy/Port McNeill Area
Northern Vancouver Island British Columbia
Nanaimo Mining Division
Permit MX-8-255, Approval 08 1610420-0926
Event #5504202 + #5513245**

**NTS 92L1E (092L.064)
50°37'59"N/127°15'06"W**

For

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by

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June 1, 2014

Fieldwork completed between May 30, 2013 and May 14, 2014

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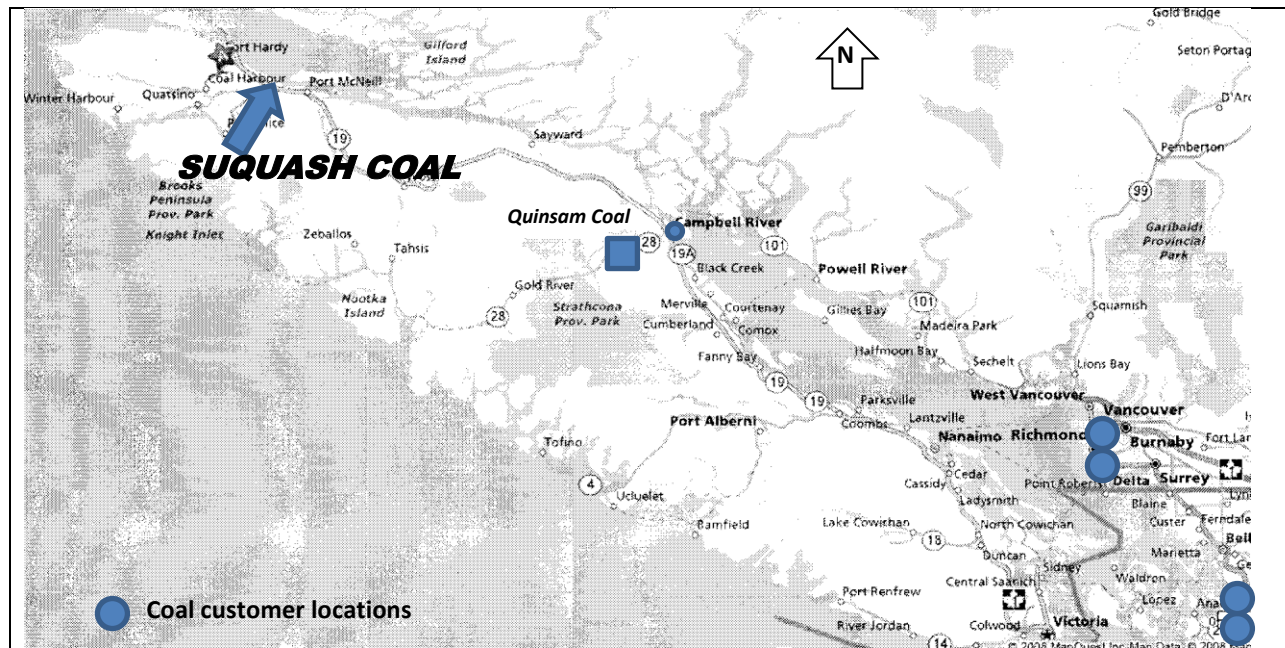
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SUMMARY

Homegold Resources Ltd. owns mineral claims in the Suquash area 25 km east of Port Hardy as shown in Figure 1. The claims have been made in accordance with all the regulations set forth by the government's Title Division.

The Company drilled 4 diamond drill holes in October-November 2008 and intersected a typical sandstone-shale-minor coal sequence of Lower Cretaceous Nanaimo Group sedimentary rocks. Total footage drilled in the 4 2008 holes was 672.36m.

Figure 1 Map of Suquash Coal Mine, near Port Hardy, BC



The company may drive a decline to reach near the former mine workings about 50 meters below grade. The purpose of the decline is to mine a bulk sample for testing at a local cement plant. In order to locate the decline in the most cost effective way, three or four test diamond drill holes are proposed in the vicinity of the proposed decline and the former number 2 shaft of the Suquash mine.

The mine is of historical interest because it was first operated by the Kwakiutl First Nation and is by far the first mine in British Columbia. To begin engaging with the Kwakiutl, past proponents have met with the Chief and Council in Fort Rupert. At this introductory meeting, the Chief and Council indicated that they will support an exploratory diamond drill program. The proponent's goal in the consultation process is to ultimately achieve a Project agreement that provides, among other items, both economic and social benefits to the Kwakiutl First Nation by working together and following consultation protocols as we move through the exploration phase. Subsequently permits have been obtained from the Ministry of Energy, Mines and Petroleum Resources to conduct an exploratory diamond drill program as described in this report. Upon completion of the

drilling and sampling results, the proponent would then apply for driving an exploration decline to extract a bulk sample for testing by the company and by potential customers.

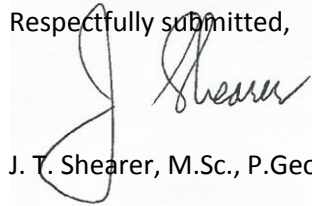
The most prominent Airphoto linears in the area are the northwest structures which reflect primary bedding within the basin. These northwest structures appear to control topography.

Primary bedrock structures/faults appear to be reflected by more northerly linears along the shore. These linears appear to be late stage.

Work in 2014 consisted of assaying 33 samples collected from 2008 drillholes #4 and #1. These samples were selected on the basis of completing the coal sampling. Assay results reveal that coal samples (such as SQ-04-36) show low Al, Si and S. Calcium is slightly elevated (2.3%) due to druzy calcite crystals long fractures. Sample SQ-01-11 has 4.8% Ca.

Shaley samples, such as SQ-04-47 have Al content up to 11.22% Al, reflective of the aluminous nature of the ash interbeds. Shaley samples include SQ-04-39, 41, 32, 35 and 38, SQ-04-38 and SQ-01-10, SQ-01-33, 34 and 36.

Respectfully submitted,



J. T. Shearer, M.Sc., P.Geol.

INTRODUCTION

This report was prepared at the request of the Board of Directors of Homegold Resources Ltd. (“Homegold”) to correlate surface outcrops and cliff sections with the 2008 drilling and recommend an exploration program for other future work to further evaluate the property.

The author, Jo T. Shearer, M.Sc., P.Geol., was retained by Homegold to write this Technical Report, visited the property in May, July, August and November 2008, and June 1 and 2, 2012 and in May 2014.

Preamble

Electra Gold Ltd., Port Coquitlam, a previous owner, is a Toronto Venture Exchange listed company with the trading symbol ELT. Electra operates a chalky geysirite mine and a barge loading terminal near Port Hardy. Electra formed a wholly owned subsidiary Suquash Coal Ltd. to restart the former coal mine. The Suquash Coal Property is known from historical exploration and mining since 1835. The Kwakiutl First Nation first produced coal for sale to the Hudson’s Bay Company, US shipping companies and others. Later, the mine was operated by the Pacific Coast Coal Company between 1908 and 1922 on Seam #2 totaling 12,000 feet of development at the mine’s 52 meter elevation. Subsequently has mine has been re-entered on several occasions for sampling and mine planning purposes.

There have been 10 historic holes drilled on the property with a total length of 6,718 feet. In addition there were two holes drilled in the vicinity of number 2 shaft for which the data has been lost. There were also other holes drilled adjacent to the property between Port McNeil and Port Hardy and on Malcolm Island. In November 2008, Electra completed 4 diamond drill holes.

Sources of Information

A major source of information has been the numerous historical assessment reports on the area within the B.C. Government Ministry of Mines Minfile database. These reports are readily available from Ministry reports dating back to 1934 on work conducted for various companies up to 1986. Prior information is contained in the Annual Reports of the Minister of Mines 1909-1921. In addition, past mining data from the BC Archives and records of Kwakiutl historical interests in the area have been obtained. We also have an underground coal mine engineering feasibility report by Hope Engineering in 1953.

The 4 holed diamond drill program was logged by Parvez, B.Sc. an experienced coal geologist under the direct supervision of John Perry and J. T. Shearer, M.Sc., P.Geol. Further work was completed by Coal Expert Gwyneth Cathel-Huhn.

The author in writing this report used as sources of information those reports and files listed in the bibliography, sampling of surface Seam 1 on May 22, 2008 and July 11, 2008, the results of previous exploration and testing programs, and previous mine operating reports. Most of the reports were prepared by persons holding a university degree in Geological Sciences or Engineering. I also include some references to people that were involved in previous coal mining at the site. Based on the author’s assessment by field checks, the information in these reports is accurate.

The author relied most significantly on a 1984 report by Stephen Gardner, P.Geo., Campbell River, formerly the Vice President, Exploration, for the Quinsam Coal Mine. Mr. Gardiner's report for Texaco Canada Resources Ltd., Calgary, includes his resource estimates that are quite close to the author's own general assessment. The author also reviewed three other independent estimates of the coal resource by geological and mining consultants and by the former coal mining company at the site. These estimates are all higher than those by Mr. Gardiner. However, all these estimates rely greatly on inferences as to the extent of the coal beds. They do not include sufficient information on underground and clean coal recovery. In particular, a 10 hole exploration program and extensive feasibility study for BC Hydro was based on using run of mine coal for an on-site power plant and thus the much higher resource estimates by this consultant are not directly useful for estimating saleable coal.

Exploration on properties containing coal can be a divisive political and environmental issue in British Columbia. The proponent has begun an on-going process of educating and communicating with the general public and First Nations about exploration and mining issues. The proponent's goal in a First Nations consultation process is to ultimately achieve a Project Agreement that provides, among other items, both economic and social benefits to the Kwakiutl First Nation by working together and following consultation protocols as the proponent moves through the exploration phase.

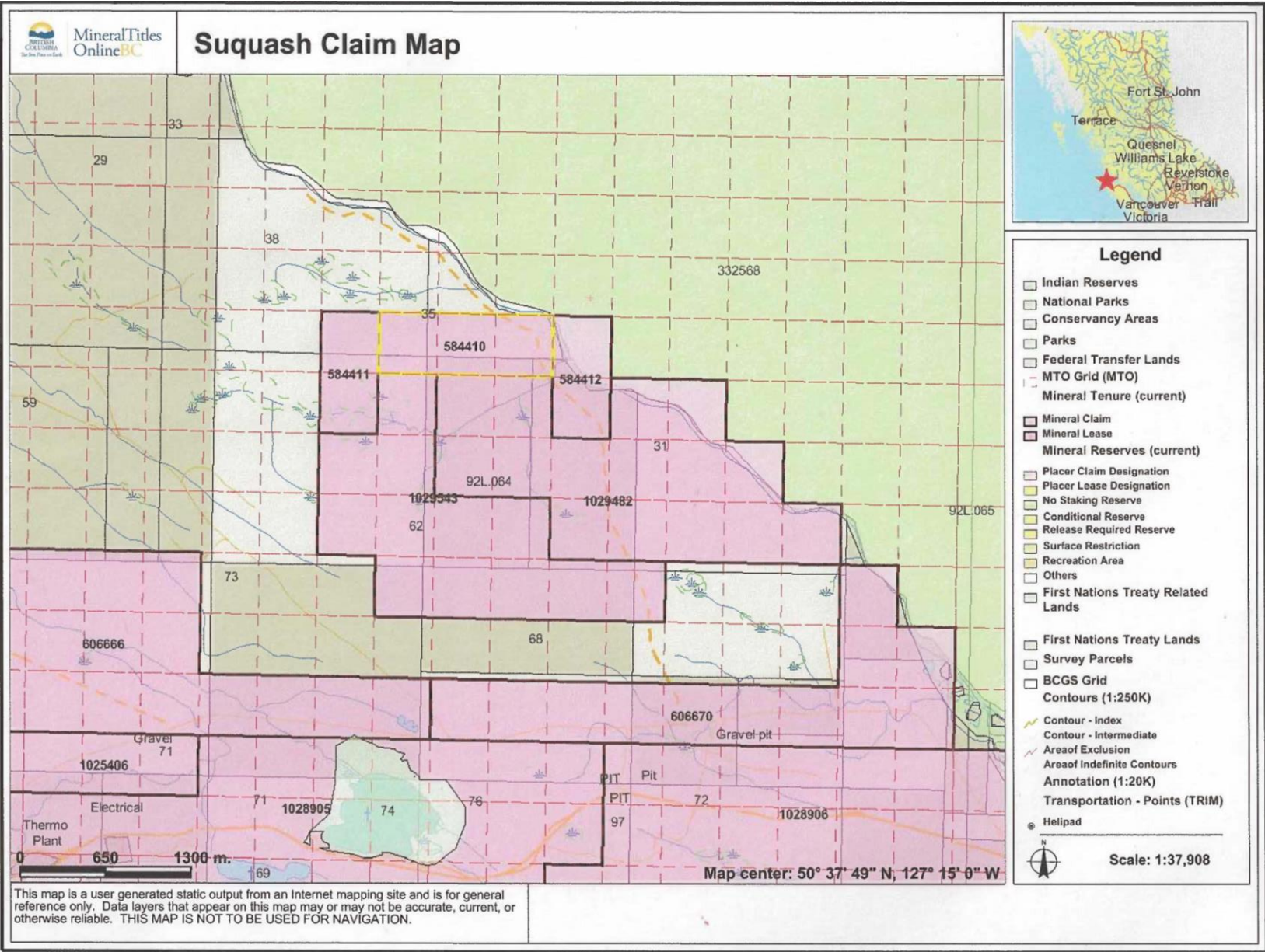


FIGURE 1A CLAIM MAP

PROPERTY DESCRIPTION AND LOCATION (CLAIM LIST)

Preamble

The mine is 25 km east of Port Hardy by the Island Highway 19 and 3.3 km of Suquash Main logging road. This road joins the highway immediately east of the Mount Waddington Regional District's 7-Mile Landfill. The property has been cleared as shown in Figure 2. Coal from the number 1 surface seam is scattered along the beach and is easily visible in the cliff and along the creek.

The site is designated in the Vancouver Island Land Use Plan as an Enhanced Forestry Area. It is within Western Forest Products' Tree Farm License Number 6 and is included in the company's Wildlife Management Strategy as part of their Sustainable Forest Management Plan for the North Vancouver Island Region.

A company has also applied for the coal licenses for 1,038 hectares of mine property as listed in Table 1. The BC Ministry of Energy, Mines and Petroleum Resources, Titles Division, Mineral Titles Branch description is: Number 92L064 Block G Units 58, 59, 69 and 70 and 92L11 Block G Units 38, 39, 40, 48, 49, 50, and 60 and 92L11 Block F Units 41, 51, 61 and 71. The property is in the Rupert Land District and Nanaimo Mining Division. The license applications were made in July 2014. The licenses are issued only after a public review process. Annual renewals are required once the licences are issued.

Table 1 List of Claims

Claim Name	Tenure Number	Size (ha)	Date Located	* Current Anniversary Date	Registered Owner
Surface Suquash	986144	512.744	May 14, 2012	September 21, 2015	J. T. Shearer
SC 2	986145	492.418	May 14, 2012	September 21, 2015	J. T. Shearer
Elektra 1	584410	61.48	May 16, 2008	July 21, 2016	J. T. Shearer
Elektra 2	584411	40.99	May 16, 2008	July 21, 2016	J. T. Shearer
Elektra 3	584412	40.99	May 16, 2008	July 21, 2016	J. T. Shearer

Total 1,148.622 hectares

Heritage and Environmental Responsibilities

Coal mining at the site is historically significant and investments will be made to preserve these resources. The mouth and banks of Suquash Creek are historically significant and will not be disturbed. There is a trail to the old shafts and equipment in the second growth forest indicating this equipment is of recreational interest. Previous proponents have met with Ministry of Tourism, Sport and the Arts, Archaeological Branch, representatives to obtain input and several reports relating to historical values on the site. Previously input and budget quotations for archaeological consulting work to address potential concerns have been obtained.

Permits

The company and property will be subject to Mine Permit regulations of British Columbia Ministry of Energy, Mines and Petroleum Resources. A permit has been received for the drilling program.

The Suquash area is within the Kwakiutl First Nation Traditional Territory (Fort Rupert) and area of interest. The company has acknowledged the legal requirements for consultation and accommodation

of First Nation Rights, Title and Interest. The Kwakiutl First Nation has developed standard agreements for other projects in their traditional territory that can be used as a template for this project. Suquash Coal seeks long term agreements to ensure that Kwakiutl people benefit from the potential mine and are compensated for the negative impacts of the mine on their communities, land, and traditional way of life. Aboriginal management of mining revenues is intended to contribute to a sustainable community, direct community benefits, revenues for community projects, and support for traditional skills and lifestyles.

A preliminary project description will be delivered to key stakeholders including local government officials, provincial and federal agencies. We will meet with regulatory reviewers and support the mine and environmental permitting process. Since the mine will have a production capacity of less than 250,000 tonnes per year of raw coal the project may not be subject to review by BC's Environmental Assessment Office.¹ Applications will be made for a Mine Permit and an Environmental Permit. Public meetings would be held to answer questions, identify areas of concern, and to address any issues.

Applications for a Mine Permit, Water License, Waste Management Permit, and other related permits for the mine, plant site and required infrastructure must be made to the BC government as summarized in Table 2. One of the key requirements is for a life of project design, sizing and reclamation of the waste rock dump.

Table 2 Regulatory Approvals Required For Suquash Mine Restart

Impact Benefit Agreement- Kwakiutl First Nation- Signifies Kwakiutl people will benefit and support the project. Required for land tenure approvals.
Exploration Permit (Minex) – for diamond drilling and bulk sampling
Mine and Reclamation Permit- Ministry of Energy & Mines (MEM)- Approves the mine plan (layout, geotechnical assessment and engineering design for underground workings, pits, dumps, plant, mine roads, other key facilities), mine operations, acid drainage prediction and management plans, and reclamation plan.
MEM and Waste Management Permit- Ministry of Environment (MOE) - Approves permitted solid waste disposal plans, liquid effluent quality, structural designs, and waste management and monitoring plans (pond effluents, tailings seepage, sewage, other). Approves air emission standards, equipment and dust control and other management and monitoring plans.
MEM and Water License- Ministry of Environment (MOE) - Grants approvals to withdraw, divert and use water (i.e. domestic and process water supply, drainage management plans, site water balance).
Land Tenure Approvals- Various- Grants rights to occupy land, including Coal Lease for underground workings and pits, plant site (MEM); License of Occupation for road and power line (Land and Water BC); others as required.
Road Use Permits- Ministry of Forests- Authorizes use of Ministry of Forests' roads and Western Forest Products road use agreement.
Other Permits, Licenses- Various- Approves potable water supply if required (Ministry of Health)

¹ Environmental Assessment Act, Reviewable Projects Regulation, Part 3, Mine projects
http://www.qp.gov.bc.ca/statreg/reg/E/EnvAssess/370_202.htm

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Access

The mine site is easily accessible by paved highway from Port Hardy, Fort Rupert, Port McNeil and Port Alice. Access to the mine is by 3.3 km of Suquash Main logging road. This road joins the highway immediately east of the Mount Waddington Regional District's 7-Mile Landfill 22 km south of Port Hardy.

Previous coal transport was exclusively by barge. There was a pier at the mine site and coal was delivered to customers initially by canoe and later by barge. A short small gage rail track operated between the mine portal and the barges. Since Electra has an existing barge ramp nearby it is proposed that coal be transported by truck to the existing loading facility in the initial stages.

There is a deep water private port nearby for loading gravel and there is deep water directly off the project site. However, transport to and from the site is more convenient and lower cost using existing facilities.

Port Hardy has an airport with regular scheduled service to Vancouver.

Climate

The average temperature and rainfall based on data compiled for a major nearby mining project is summarized in Table 3. The average temperature is 8.5 degrees C. The average daily minimum temperature in January is 1.0 degrees C and in December 1.3 degrees C. The average monthly rainfall is 131 mm. The wettest month is November with an average of 284 mm of rain. The average evaporation at the project site is expected to be 463 mm per year. The average wind speed in the project area is 4.5 m/s with a maximum of 22.4 m/s. The mean wind direction is predominantly from the north-northeast from November to February and from the west from March through April. The air quality is high throughout the area.

Physiography

The Project Area is located within the Coast Mountains and Islands physiographic region of British Columbia. The region, which includes Vancouver Island, consists largely of glacial landforms and remnant erosion surfaces.

Northern Vancouver Island consists of two major physiographic units: the Nahwitti Lowland and the Vancouver Island Mountains. The Project Area lies in the Suquash Basin subunit of the Nahwitti Lowland. This subunit is a triangular shaped area located along the eastern margin of the Nahwitti Lowland. The lowlands are underlain by gently dipping Cretaceous sedimentary rocks whereas the hills are made up of Karmutsen Volcanics. Erosion of the soft Cretaceous sediments within the basin has caused the lowland topography to be in contact with the harder, more resistant volcanic bedrock of the uplands. Within the lowlands, the Quaternary deposits tend to be relatively thick, and dominated by fluvial, glacial-fluvial, and marine sediments. These sediments are distributed along the eastern margin of the basin and range up to 30 meters in thickness.

Elevations in the licence area range from 10 to 50 meters above sea level with small undulating mounds present from the decomposition of wind thrown trees. The project area consists primarily of a gently sloping hillside of glacial drift which lies between the foreshore and Suquash Road. Suquash Creek flows through the northwest corner of the property. There are many minor seasonal streams that flow across the property and the beach directly to Queen Charlotte Sound. Misty Lake is near the south boundary of the property.

East of the road across the property in the cleared area there is 2 to 4 meters of gravel on the surface followed by shale and sandstone. West of the road, there is a marsh with deep mud.

Infrastructure and Local Resources

All parts of the property are accessible from the Suquash Logging Road and several branches. BC Hydro's main power line is 3 km away at Highway 19. It is possible that a hydro line could be extended to the waterfront properties along Suquash Road independently of the coal project. The Mount Waddington Regional District Landfill is 3 km away and could possibly be used for disposal of non-organic fill.

Cell network coverage on the property. Services from Port Hardy and Port McNeill are equally convenient. There is an extensive history of underground coal mining in nearby Campbell River and a variety of contractors and suppliers are available to service the mine.

Electra Gold has an operation at the PEM100 Quarry and operates a barge loading terminal nearby at Jensen Cove as shown in Figure 3. The existing rock conveyors would be covered to minimize dusting. All coal deliveries to customers would be barge.

Figure 2 Coal Loading at Jensen Cove, Port Hardy



- From right to left:
- (a) dump pocket grizzly for trucks
 - (b) white shore conveyor
 - (c) transfer point
 - (d) blue radiating stacking conveyor
 - (e) small control booth (blue)

Up to 15,000 tonne barges can be loaded at a rate between 700 to 800 tonnes per hour.

PROPERTY HISTORY

From 1836 to 1852 the Kwakiutl people mined and transported coal to customers including the British Navy, the Hudson's Bay Company, European and US shipping companies.^{2,3} Payment was for coal delivered not just for labor. Although miners were brought from Scotland, there were labor disputes and all the coal mining, transport and loading was by the Kwakiutl people. During the three years from 1849 to 1852 they mined and sold about 9,000 tonnes of coal. After 1852 new more competitive mines started up in Nanaimo and Seattle.

In 1908, Pacific Coast Coal Company drilled 4 holes on the property that intersected a lower coal seam about 48 meters below sea level. The company acquired coal licenses for 6 by 11 kilometers of foreshore.⁴ They sunk the 2X3 meter shaft near the mouth of Suquash Creek and began mining the number 2 seam. About 3,600 meters of lateral development work was done. A longwall face 240 meters long was opened up to the south of the shaft. The company built a small town with 20 houses, bunkhouse, store, electricity generator, and buildings for mining equipment. The pit-head and screening system was capable of handling 180 tonnes per day. Between 1909 and 1914 13,274 tonnes were mined but all work was suspended with the outbreak of World War 1 in 1914.

In 1914 the company started work on a larger 3X7 meter shaft 460 meters east of the first one and 60 meters from the shoreline. The shaft had a concrete collar, automated hinged cover, guides for two cages, and a lifting head frame. The shaft was not completed and is only 4 meters deep. It is designed with an access compartment, 1.8 by 1.2 meters, fitted with ladders, and a pumping and hoisting compartment, 1.8 meters square. A lot of machinery was delivered to the site but much of it was not. Photos of the two shafts and some of the machinery still on the mine site are shown in Figure 4.

Two winding engines, 600 x 900 mm diameter, and a 2.7 meter diameter drum were installed on a concrete base but were never used.⁵ A tipper for coal rail cars, two Vulcan hoist engines, a 100 HP and two 150 HP high pressure Goldie McCulloch boilers were delivered to the site. Ventilation was to be with a steam driven Sheldon fan, 1,200 by 760 mm turning at 125 revolutions per minute with a capacity of 400 cubic meters per minute. There were two duplex water pumps with a capacity of 230 liters per minute each.

After the war, from 1920 to 1922 two more holes were drilled, the mine was pumped out and more work was done on the surface and underground from shaft number 1. In 1920, 6 people were employed and 113 tonnes of coal were produced. However, in 1922 the entire operations of the company including coal mines in Nanaimo and Princeton ceased and the company went out of business. A reasonable average production for non-mechanized underground coal production is about 3 tonnes per person per day.

In 1952 Suquash Collieries acquired the licenses, erected a 4X5 meter office on site, dewatered the longwall, and commissioned a feasibility report.⁶ Six men were employed during the summer. Access to

² Marki Sellers, Simon Fraser University, *Negotiations for Control and Unlikely Partnerships: Fort Rupert, 1849-1851*, BC Historical News, Winter 2002/2003.

³ David Lewis, *Yesterday's Promises: A History of the District of Port Hardy*, Victoria, BC, Robinson Press, 1978.

⁴ BC Ministry of Energy & Mines Annual Report, 1908.

⁵ BC Energy & Mines, Annual Report 1921

⁶ BC Ministry of Energy & Mines, Report of the Minister of Mines, 1952

the property was by boat and barge. The company installed a 5 meter head frame and hoist at the old shaft collar and pumped out the mine using a 230 liters per minute Knowles duplex piston pump. Initially power was supplied by a portable air compressor, but this was replaced by a 1.5 by 3.0 meter vertical steam boiler. About 240 meters of old levels were reopened to provide access to the longwall face and to take samples. A small steam-driven geared hoist and a 10 millimeter diameter rope and system of pull bell signals was used at the shaft. The shaft was lined by 300 by 300 millimeter timbers. Ventilation was with a 910 millimeter diameter Sirocco exhaust fan. As the reopening of the workings progressed a considerable amount of methane was given off necessitating careful ventilation including a circuit along the south level and temporary walls in the crosscuts off this level. No explosives were used underground.

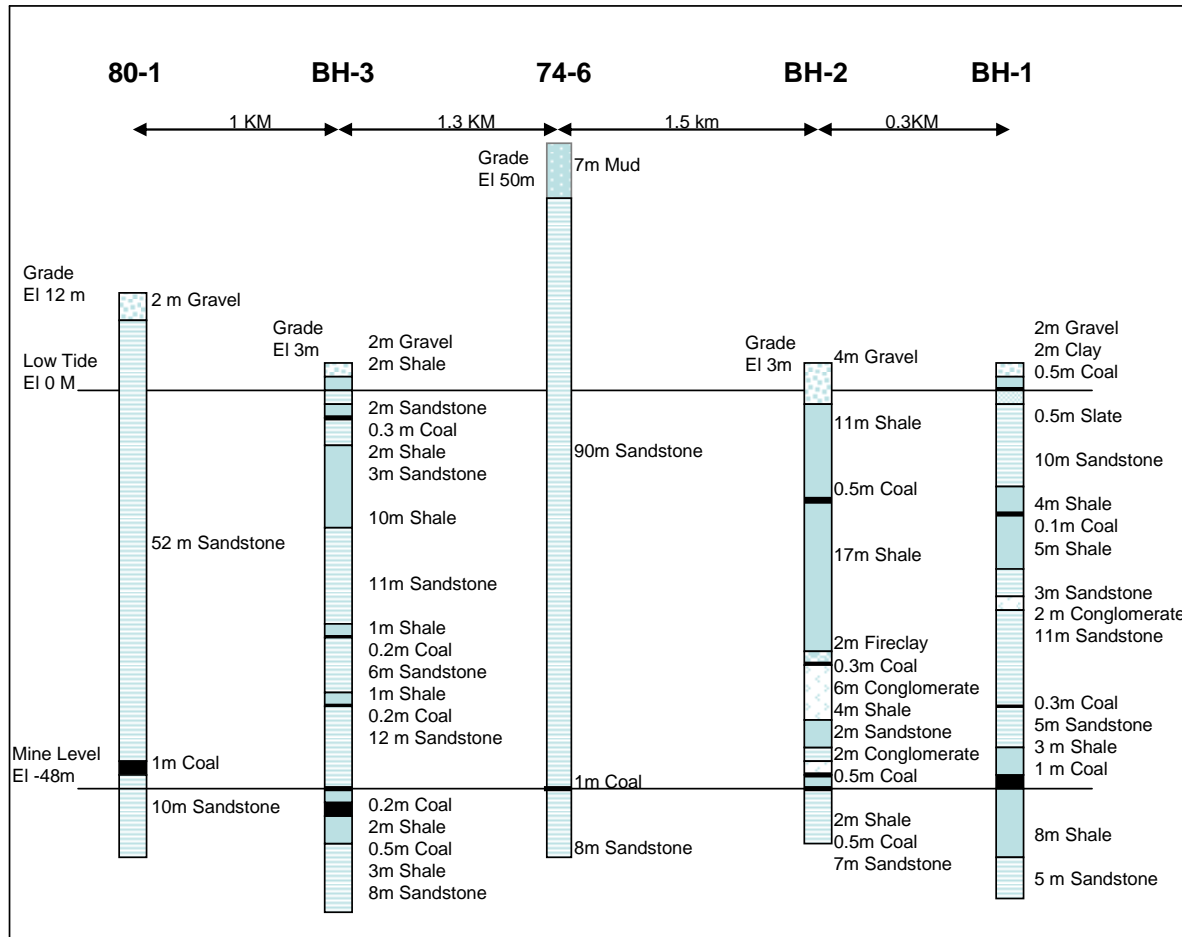
The old workings have a very hard sandstone roof above the seam. In 1952, the BC Mines inspector examined a section on the side of the south level 110 meters from the shaft and measured a total thickness of 2.3 meters. This included seven rock bands with a total thickness of 1.0 meter. The thickest continuous section of clean coal was 0.43 meters. The seam section is believed, however, to improve on the longwall face and toward the south. Conditions were found to be generally satisfactory in the course of inspections. While work was in progress a stretcher and first-aid equipment were kept at the camp and communications were by radio-telephone.

This test work was followed by a report by Harry Hope Engineering in April 1953 for a 450,000 tonne per year mine with a short rail line and ship loading system approximately where the gravel ship loader is now. For Hope Engineering to recommend this major project, the results of the underground investigations in 1952 must have been considered satisfactory but the detail sample results are not available to the current author.

There are many reports posted on the BC Energy & Mines website describing past mining operations. http://webmap.em.gov.bc.ca/mapplace/coal/coal_reports.asp?area=sq Since Suquash Collieries dewatered the mine and carried out its engineering studies the licenses have been held by Cobre Exploration Ltd. and BC Hydro who studied a large thermal power station, Ramm Ventures who were proposing to supply a Bellingham cement plant, and Priority Ventures who planned a coal bed methane project. BC Hydro spent more than \$300,000 on exploration work in the early 70s.

The results of five test holes on the property that intersect the coal mining zone are shown in Figure 9. The mining zone coal seam is quite level from the mine to borehole 74-6 1.5 km to the south and to borehole 80-1 2.8 kilometers to the southeast. There are several minor coal seams above the main seam. The number two coal seam is overlain with a massive sandstone structure that provided a reliable roof for mining operations. The main workings south of the shaft did not use support timbers although Hope Engineering set timbers in place during dewatering of the mine in 1952. The floor of the coal seam is sandstone or shale.

Figure 3 Drill core correlations



In 1852, the Hudson's Bay Company drilled three holes: one at Keogh River, one on the peninsula at Port McNeill, and a third two miles inland.⁷ In 1890 there was some drilling by Lyman Banks near Fort Rupert but the results are not currently available. An English company struck a 5 foot seam between Port McNeill and Alert Bay in 1898. Pacific Coast Coal also drilled close to Port McNeill and a deep hole on Malcom Island without discovering a significant coal seam. In 1921, the company held 1,500 hectares of crown grants and foreshore leases near Port McNeill.

Pacific Coast Coal drilled at least 6 holes on the property between 1908 and 1922 but we have access to only four of the results, BH-1 to 4. These holes were drilled along the beach at an elevation of 3 meters. Drill holes 5 and 6 were in the vicinity of shaft number 2 and the author does not have the results. However, the company purchased a great deal of mining equipment and planned to mine from a new shaft near these bore holes.

In 1974 BC Hydro completed 10 holes in the vicinity and commissioned a feasibility study by Dolmage Campbell & Associates, Vancouver, for a coal mine and electricity generating station. A test hole 1 km west of the mine, 74-1, intersected coal at minus 44 meters elevation. South of the mine, the zone 2

⁷ BC Archives MSS 436 Box 48 File 1 Pacific Coast Coal

seam is thinner. Test hole 74-3, 1.0 km southwest of the mine intersected coal at minus 26m and minus 62 meters elevation. Test hole, 74-5, 1.7 km southwest of the mine intersected coal at minus 107 meters. One zone designated zone 3 is at elevation minus 100 meters. Previous drilling also found a thicker coal seam in hole 74-05 at a depth of 190 meters and in hole 74-6 at 220 meters. However, the study concluded a coal fired electricity generating station was uneconomic at that time.

In 1977, Imperial Oil Ltd., Calgary, reviewed past studies and operations. The company concluded the higher cost of underground mining and coal cleaning did not make the coal basin economically attractive at that time.

In 1980 Ramm Ventures Corp. and Filtrol Minerals Ltd., Vancouver, commissioned further feasibility studies by Abcon Engineering, Calgary. Five exploration holes were drilled. The intent was to supply coal to the cement plant in Bellingham, WA. This drilling program encountered seam 2 in hole 80-1 at 42 meters below sea level but it was only 0.9 meters thick. The same hole had 3.3 meter thick coal seam at a depth of 290 meters.

In 1984, Gardner Exploration Consultants prepared a report on the coal deposit for Texaco Canada Resources Ltd. This study was optimistic about the potential for restarting the mine. Mr. Gardiner, other geologists and mining engineers have concluded that the most promising direction for future mining is southeast of the former mine. Although coal was found in all directions, there is a fault to the west along Suquash Creek.

Based on past drill holes and measurements at the number 2 coal seam face of past mining operations. Previous coal reserves are shown in Table 6.

Table 3 Coal Resource Estimate Using Historic Data (Not a current resource)

Parameter	Unit	Seam 2	Seam 3	Total
Total drill holes	Number	10	2	
Total intersections	Number	6	1	
Depth below sea level	Meters	50	282	
Average thickness	Meters	2.0	3.3	
Lease area	Hectares	1,038	1,038	
Coal area	Hectares	400	400	
	Million square meters	4.0	4.0	
Volume	Cubic meters	8.0	13.2	
Bulk Density	Tonnes per cubic meter	1.4	1.4	
In-situ coal reserves	Tonnes	11.2	18.5	29.7
Underground recovery	% (may be much higher)	55	55	
Raw coal mined	Tonnes	6.2	10.2	16.4
Wash plant recovery	%	60	60	
Saleable coal		3.7	6.1	9.8

Mr. Gardner, P.Geo., estimated the coal reserves under the land portion of the deposit at 9.1 million tonnes.⁸ He estimated an additional 9.0 million tonnes in-situ reserve under the sea adjacent to borehole SU-80-1 bringing the total to 18.1 million tonnes. Mr. Garner noted there are some indications

⁸ Stephen Gardner, P.Geo., Campbell River, BC, for Texaco Resources Ltd., *Geological Reconnaissance of Vancouver Island Coal Areas- Suquash Coal Basin and Outliers*, Northern Vancouver Island, BC, May, 1984, p.35.

that the thickness and number of individual coal bands is increasing in a southeasterly direction towards the sea.

In 1975, C.R. Saunders, P. Eng., and Dr. R.K. Germundson, of Dolmage Campbell & Associates Ltd., Consulting Geological & Mining Engineers, Vancouver, estimated in-situ reserves at 45 million tonnes over 3,800 kilocalories per kilogram and under 50% ash. At 55% underground recovery and 60% wash plant yield this is equivalent to about 15 million tonnes of saleable coal. Pacific Coast Coal estimated the reserves in 1912 at 47 million tonnes. James McEvoy, who wrote a report for Coniagas Mines, Toronto, in 1921, estimated the reserves at 21 million tonnes.

The conclusion of Ignacije Borovic, P.Eng., following Ram Ventures' drill program in 1980 was: "Because of the increase in the number and thickness of coal bands from holes 74-6 to 80-1, it would appear that the basinal environment for the generation of coal is enhanced to the south and east of the abandoned Suquash Mine. Most of this area is covered by the sea except for a 960 acre area (to the south and east). If future exploration is contemplated, it is recommended that it be concentrated in this area."

The calculation for the seam 3 resource is based on results from the Ram Ventures Corp. exploration program in 1980. The author believes that without further drilling the resource estimate for seam 3 is highly speculative since it is based on results for only one drill hole. Although this hole indicated a total coal zone of 3.3 meters with clean coal of 1.6 meters, there are no other nearby holes drilled to this depth. Furthermore since this seam was intersected at 282 meters below sea level it would be more difficult to access.

The current conclusions are shown in Table 6 does not include any coal under the sea. About half the coal mined in the past was from areas under the sea. The undersea land adjacent to the coal licenses drops off gradually into Queen Charlotte Sound. Past mine workings extended 330 meters out beyond the shore as shown in the mine plan. Based on hydrographic surveys, coal from seam 2 should outcrop about 3 kilometers offshore. However, the author does not include undersea reserves because further study would be required to evaluate safety and regulatory issues.

Mr. Gardner did not indicate an estimate for underground recovery or wash plant recovery. The author estimates that that the underground recovery will be at least 55% by the proposed room and pillar mining method and perhaps up to 75%. This estimate is based on consultation with former underground mine managers at the Quinsam Coal Mine in Campbell River and the former Wolf Mountain Coal Mine in Nanaimo. The proponent's proposed mining method is similar to these mines and the characteristics of the coal are similar.

The Suquash mine has a massive sandstone roof indicating that underground recoveries could be higher, up to 75%. With a massive sandstone roof less coal may need to be left behind to support the roof. The original mine used a long wall mining method for about half of the production and past mining engineers have recommended both room and pillar and longwall methods. The most comprehensive modern mining plan, by Hope Engineering, was for a room and pillar system very similar to that used by Quinsam Coal in Campbell River. However others have proposed that it may be possible to increase underground recovery by using a retreating longwall. Set-up costs for such a system would be higher. One of the purposes of driving a decline to seam number 2 is to gain first-hand experience with the seam and to then evaluate competitive mining methods and equipment.

The wash plant recovery estimate of 60% for seam 2 is based on the coal face intersections measured in the former mine. This clean coal recovery estimate is uncertain and could be as low as 45%. We did not find any record of coal washing tests. Previously only run of mine coal was produced and sold. The possible higher underground recovery may offset the potentially lower wash plant recovery rate. Mr. Borovic examined drill cuttings for seam 3 and found the coal to be dull and bright banded with abundant shale bands throughout. He concluded that a complex wash plant would be required to recover clean coal from this material and estimated the overall coal recovery rate from seam 3 (the lowest seam known) would be only 50%.

GEOLOGICAL SETTING

Regional Geology

The area is located within the Coast Mountains and islands region of British Columbia that consists largely of glacial landforms and remnants of surface erosion. It is in the Suquash Basin subunit of the Nahwitti Lowlands which are underlain by gently dipping Cretaceous sedimentary rocks. The soft Cretaceous sediments within the lowland basin are in contact with the harder, more resistant volcanic bedrock of the uplands. The lowland Quaternary deposits tend to be relatively thick, and are dominated by fluvial, glacial-fluvial and marine sediments along the eastern margin of the basin up to 30 meters thick.

A table of geological formations on Vancouver Island and are depicted in Figure 5 and their relationships are depicted in Figure 6. Because of its location at the margin of the continent, the geological history of Vancouver Island is chiefly related to massive crust movements on the Pacific margin of North America. Vancouver Island represents submarine and later terrestrial volcanism associated with rifting along an ocean floor subduction zone, formed from the Pacific Ocean plate colliding with the western edge of the North American continent and being pushed beneath the continental margin. These crustal movements began in Paleozoic time and have continued to the present. Most of the volcanism associated with rifting, however, took place in early Mesozoic time.

During the Jurassic and Triassic periods massive outpourings of pillow and flow lavas, and aquagene tufts formed volcanic island arcs which eventually formed the Insular Mountain Belt which covers Vancouver Island, the Queen Charlotte Islands, the Alaska panhandle and the Wrangell and St. Elias ranges of Alaska. These volcanic buildups are represented on northern Vancouver Island by the thick basalts of the Triassic Karmutsen Formation, Quatsino Limestone, the Bonanza Volcanics and the acidic Island Intrusions of Lower to Middle Jurassic. These volcanic complexes form the basement rock upon which later clastic sedimentary wedges of Lower and Upper Cretaceous Age were deposited.

Post-Cretaceous structural deformation in the northern Vancouver Island area is responsible for the preservation of the late Cretaceous sediments of the Suquash area on the northeast coast. This structural deformation manifests itself in the form of major normal (gravity) faults which in many cases are bounding features of sedimentary areas. The sediments of the Cretaceous are preserved on the down-dropped structural blocks. In many cases, this faulting occurs as a number of related step faults. This is best exemplified along the southwest edge of the Suquash area, where two or possibly more sub-parallel normal faults, trending in a northwesterly direction, form the edge of the basin.

In addition to the predominant faulting, Post-Cretaceous movements have resulted in minor folding. This folding is not clearly evident in surface exposures because the folds are generally gentle and broad with shallow dips. However, drilling in the Suquash area has confirmed their presence. The Post-Cretaceous structural deformation evident in the area is chiefly the result of Tertiary Volcanic activity and uplift. However fault movements in Tertiary time also occur along pre-existing fault and fracture planes that originated during major rifting that occurred during the Triassic. Late Tertiary volcanic rocks are exposed in small areas south of Port McNeill. They are basalt, almost unconsolidated tuff and breccias, volcanic boulder conglomerate and light-coloured dacite tuff.

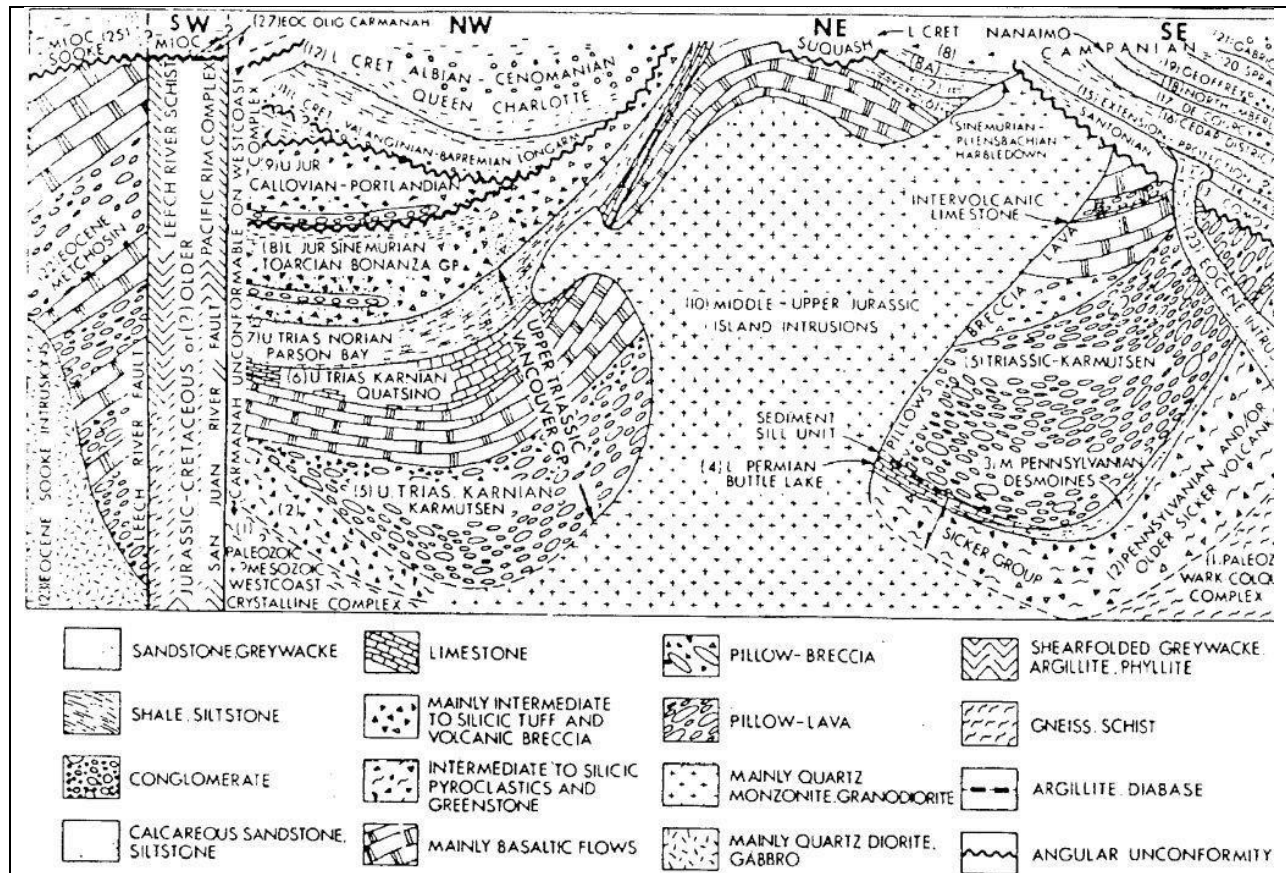
Figure 4 Table of Formations of Vancouver Island

	PERIOD	STAGE	GROUP	FORMATION	SYM-BOL	AVERAGE THICKNESS IN M.	LITHOLOGY		
CENOZOIC				late Tert.volc's of Port McNeill	Tvs				
		EOCENE to OLIGOCENE		SOOKE BAY	mpTsb		conglomerate, sandstone, shale		
				CARMANAH	eoTc	1,200	sandstone, siltstone, conglomerate		
		early EOCENE		ESCALANTE	eTE	300	conglomerate, sandstone		
				METCHOSIN	eTm	3,000	basaltic lava, pillow lava, breccia, tuff		
MESOZOIC		LATE	MAESTRICHTIAN	GABRIOLA	uKGA	350	sandstone, conglomerate		
				SPRAY	uKS	200	shale, siltstone		
		CAMPANIAN	NANAIMO		GEOFFREY	uKG	150	conglomerate, sandstone	
					NORTHUMBERLAND	uKN	250	siltstone, shale, sandstone	
					DE COURCY	uKDC	350	conglomerate, sandstone	
					CEDAR DISTRICT	uKCD	300	shale, siltstone, sandstone	
					EXTENSION - PROTECTION	uKEP	300	conglomerate, sandstone, shale, coal	
					HASLAM	uKH	200	shale, siltstone, sandstone	
		SANTONIAN		COMOX	uKC	350	sandstone, conglomerate, shale, coal		
			EARLY	CENOMANIAN	QUEEN	conglomerate unit	IKac	900	conglomerate, greywacke
		ALBIAN		CHARLOTTE	siltstone shale unit	IKap	50	siltstone, shale	
		APTIAN ?							
		JURASSIC	MID	VALANGINIAN		LONGARM	IKL	250	greywacke, conglomerate, siltstone
				BARREMIAN					
				TITHONIAN		Upper Jurassic sediment unit	UJS	500	siltstone, argillite, conglomerate
CALLOVIAN									
TOARCIAN ?	BONANZA			volcanics	IJB	1,500	basaltic to rhyolitic lava, tuff, breccia, minor argillite, greywacke		
PLIENSCHACHIAN		HARBLEDOWN	IJM	-	argillite, greywacke, tuff				
TRIASSIC	LATE	NORIAN		PARSON BAY	URPB	450	calcareous siltstone, greywacke, silty-limestone, minor conglomerate, breccia		
		KARNIAN	VANCOUVER	QUATSINO	URQ	400	limestone		
				KARMUTSEN	muRK	4,500	basaltic lava, pillow lava, breccia, tuff		
				sediment-sill unit	URds	750	metasiltstone, diabase, limestone		
LADINIAN									
PALEOZOIC	DEV. or PENN. and EARLIER ? PERM.		SICKER	BUTTLE LAKE	CPBL	300	limestone, chert		
				sediments	CPSS	600	metagreywacke, argillite, schist, marble		
				volcanics	CPsv	2,000	basaltic to rhyolitic metavolcanic flows, tuff, agglomerate		

Source: Muller, G.E. Geology of Vancouver Island, Geological Survey of Canada no. O.F. 463, 1977.

These rocks are also evident 5.6 km southwest and 6.4 km west of Port McNeill as two peaks including Cluxewe Mountain and an unnamed smaller hill approximately 2.4 km to the northwest. These tertiary volcanics have affected the sediments as a vertical volcanic dyke was observed on the beach south of the Squash mine striking at 30 degrees east of north or directly in line with the smaller peak. This dyke intruded the sediments probably through a joint or fracture plane resulting from stress placed on the sediments as a result of Tertiary uplift. Frequent parallel joint sets in adjacent sandstones also exhibited similar orientation. It is probable that additional dykes not exposed occur in a radial fashion from the centers of the Tertiary volcanic occurrences.

Figure 5 Relationship of Formations of Vancouver Island



Source: Muller, G.E. Geology of Vancouver Island, Geological Survey of Canada no. O.F. 463, 1977.

The northern part of Vancouver Island has been subject to glaciation during the Pleistocene and also some earlier period, when Georgia Strait, Queen Charlotte Strait and the entire island were covered with a continuous ice sheet originating on the mainland and flowing southwest. Also, during the Pleistocene a number of glacial sequences originated from centres on Vancouver Island and ice flowed in all directions from these centres especially down the major valleys such as the Nimpkish Valley south of Port McNeill.

Glacial erosion and scour occurred on the higher elevations while varying thickness of glacial debris and outwash material were deposited on the lowland areas, in particular the relatively flat-lying basins. This glacial deposition has masked the underlying sediments very effectively on northern Vancouver Island, especially in the Suquash area, where unconsolidated overburden is known to be up to 30 meters thick. There are a few surface exposures of Cretaceous sediments along the tide line where erosive action of the sea has uncovered the bedrock and along major fault contacts where scarp lines occur.

Property Geology

The Suquash property is central to an area of Upper Cretaceous beds situated on the northeast coast of Vancouver Island, between the towns of Port McNeill and Port Hardy. The Suquash Basin includes an area roughly 4 km wide by 32 km long. In addition, a large portion of the basin lies beneath the waters

of Queen Charlotte Straight, Broughton Straight and the western part of Malcolm Island. The Suquash coal area is confined to the southwest by a major normal fault which has its down throw side to the northeast. The displacement of this fault is about 300 meters. Smaller northeast trending cross faults occur at both ends of the sedimentary area. Lone Tree Point and the point directly south of Suquash Creek are in a line of fault planes. The barrier reef to the east of Suquash Creek seems to be a north-south break and fault.

Most of the basin is bounded by faults but the amount of internal faulting is essentially unknown due to the paucity of rock exposures and marker horizons. However, general basin configuration and the results of past drilling suggest that faulting within the basin is not severe.

The site plan including the location of drill holes on the property are shown in Figure 7. The coal measures of the Suquash field are relatively flat. The coal seam mined dips slightly, about 4 degrees toward the north east. The roof and floor of the mine were practically level. The mine was relatively dry and required very little pumping. Water in the mine drained towards the bottom of the shaft. Ditches were cut along the underground haulage ways and cross cuts to keep the mine dry. Some dripping through the sides of the shaft was pumped out. When Suquash Collieries pumped water out of the mine in 1952, there was little water seepage into the mine.

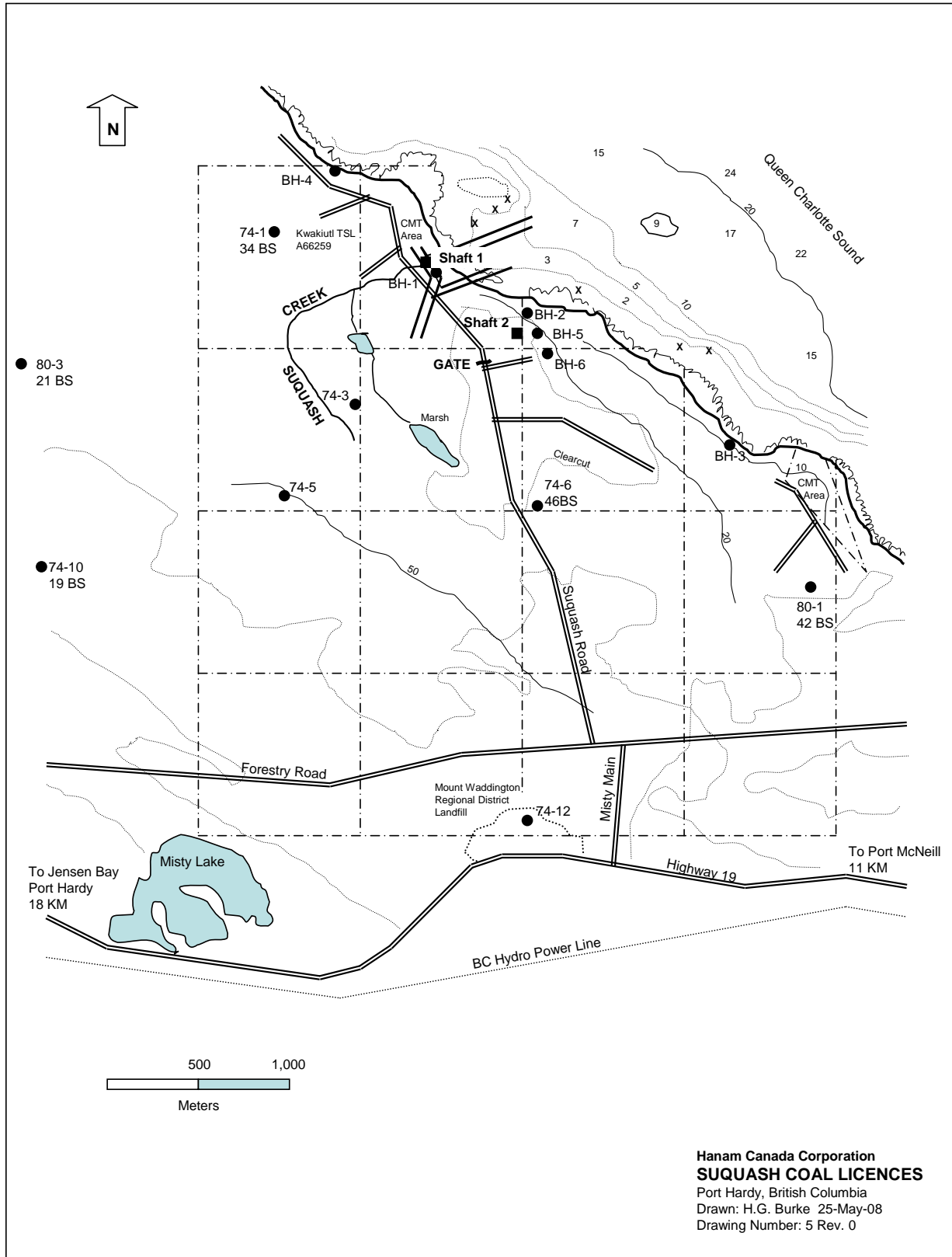
BC Ministry of Energy & Mines geologists calculated that the Suquash mine area has the potential to generate significant quantities of coal bed methane. However the author's review of records of past operations and ventilation fan capacities indicates there were relatively small amounts of methane gas generated and the mine was easily ventilated.

The most recent past owner of the Suquash coal licenses tried to raise financing for gas exploration on the property. The Suquash Sub-basin is on the southern end of the Queen Charlotte Basin and is the only part of the basin that is partly on land. This basin has previously been identified as having a high potential for oil and gas.⁹ The basin has been compared to the Cook Inlet, Alaska, and southern California continental borderland based on similarities in tectonic history and structural characteristics. Oil bearing Neogene strike-slip basins occur in the California borderland region. However, differences in types of petroleum source rocks in the California and Queen Charlotte basins preclude making direct petroleum endowment comparisons between the two regions.

The proponent has reviewed the drill core logs of deep wells drilled offshore in the Queen Charlotte Basin. All of these wells encountered multiple layers of coal down to a depth of 4,800 meters. An offshore well drilled by Shell in 1966, Sockeye B-10, found many coal seams and natural gas containing 78% methane, 12% ethane, 5% propane with no sulfur at a depth of 910 meters. This well also penetrated 40 meters of live-oil-stained Miocene sandstone. Oil staining was also found in Tertiary volcanic rocks and Neogene sandstones in wells drilled on the Queen Charlotte Islands. Indications of possible deep gas accumulations in Neogene strata have been identified on conventional seismic profiler in several offshore locations at a stratigraphic level similar to the Sockeye B-10 well show. The deepest hole so far drilled on the property was only 384 meters.

⁹ Hannigan, P.K., Dietrich, J.R., Lee, P.J., and Osadetz, K.G., Petroleum Resource Potential of Sedimentary Basins on the Pacific Margin of Canada, Geological Survey of Canada, Bulletin 564, July 12, 2001.

Figure 6 Site Plan



Hanam Canada Corporation
SUQUASH COAL LICENCES
 Port Hardy, British Columbia
 Drawn: H.G. Burke 25-May-08
 Drawing Number: 5 Rev. 0



Figure 6a

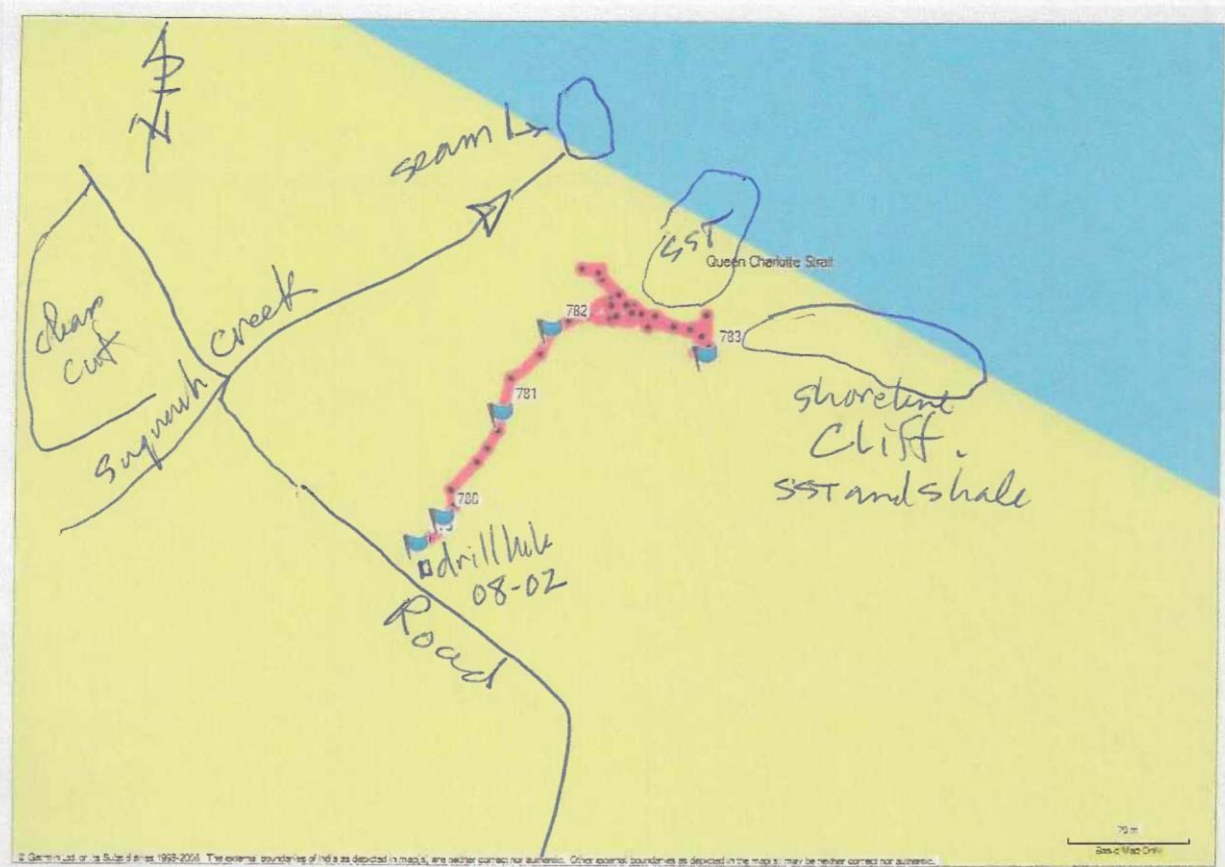


FIGURE 6b
 Access to Beach &
 Outcrops, 2012

COAL DEPOSIT MODEL CONSIDERATION

The sediments in the Suquash area are from the Upper Cretaceous Nanaimo Group and belong to the Northumberland and DeCourcy Formations of Campanian age.¹⁰ These two formational divisions belong to the third depositional cycle in the Nanaimo Group sequence, occurring above the Extension-Protection and Comox Formations, which are well known and highly coal-bearing formations of the Nanaimo and Comox areas of east-central Vancouver Island. In the field the drab coloured sandstones and buff-weathering pebble conglomerates of the Nanaimo Group are not easily relegated to their respective formational units.

Earlier workers have correlated the coal-bearing sequence in this area to the Extension-Protection Formation. Steve Gardiner assumed that Muller relied on fossil dating to place the age of the Suquash coal-bearing sediments as slightly younger than the Extension Protection Formation. The quality of the coal at Suquash as documented by D.B. Dowling and others is that of slightly lower rank than Comox and Extension-Protection Formations which would tend to support Muller's conclusions¹¹ but definitive fossil evidence is lacking.

The drill records and the underground seam sections from the old mine workings indicate the coal was formed in a constantly changing depositional environment that caused numerous shale and dirt bands to appear throughout the seam section. The drilling shows that characteristic was not a localized feature that was coincidental with the original mine location. Based on drill core results it would appear that coal quality is enhanced to the south and east of the former mine.

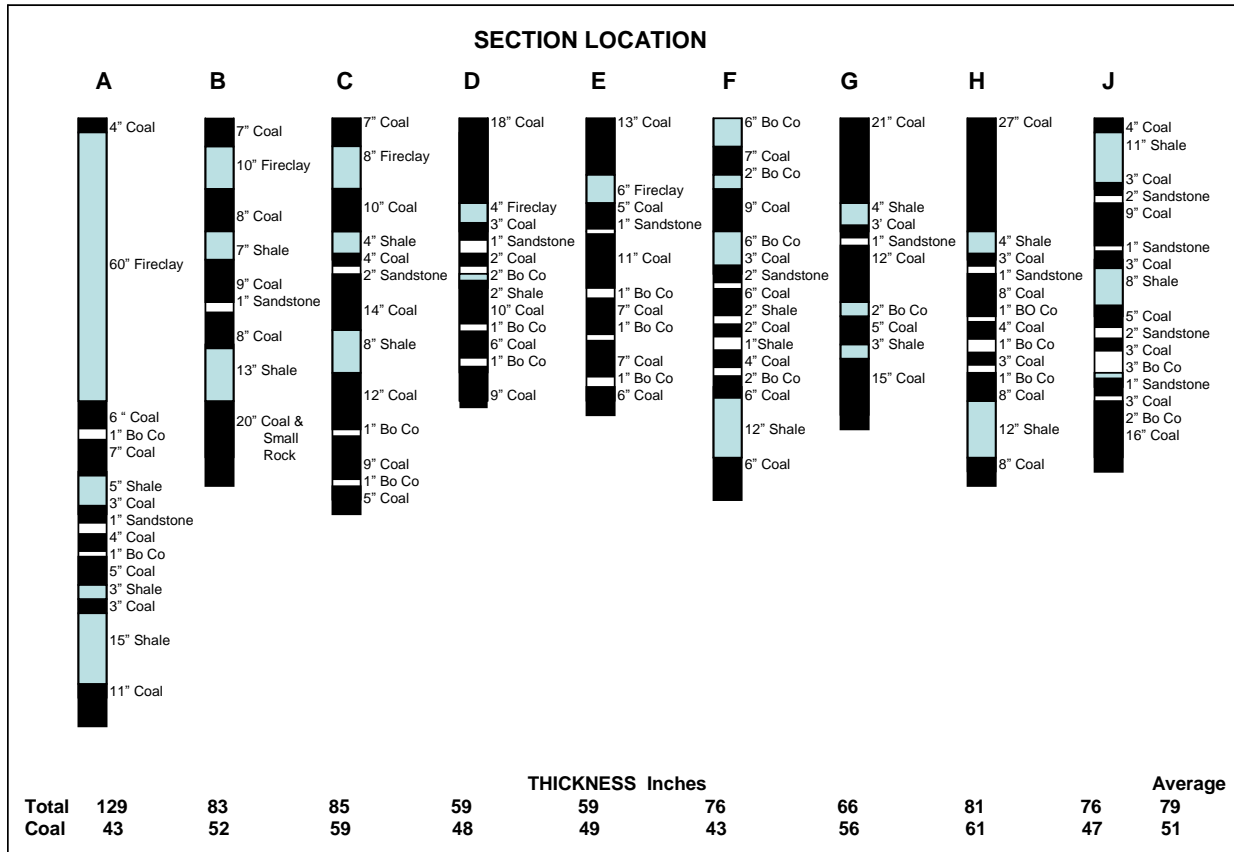
COAL MINE FACE SECTIONS

The coal face cross sections along the existing long wall and in two of the tunnels towards the sea are shown in Figure 8. The average coal thickness in these sections is 1.3 meters in a total seam of 2.0 meters. The seams are interspersed with beds of fireclay, shale, sandstone, and bone coal. Processing is required to produce coal that meets market specifications.

¹⁰ Muller, J.E., *The Geology of Vancouver Island*, 1977.

¹¹ Dowling, D.B., *Coalfields of British Columbia*, Geological Survey of Canada Memoir 69, 1915, p. 123.

Figure 7 Suquash Coal Mine Face Sections



DIAMOND DRILLING 2008

Four diamond drill holes were completed for a total of 1,085 metres HQ core as shown in Table 4.

TABLE 4
Drillhole Data

Hole No.	Location		Elevation	Length	Dip
	Northing	Easting			
SQ-08-01	5610573	624585	14	121.61	
SQ-08-02	5610800	624236	12	103.32	
SQ-08-03	5610205	624718	18	118.56	
SQ-08-04	5610081	625184	17	328.87	-90

Total: 672.36

Detail coal and rock samples from the core are listed on the following pages with the 2014 samples (33 samples) collected to compliment the original sampling.

Samples collected are shown as follows:

Sample transmittal note(Note: these samples are still pending submittal to the lab)

Suquash Project

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)		Sample interval (m)		Thickness (m)			Composites	Raw head analysis (air-dried basis):				
					From	To	Sampled	(Missing)	Total		Specific gravity	Moisture%	Ash %	Total Sulphur %	Sample weight (grams)
EG-1	SQ-01-01			roof siltstone	74.57	74.67	0.10	no data	0.10						
	SQ-01-02		2R	coal	74.67	75.12	0.45	no data	0.45	Prox +					
	SQ-01-03			floor siltstone	75.12	75.24	0.12	no data	0.12						
	SQ-01-04			roof siltstone	78.98	79.07	0.09	no data	0.09						
	SQ-01-05		2	coal	79.07	79.24	0.17	no data	0.17						
	SQ-01-06			rock	79.24	79.65	0.11	(0.30)	0.41						
	SQ-01-07			stony coal	79.65	79.86	0.21	no data	0.21						
	SQ-01-08			coal & rock	79.86	80.16	0.30	no data	0.30						
	SQ-01-09			floor siltstone	80.16	80.26	0.10	no data	0.10						
EG-2	SQ-02-01			roof	60.10	60.15	0.05	no data	0.05						
	SQ-02-02		1A	coal & sty co	60.15	60.52	0.37	no data	0.37	Prox +					
	SQ-02-03			shale	60.52	60.62	0.10	no data	0.10						
	SQ-02-04			coal	60.62	60.70	0.08	no data	0.08						
	SQ-02-05			floor	60.70	60.77	0.07	no data	0.07						
	SQ-02-06			roof	69.70	69.80	0.10	no data	0.10						
	SQ-02-07			coal	69.80	69.88	0.08	no data	0.08	Prox +					
	SQ-02-08 SQ-02-8A			coaly shale	69.88	70.00	0.12	nil	0.12	Prox +				combine these two sub-samples before head analysis	
	SQ-02-20			siltstone	70.00	70.28	0.28	nil	0.28						

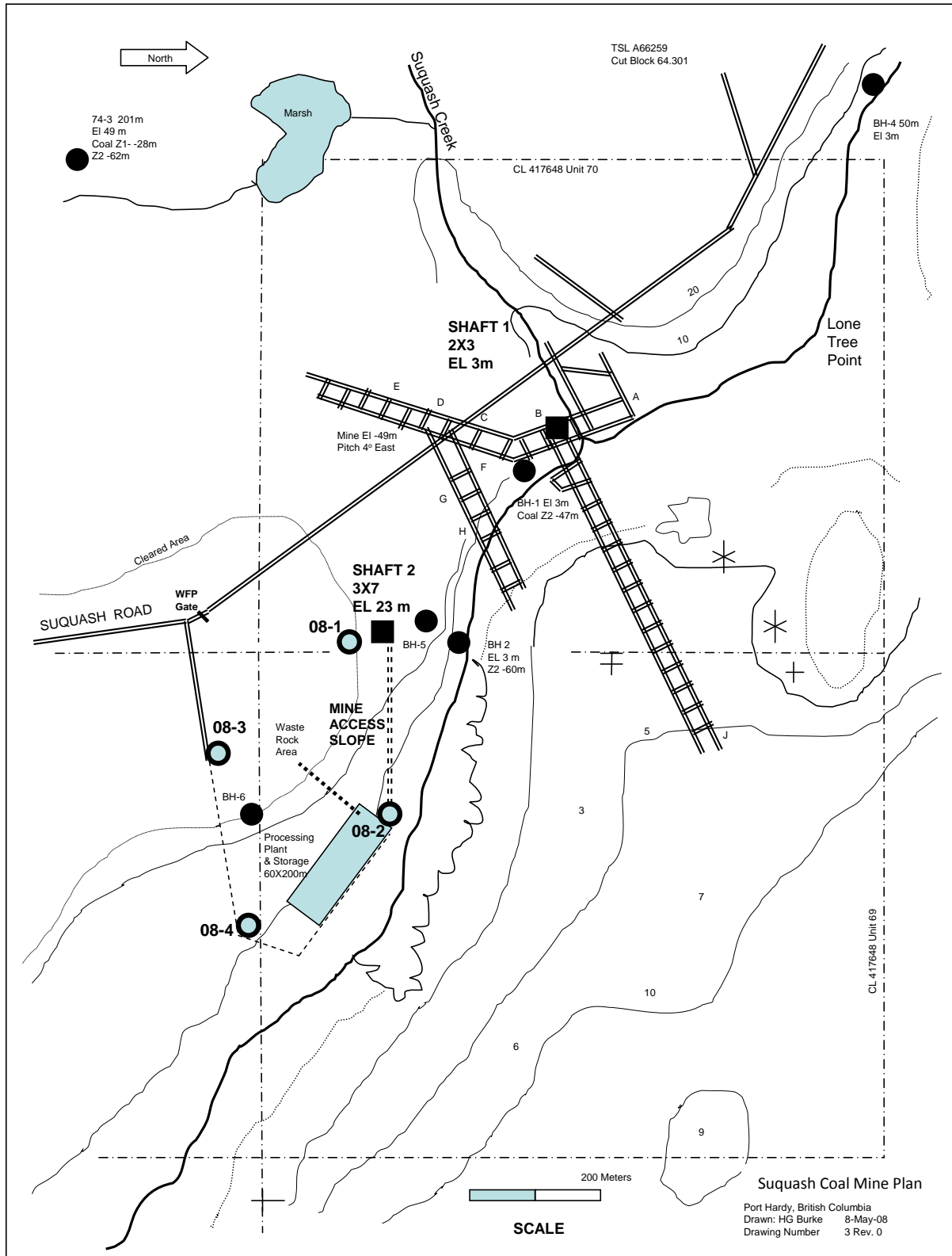
	SQ-02-21			slst / sh lam	70.28	70.60	0.32	nil	0.32							
	SQ-02-22			sh / sst lam	70.60	70.82	0.22	nil	0.22							
	SQ-02-09			roof	70.82	70.92	0.10	no data	0.10	Comp. No.2A						
	SQ-02-10		2R	coal & sty co	70.92	71.54	0.62	no data	0.62							
	SQ-02-11			shale	71.54	71.71	0.17	no data	0.17							
	SQ-02-12		2	coal & shale	71.71	72.59	0.88	no data	0.88							
	SQ-02-13			shale	72.59	72.89	0.30	no data	0.30							
Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)		Sample interval (m)		Thickness (m)				Composites	Raw head analysis (air-dried basis):				
					From	To	Sampled	(Missing)	Total			Specific gravity	Moist-ure%	Ash %	Total Sulphur %	Sample weight (grams)
EG-2	SQ-02-14		2	coal & shale	72.89	73.13	0.24	no data	0.24	Prox+						
	SQ-02-15			shale	73.13	73.63	0.44	(0.06)	0.50							
	SQ-02-16			coal	73.63	73.72	0.09	no data	0.09							
	SQ-02-17			shale	73.72	74.04	0.32	no data	0.32							
	SQ-02-18			coal & sty co	74.04	74.22	0.18	no data	0.18							
	SQ-02-19			floor	74.22	74.32	0.10	no data	0.10							
EG-3	SQ-03-15			roof sst & sh	34.70	34.80	0.10	no data	0.10							
	SQ-03-16		0	coal & shale	34.80	35.22	0.42	no data	0.42	Prox +						
	SQ-03-17			floor siltstone	35.22	35.32	0.10	no data	0.10							
	SQ-03-01			roof sh (ash?)	57.10	57.20	0.10	no data	0.10							
	SQ-03-02		1?	coal	57.20	57.27	0.07	no data	0.07	Prox+						
	SQ-03-03			sandstone	57.27	57.52	0.25	no data	0.25							
	SQ-03-04			coal	57.52	57.96	0.44	no data	0.44							
	SQ-03-05			floor sst	57.96	58.065	0.105	no data	0.105							

	SQ-03-18		2R	coal	95.63	96.15	0.52	nil	0.52	Prox+					
	SQ-03-06			roof	100.77	100.85	0.08	no data	0.08	Comp. No.3A					
	SQ-03-07			coal	100.85	101.00	0.13	(0.02)	0.15						
	SQ-03-08 SQ-03-08A		2	shale	101.00	101.38	0.38	no data	0.38					combine these two sub-samples before head analysis	
	SQ-03-09			coal & rock	101.38	101.86	0.48	no data	0.48						
	SQ-03-10 SQ-03-10A			shale and sst	101.86	102.14	0.28	no data	0.28					combine these two sub-samples before head analysis	
	SQ-03-11			coal	102.14	102.35	0.21	no data	0.21						
Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)	Sample interval (m)		Thickness (m)			Composites	Raw head analysis (air-dried basis):					
				From	To	Sampled	(Missing)	Total		Specific gravity	Moist-ure%	Ash %	Total Sulphur %	Sample weight (grams)	
EG-3	SQ-03-12 SQ-03-12A		2	shale	102.35	102.66	0.31	no data	0.31	No.3A (cont.)				combine these two sub-samples before head analysis	
	SQ-03-13			coal & rock	102.66	103.80	1.14	no data	1.14						
	SQ-03-14		floor	103.80	103.90	0.10	no data	0.10							
	SQ-03-19			shale	103.90	104.38	0.48	nil	0.48						
	SQ-03-20			shale	104.38	104.60	0.22	nil	0.22						
	SQ-03-21			siltstone	104.60	104.81	0.21	nil	0.21						
	SQ-03-22			sandstone	104.81	105.17	0.36	nil	0.36						
EG-4	SQ-04-01			shale roof	39.80	39.90	0.10	no data	0.10						
	SQ-04-02		0	coal	39.90	40.20	0.30	no data	0.30	Prox +					
	SQ-04-03			sst floor	40.20	41.00	0.0		0.10						
	SQ-04-04			roof	106.93	107.03	0.10	no data	0.10	Comp No.4A					
	SQ-04-05		2R	coal	107.03	107.40	0.37	no data	0.37						

	SQ-04-06 SQ-04-6A			shale	107.40	108.22	0.82	no data	0.82						combine these two sub-samples before head analysis
	SQ-04-07		2	coal & shale	108.22	108.64	0.42	no data	0.42	Comp. No.4B					
	SQ-04-08			shale	108.64	108.83	0.19	no data	0.19						
	SQ-04-09			coal	108.83	108.90	0.07	no data	0.07						
	SQ-04-10			shale	108.90	109.05	0.15	no data	0.15						
	SQ-04-11			coal	109.05	109.10	0.05	no data	0.05						
	SQ-04-12			sandstone	109.10	109.23	0.12	(0.01)	0.13						
	SQ-04-13			coal	109.23	109.32	0.09	no data	0.09						
	SQ-04-14			shale	109.32	109.46	0.14	no data	0.14						
Site	Sample No.	Lab No.		Coal bed designation (local nomenclature)		Sample interval (m)		Thickness (m)			Composites	Raw head analysis (air-dried basis):			
			From			To	Sampled	(Missing)	Total	Specific gravity		Moisture%	Ash %	Total Sulphur %	Sample weight (grams)
EG-4	SQ-04-15		2	coal	109.46	109.60	0.14	no data	0.14	No.4B					
	SQ-04-16			floor	109.60	109.70	0.10	no data	0.10						
	SQ-04-97			coalified log	coal	281.87	281.91			0.04	Prox +				
				coaly shale	281.91	281.94			0.03						
				coal	281.94	281.97			0.03						

Each drill hole intersected a conformable sequence of sandstone-shale-conglomerate with minor coaly beds (refer to Appendix III for drill logs #1 and #4).

Figure 8 Mine Plan



PREVIOUS EXPLORATION 2012

Previous exploration program in 2012 consisted of checking the beach exposures and cliff outcrops along the shoreline.

The hangingwall sandstone which shows a micro-undulation caused by soft sediment deformation slightly disrupting bedding.

The exposures on the beach and in the shoreline cliff correlate closely, as expected, with the upper part of each of the four 2008 drill holes.

A typical section is outlined below:

From	To	Lithology	Remarks
4.85	5.85	Sandstone	Sandstone cross bedded 0.40cm at the bottom
5.85	8.85	Sandstone	Sandstone partly laminated at 7°
8.85	9.05	Sandstone	
9.05	10.48	Sandstone	Partly laminated at 5°
10.48	12.03	Sandstone	Lower contact erosional
12.03	13.33	Siltstone	
13.33	13.63	Siltstone	0.30cm at the bottom, contact gradational
13.63	14.91	Sandstone	
14.91	16.25	Sandstone	BCN at 15m
16.25	16.69	CST	
16.69	16.74	Coal, Bright	Bright coal
16.74	16.87	Coal, BN	Coal
16.87	17.10	CST	CST with thin laminational bright coal
17.10	17.32	Sandstone	With lamination of coal
17.31	17.40	Siltstone	
17.40	17.48	CST	With laminations of coal
17.48	17.57	Coal, Dull	
17.57	17.63	Coal, Bn	
17.63	17.68	CST	
17.68	17.72	Sandstone	
17.72	17.97	Sandstone	
17.97	20.97	Sandstone	3° at 20.30m
20.97	22.01	Sandstone	5° at 69.5m
22.01	23.06	Sandstone	Lower contact irregular
23.06	23.21	Sandstone	Partly silty



Figure 9 Airphoto Key Map

WORK PROGRAM 2013-2014

Work in 2014 consisted of assaying 33 samples collected from the 2008 drill hole #1 and #4 to complete the coal testing of the sequence which was encountered. These samples are ultimately destined to be sent to David Ko, Loring Labs, 629 Beaverdam, Calgary, Alberta (403-274-2777).

Assays were conducted by using an XRF Unit factory calibrated (Cert No. 0154-0557-1) on October 30, 2013, Instrument #540557 Type Olympus DPO-2000 Delta Premium. The instrument was calibrated using Alloy Certified reference materials by ARM1 and NIS5 standards. Only certified operators were employed and that were experienced in XRF assay procedures. Read times were 120 seconds or greater.

Results are shown in Appendix III.

Results reveal that coal samples (such as SQ-04-36) show low Al, Si and S. Calcium is slightly elevated (2.3%) due to druzey calcite crystals long fractures. Sample SQ-01-11 has 4.8% Ca.

Shaley samples, such as SQ-04-47 have Al content up to 11.22% Al, reflective of the aluminous nature of the ash interbeds. Shaley samples include SQ-04-39, 41, 32, 35 and 38, SQ-04-38 and SQ-01-10, SQ-01-33, 34 and 36.

INTERPRETATION AND CONCLUSIONS

Previous results of drilling 4 holes totalling 672.36m in 2008 which all intersected a typical Lower Cretaceous sandstone-shale-minor coal sections in each hole. The author's interpretation of past exploration data is that there may be an in-situ coal resource of 11.2 million tonnes that should provide 3.7 million tonnes of saleable coal. This resource is sufficient to supply two cement plant customers for about 15 years. Whether such a small scale mining operation would be economic depends on a variety of factors beyond the scope of this report.

There are a number of environmental issues that require further investigation most notably the location and method of disposal of waste rock and tailings from coal cleaning.

Results reveal that coal samples (such as SQ-04-36) show low Al, Si and S. Calcium is slightly elevated (2.3%) due to druzy calcite crystals long fractures. Sample SQ-01-11 has 4.8% Ca.

Shaley samples, such as SQ-04-47 have Al content up to 11.22% Al, reflective of the aluminous nature of the ash interbeds. Shaley samples include SQ-04-39, 41, 32, 35 and 38, SQ-04-38 and SQ-01-10, SQ-01-33, 34 and 36.

The author concludes:

- 1) Further drilling is warranted in order to provide more data to design and construct an exploration decline for bulk sampling the former Suquash Coal mine 25 km east of Port Hardy. This conclusion depends on the company obtaining a letter of support from the Kwakiutl First Nation subject to a number of social, economic, and environmental conditions.
- 2) A bulk sample from the former coal workings at 50 meters below sea level should be extracted in order that customers can test the coal and measure its performance relative to competitive supplies. The sample would also provide a basis for estimating saleable coal recovery rates.
- 3) Baseline environmental information is needed in order to plan for waste rock and tailings disposal.

RECOMMENDATIONS

Mapping

An initial mapping project should be undertaken for the lease area as far south as Highway 19 and the parallel BC Hydro Power line approximately as shown in Figure 8 and 8a. A larger scale map should be made for the area near the existing two shafts and underground workings including data from the historical mine survey maps approximately as shown in Figure 11. The maps should include:

- Coal licence grid and boundaries
- Portion of adjacent oil and gas license boundary
- Surface mineral titles boundaries on the coal property
- Undersea outcrop about 3 kilometers from shore
- Former access shafts, mining equipment still in place, and trails
- The underground tunnel locations based on historical maps confirmed by surface tests
- Land and hydrographic contours
- Seasonal marshes and small unnamed creeks
- The extent of past logging operations and logging roads
- Archaeological information
- Past drill hole locations
- Suquash Road, Misty Main, and the Western Forest Products' Road

Drilling program

An initial diamond drill program of six more holes each 100 meters and one hole totalling 300 metres should be undertaken in the vicinity of the number 2 shaft. Data from these holes would be used to assist in determining the optimum location for the decline to the number 2 coal seam. The specific locations of the proposed holes would be determined following the mapping program.

If the proponent can acquire the subsurface oil and gas rights to the coal license area, then an industry partner should be recruited to extend the depth of one well to 1,000 meters in order to penetrate potential gas bearing strata. This deeper well should be a separately funded venture.

Seismic Program

Although the Ministry of Energy & Mines normally issues oil and gas subsurface titles by a public auction process the proponent has submitted an Expression of Interest to acquire the subsurface rights in exchange for conducting a seismic exploration program. This program would supplement coal drilling results and is recommended in order to secure the subsurface oil and gas rights to the property.

The seismic testing would consist of setting off dynamite charges on the surface or using vibrating head at the surface and recording seismic waves at detectors placed at bottom of the coal exploration drill holes. Results on underground formations would be obtained for a distance around the wells equal to about half their depth.

Budget

An exploration program including: geological compilation, mapping of all previous work to common scales, grid, and diamond drilling. Some preliminary archaeological and environmental baseline studies are also proposed.

For the nearby Orca Sand & Gravel project seismic surveys were carried out by Frontier Geosciences Inc. Drilling and sampling was by Lane Christensen Co., drilling contractor. Past coal testing was by Commercial Testing & Engineering Co., North Vancouver. We have obtained unit prices site preparation, road work, drilling and blasting from Rockpro, Port Hardy.

Table 5 Exploration Budget

STAGE 1		
Geological mapping	10,000	
Base map detail	8,000	
Planning, selection and site confirmation	7,500	
Compilation, digitization	4,000	
Characterization and analysis of coal	3,500	
Consulting, supervision and reports	<u>8,000</u>	
		45,000
Surface diamond drilling	54,000	
600 meters @\$90/meter, Includes drill moves & Mob & demob, consumables, grease, boxes	6,000	
Characterization, coal analyses and washability tests	10,000	
Consulting, supervision and reports	24,000	
Access road improvements and excavator standby	20,000	
Trenching	5,000	
Report Preparation, Program Supervision	<u>25,000</u>	
		<u>125,000</u>
Stage 1 Total		195,000
(Seismic Testing if required - \$50,000)		
STAGE 2 Contingent on results of Stage 1		
Access to slope	20,000	
Drive decline 250 meters X \$2,000/meter (probably high)	435,000	
Coal sample extraction	240,000	
Coal crushing and washing	90,000	
Coal transport	20,000	
Coal quality testing	10,000	
First Nations consultation and studies	35,000	
Archaeological and environmental studies	20,000	
Consulting, Supervision, Reports, Permitting	<u>30,000</u>	
Stage 2 Total		<u>900,000</u>
Stage 1 & 2 Total		\$ 1,095,000

An inspection of Airphoto Linears shows a strong northwest orientation to the most prominent reflecting primary bedding within the basin. A more northerly linear is present along the shoreline, probably due to faulting as seen in the old mine.

The most prominent Airphoto linears in the area are the northwest structures which reflect primary bedding within the basin. These northwest structures appear to control topography.

Primary bedrock structures/faults appear to be reflected by more northerly linears along the shore. These linears appear to be late stage.

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APPENDIX I

STATEMENT of QUALIFICATIONS

June 1, 2014

STATEMENT OF QUALIFICATIONS

I, J. T. (Jo) Shearer, M.Sc., P.Geo., of Unit 5 – 2330 Tyner St., Port Coquitlam, B.C. V3C 2Z1 do hereby certify that:

I am an independent consulting geologist and principal of Homegold Resources Ltd.

My academic qualifications are as follows: Bachelor of Science, (B.Sc.) in Honours Geology from the University of British Columbia, 1973, Associate of the Royal School of Mines (ARSM) from the Imperial College of Science and Technology in London, England in 1977 in Mineral Exploration, and Master of Science (M.Sc.) in Geology from the University of London, UK, 1977

I am a Member in good standing of the Association of Professional Engineers and Geoscientists in the Province of British Columbia (APEGBC) Canada, Member No.19279 and a Fellow of the Geological Association of Canada, (Fellow No. F439)

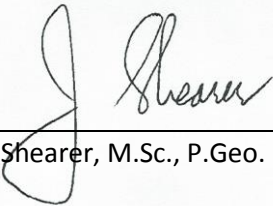
I have been professionally active in the mining industry continuously for over 40 years since initial graduation from university and have worked on several nearby mineral properties.,

I last inspected the Suquash Coal Property on May 5, 6, 10 + 11, 2014 and May 1 to 2, 2013 and also in the past supervised the diamond drill program between October 20, 2008 and November 1, 2008.

I am responsible for the preparation of all sections of the technical report entitled “Assessment Report on the Suquash Area” dated June 1, 2014.

Signed and dated in Vancouver B.C.

June 1, 2014
Date


J.T. (Jo) Shearer, M.Sc., P.Geo.

APPENDIX II

STATEMENT of COSTS

June 1, 2014

Statement of Costs Suquash Project Statement of Costs

Magnetometer, Geology, Travel and Report

	Without HST
Wages	
J. T. Shearer, M.Sc., P.Geo., Geologist 4 days @ \$700/day,	\$ 2,800.00
Ron Savelieff, 3 days @ \$400/day, June 2, 2012	1,200.00
	\$ 4,000.00
Wages Sub-total	
Expenses	
Truck 1, Rental, fully equipped 4x4, 4 days @ \$120/day	480.00
Fuel, 1,600km	270.00
Hotel, 4 nights, 2 people	580.25
Food/Supplies, 7 person days @ \$50/day	350.00
XRF Assays	800.00
Report Preparation	1,400.00
Word Processing and Reproduction	350.0
	\$ 4,230.25
Expenses Sub-total	
	\$ 8,230.25
Grand Total	

Event # 5504202
Date Filed May 14, 2014
Work Applied \$3,600.00
PAC \$1,425.81
Total Filed \$5,025.81

Event # 5513245
Date Filed July 17, 2014
Work Applied \$4,510.00
PAC \$1,929.34
Total Filed \$6,439.34

APPENDIX III

DRILL LOG EXCERPTS

June 1, 2014

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)		Sample interval (m)		Thickness (m)			Compo- sites / notes	Raw head analysis (air-dried basis):				
					From	To	Sampled	(Missing)	Total		Specific gravity	Moist- ure%	Ash %	Total Sulphur %	Original sample weight (grams)
SQ-08-1			0	coal	16.69	16.87			0.18						
				shale	16.87	17.10			0.23						
				sandstone	17.10	17.32			0.22						
				siltstone	17.32	17.40			0.08						
				shale	17.40	17.48			0.08						
				coal	17.48	17.63			0.15						
				coal	33.09	33.24			0.15						
				coal	40.01	40.07			0.06						
				shale	40.07	40.52			0.45						
			1	coal	40.52	40.77			0.25						
				shale	40.77	41.12			0.35						
				coal	41.12	41.27			0.15						
				coal	57.86	57.90			0.04						
			1A	coaly shale	62.42	62.52			0.10						
			coal	66.08	66.17			0.09							
SQ-01-01	B 93185			roof siltstone	74.57	74.67	0.10	no data	0.10		2.49	1.62	88.27	0.19	713
SQ-01-02	B 93186	2R		coal	74.67	75.12	0.45	no data	0.45	Prox: VM 33.11 FC 45.86	1.43	5.15	15.88	1.15	1882
SQ-01-03	B 93187			floor siltstone	75.12	75.24	0.12	no data	0.12		2.57	2.02	90.24	0.03	831
SQ-01-04	B 93188			roof siltstone	78.98	79.07	0.09	no data	0.09		2.46	2.34	88.45	0.13	622
SQ-01-05	B 93189			coal	79.07	79.24	0.17	no data	0.17		1.39	4.90	11.64	1.88	623
SQ-01-06	B 93190			rock	79.24	79.65	0.11	(0.30)	0.41		2.40	2.51	76.34	6.09	713
SQ-01-07	B 93191	2		stony coal	79.65	79.86	0.21	no data	0.21		1.90	3.06	51.86	5.52	1228
SQ-01-08	B 93912			coal & rock	79.86	80.16	0.30	no data	0.30		1.59	5.00	32.23	0.16	1316
SQ-01-09	B 93193			floor siltstone	80.16	80.26	0.10	no data	0.10		2.39	3.91	84.12	0.49	659

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)	Sample interval (m)		Thickness (m)			Composites / notes	Raw head analysis (air-dried basis):				
				From	To	Sampled	(Missing)	Total		Specific gravity	Moisture%	Ash %	Total Sulphur %	Sample weight (grams)
SQ-08-1	SQ-01-10		roof	81.69	81.79	0.10	no data	0.10						
	SQ-01-11		coal	81.79	81.90	0.11	no data	0.11						
	SQ-01-12		floor	81.90	82.00	0.10	no data	0.10						
	SQ-01-13		roof	83.81	83.91	0.10	no data	0.10						
	SQ-01-14		coal	83.91	84.00	0.09	no data	0.09						
	SQ-01-15		floor	84.00	84.08	0.08	no data	0.08						
	SQ-01-16		roof	84.84	84.94	0.10	no data	0.10						
	SQ-01-17		coal	84.94	85.02	0.06	0.02	0.08						
	SQ-01-18		floor	85.02	85.12	0.10	no data	0.10						
	SQ-01-19		roof	85.195	85.26	0.065	no data	0.065						
	SQ-01-20		coal	85.26	85.40	0.14	no data	0.14						
	SQ-01-21		mudstone	85.40	85.63	0.23	no data	0.23						
	SQ-01-22		coal	85.63	85.71	0.08	no data	0.08						
	SQ-01-23		floor	85.71	85.81	0.10	no data	0.10						
	SQ-08-2	SQ-02-01	B 93194	roof	60.10	60.15	0.05	no data	0.05		2.60	2.00	89.03	1.35
SQ-02-02		B 93915	1A coal & sty co	60.15	60.52	0.37	no data	0.37		1.49	4.65	18.00	1.84	1604
SQ-02-03		B 93916	shale	60.52	60.62	0.10	no data	0.10		2.02	2.88	61.56	0.28	542
SQ-02-04		B 93917	coal	60.62	60.70	0.08	no data	0.08		1.56	4.67	25.72	0.58	304
SQ-02-05		B 93918	floor	60.70	60.77	0.07	no data	0.07		2.57	2.12	87.86	0.06	453
SQ-02-27			flint clay?			0.40	nil	0.40						
SQ-02-06	B 93199	roof	69.70	69.80	0.10	no data	0.10		2.63	2.22	89.37	1.15	661	

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)		Sample interval (m)		Thickness (m)			Compos- ites / notes	Raw head analysis (air-dried basis):				
					From	To	Sampled	(Missing)	Total		Specific gravity	Moist- ure%	Ash %	Total Sulphur %	Sample weight (grams)
SQ-08-2	SQ-02-07	B 93200	2R	coal	69.80	69.88	0.08	no data	0.08		1.47	4.48	15.86	3.45	331
	SQ-02-08/8A	B 93201		coaly shale	69.88	70.00	0.12	nil	0.12		1.98	2.76	47.82	9.77	780
	SQ-02-20	B 93202		siltstone	70.00	70.28	0.28	nil	0.28		2.71	2.66	92.08	1.23	2098
	SQ-02-21	B 93203		slst / sh lam	70.28	70.60	0.32	nil	0.32		2.66	2.61	92.70	0.42	2403
	SQ-02-22	B 93204		sh / sst lam	70.60	70.82	0.22	nil	0.22		2.57	2.67	85.10	2.67	1450
	SQ-02-09	B 93205		roof	70.82	70.92	0.10	no data	0.10		2.54	2.34	81.43	4.05	712
	SQ-02-10	B 93206	2	coal & sty co	70.92	71.54	0.62	no data	0.62	comp. no. 1 [B 93583]	1.55	4.62	22.52	3.08	2722
	SQ-02-11	B 93207		shale	71.54	71.71	0.17	no data	0.17		2.45	2.72	81.41	0.23	1245
	SQ-02-12	B 93208		coal & shale	71.71	72.59	0.88	no data	0.88		1.57	4.47	26.43	0.86	3798
	SQ-02-13	B 93209		shale	72.59	72.89	0.30	no data	0.30		2.29	2.49	72.20	2.97	1914
	SQ-02-14	B 93210		coal & shale	72.89	73.13	0.24	no data	0.24		1.83	4.13	44.48	1.48	1660
	SQ-02-15	B 93211		shale	73.13	73.63	0.44	(0.06)	0.50		2.49	3.08	82.09	0.09	2794
	SQ-02-16	B 93212		coal	73.63	73.72	0.09	no data	0.09	comp. no. 2 [B 93584]	1.68	4.53	35.65	0.35	375
	SQ-02-17	B 93213		shale	73.72	74.04	0.32	no data	0.32		2.40	2.79	82.72	0.09	2208
	SQ-02-18	B 93214		coal & sty co	74.04	74.22	0.18	no data	0.18		1.55	5.59	25.58	0.38	771
	SQ-02-19	B 93215		siltstone	74.22	74.32	0.10	no data	0.10		2.21	3.30	75.04	0.13	626
	SQ-02-23			sst, quartzitic	74.32	75.04	0.72	nil	0.72						
	SQ-02-24			slst, qtztic	75.04	75.70	0.66	nil	0.66						
	SQ-02-25			sst, quartzitic	75.70	76.16	0.46	nil	0.46						
	SQ-02-26			coal	<i>check sample (lump coal from Comox Basin)</i>										
			coal	99.68	99.73			0.05							
			shale	99.73	100.43			0.70							

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)	Sample interval (m)		Thickness (m)			Composites / notes	Raw head analysis (air-dried basis):					
				From	To	Sampled	(Missing)	Total		Specific gravity	Moisture%	Ash %	Total Sulphur %	Sample weight (grams)	
SQ-08-2			2A coal	100.43	100.56			0.13							
			stony coal	100.56	100.65			0.09							
SQ-08-3	SQ-03-15	B 93216		roof sst & sh	34.70	34.80	0.10	no data	0.10		2.40	2.07	78.44	2.30	678
	SQ-03-16	B 93217	0	coal & shale	34.80	35.22	0.42	no data	0.42	Prox VM 34.19 FC 39.77	1.52	4.95	21.09	1.88	1725
	SQ-03-17	B 93218		floor siltstone	35.22	35.32	0.10	no data	0.10		2.20	2.46	64.01	6.27	702
				coal	47.40	47.49			0.09						
				coal	50.84	50.97			0.13						
SQ-03-01	B 93219			roof sh (ash?)	57.10	57.20	0.10	no data	0.10		2.63	3.10	91.54	0.26	354
SQ-03-02	B 93220			coal	57.20	57.27	0.07	no data	0.07		1.58	3.78	28.11	1.66	218
SQ-03-03	B 93221	1?		sandstone	57.27	57.52	0.25	no data	0.25		2.60	1.90	87.34	2.46	1938
SQ-03-04	B 93222			coal	57.52	57.96	0.44	no data	0.44		1.46	3.83	13.44	3.16	1474
SQ-03-05	B 93223			floor sst	57.96	58.065	0.105	no data	0.105		2.56	1.63	87.26	1.00	724
				stony coal	79.52	79.58			0.06						
				coal	81.29	81.36			0.07						
		1A		coal	84.94	85.05			0.11						
				coal	90.52	90.56			0.04						
SQ-03-18	B 93224	2R		coal	95.63	96.15	0.52	nil	0.52	Prox VM 33.41 FC 48.31	1.45	4.57	13.71	0.96	2079
SQ-03-06	B 93225			roof	100.77	100.85	0.08	no data	0.08		2.57	2.29	88.69	0.14	586
SQ-03-07	B 93226			coal	100.85	101.00	0.13	(0.02)	0.15		1.45	4.27	14.36	1.81	535
SQ-03-08/08A	B 93227			shale	101.00	101.38	0.38	no data	0.38		2.45	2.30	78.47	3.74	2519
SQ-03-09	B 93228	2		coal & rock	101.38	101.86	0.48	no data	0.48		1.62	3.49	29.70	3.79	2146
SQ-03-10/10A	B 93229			shale and sst	101.86	102.14	0.28	no data	0.28	comp. 3 [B 93585]	2.58	2.31	86.35	0.07	1850
SQ-03-11	B 93230			coal	102.14	102.35	0.21	no data	0.21		1.50	4.34	19.03	0.64	852

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)		Sample interval (m)		Thickness (m)			Compos- ites / notes	Raw head analysis (air-dried basis):				
					From	To	Sampled	(Missing)	Total		Specific gravity	Moist- ure%	Ash %	Total Sulphur %	Sample weight (grams)
SQ-08-3	SQ-03-12/12A	B 93231	2	shale	102.35	102.66	0.31	no data	0.31	Comp. no.3 (cont'd)	2.51	1.92	84.65	0.11	2189
	SQ-03-13	B 93232		coal & rock	102.66	103.80	1.14	no data	1.14		1.75	3.02	42.60	1.41	5501
	SQ-03-14	B 93233	floor	103.80	103.90	0.10	no data	0.10	2.65		2.43	89.08	0.06	669	
	SQ-03-19	B 93234	shale	103.90	104.38	0.48	nil	0.48	2.66		2.32	89.20	0.09	3075	
	SQ-03-20	B 93235	shale	104.38	104.60	0.22	nil	0.22	2.17		2.83	71.22	0.53	1364	
	SQ-03-21	B 93236	siltstone	104.60	104.81	0.21	nil	0.21	2.64		2.96	92.67	0.04	1401	
	SQ-03-22	B 93237	sandstone	104.81	105.17	0.36	nil	0.36	2.71		2.81	94.96	0.02	2438	
SQ-08-4	SQ-04-01	B 93238	0	shale roof	39.80	39.90	0.10	no data	0.10	Prox: VM 36.00 FC 40.05	2.70	1.50	89.08	2.25	735
	SQ-04-02	B 93239		coal	39.90	40.20	0.30	no data	0.30		1.51	3.43	20.52	3.68	1069
	SQ-04-03	B 93240		sst floor	40.20	41.00	0.0		0.10		2.74	1.34	91.98	0.69	708
				bony coal	50.73	50.80									
				stony coal	50.80	50.90									
	Methane 1			coal	60.38	60.49	0.11	no data	0.11						
				coal	61.70	61.75			0.05						
				1	coal	62.39	62.43			0.04					
			shale		62.43	62.49			0.06						
	Methane 2			coal & sty co	62.49	62.58			0.09						
	Methane 3				coal	63.75	63.78			0.03					
					shale	63.78	63.83			0.05					
					coal	63.83	63.86			0.03					
				1A	coal	88.46	88.58		(0.06)	0.12					
			stony coal		88.58	88.66			0.08						

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)		Sample interval (m)		Thickness (m)			Compo- sites / notes	Raw head analysis (air-dried basis):					
					From	To	Sampled	(Missing)	Total		Specific gravity	Moist- ure%	Ash %	Total Sulphur %	Sample weight (grams)	
SQ-08-4	SQ-04-04	B 93241		roof	106.93	107.03	0.10	no data	0.10	comp. no. 4 [B 93586]	2.35	2.72	71.94	6.49	632	
	SQ-04-05	B 93242	2R	coal	107.03	107.40	0.37	no data	0.37		1.54	4.11	19.36	5.50	1695	
	SQ-04-06/06A	B 93243		shale	107.40	108.22	0.82	no data	0.82		2.54	2.79	89.19	0.12	5756	
	SQ-04-07	B 93244	2	coal & shale	108.22	108.64	0.42	no data	0.42		1.58	3.87	28.31	2.02	1913	
	SQ-04-08	B 93245		shale	108.64	108.83	0.19	no data	0.19		2.11	2.88	63.23	5.51	1325	
	SQ-04-09	B 93246		coal	108.83	108.90	0.07	no data	0.07		1.45	5.21	11.47	0.84	246	
	SQ-04-10	B 93247		shale	108.90	109.05	0.15	no data	0.15		2.33	2.48	79.71	0.18	997	
	SQ-04-11	B 93248		coal	109.05	109.10	0.05	no data	0.05		1.52	4.61	23.86	0.62	226	
	SQ-04-12	B 93249		sandstone	109.10	109.23	0.12	(0.01)	0.13		2.41	1.92	84.63	0.25	835	
	SQ-04-13	B 93250		coal	109.23	109.32	0.09	no data	0.09		1.60	4.82	27.28	2.15	386	
	SQ-04-14	B 93251		shale	109.32	109.46	0.14	no data	0.14		1.99	3.23	54.28	5.79	785	
	SQ-04-15	B 93252		coal	109.46	109.60	0.14	no data	0.14		1.43	5.29	11.77	0.77	536	
	SQ-04-16	B 93253			floor	109.60	109.70	0.10	no data		0.10	2.35	3.26	76.32	1.97	515
				coal	140.15	140.18			0.03							
				coal & rock	145.15	145.17			0.02							
	SQ-04-17			roof	146.55	146.68	0.13	nil	0.13							
SQ-04-18		2A	coal	146.68	146.77	0.09	nil	0.05						combine four samples		
SQ-04-19			shale	146.77	146.89	0.12	nil	0.12								
SQ-04-20			stony coal	146.89	146.94	0.09	nil	0.09								
SQ-04-21			coal & shale	146.94	147.32	0.38	nil	0.38								
SQ-04-22			coy slst floor	147.32	147.42	0.12	nil	0.12								
SQ-04-23			coal	147.42	147.46	0.04	nil	0.04								
SQ-04-24			floor	147.46	147.56			0.10								
			stony coal	152.60	152.72			0.12								
			coal	152.72	152.83			0.11								
			shale	152.83	152.99			0.16								

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)	Sample interval (m)		Thickness (m)			Compo- sites / notes	Raw head analysis (air-dried basis):					
				From	To	Sampled	(Missing)	Total		Specific gravity	Moist- ure%	Ash %	Total Sulphur %	Sample weight (grams)	
SQ-08-4			sandstone	152.99	153.21			0.22							
	SQ-04-25		sandstone roof	153.19	153.31	0.12	nil	0.10							
	SQ-04-26	2B	dirty coal	153.31	153.48	0.17	nil	0.17							
	SQ-04-27		shale	153.48	153.69	0.21	nil	0.21							
	SQ-04-28		co and sty co	153.69	153.77	0.08	nil	0.08						combine three samples	
	SQ-04-29	shale	153.77	159.03	0.26	nil	0.26								
	SQ-04-30		dy coal	159.03	154.17	0.14	nil	0.14							
	SQ-04-31		coaly sh floor	154.17	154.24	0.07	nil	0.07							
				coal	157.15	157.18			0.03						
			sandstone roof	160.07	160.17			0.10							
			coal	160.17	160.29			0.12							
			shale	160.29	160.33			0.04							
			sandstone	160.33	161.50			0.17							
			coal	161.50	161.59			0.09							
			stony coal	161.59	161.68			0.09							
			shale floor	161.68	161.78			0.10							
			shale roof	161.78	162.06			0.28							
			coal & sty co	162.06	162.19			0.13							
			shale	162.19	162.25			0.06							
			coal	162.25	162.30			0.05							
			shale floor	162.30	162.40			0.10							
			coal	165.73	165.79			0.06							
			shale	165.79	166.14			0.35							
			coal	166.14	166.19			0.05							

Table 14-4: Sample inventory and raw head analysis of core samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)	Sample interval (m)		Thickness (m)			Composites / notes	Raw head analysis (air-dried basis):				
				From	To	Sampled	(Missing)	Total		Specific gravity	Moisture%	Ash %	Total Sulphur %	Sample weight (grams)
SQ-08-4	SQ-04-44		sandstone roof	173.31	173.41			0.10						
	SQ-04-45		coal	173.41	173.67			0.26						
	SQ-04-46		coaly shale	173.67	173.71			0.04						
			shale floor	173.71	173.81			0.10						
			coal	177.49	177.61			0.12						
	SQ-04-47		shale roof	183.24	183.34			0.10						
	SQ-04-48		coal & sty co	183.34	183.49			0.15						
	SQ-04-49		coal	183.49	183.72			0.23						
	SQ-04-50		shale floor	183.72	183.82			0.10						
			coal	198.64	198.70			0.06						
SQ-04-98		coal	<i>check sample (lump coal from Comox Basin)</i>											
SQ-04-99		sst/slst/mst	204.495	205.125	0.63	nil	0.63							
SQ-04-51	immediate roof of No.3 coal	shale	205.125	205.22	0.095	nil	0.095						combine seven samples	
SQ-04-52		coal	205.22	205.27	0.05	nil	0.05							
SQ-04-53		shale	205.27	205.60	0.33	nil	0.33							
SQ-04-54		dirty coal	205.60	205.74	0.14	nil	0.14							
SQ-04-55		shale	205.74	206.22	0.48	nil	0.48							
SQ-04-56		coal	206.22	206.31	0.09	nil	0.09							
SQ-04-57		siltstone roof	206.31	206.49	0.18	nil	0.18							
SQ-04-58		3	stony coal	206.49	206.67	0.18	nil	0.18						combine five samples
SQ-04-59	coal	206.67	206.96	0.29	nil	0.29								
SQ-04-60	shale	206.96	207.11	0.15	nil	0.15								
SQ-04-61	coal	207.11	207.36	0.25	nil	0.25								
SQ-04-62	mst and coal	207.36	207.46	0.10	nil	0.10								
SQ-04-63	shale floor	207.46	207.56	0.10	nil	0.10								

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)	Sample interval (m)		Thickness (m)			Compo- sites / notes	Raw head analysis (air-dried basis):				
				From	To	Sampled	(Missing)	Total		Specific gravity	Moist- ure%	Ash %	Total Sulphur %	Sample weight (grams)
SQ-08-4			stony coal	209.47	209.59			0.12						
	SQ-04-64		slty rubbly sh	217.84	217.94	0.10	nil	0.10						
	SQ-04-65		coaly mst	217.94	218.12	0.18	nil	0.18						<i>this is roof</i>
	SQ-04-66	4	coal	218.12	218.44	0.32	nil	0.32						combine two samples
	SQ-04-67		stony coal	218.44	218.58	0.14	nil	0.14						
	SQ-04-68		shale	218.58	219.09	0.51	nil	0.51						
	SQ-04-69		coal	219.09	219.17	0.08	nil	0.08						combine three samples
	SQ-04-70		stony co & sh	219.17	219.23	0.06	nil	0.06						
	SQ-04-71		coal	219.23	219.29	0.06	nil	0.06						
	SQ-04-72		mst floor	219.29	219.395	0.105	nil	0.105						
			shale roof	220.12	221.02			0.90						
	SQ-04-73		coaly mst	221.02	221.14	0.12	nil	0.12						<i>this is roof</i>
	SQ-04-74	4L	coal w <u>pyrite</u>	221.14	221.23	0.09	nil	0.09						
	SQ-04-75		stony coal	221.23	221.56	0.33	nil	0.33						
	SQ-04-76		coal	221.56	221.75	0.19	nil	0.19						
	SQ-04-77		coaly mst	221.75	221.97	0.22	nil	0.22						
	SQ-04-78		coal & mst	221.97	222.35	0.38	nil	0.17						
	SQ-04-79		coy sst floor	222.35	222.445	0.095	nil	0.095						
				coal	229.33	229.37			0.04					
			shale	229.37	230.31			0.94						
SQ-04-80		shale roof	230.31	230.41			0.10							
SQ-04-81		coal	230.41	234.73			0.32							
SQ-04-82		shale	234.73	231.27			0.54							
			234.14	234.16			0.02							
			234.16	234.19			0.03							
SQ-04-83		shale roof	234.19	234.31			0.12							

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)	Sample interval (m)		Thickness (m)			Compo- sites / notes	Raw head analysis (air-dried basis):				
				From	To	Sampled	(Missing)	Total		Specific gravity	Moist- ure%	Ash %	Total Sulphur %	Sample weight (grams)
SQ-08-4	SQ-04-84		coal	234.31	234.35			0.04						
	SQ-04-85		coaly sh floor	234.35	234.41			0.06						
			shale floor	234.41	234.45			0.04						
			shale	234.45	234.94			0.49						
	SQ-04-86		mst roof	234.94	235.01	0.07	nil	0.07						
	SQ-04-87		5	dirty coal	235.01	235.15	0.14	nil	0.14					
	SQ-04-88			coal w pyrite	235.15	235.46	0.31	nil	0.31					
	SQ-04-89			v dirty coal	235.46	235.61	0.15	nil	0.15					
	SQ-04-90			coal	235.61	235.66	0.05	nil	0.05					
	SQ-04-91			mst / slst	235.66	236.21	0.55	nil	0.55					
	SQ-04-92			coal w pyrite	236.21	236.54	0.33	nil	0.33					
	SQ-04-93			sdv slst floor	236.54	236.63	0.09	nil	0.09					
				shale	236.63	237.44			0.81					
				sandstone	237.44	237.59			0.15					
			coal	237.59	237.65			0.06						
	SQ-04-94		stony coal	237.65	237.86			0.21						
	SQ-04-95		coal	237.86	238.00			0.14						
	SQ-04-96		shale floor	238.00	238.10			0.10						
				stony coal	242.97	243.12			0.15					
			coal	254.02	254.15			0.13						
			coal	256.48	256.53			0.05						
			coal	258.34	258.39			0.05						
			stony coal	258.39	258.50			0.11						
			coal	267.48	267.58			0.10						

Table 14-4: Sample inventory and raw head analysis of samples from year-2008 drilling (continued)

Site	Sample No.	Lab No.	Coal bed designation (local nomenclature)	Sample interval (m)		Thickness (m)			Composites / notes	Raw head analysis (air-dried basis):					
				From	To	Sampled	(Missing)	Total		Specific gravity	Moisture%	Ash %	Total Sulphur %	Sample weight (grams)	
SQ-08-4			(core lost)	281.58	281.78		(0.20)								
			coaly shale	281.78	281.83	0.05	nil	0.05							
			canneloid sh	281.83	281.87	0.04	nil	0.04							
	SQ-04-97	B 93254	coalified log	coal	281.87	281.91	0.04	nil	0.04	Prox: VM 26.80 FC 33.43	1.69	3.44	36.33	1.50	615
				coaly shale	281.91	281.94	0.03	nil	0.03						
				coal	281.94	281.97	0.03	nil	0.03						
				coal	285.68	285.72			0.04						
			coal	288.82	288.85			0.03							
			coal	314.55	314.59			0.04							

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APPENDIX IV

SAMPLE DESCRIPTION

June 1, 2014

Appendix IV
Sample Descriptions

Sample Number	Description
01-10	Gray shale with one carbonaceous to coal layer, shale is soft sediment deformed, folded and lumped, layering undulating
01-11	Solid vitreous coal layering at 85° to core axis, highly fractured at 5° to core axis
01-12	Gritty sandstone, down the hole arrow? Vitreous lenses and layers at 75° to core axis, wispy bedding, abundant carbonaceous partings
01-13	Shaley, dark shale, very fine grained, broken chunks, only minor carbonaceous
01-14	Mostly dull coal with many thin vitreous coal layers, 85°-0° to core axis, sparse 0° to core axis fractures, traces of calcite, trace pyrite film
01-15	Grey siltstone, carbonaceous material appears to be filling cracks, convoluted bedding perhaps bioturbated
10-16	Medium grey uniform siltstone, abundant carbonaceous twigs and laminae, kaolinitic
01-17	90% vitreous coal, 10% dull bedding 90° to 85° to core axis (layering), well fractured by 5° to core axis fractures
01-18	Grey-brown, sandstone with 1.5cm coal bed at top, wispy carbonaceous lenses, wispy bedding overall
01-19	Gritty, fine sandstone, dark grey-black uniformly carbonaceous, minor lenses of vitreous coal
01-20	Shaley coal, dull, abundant micro lenses of vitreous coal, minor calcareous lenses, bedding is 90° to core axis, trace of 5° fractures
01-21	Carbonaceous black shale, many lenses of vitreous coal, minor 90° slickensides, bedding is 90° to core axis
01-22	Coal, black 60% dull coal + 40% vitreous, layering at 80° to 85° to core axis, rare 0° fractures, trace of calcite o 0° fractures
01-23	Black coaly shale (shaley coal), minor vitreous coal lenses 1-2mm wide, trace white calcite hairlines
04-32	Fine sandstone, abundant carbonaceous wisps, light grey in colour, kaolinitic? coaly lenses also
04-33	Vitreous coal, highly fractured calcite on fractures, some silty lenses 90° to core axis
04-34	Siltstone – fine sandstone, carbonaceous wisps, shaley interbeds, very angular clasts, minor coal lenses
04-35	Silty fine sandstone, light grey abundant carbonaceous wisps, crude leaf impressions, convoluted bedding
SQ-04-36	HQ drill core, coal, very well banded, alternating dull and vitreous layers, trace druzy calcite xls, vitreous layers have conchoidal fracture banding at 90to core axis
04-37	Black shale with significant coal lines and layers, vitreous coal layers on one end of samples, slickensides at 85°-70° to core axis, undulating
04-38	Fine sandstone with coaly 8mm interbed or lens at bottom, abundant carbonaceous wisps throughout, slickensides at 35° to core axis
04-39	Grey siltstone, very abundant carbonaceous wisps, uniform appearance, trace slickensides

04-40	Highly fractured vitreous coal, calcite films on fractures bedding 85° to core axis, abundant slickensides
04-43	NQ core, dull black coal with narrow bands of vitreous coal at 90° to core axis, lensey bands of vitreous coal, slickensides common at a variety of angles to core axis
04-44	Grey fine sandstone and brown weathering sandstone, wispy bedding, lenticular carbonate lenses, soft sediment slumping
04-46	Black, shaley coal – coaly shale, lenses of vitreous coal, some dull coal, 90° to core axis, trace of calcite on fractures, poorly developed slickensides
04-41	Shaley siltstone with abundant carbonaceous lenses (coaly lenses) at 85° to core axis, slickensides on 90° to core axis fractures, trace calcite in coaly lenses as films on 0° to core axis fractures
SQ-04-42	Coal, one half vitreous, the other half dull, slickensides common at 90°, layering at 90°
04-45	90° to slickensides, calcite filled highly fractured at 0° to core axis, dull black coal with 2mm wide vitreous layers at 90° to core axis, large sample
SQ-04-47	Soapy feel, abundant calcite, wispy carbonaceous lenses, appears talcous
04-48	Well banded vitreous and dull coal bands, dull bands are finely banded to laminated <1mm laminae, vitreous has calcitic films, also pyrite films
04-49	Gritty, coarse siltstone, black calcite rich layers, layering at 90° to core axis, traces of coaly lenses
04-50	Shaley mudstone, carbonaceous on fracture surfaces, minor calcareous nodules, laminations at 90° to core axis, coaly lenses

APPENDIX V

ASSAY RESULTS

June 1, 2014

	Al	Al +/-	Si	Si +/-	P	P +/-	S	S +/-	Cl	Cl +/-	K	K +/-	Ca	Ca +/-	
SQ-04-47	9.63	0.07	23.91	0.13	ND			1.4114	0.0087	ND	ND		0.357	0.0047	
SQ-04-45	2.1078	0.0265	3.7815	0.0237	0.052	0.0068		2.7024	0.0151	ND	0.096	0.0013	2.9709	0.0165	
SQ-04-42	5.5105	0.0388	10.329	0.0489	ND			0.477	0.0028	ND	0.2263	0.0018	ND		
SQ-04-36	0.782	0.0153	1.1618	0.0081	0.0649	0.0049		1.0246	0.0051	0.5684	0.0111	0.0297	0.0007	2.3129	0.0108
SQ-04-43	5.4211	0.0416	11.49	0.06	ND			1.2733	0.0069	ND	0.5542	0.0034	0.1128	0.0023	
SQ-04-46	6.6537	0.046	14.18	0.07	ND			0.9161	0.0051	ND	0.3874	0.0027	ND		
SQ-04-39	11.22	0.07	27.22	0.13	ND			0.2878	0.003	ND	1.4542	0.0082	0.0505	0.0047	
SQ-04-48	2.6147	0.0342	5.1525	0.0348	0.0508	0.0077		2.2224	0.014	ND	0.2532	0.0023	0.5075	0.0039	
SQ-04-41	6.8059	0.049	12.31	0.06	ND			0.7731	0.0047	ND	0.275	0.0024	0.1317	0.0025	
SQ-04-33	0.7663	0.02	1.759	0.0143	0.0796	0.0069		4.0478	0.0261	ND	ND		2.1712	0.0141	
SQ-04-40	1.4631	0.0262	2.7321	0.0202	0.0582	0.007		0.7838	0.0053	ND	0.09	0.0014	1.0757	0.0069	
SQ-04-44	3.9738	0.0483	10.46	0.08	0.2184	0.0126		8.46	0.06	ND	0.613	0.0056	2.9841	0.0233	
SQ-04-32	8.22	0.07	26.87	0.16	ND			0.2211	0.0032	ND	0.459	0.0045	1.707	0.0117	
SQ-04-35	8.01	0.06	24.41	0.14	0.1481	0.0142		0.3617	0.0036	ND	1.2265	0.0081	2.9684	0.0183	
SQ-04-37	3.4889	0.0417	5.8232	0.0449	0.1012	0.0096		8.36	0.06	ND	0.4266	0.0039	1.7924	0.0136	
SQ-04-50	6.65	0.05	13.75	0.08	ND			5.6322	0.0313	ND	0.6317	0.0044	3.04	0.0174	
SQ-04-38	8.84	0.07	21.15	0.13	ND			0.4285	0.0042	ND	1.0668	0.0077	0.1276	0.0046	
SQ-04-34	6.02	0.06	14.97	0.11	ND			1.4176	0.0113	ND	0.5769	0.0055	0.4135	0.0052	
SQ-04-49	3.0731	0.0345	5.7936	0.0374	0.0588	0.0082		6.4512	0.0385	ND	0.2317	0.0023	1.4372	0.0092	
SQ-01-11	0.7914	0.019	1.5951	0.0123	0.0256	0.007		0.969	0.006	ND	0.0148	0.0009	4.8028	0.0272	
SQ-01-10	10.94	0.07	27.86	0.14	0.3219	0.0145		0.0772	0.0022	ND	0.6831	0.005	1.4102	0.0091	
SQ-01-18	9.59	0.07	20.39	0.11	ND			0.5453	0.0042	ND	0.7663	0.0053	0.3128	0.0045	
SQ-01-16	8.93	0.07	24.46	0.15	0.2082	0.0142		0.1554	0.0027	ND	1.2003	0.0082	0.7399	0.0068	
SQ-01-21	4.9694	0.0401	9.52	0.05	0.0572	0.0071		3.4503	0.0186	ND	0.1615	0.0018	0.5891	0.0041	
SQ-01-13	10.6	0.07	24.94	0.12	ND			0.9	0.0056	ND	1.421	0.0079	ND		
SQ-01-15	7.79	0.06	18.44	0.11	ND			0.3581	0.0032	ND	0.3419	0.0032	1.4109	0.009	
SQ-01-20	3.8391	0.0357	6.8716	0.0409	0.056	0.007		4.0842	0.023	ND	0.1653	0.0018	0.7461	0.0049	
SQ-01-12	9.52	0.07	24.5	0.13	ND			0.1478	0.0025	ND	0.9139	0.0061	0.1714	0.0045	
SQ-01-23	8.45	0.06	22.46	0.12	ND			0.3459	0.0033	ND	0.212	0.003	ND		
SQ-01-17	0.8754	0.0168	1.7259	0.0115	0.0559	0.0048		1.9014	0.0099	0.2163	0.0128	0.0336	0.0008	0.6824	0.0038
SQ-01-19	8.19	0.06	15.83	0.1	0.0549	0.0109		3.2215	0.0199	ND	0.5856	0.0046	0.566	0.0054	
SQ-01-22	4.5738	0.037	13.54	0.07	0.0899	0.0073		1.0184	0.0057	ND	0.1196	0.0017	0.1728	0.0024	
SQ-01-14	3.5026	0.0332	7.2608	0.0404	0.0598	0.0064		1.358	0.0076	ND	0.0742	0.0013	0.4752	0.0032	

Ti	Ti +/-	V	V +/-	Cr	Cr +/-	Mn	Mn +/-	Fe	Fe +/-	Co	Co +/-	Ni	Ni +/-	Cu
	0.3088	0.0186	0.0599	0.0085	ND	ND		2.307	0.0208	ND		ND		ND
	0.1329	0.0106	ND		ND	ND		1.3934	0.0123	ND		ND		ND
	0.0741	0.0095	ND		ND	ND		0.3239	0.0048	ND		ND		ND
	0.3166	0.0375	ND		ND	ND		0.2274	0.0117	ND		ND		ND
ND		ND			ND	ND		0.2047	0.0034	ND		ND		ND
	0.5236	0.0168	0.0228	0.006	ND	ND		0.6753	0.0079	ND		ND		0.0021
	0.1983	0.013	0.017	0.0056	ND	ND		0.684	0.0081	ND		ND		0.0018
	0.5222	0.0222	0.03	0.0083	ND	0.0195	0.003	2.7707	0.023	ND		ND		0.0071
	0.1833	0.0135	ND		ND	ND		0.926	0.0108	ND		ND		ND
	0.4719	0.0171	ND		ND	ND		0.3798	0.006	ND		ND		0.0026
ND		ND			ND	ND		3.7306	0.0285	ND		ND		ND
	0.0539	0.0106	ND		ND	ND		0.2098	0.0045	ND		ND		ND
	0.3379	0.0195	0.0306	0.0077	ND	0.0268	0.0037	9.6	0.08	ND		ND		ND
	0.3819	0.0231	0.0537	0.01	ND	0.0212	0.0035	1.731	0.0198	ND		ND		ND
	0.6692	0.0265	0.0603	0.0102	ND	0.0342	0.0037	2.6911	0.0254	ND		ND		0.0049
	0.3247	0.016	ND		ND	ND		9.49	0.07	ND		ND		0.0037
	0.4883	0.0192	0.029	0.0071	ND	0.0133	0.0025	2.8848	0.0232	ND		ND		ND
	0.708	0.027	0.0571	0.0101	ND	0.0152	0.0031	2.1509	0.0223	ND		0.0043	0.0009	0.009
	0.6844	0.0278	0.0509	0.0103	ND	ND		1.4944	0.0191	ND		0.0034	0.0009	0.0039
	0.3164	0.0155	0.0323	0.0064	ND	ND		1.6174	0.0155	ND		ND		0.002
ND		ND			ND	0.0133	0.0019	0.6271	0.0078	ND		ND		ND
	0.5295	0.0231	0.0347	0.0088	ND	0.0161	0.003	2.1869	0.0203	ND		ND		0.0132
	0.62	0.0228	0.0263	0.0081	ND	0.0205	0.0029	2.0671	0.0193	ND		ND		0.0077
	0.485	0.0234	0.032	0.009	ND	0.0309	0.0037	3.2482	0.0289	ND		0.0036	0.0009	0.0065
	0.815	0.0194	0.0483	0.0067	ND	ND		2.3337	0.0179	ND		ND		ND
	0.3989	0.019	0.04	0.0077	ND	0.026	0.003	3.0481	0.0236	ND		0.0028	0.0008	0.0066
	0.3849	0.0289	ND		ND	ND		1.4697	0.0283	ND		ND		ND
	0.7008	0.0231	ND		ND	0.009	0.0024	2.2149	0.0201	ND		ND		ND
	0.2902	0.0133	ND		ND	ND		2.5601	0.0196	ND		ND		ND
	0.5452	0.0229	0.0383	0.0087	ND	0.0203	0.0031	2.4753	0.0224	ND		0.0026	0.0008	0.0044
	0.7319	0.0254	0.0499	0.0093	ND	ND		1.1062	0.0135	ND		ND		ND
ND		ND			ND	ND		1.1571	0.0096	ND		ND		ND
	0.388	0.0195	0.037	0.0078	ND	0.012	0.0026	2.5966	0.0235	ND		ND		ND
	0.4145	0.0161	ND		ND	ND		0.4286	0.0063	ND		ND		ND
	0.0448	0.0096	ND		ND	ND		0.6154	0.0074	ND		ND		ND

Cu +/-	Zn	Zn +/-	As	As +/-	Se	Se +/-	Rb	Rb +/-	Sr	Sr +/-	Y	Y +/-	Zr	Zr +/-
	0.0011	0.0004	ND		ND		0.0013	0.0002	0.1254	0.001	0.0013	0.0002	0.01	0.0004
	ND		ND		ND		0.001	0.0001	0.0112	0.0002	0.0012	0.0001	0.0054	0.0002
	ND		ND		ND		0.0012	0.0001	0.0074	0.0001	0.0011	0.0001	0.0043	0.0001
	0.0027	0.0007	ND		ND		0.0006	0.0002	0.0083	0.0004	0.0017	0.0003	0.011	0.0005
	ND		ND		ND		ND		0.0058	0.0001	0.0011	0.0001	0.0089	0.0001
0.0004	0.0014	0.0002	ND		ND		0.0029	0.0001	0.0141	0.0002	0.0014	0.0001	0.0079	0.0002
0.0004	0.0014	0.0003	ND		ND		0.0027	0.0001	0.0106	0.0002	0.0011	0.0001	0.006	0.0002
0.0008	0.0099	0.0006	ND		ND		0.0063	0.0002	0.0256	0.0004	0.0018	0.0002	0.0119	0.0003
	ND		0.0006	0.0002	ND		0.0019	0.0001	0.0121	0.0002	0.0014	0.0001	0.0036	0.0002
0.0005	ND		ND		ND		0.0028	0.0001	0.0122	0.0002	0.0015	0.0001	0.0066	0.0002
	ND		0.0013	0.0002	ND		ND		0.0094	0.0002	0.0025	0.0001	0.0103	0.0002
	0.0011	0.0002	ND		ND		0.0005	0.0001	0.0055	0.0001	0.0022	0.0001	0.0079	0.0002
	0.0032	0.0006	0.0121	0.0006	ND		0.0027	0.0002	0.0732	0.0009	0.0017	0.0002	0.0124	0.0004
	0.0047	0.0005	0.0008	0.0003	ND		0.003	0.0002	0.0432	0.0005	0.0027	0.0002	0.0171	0.0004
0.0008	0.0063	0.0006	0.0013	0.0003	ND		0.0046	0.0002	0.0416	0.0005	0.0022	0.0002	0.0161	0.0004
0.0008	0.0034	0.0005	0.002	0.0003	ND		0.0031	0.0002	0.0182	0.0004	0.0016	0.0002	0.0078	0.0003
	0.0065	0.0005	ND		ND		0.0045	0.0002	0.0227	0.0003	0.0016	0.0001	0.0101	0.0002
0.0009	0.0048	0.0005	ND		ND		0.0051	0.0002	0.0233	0.0004	0.0015	0.0002	0.0134	0.0003
0.0008	0.0047	0.0005	ND		ND		0.0039	0.0002	0.0229	0.0004	0.0019	0.0002	0.0153	0.0004
0.0005	0.0009	0.0003	ND		ND		0.0027	0.0001	0.021	0.0003	0.0013	0.0001	0.005	0.0002
	ND		0.005	0.0002	ND		ND		0.008	0.0002	0.0012	0.0001	0.0025	0.0001
0.001	0.009	0.0006	ND		ND		0.003	0.0002	0.06	0.0006	0.0015	0.0002	0.0113	0.0003
0.0008	0.0059	0.0005	ND		ND		0.0044	0.0002	0.0353	0.0004	0.0009	0.0001	0.008	0.0003
0.0009	0.0119	0.0008	ND		ND		0.0052	0.0002	0.0359	0.0005	0.0016	0.0002	0.0107	0.0003
	0.0015	0.0003	0.0009	0.0002	ND		0.0017	0.0001	0.0186	0.0003	0.0013	0.0001	0.0122	0.0002
0.0007	0.0086	0.0006	0.0034	0.0003	ND		0.0081	0.0002	0.0312	0.0004	0.0016	0.0002	0.0109	0.0003
	0.0024	0.0006	ND		ND		0.0014	0.0002	0.0325	0.0007	0.001	0.0002	0.0177	0.0006
	0.0051	0.0005	ND		ND		0.0022	0.0002	0.0452	0.0005	0.0014	0.0001	0.0192	0.0003
	0.0034	0.0003	0.0012	0.0002	ND		0.0008	0.0001	0.0133	0.0002	0.0011	0.0001	0.0062	0.0002
0.0007	0.007	0.0006	ND		ND		0.0052	0.0002	0.0339	0.0004	0.0013	0.0002	0.0135	0.0003
	0.0087	0.0006	ND		ND		0.0028	0.0002	0.0185	0.0003	0.0023	0.0002	0.0205	0.0003
	0.0023	0.0002	0.0434	0.0005	ND		ND		0.0076	0.0001	0.0013	0.0001	0.0014	0.0001
	0.0088	0.0006	ND		ND		0.0039	0.0002	0.0195	0.0003	0.0015	0.0002	0.0083	0.0003
	0.0186	0.0006	ND		ND		0.0015	0.0001	0.0118	0.0002	0.0011	0.0001	0.0209	0.0002
	ND		0.0022	0.0002	ND		0.0004	0.0001	0.018	0.0002	0.0013	0.0001	0.0076	0.0002

Mo	Mo +/-	Ag	Ag +/-	Cd	Cd +/-	Sn	Sn +/-	Sb	Sb +/-	W	W +/-	Hg	Hg +/-	Pb
0.0005	0.0002	ND		ND		ND		ND		ND		ND		0.0022
ND		0.0025	0.0007	ND		ND		ND		ND		ND		ND
ND		0.0019	0.0005	0.0043	0.0007	ND		ND		ND		ND		ND
ND		ND		ND		ND		ND		ND		ND		ND
ND		0.0028	0.0005	0.0022	0.0006	ND		ND		0.0071	0.0006	0.0033	0.0003	ND
ND		0.0019	0.0006	0.0028	0.0008	ND		ND		ND		ND		ND
ND		ND		0.004	0.0008	ND		ND		ND		ND		0.0013
ND		ND		ND		ND		ND		ND		ND		0.0015
ND		0.0023	0.0008	ND		ND		ND		ND		ND		ND
ND		ND		0.0026	0.0008	ND		ND		ND		ND		ND
ND		ND		0.0031	0.0009	ND		ND		0.0034	0.0007	ND		ND
0.001	0.0001	ND		ND		ND		ND		ND		ND		0.0007
0.0022	0.0002	ND		ND		ND		ND		ND		ND		0.0017
ND		ND		ND		ND		ND		ND		ND		0.0014
ND		ND		ND		ND		ND		ND		ND		0.0012
ND		ND		ND		ND		ND		ND		ND		0.0018
ND		ND		ND		ND		ND		ND		ND		0.0016
ND		ND		ND		ND		ND		ND		ND		0.0009
0.0008	0.0002	ND		ND		ND		ND		ND		ND		ND
ND		ND		0.0031	0.0009	ND		ND		ND		ND		0.0008
0.0004	0.0001	0.0031	0.0007	ND		ND		ND		0.0045	0.0006	0.0016	0.0003	ND
ND		ND		ND		ND		ND		ND		ND		0.0017
ND		ND		ND		ND		ND		ND		ND		0.0012
0.0007	0.0002	ND		ND		ND		ND		ND		ND		0.0015
ND		ND		ND		ND		ND		ND		ND		0.0012
ND		ND		ND		ND		ND		ND		ND		0.003
ND		ND		ND		ND		ND		ND		ND		0.0027
ND		ND		ND		ND		ND		ND		ND		0.0029
ND		ND		ND		ND		ND		ND		ND		0.0008
ND		ND		ND		ND		ND		ND		ND		0.0021
ND		ND		ND		ND		ND		ND		ND		0.0056
ND		0.0021	0.0005	0.0026	0.0007	ND		ND		ND		ND		0.0006
ND		ND		ND		ND		ND		ND		ND		0.001
ND		ND		0.0032	0.0008	ND		ND		ND		ND		0.0012
ND		ND		ND		ND		ND		0.0035	0.0006	0.0009	0.0003	0.0014

Pb +/-	Bi	Bi +/-	Th	Th +/-	U	U +/-	LE
0.0003	ND		ND		ND		61.88
	ND		ND		0.0007	0.0002	86.74
	ND		ND		ND		83.04
	ND		ND		ND		99.4316
	ND		ND		ND		93.8195
	ND		ND		ND		79.89
0.0002	ND		ND		ND		76.94
0.0003	ND		0.0021	0.0006	ND		56.35
	ND		ND		0.001	0.0002	88.07
	ND		0.0028	0.0004	0.0009	0.0002	78.82
	ND		ND		ND		87.42
0.0002	ND		0.0036	0.0004	ND		92.98
0.0004	ND		ND		ND		63.19
0.0003	ND		ND		ND		60.26
0.0003	ND		0.003	0.0007	ND		59.34
0.0004	ND		ND		ND		70.16
0.0003	ND		ND		ND		66.84
0.0003	ND		ND		ND		65.39
	ND		0.0025	0.0007	ND		74.31
0.0002	ND		ND		ND		80.95
	ND		0.0014	0.0004	0.0008	0.0002	91.1325
0.0003	ND		ND		ND		55.84
0.0003	ND		ND		ND		65.6
0.0003	ND		0.0024	0.0007	ND		60.43
0.0002	ND		ND		0.0013	0.0003	78.02
0.0003	ND		ND		ND		58.56
0.0005	ND		0.0039	0.001	ND		98.0839
0.0003	ND		0.0033	0.0006	0.0017	0.0004	68.65
0.0002	ND		ND		ND		81.36
0.0003	ND		ND		ND		61.59
0.0004	ND		ND		ND		66.59
0.0001	ND		ND		0.0006	0.0002	93.29
0.0003	ND		ND		ND		68.47
0.0002	ND		ND		ND		79.58
0.0002	ND		0.0014	0.0004	0.001	0.0002	86.57