Centerpoint Resources Inc.
加拿大中鈇资源有限公司项目简介

Province of British Columbia, Canada
加拿大大不列颠哥伦比亚省
Centerpoint Resources Project Team
中鈇资源企划组
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Centerpoint Resources Inc. Overview
加拿大中鈇资源有限公司概况

- Centerpoint Resources Inc. was a privately held and incorporated in BC in 2009. The projects held by Centerpoint and its subsidiary, Centermount Coal Ltd. include Bingay Main Coal, Bingay A&B Coal and Cinnabar Peak Coal in BC, and a gold propertie in Manitoba.
- 加拿大中鈇资源公司2009年在BC省注册成立的私有公司，下属有中山焦煤公司及朱砂峰焦煤项目，滨盖主区和滨盖A&B项目及曼尼托巴省的金矿项目

- The company currently has no external debt or liabilities with excellent reputation in mining industry in Canada .

  公司目前无任何对外负债，在加拿大矿业领域口碑极佳。

- Highly efficient daily management for professional operation, NI43-101 Report and EA are all written by the world top class firms such as SNC–LAVALIN and SRK Consulting (Canada) Inc. to secure the credibility and operability.

  公司的运作方式务实，日常管理高效，矿业公司的专业工作基本采取对外竞标的方式，NI43-101报告，环评报告等重要文件均由世界顶级团队SNC-Lavalin及SRK Consulting (Canada) Inc.撰写，以保证可信度和可操作性。

Project Summary
项目摘要

- **Complete infrastructure** 基础设施完备
  - ✓ Convenient transportation, a forest highway through the mine site, more than 20 kilometers from the railway rail, water and electricity adjacent to the site.
    交通便利，有森林公路直通矿区，距离铁路接轨20多公里，水电气毗邻厂区。
  - ✓ Bingay Mine Property Located mature high-yield coking coal area in BC, Canada, near Teck5 profitable coking coal mines which have been running for many years.
    矿区位于加拿大BC省成熟的高产焦煤区，附近的泰克5个煤田均为焦煤矿，运行多年，利润可观
- **Excellent coal quality with large resource** 煤质精良储量大
  - ✓ Higher G Factor, low sulfur, moderate volatile
    焦煤粘结度高，含硫低，挥发份适中。
  - ✓ Metallurgical Coal Tonnage Total is 118 million tone, at least 15 years of open mining service life, stripping ratio: 1:7.7. Annual production 2 million tons of clean coking coal. Subsequent underground mining can be up to 15 years.
    储量1.18亿吨。露天开采服务年限至少15年，剥采比1:7.7。年产200万吨精煤。后续地下开采更可达15年之久。
  - ✓ Great potential on Bingay A and B
    后备煤田A和B区域资源开发潜力巨大。

Project Summary
项目摘要

- **The progress of the current project** 当前项目进度
  - ✓ Environmental assessment and mining permit application is planned to be submitted in the third quarter of 2022, all construction permits are expected to be obtained before middle of 2023
  - ✓ 环评证、采矿证计划于2022年第三季度上报，预计2023年上半年将获准所有建矿许可。

- **Stable investment environment with very low tax rate**
  加拿大投资环境稳定，税率极低
  - ✓ A sound legal system with political and economic stability, Investment and immigration perfect combination.
    法制健全，政治经济稳定。投资与移民完美结合。
  - ✓ Mining tax is very low: no VAT (Value Added Tax), only 26% of the income tax and all construction costs can be tax deducted.
    矿业税率极低：无增值税，只有26%的所得税，且所有建矿成本都可以抵扣。

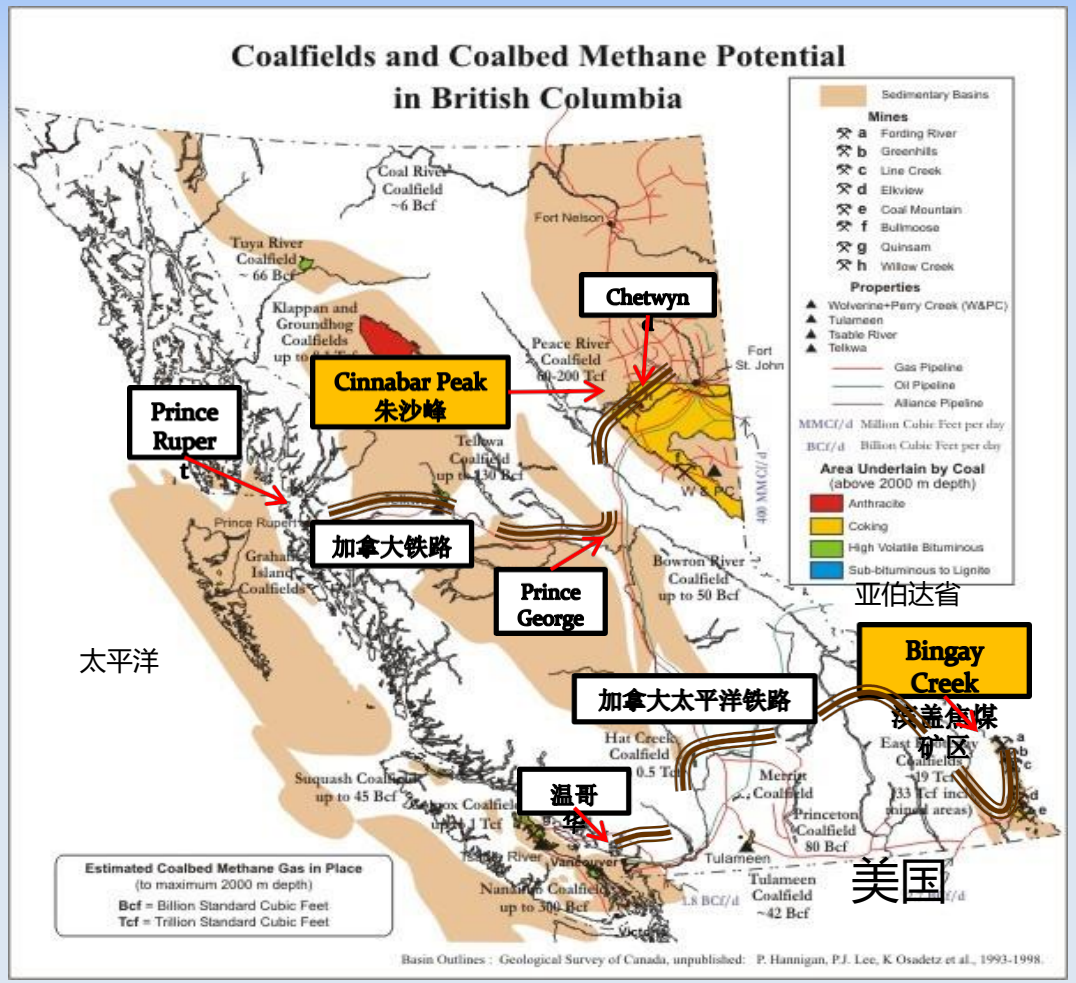
Cinnabar Peak Project Location
朱砂峰项目位置

- Cinnabar Peak is a large coking coal resource, containing an estimated at least 272 million tonnes of coal

朱砂峰大型焦煤矿产资源，估计约有最少2.72 亿吨煤。

- Coordinates of the center of the Cinnabar Peak coal property are 56°00 N 122°10W

朱砂峰煤炭矿产中心位置的经纬度为北纬56°00， 西经122°10



Transportation and Infrastructure
交通及基础设施

The Cinnabar project covers an area of 130.29 sq. km. in northeastern B.C. The region has hosted large scale coal mining since 1982. The center of the deposit is located 110 km west of the City of Fort St. John, an industrial centre for oil and natural gas, forestry and agriculture. The city benefits from excellent access to infrastructure and is located on the Alaska (Pan-American) Highway and the Canadian National Railway, and also hosts a major regional airport.

朱砂峰项目位于英属哥伦比亚省东北部，覆盖面积130.29平方公里。该地区自1982 年开始已有大规模的煤矿开采。矿床中心位于St. John 市以西110 公里，该市是一个聚集石油、天然气、林业和农业一体的工业中心。该市从非常完善的基建设施获益，位于阿拉斯加（泛美）高速公路、加拿大国家铁路上，并且有一个主要的地区机场。

Transportation and Infrastructure
交通及基础设施

The coal deposit straddles a reservoir formed by two hydro dams within a canyon on the Peace River. The deposit is readily accessible by a major road network on both sides of the lake, and has ready access to electric power, natural gas and water.

该矿床横跨Peace River 河谷内由两个水电坝筑成的水库，因此可通过水库两侧的主要道路网到达矿区。且该矿区现已有获得电力、天然气及水的渠道。

View westward along Dinosaur Lake, from a vantage point above Mt.Johnson.W.A.C. Bennett dam and Lake Williston are in far background.
顺着恐龙湖西望，居高临下俯瞰*Mt.Johnson.W.A.C. Bennett* 大坝，远处为*Williston*湖

Transportation and Infrastructure
交通及基础设施

- **Electrical power** – WAC Bennett Dam Hydro Plant is on the Cinnabar Peak coal property. The capacity is 2,730 megawatts (21st largest hydro electric plant in the world). A second hydroelectric dam (Peace Canyon) has a capacity of 700 megawatts and is also located nearby.

  电力-- WAC Bennett 水电站位于朱砂峰项目区，2,730兆瓦容量，全球排名第21位。附近第二大的和平谷水利大坝容量为700兆瓦。

- **Natural gas** --- There is a large active gas field near the coal property

  天然气—在矿区附近有大型天然气田。

- **Water** is abundant. There are numerous rivers and lakes within the property. Rainfall is 300mm per year and the snowfall is 2000 mm per year.

  水资源丰富：无数河流湖泊，年降雨量300毫米，年降雪量2000毫米

- **Communities** – the Village of Hudson's Hope (population 1010) is near the eastern boundary of the property. The City of Fort St.John (population 20,000) is a one and half hour drive to the east, and is strategically located on the Alaska Highway, with a major airport. This city is the centre of the provincial oil and gas industry and thereby has industrial support for any coal mine development.

  社区- 矿区东邻人口1010人的Hudson's Hope乡村。向东开车1.5小时为2万人口的Fort St. John城市。

- **Provincial Highway** 29 is a paved road that accesses the Cinnabar Peak coal property. Because of oil and gas exploration, there are numerous roads throughout the area.

  通过铺就好的省级**29**号高速公路可以进入矿区，因为油气公司的做了很多勘探工作，因此有无数道路通过该地区。

Railroad and Port 铁路和出海港口

- Coal railroad load out would be at Chetwynd, which is located on CN Rail 44 kilometres to the south. From Chetwynd, coal can be shipped to the coal loading facilities at the Port of Prince Rupert (turn around time 45 hours – one way distance 1027 km) or the Port of Vancouver (turn around time 70 hours – one way distance 1091 km). Train capacity is 16,112 tonnes. A coal railroad branch line south east of Hudson's Hope or coal loading facility near Fort St.John is a possibility.

  加拿大CN铁路煤炭装载区将位于矿区以南40公里的Chetwynd小镇。从Chetwynd可以将煤通过铁路运输到鲁珀特王子港（往返45小时—单程距离1027公里）或者运到温哥华港（往返70小时-单程距离1091公里）。火车运力为16,112吨。 Hudson's Hope 东南方向的运煤支线或者临近Fort St.John 的煤炭装载区都是可能的运输方式。

- Port of Prince Rupert vessel time to Shanghai is 232 hours. Loading rate is 9000 tonnes per hour. Stockpile capacity 1.2 million tonnes. Annual capacity is 24 million tonnes. Maximum ship size 350,000 DWT.

  鲁珀特王子港船运到上海为232小时。每小时装载速度为9000吨， 储存容量为120万吨。年吞吐量为2500万吨，最大货船总载重吨位为350,000吨。

- Port of Vancouver vessel time to Shanghai is 276 hours. It is the largest coal port in North America. Annual capacity is 33 million tonnes.

  温哥华刚船运到上海时间为276小时。此港为北美最大的港口， 年吞吐量为3300万吨。

Port of Prince Rupert
鲁珀特王子港

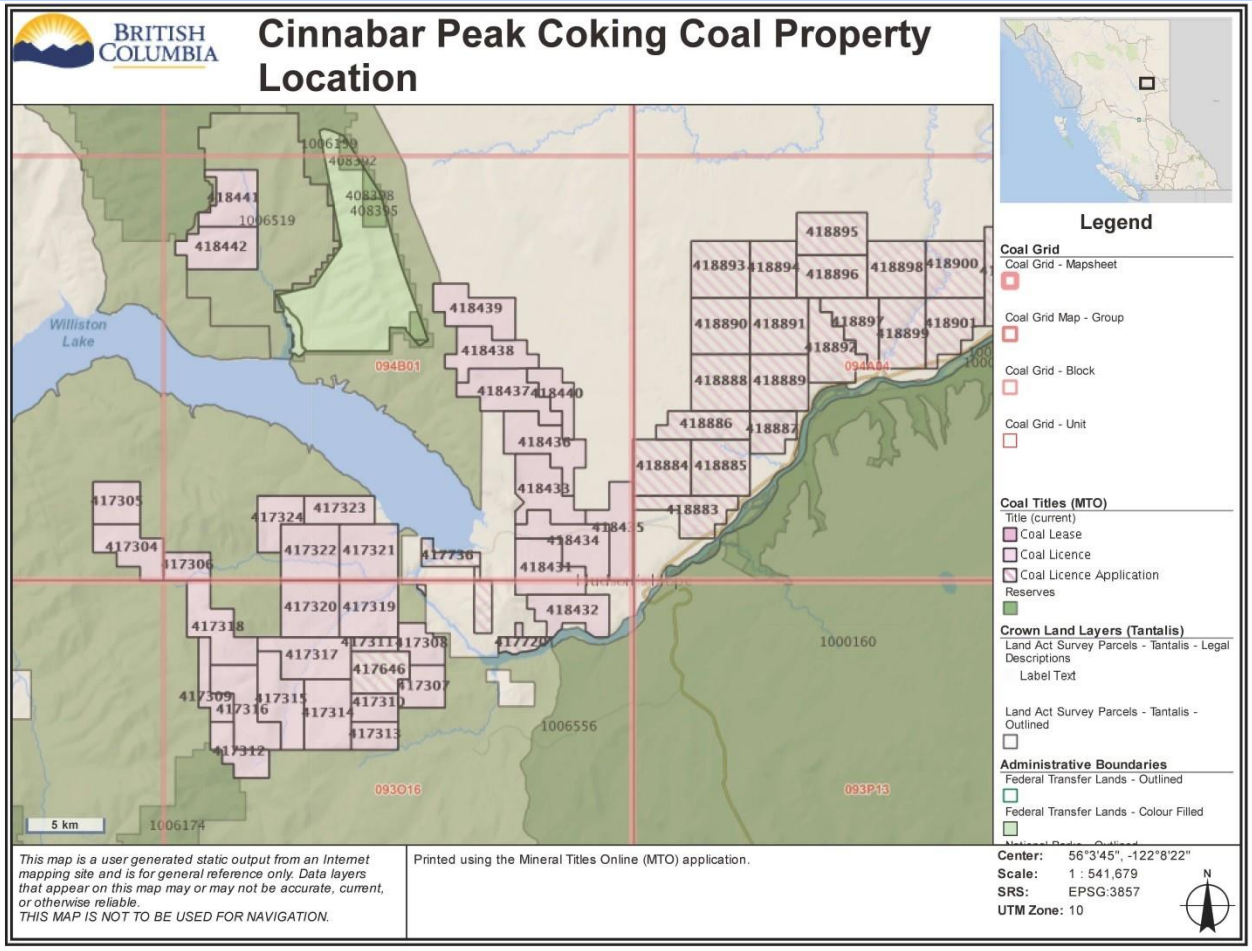
Tenure 土地使用权

- Coal exploration within public lands in British Columbia is governed by the Provincial Ministry of Energy & Mines , who issue coal exploration licences.
  BC省能源矿产厅管理公共土地上的煤炭勘探，并颁发煤炭勘探执照
- The Cinnabar Peak property consists of 10 coal licences, totalling 57.93 square kilometres.
  朱砂峰资产包含已经批准的4个煤炭矿权，总计57.93平方公里。
- Coal exploration licences will give Centerpoint the exclusive right to explore for coal within their areas.
  煤炭勘探许可将给予中鈇公司在该地域内，独家拥有的煤炭勘探权利。

BRITISH COLUMBIA | Ministry of Energy and Mines

Cinnabar Peak Coking Coal Project Licenses and Area Map
朱砂峰焦煤项目矿权面积图

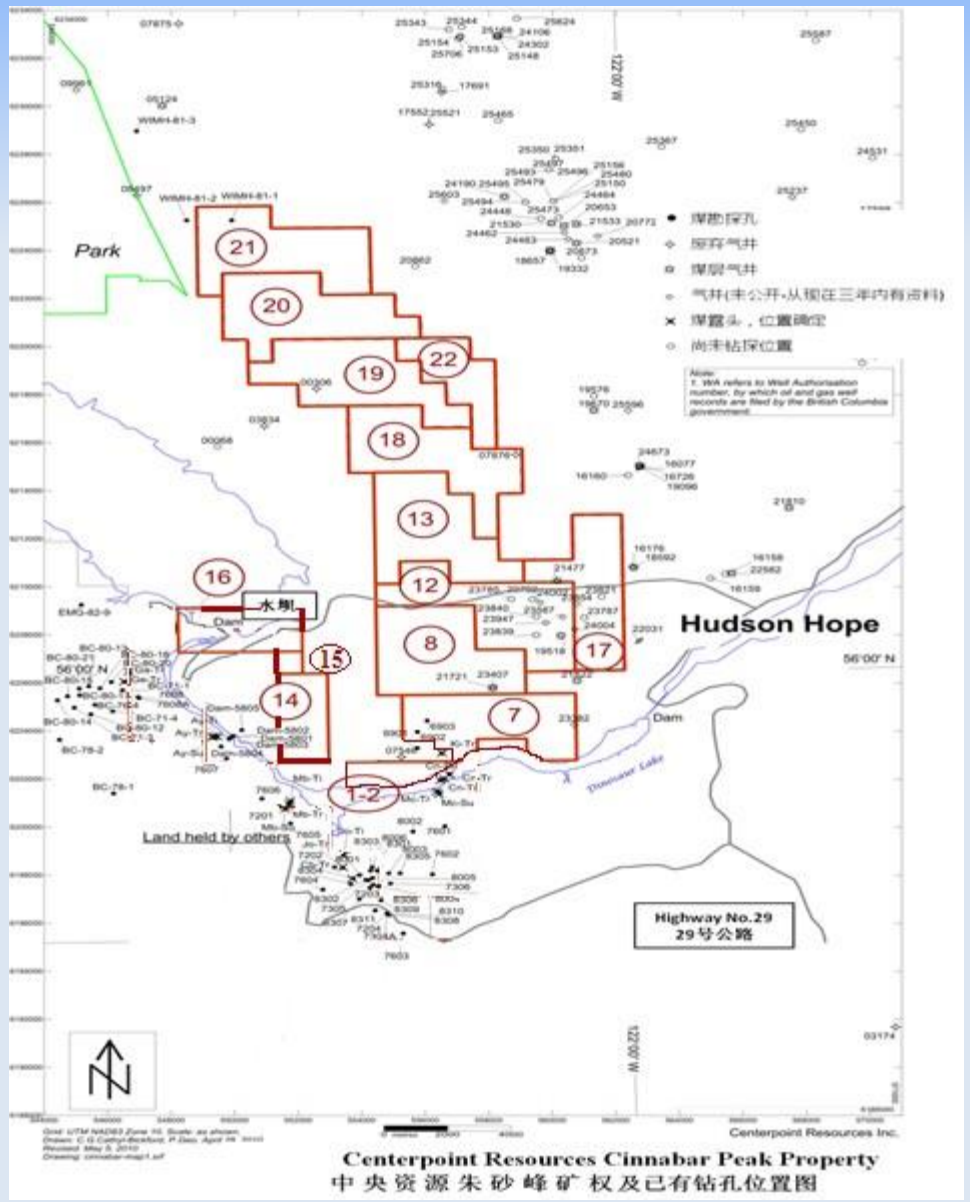
Cinnabar Peak Coal Licence and Area 朱砂峰焦煤矿权及面积	
Coal Licence 矿权	Hectares 公顷
418431	1446
418432	1344
418434	1446
418435	1157
Total 总计	5793公顷



Previous Exploration
过去勘探

- A lot of Exploration Work in the southern part of property and surroundings, 65 drill holes in the property, Plenty of Geological and coal data

  过去在资产地南部及周围进行了大量勘探工作, 有65个钻孔, 资料齐全



Geology
地质

- Coking coals of interest for mining at Cinnabar Peak are contained within the Gething Formation, of Early Cretaceous (135 million year old).

  朱砂峰可采的焦煤是包含在早期白垩纪（1.35亿年以前）的盖森地层构造当中。

- The Gething Formation is 300 to 550 metres thick, containing numerous coal beds.

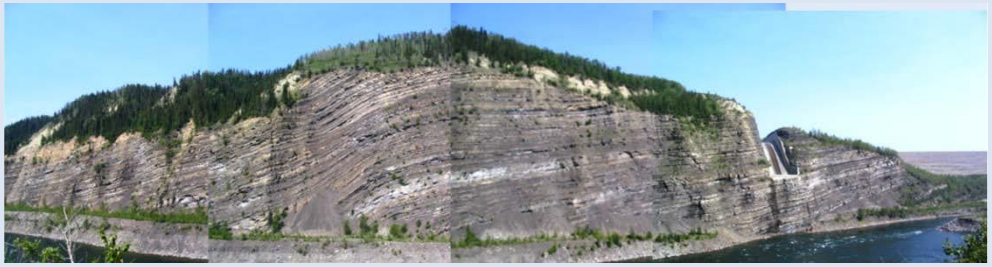
  盖森地层厚度为300到550米，包含有诸多煤层。

- At least 21 coal beds extend across the property.

  至少21个煤层延展贯穿整个资产。

- 5 of these coal beds are of major interest for mining, since they are thicker and more continuous.

  其中5个煤层非常厚，而且具有很好的连续性，为主要开采煤层。



Panoramic view Gething Formation; western face of the Peace River Canyon below the Bennett Dam.
Gething 地层组的全景图；在*Bennett* 坝下面的和平河谷

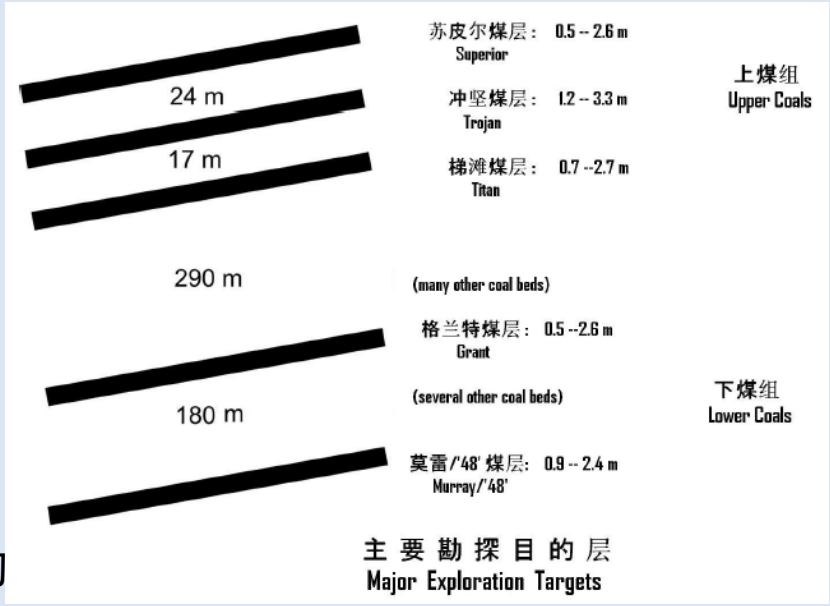
Geology
地质

East Bank section of Gething and Cadomin formations, looking southward from Bennett Dam. Coal beds lie within dark-coloured bands of rock; note consistency of geological structure, and general dip of strata parallel to ground surface.
东岸的盖森（Gething）和Cadomin储层段，由Bennet提坝往东条路眺望。煤床藏于深色横纹里；请注意地质构造和一般平衡于倾角地层的一致性。

Geology
地质

- Major coals are arranged in two groups: the Upper Coals and the Lower Coals. Upper Coals include the Superior, Trojan and Titan coal beds. Lower Coals include the Grant and Murray coal beds.
  主要的煤层分布为两组：上煤组和下煤组。上煤组包含Superior,、Trojan 和Titan煤层。下煤组包含Grant 和 Murray 煤层。
- Coal beds are up to 3.3 metres thick at Cinnabar Peak. Coals greater than lmetre thick are considered of interest for mining.
  在朱砂峰煤层厚达3.3米。煤层厚度超过一米，被认为有开采利益。
- Depth to the coal ranges from 0 to 900 metres. Most of the known coal lies shallower than 600 metres.
  煤的深度范围为0米到900米。多数已知的煤层赋存于地下600米以内。

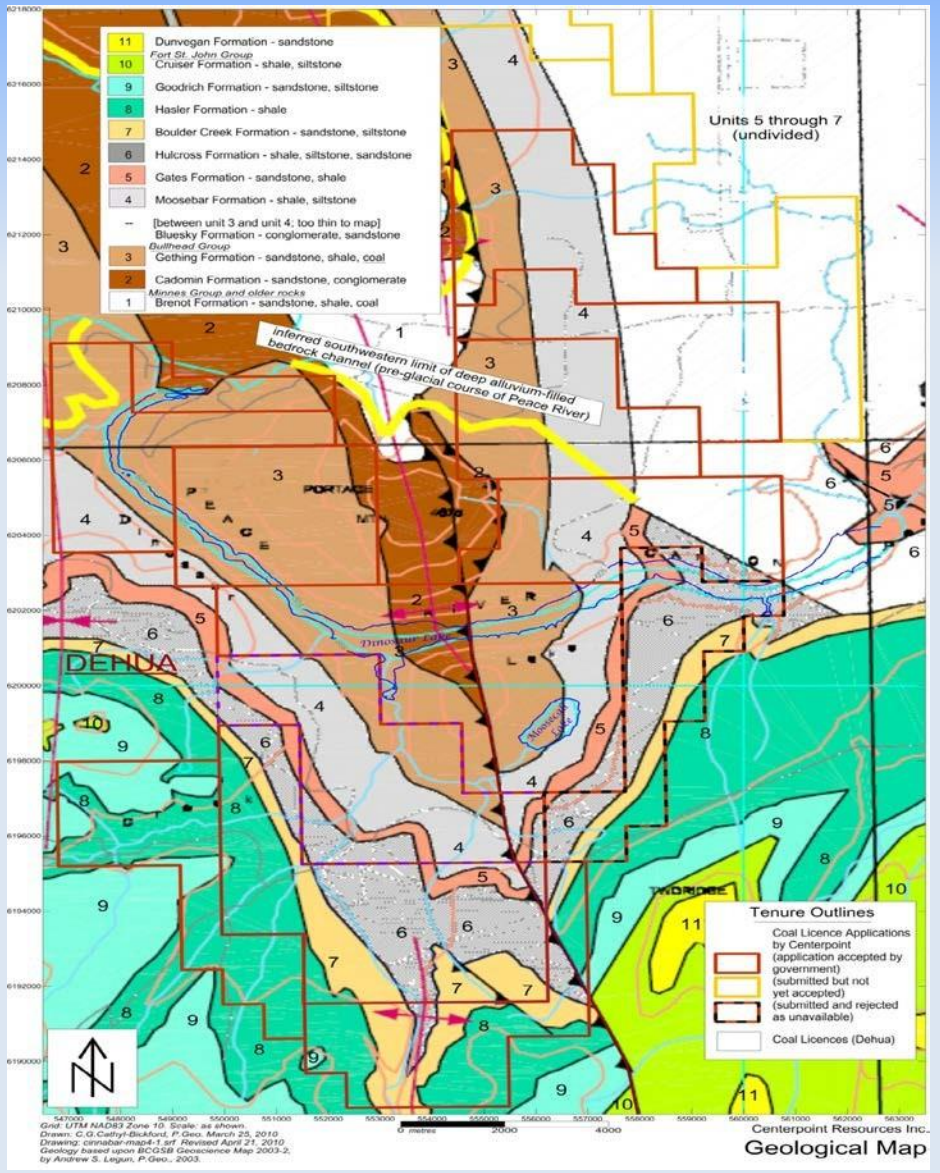
- Dip of the coals is low to moderate (7% to 38%), facing away from the centre of a large anticline.
  煤层倾角平缓为中度范围(7% 到 38%), 背离大的背斜中心。



Geological Section 地质切面图

Regional Geology Map
地区地质图

The light brown, the gething formation ,is coal bearing.
此图中的土黄色部分是盖森地层，为含煤地层



Coal Resource and Quality
煤炭资源和煤质

- Speculative resources of coal, in beds at least 1 metre thick, contain at least 2.72 million tonnes of Coal, of which 2.41 million tonnes are considered to be within 600 metres of the ground surface.
- Resource estimation includes an allowance for geological risk, which is decreased within areas which have already been extensively drilled. 。
- The Lower Coals are not assumed to extend beneath the Upper Coals. This is a conservative assumption, based on the Lower Coals having fewer boreholes than the Upper Coals.
- 推测1米以上的厚煤层的资源总量最少为2.72亿吨。其中2.41亿吨被认为是赋存于地下600米以内。
- 资源估计考虑到了地质风险，而在钻探密集地区，其风险也随之降低。
- 由于下煤组钻孔少于上煤组，储量估算是基于下煤组并没有在上煤组的下方延展，这个估算是很保守的，具有很高的可靠性。

East Bank section of Gething and Cadomin formations, looking northeastward.
东北方向的盖森和*Cadomin*层组的东岸切面图

Coal Resource and Quality
煤炭资源和煤质

- Coals with coking ability have been identified as our major exploration targets. Cinnabar Project is estimated to Coals are mostly medium volatile coking coal, with some high volatile bituminous coal in the western part of the property. Volatile matter content decreases to the east, and also decrease downward within the Gething Formation.
  我们主要的勘探目标是焦煤。朱砂峰项目预计煤质多数为中度挥发焦煤，西部区域的煤质为高挥发度焦煤，东部区域以及盖森层组挥发物质成分降低。
- Ash of the coal by itself is low, at 3% to 7%. Sulphur content of the coal is low, typically within 0.55% , rarely exceeding 1%. All coal resources are within coal beds considered to have characteristically low sulphur contents.
  煤自身的灰分很低，在3%到7%之间。煤的硫分很低，典型的为0.55%以内， 很少超出1%。
- Coals can be blended from within the property, to meet the VM23-25%, ash less than 8% requirement of Asian markets.
  可以在矿上就地混煤，以满足中度挥发23-25%，灰分低于8%的亚洲市场需求。

Coal Resource and Quality
煤炭资源和煤质

Block 区块	Area (hectares) 面积(公顷)			coals within the area 区内煤组	gross thickness (metres) 总厚度(米)	risk factor used 采用的风险系数	scaling factor (ha to m2)比例系数	S.G.(gm/cc)视密度	Tonnes of coal (speculative level-of-assurance) 煤吨数(预测的)		
	Upper Coals 上煤组		Lower Coals above 600 m 下煤组						Upper Coals上煤组		Lower Coals下煤组
	Depth (above 600 m) 深度600m 以浅	Depth (below 600m) 深度600m以 下							Depth(above 600m)深度600 米以浅	Depth (below 600m) 深度600米以下	Depth above 600 m 深度600 米以下
701s			586	GrMu	2.5m	0.3	10000	1.34			5889300
702s	834			SuTr Ti	5.5m	0.75	10000	1.34	46099350		
801s			290	GrMu	2.5m	0.3	10000	1.34			2914500
802s	1105			SuTr Ti	4.5m	0.7	10000	1.34	46642050		
1201s			164	GrMu	2.5m	0.3	10000	1.34			1648200
1202s	1250			SuTr Ti	3.5m	0.6	10000	1.34	35175000		
1301s			363	GrMu	2.5m	0.3	10000	1.34			3648150
1302s	931			SuTr Ti	3.5m	0.6	10000	1.34	26198340		
1402s			1300	GrMu	2.5m	0.3	10000	1.34			13065000
1502s			1072	Mu	2.1m	0.4	10000	1.34			12066432
1701s	1153			SuTr Ti	3.5m	0.5	10000	1.34	27037850		
1801s	1118			Tr Su	2.5m	0.3	10000	1.34	11235900		
1802s			241	GrMu	2.5m	0.3	10000	1.34			2422050
1901s	744			Tr Su	2.5m	0.3	10000	1.34	7477200		
1902s			311	GrMu	2.5m	0.3	10000	1.34			3125550
1903s			31	GrMu	2.5m	0.3	10000	1.34			311550
2001s	538			SuTr Ti	4.0m	0.3	10000	1.34	8651040		
2002s			774	GrMu	2.5m	0.3	10000	1.34			7778700
2101s	1059			SuTr Ti	4.5m	0.4	10000	1.34	25543080		
2102s			264	GrMu	2.5m	0.3	10000	1.34			2653200
2103s			113	GrMu	2.5m	0.3	10000	1.34			1135650
2201s	722			Tr Su	2.5m	0.3	10000	1.34	7256100		
							Totals		**241×10^6**		**57×10^6**

Coal Quality
煤质

Coal quality data from 1971/1973 exploratory work
1971/1973年勘探工作的煤质数据

Sample details					Proximate analyses of raw coal							
Bed 煤层	Locality 位置	Sample 样品	Lab No. 实验号		Basis 基准	M 水分	VM 挥发分	FC 固定碳	Ash 灰分	Sul 硫	FSI 自由膨胀系数	CV (BTU) 发热量
Trojan	Moosecall Creek outcrop trench (1971)	139/140	7		adb	1.27	24.81	52.27	21.65	0.60	4.5	11570
		135/136	5		adb	1.26	24.16	54.19	20.39	0.67	4	11760
		137/138	6		adb	1.26	29.56	61.61	7.51	0.71	8.5	14010
Trojan	BH7304 A (1973)	139.88-140.61	171		adb	0.40	25.32	70.38	3.90	0.46	3	
		140.61-141.33m	172		adb	0.39	24.02	59.27	16.32	0.36	1.5	
		141.48-142.37m	174		adb	0.24	27.18	68.95	3.63	0.38	5.5	
		142.37-143.13m	175		adb	0.34	29.42	66.25	3.99	0.52	7.5	
Trojan	BH7305 (1973)	27.23-27.83m	177		adb	0.40	24.26	62.77	12.57	0.57	1.5	
		27.86-28.56m	179		adb	0.26	27.04	64.89	7.81	0.57	4	
		28.66-29.03m	181		adb	0.13	29.68	63.25	6.94	0.48	8	
Mogul	BH7306	111.77-112.62m	603		adb	0.23	23.26	70.98	5.53	0.53	1	
		113.08-113.49	609		adb daf	0.15	21.92 22.89	73.84 77.11	4.09	0.60	1	
Castle Point	BH7306	147.83-148.22	610		adb	0.43	23.97	61.58	14.02	1.02	5.5	
		148.88-149.06m	612		adb	0.50	24.92	53.14	21.44	1.07	7.5	

Notes: adb: air-dried basis. 1971 data are taken from report by Checklin and Halferdahl (1971); 1973 data are taken from report by Haslett and others (1974).

备注：adb:风干基. 1971 数据来源于 Checklin and Halferdahl (1971)的报告; 1973 的数据来源于 Haslett and others (1974)的报告.

Coal Quality 煤质

	AS RECEIVED BASIS 照收到	DRY BASIS 干基准	ASTM METHOD ASTM方式
% Moisture （湿分）	2.49	.....	D 3302
% Ash （灰分）	5.96	6.11	D 3174
% Volatile Matter （挥发分） % Fixed Carbon （固定碳	19.12	19.61	D 3175
	72.43	74.28	
	100	100	
% Sulphur （硫磺）	0.53	0.55	D 4239

SGS Coal quality Analysis in 2010
2010年SGS 分析的煤质数据

ANALYSIS 化验项目	RESULT 结果	Unit单位	METHOD 方法
Vitrinite Type V12 镜质体V12种类	4.7	%	ASTM D2798
Vitrinite Type V13镜质体V13种类	6.4	%	ASTM D2798
Vitrinite Type V14镜质体V14种类	5.9	%	ASTM D2798
Vitrinite Type V15镜质体V15种类	5.9	%	ASTM D2798
Vitrinite Type V16镜质体V16种类	6.4	%	ASTM D2798
Vitrinite Type V17 镜质体V17种类	7.2	%	ASTM D2798
Vitrinite Type V18镜质体V18种类	5.9	%	ASTM D2798
Vitrinite 镜质体	42.4	%	ASTM D2799
Exinite壳质体	3.7	%	ASTM D2799
Resinite 树脂煤	0.3	%	ASTM D2799
Semifusinite (Reactive) 半丝质体（反应性）	7.8	%	US STEEL
Total Reactives总反应性	54.2	%	US STEEL
Semifusinite (Inert) 半丝质体（惰性）	31.3	%	US STEEL
Micrinite微粒体	9.2	%	ASTM D2799
Fusinite 丝质	1.8	%	ASTM D2799
Mineral Matter 矿物体	3.5	%	ASTM D2799
Total Inerts 总惰性体	45.8	%	US STEEL
Composition Balance Index 组织平衡系数	6.82		US STEEL
Rank Index 阶级系数	6.23		US STEEL
Mean Maximum Vitrinite Reflectance 平均最高镜质体反	1.56	%	ASTM D2798
Calculated Stability Factor 计算稳定系数	24		US STEEL

V. Sharma, Laboratory Supervisor

Mineability
可采性

- Coal geology is not complex and seams are not steep (typically 7%) .Estimated that mining extraction can continue to a depth of 600 metres.

  煤炭地质不复杂，煤层不陡峭（基本为7%）。预计开采最深可达600米。
- Seams are generally thin but are ideal for underground long wall and short wall mining, and room & pillar extraction. These methods are common in Asia.

  采用地下长臂和短臂以及房柱式开采，煤层厚度非常理想。
- Three separate mines in different areas could be considered for a maximum total production of 6,000,000 clean tonnes per year for a minimum 25 year mine life.

  考虑在不同区域开发3个独立的矿区，年产高达600万吨精煤，至少25年的矿山服务年限。

Conclusion
结论

- Centerpoint's coal property at Cinnabar Peak Consists of 57.93 square kilometres of coal exploration licence, effectively controlling the most accessible part of a larger coalfield.
  中鈇公司的朱砂峰煤炭资产包含57.93平方公里的煤炭勘探执照，有效地控制了大部分煤田的出入通道。
- Centerpoint's property is estimated to contain at least 2.72 million tonnes of coal, of which 241 million tonnes are considered to be within 600 metres of the ground surface.
  中鈇公司煤炭资产预计总量最少为2.72亿吨煤，其中2.41亿吨被认为是地表以下600米以内。
- Coal resources at Cinnabar Peak are classified as being at the "speculative" level-of-assurance.
  朱砂峰的煤炭资源量是根据资源勘探资料估算的，可靠程度高
- The coal beds have a range of volatile-matter contents amenable to blending to meet Asian requirements for cokingcoal.
  煤层含有的挥发物含量适合混配，以满足亚种对焦煤的要求。
- Ash content and sulphur content of the coals are low, rendering them attractive for development.
  此煤的灰分和硫分含量比较低，让此种煤炭开发颇具吸引力。
- The coal would be workable by underground methods.
  此煤采用地下开采方式可行。
- The property is well-served by infrastructure, allowing for ready exploration and development.
  该区域基础设置配套良好，为项目的勘探和开发做出很好的准备。

Centerpoint Resources Ltd..
加拿大中鈇资源有限公司

Thank you

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