

# 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  
Feb. 2022

# Centerpoint Resources Inc. Overview

## 加拿大中鉄资源有限公司概况

- 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.
- 加拿大中鉄资源公司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**

- ✓ 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

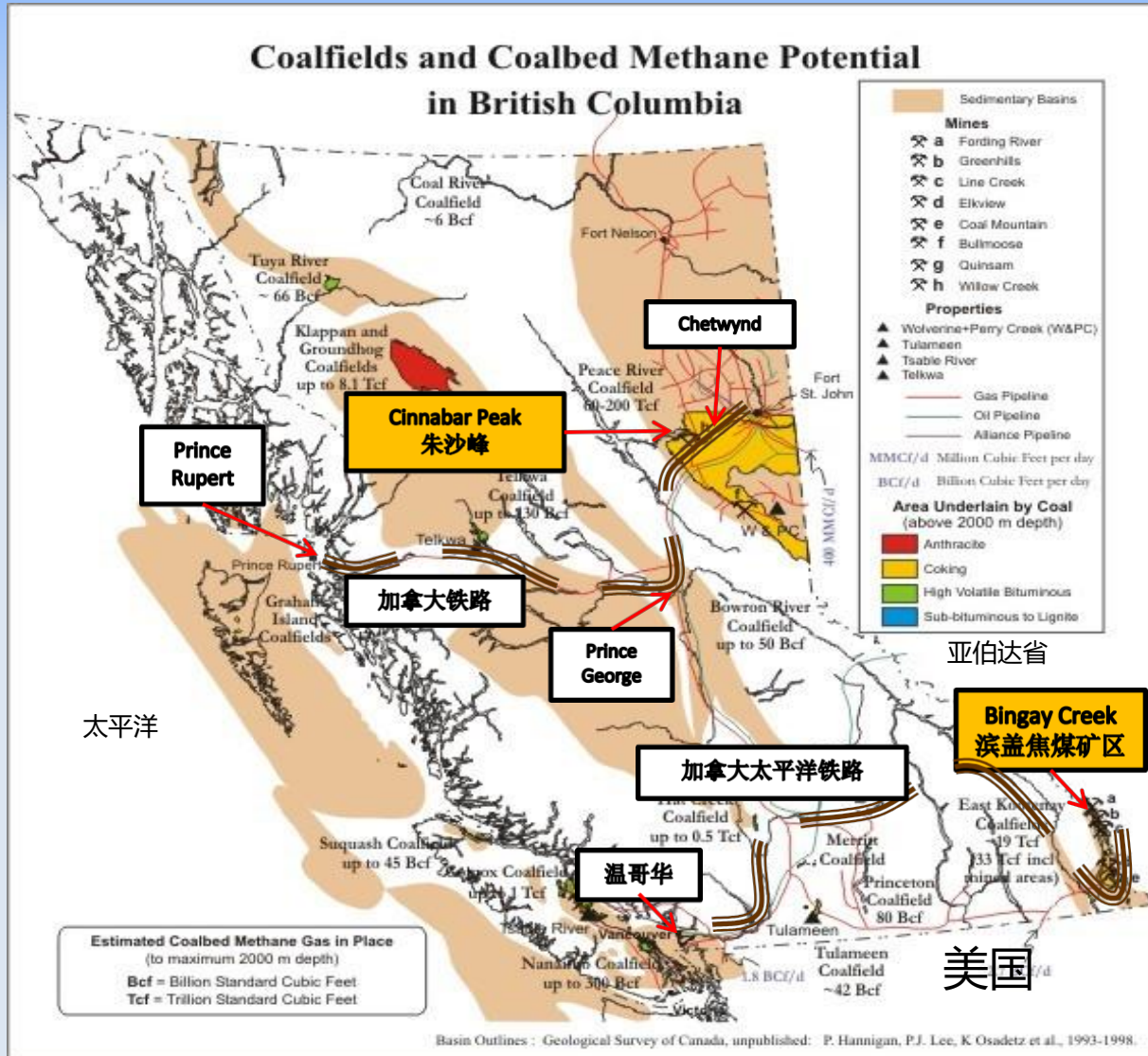
## 项目摘要

- **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。

# Project Location 项目位置



The Bingay Main Asset is located in the southeast corner of B.C., in the East Kootenay portion of the Rocky Mountain coal field, covering 11.57 sq. km. The Asset is adjacent to Teck Coal's Fording River Operation which produces 8 million tonne of coking coal annually and is located within the "Coal Enhanced Resource Development Zone" incorporated into the south Rocky Mountain Land Use Plan.

滨盖主区位于英属哥伦比亚省东南角，落基山脉煤田的East Kootenay 区域。该矿床靠近 Teck Coal 的 Fording River 矿作业区，年产焦煤900万吨；同时位于落基山脉南部土地利用规划中的“强化煤炭资源开发区”内。



# Map of Bingay Areas Main, A, B

## 宾盖主区, A, B区地图

- Bingay Main license 100% owned by Centermount - area 11.57 km<sup>2</sup>

中山焦煤有限公司拥有100%的宾盖主区, 面积11.57平方公里。

- Bingay AB licenses 100% owned by Centerpoint - area 12.221km<sup>2</sup>

中缺资源有限公司拥有100%的宾盖AB, 面积12.21平方公里。

- Notice of work of Bingay AB obtained

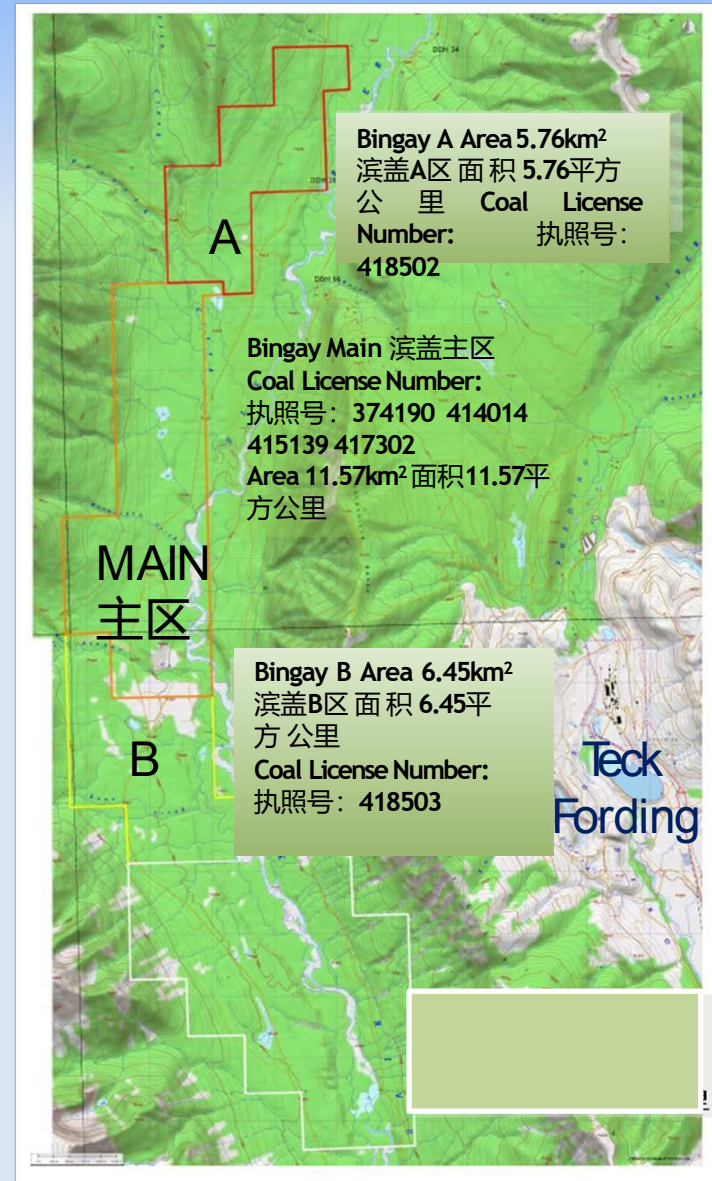
拥有宾盖AB勘探许可

- All licenses are current

所有的权证都是有效的

- Bingay area including Bingay Main and Bingay A&B, total is 23.78 km<sup>2</sup>

宾盖区域包括宾盖主区和宾盖AB总面积23.78平方公里。



# Bingay Main Property 滨盖主区

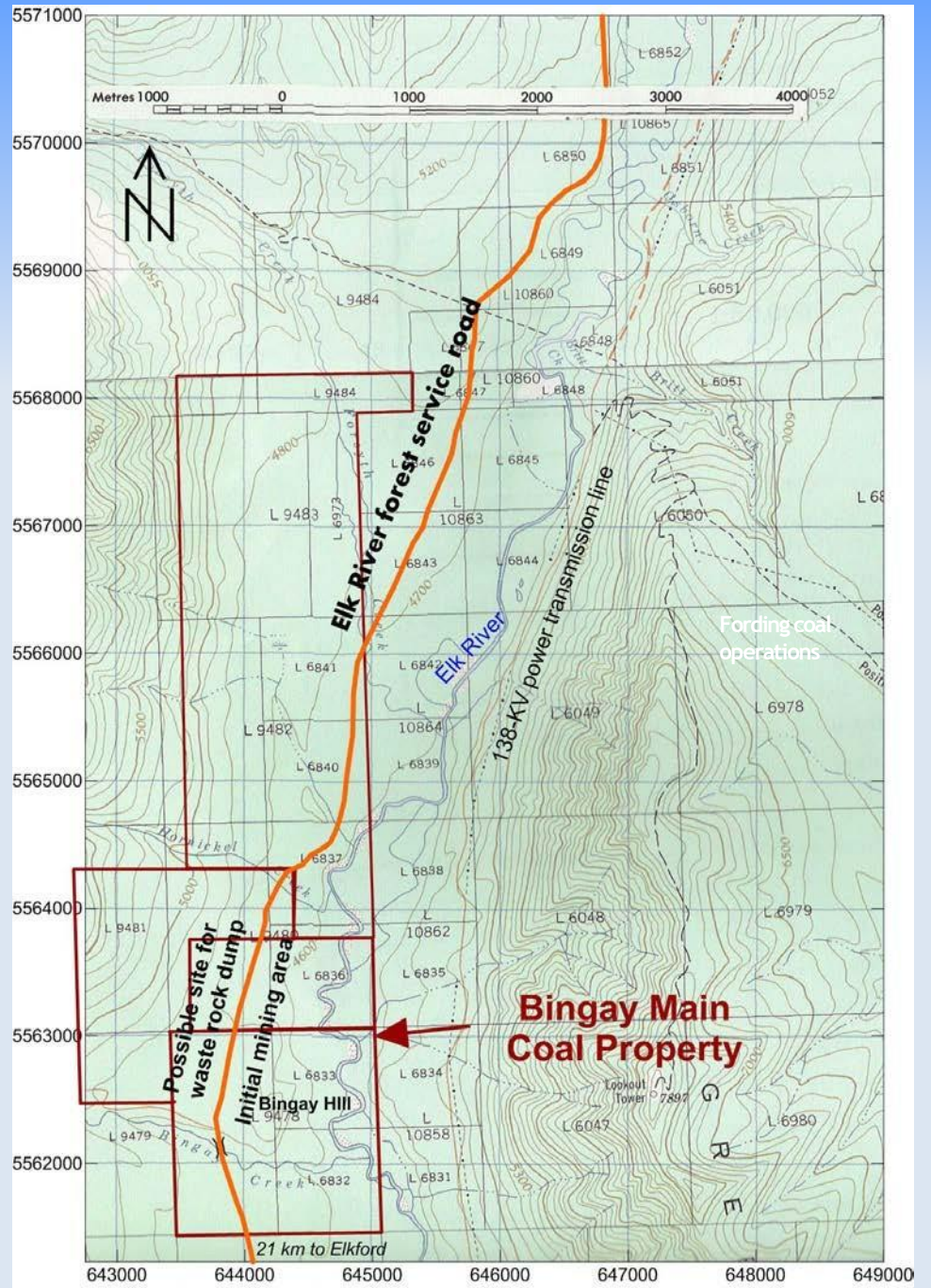


Figure 1: Map showing Bingay Main coal license location  
图1: 滨盖主区煤田许可证位置图



# Bingay Main Property Open Pit Mining

## 滨盖主区 - 适于露天开采





# Infrastructure and Transportation Consideration

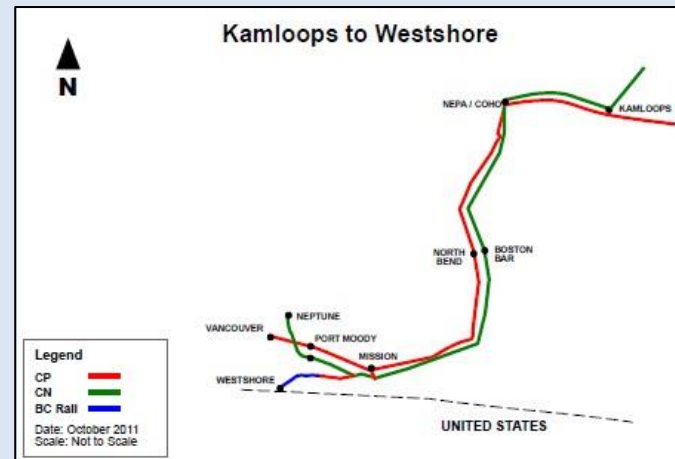
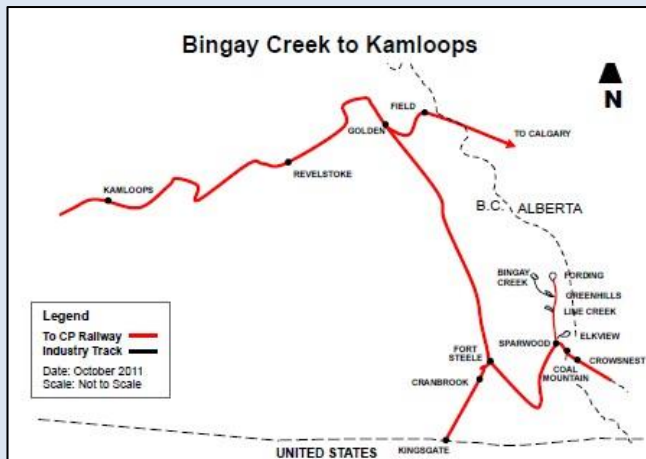
## 交通及基础设施完善

- **Road:** Existing major forest service roadway in place, standard upgrading to be completed during project construction

公路：当地已有为林区提供服务的公路干道，  
在本项目施工过程中将完成对公路的标准升级改造

- **Rail:** Close to Canadian Pacific Railway which has the capacity for Bingay because currently only 40% of capacity is being used. 26km railway needs to be built in order to connect mine site to Canadian Pacific Railway.

铁路：临近加拿大太平洋铁路，目前运输量仅为运力的40%，公司需要建设26公里的铁路专用线以连接厂区到太平洋铁路公司主干线。



# Infrastructure and Transportation Consideration

## 交通及基础设施完善

- **Port:** Port facilities (Westshore, Neptune) are by 2016 able to provide capacity to handle the mine production.

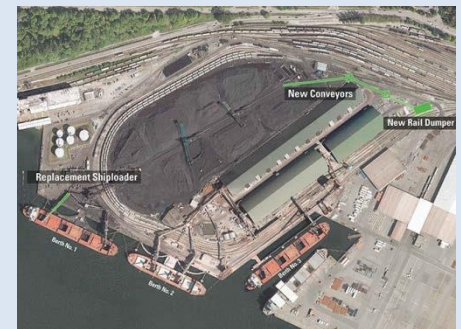
海港：港口设施西岸和海王星码头2016年吞吐量可为矿区产区提供足够运力。

- ✓ Westshore Terminals, Delta, BC. Throughput capacity 33 million tonne, peak berth loading 7000tonne.

西岸码头年吞吐量3300万吨，处理能力每小时7000吨。

- ✓ Naptune Terminals, Vancouver North Shore BC., has the capacity to handle over 24 million tonne of bulk products a year. With the completion of terminal improvement projects, capacity at the terminal will increase to 30 million tones.

海王星码头，年吞吐量2400万吨，目前正在扩建，以增长到每年3000万吨。



# Infrastructure and Transportation Consideration

## 交通及基础设施完善

- **Water** : Surface runoff from a nearby creek and groundwater removed from the open pits sufficient for the project development  
用水: 附近小溪的地表径流和露天开采过程中排出的地下水足够满足项目发展的需要。
- **Power** : Grid power available through a 138 kV transmission line adjacent to the Asset  
电力: 紧邻本资产有一条138 千伏的输电线路连接电网和天然气管道也从厂区经过。





# Geological Coal Resource 煤炭地质资源

NI 43- 101 Technical Report 技术报告– December 2016 年12月

Bingay Main 滨盖主区	Measured 探明	Indicated 控制	Inferred 推断	Total Coal 总吨位(Tonnage)
Metallurgical 焦煤	86,041,990	13,944,167	18,343,666	<b>118,329,824</b>

Resource defined from 资源量来自:

Number of DH 钻孔总数	Year 年份							Total总数
	1983	2004	2005	2010	2011	2012	2016	
Type 类型								
Diamond 金刚钻	3			16	3	5	16	43
Rotary 旋转式		6	8	42	6	12		74
Trench 探槽				9		1	3	13
Total 总数	3	6	8	67	9	18		130

**Huge potential on Bingay A&B area 27.22 km<sup>2</sup>, drill holes show 32 coal seams**  
滨盖A&B面积27.22平方公里潜力巨大,钻孔表明有32个煤层

# Geological Coal Resource

## 煤炭地质资源

### Bingay Main Detailed Cooking Coal Tonnage

#### 滨盖主焦煤吨位煤层

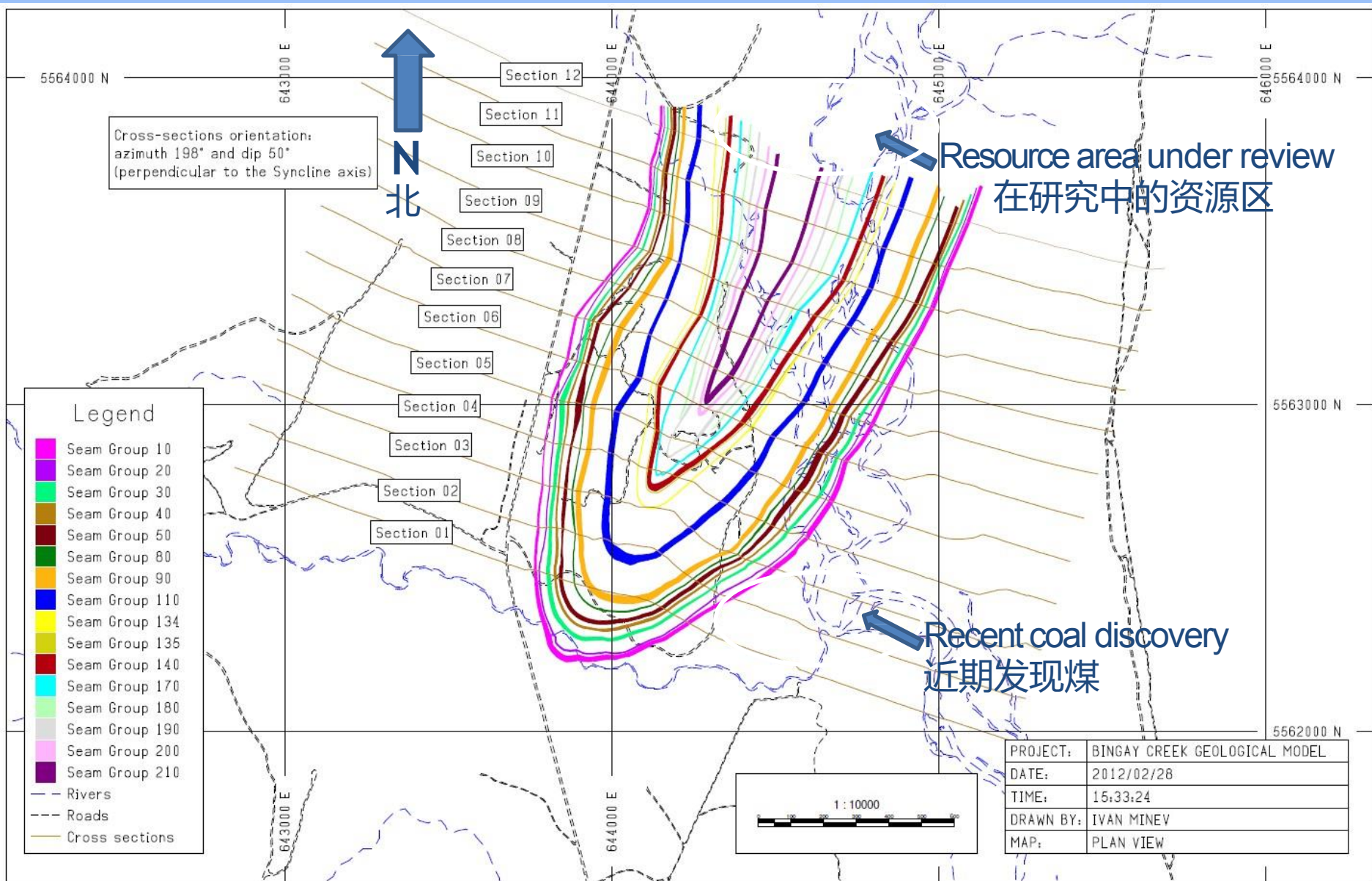
Coal Seam 煤层	Measured 探明	Indicated 控制	Inferred 推断
1-2	11,611,375	1,881,766	2,475,482
3	6,942,437	1,125,108	1,480,090
4-7	16,146,895	2,616,804	3,442,431
8	1,537,904	249,236	327,873
9-10	17,791,915	2,883,400	3,793,140
10R	697,240	112,996	148,648
11-12	11,439,057	1,853,840	2,438,745
13	4,155,966	673,526	886,030
14-16	5,047,130	817,950	1,076,021
17	2,361,716	382,745	503,505
18	981,987	159,143	209,354
19	1,269,326	205,710	270,613
20-21	6,059,042	981,943	1,291,756
<b>Total 总数</b>	<b>86,041,990</b>	<b>13,944,167</b>	<b>18,343,688</b>
<b>TOTAL 总储量</b>	<b>99,986,157</b>		<b>118,329,845</b>

Metallurgical Coal Tonnage Total

焦煤吨位总数

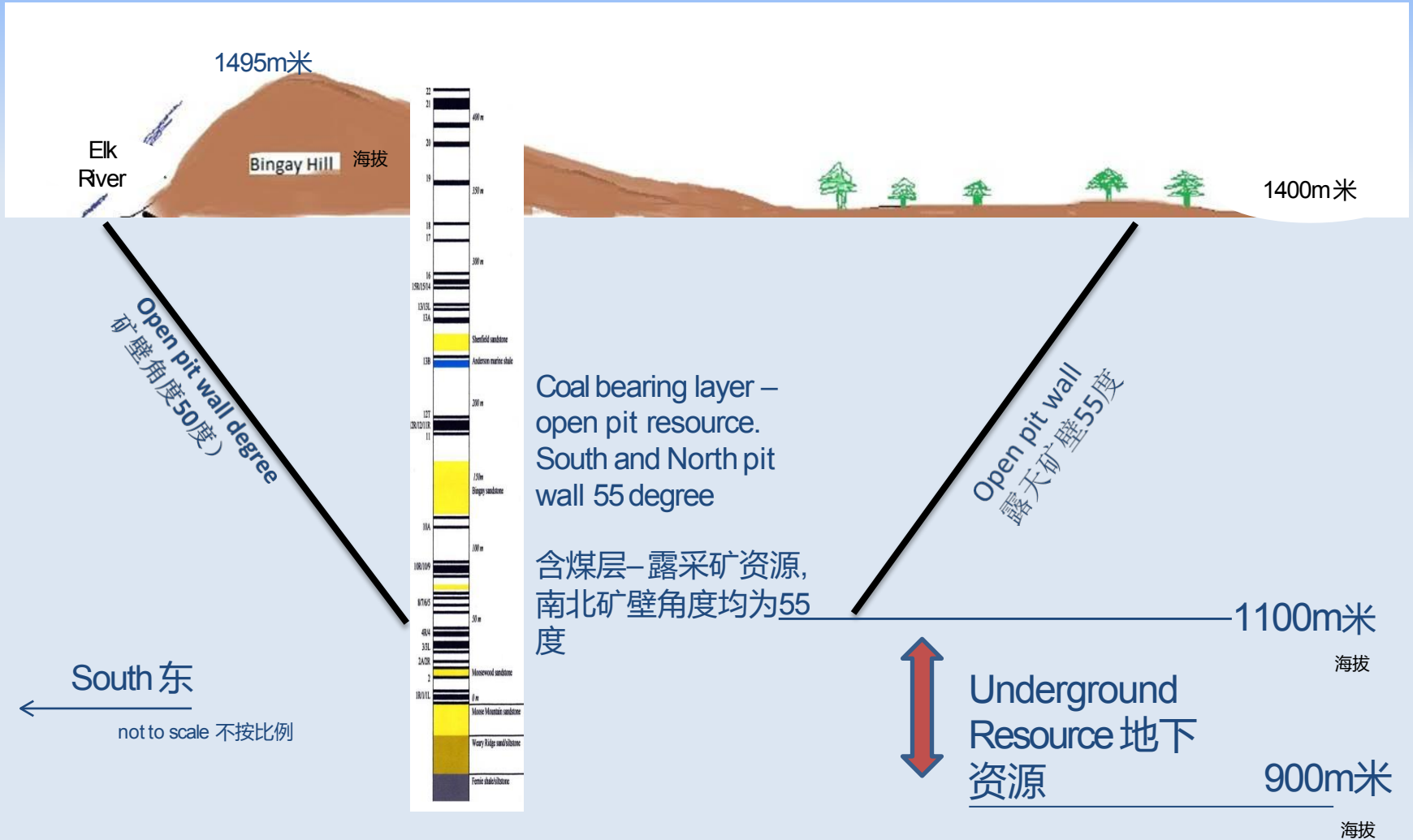
**118,329,824**

# Plan view of Bingay Main deposit 滨盖主区矿床平面图





# Bingay – Resource 滨盖资源



# Bingay - Coal Quality

## 滨盖 - 煤质

ALS Certified of Analysis 经由ALS试验室验证分析

Proximate近似值																		
	ASH 灰分	RM 残留水分	VM 挥发分	FC 固定碳	FSI自由膨胀系数	Dry Basis干基灰分	R <sub>o</sub> 最大镜质	Softening软化	Max Fluidity最大流动性	Max Fluidity最大流动性	Solidication固化	Range范围	煤层 Seam	反应后焦炭强度	焦炭反应性指数			
	%	%	%	%	FSI	%		温度.°C	DDPM	温度.°C	温度.°C	Delta T		CSR	CRI			
#9 to # 10 Seam 9号到10号煤层	9.05	1.24	28.86	60.73	6.5	9.17	1.01	420	14	446	462	42	10	68.3	24.3			
#12 Seam 12号煤层	11.6	1	25.54	61.86	5	11.72	1.09	417	9	444	467	50	12	65.9	24.7			
	X Index	Y Index指数	GFactor															
	(Shrinkage) X指数	Thickness厚度	粘结指数															
	收缩	Plastic Layer塑料层																
#10 Seam 10号煤层	26.5	12.39	71.55															
#12 Seam 12号煤层	33.5	12.04	77.02															
#20 Seam 20号煤层	22.5	18.59	82.93															
			% of deposit	FSI	%ASH 灰分	残留 Residual	%ASH 灰分	VM 挥发分	FC 固定碳	CV 发热量	S 硫	Softening 软化	Max Fluidity最大流动性	Max Fluidity最大流动性	Solidication 固化	Range范围	最大镜质	GFactor 粘结指数
			矿床百分比	自由膨胀系数	Dry Basis 干基	水分 Moisture	(adb)	%	%	Dry干燥	%	温度.°C	DDPM	温度.°C	温度.°C	Delta T	R <sub>o</sub> m	
1. 2012-04DA (120201-120203)		Seam 10 煤层	19.9	4.5	9.26	1.1	9.16	27.8	61.94	7596	0.16	424	6	446	462	38	0.97	
2. 2012-04DA (120206-120209)		Seam 10 煤层		5	7.34	0.97	7.27	27.02	64.74	7682	0.24	426	3	444	450	24	1.02	
3. 2012-05DA (120212-120216)		Seam 12 煤层	15	3	8.14	0.94	8.06	29.15	61.85	7683	0.26	413	37	442	466	53	0.97	
4. 2012-05DA (120301-120310)		Seam 10 煤层		6	7.24	1.28	7.15	27.58	63.99	7774	0.19	420	15	443	462	42	1	71.55
5. 2012-05DA (120311-120312)		Seam 4 煤层	14.6	7	6.88	1.01	6.81	27.04	65.14	7812	0.31	423	8	446	460	37	1.03	
6. 2012-06DA (120313-120352)		Seam 20 煤层	6.7	7.5	6.77	1.15	6.69	28.07	64.09	7850	0.26	420	67	446	468	48	1.04	82.93
7. 2012-08DA (120357-120381)		Seam 12 煤层		7.5	5.07	1.13	5.01	27.12	66.74	7996	0.11	417	5	450	463	46	1.09	77.02
4, 10, 12, and 20 seams			0.562	of the deposit														

# Bingay - Coal Quality

## 滨盖 - 煤质

Previous Data from Prefeasibility Study					以前预可研报告的数据									
	自由膨胀系数	粘结指数	粘结指数X值	粘结指数Y值	残留水分	灰分	挥发分	固定碳	流动性	硫	磷	反应活性	最大镜质反射率	反应后焦炭强度
Bed煤层	FSI	G Factor	GFactor X(mm)	GFactor Y(mm)	RM %	Ash %	VM %	FC%	ddpm	% Sulfur	Phos. %	% Reactives	R0m	CSR
No.10号	4	93.00	26.50	17.50	0.56	8.75	27.62	63.07	7.00	0.34	0.05	68.10	1.02	54.1
No.12号	5 1/6	76.00	32.25	12.50	0.60	10.31	28.83	60.26	91.50	0.36	0.09	70.37	0.98	54.4
No.4号	5	93.00	26.50	17.50	0.52	10.65	29.01	59.82	15.90	0.43	0.03	68.49	0.91	47.60
No.20号	6 1/2	99.00	29.00	17.00	0.32	5.62	32.17	61.88	66.47	0.58	0.05	70.60	0.97	61.80

The Bingay Coal Quality is similar to East Kootenay area Medium Volatile coal. Based on drilling and trenching coal results, Bingay Coal is classed as Medium Volatile coking coal which is 70 % of the resource and is considered as JM (coking coal) in the Chinese standards. The remaining 30% is fat coking coal with 10% being low ash class.

滨盖煤质和东库特尼区域中度挥发焦煤类似。基于钻孔和刨槽的结果，滨盖的煤，70%为中度挥发焦煤，即中国的JM（焦煤），20%为肥焦煤，10%为低灰肥焦煤。



# Bingay Mine Production

## 滨盖主区矿山生产

- Open pit life 15 years  
露天矿生产年限15年
- Underground mining 15 more years  
地采15年
- Raw coal strip ratio approximately 1:7.7  
原煤剥采比约为 1:7.7
- Target 2 Million clean tonnes per year  
目标为每年200万吨精煤
- Potential coal on Bingay AB, possibility of additional open pit mine increasing production  
滨盖AB储量潜力巨大，可以再增加露天开采的产量

# Bingay A&B High Potential Coal

## 滨盖A&B区域资源开发潜力巨大

- 4 drillholes east of Bingay A, DDH34 intersected 96m of coal seams thicker than 1 m, 11 major seams thicker than 3m. DDH96 14 coalbeds. DDH-16 and 16-BA02 abandoned before coalbearing beds  
滨盖A附近4个已知钻孔，DDH34大于1米厚煤共96米，11个主要煤层厚度大于3米。DDH96钻到14个煤层。其他两个钻孔在钻到煤层时或之前停钻
- Local Geology and Structural Similarities  
地质和构造特征及相似性
- Huge potential on Bingay A&B area 12.21 km<sup>2</sup>  
drill holes show 32 coal seams  
滨盖A&B面积12.21平方公里潜力巨大,钻孔表明有32个煤层
- Further exploration to prove and increase resources  
需进一步系统勘探工程增加储量



# Direct Operating Cost 直接运营成本

Surface Mining 露天采矿	\$32.00/CMT
Coal Processing 煤炭加工处理	\$5.27/CMT
Other (ie. Overhead) 其他 (如管理费用)	\$5.42/CMT
Rail (includes car lease) 铁路 (含租车)	\$23.76/CMT
Port (includes sampling & commission) 港口 (包括采样及服务费用)	\$9.87/CMT
<b>Total Operating Cost</b> 总的运营成本	<b>\$76.32/CMT</b>

Approximately the same as Fording Coal  
约和泰克福丁煤矿相同



# Development Timetable 开发时间表

	2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Feasibility Study</b> 可行性研究报告	█											
<b>Environmental Assessment</b> 环境评估	█											
<b>Mining Permit</b> 采矿证	█											
<b>Design&amp;Construction</b> 设计与施工												
<b>Production</b> 投产												█

Potential Mining Start in  
2023.Q4  
2023年 第四季度投产



# 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.  
中缺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.  
中缺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 coking coal.  
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. 加拿大中央资源有限公司

Thank you  
谢谢