



## **BLACK CRANE ENERGY CORP.**

Strategic Alternatives Process

Portfolio of E&P Upstream and Bitcoin Mining  
Assets in Alberta

Spring 2022

## DESCRIPTION OF THE PROCESS

Black Crane Energy Corp. (“BCEC” or the “Company”) has initiated a process to explore strategic alternatives for the Company, which may include: (1) sale of the Company’s shares or its assets; (2) joint venture prospects; or (3) an equity or debt investment in the Company to help accelerate development of its E&P assets and bitcoin mining pipeline (the “Process”). BCEC has retained ARCO Capital Partners Inc. (“ARCO”) as its exclusive financial advisor to assist with the Process.

BCEC’s portfolio includes: (1) operated light oil and natural gas production base in Irricana and Chigwell areas of central Alberta (the “E&P Properties”); and (2) a vertically integrated bitcoin mining operation tied to a single gas well in Irricana (“Bitcoin Operation”).

Unless otherwise noted, referenced production data for the E&P Properties reflects working interest field production volumes for February 2022. The Company has prepared an internal reserve evaluation for the E&P Properties (“Reserve Report”). The Reserve Report is effective December 31, 2021, using GLJ’s forecast pricing as at January 1, 2022, which is posted on their website.

A Confidentiality Agreement (“CA”) is available to prospective parties by contacting ARCO directly. Parties who execute a CA will have access to confidential information via an online data room (the “Data Room”). The deadline for non-binding proposals is **April 14, 2022**, but such date may be subject to change by the Company (“Bid Deadline”). Parties that have executed the CA will be provided detailed bidding instructions, including the submission guideline for proposals.

It is the intention of BCEC to conduct the Process with minimal disruption to BCEC’s operations, as such interested parties should make inquiries and requests for information directly to ARCO. BCEC reserves the right to alter the Process, close the Data Room, change the date for proposals and/or decline any or all offers.

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## PROCESS TIMELINE



## CONTACT INFORMATION

Interested parties should contact the below with respect to signing a CA and/or accessing the Data Room and for any other enquiries related to the Process:

Dejan Kukic, CFA  
 President  
 ARCO Capital Partners Inc.

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 Email: dkukic@arcocapital.ca  
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## COMPANY OVERVIEW & HISTORY

BCEC is a private Alberta company founded in 2016 by the incumbent management team. Since October 2017, BCEC has been largely funded by private equity, which has allowed BCEC to grow production organically with drilling and completion activity over the next two years.

Current corporate profile is defined by a low-decline, balanced production mix with added revenue diversification from an integrated bitcoin mining operation.

### Company Leadership

Malcolm Adams	President & CEO & Director
Todd Hirtle	Vice President & Chief Financial Officer
Rick Howe	Vice President, Engineering
Dana Roney	Vice President, Operations
Sheldon Nedjelski	Vice President, Land
Rick Rathier	Senior Geologist

### Advisors

Legal Counsel	Norton Rose Fulbright LLP
Reserve Engineer	Internal Evaluation
Banker	CIBC
Auditor	KPMG

### Company History

2016	BCEC is founded by the current management team
2017	BCEC closes Equity Line of Credit with PE sponsor; executes a 5-well 'drill-to-earn' farm-in deal with a major producer and a 20 section Freehold leasing arrangement; spuds first well in Irricana
2018	BCEC drills 2 horizontals in Irricana and acquires 5 recompletion wells
2019	BCEC drills 2 vertical Belly River wells in Irricana
2021	BCEC receives delivery of 111 miners and commences wellsite bitcoin mining operations in July 2021

### Outstanding Indebtedness as at December 31, 2021

Accounts Payable & Accrued Liabilities	\$M	352
Other Short Term Liabilities	\$M	-
Lease Obligations	\$M	21
Bank Debt	\$M	60
Accounts Receivable & Prepaid Expenses	\$M	(482)
Cash	\$M	(1,290)
<b>Net Debt / (Net Cash)</b>	<b>\$M</b>	<b>(1,339)</b>

### Estimated Tax Pools as at December 31, 2021

Canadian Oil & Gas Property Expense (COGPE)	\$M	1,898
Canadian Development Expense (CDE)	\$M	3,027
Canadian Exploration Expense (CEE)	\$M	1,419
Undepreciated Capital Cost (UCC)	\$M	1,025
Non-Capital Losses (NCL)	\$M	13,957
Share Issue Costs	\$M	45
<b>Total Pools</b>	<b>\$M</b>	<b>21,371</b>

### AER Related Metrics

<b>LMR (As at March 5, 2022)</b>	<b>x</b>	<b>3.05</b>
Well Related Liability	\$M	1,719
Facility Related Liability	\$M	221
Total Deemed Liability Value	\$M	1,941
Deemed Asset Value	\$M	5,927
<b>Net Asset Value</b>	<b>\$M</b>	<b>3,986</b>
<b>Current Active to Inactive Well Ratio</b>	<b>x</b>	<b>2.5</b>
Active Wells (Net)	#	7.5
Inactive Wells / Suspended (Net)	#	3.0

## ASSET OVERVIEW & HIGHLIGHTS

BCEC has consolidated ~31,000 net acres in Irricana and Chigwell areas of central Alberta targeting development of oil and liquids-rich gas prospects in the Ellerslie, Falher and Belly River Formations. In July 2021, BCEC implemented a commercial scale, fully integrated bitcoin mining operation to further evaluate a gas well while also diversifying and maximizing corporate netbacks.

Strong cash flow generated by low opex and diversified sales product

- BCEC's E&P Properties averaged 181 BOE/d in Q4/2021, consisting of 85 bbl/d of light oil (+32° API) and liquids and 573 Mcf/d of gas
- E&P Properties generated \$2.5 MM of annualized NOI in Q4/2021 (\$38/BOE) with full year operating costs of \$0.65 MM (\$10.15/BOE) and royalties of \$0.5 MM (16%)
- BCEC's 40 Mcf/d Bitcoin Operation generated \$0.7 MM of annualized NOI in Q4/2021 (\$46/Mcfe), providing significant sales diversification and improved gas-equivalent realizations
- The majority of BCEC's production (~90%) is in Irricana, which includes four Ellerslie producers (100% WI) and a single Belly River producer (100% WI)

Conservative reserve modeling

- BCEC has booked two 1.5-mile Ellerslie horizontals offsetting BCEC's best Ellerslie vertical well in Irricana (178 Mboe P+P); +150 Mbbbl EUR and \$4.4 MM DCT per well
- Modeled PDP production decline of ~20% vs. 9% field actuals with PDP RLI of 6.2 years

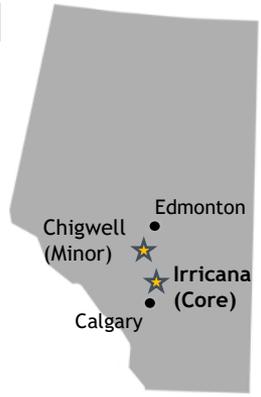
Upside in E&P play generation and bitcoin pipeline

- BCEC has captured a thick, stacked liquids-rich gas Falher channel in Chigwell, analogous to Bonavista's Morningside Falher play; 31 prospective Tier One horizontal locations provide an opportunity to drill-to-fill 20 MMcf/d for ~5 years to an underutilized deep-cut plant
- 4.3 MWs of potential bitcoin mining projects that could be integrated with BCEC's existing well sites, plus ~4.4 MWs of ready-to-capture suspended gas well assets could generate ~\$1.2 MM per month in Bitcoin mining revenue at \$55,000/BTC

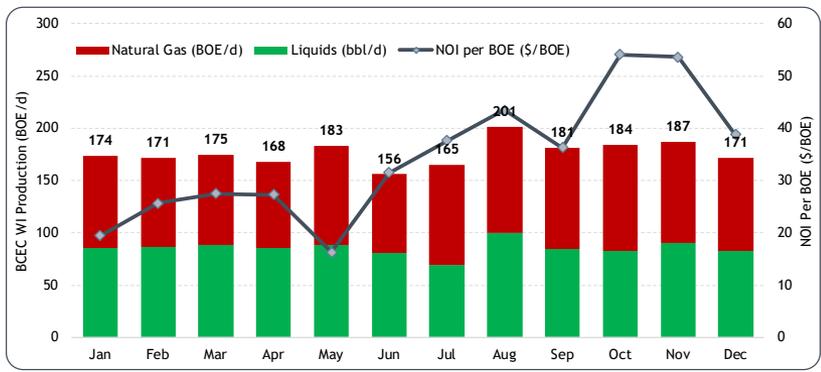
Low environmental footprint

- 18 wells (14.6 net); 10 producers (7.5 net); 3 net suspended (inactive)
- ARO (PVO): \$1.7 MM for wells and \$0.3 MM for pipelines and facilities

E&P Properties Overview	
Operator	+95% operated by BCEC
WI	91% (production)
Land	~31,100 net acres
Prod'n Vol. (Feb 2022)	~195 BOE/d (65 bbl/d + 800 Mcf/d)
Zones	Ellerslie, Belly River, Falher
Wells	Total: 18 gross (14.6 net) Producing: 10 gross (7.5 net) Suspended: 3 gross (3.0 net) Abandoned: 5 gross (4.1 net)



BCEC 2021 Sales Volumes and NOI Per BOE



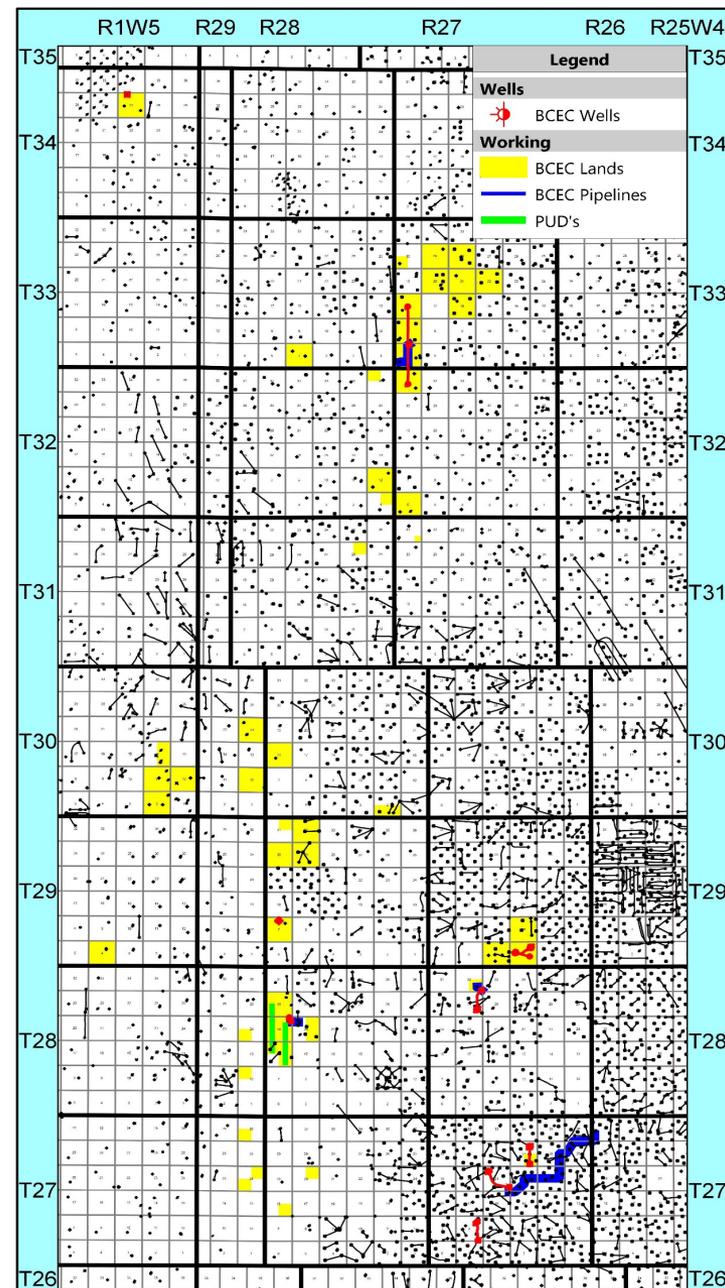
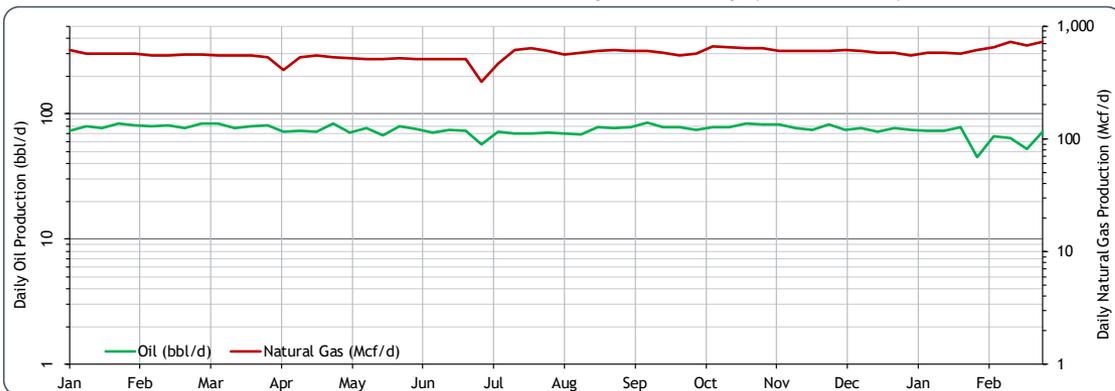
Properties	Production Volumes				Net Operating Income			Reserves Summary - Internal Report (December 31, 2021)							
	Q4 2021 Volumes (LOS)			2022E <sup>(1)</sup>	2021 Actuals (LOS)		2022E <sup>(1)</sup>	Total PDP				Total P+PDP			
	Liquids bbl/d	Gas Mcf/d	Total BOE/d	PDP BOE/d	2021 \$M	Q4 (Ann.) \$M	PDP \$M	Liquids Mbbbl	Gas MMcf	Total Mboe	NPV10 BT \$M	Liquids Mbbbl	Gas MMcf	Total Mboe	NPV10 BT \$M
E&P Properties <sup>(1)</sup>	85	573	181	148	1,920	2,564	1,702	151	1,118	337	5,039	217	1,468	462	6,328
Bitcoin Operation <sup>(2)</sup>	n/a	n/a	n/a	n/a	310	697	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NRA Liability <sup>(3)</sup>											(266)				(266)
<b>Total</b>	<b>85</b>	<b>573</b>	<b>181</b>	<b>148</b>	<b>2,230</b>	<b>3,262</b>	<b>1,702</b>	<b>151</b>	<b>1,118</b>	<b>337</b>	<b>4,773</b>	<b>217</b>	<b>1,468</b>	<b>462</b>	<b>6,062</b>

(1) Reflects production and net operating income of the Company's upstream producing assets. Reserves Summary as per internally prepared December 31, 2021 reserve evaluation of upstream assets only.  
 (2) Company owned and vertically integrated bitcoin mining operation based on 6 months of operations which commenced in July 2021.  
 (3) Liability reflects the discounted value of abandonment and reclamation costs for wells with no reserves assigned (NRA) as per the Company's reserve evaluation.

## IRRICANA

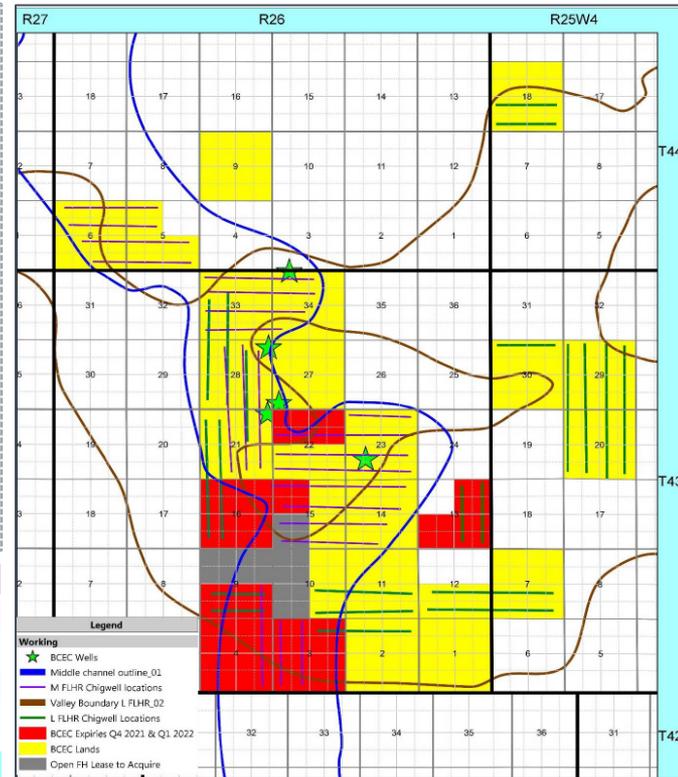
- In 2017, BCEC assembled an operated 100% working interest position in the greater Irricana area through various Crown land sales, a 5-well 'drill-to-earn' farm-in deal with a major producer, and a 20 section Freehold leasing arrangement with a third party. BCEC fulfilled the 5 well drilling commitment during Q4/2019 after drilling two horizontal wells and three vertical wells
- BCEC's focus in Irricana has been on proving-up the Ellerslie shoal trends which are mapped over a large area capturing 48 x 20 miles. The Ellerslie zones are 2 to 5 metre thick hydrocarbon charged marine sands best drilled via horizontals to help address the variable permeability within the reservoir and link up multiple sweet spots
  - BCEC has identified more than a dozen Ellerslie pools along the Irricana trend using seismic, existing well control and the Company's proprietary database analyzing +300 well drill cuttings
- BCEC's key producing Ellerslie wells in Irricana, include:
  - 16-19-28-28W4 vertical drilled in 2017 at -2,100 metre depth and fracked in lower Ellerslie zone; current production is ~45 BOE/d (80% liquids) of 48-50° API condensate
  - 06-18-33-27W4 horizontal drilled in 2018 at -2,000 metre depth which resulted in a new pool discovery; current production is ~70 BOE/d (30% liquids)
- Upside in Irricana includes horizontal drilling prospects and vertical well completions / reactivations:
  - Two booked Ellerslie horizontal locations offsetting 16-19-28-28W4 well
  - Ellerslie oil well (15-27-27-27W4) currently being reactivated for an extended production test
  - 2019 drilled Belly River vertical oil well (14-27-34-01W5) requires frac and equip capital
  - Currently producing liquids-rich Ellerslie gas well (16-3-29-27W4) that requires a frac to maximize production and reserves
  - Uphole Cardium oil by-passed pay in 16-19-28-28W4
- Solution gas production in Irricana is tied into Ember's pipeline and processing system, while emulsion is trucked to a variety of local oil terminals. Liquids-rich gas production from 16-3-29-27W4 is processed at TAQA's Crossfield gas plant

Irricana - BCEC's WI Production by Commodity (2021 / 2022)



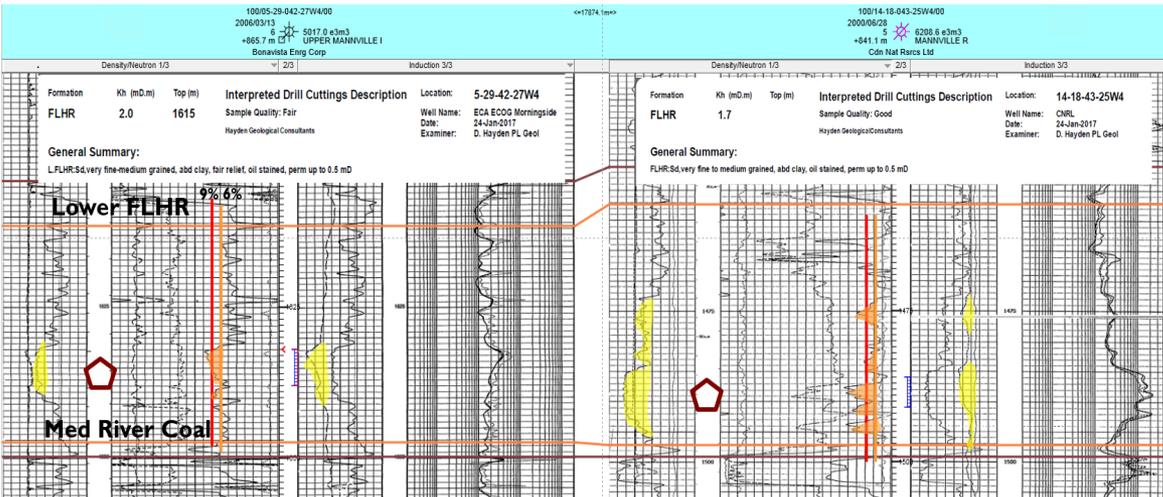
## CHIGWELL

- BCEC has ~19.5 gross sections of Mannville rights in Chigwell, and is currently producing ~200 Mcf/d gross (~100 Mcf/d net to BCEC's working interest) from five Mannville gas wells (four are operated by BCEC)
- BCEC has identified stacked Falher channels over its acreage that are analogous to Bonavista's Falher development at Morningside, seven miles to the west
  - Falher is a liquids-rich gas play within the Upper Mannville, characterized by thick sands (+15 metres), OGIP up to 12.5 Bcf/section, permeability of 0.1 to 5 mD, and potential C3+ NGL yield of ~40 bbl/MMcf
  - Higher permeability streaks within the Formation are most effectively connected with extended reach horizontal drilling as shown by Bonavista's development program
- Chigwell type well (shown below) shows similar-to-better sand quality vs. Morningside's analog well. Bonavista was able to grow Morningside to a peak production rate of +30 MMcf/d (+40 horizontals drilled) before slowing the pace of development in 2020
- BCEC has identified 31 gross Tier One horizontal drilling locations in the Middle (22) and Lower (9) Falher sands over its acreage and estimates the potential to achieve +20 MMcf/d for ~5 consecutive years based on modeling of full field development
- BCEC is currently evaluating a takeaway option using underutilized gas gathering infrastructure to connect Chigwell gas to Keyera's deep cut Rimbeay gas plant, which could significantly improve project economics

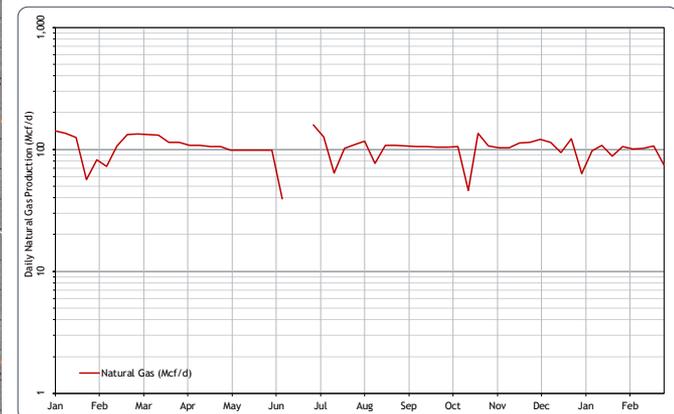


Morningside Type Well (100/05-29-042-27W4/00)	
Net Pay > 6.0%	7.0 metres
Net Pay > 9.0%	3.8 metres
Permeability (Cuttings):	0.1 - 0.5 mD
IP30 / EUR:	400 Mcf/d & 180 MMcf

Chigwell Type Well (100-14-18-043-25W4/00)	
Net Pay > 6.0%	11.6 metres
Net Pay > 9.0%	7.1 metres
Permeability (Cuttings):	0.1 - 0.5 mD
IP30 / EUR:	700 Mcf/d & 870 MMcf



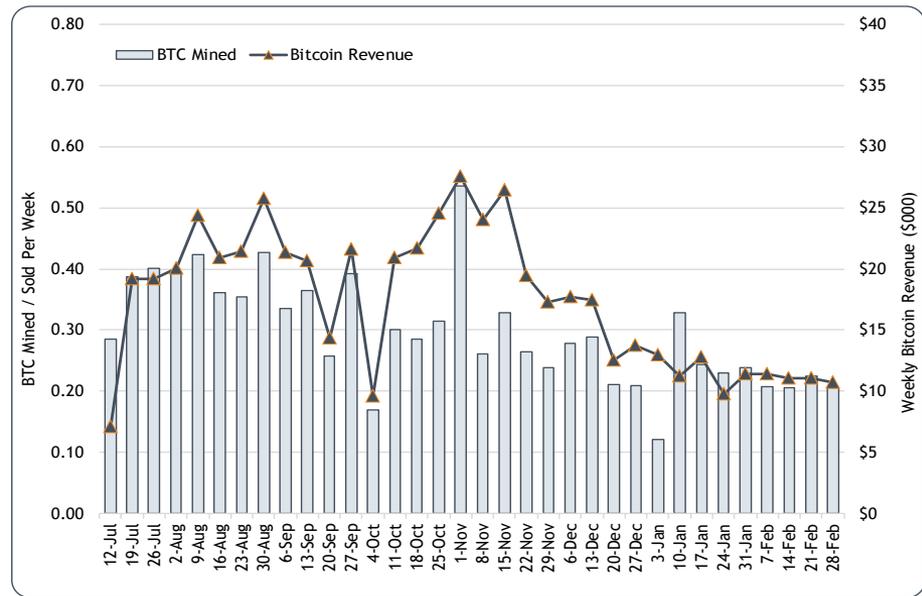
Chigwell - BCEC's WI Production (2021 / 2022)



## BITCOIN OPERATION

- In an effort to optimize near term cash flow, minimize stranded capital risk, and diversify its revenue stream, BCEC commenced wellsite bitcoin mining operations in July 2021 using natural gas to fuel a portable power generator
- BCEC's Bitcoin Operation includes:
  - Caterpillar 3412 natural gas generator set with noise suppression (currently rented with a buyout option)
  - 2 Digital Shovel M300 mining data centers with modem and firewall upgrades, and 24/7 security system
  - 111 Avalon bitcoin miners, capable of 8,500 TH/sec; currently limited to 89 miners with existing generator
- During H2/2021, BCEC mined 8.2 bitcoins (BTC) and realized \$0.5 MM in revenue (\$60,585/BTC average) based on weekly revenue sweeps
  - Realized \$0.3 MM in net operating income during H2/2021; operating costs of \$0.16 MM (generator rental accounted for ~50% of costs)
  - BCEC is currently evaluating the economics of acquiring a larger generator that will power all 111 miners at BCEC's current well site; currently 21 miners are temporarily offsite at a third-party mining operation
- BCEC has identified additional mining opportunities using ~700 Mcf/d of existing gas from portfolio wells which could generate nearly \$1.2 MM per month in Bitcoin mining revenue at \$55,000/BTC
- BCEC has also developed a pipeline of additional bitcoin mining opportunities including the potential acquisition of 6 suspended gas wells capable of supplying ~800 Mcf/d of feedstock that can generate \$1.2 MM per month in bitcoin revenue at \$55,000/BTC

BCEC's Weekly Bitcoin Mining and Sales Revenue Since Inception



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This presentation contains certain forward-looking information and statements, including forecasts of commodity prices and the Company's production volumes, revenue, and net income, and statements with words such as "anticipate", "believe", "could", "estimate", "expect", "plan", "potential", or similar words suggesting future outcomes or a projection. The projections, estimates and forecasts contained in such forward-looking information and statements necessarily involve a number of assumptions and are subject to both known and unknown risks and uncertainties that may cause the Company's actual performance and financial results in future periods to differ materially from these projections, estimates and forecasts.

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