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SCALE
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Introduction

ANGUS *PSQ* PROJECT SUPERIOR MONTNEY PROPPANTS



ANGUS PSQ PROJECT SUMMARY

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Proximity

Angus PSQ is located ~70 km north of **Prince George, BC** (workforce and services) in Central BC and close to the Montney Basin: ~250 km south of **Chetwynd, BC** and ~350 km south of **Dawson Creek, BC** (both market centres), compared to >3,000 km from Wisconsin - this presents significantly lower shipping costs and large avoided GHG emissions

Scale

Angus PSQ hosts two very large geologic units of high-purity quartzites at surface - Management believes the property is capable of **>50years** supply at projected demand rates:

Averil formation has a drilled resource of **726 MM tonne** (2010 NI 43-101 compliant)

Monkman formation was more recently discovered with similar size potential

Quality

2021 bulk sample trials at Vitreo's Moberly, BC Frac Sand Plant confirms high-quality API frac sands can be readily produced – these are comparable to imported sands and significantly better than other domestic products



BACKGROUND

- The Angus *PSQ* property comprises a high-purity quartzite/quartz-arenite resource
- In addition to the known resource at **Averil**, ongoing exploration of the area delivered a second discovery of a second geologic unit known as **Monkman** nearby
- Historic drilling, permitting and engineering (including a 43-101 compliant PEA) for the **Averil** deposit established economics of approximately 726 MM tonne resource, occurring in mono-crystalline grain sizes typically used in Montney well completions
- **Monkman** has potential to host a similar sized deposit based on its surface expression - API testing indicates it has similar grain sizes and strengths
- In May 2021, a 500 tonne Monkman bulk sample was delivered to Vitreo's Moberly sand plant in Golden, BC for evaluation at its commercial facility – this large-scale trial exceeding previous benchmark and pilot-plant testing
- The results of the trials successfully confirms yields and strengths for API quality frac sands
- Vitreo has completed an internal preliminary economic evaluation (PEA) detailing a 2MM tonne per year operation and showing compelling economics
- The Angus *PSQ* project is scalable and can be expanded to meet market demand and is currently held under an option to acquire a 100% interest

PROXIMITY TO MARKET



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Angus *PSQ* is well situated to the Montney within highway, rail, power and gas corridors, while the Prince George region (pop >75,000) can readily support long-term mining and product logistics, with the following distances:

~ **70 km** north of Prince George, BC
(workforce and services)

~**250 km** south of Chetwynd, BC
(market)

~**350 km** south of Dawson Creek, BC
(market)

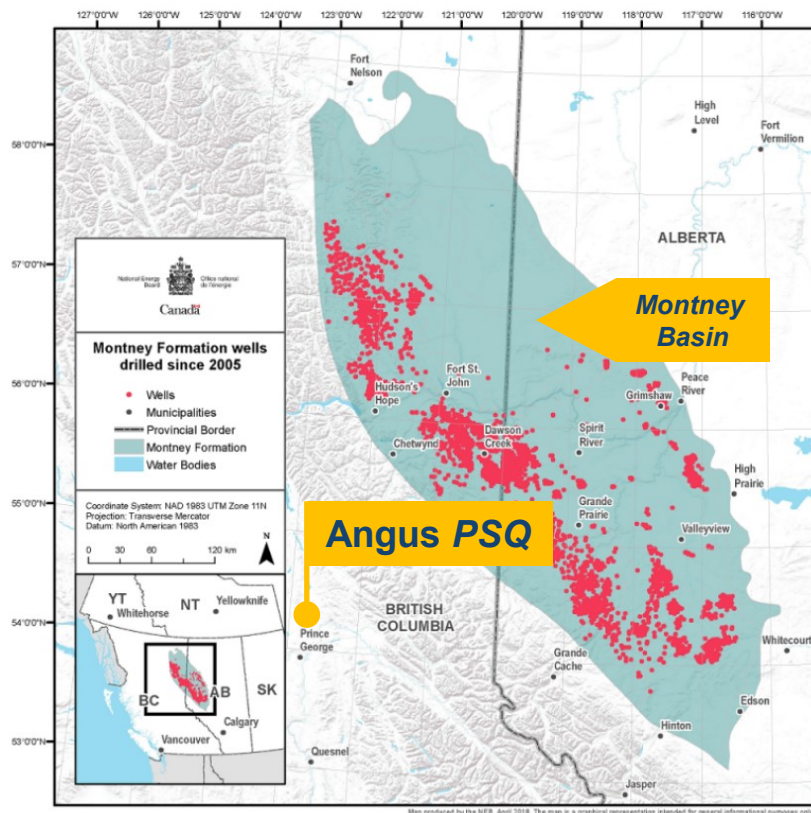


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- The Montney Basin is currently the most active field in the WCSB representing 55% of all completions
- Deep drilling continues to demonstrate strong gas returns with condensates and it remains an attractive target
- The primary driver for development is the construction of LNG Canada's operation, anticipated to be online in 2025
- Several companies are ramping up development of wells in order to meet the LNG demand
- Because of the depths and stresses involved, higher quality proppants are required to ensure well production – these are typically imported from Wisconsin

PROXIMITY TO LOGISTICS

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Angus *PSQ* is well situated to a sizeable transportation and energy corridor aligned with BC Highway 97

- Highway 97 provides a direct connection by truck/carrier to Montney distribution centres such as Chetwynd and Fort St. John, and an opportunity for direct delivery to certain well locations
- BC Rail (CN) parallels the highway and provides similar opportunity for bulk rail transport
- Power and natural gas are also within the infrastructure corridor
- Services at nearby Bear Lake, BC include other industrial-use sites with highway, railway, power and gas access

PROXIMITY VS COMPETITORS

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- Proximity to Montney well sites is clearly advantageous with respect to costs but there is also a considerable reduction in GHG based on shipping of the nearest similar-quality proppants
- For comparison, the rail distance from a Wisconsin mine to Chetwynd, BC is **~3,150 km**
- The distance from Bear Lake, BC to Chetwynd, BC is **~250 km**
- We estimate the avoided GHG emissions associated with reduced transportation are **0.0403 tCO₂e/tonne OR** a **92%** reduction in emissions associated with transportation
- With a planned 2MM tonne/year production and potential to displace imported sand, the avoided rail GHG emissions are estimated to be **>80,500 tCO₂e** per year
- Other benefits, for future GHG comparisons include the use of BC clean energy in processing

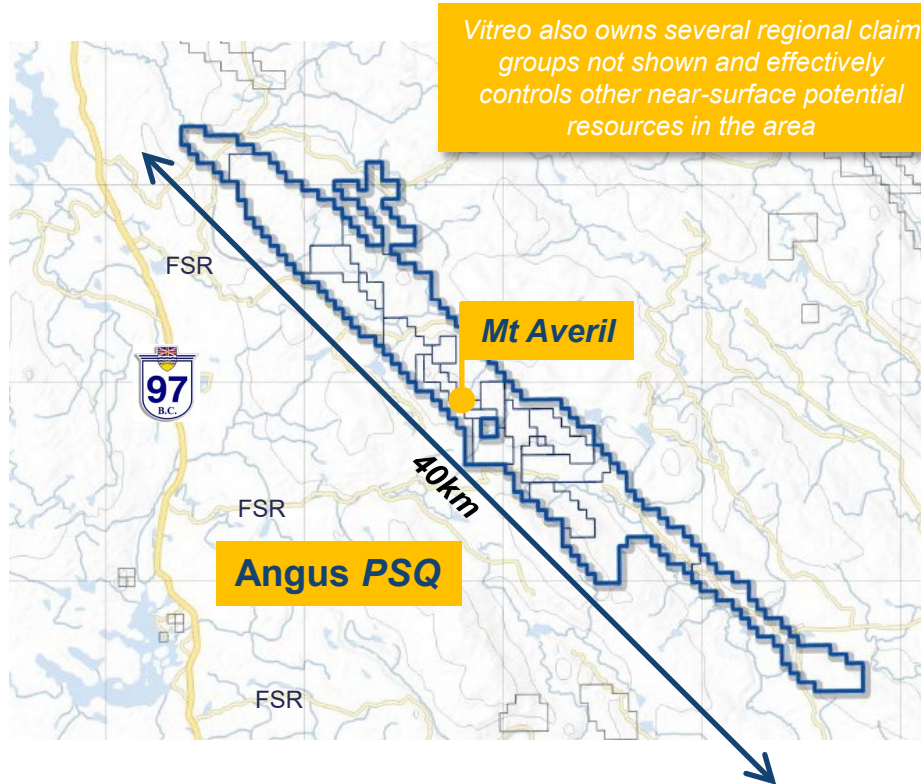


SCALE FOR >50 YEARS SUPPLY

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- Angus PSQ is a large property approximately 40km along strike of Monkman and Averil formation rocks and 4km across
- The entire project area is road accessible from HWY 97 along well established forest service roads (FSR), several of which are operated year round
- A portion of the Averil trend was drilled in 2011 and has a resource of 726MM tonnes and is open along strike and at depth
- The parallel striking Monkman formation, located 2km east of Averil can readily host the same size of resource
- At projected Montney proppant demand rates the Angus PSQ represents more than 50 years supply for the entire basin

SCALE & 726 MM TONNE RESOURCE

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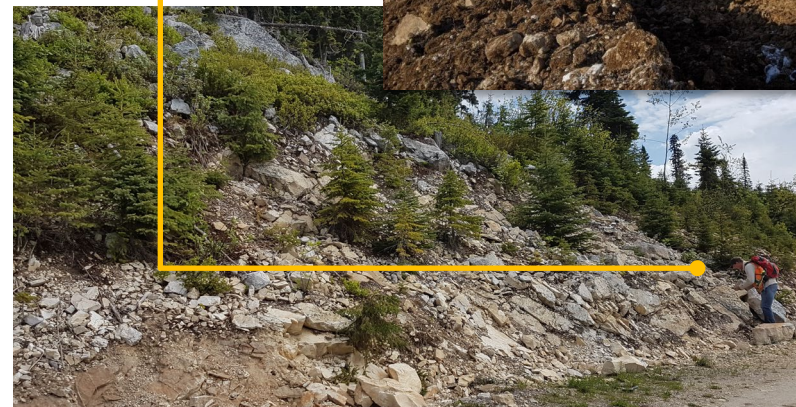
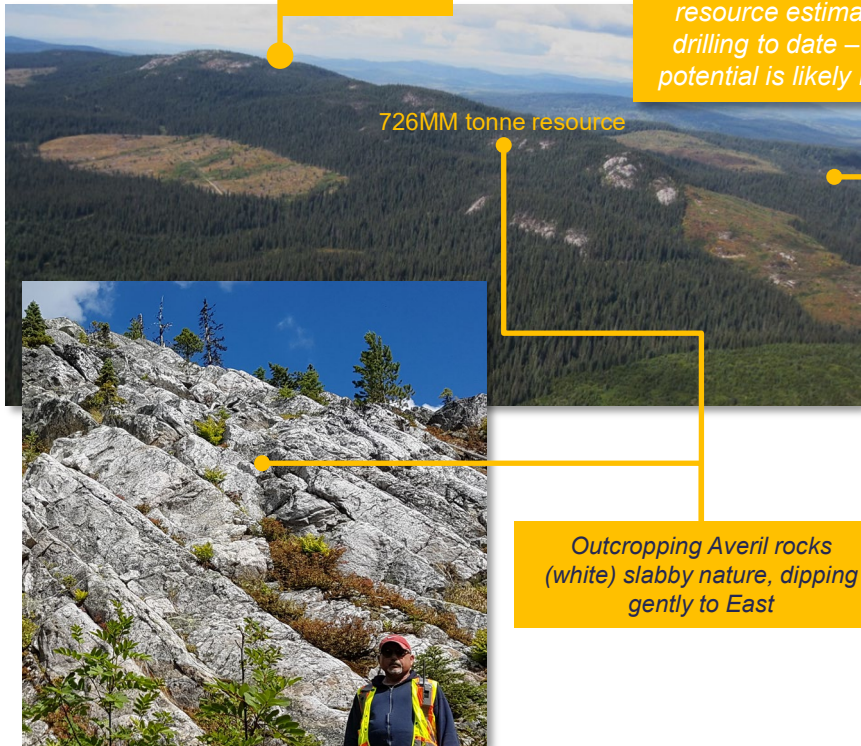
Mt Averil

The current NI43-101 compliant resource estimate is based on limited drilling to date – the ultimate resource potential is likely in the billions of tonnes

726MM tonne resource

Outcropping Monkman in road cut and bulk sample location

Outcropping Averil rocks (white) slabby nature, dipping gently to East



QUALITY & INDUSTRY BENCHMARKS

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- Angus *PSQ* quartzites/quartz arenites have undergone significant testing to assess API quality, crush strength and yields in various sand sizes
- A variety of lab, pilot-scale and full-scale commercial trials have been successfully performed
- Vitreo has a unique opportunity in the industry to run comprehensive trials at it's Moberly Silica Sand plant (*see video link at right processing Angus bulk samples*)
- With product yields primarily in the 30 to 150 Mesh range we can meet industry-standard sizes in addition to custom or hybrid gradations



Vitreo's Moberly Silica Sand Plant was used to process Angus bulk samples – a video showing the facility and process operations is available here:
<https://player.vimeo.com/video/552639677>

Vitreo has created a world-class comminution, process evaluation and API-standard testing lab at its Moberly plant



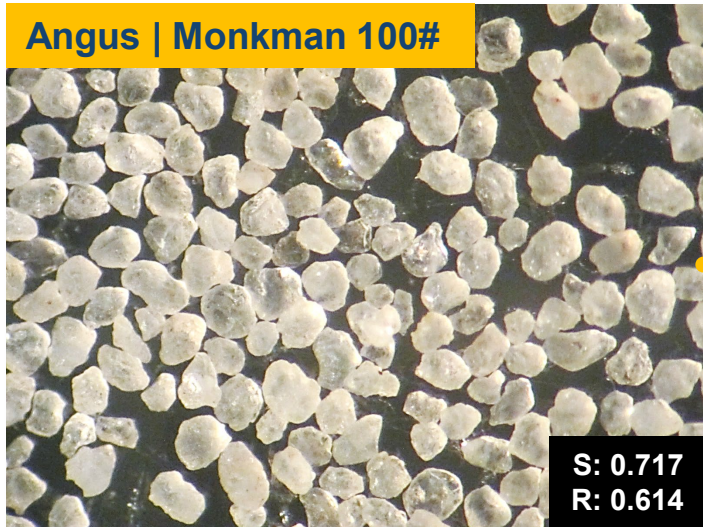
QUALITY 100 MESH SAND

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Angus | Monkman 100#



- Preliminary results from 100mesh samples show API crush strengths to **>8K** (11.2% fines at 9K)
- Vitreo estimates strengths will improve with additional processing and final polishing
- Since the sample is derived from quartzites and subject to a variety of processes these sands have very low turbidity
- Product gradations can be readily customized
- Long-term conductivity testing is underway

Sample	K-factor	Roundness	Sphericity	PSD – Mesh Size (% Retained)							
				#170	#140	#120	#100	#80	#70	#60	#50
Angus-Monk 100 mesh Attrition Scrubbed and Hydrosized	8	0.614	0.717	0.2	1	6.5	23.5	38.4	25.4	4.1	0.6

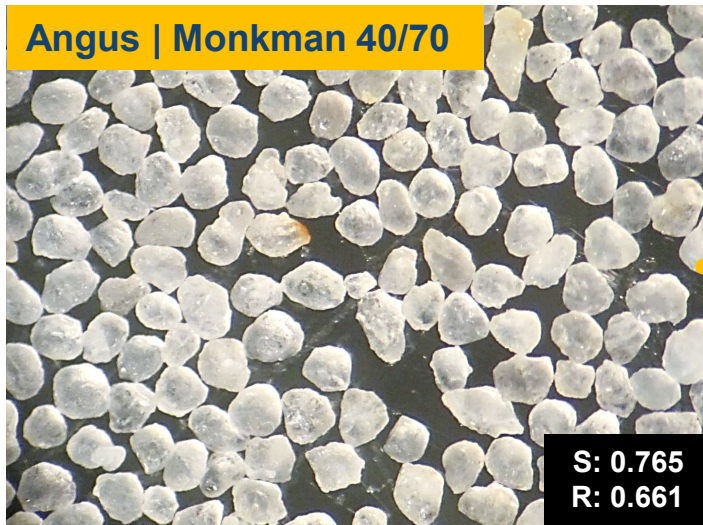
QUALITY 40/70 SAND

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Angus | Monkman 40/70



- Preliminary results from **40/70** samples show API crush strengths to **>7K** (13.3% fines at 8K)
- Vitreo estimates strengths will improve with additional processing and final polishing
- Since the sample is derived from quartzites and subject to a variety of processes these sands have very low turbidity
- Product gradations can be readily customized
- Long-term conductivity testing is underway

Sample	K-factor	Roundness	Sphericity	PSD – Mesh Size (% Retained)							
				#80	#70	#60	#50	#45	#40	#35	#30
Angus-Monk 40/70 Attrition Scrubbed and Hydrosized	7	0.661	0.765	0.1	0.9	12.9	51	33.4	1.6	0.1	0

QUALITY 30/50 SAND

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Angus | Monkman 30/50



- Preliminary results from **30/50** samples show API crush strengths to **>5K** (10.9% fines at 6K)
- Vitreo estimates strengths will improve with additional processing and final polishing
- Since the sample is derived from quartzites and subject to a variety of processes these sands have very low turbidity
- Product gradations can be readily customized
- Long-term conductivity testing is underway

Sample	K-factor	Roundness	Sphericity	PSD – Mesh Size (% Retained)							
				#70	#60	#50	#45	#40	#35	#30	#25
Angus-Monk 30/50 Attrition Scrubbed and Hydrosized	5	0.695	0.764	0	0.1	0.6	11	39.6	41.2	7.2	0.3

CONSULTATION

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- Angus *PSQ* is within the traditional territory of the **MacLeod Lake Indian Band (MLIB)** and we extend our thanks for welcoming Vitreo and our exploration programs to their territory
- In the fall of 2020, and with the assistance of Duz Cho Construction (a 100% owned company of MLIB), the Monkman bulk sample was drilled, blasted and trucked to our Moberly for testing
- Vitreo is developing a consultation program and will continue to discuss and engage MLIB, and other nations as the project and programs are advanced



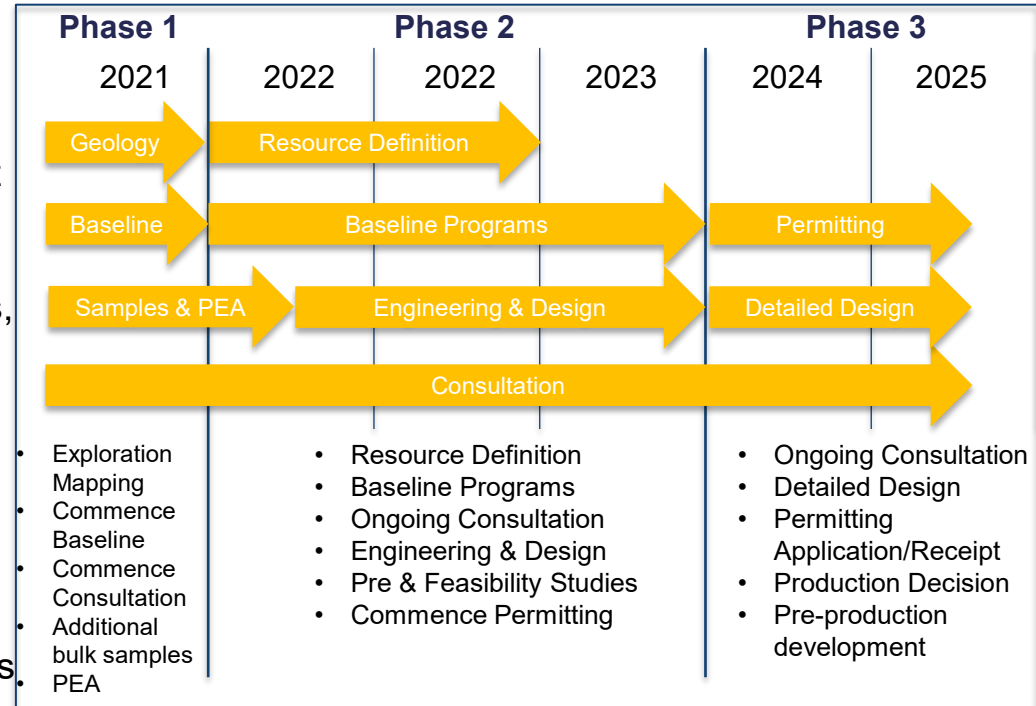
TIMELINES

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- Angus *PSQ* is greenfield project with enormous potential – proof of concept processing trials at Vitreo’s Moberly plant confirm key aspects of the project
- Vitreo’s experience in mining and processing Moberly quartzites/quartz-arenite helps to inform the design basis, capital and operating cost assumptions
- Vitreo intends to complete many aspects of the project concurrently with project baseline studies, geology and engineering
- Vitreo will work in collaboration with MLIB to ensure benefits of the project are shared and traditional territory rights are respected



OPPORTUNITY

With 100% interest in the Angus PSQ project and surrounding regional claims, all options are available to develop a world-class mine with many benefits and opportunities;

Proximity

- Shortest delivery distance with most flexibility in transport carrier mode (direct by truck, transload by rail)
- Lowest delivery cost
- Significant avoided GHG by comparison to imported sand

Scale

- Multi-generational supply potential with >50 Years production based only on initial estimate of known resource and demand appraisals for the entire Monteny basin

Quality

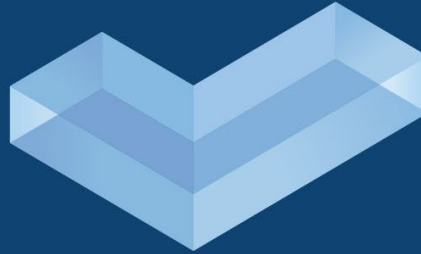
- Demonstrated commercial quality and strengths greater than other domestic sand supply

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