BRITISH COLUMBIA	**Ministry of Transportation and Infrastructure** Geotechnical and Materials Engineering	**Southern Interior Region** 231 - 447 Columbia Street Kamloops, BC V2C 2T3 Telephone: (778) 362-4597 Fax: (250) 828-4083

Darlington Quarry No. 2842

2021 Technical Information Report

Location: The quarry is located approximately 25km north of Barriere on Highway 5 then 1.5 km west on the Darlington Main Forest Service Road (DMFSR).

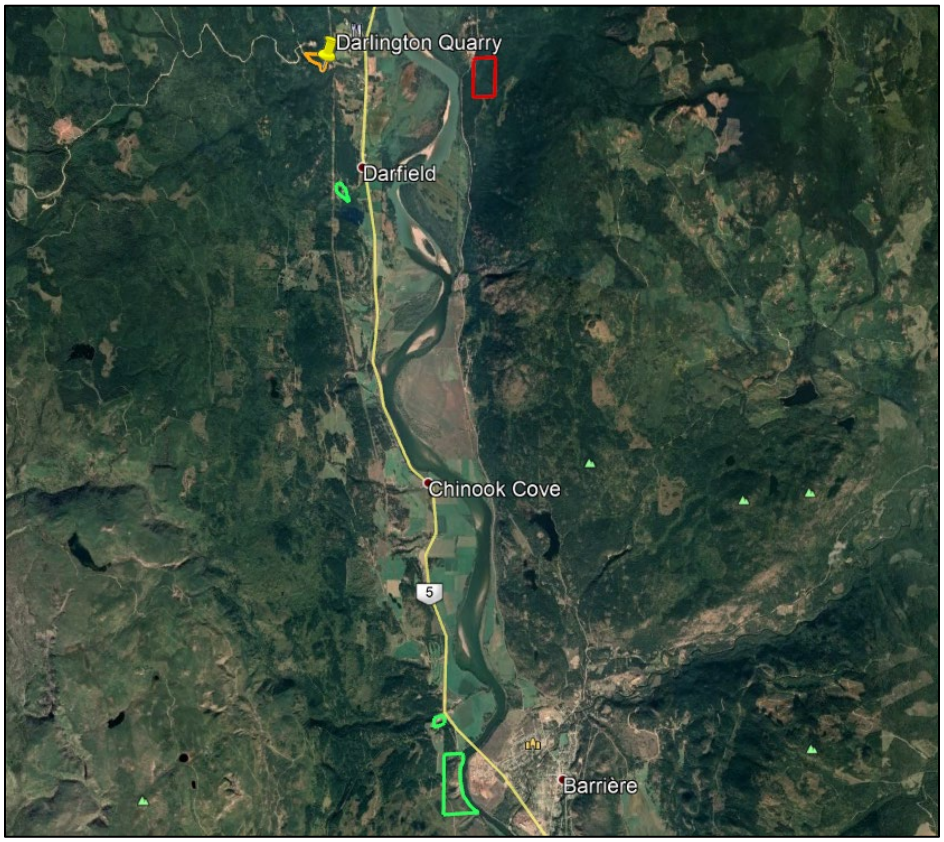

Figure 1 Darlington Quarry located between Barriere and Little Fort, BC.

Legal Description: Unsurveyed Crown Land lying south of Lot 80, KDYD, W6M. A Crown Land Act Section 16 Map Reserve held in the name of the Ministry of Transportation covers the area. The geographic coordinates for the quarry are UTM Zone 10 695516 Easting, 5688443 Northing.

Rock Quality: Darlington Quarry has not been tested to determine the quality of the rock. Visual inspection indicates that the quarry consists of good quality granitic rock. Potential Acid

Production/Neutralization analysis indicates the material does not exhibit acid generating characteristics (see attached).

Quarry Volume:

The quarry has not been surveyed; therefore, the volume of rock available has not been determined.

Pit Development and Recommendations:

- The mining area has not been developed by the Ministry of Transportation and Infrastructure (MoTI). Development will be the responsibility of the contractor and shall be completed as per the quarry development plan or as directed by the Ministry Representative. All development must be carried out in accordance with the Health, Safety, and Reclamation Code for Mines in British Columbia, the current Standard Specifications for Highway Construction, and the Aggregate Operators Best Management Practices Handbook for BC.

- The quarry is located adjacent to the Darlington Main Forest Service Road (DMFSR), which contains a switchback at the southern end of the property. The intention of working the quarry is to improve the sight distances of the DMFSR at this point as well as other curves within the quarry reserve boundary.

- A quarry mining plan has not been prepared by MoTI. Prior to use of the quarry the successful contractor will be required to develop a mining plan for approval by the Project Manager as well as the Aggregate Resource Manager.

- The initial portion of DMFSR off Highway 5 crosses private property. The posted speed limit through this area shall be a maximum of 30 km/hr. The Contractor will be required to secure a Road Use Permit to utilize the DMFSR.

- The application of a dust suppressant on the DMFSR is required.

- Rock may be stockpiled as indicated on the Quarry Development Plan, or where space permits as directed by the Ministry Representative. Site preparation may be required to create a clear and level stockpile area.

- Some stripping and development may be required prior to mining and rock stockpiling. If additional development is required, it shall conform to the requirements of the pit development plan or be completed as directed by the Ministry Representative. Movement of any surplus overburden in the quarry will be the responsibility of the contractor.

- All trees, vegetation, and overburden are to be removed within 2m of the top of the pit faces. Topsoil, overburden, and aggregate cannot be removed within 5m of the reserve boundary.

- No dumping of debris or petroleum products is permitted. The pit must be left in a clean and safe condition.

- Extract rock in a multiple bench system of mining with minimum 8m wide benches and maximum 8m high rock faces.

- Before vacating the site, the contractor/blaster must certify that no unexploded charges remain at the site, any loose unfired explosives have been collected and destroyed and all loose rock from the faces has been scaled.

- Provide daily blast logs to Ministry Representative.

- The quarry shall be worked in accordance with Section 204 of the MoTI Standard Specifications for Highway Construction

- If more than 10 metres of rock is blasted from the upper rock cut into the face, blasting must be stopped and a secondary ML/ARD assessment is recommended to be done.

- **All reject materials resulting from aggregate production are to be placed in separate stockpiles free from deleterious material and in an easily accessible location. No stockpiling against the pit face is permitted without the permission from the Aggregate Resource Manager.**

Site Photographs:

Figure 2 Exposed rock face at Darlington Quarry (June 2021).

Figure 3 Switchback on the Darlington Main Forest Service Road (November 2018).

Figure 4 Switchback on the Darlington Main Forest Service Road (July 2018).

Figure 5 Typical rock outcrop (July 2018).

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CHEMICAL ANALYSIS REPORT

Date: July 10, 2001

Et. File No. **AK 01-156**

Report On: **Acid / Base Accounting**
No. of samples received: 5
Sample type: Rock
Project #: AK 2001-156
Samples submitted by: Brian James

Report To: **Ministry of Highway**
1165 Battle Street
KAMLOOPS, BC
V2C 2N4

Attention: **Brian James**

ECO-TECH LABORATORIES LTD.
per:

Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

POTENTIAL ACID PRODUCTION / NEUTRALIZATION

Et. #	Tag #	Paste pH	Sulfur % (as S)			Tonnes $CaC0_3$ Equivalent per 1000 Tonnes		
			Sulfate	Sulfide	Sulfur	Production	Neutralization	Net Neutralization Potential
1	654 - Darlington Quarry Site 3	8.29	<0.01	0.02	0.02	0.63	14	13
2			-					-
3			-					-
4			-					-
5	47043 - Darlington Quarry Site	8.89	<0.01	0.02	0.02	0.63	12	12
QC/DATA								
Resplit:								
1	654 - Darlington Quarry Site 3	8.29	<0.01	0.02	0.02	0.63	14	13
Repeat:								
1	654 - Darlington Quarry Site 3	8.29	<0.01	0.02	0.02	0.63	14	14
Standard:								
NBM1-		-			0.30	9.38	47	38
NBM1-		-			0.30	9.38	46	37

FP/lh
XLS/01

End of Report