BC Geological Survey
Assessment Report
39618

Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Technical: Geological and geomorphological mapping **TOTAL COST:** $22,648.92

AUTHOR(S): John Ostler; M.Sc., P.Geo. **SIGNATURE(S):** John Ostler

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): **YEAR OF WORK:** 2021

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5852655

PROPERTY NAME: Perry

CLAIM NAME(S) (on which the work was done): Perry (1073084), Perry 2 (1073248)

COMMODITIES SOUGHT: placer gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Fort Steele **NTS/BCGS:** N.T.S.: 82 G/12, B.C.G.S.: 082G 051

LATITUDE: 49 ° 34 ' 37 " **LONGITUDE:** 115 ° 57 ' 26 " **(at centre of work)**

OWNER(S):
1) John David Ostler 2)

MAILING ADDRESS:
1015 Clyde Avenue, West Vancouver, British Columbia
V7T 1E3

OPERATOR(S) [who paid for the work]:
1) John David Ostler 2)

MAILING ADDRESS:
1015 Clyde Avenue, West Vancouver, British Columbia
V7T 1E3

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
The property is located on the northwestern margin of the spillway of lower Perry Creek. The slope at the margin has outcrops of Cambrian-age Eager Formation meta-siltstone mantled with a thin layer of Illanoian-age till. A paleo-channel of Perry Creek cro the southern part of the property area. The channel is buried from 17 to 25 m beneath the land surface. On the property, the palaeo channel turns abruptly from northward to eastward creating a classic placer gold trap.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: ARIS No. 412

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	Scale 1:2,000 38 hectares	Perry (1073084), Perry 2 (1073248)	$20,384.03
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail	10 km	Perry (1073084), Perry 2 (1073248)	$2,264.89
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$22,648.92

CASSIAR EAST YUKON EXPEDITING LTD.
EGBC FIRM No. 1000310

GEOMORPHOLOGICAL AND GEOLOGICAL SURVEY ON THE PERRY PROPERTY

Map-staked Placer Claims

Name	Record Number	Area	Expiry Date
PERRY	**1073084**	**20.95 ha (51.75 A)**	**December 2, 2031**
PERRY 2	**1073248**	**20.95 ha (51.75 A)**	**December 11, 2031**
Total Property Area		**41.90 ha (103.49 A)**	

NOTE: UNDERLINE indicates claims on which work was conducted during the current program.

Location:
Fort Steele Mining Division
N.T.S.: 82 G/12 B.C.: 082G 051
49° 34' 37"N., 115° 57' 26" W.
U.T.M.: 5,492,140 N., 575,370 E., Zone 11U
at the centre of the current (2021) work

Owner:
John D. Ostler
1015 Clyde Avenue, West Vancouver, British Columbia, V7T 1E3

By:
John Ostler; M.Sc., P.Geo.
1015 Clyde Avenue, West Vancouver, British Columbia, V7T 1E3

December 10, 2021

CONTENTS

FIGURES

CONTENTS
Continued

GEOMORPHOLOGICAL AND GEOLOGICAL SURVEY ON THE PERRY PROPERTY

SUMMARY

The Perry property comprises two map-staked placer claims that together cover 41.90 hectares (103.49 acres) in the Fort Steele Mining Division and in the Kootenay Land District in the Moyie Range of the Columbia Mountains in southeastern British Columbia. The property is located on N.T.S. map sheet 82 G/12 and on B.C. map sheet 082G 051. The centre of the property area is at 49° 34' 37" north latitude and at 115° 57' 26" west longitude (U.T.M.: 5,492,140 N., 575,370 E., Zone 11U). John D. Ostler is the registered owner of the claims that comprise the property.

The Perry property occupies part of the northern slope and adjacent floor of the lower Perry Creek valley. Elevations of the property range from 1,107 m (3,632 ft) at the northwestern margin of the PERRY 2 (1073248) claim, down to 945 m (3,100 ft) on the floor of the lower Perry Creek valley at the southeastern corner of the PERRY (1073084) claim.

The property hosts a second-growth forest comprised mostly of pine, cedar, spruce, fir, aspen, and cottonwood trees which is in various states of growth. Much of the property area has been clear cut. There is sufficient timber suitable for underground placer mining on the property.

Cranbrook, located on B.C. Highways 3 and 95 about 20 km (12.2 mi) south of the property, is the nearest regional supply and service centre. Cranbrook hosts the nearest international airport, helicopter base, and a rail yard. At Cranbrook, services required to support a placer mining operation are available.

The Perry Creek area experiences cold winters and hot, dry summers. Winter snow falls in the property area by late November and stays on the ground until April. Surface work can be conducted on the property from April to November during a normal year.

The current exploration target on the property is on crown land with no special restrictions on development thereon. Normally, upon development permitting, one is able to secure surface rights necessary to conduct a mining operation. The author knows of no legal impediment to one being able to secure such surface rights as part of the permitting process.

A three-phase power transmission line services residences at the village of Wycliffe which is located on B.C. Highway 95A about 7.4 km (4.5 mi) east of the property. Adequate fresh water for a mining operation could be drawn from local groundwater or from Perry Creek.

The Perry property occupies part of the northwestern margin of the Perry Creek spillway and the southwesterly trending slope adjacent with it.

The 1961 Morris seismic survey indicated that a palaeo-channel of Perry Creek proceeds northward in a steep-sided gorge from near the head of the spillway near Old Town (Perry City) for 2.6 km (1.58 mi) to the southern part of the Perry property area where it turns abruptly to the east. The survey also indicates that the bedrock surface beneath the palaeo-channel is at a depth of about 17 m (55.8 ft) beneath the surface of the current spillway at the southern boundary of the Perry property. It may be as much as 25 m (82 ft) beneath the surface in the southeastern part of the property area.

Geomorphological and geological survey of the Perry property during the current (2021) work program reveal that the slope defining the northwestern margin of the Perry Creek spillway on the Perry property is underlain by meta-siltstones of the Cambrian-age Eager Formation which are covered by a thin layer of probably Illinoian-age till. The Eager Formation stratigraphy was cut by several Eocene-age transcurrent faults

that created an embayment of at least 1.8 hectares (4.45 acres) on the northern, outer side of the curve of the palaeo-channel in the central part of the Perry property area. That embayment could create a significant area of counter currents and enhance those already present due to the sharp curve in the palaeo-channel resulting in an extensive gold trap that could have been active from Eocene to early Pleistocene time, a duration of about 57 million years.

Post-glacial lake and debris flow sedimentation has covered any potentially productive pay gravel on the Perry property to an unknown depth. It is expected that this cover is less than 10 m (32.8 m) thick.

Productive pay gravels containing placer gold deposits may be present at the bedrock surface and at various false bedrock horizons in the gorge hosting the palaeo-channel of Perry Creek in the Perry property area. Placer gold deposition would be greatly enhanced by the embayment and curve in the palaeo-channel in the south-central part of the Perry property area.

A program of 200 m of percussion drilling comprising 8 25-m long holes is recommended. The estimated cost of that program is $48,000.

GEOMORPHOLOGICAL AND GEOLOGICAL SURVEY ON THE PERRY PROPERTY

1.0 INTRODUCTION

1.1 Duration and Management of the Current (2021) Work Program

The property owner, John D. Ostler; M.Sc., P.Geo. conducted the current (2021) exploration program and produced this report through his company, Cassiar East Yukon Expediting Ltd. (EGBC Firm No. 1000310) of West Vancouver, British Columbia. The text of this report was written in WordPerfect 6 X 8. Maps and figures were produced by a variety of computer and traditional drafting techniques. Everything was converted to pdf format using Adobe Acrobat 2017. For details and costs of the current exploration program, see sections 3.2, 3.3, and 5.1 to 5.3 of this report. The current work program was conducted on and about the property during the following days:

August 3 and August 9, 2021:	transport from Vancouver to Fort Steele area, return
August 4 to 8, 2021:	field work on the Perry property
December 11, 2019 to December 10, 2021:	research and production of this assessment report (intermittent)

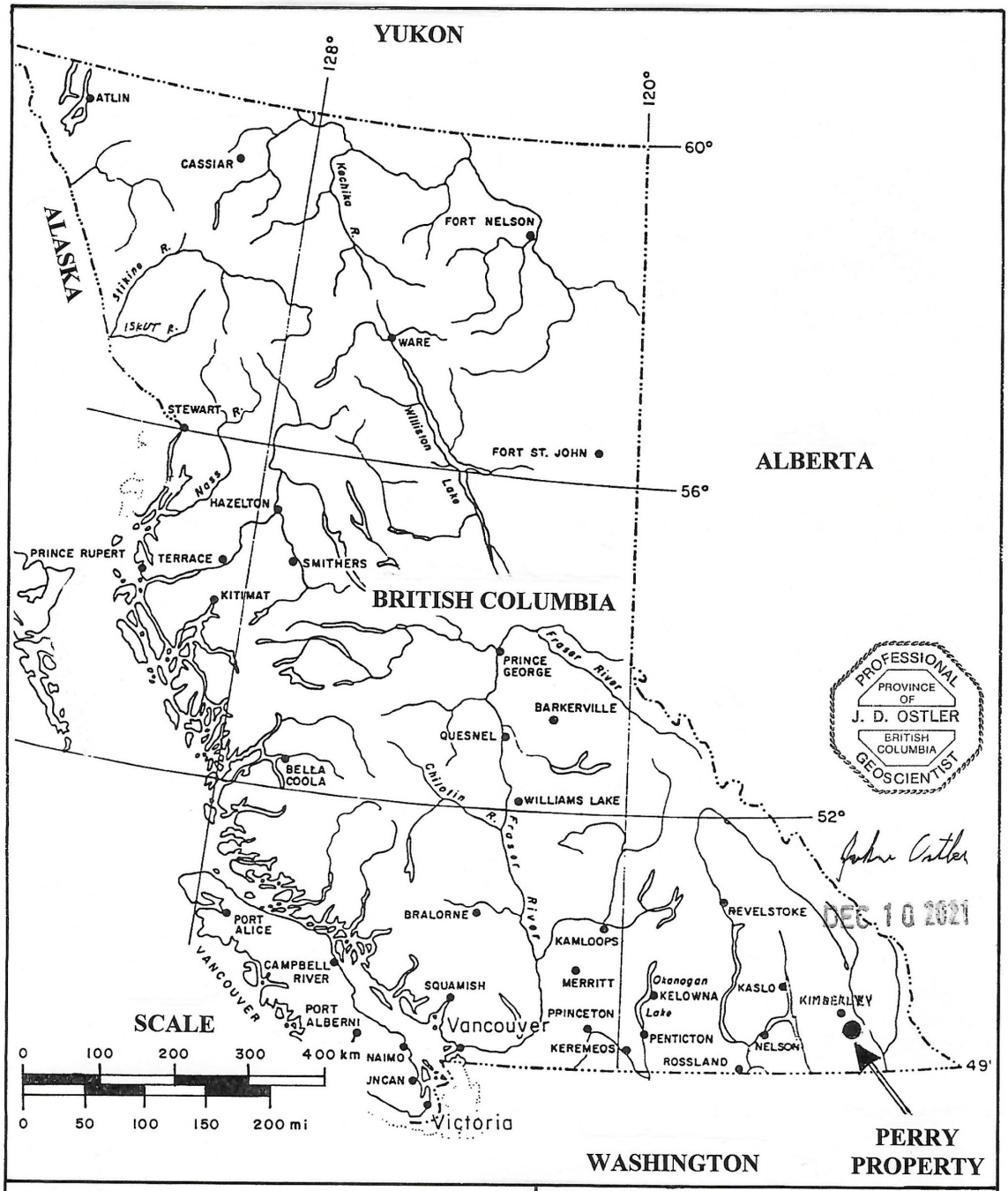
A total of 33.5 person-days 33.5 X 8 = 268 person-hours were spent on the claims comprising the Perry property during the current (2021) program (Figures 8 and 11, Table 3).

1.2 Property Description and Location

The Perry property is located north of Perry Creek on part of the lower eastern slope of the Moyie Range of the Columbia Mountains in southeastern British Columbia. That area is adjacent with the western margin of the Rocky Mountain Trench. It is located on N.T.S. map sheet 82 G/12 and on B.C. Map 082G 051 (Figures 1 and 2). The property comprises 2 map-staked placer claims that cover 41.90 hectares (103.49 acres) in the Fort Steele Mining Division and in the Kootenay Land District. Tenures comprising the property (Figure 2) are as follows:

Table 1
Map-staked Placer Claims

Claim Name	Record No.	Area: hectares (Acres)	Record Date	Expiry Date	Owner
PERRY	1073084	20.95 (51.75)	Dec. 2, 2019	Dec. 2, 2031	John D. Ostler
PERRY 2	1073248	20.95 (51.75)	Dec. 11, 2019	Dec. 11, 2031	John D. Ostler
Total Property area		41.90 (103.49)			



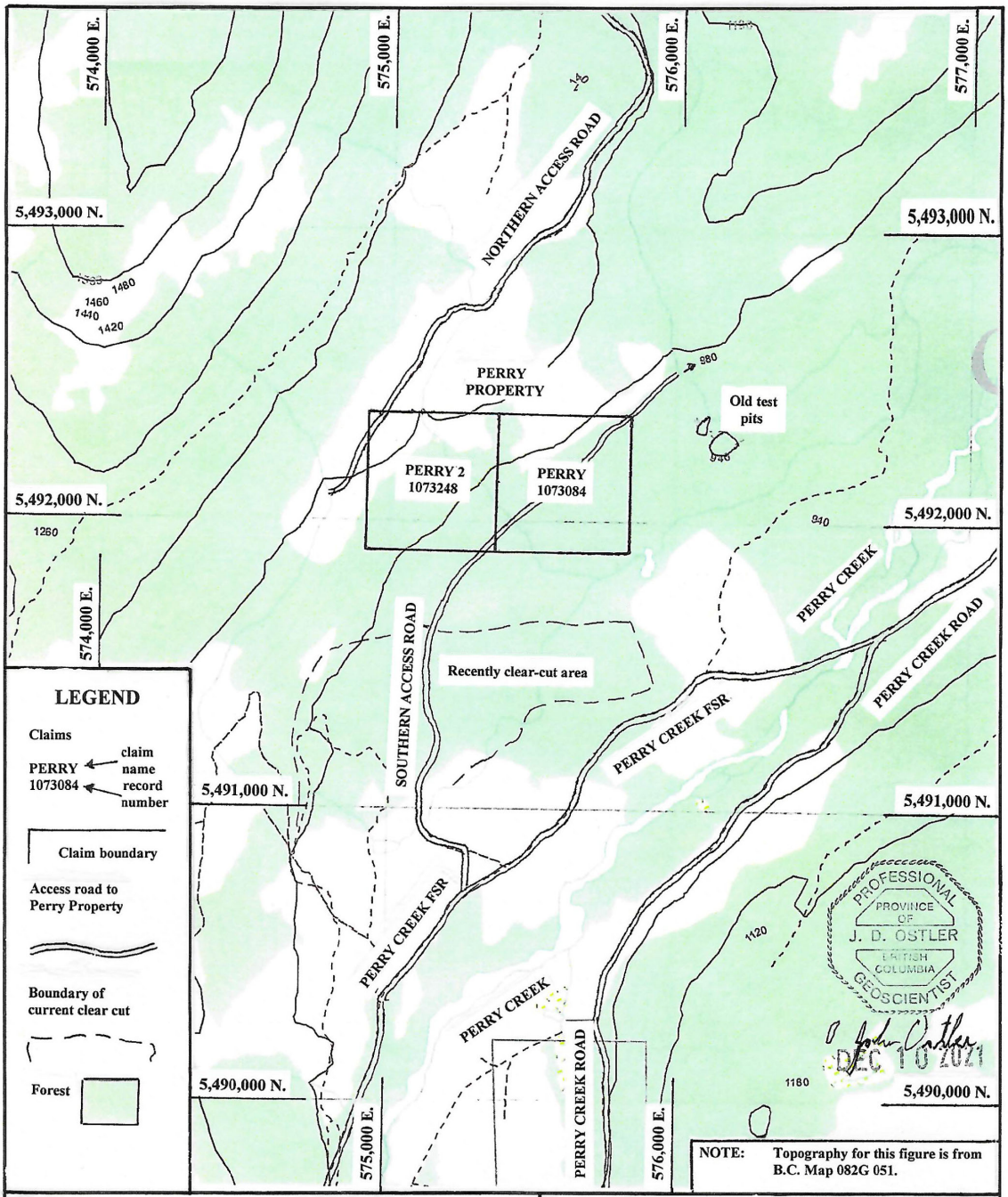
N.

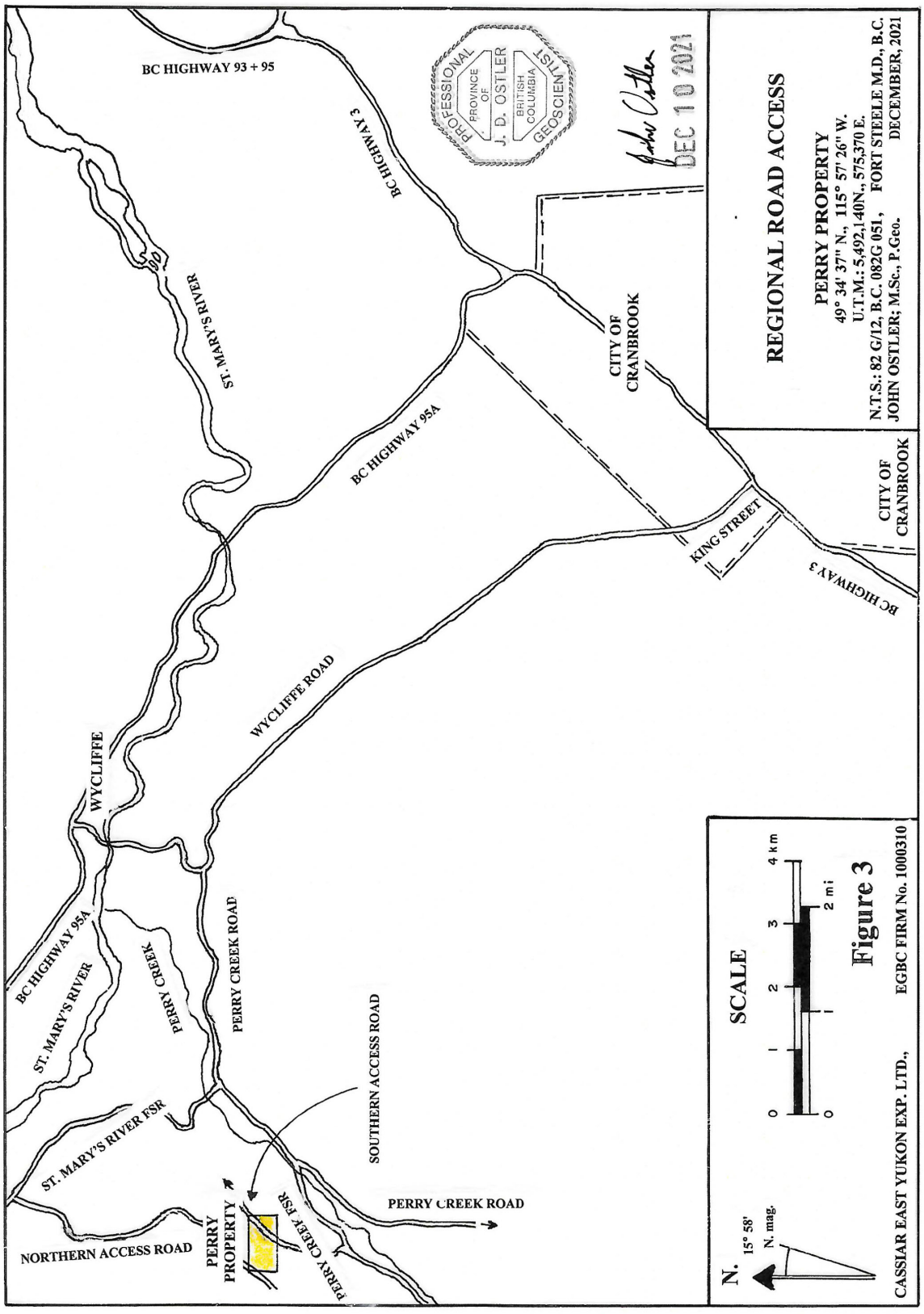
Figure 1

CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310

GENERAL LOCATION

PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021


574,000 E.
575,000 E.
576,000 E.
577,000 E.
5,493,000 N.
5,492,000 N.
5,491,000 N.
5,490,000 N.
NORTHERN ACCESS ROAD
PERRY PROPERTY
PERRY 2 1073248
PERRY 1073084
Old test pits
SOUTHERN ACCESS ROAD
Recently clear-cut area
PERRY CREEK
PERRY CREEK ROAD
PERRY CREEK FSR
1480
1460
1440
1420
1280
980
940
1120
1180
LEGEND
Claims
PERRY 1073084 ← claim name / record number
Claim boundary
Access road to Perry Property
Boundary of current clear cut
Forest
NOTE: Topography for this figure is from B.C. Map 082G 051.
PROFESSIONAL
PROVINCE OF
J. D. OSTLER
BRITISH COLUMBIA
GEOSCIENTIST
DEC 10 2021
N.
15° 58'
N. mag.
SCALE
0 200 400 600 800 1000 m
0 1000 2000 3000 ft
Figure 2
CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 100031u
TENURES and TOPOGRAPHY
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021


BC HIGHWAY 93 + 95
BC HIGHWAY 3
ST. MARY'S RIVER
CITY OF CRANBROOK
BC HIGHWAY 95A
KING STREET
CITY OF CRANBROOK
BC HIGHWAY 3
WYCLIFFE ROAD
WYCLIFFE
BC HIGHWAY 95A
ST. MARY'S RIVER
PERRY CREEK
PERRY CREEK ROAD
SOUTHERN ACCESS ROAD
ST. MARY'S RIVER FSR
PERRY CREEK ROAD
NORTHERN ACCESS ROAD
PERRY PROPERTY
PERRY CREEK FSR
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. D. OSTLER
GEOSCIENTIST
DEC 10 2021
REGIONAL ROAD ACCESS
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021
SCALE
0 1 2 3 4 km
0 1 2 mi
N.
15° 58'
N. mag.
Figure 3
CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310

On November 27, 2021, sufficient work was filed (Event 5852655) to extend the expiry date of the claims to those reported in the preceding table.

There is no private land or aboriginal homeland on the property. The closest reserve is the Kootenay No. 1 Indian Reserve which is located about 11.8 km (7.2 mi) east of the of the northeastern corner of the PERRY (1073084) placer claim. The property is located in area designated as Ktunaxa territory.

There is no plant or equipment, inventory, mine or mill structure of any value on the property.

1.3 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

Perry Creek flows for about 34 km (20.7 mi) east-northeastward across the Columbia Mountains from Richmond Lake to St. Mary's River. The upper 25 km (15.25 mi) of the creek flows through a steep valley and gorge that has eroded back into the range. The lower 9 km (5.5 mi) of Perry creek flows through a 1.5-km (0.9-mi) wide spillway that has been filled with detritus from the upstream part of the river. The Perry property occupies part of the northern slope and the adjacent floor of that spillway (Figure 2). Elevations of the property range from 1,107 m (3,632 ft) at the northwestern margin of the PERRY 2 (1073248) claim, down to 945 m (3,100 ft) on the floor of the lower Perry Creek spillway at the southeastern corner of the PERRY (1073084) claim (Figure 2).

The property hosts a forest comprised mostly of larch, pine, spruce, fir, pine, aspen, and cottonwood trees which is in various states of growth. The fir, spruce, and pine were selectively logged off the floor of the spillway that occupies the southeastern part of the property at least 25 years ago. Consequently, all of the large trees in that area are larch. The previously logged species are represented only by juvenile trees. The main slope comprising most of the northwestern part of the property area does not seem to have been logged. It is a steep south-southeasterly facing slope which is quite dry. It is populated by a sparse forest of mostly fir, spruce, and red pine. Large yellow (ponderosa) pine trees populate the very dry convex parts of the slope. Thick mats of long yellow pine needles are quite slippery when wet. There is sufficient timber suitable for small underground placer mining operation on the property.

Directions for road access to the property are as follow (Figure 3):

Highway 3, also locally named Van Horne Street, is the main road that transects Cranbrook. To travel to the Perry property turn northwestward off Highway 3 onto King Street. North of town, King Street becomes Wycliffe Road.

To access the lower part of Perry Creek, travel northwestward along Wycliffe Road for about 12 km (7.3 mi) to its junction with Perry Creek Road. The junction is just south of where Wycliffe Road switches back down onto the floor of the St. Mary's River valley (Figure 3).

To access the northwestern part of the Perry property, travel for 3.6 km (2.2 mi) along Perry Creek Road to its junction with St. Mary's River Forest Service Road (FSR) (Figure 3). Turn right and travel northward along the St. Mary's River FSR for 4.4 km (2.7 mi) to an un-named single lane road. Turn left (southwest) onto that road and travel southwestward along it for 4.6 km (2.8 mi) to the northern boundary of the Perry property. The road crosses the northwestern corner area of the PERRY 2 (1073248) claim (Figures 2, 3, and 11). There are several lesser used, side roads that extend from both sides of the main road. Stay on the most well-traveled main road.

To access the southeastern part of the property on the floor of the Perry Creek spillway, travel along Perry Creek Road for 5.4 km (3.3 mi) to its junction with the Perry Creek Forest Service Road (FSR). Turn to the right onto the forest service road and cross the bridge over Perry Creek. Perry Creek FSR is also known as Perry Creek 5577 01. Travel west-southwestward for about 1.6 km (1 mi) to the entrance to a recent clear cut and turn right (northward) into the clear cut (Figures 3 and 11). Travel the main road through the clear cut for about 1.1 km (0.7 mi) to its northern boundary. That road continues northeastward beyond the clear-cut for another 0.5 km (0.3 mi) where it crosses over the southern boundary of the Perry property (Figures 3 and 11). The road continues northeastward across the property for another 0.65 km (0.4 mi) to the property's eastern boundary near its northeastern corner (Figures 2, 3, and 11).

Cranbrook, located on B.C. Highways 3 and 95 about 20 km (12.2 mi) south of the property, is the nearest regional supply and service centre. Cranbrook hosts the nearest international airport, helicopter base, and a rail yard. At Cranbrook, services required to support a placer mining operation are available.

The Perry Creek area experiences cold winters and hot, dry summers. Winter snow falls in the property area by late November and stays on the ground until April. Surface work can be conducted on the property from April to November during a normal year.

The current exploration target on the property is on crown land with no special restrictions on development thereon.

A three-phase power transmission line services residences along Perry Creek Road, within 4.4 km (2.7 mi) of the property. Adequate fresh water for a placer mining operation could be drawn from local groundwater (Figure 2).

Both the mining business and the pool of professionals and skilled tradesmen who serve it are international and mobile. The Cranbrook-Kimberly area has already demonstrated that it has sufficient amenities to attract personnel to work at placer mines in the area.

2.0 HISTORY

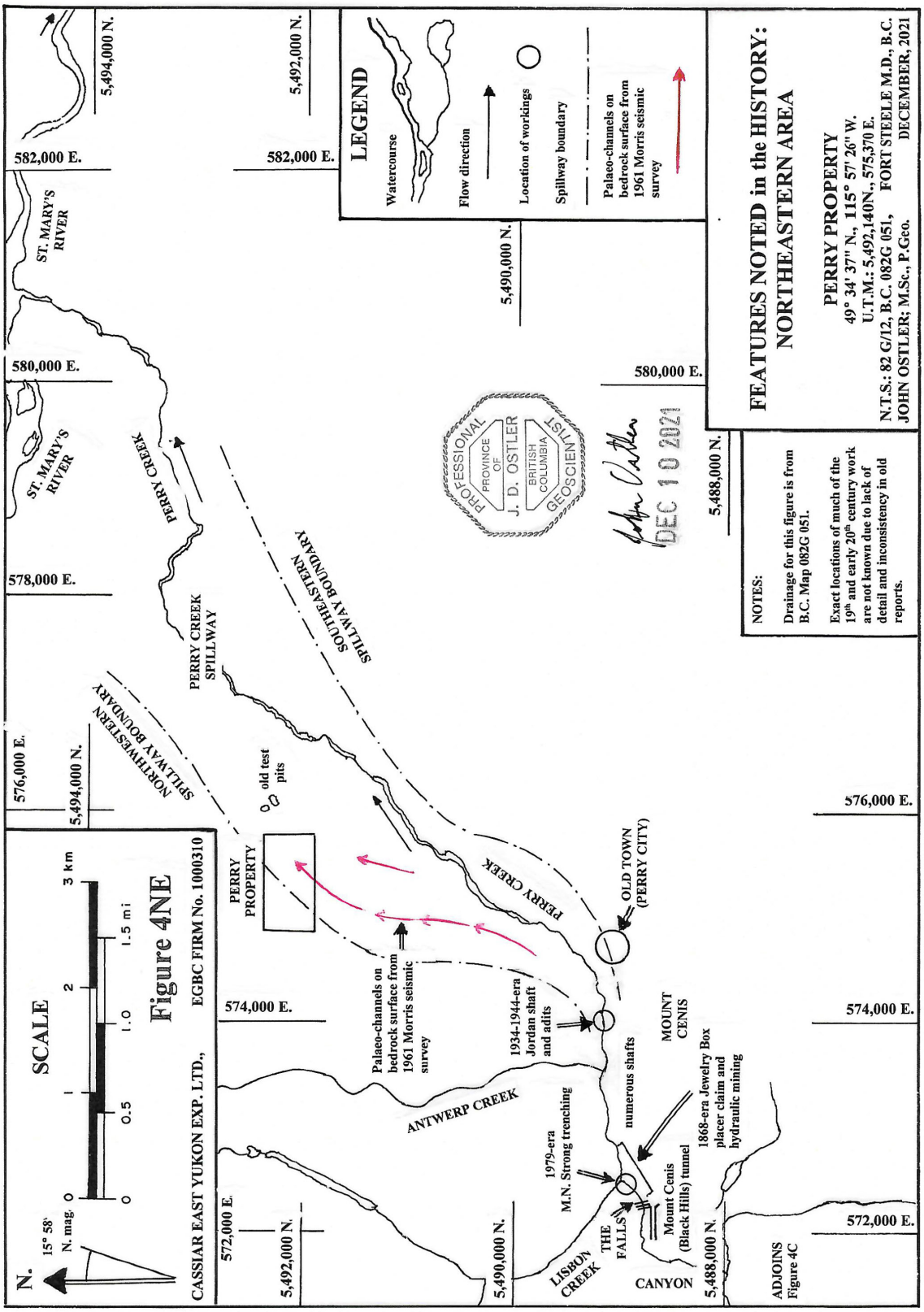
2.1 Chronology of Ownership and Exploration of Placer Claims in the Perry Creek Area

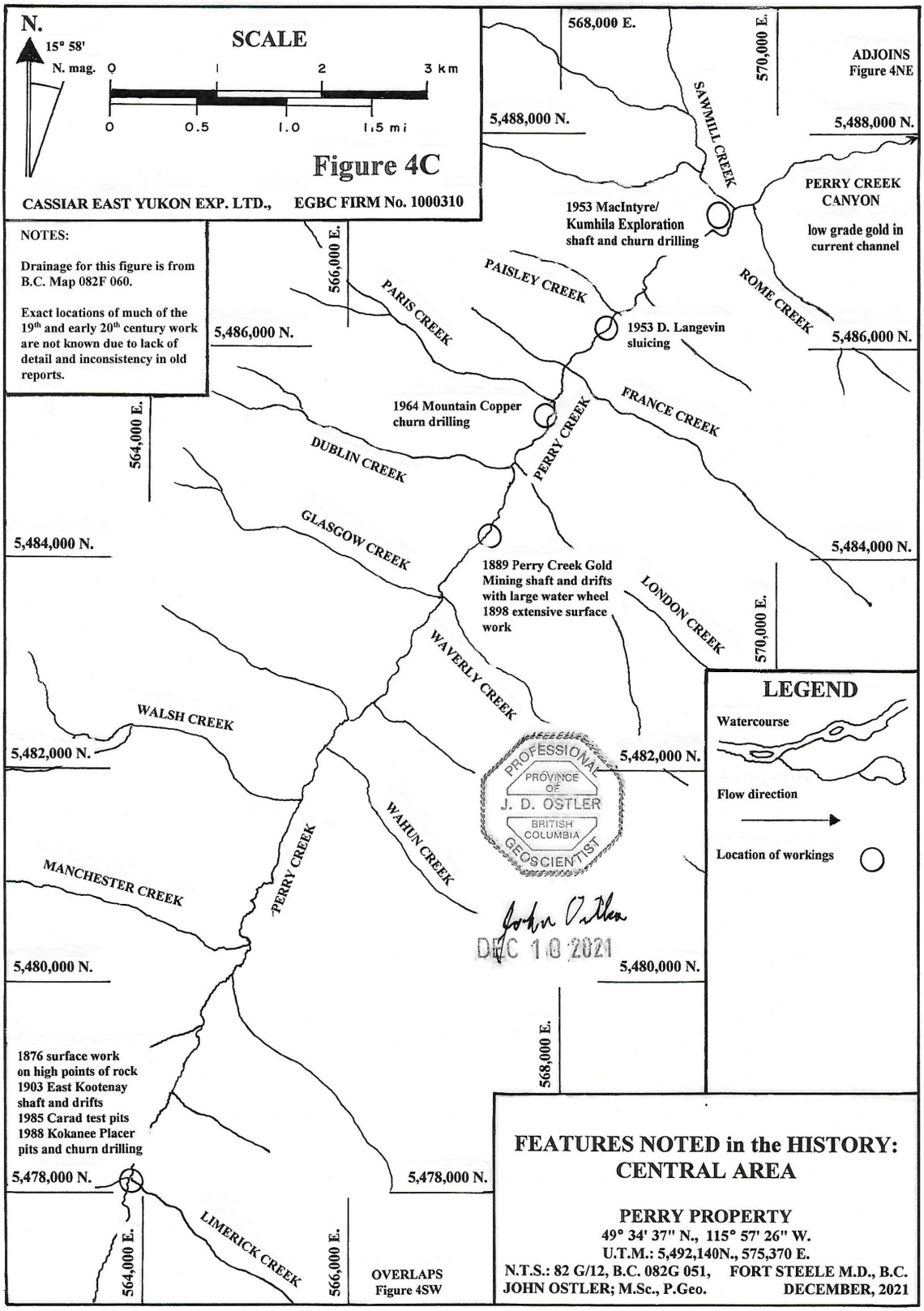
NOTE: All references to ounces (oz) are to Troy ounces = 31.104 grams.

Unless otherwise referenced, the following history prior to 1965 is gleaned from the British Columbia Minister of Mines' annual reports and bulletins.

1863 Initial Discovery in the Kootenay Gold Camp
Gold was discovered by Jack Fisher near the mouth of what later became known as Fisher Creek on Wild Horse River. The river was so named in recognition of the wild horses that lived on the river delta.

1864 At least 400 miners were working claims that extended for several kilometers up Wild Horse River. The "town" of Fisherville (probably mostly wooden tent frames) was built near the mouth of Fisher Creek. In good ground, miners were netting about $1/pan. At a gold price of $18.00/ounce, that would equal about 0.07 oz placer gold per pan after deductions for fineness and smelter charges. Wages could be from $20 to $30/day at a time when labourers were making about $2/day in more civilized places. The gold was coarse and easy to recover with pans, small sluices, and rockers. Nuggets were worth from $2.50 to $78 after deductions for fineness and smelter charges. They weighed from about 0.15 to 4.4 ounces.


FEATURES NOTED in the HISTORY: NORTHEASTERN AREA
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021
LEGEND
Watercourse
Flow direction
Location of workings
Spillway boundary
Palaeo-channels on bedrock surface from 1961 Morris seismic survey
NOTES:
Drainage for this figure is from B.C. Map 082G 051.
Exact locations of much of the 19th and early 20th century work are not known due to lack of detail and inconsistency in old reports.
PROFESSIONAL GEOSCIENTIST
PROVINCE OF BRITISH COLUMBIA
J. D. OSTLER
DEC 10 2021
N.
15° 58' N. mag.
SCALE
0 0.5 1 2 3 km
0 1.0 1.5 mi
Figure 4NE
CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310
ADJOINS Figure 4C
ST. MARY'S RIVER
PERRY CREEK
PERRY CREEK SPILLWAY
NORTHWESTERN SPILLWAY BOUNDARY
SOUTHEASTERN SPILLWAY BOUNDARY
PERRY PROPERTY
old test pits
Palaeo-channels on bedrock surface from 1961 Morris seismic survey
1934-1944-era Jordan shaft and adits
numerous shafts
MOUNT CENIS
1868-era Jewelry Box placer claim and hydraulic mining
1979-era M.N. Strong trenching
Mount Cenis (Black Hills) tunnel
THE FALLS
LISBON CREEK
CANYON
ANTWERP CREEK
OLD TOWN (PERRY CITY)
582,000 E.
580,000 E.
578,000 E.
576,000 E.
574,000 E.
572,000 E.
5,494,000 N.
5,492,000 N.
5,490,000 N.
5,488,000 N.


N.
15° 58'
N. mag.
SCALE
0 1 2 3 km
0 0.5 1.0 1.5 mi
Figure 4C
CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310
NOTES:
Drainage for this figure is from B.C. Map 082F 060.
Exact locations of much of the 19th and early 20th century work are not known due to lack of detail and inconsistency in old reports.
568,000 E.
570,000 E.
ADJOINS Figure 4NE
5,488,000 N.
SAWMILL CREEK
PERRY CREEK CANYON
low grade gold in current channel
1953 MacIntyre/ Kumhila Exploration shaft and churn drilling
566,000 E.
PAISLEY CREEK
PARIS CREEK
ROME CREEK
5,486,000 N.
1953 D. Langevin sluicing
564,000 E.
1964 Mountain Copper churn drilling
FRANCE CREEK
DUBLIN CREEK
PERRY CREEK
GLASGOW CREEK
5,484,000 N.
1889 Perry Creek Gold Mining shaft and drifts with large water wheel 1898 extensive surface work
LONDON CREEK
WAVERLY CREEK
WALSH CREEK
5,482,000 N.
WAHUN CREEK
PERRY CREEK
MANCHESTER CREEK
5,480,000 N.
1876 surface work on high points of rock
1903 East Kootenay shaft and drifts
1985 Carad test pits
1988 Kokanee Placer pits and churn drilling
5,478,000 N.
LIMERICK CREEK
OVERLAPS Figure 4SW
LEGEND
Watercourse
Flow direction
Location of workings
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. D. OSTLER
GEOSCIENTIST
DEC 10 2021
FEATURES NOTED in the HISTORY: CENTRAL AREA
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
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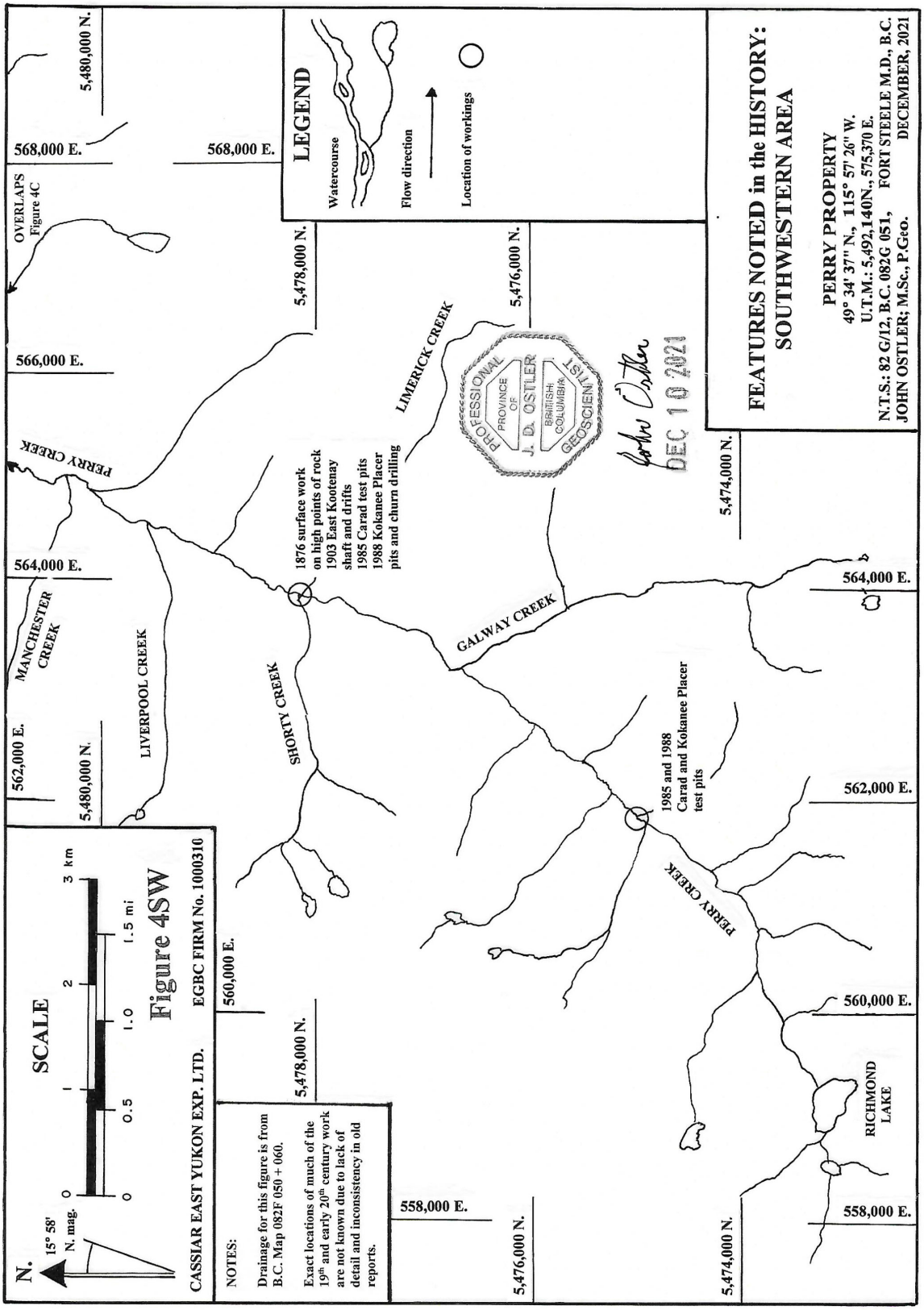
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021


FEATURES NOTED in the HISTORY: SOUTHWESTERN AREA
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021
LEGEND
Watercourse
Flow direction
Location of workings
OVERLAPS Figure 4C
568,000 E.
5,480,000 N.
5,478,000 N.
5,476,000 N.
5,474,000 N.
566,000 E.
564,000 E.
562,000 E.
560,000 E.
558,000 E.
PERRY CREEK
MANCHESTER CREEK
LIVERPOOL CREEK
SHORTY CREEK
GALWAY CREEK
LIMERICK CREEK
RICHMOND LAKE
1876 surface work on high points of rock
1903 East Kootenay shaft and drifts
1985 Carad test pits
1988 Kokanee Placer pits and churn drilling
1985 and 1988 Carad and Kokanee Placer test pits
PROFESSIONAL GEOSCIENTIST PROVINCE OF BRITISH COLUMBIA J. D. OSTLER
DEC 10 2021
N.
15° 58' N. mag.
SCALE
0 0.5 1 1.0 2 1.5 mi 3 km
Figure 4SW
CASSIAR EAST YUKON EXP. LTD. EGBC FIRM No. 1000310
NOTES:
Drainage for this figure is from B.C. Map 082F 050 + 060.
Exact locations of much of the 19th and early 20th century work are not known due to lack of detail and inconsistency in old reports.

1865 The Dewdney trail was completed from New Westminster on the coast to Wild Horse River. That wagon road facilitated the importation of equipment, supplies, and if necessary, British troops to the Wild Horse River placer camp. The colonial government was in a great rush to complete the trail before the end of the American Civil War. At that time, the United States had the world's largest standing army. The colonial government wanted to prevent annexation of British Columbia to the United States as Texas and California had been annexed previously.

1868 Gold Discovered on Perry Creek
Gold was discovered in Perry Creek in 1868 according to the Journal of the Northwest Mining Association (Vol. 3, p. 74). Perry Creek is located about 36 km (22 mi) west-southwest of Wild Horse River.

M.B. Strong (1979) reported:
"On October 20, 1868, government agent P O'Reilly reported to Victoria that "a new and important goldfield has been discovered in the Kootenay district and that the surface gravel or pay dirt yields good prospects for a depth from four to six feet (1.22 to 1.83 m) ... making eight to sixteen dollars per day to the hand (0.44 to 0.89 oz gold @ $18/oz). Underneath this gravel is a stratum of clay through which there has been no prospecting as yet."

In the same letter he reported that where bedrock was exposed, large values (concentrations) were recovered from surface.

Strong also reported that, "... Perry Creek was prospected over its entire length and it was soon noted that a change of character occurred in the vicinity of the "Falls", about 2 miles (3.28 km) upstream from the town site, presently known as "Old Town". Above the falls were known as "deep diggings", where the topography is rounded and the valley bottom is filled with thick overburden. Below the falls the slopes are steep and the bedrock was near surface in many places. The earliest mining efforts were concentrated below the falls where good pay was within easy reach of the surface ..."

1874 Initial Record of Mining on Perry Creek
In the first annual report of the British Columbia Minister of Mines it was noted that, "the Kootenay District was chiefly occupied by miners coming from the neighbouring territories of Washington, Idaho, and Montana, and has always been a favourite field for American enterprise. Steady wages have always been obtained on the creeks there, the most important of which are Perry Creek and Wild Horse River."

That year, a total of 35 people were recorded to be working 20 placer claims along Perry Creek. Workings included at least one tunnel and one hydraulic operation. Six ground sluices were being operated near the creek. Wages were $3.50 to $6 per person-day (0.194 to 0.333 oz gold at gold = $18/oz).

1875 Annual Work Summary
Seven placer claims were worked along the Perry Creek in 1875. Workings included ground sluices.

1876 Perry Creek Canyon: Minor activity
It was reported that, "On Perry Creek there have not been any new developments, notwithstanding Perry is a favourite creek. The rich pay found in shallow diggings below the falls (Figure 4NE), and on high points of rock at a distance of eight miles (13.1 km) or more up stream from the same falls (and above the canyon in the western part of Perry Creek) (Figures 4C and 4SW), leads every practical miner to believe that there is abundance of mining ground on Perry Creek, lacking nothing to develop it but men and means sufficient to cope with difficulties of a not very formidable nature ..."

1876 Continued

A total of 6 claims were being worked on Perry Creek in 1876.

1877 Perry Creek: Minor activity

It was reported that, "The company of three men that were prospecting on Perry Creek failed to test the deep ground in consequence of a serious break down in their machinery. The value of the deep ground on Perry Creek is to-day as great a mystery as ever ...

Every effort made to develop new gold diggings in this district, during the past mining season, has proved an utter failure. In the majority of cases lack of judgement and want of means has been the cause. There are at present in Kootenay miles of streams on which, gold has been found, but in no case during the last five years has any attempt to prospect any of them been carried out far enough to demonstrate satisfactorily whether gold in paying quantities was deposited in any of them."

1878 Perry Creek: Poor results by prospecting but good production on established claims

Powers, Lyons, Ridgway, and Moore worked on Perry Creek and got no return.

During 1878, 4 claims were worked on Perry Creek by 18 men. Wages were $3.50 to $4.00 per day and a total production was valued at $4,750 (263.9 oz at $18/oz).

1880 Perry Creek below the Falls: Steady production

William Fernie, the government agent, reported that, "There is at present only one company at work on Perry Creek, who are taking good pay out of the creek bed below the falls (Figure 4NE). The upper portion of this creek is supposed to be rich, and good prospects have been obtained there at different times, but the difficulty of opening up the ground has hitherto prevented it from being worked. I hear that there is a probability of a company being formed to try to open up this portion of the creek."

The sole group working "below the falls" in 1880 probably was the same un-named Chinese syndicate that had been working on Perry Creek since 1874. In 1880 they employed 6 men, down from 16 employees in 1878. Production from that persistent group in 1880 was valued at $2,000 (111.1 oz at 18/oz).

1881 Perry Creek at the Palaeo-channel beneath the Falls: Preliminary work for underground mining

It was reported that, "On Perry Creek, the Black Hills Company has done a large amount of preliminary work and is getting the claim into shape for future operations on a large scale (Figure 4NE). A good sawmill has been erected on this property and a quantity of lumber sawed. Next season the company will probably be taking out good pay if they meet with no bad luck.

There is room for a number of other companies like this one, and plenty of as good, if not better, ground than this company is occupying ..."

1882 Perry Creek at the Falls: Results of underground exploration and work summary

It was reported that, "On Perry Creek The Black Hills Company has not made satisfactory progress, owing to the loose nature of the ground and quantities of water met with, which makes tunnelling very slow work (Figure 4NE). The Mount Cenis company are fixing up their tunnel, and expect soon to be taking out pay."

An account in the Journal of the Northwest Mining Association (Vol. 3, p. 74.) indicated that the Black Hills and Mount Cenis tunnels were in reality the same working (see 1897).

1882 Continued

During 1882, 12 claims were being maintained on Perry Creek. Three groups were working, one group was producing gold and the other two were prospecting. A total of 22 miners and prospectors were employed. They made from $3.00 to $4,00 per day. Production from Perry Creek in 1882 was valued at $2,000 (111.1 oz at $18/oz).

1883 to 1886 Perry Creek: No work

Edward Kelly reported, "Perry Creek, I regret to say, has not been worked this season, yet some miners here set a high estimate on the value of Perry Creek mines."

A few prospectors continued to work on Perry Creek with no notable results during the mid 1880s.

During 1885, a rush to Findlay Creek resulted in a labour shortage throughout the Kootenay placer gold camp.

In 1886, production was curtailed by a lack of water due to a drought.

1886 Perry Creek: Positive report

It was reported that, "On Perry Creek, west of Wild Horse Creek, considerable mining has been done in early days, and much gold taken from the lower portion, below the falls of that creek (Figure 4NE). Several attempts have been made to work the deep ground, but owing to the difficulties to be encountered and the want of capital, these efforts have ended in abandonment.

There is no doubt in the minds of those who, from their experience, are capable of forming an opinion as to the richness of Perry Creek, in the upper and deep ground, and that could some company with sufficient capital be induced to take and interest in its development. A prosperous mining camp would be the result."

1887 Upper Perry Creek, West of the Canyon: "Deep diggings"

It was reported that, "The Perry Creek Gold Mining Company have, at considerable expense, succeeded in putting down a shaft some fifty feet (15.24 m) in their mining ground (Figure 4C). Owing to quicksands having to be contended with while sinking, it was an undertaking requiring great care and skill. Mr. Billsland, an old Cariboo miner of large experience, is the company's foreman, and he has been successful where others in the past have failed. Upon completing the shaft it was found that the bed-rock was pitching, and that the company would have to drift for the channel. In consequence, however, of the amount of water coming into the shaft, the work had to be stayed until the arrival of pumps of sufficient power from Victoria, and it is hoped that they will be placed upon the ground this winter. In the meantime, the company's men have been engaged in erecting substantial buildings for winter quarters, and in getting out timbers, &c., for future operations."

1887 Underground Work at the Falls

It was reported that, "In the Mount Cenis Tunnel work is being carried on vigorously, day and night shifts being constantly employed. As yet nothing can be determined as to the results. Mr. Billsland speaks very highly of the indications, &c."

1888 Underground work at and above the Falls and Summary of Current Work

In 1888, 10 men were working in a tunnel. The author assumes that the work was being conducted in the Mount Cenis tunnel (Figure 4NE).

The value of the production from Perry Creek that year was reported to have been $515, (28.6 oz at $18/oz).

1887 to 1889 Corporate Maneuver

Sometime between its incorporation in 1887 and the field season of 1889, The Perry Creek Gold Mining Company acquired rights to the Mount Cenis adit from The Black Hills Company.

1889 Perry Creek: Mount Cenis Tunnel at the Falls

It was reported that, "Placer mining is here prosecuted by The Perry Creek Gold Mining Company, Limited Liability, incorporated in 1887. Their tunnel, driven at a depth of several hundred feet under Mount Cenis, and following the ancient bed of the stream, is now 900 feet (274.3 m) in (Figure 4NE). Most of the ground encountered presents features of a cañon, with the bed-rock, owing to the great rush of the waters, smooth and polished. Large boulders impeded the work , but wherever gravel and clay had lodged the ground was paying well. The company runs cars on iron tracks in the tunnel, and they have machinery for driving pure air to the workings. The number of miners employed is from ten to fifteen, under a superintendent." The output for the year 1889 was valued at $6,500 (about 361 oz at $18/oz), the gold assaying in San Francisco as high as $18.50 per ounce.

1889 Drifting at the Bottom of the Perry Creek Gold Mining Company Shaft

It was reported that, "Five miles (8.1 km) up on the same creek the said company have this year resumed work on their shaft constructed in 1887 (Figure 4C). This shaft is sunk in the centre of the creek 55 feet (16.8 m) deep, and protected by a treble coffer dam. Having brought by pack animals, and partly on the backs of Indians, a powerful Cornish lift pump, of a total of 9,000 lbs (4.5 tons or 4.1 mt), over a most inaccessible part of the country, it was placed in the shaft, which by blasting through the solid bed-rock, had been deepened to 65 feet (19.8 m). Water was brought by a ditch and flume, and a large wheel in the latter, connected with the pump, kept the work clear. (For more detail, see 1898.) This consisted of drifts lengthwise and across the channel. Though the ground traversed in all directions by these drifts seemed most favourable for the lodgement of gold, only small quantities were found. The company sent orders in the month of October to temporarily cease working this portion of their ground ..."

1890 Annual Production

There were 10 claims and leases on Perry Creek in 1890 of which seven were being worked or prospected by a total of 10 miners. Wages averaged about $2.75/day. Three sluices were being operated. Production from Perry Creek in 1890 was valued at $3,000 (166.7 oz at $18/oz).

1891 Annual Production

There were 3 groups of miners sluicing gold from 3 claims Perry Creek in 1891. Production from Perry Creek in 1891 was valued at $3,900 (216.7 oz at $18/oz).

1892 Annual Production

There were 5 groups of miners sluicing gold from 5 claims Perry Creek in 1892. Production from Perry Creek in 1892 was valued at $3,000 (166.7 oz at $18/oz).

1894 Annual Production

One group of miners was sluicing gold on a hill claim near the creek. Production from the hill claim in 1894 was valued at $300 (16.7 oz at $18/oz).

The "hill claim" referred to in the 1894 report may have been on the gravel bench located on the southern side of Perry Creek near the falls where hydraulic mining was attempted by the Perry Creek Hydraulic Mining Company in 1903 to 1904 and by the Wild Horse Creek Placer Mining Company from 1918 to 1922.

1895 Perry Creek: No new developments, Annual Production

No new developments were reported from Perry Creek in 1895. Production, presumably from the hill claim worked the previous year, was valued at $1,500 (83.3 oz at $18/oz).

1896 to 1898 Wagon Road Construction

The mouth of Perry Creek is not far from the end on the St. Mary's wagon road, and it is intended to continue this road some distance up the creek in 1897". The road had been extended to Perry City (Old Town) by the Summer of 1898.

1897 Perry Creek Canyon: Quartz ledges

On Perry Creek, the large ledges of quartz mentioned in the Report for 1896, received a good deal of attention, and Mr. John E, Hardman erected a small stamp mill for testing purposes, but the result of the season's work was that this quartz, so far as prospected and tested, proved to be very low grade and to carry very little gold that could be saved by any free-milling process.

1897 Short History of Development near the Falls

An account in the Journal of the Northwest Mining Association (Vol. 3, p. 74.) briefly described work near the water falls as follows: "... the most important (placer gold discovery) being that on Perry Creek, where a town soon sprang up and numbers of claims were worked to advantage. The first showy claim, called "Jewelry Box," which was easily worked and produced lots of nuggets, was situated just below the falls, where work has been carried on at intervals almost ever since, with varying degrees of success. When the surface diggings had been worked out at this point, some parties undertook to drive a tunnel (adit), following an old channel, which appeared to run around one side of the falls. This is known as "The Mount Cenis" tunnel. The work proving too expensive for individual miners, it passed into the hands of the Black Hills Co. and then into the possession of the present owners, "The Perry Creek Mining Co.," who have spent large sums in development work and buildings, and are making preparations to carry on operations in a much more extensive manner this coming season."

1898 Perry Creek West of Old Town: Report of detailed field examination

J.F. Armstrong, gold commissioner for the Fort Steele Mining Division, reported the results of a detailed examination of workings on Perry Creek as follows:

"Perry Creek in past years was the scene of considerable activity as a placer field, although little, if any, successful work of this nature is now in progress. The centre of activity seems to have been "Old Town" or "Perry City," which, judging from the remains of old dwellings and stores, must once have been a prosperous town. Now (in 1898), however, it boasts of one "hotel," the only habitable building left, although not in use as such at the time of my visit.

There is a fairly good wagon road connecting "Old Town" with both Fort Steele and Cranbrook, via "The Mission," which was built in the placer mining days. The stream has been worked for placer gold with varying success for a mile or more above the old town, or as far up as the falls, and has yielded, as a whole, a considerable amount. At the falls, and for a distance of two or three miles (3.2 to 4.8 km) above, little gold was found in the present channel of the creek. The older channel for this distance passes apparently to the east of a small mountain, which separates it from the present stream. Immediately below the falls a tunnel has been run on this old channel, and is said to be in nearly 1,000 feet (305 m), a lower or drainage tunnel following it all the way. This has been for some time abandoned by the constructing company, yet is worked occasionally by individual prospectors, who take out good wages.

1898 Continued

Two miles (3.2 km) above the falls, near the "Old Shaft," (see author's comments below and Figure 4C) the stream was worked quite extensively by surface sluicing and a shaft sunk to bedrock from 100 to 200 feet (30.5 to 61 m) deep, from which considerable gravel was removed, but with what result, I was unable to learn. The shaft is now (in 1898) filled with water. Here again is to be found a most ingenious and beautifully constructed over-shot water wheel, arranged to do the hoisting and working by an eccentric pinion shaft, a line of rods connected with a "bob" working a deep level plunger pump in a separate compartment of the shaft.

The placer record of the stream drew special attention to the creek and its tributaries, and a great deal of lode prospecting has been done from Old Town to the head of the creek. A large number of claims were, from time to time, recorded, many of which were justified by discoveries made, but as many more on no apparent values. The work done has proved, however, that there are without a doubt a number of very strong parallel quartz ledges, some of great width and traceable for miles, running S. 20° W. (200°) or about parallel with the general direction of the creek and dipping nearly vertical ..."

The location of the "Old Shaft" in J.F. Armstrong's preceding report is inconsistent with other reports. In the second paragraph of his report, Armstrong wrote that, " At the falls and for a distance of two or three miles (3.2 to 4.8 km) above, little gold was found in the present channel of the creek." In the third paragraph, he wrote, "Two miles (3.2 km) above the falls, near the "Old Shaft," the stream was worked quite extensively by surface sluicing and a shaft sunk to bedrock from 100 to 200 feet (30.5 to 61 m) deep, from which considerable gravel was removed". Why would "extensive surface sluicing" be conducted on a barren stretch of the creek? He continued by reporting that, "Here again is to be found a most ingenious and beautifully constructed over-shot water wheel, arranged to do the hoisting and working by an eccentric pinion shaft, a line of rods connected with a "bob" working a deep level plunger pump in a separate compartment of the shaft." That over shot water wheel was installed at the Perry Creek Gold Mining Company shaft which was reported in 1889 to have been at a location about five miles (8.1 km) and not two miles (3.2 km) up stream from the falls (Figures 4C and 4SW).

1899 Wagon Road Construction

In 1899, wagon road to Perry Creek was extended to Old Town (Perry City), mostly to service the lode claims along the ridges flanking the creek.

1901 Perry Creek: Placer mining activity

It was reported that, "Considerable placer mining is ... in progress on this creek, owing to the fact that Messrs. Thompson, Banks Bros., and Theis, after sinking a shaft and drifting have encountered "pay dirt", and have taken out a considerable amount of gold. Other leases, of which there are nearly a dozen, are now being worked."

1901 Continued

M.B. Strong made a general comment about that work as follows:

> About the turn of the century several small companies of individuals did extremely well by shafting to bedrock and drifting on old channels.
>
> M.B. Strong; 1979: p. 4 (un-numbered).

1903 Perry Creek from Old Town to above the Canyon: Development

It was reported that, "On Perry Creek three companies are working, each with a different principle. Near Old Town the Theis Company is sinking a new shaft to bedrock, work on the old shaft having been profitable; the Perry Creek Hydraulic Mining Co. is constructing a flume two miles (3.2 km) in length and will work bench diggings by hydraulic power, commencing near (below) the falls (Figure 4NE); while the East Kootenay Placer Mining Co., further up the creek, has taken in a railway steam-shovel with which to raise the gravel from bedrock, and is now perfecting the machinery for handling the gravel between the steam-shovel and the flumes."

The location of the East Kootenay Placer Company's work and the steam shovel was about 16 miles (25.76 km) up Perry Creek, probably from Old Town, according to M.B. Strong (1979). The author suspects that the East Kootenay shaft is located near the location of the 1988 Carad-Kokanee Placer test pits and churn drilling on Perry Creek near its confluence with Shorty Creek (Figures 4C and 4SW).

1904 Perry Creek: Hydraulic mining production

It was reported that, "On Perry Creek ... the largest and most important development has been the completion of the plant of the Perry Creek Hydraulic Mining Company, which was fully described in the Provincial Mineralogist's report of last year (1903). The remarkable drought and low water of the past season retarded operations considerably, but the monitors were at work in September.

Six men working on the Thompson lease last summer, drifting on bedrock, are stated to have averaged $18 to $20 a day to the man (a recovery of 1.0 to 1.1 oz gold per man at gold = $18/oz).

The plant on the Theis leases during the season was moved from the south to the north side of the creek, where indications were more favourable and less pumping was required to keep the workings free of water.

There have been eight applications for leases farther up this creek and two on Valley creek, a tributary of Perry."

The author believes that the Theis Company and Thompson placer leases were located along Perry Creek somewhere between Old Town and Lisbon Creek. Probably, drifts along the bedrock surface at the bottoms of their shafts were mining southwestward extensions of the palaeo-channels that were later identified by the 1961 Morris seismic survey (Figures 4NE and 5).

1907 Less Placer Production on Perry Creek

It was reported that only one company was working on Perry Creek in 1907 and that it was purchased by Illinois Steel Co.

1918 Perry Creek: Preparations for hydraulic mining at the Falls
It was reported that, "Perry creek showed some improvement as far as placer-mining was concerned. The Wild Horse Creek Placer Mining Company, which has bought out the old Perry Creek Hydraulic, did considerable work fixing up the big flume, putting in supplies, lumber, etc., and making ready for an early start this spring."

1919 Perry Creek: Preparations for hydraulic mining at the Falls
It was reported that, "On Perry creek A.J. Palmquist (of The Wild Horse Creek Placer Mining Company) has been busy during the season completing a flume to conduct water to a point near the falls, where he intends to operate monitors on a high gravel-bank on the southerly side of the creek."

1920 Perry Creek: Preparations for and initial test of hydraulic mining at the Falls
It was reported that, "On Perry creek A.J. Palmquist has completed the flume and installed monitors. A preliminary test is said to have yielded a nice return of fine gold."

1921 Perry Creek: Field examination
N.A. Wallinger, Gold Commissioner of the Fort Steele Mining Division reported a field examination of Perry Creek during July, 1921as follows:

The creek is approximately 20 miles (32.2 km) long and empties into St. Mary's river at a point about 8 miles (12.9 km) north-west of Cranbrook, from where a wagon-road leads to within 7 miles (11.3 km) of its head.

Around the head of the creek the summits are rounded and present a fairly even skyline, while the hill-slopes are well covered with detritus supporting a heavy growth of timber. Erosion by glaciation is pronounced and has no doubt been the chief factor in accounting for the concentration of gravels lower down the creek.

Near the headwaters the valley widens, forming a basin-like depression, which suggests that at one time it was either filled by a glacier or small lake. In the opinion of a pioneer placer-miner who had worked on the creek in the early sixties, at one time a lake did occupy this basin and the creek followed a different channel at the falls; owing to an uplift the waters of the lake were flooded down the valley, carrying with them immense quantities of material which choked the original channel with boulders, piled the gravel in high banks on either side, and forced a new channel, through which the creek now flows. Although delving into the depths of the uncertain past, this theory is interesting and sounds feasible, for there certainly is an old channel entering the creek just below the falls, at which point the Wild Horse Gold Mining Company is now operating. This company, under the management of A.J. Palmquist, has succeeded in conveying water from the old flume to the top of the bank, from where it is piped down for a distance of about 300 feet (91.4 m) to the monitor stationed 100 feet (30.5 m) above the level of the creek.

The gravel filling the old channel represents a bank of about 400 feet (121.9 m) high; for the first 100 feet (30.5 m) or so it is darker in colour and shows a stratification different from the upper portion, which latter contains a greater portion of silt. It would seem probable that the old channel occupied a box canyon similar to the one through which the creek now flows.

At the time of the writer's visit the stream of the monitor was playing on a mass of boulders at the bottom of the bank. The sluice box is laid on the gravel at the edge of the creek and is connected with a flume from a pool just below the falls, which provides additional water for sluicing. On account of the great height of the bank and the limited amount of room between the working-face and the creek, it is a proposition which will have to be worked very carefully; while getting rid of the tailings presents somewhat of a problem, as the grade of the creek does not exceed 3 per cent ..."

1922 Perry Creek near the Falls: Hydraulic mining
It was reported that, "On Perry Creek the Wild Horse Gold Mining Company operated its monitor on a high gravel-bank just below the falls during the early part of the season. Unfortunately the creek has not sufficient grade to take care of the tailings and operations at this point could not be carried on successfully.

To add to its troubles the bank caved and buried a long section of the sluice box. A.J. Palmquist, the manager, is now seriously considering the construction of a dam at a point about 1500 feet (457.2 m) up the creek from the canyon: the idea being to hydraulic the gravel into the main channel and sluice it down the creek by suddenly releasing large volumes of water from the dam by means of automatic gates. The material would then pass through sluice-boxes and a large undercurrent, in which it is hoped to catch values."

1923 Perry Creek near the Falls: Minor work
It was reported that, "On Perry creek A.J. Palmquist had a small crew of men working during the season. It is understood that he intends to put a dam above the falls, but what progress has been made in this direction is not known."

1932 Perry and Valley Creeks: Churn drilling, shaft sinking, and tunneling
It was reported by J.D. Galloway in BC Department of Mines Bulletin 1933-1, p. 43 that,

PERRY AND VALLEY CREEKS

"The past season witnessed a considerable amount of development-work carried out on these creeks.

Perry Creek Syndicate.— Near Old Town (Figure 4NE) some sixteen men were employed by G.M. Bell and associates, who installed compressor and hoisting equipment. Preliminary testing included three holes sunk to bed-rock with a Keystone drill. Results being encouraging, this was followed by the sinking of a shaft 100 feet (30.5 m) in the rim-rock, with a 95-foot (29-m) drift under the stream-bed. This work was practically completed at the end of the season (1932) and production is expected to be made in 1933.

Grady Leases.— A start was made late in the fall by T.B. Grady, of Vancouver, in connection with five adjoining creek and bench leases, situated 1 ½ miles (2.4 km) above Old Town, which were acquired on a lease and option basis from A. Hurry, J. Leask and associates, of Cranbrook. A long tunnel is being driven to prove the ground with a view of hydraulicking, for which equipment already on the property includes three monitors.

(This was the ground just beneath the falls that was hydraulicked by the East Kootenay Placer Mining Company in 1903 and 1904, and the Wild Horse Gold Mining Company during 1922.)

McDonald Leases.--- On Valley creek near where it joins Perry creek, Dan McDonald, M.P. Johnson, and R.V. Price have been drifting in connection with their creek leases."

Galloway, J.D.; 1933: p. 43.

1933 Hydraulic Operation at the Falls: Mining and development
It was reported that, "At the property of G.M. Bell, of Calgary ... a crew of men has been employed continuously."

Probably this was the Mount Cenis tunnel (Figure 4 NE).

Grady Leases 2.4 km above Old Town down stream from the Falls: Corporate maneuver
It was reported that, "Above Old Town the leases of A. Hurry and associates, of Cranbrook, are reported to have been turned over to Portland, Oregon, interests, who expect start work as soon as climatic conditions permit."

1934 Perry Creek: Continuation of work in workings beneath the shaft west of Old Town
On Perry creek work was continued by G.M. Bell, of Calgary, in the shaft-workings near Old Town. This may have been the Jordan shaft as described by M.B. Strong in the following text:

> In the early 30's a deep shaft near Old Town was put down over 100 feet (30.5 m) but operations were not continued, presumably for lack of value (?). Soon after, the Jordan shaft was sunk about a half mile (0.81 km) upstream and hit good pay on bedrock and drifting operations continued quite successfully, for over 10 years.
>
> M.B. Strong; 1979: p. 4 (un-numbered).

1935 Perry Creek: Cessation of work in workings beneath the shaft west of Old Town
On Perry creek a Calgary syndicate undertook to drive to bed-rock, but work was stopped by the breakdown of their water-wheel.

It was noted that an inspection was made of the North Star placer mine on Perry Creek, operated by D.A. MacIntosh and associates. The location of that operation is unknown to the author.

1950 to 1970 At the Falls near the confluence of Perry and Lisbon creeks: Small-scale production
In 1979, M.B. Strong reported that during the 1950s and 1960s, several prospectors found that coarse gold remained among old workings near the falls near the confluence of Lisbon and Perry creeks. Ernie Pinchback of Marysville, B.C. conducted the most extensive work in the area at that time. He excavated a short inclined shaft that reached bedrock at about 4 feet (1.22 m) below the creek water level at a distance of 40 feet (12.2 m) away from the edge of the present creek. Mr. Pinchback stated that he got $72.00 (2 oz) worth of gold from 12 yd^3 (9.18 m^3) of gravel. He could see no visible paystreak but claimed (to M.B. Strong) the ground to be spotty in value. Mr. Pinchback related to M.B. Strong that he worked an area to the right (north) of his adit and retrieved 6 oz of gold near the surface. M.B. Strong estimated the area of that work to have been about 11.11 yd^2 (9.29 m^2).

1950 to 1975 Coarse Gold on Bedrock on Lisbon Creek
According to M.B. Strong (1979), Bob Williams of Kimberly, B.C. and a partner sub-leased along Lisbon Creek. They dug shallow test holes and found coarse gold on bedrock on Lisbon Creek near its confluence with Perry Creek. Included were a 1 oz nugget and several large pieces of gold (Figures 4NE and 4C).

1953 Junction of Sawmill and Perry creeks: Shaft sinking, churn drilling, sluicing
It was reported that, "F. MacIntyre is sinking a shaft to bedrock on his placer leases located just above the junction of Sawmill and Perry Creeks."

1953 Perry Creek upstream from Sawmill Creek: Sluicing operations
D. Langevin continued sluicing operations on his leases located a mile (1.6 km) above the Sawmill-Perry Creek junction.

1953 Churn Drilling near the confluence of Perry and Sawmill Creeks
It was reported that, "In September, L.J. Hickman, one of the principals in this private company (Kumhila Exploration Co. Ltd.), did some test drilling on leases near the junction of Sawmill Creek and Perry Creek (Figure 4C) and about 10 miles (16.1 km) from the Cranbrook-Kimberly Highway. Nine 38-foot (11.6-m) holes were drilled to bedrock with a Keystone 71, 6-inch (15.25-cm) churn drill. The results were disappointing, and no further work is planned for the area."

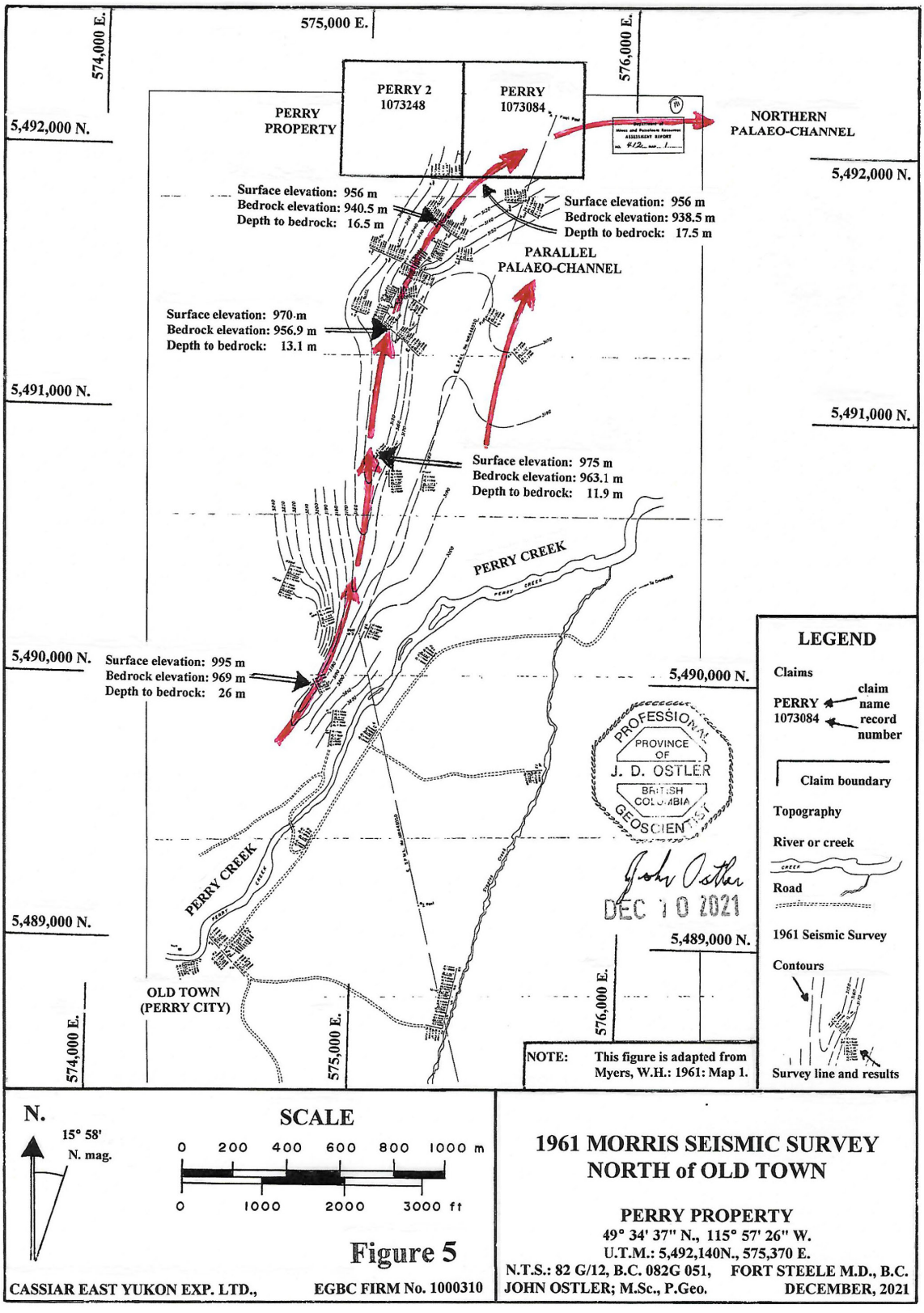
1961 William Howard Myers, P.Geol. conducted a seismic refraction survey for H.R. Morris of Morris and Morris, Mineral Exploration Consultants of Calgary, Alberta (Myers, 1961) on Special Placer Lease #MR44805D. The lease extended south-southwestward from the current PERRY and PERRY 2 (1073084 and 1073248) claims across Perry Creek past Old Town to west of the slough on Staples Creek. The northern survey extended from north of Perry Creek near Old Town to the current Perry property area (Figures 4NE and 5). The southern survey was conducted in the Staples Creek area south of Old Town. The surveys were conducted by a 2-person crew from May 11 to July 1, 1961. A total of 48 survey lines of various lengths were completed.

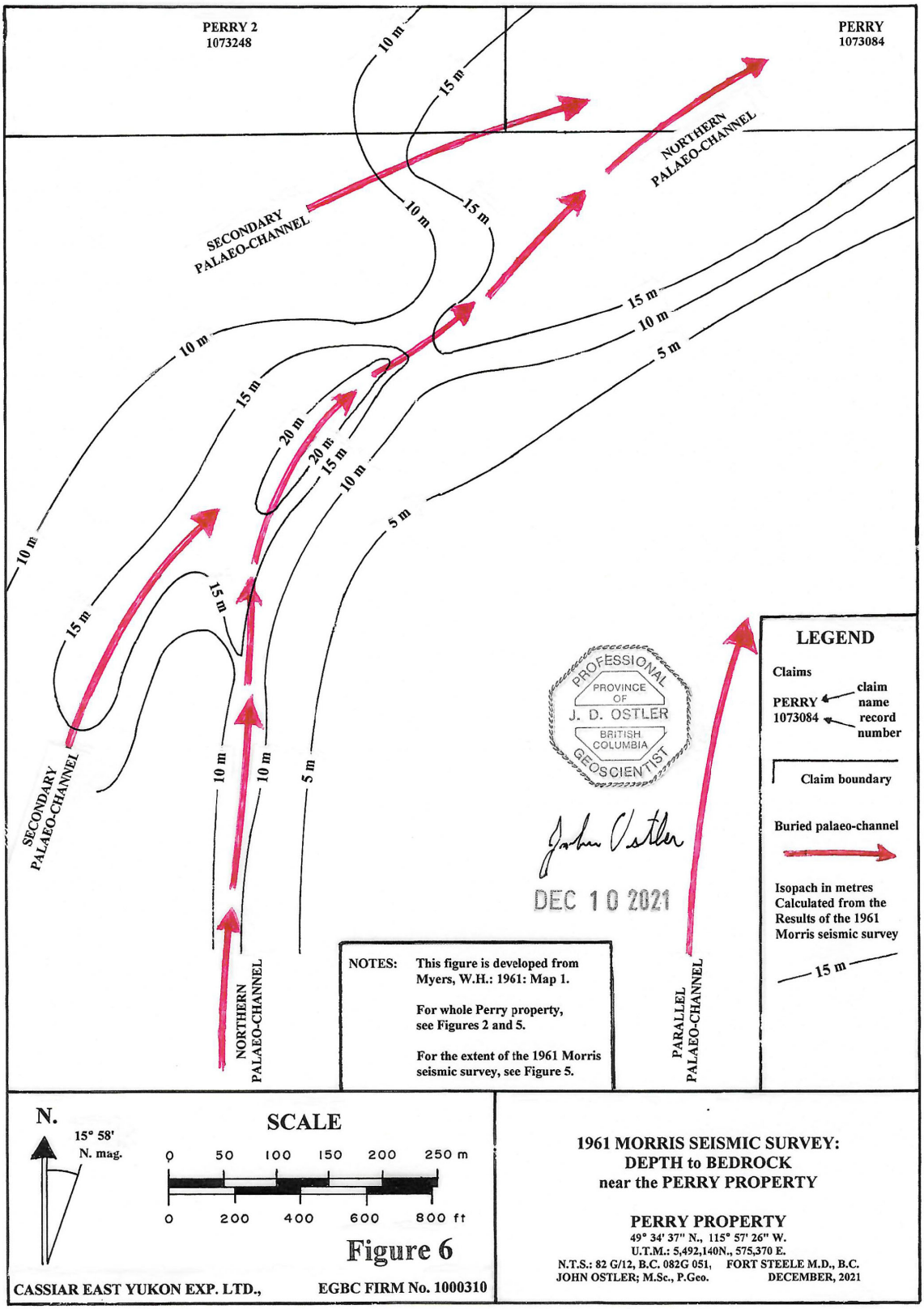
The time-domain survey was conducted using a Dyna Metric Model 117 Seismic Timer Unit, two geophones and an 8-lb sledge hammer to provide shock waves. The average spread length was 48.8 m (160 ft); station spacing ('a' spacing) was 3.5 m (10 ft). In areas of deeply buried bedrock, the spread length was increased to 97.6 m (320 ft).

The results of the survey lines near Staples Creek were inconclusive. By contrast, the results of the survey along the northwestern margin of the Perry Creek spillway between Perry Creek and the Perry property were quite clear. It was estimated that the depth from surface to bedrock varied from 2.4 to 30.2 m (8 to 99 ft). A palaeo-channel, 2.2 km (1.34 mi) long was contoured along the northwestern margin of the spillway from near the current channel of Perry Creek to onto the current Perry property (Figure 5).

W.H. Myers's conclusions regarding the palaeo-channel were as follow:

> The results of the refraction work indicates the existence of an old channel which Perry Creek probably occupied in part during Tertiary times or pre-glaciation. The general outline of this channel ... (Figure 5) is located north of the present channel. It is very possible that the old channel continued to flow more northerly and emptied into the St. Mary's River several miles north west of the present confluence. It is also possible that the old channel outlined by the meander of the old creek and it may run east and enter back into the present channel near St. Mary's River (the theory supported by the author).
>
> The elevation of bed rock in the old channel is considerably lower than the elevation of the bed rock in the present creek bed. There appears to have been as much as 30 to 40 ft (9.1 to 12.2 m) of down cutting in this older channel below the level of the glacial erosion. The channel appears to have been partly filled with glacial drift. Some tertiary gravels or gravels deposited during the cutting of the old channel were found in a pit which was later excavated into the old channel. The grade of the old channel is approximately 70 ft per mile (13 m/kilometer), rising toward the upstream side of Perry Creek where as the present stream gradient at this point is in the order of 50 ft per mile (9.3 m/ kilometer).
>
> Myers, W.H.; 1961: pp. 5-6.


574,000 E.
575,000 E.
576,000 E.
5,492,000 N.
5,491,000 N.
5,490,000 N.
5,489,000 N.
PERRY 2
1073248
PERRY
1073084
PERRY
PROPERTY
NORTHERN
PALAEO-CHANNEL
PARALLEL
PALAEO-CHANNEL
Surface elevation: 956 m
Bedrock elevation: 940.5 m
Depth to bedrock: 16.5 m
Surface elevation: 956 m
Bedrock elevation: 938.5 m
Depth to bedrock: 17.5 m
Surface elevation: 970 m
Bedrock elevation: 956.9 m
Depth to bedrock: 13.1 m
Surface elevation: 975 m
Bedrock elevation: 963.1 m
Depth to bedrock: 11.9 m
Surface elevation: 995 m
Bedrock elevation: 969 m
Depth to bedrock: 26 m
PERRY CREEK
PERRY CREEK
OLD TOWN
(PERRY CITY)
PROFESSIONAL
PROVINCE
OF
J. D. OSTLER
BRITISH
COLUMBIA
GEOSCIENTIST
DEC 10 2021
LEGEND
Claims
PERRY
1073084
claim name
record number
Claim boundary
Topography
River or creek
Road
1961 Seismic Survey
Contours
Survey line and results
NOTE: This figure is adapted from Myers, W.H.: 1961: Map 1.
N.
15° 58'
N. mag.
SCALE
0 200 400 600 800 1000 m
0 1000 2000 3000 ft
Figure 5
CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310
1961 MORRIS SEISMIC SURVEY
NORTH of OLD TOWN
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021


PERRY 2
1073248
PERRY
1073084
SECONDARY PALAEO-CHANNEL
NORTHERN PALAEO-CHANNEL
SECONDARY PALAEO-CHANNEL
NORTHERN PALAEO-CHANNEL
PARALLEL PALAEO-CHANNEL
10 m
15 m
20 m
5 m
LEGEND
Claims
PERRY 1073084
claim name
record number
Claim boundary
Buried palaeo-channel
Isopach in metres Calculated from the Results of the 1961 Morris seismic survey
15 m
NOTES: This figure is developed from Myers, W.H.: 1961: Map 1.
For whole Perry property, see Figures 2 and 5.
For the extent of the 1961 Morris seismic survey, see Figure 5.
PROFESSIONAL
PROVINCE OF
J. D. OSTLER
BRITISH COLUMBIA
GEOSCIENTIST
DEC 10 2021
N.
15° 58'
N. mag.
SCALE
0 50 100 150 200 250 m
0 200 400 600 800 ft
Figure 6
CASSIAR EAST YUKON EXP. LTD.,
EGBC FIRM No. 1000310
1961 MORRIS SEISMIC SURVEY:
DEPTH to BEDROCK
near the PERRY PROPERTY
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021

1961 Continued

The author calculated from the 1961 seismic data that depths from surface to the palaeo-channels ranged from less than 10 m (30.5 ft) to more than 20 m (65.6 ft) (Figure 6).

1964 Churn Drilling near the confluence of Perry and Paris Creeks
During the autumn of 1964 Mountain Copper Company of California Limited staked and recorded 10 placer leases near the confluence of Perry and Paris Creeks, ... A crew of five men drilled six holes totaling 132 feet (40.2 m), with a churn drill between October 21st and November 7th. All holes were drilled to bedrock, and were on the west side of Perry Creek (Figure 4C).

Adit Sinking near the Confluence of Perry and Lisbon Creeks
R.E. Williams and W. Kludash, of Kimberly, made a few cuts and started a new adit on their placer lease near the confluence of Perry and Lisbon Creeks. The work was done on week-ends.

1972 It was reported in Geology, Exploration and Mining in British Columbia; p. 566 that Mesa Petroleum (M.A.) Co. of Calgary, Alberta held placer leases Nos. 1004, 1069, and 10 others near the confluence of Perry and Antwerp creeks. Seismic work and air photo interpretation indicated the possibility that an unworked buried drainage system existed downstream from the old Perry Creek placer workings. A refraction seismic survey was run along 1,219 m (4,000 ft) of line on three leases. Details of that survey are not known to the author.

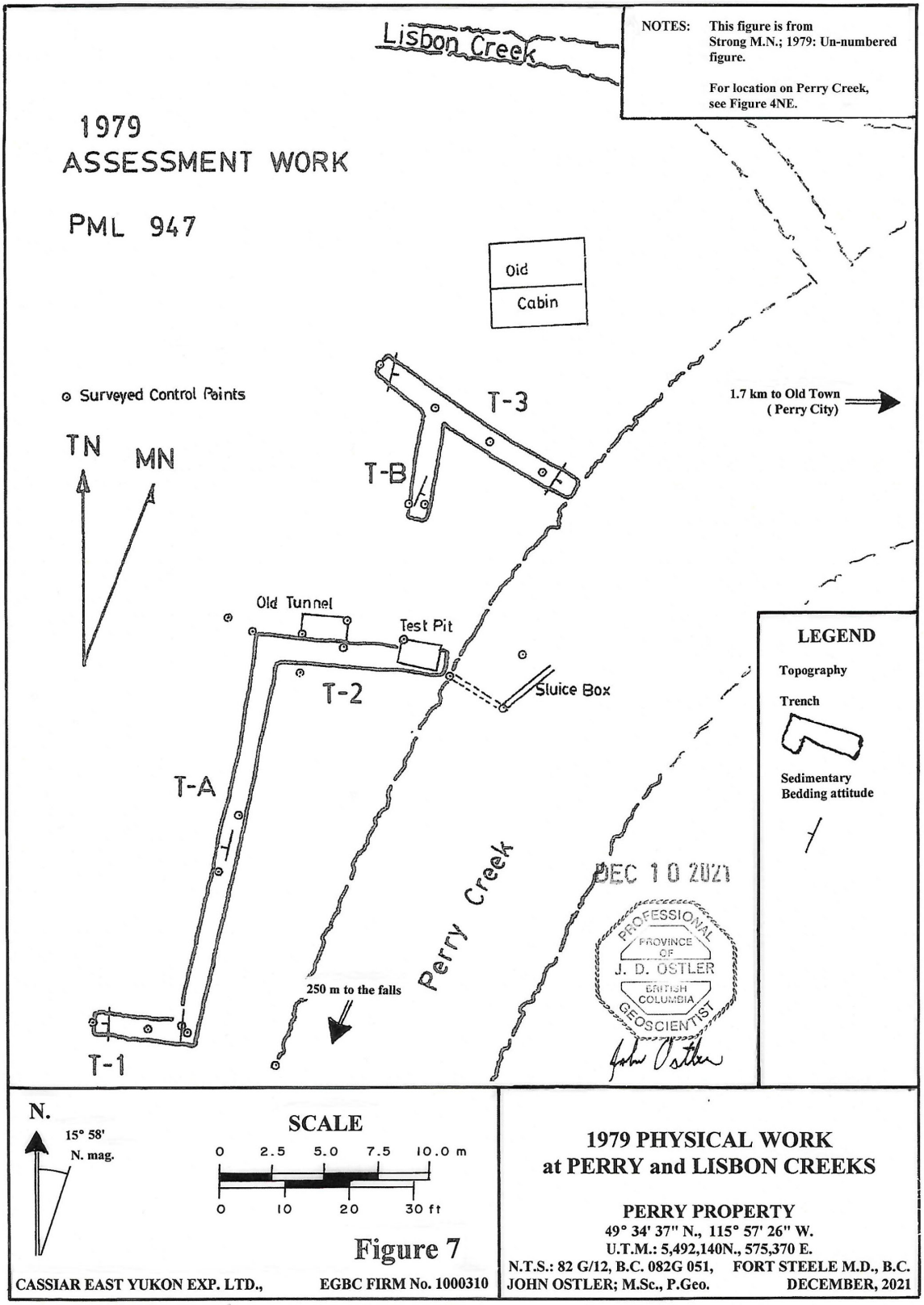
1979 Near the confluence of Perry and Lisbon Creeks (downstream from the Falls): Excavator stripping and hand trenching
In June and July, 1979, M.B. Strong (1979) renovated the Lisbon Creek road, conducted 3 days of excavator trenching and 26 days of hand trenching. Samples from the trenches and along Perry Creek were tested with a sluice by a 1 to 3-man crew. M.B. Strong's 1979-era Placer Lease 947 covered ground staked downstream from the falls as the Jewelry Box claim in 1868. The 1868-era claim-area yielded a reported 150,000 ounces of gold. The reported production from the entire river system was 200,000 ounces of gold (_____, 1989).

Trench T-1 was oriented at right angles to Perry Creek and located about 100 m (328 ft) upstream from the confluence of Perry and Lisbon creeks (Figure 7). That trench exposed previously worked ground that contained low gold concentrations.

Trench T-2 investigated Ernie Pinchback's 1950s-era inclined adit. It was oriented at about 70° from Perry Creek and located about 60 m (197 ft) upstream from the confluence of Perry and Lisbon creeks. Ernie Pinchback reported zones near the bedrock surface that contained gold concentrations worth $\$50.00/yd^3$ ($\$65.40/m^3$). In 1979, M.B. Strong earned about $\$2.00/yd^3$ ($\$2.62/m^3$) from the bottom of trench T-2 which did not reach bedrock.

Trench T-A was designed to connect trenches T-1 and T-2 (Figure 7). Bedrock was encountered in the northerly 12.2 m (40 feet) of trench T-A adjacent with trench T-2. South of that, the bedrock surface dropped precipitously to beyond the maximum depth of the excavator.

Trench T-3 was excavated at right angles from Perry Creek at a location about 38 m (124.7 ft) upstream from its confluence with Lisbon Creek (Figure 7). Bedrock was about 1 m beneath surface and had a water worn surface that had not been worked previously. Trench T-B was excavated southward from trench T-3 toward trench T-2. About 10 m (30.5 ft) of work was completed when the excavator broke down and machine work terminated.


Lisbon Creek
NOTES: This figure is from Strong M.N.; 1979: Un-numbered figure.
For location on Perry Creek, see Figure 4NE.
1979
ASSESSMENT WORK
PML 947
Old Cabin
Surveyed Control Points
TN
MN
T-3
T-B
1.7 km to Old Town (Perry City)
Old Tunnel
Test Pit
T-2
Sluice Box
T-A
T-1
250 m to the falls
Perry Creek
LEGEND
Topography
Trench
Sedimentary Bedding attitude
DEC 10 2021
PROFESSIONAL
PROVINCE OF
J. D. OSTLER
BRITISH COLUMBIA
GEOSCIENTIST
N.
15° 58'
N. mag.
SCALE
0 2.5 5.0 7.5 10.0 m
0 10 20 30 ft
Figure 7
CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310
1979 PHYSICAL WORK
at PERRY and LISBON CREEKS
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021

M.B. Strong (1979) reported the results of testing on bedrock in trench T-3 as follow:

> My project was running out of time and I was only briefly able to test the bedrock in T-3, where the bedrock had not been worked and the results were far more interesting. The crevice material there gave several dollars per pan and the "ironstone" was thick, several pounds per pan. In general the gold in a pan of the pay dirt equaled the gold in several yards of the overburden material! I cleaned up about 10 square feet (about 0.31 m^2) of gravel and got a pennyweight (1/20 ounce) of gold, which agrees with results elsewhere on the area of shallow bedrock.
>
> M.B. Strong; 1979: p. 7 (un-numbered)

M.B. Strong (1979) calculated an historic resource in the area between trench T-3 and the confluence of Lisbon and Perry creeks as follows:

> The most promising part of this area appears to be the shallow bedrock from T-3 north (Figure 7). About 25,000 square feet (925 yd^2 or 774.2 m^2) of bedrock lies under about three to five feet (0.98 to 1.52 m) of overburden. The bedrock should yield an ounce for every 200 square feet (0.1615 oz/ m^2), providing a reserve (equivalent to an inferred resource) here of 125 ounces.
>
> M.B. Strong; 1979: p. 7 (un-numbered)

Accounts of placer gold exploration on Perry Creek during the late 1980s are included in the August 18, 1989 Rights Offering Circular of Barkhor Resources Inc which is available on line in the B.C. Property Files for MINFILE Occurrence 082GNW 067.

1985 Machine trenching from the Falls to about 19.5 km (11.9 mi) up stream
Carad Placer Mines of Cranbrook, B.C. undertook a test-pit exploration program with a back hoe and a Gold Genie. Over 20 test pits were dug (Figures 4NE, 4C, and 4SW) and numerous "buckets" of the lowest material were processed. Only a few of these test pits actually reached bedrock. Significant gold values (concentrations) were encountered in approximately eight of the pits.

1988 Trenching along Perry Creek from 14 to 21 km (8.5 to 12.8 mi) up stream from the Falls
Percussion Drilling near the confluence of Limerick and Perry creeks
Kokanee Placer Ltd. dug three pits at Perry Creek about 2.5 km southwest of Galway Creek in the upper area of the company's leases (1988-era Placer Lease 16,236) (Figure 4SW) to obtain a larger bulk sample from the upper creek area, that had been indicated by Carad's work, for processing through a small trommel.

The three pits yielded 200 m^3 (261.6 yd^3) of material but only 40% was considered to be near the bedrock surface.

Testing was less than satisfactory due to the depth of bedrock which was greater than expected. However, visible specks of gold were found over 8' (2.44 m) (26'-34' or from 7.92 to 10.36 m) near bedrock in PC-1 including three small nuggets. In PC-2 visible specks of gold were noted over 6' (2.83 m) (20-26' or 6.10 to 7.92 m) just above bedrock. The results are classified as incomplete.

1988 Continued

The second phase of the program consisted of drilling three reverse circulation drill holes between two areas of test pitting in the 1985 drill program.

Drilling was on 1988-era Placer Lease 16,251 located at the confluence of Perry, Shorty and Limerick creeks near the location of the 1903-era East Kootenay Placer Mining Company shaft (Figures 4C and 4SW).

The drilling indicated 2 channels coming out of the canyon with some amounts of fine gold associated with gravel/hardpan interface and the gravel/bedrock interface. Gold concentrations at those two "stratigraphic" horizons (the gravel/hardpan and gravel/bedrock interfaces) is significant in light of the past production from the area. The recovery of sample was variable. It should be noted that when recovery was good at these "stratigraphic" horizons (i.e. drill hole PC #1 26-28' or7.92 to 8.53 m) gold content was up appreciably but even where recovery was poor (PC #1 30-32' or 9.14 to 9.75), significant gold was indicated.

Test work in 1988 also indicated the presence of gold in the active surface gravels. Although this might indicate an area of recent run-off, it suggested to the company that bulk testing of the surface horizons might be warranted.

2019 The author map-staked the PERRY and PERRY 2 (1073084 and 1073248) placer claims on December 2 and 11 respectively to secure open ground near the northern end of the 1961 Morris seismic survey.

2020 In the Spring of, 2020 the government of British Columbia issued Order 13180-20-411 regarding the Covid-19 virus pandemic. The required assessment work filing deadline dates of all claims subsisting upon the issue of Order 13180-20-411 that expired before December 31, 2021, were protected for the purpose of filing work until December 31, 2021. The deadlines for filing assessment work on the PERRY and PERRY 2 (1073084 and 1073248) placer claims were extended from December 2 and 11, 2020 respectively to December 31, 2021 (Events 5796282 and 5787949).

2021 From August 3 to 8, 2021, the author conducted geomorphological and geological mapping over the whole of the current Perry property (Figure 8). A total of 38 hectares (93.9 acres) was mapped at a scale of 1:2,000 (Figure 11). That exploration comprises the current work conducted on the property as recorded herein. For details of the results, extent and value of that current work, see sections 3.2, 3.3, and 5.1 to 5.3 of this report.

2.2 Historical Placer Mineral Resource and Reserve Estimates, and Production from the Perry Creek Camp and the Perry Property

2.2.1 Historical Placer Mineral Resource and Reserve Estimates from the Perry Property

No historical estimates of mineral resources or reserves of placer gold in the area of the Perry property are known to the author.

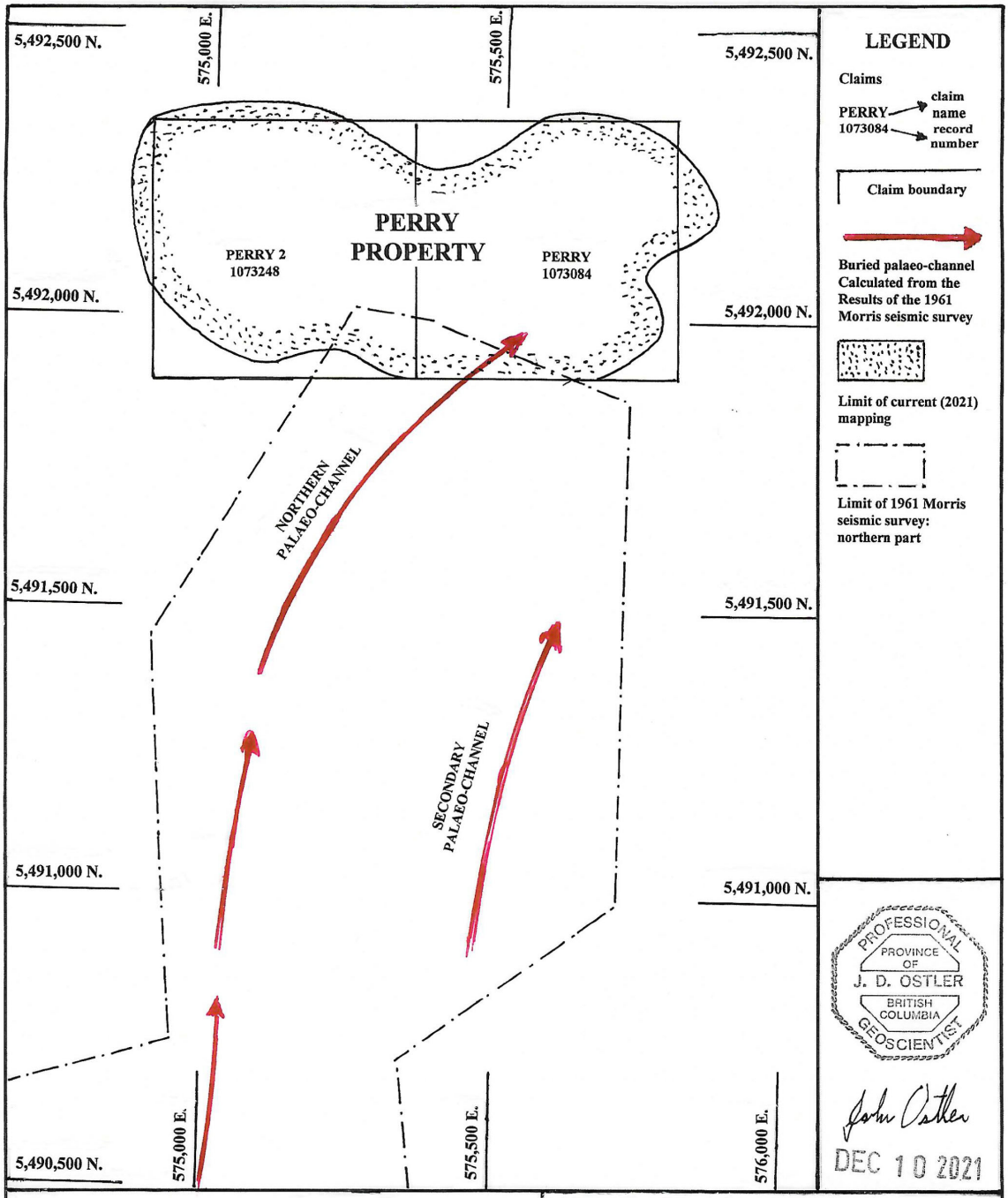


Figure 8

CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310

RECENT WORK in the PERRY PROPERTY AREA

PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021

2.2.2 Production from the Perry Creek Camp

In the August 18, 1989 rights offering circular of Barkhor Resources Inc. (_____, 1989), a general statement regarding total gold production from Perry Creek reportedly made by S. Brian Hamilton, P.Eng. in his May, 1989 qualifying report (unavailable) was as follows:

> Large quantities of gold have been economically taken from the river system at a "false" clay bedrock interface or hardpan and from the bedrock surface in the canyons. (from the Falls downstream to) near the site of "Old Town" (Perry City), a portion of the creek (on the 1868-era Jewelry Box placer lease or on 1979-era Placer Lease 947) that ran through a canyon, yielded in excess of a reported 150,000 ounces of gold production from bedrock. In total, the reported production of gold in the entire river system was 200,000 ounces.
>
> _____, 1989: p. 13.

S.S. Holland (1950) described reporting of placer gold production from Wild Horse River and Perry Creek as follows:

> Most of the placer gold from the Fort Steele Mining Division has come from Wild Horse River, formerly known as Wild Horse Creek, discovered in 1863. The record of production since 1874 is reasonably complete, but for the preceding years... there is absolutely no record. From 1896 to 1905 the production from Perry Creek (discovered in 1867) is listed with that of Wild Horse River, and from 1906 to 1922 the production of the whole division is listed under Wild Horse River. In the early years Wild Horse River probably produced about nine-tenths of the total placer gold production of the division.
>
> Holland, S.S.; 1950: p.33.

Holland calculated that a total of $820,008 was realized from the Fort Steele Mining Division through a reported production of 41,858 oz of gold. He used an average gold price of $18.25/oz and an average fineness of 0.878 in his calculation. M.N. Strong (1979) reported that Perry Creek gold was generally coarse and easy to recover. It had a fineness of about 0.900.

The author subscribes to the supposition that actual production from a placer camp is at least 10 times the amount of the reported production. J.D. Galloway (1933) made such a supposition in his summary of placer mining in British Columbia as follows:

> The total production of the (Wild Horse) creek, mostly from a length of 3 or 4 miles (4.83 to 6.44 km), is variously estimated at from $5,000,000 to $20,000,000. A large production at least is certain ...
>
> Galloway, J.D.; 1933: p. 44.

Using the average free market price for gold in 1933, $26.33/oz, an unofficial production of 189,897 to 759,588 ounces can be estimated. Using an average price for gold of $18.00/oz as reported during the late 19th century, an unofficial production of 277,778 to 1,111,112 ounces can be estimated.

The author does not know the source of S.B. Hamilton's estimate (above) of reported productions of 150,000 ounces of gold from the area from the falls to Old Town along Perry Creek and of 200,000 ounces of gold from the whole Perry Creek drainage system. However, if those were accurate reported production figures and if, as is normally assumed, actual production was at least 10 times the amount of the reported production, then actual production from the falls to Old Town would have been an astounding 1,500,000 ounces of gold and production from the whole Perry Creek drainage would have been 2,000,000 ounces of gold. That would have been greater production than the total estimated from Wild Horse River!

There are several references in the B.C. Minister of Mines Annual Reports to the comparative sizes of gold production from Perry Creek and Wild Horse River. Consistently, production from Perry Creek was reported to be much less than that of Wild Horse River. S.S. Holland (above) estimated that production from Perry Creek was less than 10% of that from Wild Horse River. Thus, the author assumes that Hamilton's production estimates of 150,000 ounces of gold from the area from the falls to Old Town along Perry Creek, and of 200,000 ounces of gold from the whole Perry Creek drainage system to be estimates of total production and not reported production.

3.0 GEOLOGICAL SETTING AND MINERALIZATION

3.1 Regional Geology

3.1.1 Pre-Cenozoic age Geology

The eastern (lower) part of Perry Creek east of 116° west longitude was mapped by both the Geological Survey of Canada and by the British Columbia Geological survey, most notably by: G.B. Leech (1958 and 1960), Trigve Höy (1979 and 1984) (Figure 9, eastern part). Mapping of the whole of the Perry Creek drainage was re-compiled by Trigve Höy and Ginette Carter (1988) (Figure 9). That compilation contained some significant mapping detail only east of 116° west longitude and much less west of it.

For a history of stratigraphy and deformation, see Table 3 of this report.

R.J.W. Douglas et al. (1970) described the geologic history of the Moyie Range around Perry Creek as follows:

> The Proterozoic successions of the southeastern Cordillera are customarily referred to as the Purcell and Windermere systems. They are separated by a widespread unconformity and interval of folding, metamorphism, and intrusion of granitic stocks, these effects being considered to be the result of the East Kootenay Orogeny. The granites ... have yielded K-Ar dates of 675 to 745 million years which suggest that the orogeny occurred within the Hadrynian era ... The Purcell is probably therefore mainly Helikian in age although part may be as young as early Hadrynian and, by virtue of its allochthonous position with respect to the Hudsonian metamorphosed basement, part of the Purcell may be Late Aphebian. The Windermere falls entirely within the Hadrynian and, as it is locally conformable with Lower Cambrian sediments, probably represents all or most of the late Hadrynian ...
>
> The Purcell is divisible into two main parts by an hiatus, partly represented by the Purcell lava, a very extensive basalt flow several hundred feet thick ... The lower part of the Purcell is divisible into three main units. The lowest includes the thin, varicoloured, laminated, and stromatolitic carbonates and conglomerates with pebbles of quartzite and dolomite that comprise the near-shore Waterton and Aylton formations in the Clarke Range, and which grade westward into various facies including that of the very thick Aldridge Formation. The Aldridge comprises rusty-weathering, fine-grained, laminated argillaceous quartzite and dark argillite with graded bedding and scour and fill structures, indicating deposition in deep water. The middle unit contains red and green argillite and quartzite that comprise the Appekunny and Grinnell formations in the east. These rocks contain such tidal-flat and shallow-water features as channel fillings, torrential ripple marks, mud cracks, salt-hopper and raindrop markings, features that are generally lacking in the equivalent but thicker Creston Formation of the west. The upper unit of the lower Purcell, represented by the Siyeh Formation in the east, contains much clean carbonate typically with “molar tooth” and stromatolitic and oolitic structures, interbedded with shale and siltstone in the lower and upper parts. The latter unit constitutes the Siyeh of the Purcell Mountains and the underlying rocks, argillaceous and silty dolomites, form the Kitchener Formation. The upper part of the Purcell, the Shepard and lower Gateway formations contain much argillaceous and silty dolomite whereas the conformable higher units of alternating argillite and quartzite vary from green and grey to purple and red and exhibit shallow water sedimentary structures.
>
> The Purcell is intruded by the Moyie gabbro sills and is unconformably overlain by the Hadrynian Windermere system in the western and northern Purcell mountains and by various Palaeozoic formations in the eastern Purcell and southern Rocky Mountains..
>
> Helikian sedimentation was brought to a close in the southern Cordilleran Geosyncline by the East Kootenay Orogeny ... It was manifested by uplift, gentle folding, tilting, faulting, granitic intrusion, and regional metamorphism to greenschist facies and locally to sillimanite grade.
> ...
> In southern Rocky Mountains, the Miette Group is composed of a basal unit, 3,000 feet (914 m) thick of argillite and argillaceous sandstone, succeeded by 2,000 feet (610 m) of sandstone, grit, conglomerate, and argillite, which is overlain by 3,000 feet (914 m) of argillite and, locally at the top, by a carbonate 0 to 3,000 feet (914 m) thick ...
>
> The Lower Cambrian ... is restricted to the Cordilleran Geosyncline, and is generally thickest in linear troughs marginal to the (North American) craton. It is of miogeosynclinal facies. Thick extensive sheets of orthoquartzite and conglomerate overlain by limestone ... grade westward into thinner calcareous shales ... Their maturity relative to the underlying Windermere clastics, with which

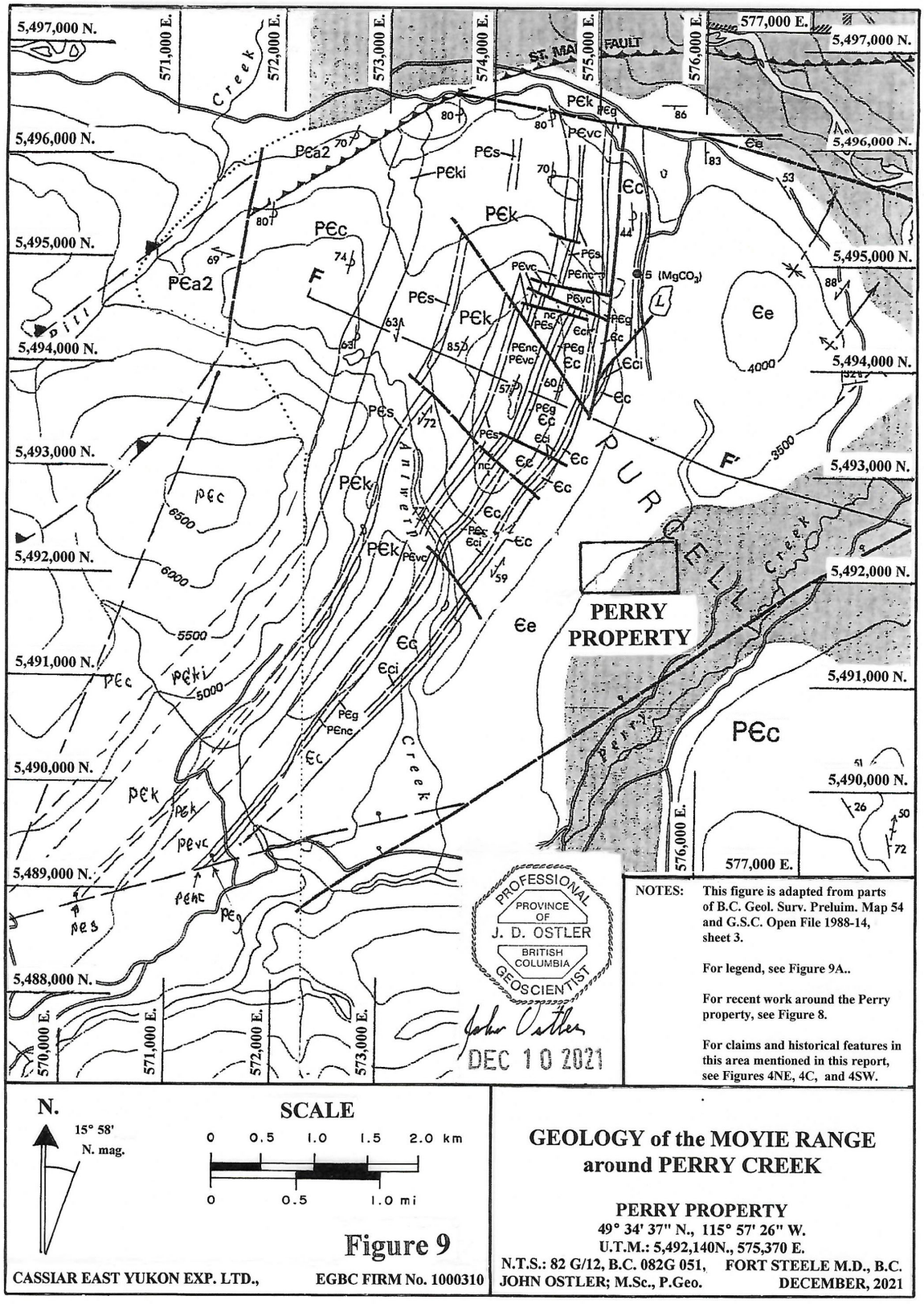

5,497,000 N.
5,496,000 N.
5,495,000 N.
5,494,000 N.
5,493,000 N.
5,492,000 N.
5,491,000 N.
5,490,000 N.
5,489,000 N.
5,488,000 N.
571,000 E.
572,000 E.
573,000 E.
574,000 E.
575,000 E.
576,000 E.
577,000 E.
570,000 E.
PERRY PROPERTY
PURCELL
FAULT
Creek
PEc
PEa2
PEki
PEk
PEs
PEvc
PEnc
PEg
Ec
Eci
Ee
F
F'
A
A'
6500
6000
5500
5000
4000
3500
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. D. OSTLER
GEOSCIENTIST
DEC 10 2021
NOTES: This figure is adapted from parts of B.C. Geol. Surv. Preluim. Map 54 and G.S.C. Open File 1988-14, sheet 3.
For legend, see Figure 9A..
For recent work around the Perry property, see Figure 8.
For claims and historical features in this area mentioned in this report, see Figures 4NE, 4C, and 4SW.
N.
15° 58'
N. mag.
SCALE
0 0.5 1.0 1.5 2.0 km
0 0.5 1.0 mi
Figure 9
CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310
GEOLOGY of the MOYIE RANGE around PERRY CREEK
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021

Figure 9A
Legend to Figure 9

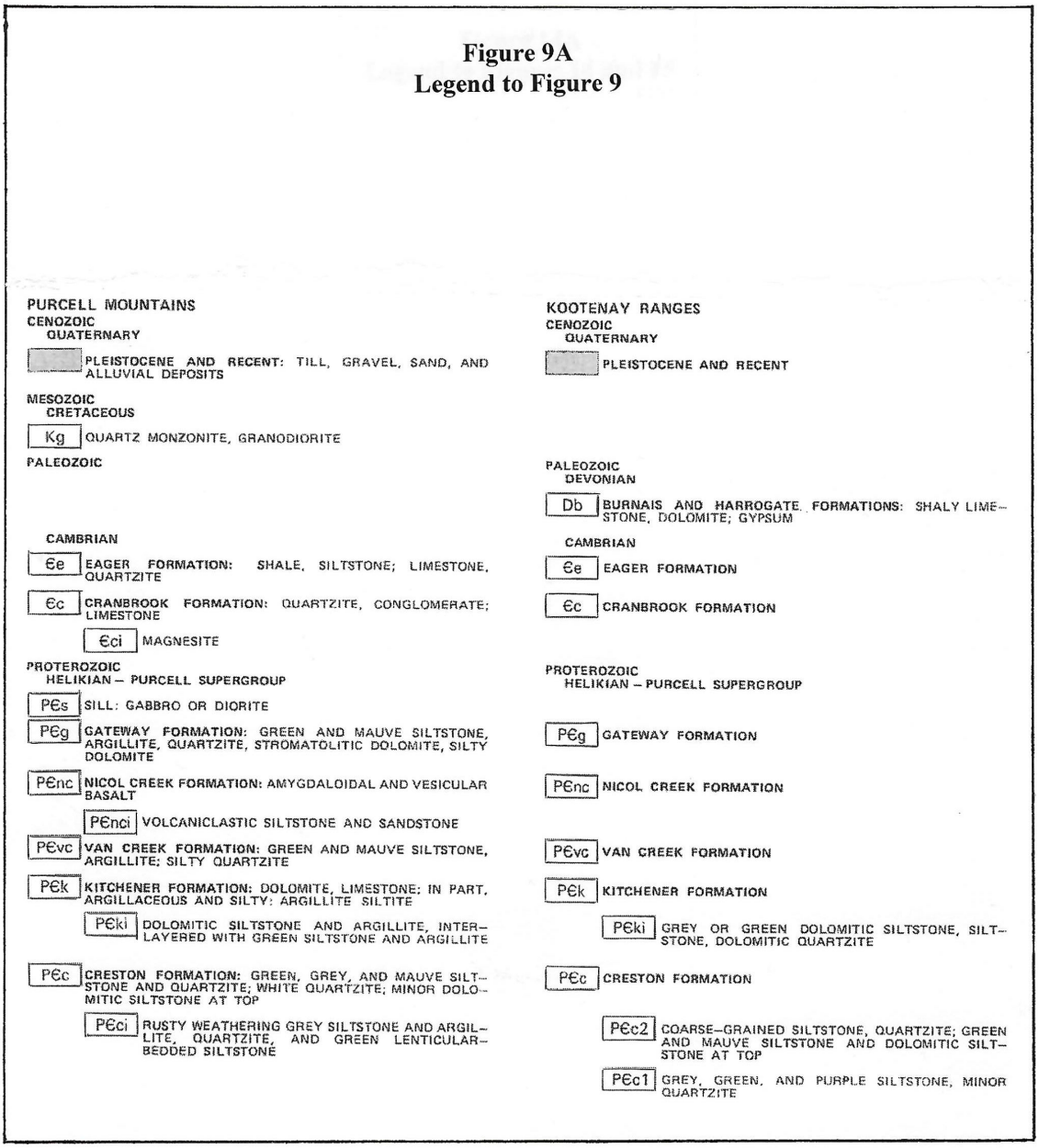


Figure 9A Continued
Legend to Figure 9

PROTEROZOIC
HELIKIAN – PURCELL SUPERGROUP

P€m MOYIE SILLS; MINOR DYKES: GABBRO, DIORITE

P€a ALDRIDGE FORMATION: QUARTZITE, QUARTZ WACKE, SILTSTONE, ARGILLITE

P€a3 UPPER ALDRIDGE: RUSTY WEATHERING ARGILLITE AND SILTSTONE

P€a2 MIDDLE ALDRIDGE: THIN TO THICK–BEDDED GREY QUARTZITE, QUARTZ WACKE; SILTSTONE AND RUSTY WEATHERING ARGILLITE DOMINATE NEAR TOP

P€a1 LOWER ALDRIDGE: RUSTY WEATHERING SILTSTONE AND QUARTZITE; SILTY ARGILLITE

P€a1q GREY–WEATHERING QUARTZITE, QUARTZ WACKE

PROTEROZOIC
HELIKIAN – PURCELL SUPERGROUP

P€m MOYIE SILLS; MINOR DYKES

P€a ALDRIDGE FORMATION

P€a3 UPPER ALDRIDGE

P€a2 MIDDLE ALDRIDGE

P€a2q GREY QUARTZITE, QUARTZ WACKE

P€a2s SILTSTONE AND ARGILLITE

P€avi MEDIUM TO DARK GREY SILTSTONE, ARGILLITE

P€av THICK–BEDDED QUARTZITE; MINOR CONGLOMERATE

P€aiv BUFF–COLOURED DOLOMITIC SILTSTONE, ARGILLITE

P€aiii GREY TO TAN SILTSTONE; GREY OR BLACK ARGILLITE

P€aiii GREY TO TAN SILTSTONE; GREY OR BLACK ARGILLITE

P€aii SILTY DOLOMITE, DOLOMITIC SILTSTONE: MINOR LIMESTONE

P€ai GREY TO BLACK SILTSTONE, ARGILLITE

P€f FORT STEELE FORMATION: WHITE CROSSBEDDED QUARTZITE; MUD–CRACKED SILTSTONE AND ARGILLITE

SYMBOLS

LIMIT OF MAPPING OR EXPOSURE

ROCK OUTCROP

GEOLOGICAL CONTACT:
DEFINED, APPROXIMATE, ASSUMED

FAULT:
DEFINED, APPROXIMATE, ASSUMED

THRUST OR REVERSE FAULT

NORMAL FAULT

FOLD AXIAL TRACE:
ANTICLINE, OVERTURNED

SYNCLINE, OVERTURNED

BEDDING:
INCLINED, OVERTURNED, VERTICAL

FOLIATION, CLEAVAGE

JOINTING

LINEATION

MINOR FOLD AXIS

SMALL SHEAR (WITH DIP)

MINERALIZED VEIN (SHOWING TREND)

MINE; PROSPECT OR OCCURRENCE

TOPOGRAPHIC CONTOUR (500–FOOT INTERVAL)

ROAD: HARD SURFACE

LOOSE OR STABILIZED SURFACE

LAKE

> they may be locally conformable, suggests reduction of relief and a general tectonic stability of the (North American) craton by ... the Early Cambrian. Northeast-trending Eager Trough (south of the property-area) possibly bordered on the southeast by the Moyie fault, separates Purcell Arch from an emergent block to the south (Montania). Quartzose sandstone and conglomerate derived from adjacent uplifts transgress the arch and lie unconformably on Purcell and Windermere strata...
>
> Middle Cambrian sediments ... in the southern Cordilleran Geosyncline conformably overlie the Lower Cambrian in ... deeply depressed ... troughs ... Shale was probably deposited in the Eager Trough ...
>
> R.J.W. Douglas et al.; 1970: pp. 371-378
> in R.J.W. Douglas ed.; 1970.

Lower to Middle Cambrian Period sedimentation is represented in the Perry Creek area by: Eager Formation shale, siltstone, limestone, and quartzite; and Cranbrook Formation quartzite, conglomerate and limestone. Farther west, the Cordilleran Eugeosyncline was filled by sediments and volcanics of the Slocan and Lardeau groups from the Upper Cambrian to Devonian Period. The Cariboo Orogeny occurred during the Early to Middle Ordovician Period. It resulted in deformation, regional metamorphism and conpressional folding and faulting. The final filling of the Cordilleran Miogeosyncline by strata of the Kaslo and Milford Groups occurred from the Devonian to Triassic Period (Table 2).

The Perry Creek placer gold camp is at the northwestern margin of the Kimberley Gold Trend as defined by Seabrook and Höy (2015). The trend is a pear-shaped region that extends southwestward from Wild Horse River through the Moyie River area to near the British Columbia-Washington border. Trigve Höy (2015) maintained that the Kimberly Gold Trend was associated with the Kanasewich structural zone.

His description of that zone was as follows:

> The Kanasewich structural zone ... extends south-westward across the Purcell Mountains into the southern Kootenay arc in the Salmo-Rossland area of southeastern British Columbia. It coincides approximately with the western extension of an Archean basement structure, referred to as the Vulcan structure, that separates two cratonic blocks of the Canadian Shield. The Kanasewich zone delineates one of the more prominent metallogenic belts in British Columbia that includes deposits such as the Sullivan mine, lead-zinc replacement deposits on the Kootenay Arc, the Rossland gold-copper camp, the Pend O'Reille lead-zinc camp, and the gold deposits of the Sheep Creek camp. In addition, the Kimberley Gold Belt, containing placer gold in Wild Horse Creek, Moyie River and Perry Creek ...
>
> Höy, Trigve; 2015: p. 4.

The Columbian Orogeny occurred from the Early Jurassic to Middle Cretaceous Period (Table 2). Possibly during that time, activity along the Kanasewich structural zone provided conduits for gold-bearing fluids to rise from great depth and enrich cover rocks along the zone. This made gold available for concentration in mesothermal vein structures during Cretaceous-period development of the transcurrent faults of the Rocky Mountain Trench.

The Columbian Orogeny created most of the current landforms and shifted most of the geologic terranes of British Columbia into their current positions. Transcurrent faulting related to development of the Rocky Mountain Trench, occurred throughout the Perry Creek area. This fault activity may have provided fluid flow necessary for the local mobilization and concentration of gold in the pyrite-chalcopyrite-arsenopyrite-quartz veins that are generally believed to be the source of the placer gold in the Perry Creek placer camp.

J.F. Armstrong, gold commissioner of the Fort Steele mining division, described extensive gold-bearing quartz ledges and stratigraphy that he examined during a trip to Perry Creek in 1896 as follows:

> ... there are without doubt a number of very strong parallel quartz ledges, some of great width and traceable for miles, running S. 20° W. (200°) or about parallel with the general direction of the creek and dipping nearly vertical.
>
> These ledges are found on the north-west side of (Perry Creek), near Sour Dough Creek, through the length of some 18 claims (457.2 X 18 = 8,230 m or for 5.02 miles), while further down the creek they re-appear on the opposite side of the stream. The exact point at which they cross, I could not determine in the short time at my disposal, but probably about a mile above the "Old Shaft".
>
> The best exposure of the whole series of ledges lies some two miles (3.2 km), above Sour Dough Creek. At this point - starting at the ledge highest up the hill - there is a 10-foot (3.05-m) quartz ledge exposed in the *Buck Horn* and *Big Horn* claims. Some 1,500 feet (457.2 m) below this again is the Big Ledge, about 40 feet (12.2 m) wide, on which is a string of 15 to 18 claims in line, *Teller, Apex, Cashier, Banker,* etc., etc. About 400 feet (121.9 m) below the "Big Ledge" is a third, an 8-foot (2.4-m), and again some 1,000 feet (304.8 m) lower a series of some three or four 5-foot (1.5-m) ledges parallel to each other and about 100 feet (30.5 m) apart.
>
> The country rock is composed of hard shales or slates with quartzites in this beds, the strike of the beds being S. 20° W. (200°), with a dip of 55° to the west.
>
> The strike of the country rock and of the quartz ledges are identical, but the dip differs. The upper side of the ledges seems to be fast to the country rock, but on the lower side, in many places where exposed, there appeared to be an igneous dyke of "miner's porphyry," much decomposed on the surface. This was most noticeable on the claims farthest down the creek.

> These ledges and the accompanying “porphyry” will give gold colours at almost any point where tried but, as yet, only surface trials have been made. Scattered through the quartz in small grains are iron sulphides carrying gold, and it is an open question whether the free gold found on the surface is not from the weathering of these sulphides.
>
> B.C. Minister of Mines Annual Report, 1898: pp. 1014-1015.

These ledges may have been part of the low-grade periphery or root zone of a structure that hosted a large quantity of sulphides that when weathered, produced large quantities of coarse gold. The author opines that the high-grade part of that structure, located directly above the current course of the upper part of Perry Creek, weathered away leaving gold on the creek bed below. The quartz ledges along Perry Creek are mesothermal vein structures that contain minerals that were deposited at least 1 km (0.61 mi) beneath a Late Cretaceous-age land surface. At least 1 km (0.61 mi) of material has been removed to un-roof the current land surface at Perry Creek. That thickness is sufficient to have hosted extensive gold-bearing structures capable of mineralizing the Perry Creek drainage.

It was noted by J.A. Armstrong in 1898 (see Section 2.1 of this report) that at the water fall on Perry Creek, much higher concentrations of gold were found on the floor of the palaeo channel in the adit than were found in the current channel on surface. That may indicate that the rate of addition of gold to Perry Creek drainage is lower presently than it was when the palaeo channel was active, and that the amount of gold contributed to Perry Creek from the quartz ledges has diminished as weathering has progressed downward through them.

3.1.2 Cenozoic and Holocene-age Development of Perry Creek and its Unconsolidated Stratigraphy

The written record of Cenozoic to Holocene-age unconsolidated stratigraphy along Perry Creek is sparse due to a lack of hydraulic mining there and a lack of percussion drill logs in the area. References to stratigraphic units throughout the literature regarding Perry Creek are terse to the point of being cryptic. In contrast, the stratigraphy of the unconsolidated sediments of the Wild Horse River valley between Fisherville and Boulder Creek are fairly well-known due to a long history of hydraulic mining in that area.

Presently, Perry Creek empties into St. Mary’s River near the village of Wycliffe about 6 km (3.66 mi) east of the Perry property. That may not have always been the case.

The structures and zones of weakness that define the course of St. Mary's River developed from the Late Cretaceous Period throughout the Palaeocene Epoch, about 65.0 to 56.5 million years ago. At that time, the whole area of the current Perry Creek drainage probably was part of an upland plateau.

A plethora of small water courses cut laterally into the edge of that plateau along the southwestern bank of St. Mary's River in a effort to establish channels at grade equal to the level of St. Mary's River. Through the process of stream capture, a few of the water courses prospered and the majority became insignificant. Probably, by the end of the Eocene epoch, 35.4 million years ago, northeasterly-southwesterly fractures containing quartz ledges produced linear zones of rock weakness that favoured stream erosion in that direction. The general direction of Perry Creek was established.

From the Eocene to Pliocene epoch, 35.4 to 1.6 million years ago, the climate of what is now known as the East Kootenay region became cooler and wetter. Stream flow and lateral stream profile cutting increased southwestward from St. Mary's River. Possibly, the northeastern part of the spillway that extends from St. Mary's River toward Old Town (Perry City) may be underlain by an Eocene to Pliocene-age channel that has an elevation close to that of St. Mary's River, about 880 m (2,887) a.s.l. That would be about 80 m (262.5 ft) beneath the current surface of the Perry Creek spillway at the Perry Creek Forest Service Road bridge, located about 4 km (2.44 mi) upstream from the confluence of Perry Creek and St. Mary's River (Figure 4NE).

The Eocene to Pliocene-age channel of Perry Creek may not have been located directly beneath the current channel near the Perry Creek Forest Service Road bridge. A seismic survey was conducted along the northwestern margin of the Perry Creek spillway from north of Old Town to the area around the current Perry property by W.H. Myers in 1961 (1961 in section 2.1 of this report) (Figures 4NE, 5, and 6). Myers conclusions regarding the seismic surveys were as follow:

> The results of the refraction work indicate the existence of an old channel which Perry Creek probably occupied in part during Tertiary times or pre-glaciation. The general outline of this channel is shown on the enclosed map (Figure 5) and is located north of the present channel. It is very possible that the old channel continued to flow more northerly and emptied into St Mary's River several miles north west of the present confluence. It is very possible that the old channel outlined by the refraction work is part of a meander of the old creek and it may turn east and enter back into present channel near St. Mary's River.

> The elevation of the bedrock in the old channel is considerably lower than the elevation of the bedrock in the present creek bed. There appears to have been as much as 30 to 40 feet (9.1 to 12.2 m) of down cutting in this older channel below the level of glacial erosion. The channel appears to have been partially filled with glacial drift. Some Tertiary gravels deposited during the cutting of the old channel were found in a pit which was later excavated into the old channel. The grade of the old channel is approximately 70 feet per mile (13 m/km or 0.013%), rising toward the upstream side of Perry Creek where as the present gradient at this point is in the order of 50' per mile (9.3 m/km or 0.0093%).
>
> It is recommended that further testing be carried out in the old channel as outlined by the refraction seismic work. There is sufficient control from the refraction work to locate favourable placer traps in these old gravels.
>
> Myers, W.H.; 1961: pp. 5-6.

The 1961 seismic surveys indicated that a palaeo-channel ran along the northwestern margin of the spillway. North of Old Town, the elevation of the channel was indicated to be about 969 m (3,179 ft), about 26 m (85.4 ft) beneath the current land surface at the southwestern apex of the spillway which is 995 m (3,264.4 ft). At the northern end of the seismic survey where the projected centre of the palaeo-channel crosses the southern boundary of the PERRY (1073084) placer claim, the author estimates from the 1961 survey data that the elevation of the bedrock surface is about 938.5 m (3,079.1 ft) a.s.l. That elevation is about 17.5 m (57.4 ft) beneath the present land surface at the southern boundary of the claim which is about 956 m (3,136.5 ft) (Figures 4NE, 5, and 6).

The author opines that it is quite reasonable that the palaeo-channel as defined by the 1961 seismic surveys could progress eastward along the northern margin of the Perry Creek spillway to a point beneath the current course of Perry Creek somewhere northeast of the Perry Creek Forest Service Road bridge.

There is a suggestion on Myer's map (Figure 5) that a second palaeo-channel may run parallel with the northern palaeo-channel at a location about 1 km (0.61 mi) south of the Perry property. Probably the whole bedrock surface of the Perry Creek spillway hosts sections of cut-off palaeo-channels. Other than the excavation of some shafts near Old Town at the apex of the spillway, there is no record known to the author of any significant placer gold exploration having been conducted on the bedrock floor of the Perry Creek spillway.

Tills deposited by continental ice sheets east of the North American cordillera indicate that there were

five major glacial stages during the Pleistocene epoch: the Nebraskan, Kansan, Illinoian, Sangamon, and Wisconsin. During each epoch there were as many as three glaciations.

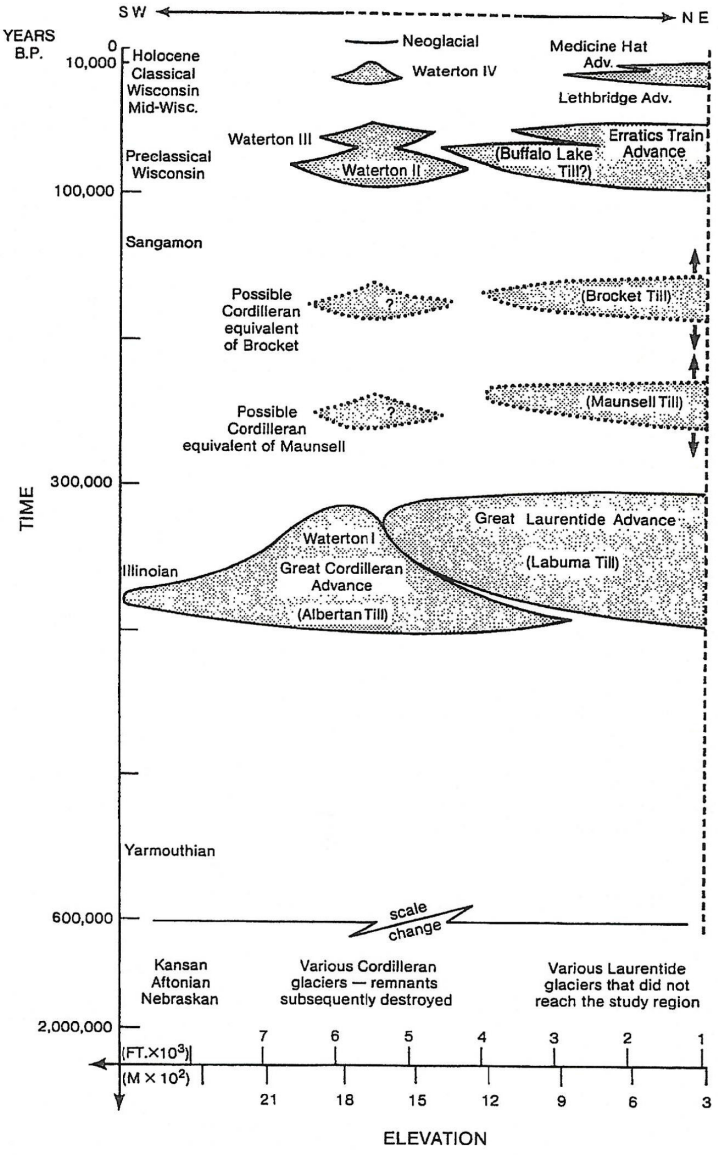
During each glaciation there was an episode of ice scouring followed by till deposition, and periglacial outwash deposition. There are several terse references to false bedrock surfaces in the history of placer mining along Perry Creek such as the one in the August 1989 rights offering circular of Barkhor Resources Inc. (_____, 1989), written as follows:

> Large quantities of gold have been economically taken from the river system at a "false" clay bedrock interface or hardpan and from the bedrock surface in the canyons. (from the Falls downstream to) near the site of "Old Town" (Perry City), a portion of the creek (on the 1868-era Jewel Box Placer Lease or on 1979-era Placer Lease 947) that ran through a canyon, yielded in excess of a reported 150,000 ounces of gold production from bedrock. In total, the reported production of gold in the entire river system was 200,000 ounces.
>
> _____, 1989: p. 13.

Presently, the provenance of these "false clay bedrock" surfaces it is not known to the author. Were they basal till like the Illinoian-stage blue till that is prevalent in the Wild horse River valley, or were some of them the upper surfaces of lake-bottom sediments like the post-Illinoian-stage tan silt that unconformably overlies the blue till between the Main Hydraulic Pit and Boulder Creek at Wild Horse River?

During each interglacial period was one of erosion and the cutting of new channels back from St. Mary's River into the Perry Creek spillway or into valley fill farther up the creek. Commonly, more than one channel would develop and the one that was most successful at stream capture would become the new river channel. At the "falls" upstream from Old Town, the current Perry Creek channel cuts through rock and an old channel just south of the falls is filled and abandoned.

N.W. Rutter (1984) studied the Pleistocene-epoch history of the Waterton Lakes area on the eastern side of the Rocky Mountains east of the Wild Horse River area. He found that the last major glaciation in the area occurred during the Illinoian stage from 390,000 to 350,000 years ago (Figure 10). An ice-free corridor subsisted along the area of the Alberta-British Columbia border since that time. Two quite minor alpine ice advances occurred at about 250,000 and 175,000 years ago during the Sangamon stage. Three more minor ice advances occurred at 90,000, 65,000, and 15,000 years ago during the Wisconsin stage.



PROFESSIONAL
PROVINCE OF BRITISH COLUMBIA
J. D. OSTLER
GEOSCIENTIST

DEC 10 2021

NOTE: This figure is from Rutter, N.W.; 1984: Figure 1.

Figure 10

CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310

PLEISTOCENE HISTORY of the WESTERN CANADIAN ICE-FREE CORRIDOR

PERRY PROPERTY

49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021

Table 2
Table of Geologic Events and Lithologic Units in the East Kootenay Gold Camp Area

Time	Formation or Event
Holocene 8,000-0 years	**Valley rejuvenation**: Down cutting of the present stream profile. **MINERALIZATION: Re-deposition of placer gold from pre-existing channels**
Pleistocene Wisconsin 130,000-8,000 years	**Perry Creek: Valley filling of the spillway, development of the current channel of Perry Creek from the falls to St. Mary's River** Alpine glaciations, uplift and channel development at 90,000, 65,000 and 15,000 years **MINERALIZATION: concentration of placer gold in channels**
Sangamon and Post-Sangamon 250,000-130,000 years	**Perry Creek: Valley filling of the spillway, possible development of the current channel of Perry Creek upstream from the falls** **Minor alpine glaciations**, uplift and channel development at 250,000, and 175,000 years **MINERALIZATION: concentration of placer gold "false clay bedrock interfaces" and in other areas**
Post-Illinoian 350,000-320,000 years	**Post-glacial uplift and development of new channels in the Perry Creek drainage** **MINERALIZATION: concentration of placer gold on top of the "false clay bedrock interfaces"**
Illinoian 390,000-350,000 years	**Major glaciation**, **ice carving of most of the pre-existing sediment in the Wild Horse River valley, probably the same at Perry Creek** **Deposition of the sulphide-rich blue boulder-clay basal till (the Blue Till) at Wild Horse river, the "false clay bedrock interfaces" upstream from the falls on Perry Creek may be Illinoian-stage till beds** **Scouring out of much of the previous Pleistocene-epoch sediment in Perry Creek**.
Post- Kansan 520,000 to 390,000 years	**Post-glacial uplift and development of new channels in the Perry Creek drainage** **MINERALIZATION: weathering of gold out of sulphide-bearing veins, concentration of placer gold in the gavel channels** **Moderately severe glaciation**, unknown amount of glacial disruption and redistribution of placer gold in the Perry Creek drainage
Kansan 602,000 to 520,000 years	**Development of new channels on the bedrock surface beneath the Perry Creek spillway** **MINERALIZATION: weathering of gold out of sulphide-bearing veins, concentration of placer gold in the yellow gravel**
Post-Nebraskan to Pre-Kansan 800,000? to 602,000 years	1.6 m.y. - 800,000? years: glaciations of unknown intensities and extents. An unknown amount of pre-glacial gold was removed by glaciation.
Early Pleistocene to Nebraskan 1.6 m.y. - 800,000? years	
Late Pliocene to early Pleistocene 3.4 to 1.0 m.y.	Back cutting of lower Perry Creek profile and development of a primary channel of the creek **MINERALIZATION: weathering of gold out of sulphide-bearing veins and quartz ledges, concentration of placer gold in the pre-glacial Perry Creek channel**
	m.y. = million years ago

Table 2 Continued
Table of Geologic Events and Lithologic Units in the East Kootenay Gold Camp Area

Eocene to Pliocene 57.1-1.6 m.y.	Deep erosion, and unroofing of the rocks, incision of the land surface. Development of the channel of Perry Creek **MINERALIZATION: Release of free gold from sulphides of pyrite-arsenopyrite-chalcopyrite-quartz veins during deep weathering and its deposition in placers in the channel of Wild Horse River through the pass between Lone Peak and the rest of the Hughes range.**
Late Cretaceous to Eocene 97-57.1 m.y.	**Onset of regional erosion.** **MINERALIZATION: Release of free gold from sulphides of pyrite-arsenopyrite-chalcopyrite-quartz veins and ledges**
Early Jurassic to Middle Cretaceous 200-130 m.y.	**Columbian Orogeny:** **Deformation of Cache Creek rocks in a northeastward dipping subduction zone, accretion of Nicola Group rocks to North America:** progressive deformation and regional metamorphism, overriding of Cache Creek and Quesnel Terrane rocks onto Kootenay Arc strata, intense deformation, uplift, regional metamorphism culminating in extensive plutonism in Kootenay Arc rocks. The orogeny progressed from east to west. Uplift of the Coast Mountains. Normal faulting related to development of the Rocky Mountain Trench, deposition of small monzonitic intrusions in the Wild Horse River area Disruption of stratigraphy by the Rocky Mountain Trench and associated secondary structures **MINERALIZATION:** **Upward migration of gold into crustal rocks along the Kanasewich structural zone and subsequent deposition of sub-vertical gold-bearing pyrite-chalcopyrite-arsenopyrite-quartz veins and quartz ledges along Perry Creek**
Late Permian to Early Triassic 256-241 m.y.	**Mild orogenic event in southern British Columbia:** Deformation, low-grade metamorphism, plutonism, uplift and erosion.
Late Devonian to Triassic 355-251 m.y.	**Deposition of the Kaslo and Milford Group clastic sediments representing the final filling of the Cordilleran Miogeosyncline in the West Kootenay region.** These rocks were deposited on an erosional surface resulting in a major unconformity between them and the underlying eugeosynclinal rocks.
Early to Middle Ordovician 490-460 m.y	**Cariboo Orogeny:** Early deformation and regional metamorphism of the Lower to Middle Eagle Bay Formation, Slocan and Lardeau groups west of the Rocky Mountain Trench, compressional faulting in the Purcell Mountains **MINERALIZATION: Deposition of silver and gold-bearing galena-sphalerite-carbonate-quartz veins and mantoes**
Middle Cambrian to Devonian 544-355 m.y.	**Deposition of the Lower to Middle Eagle Bay Formation mafic volcanic and meta-sedimentary rocks**, and the Lardeau and Slocan group volcanics and sediments in the Cordilleran Eugeosyncline west of the Perry Creek area.
Early to Middle Cambrian 600 to 544 m.y.	**Deposition of Mio to Eugeosynclinal sediments in a deepening Cordilleran Geosynclinal basin**: deposition of the Cranbrook and Eager formations in the Purcell Mountains, block faulting during basin deepening
Late Haydrinian to Cambrian 675 to 600 m.y.	**Deposition of the Windermere Supergroup clastic sediments and volcanics:**
Late Hadrynian 745 to 675 m.y.	**East Kootenay Orogeny**: folding and compressional movement on faults in the Perry Creek area, lower greenschist facies regional metamorphism
Late Aphebian to Late Hadrynian 1,860 to 745 m.y.	**Deposition of the Purcell Supergroup sediments and volcanics**; deposition of the Aldridge Formation in the Perry Creek area Development of block faulting due to basinal extension during sedimentation **MINERALIZATION:** **SEDEX base metal deposition in the Aldridge Formation at the Sullivan mine, northwest of the Perry Creek area during basin spreading**
	m..y. = million years ago

NOTE: Data for this table was compiled by the author from various sources.

Although the East Kootenay gold camp is on the wet side of the Rocky Mountains and thus would have endured more extensive glaciation, ice accumulations during the Sangamon and Wisconsin stages probably were quite thin and not very destructive of pre-existing valley-fill stratigraphy.

A detailed understanding of the Pleistocene-epoch unconsolidated stratigraphy of the Perry Creek drainage would be of great assistance in discerning the locations and extent of the most productive gold-bearing strata.

3.2 Property Geomorphology and Geology

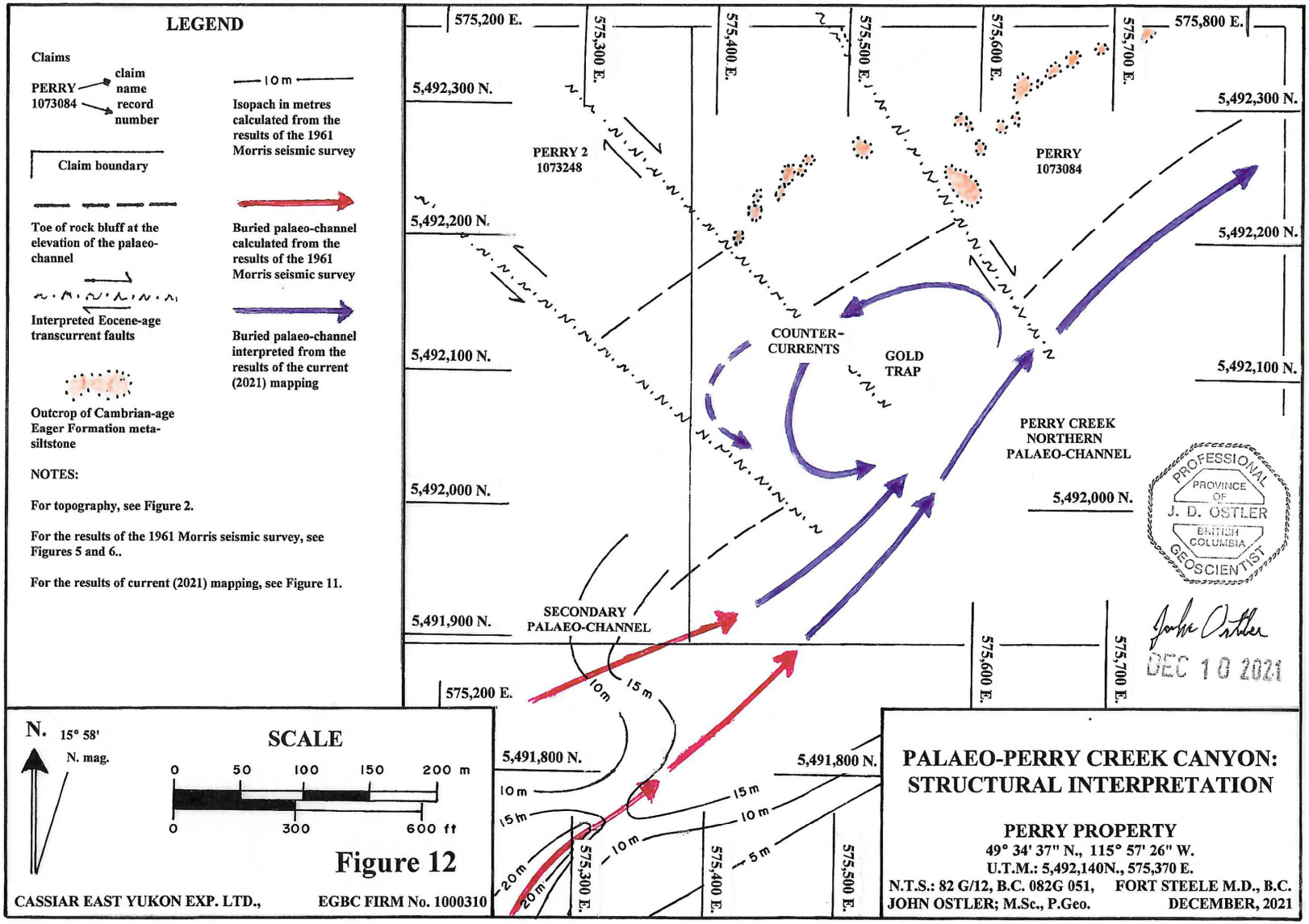
3.2.1 Hard Rock Stratigraphy

Regional geology from B.C. Geological Survey Preliminary Map 54 (Figure 9) indicates that the property is underlain by shale, siltstone, limestone and quartzite of the Cambrian-age Eager Formation. Mineralogically, these rocks are a passive host with regard to the deposition of placer gold. Their main influence on the tenor of gold deposition is their ability to form natural riffles and sediment traps at the bedrock surface due to irregularities in their resistance to weathering caused by inconsistencies across bedding and cleavages.

Two members of the Eager Formation outcrop on the slope forming the northwest margin of the Perry Creek spillway across the Perry property (Figure 11). Both members are comprised of silty turbidite beds, generally less than 10 cm thick. The upper member has a siliceous matrix; the lower member has one with a high dolomite content. The upper siliceous member is medium grey and weathers dark grey. The lower dolomitic member is also grey but weathers to a light brown to grey.

The contact between the two members is almost exposed just down hill from mapping station PE21 in the southern part of the PERRY 2 (1073248) claim (Figure 11). That contact seems to be conformable.

Of the two members of the Eager Formation, the lower dolomitic member seems to be the most resistant to erosion, retarding retreat of the slope across the property area. Evidence for this is that the slope angle below outcrop of the lower dolomitic member is significantly steeper than it is on the slope above outcrop of that lithology. It is assumed by the author that the relatively steep slope (about 20°) exposed beneath the outcrop of the lower dolomitic member persists down to the bottom of that land form at the level of the


LEGEND
Claims
PERRY 1073084
claim name
record number
Claim boundary
Toe of rock bluff at the elevation of the palaeo-channel
Interpreted Eocene-age transcurrent faults
Outcrop of Cambrian-age Eager Formation meta-siltstone
10m
Isopach in metres calculated from the results of the 1961 Morris seismic survey
Buried palaeo-channel calculated from the results of the 1961 Morris seismic survey
Buried palaeo-channel interpreted from the results of the current (2021) mapping
NOTES:
For topography, see Figure 2.
For the results of the 1961 Morris seismic survey, see Figures 5 and 6..
For the results of current (2021) mapping, see Figure 11.
575,200 E.
575,300 E.
575,400 E.
575,500 E.
575,600 E.
575,700 E.
575,800 E.
5,492,300 N.
5,492,200 N.
5,492,100 N.
5,492,000 N.
5,491,900 N.
5,491,800 N.
PERRY 2 1073248
PERRY 1073084
COUNTER-CURRENTS
GOLD TRAP
PERRY CREEK NORTHERN PALAEO-CHANNEL
SECONDARY PALAEO-CHANNEL
10m
15m
20m
5m
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. D. OSTLER
GEOSCIENTIST
DEC 10 2021
N.
15° 58'
N. mag.
SCALE
0 50 100 150 200 m
0 300 600 ft
Figure 12
CASSIAR EAST YUKON EXP. LTD., EGBC FIRM No. 1000310
PALAEO-PERRY CREEK CANYON: STRUCTURAL INTERPRETATION
PERRY PROPERTY
49° 34' 37" N., 115° 57' 26" W.
U.T.M.: 5,492,140N., 575,370 E.
N.T.S.: 82 G/12, B.C. 082G 051, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021

buried palaeo-channel adjacent with it (Figures 5, 6, 11, and 12). The 1961 Morris seismic survey indicated that the bedrock surface beneath the palaeo-channel at the southern boundary of the Perry property was about 17 m (55.8 ft) beneath the current surface on the Perry Creek spillway (Figures 5 and 6). It could be as much as 25 m (82 ft) below surface in the eastern part of the PERRY (1073084) claim.

Across the property, Eager Formation rocks are transected by northwest-southeasterly trending transcurrent faults, presumably of Eocene age. Evidence for one of those faults is the displacement of Eager Formation stratigraphy between mapping stations PE25 and PE27 in the central part of the PERRY (1073084) claim. Assuming that the rocks at stations PE25 and PE27 are outcrops of the same resistant beds, the net dextral horizontal component of movement on that fault could be about 60 m (197 ft).

Current mapping indicates that across the property area, Eager Formation rocks form an upright homocline with an average attitude of about 210/42° northwest of the transcurrent fault mapped between stations PE25 and PE27. Southwest of that fault, the attitude of that stratigraphy is an average of about 220/73°, indicating a significant amount of differential rotation of the two blocks during faulting..

Topography along the slope across the property indicates that a northwestward embayment was created in the slope by Eocene-age transcurrent faulting. The author's tentative estimate of the minimum area of the embayment is 1.8 hectares (4.45 acres). That embayment could create a significant area of counter currents in the palaeo-channel beneath the surface of the Perry property resulting in an extensive gold trap that could have been active from Eocene to early Pleistocene time, a duration of up to 57 million years (Figures 11 and 12). It is assumed that the palaeo-channel and its embayment was filled in by glacial till and other sediments during Pleistocene-era glaciation.

3.2.2 Unconsolidated Stratigraphy

The Glacial and post-glacial stratigraphy of the Perry property is the primary subject of the current (2021) exploration program.

The earliest unconsolidated sedimentary unit on the property is the till that mantles the northwestern slope of the Perry Creek spillway. It occupies the northwestern part of the property area (Figures 11 and 12). Two drumlinoid features located near the northwestern corner of the property indicate that the direction of

glacial ice flow was toward 038° (almost northeasterly) at that time. The bedrock surface is exposed near the top of the slope at mapping station PE1 and at several locations along the lower part of the slope, thus the author opines that the till is quite thin.

The last pervasive glaciation in the Perry Creek area occurred during the Ilinoian stage, 390,000 to 350,000 years ago (Table 2). The author suspects that the till may date to that time. However, he has no direct evidence of that.

Neither the Sangamon or Wisconsin glaciations were as severe nor as extensive as that during the Illinoian stage. There was significant ice scouring of the slope in the northwestern part of the Perry property area, but the level of ice scouring was not high enough to disturb the two drumlinoid features located atop the slope near the northwestern corner of the property (Figures 11 and 12, Table 2). Scouring and interglacial erosion of the slope has produced a surface layer of scree comprised of till cobbles and fines, and flagstones of Cambrian-age Eager Formation meta-siltstone. As would be expected, flagstones of Eager Formation meta-siltstone are most common adjacent with and down-slope from outcrops of that rock unit.

There is an area covering about 0.24 hectare (0.59 acre) where till is covered by a thin layer of tan silt at mapping stations PE4, PE6, and PE7 just below the crest of the slope. The author interprets that feature to have been a temporary ice-dammed pond located at the margin of a Sangamon or Wisconsin-age valley glacier.

During the waning stage of the most recent Wisconsin glaciation, a lake covered the Perry Creek spillway in the area of the Perry property and a layer of tan silt was deposited. Presumably, the northeastern end of the lake was ice dammed. At the Perry Creek forest service road about 1 km (0.61 mi) south of the Perry property, river gravel is exposed beneath the tan silt lake sediment. On the property, the base of the tan silt is not exposed. The author estimates that it could be as much as several metres thick. Drilling or machine trenching would be required to discern the depth through the tan silt to the river gravel presumed to be beneath it.

While the lake was still filled with water, a series of fluidized debris flows went down clefts in the slope and onto the lake bottom. A well-developed debris flow was observed by the author at mapping stations PE19, PE9, and PE17 (Figure 11). There, the debris-flow sediment was at least 2 m thick, 40 m (131 ft) wide,

and extended for at least 180 m (591 ft) out from the lake shore. That debris flow channel may have been active during several periods of flood.

Continuous Holocene-age (post-glacial) mass wastage resulted in the deposition of an apron of remobilized till and detritus from Eager Formation meta-siltstone along the toe of the slope (Figures 11 and 12). The apron covers the upstream ends of the debris flows and post-dates them. The surface layer of the apron was deposited after the ice dam burst and the lake was no longer filled with water.

3.3 Mineralization

3.3.1 Placer Gold

By the 1880s, it was well-known that polymetallic gold-bearing quartz veins and ledges existed in the Precambrian-age schists throughout the East Kootenay Gold Camp area. It was generally believed that release of free gold and its concentration into nuggets and plates during weathering out of sulphide minerals was the source of the placer gold in Wild Horse River. Proof of this mechanism was reported in the B.C. Minister of Mines', Annual Report for 1891 as follows:

> The Pass claim on the mountain above Wild Horse, is, I understand, shewing favourably. In the vicinity of this lead a small stringer was discovered last summer. A little pocket in this seam, which was situated on the mountain, far above the action of water, contained over $100 worth of gold (over 5.6 oz @ $18/oz). The remainder of the seam, as far as it was explored was barren. This would tend to confirm Dr. Dawson's opinion as to the origin of the Wild Horse placers.
>
> B.C. Min. Mines', Ann. Rept. of 1891: p. 570.

Similarly, the sub-vertical gold-bearing quartz ledges that parallel the main channel of Perry Creek are generally accepted to be the source of the placer gold in the Perry Creek drainage. In the author's opinion, there is no single "mother lode" source of the placer gold in the camp. Any energy expended searching for one is wasted.

Unlike at Wild Horse River, comparitively little detail is known of the physical properties of the placer gold of Perry Creek. M.N. Strong (1979) reported that Perry Creek gold was generally coarse and easy to recover, and that it had a fineness of about 0.900. Also, he noted the association of coarse placer with ironstone. Other black-sand minerals are not mentioned much in the history of Perry Creek; thus, the author

assumes that the volume of black sand was not a problem related to the separation of placer gold at Perry Creek.

At the Main Hydraulic Pit at Wild Horse River, the most productive strata were Kansan-stage gravel beds near the bedrock surface. Those beds were rich in ironstone (mostly magnetite vein material) (Ostler, 2019). At Perry Creek, no association of ironstone with any specific stratigraphic interval has been reported.

Percussion drilling programs were conducted at several locations along Perry Creek upstream from Old Town. The author knows of no percussion drill logs that have survived. Details of the local stratigraphy and its association with gold tenor remains largely a mystery.

Across the Perry property, the palaeo-channel beneath current spillway was indicated by the 1961 Morris seismic survey to occupy the bottom of a 17 to 25-m (55.8 to 82-ft) deep, steep-sided gorge. In the Main hydraulic pit area of Wild Horse River, there were two major productive horizons for placer gold: The upper one was at the base of the red channel gravel located atop a blue Illinoian-age basal till. The lower one was in Kansan-age yellow till and gravel located beneath the blue till and just above the bedrock surface (Ostler, 2019). Pleistocene-age climatic conditions were very similar at Perry Creek and Wild Horse River; thus a layer of Illinoian-age till could exist in the gorge above the palaeo-channel providing both a productive false bedrock surface above the till and a more productive surface on bedrock.

4.0 DEPOSIT TYPE: PLACER GOLD

The mineral exploration target on the Perry property is a buried channel alluvial placer gold deposit.

Surficial placer gold deposits were described by V.M. Levson (1995) as follows. The morphology and controls of surficial and buried channel placer gold deposits are essentially the same:

SURFICIAL PLACERS C01

IDENTIFICATION

SYNONYM:

Holocene deposits; terrace placers; fluvial, alluvial, colluvial, eolian (rare) and glacial (rare) placers.

COMMODITIES (*BYPRODUCTS*):

Au, PGE and Sn, locally Cu, garnet, ilmenite, cassiterite, rutile, diamond and other gems - corundum (rubies, sapphires), tourmaline, topaz, beryl (emeralds), spinel - zircon, kyanite, staurolite, chromite, magnetite, wolframite, sphene, barite, cinnabar} Most of the minerals listed in brackets are recovered in some deposits as the principal product.

EXAMPLES (British Columbia - *Canada/ International*):

Fraser River (Au), Quesnel River (Au), Tulameen district (PGE); North Saskatchewan River (Au, Alberta, Canada),Vermillion River (Au, Ontario, Canada), Riviere Gilbert (Au, Québec, Canada), Klondike (Au, Yukon, Canada), Río Tapajos (Au, Brazil), Westland and Nelson (Au, New Zealand), Yana-Kolyma belt (Au, Russia), Sierra Nevada (Au, California, U.S.A.), Goodnews Bay (PGE, Alaska, U.S.A.), Emerald Creek (garnet, Idaho, U.S.A.), Río Huanuni and Ocuri (Sn, Bolivia), Sundaland belt (Sn, Thailand).

GEOLOGICAL CHARACTERISTICS

CAPSULE DESCRIPTION:

Detrital gold, platinum group elements and other heavy minerals occurring at or near the surface, usually in Holocene (Tertiary subsurface channels also) fluvial or beach deposits. Other depositional environments, in general order of decreasing importance, include: alluvial fan, colluvial, glacial-fluvial, glacial, and deltaic placers.

TECTONIC SETTINGS:

Fine-grained, allocthonous placers occur mainly in stable tectonic settings (shield or platformal environments and intermontane plateaus) where reworking of clastic material has proceeded for long periods of time. Coarse autochthonous placer deposits occur mainly in Cenozoic and Mesozoic accretionary orogenic belts and volcanic arcs, commonly along major faults.

DEPOSITIONAL ENVIRONMENT / GEOLOGICAL SETTING:

Surficial fluvial placer concentrations occur mainly in large, high-order stream channels (allochthonous deposits) and along bedrock in high-energy, steep-gradient, low-sinuosity, single-channel streams (autochthonous deposits). Concentrations occur along erosional surfaces at the base of channel sequences. Alluvial fan, fan-delta and delta deposits are distinct from fluvial placers as they occur in relatively unconfined depositional settings and typically are dominated by massive or graded sands and gravels, locally with interbedded diamicton. Colluvial placers generally develop from residual deposits associated with primary lode sources and by sorting associated with downslope migration of heavy minerals. Glaciofluvial and glacial placers are mainly restricted to areas where ice or meltwater has eroded pre-existing placer deposits. Cassiterite, ilmenite, zircon, and rutile are lighter heavy minerals which are distributed in a broader variety of depositional settings.

AGE OF MINERALIZATION:

Mainly Holocene (rarely Late Pleistocene) in glaciated areas; generally Tertiary or younger in unglaciated regions. (Buried channels are commonly Tertiary to Pleistocene in age.)

HOST / ASSOCIATED ROCK TYPES:

Well-sorted, fine to coarse-grained sands; well-rounded, imbricated and clast-supported gravels.

DEPOSIT FORM:

In fluvial environments highly variable and laterally discontinuous; paystreaks typically thin (<2 m), lens shaped and tapering in the direction of palaeoflow; usually interbedded with barren sequences.

TEXTURE / STRUCTURE:

Grain size decreases with distance from the source area. Gold typically fine-grained (<0.5 mm diameter) and well rounded; coarser grains and nuggets rare, except in steep fluvial channel settings where gold occurs as flattened flakes. Placer minerals associated with colluvial placer deposits are generally coarser grained and more angular.

ORE MINERALOGY (Principal and *subordinate*):

Au, PGE, cassiterite (Cu, Ag and various industrial minerals and gemstones).

GANGUE MINERALOGY:

Quartz, pyrite and other sulphides in many deposits uneconomic concentrations of various heavy minerals such as magnetite and ilmenite.

ALTERATION MINERALOGY:

Fe and Mn oxide precipitates common; Ag depleted rims of Au grains increase in thickness with age.

ORE CONTROLS:

In fluvial settings, placer concentrations occur at channel irregularities, in bedrock depressions and below natural riffles created by fractures, joints, cleavage, faults, foliation or bedding planes that dip steeply and are oriented perpendicular or oblique to stream flow. Coarse-grained placer concentrations occur as lag concentrations where there is a high likelihood of sediment reworking or flow separation such as at the base of channel scours, around gravel bars, boulders or other bedrock irregularities, at channel confluences, in the lee of islands and downstream of sharp meanders. Basal gravels over bedrock typically contain the highest placer concentrations. Fine-grained placer concentrations occur where channel gradients abruptly decrease or stream velocities lessen, such as at sites of channel divergence and along point bar margins. Gold in alluvial fan placers is found in debris-flow sediments and in interstratified gravel, sand and silt. Colluvial placers are best developed on steeper slopes, generally over a weathered surface and near primary lode sources. Economic gold concentrations in glaciofluvial deposits occur mainly along erosional unconformities within otherwise aggradational sequences and typically derive their gold from older placer deposits.

GENETIC MODEL:

Fluvial placers accumulate mainly along erosional unconformities overlying bedrock or resistant sediments such as basal tills or glaciolacustrine clays. Basal gravels over bedrock typically contain the highest placer concentrations. Overlying bedded gravel sequences generally contain less placer minerals and reflect bar sedimentation during aggradational phases. Frequently the generation of more economically attractive placer deposits involves multiple cycles of erosion and deposition.

ASSOCIATED DEPOSIT TYPES:

Fluvial placers commonly derive from hydrothermal vein deposits and less commonly from porphyry and skarn deposits. PGE placers are associated with Alaskan-type ultramafics. Allochthonous fluvial placers are far traveled and typically remote from source deposits.

EXPLORATION GUIDES

GEOCHEMICAL SIGNATURE:

Anomalous concentrations of Au, Ag, Hg, As, Cu, Fe, Mn, Ti or Cr in stream sediments. Au fineness (relative Ag content) and trace element geochemistry (Hg, Cu) of Au particles can be used to relate placer and lode sources.

GEOPHYSICAL SIGNATURE:

Ground penetrating radar is especially useful for delineating the geometry, structure and thickness of deposits with low clay contents, especially fluvial terrace placers. Shallow seismic, electromagnetic, induced polarization, resistivity and magnetometer surveys are locally useful. Geophysical logging of drill holes with apparent conductivity, naturally occurring gamma radiation and magnetic susceptibility tools can supplement stratigraphic data.

OTHER EXPLORATION GUIDES:

Panning and other methods of gravity sorting are used to identify concentrations of gold, magnetite, hematite, pyrite, ilmentie, chromite, garnet, zircon, rutile and other heavy minerals. Many placer gold paystreaks overlie clay beds or dense tills and in some camps these “false bottom” paystreaks are important..

ECONOMIC FACTORS

GRADE AND TONNAGE:

Deposits are typically high tonnage (0.1 to 100 Mt) but low grade (0.05-0.25 g/t Au, 50-200 g/t Sn). Placer concentrations are highly variable both within and between individual deposits.

ECONOMIC LIMITATIONS:

The main economic to mining surficial placer deposits are typically low grades and most deposits occur below the water table. Environmental considerations are also an important limiting factor as these deposits often occur near, or within modern stream courses.

IMPORTANCE:

Placer gold deposits account for more than two-thirds of the world's gold reserves and about 25% of known local production in British Columbia. Recorded placer production has represented 3.5% of B.C.'s total gold production is the last twenty years. Prior to 1950, it was approximately 160,000 kg. Actual production in British Columbia was significantly larger. Placer mining continues to be an important industry in the province with annual average expenditures of more than $30 million over a survey period from 1981 to 1986. Shallow alluvial placers also account for a large part of world tin (mainly from SE Asia and Brazil) and diamond (Africa) production.

Levson V.M., in:
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5.0 EXPLORATION

5.1 Procedures and Parameters of the Current (2021) Exploration Program

Prior to the current (2021) exploration program, no property-scale geomorphological or geological surveys had been conducted on the Perry property.

Five traverses were conducted across the Perry property from August 4 to 8, 2021 inclusive. Total foot traverse length was about 4.46 km (2.72 mi). Assuming that results of exploration along traverse lines were relevant for 30 m (98.4 ft) on either side of a traverse line, a total area of 26.76 ha (66.1 acres) was investigated in detail. The total area mapped was 38 hectares (93.9 acres) at a scale of 1:2,000.

Locations were established by use of a Garmin 62 GPS unit. Established field techniques for both float and outcrop mapping were used.

Topography for the resulting geomorphological and geological map was taken from BC Trim map 082G 051 (Figure 11). Parts of that map were blown up and used as field base maps. Some of the maps and diagrams from previous assessment reports, government maps, reports and property files were re-scaled and used in this report (Figures 2, and 5 to 10). Figures for this report were produced using traditional drafting and various computer techniques.

5.2 Results and Interpretation of the Current (2021) Exploration Program

No geomorphological or geological surveys are known to have been conducted over the Perry property area prior to the current (2021) exploration program. Thus the text of Section 3.2 of this report, Property Geomorphology and Geology comprise all of the results and author's interpretation of the current (2021) exploration program. They are not repeated in this section.

5.3 Duration, Area, Location, Management, and Value of the Current (2021) Exploration Program

The current work program was conducted on and about the property during the following days:

August 3 and August 9, 2021: transport from Vancouver to Fort Steele area, return
August 4 to 8, 2021: field work on the Perry property
December 11, 2019 to
December 10, 2021: research and production of this assessment report (intermittent)

A total of 33.5 person-days (33.5 days X 8 = 268 person-hours) of work was conducted during the current (2021) exploration program.

Table 3
Duration of the 2021 Exploration Program

Name	Geomorph. and Geological Surveys	Tspt.+ road access search	Research, Data processing+ reporting	Total person-days
John Ostler; M.Sc., P.Geo. West Vancouver, B.C.	4.5	2.5	26.5	33.5

Table 4
Area and Location of the 2021 Exploration Program

Activity	Area in Hectares (acres)	Claims Name	Record No.
Geomprphological and geological surveys	38 ha (93.86 acres)	PERRY PERRY 2	1073084 1073248
Road and local access survey	Length = 10 km (6.1 mi)	PERRY PERRY 2	1073084 1073248

Table 5
Contractors for the 2021 Exploration Program

Contractor	Activities
Cassiar East Yukon Expediting Ltd. 1015 Clyde Avenue West Vancouver, British Columbia, V7T 1E3 (604) 926-8454	Exploration, research, program design, field work, and reporting
Dominion Blue Reprographics 104-826 Harbourside Drive North Vancouver, British Columbia, (604) 986-2391	copy of large scale maps and scale changes

Table 6
Value of the 2021 Exploration Program

Item		
Wages: John Ostler; M.Sc., P.Geo.: Research, data compilation, and reporting 26.5 days @ $600/day . . . Field work, 7 days @ $600/day	$ 15,900.00 $ 4,200.00 $ 20,100.00	$ 20,100.00
Transport: 1 1-ton 4X4 pick-up truck, 7 days @ $180/day . . . . . . Diesel	$ 1,260.00 $ 370.40 $ 1,630.40	$ 1,630.40
Camp and Crew Costs: Hotel; Heritage Inn Cranbrook, B.C., 6 nights @118.77/night inc breakfast . . . . . . Dinners and camp food, ($45.09 of this is G.S.T. exempt) . . . . . . Field supplies	$ 712.62 $ 118.32 $ 29.95 $ 860.89	$ 860.89
Office expenses: Production of topographic and base maps, mylars and large figures, and other report production costs	$ 57.63	$ .57.63
Value of the Current (2021) Work on the Perry Property		**$ 22,648.92**
G.S.T.: 0.05 X $22,603.83		$ 1,130.19
Total Value of the Current (2021) Exploration on the Perry Property		**$ 23,779.11**

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The Perry property occupies part of the northwestern margin of the Perry Creek spillway and the southwesterly trending slope adjacent with it.

The 1961 Morris seismic survey indicated that a palaeo-channel of Perry Creek proceeds northward in a steep-sided gorge from near the head of the spillway near Old Town (Perry City) for 2.6 km (1.58 mi) to the southern part of the Perry property area where it turns abruptly to the east. The survey also indicates that the bedrock surface beneath the palaeo-channel is at a depth of about 17 m (55.8 ft) beneath the surface of the current spillway at the southern boundary of the Perry property. It may be as much as 25 m (82 ft) beneath the surface in the southeastern part of the property area.

Geomorphological and geological survey of the Perry property during the current (2021) work program reveal that the slope defining the northwestern margin of the Perry Creek spillway on the Perry property is underlain by meta-siltstones of the Cambrian-age Eager Formation which is covered by a thin layer of probably Illinoian-age till. The Eager Formation stratigraphy was cut by several Eocene-age transcurrent faults that created an embayment of at least 1.8 hectares (4.45 acres) on the northern, outer side of the curve of the palaeo-channel in the central part of the Perry property area. That embayment could create a significant area of counter currents and enhance those already present due to the sharp curve in the palaeo-channel resulting in an extensive gold trap that could have been active from Eocene to early Pleistocene time, a duration of about 57 million years.

Post-glacial lake and debris flow sedimentation has covered any potentially productive pay gravel on the Perry property to an unknown depth. It is expected that this cover is less than 10 m (32.8 m) thick.

Productive pay gravels containing placer gold deposits may be present at the bedrock surface and at various false bedrock horizons in the gorge hosting the palaeo-channel of Perry Creek in the Perry property area. Placer gold deposition would be greatly enhanced by the embayment and curve in the palaeo-channel in the south-central part of the Perry property area.

6.2 Recommendations

It is recommended that a program of 200 m of percussion drilling be conducted on the spillway of Perry Creek in the southeastern part of the Perry property. The program should comprise eight drill holes with an average length of 25 m. The drill pattern should be in the shape of a cross to test both the trend and the cross section of the palaeo-channel and the gorge that hosts it. The trend of the channel should be tested by five drill

holes at mapping stations PE9, PE10, PE11, PE12, and at the junction of the main southern road across the property and the road to the abandoned cabin near its eastern boundary. The cross-section of the channel and the embayment in the palaeo-channel should be tested by three drill holes located near mapping stations PE15, PE33, and PE32.

The recommended drill program should result in identification of the stratigraphy and general gold potential of the gorge and the palaeo-channel beneath it across the Perry property.

The estimated cost of the recommended program is $48,000 including $24,000 for drilling, $6,000 for sample processing, $6,000 for mobilization, drill site preparation and closing, and $12,000 for research supervision and reporting.

John Ostler: M.Sc., P.Geo.,
Registrant of record for the August, 2021 work on the Perry property

West Vancouver, British Columbia,
December 10, 2021

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APPENDIX 'A'

CERTIFICATE of the QUALIFIED PERSON

I, John Ostler, of 1015 Clyde Avenue in the City of West Vancouver, Province of British Columbia do hereby certify:

That I am a consulting geologist with business address at 1015 Clyde Avenue, West Vancouver, British Columbia;

That I am a graduate of the University of Guelph, Ontario where I obtained my Bachelor of Arts degree in Geography (Geomorphology) and Geology in 1973, that I am a graduate of Carleton University of Ottawa, Ontario where I obtained my Master of Science degree in Geology in 1977;

That I am registered as Professional Geoscientist No. 18415 with the Association of Professional Engineers and Geoscientists of British Columbia;

That I am registered as BC Mine Supervisor No. 839187;

That my company, Cassiar East Yukon Expediting Ltd, is registered as EGBC Firm No. 1000310;

That I am the registrant of record for the August, 2021 work on the Perry property;

That I have been engaged in the study and practice of the geological profession for more than 45 years;

That this report is based on information in the literature and exploration conducted by me on the Perry property from August 4 to 8, 2021;

That I am the owner of the Perry property; and

That I am the sole author of this report and all sources of information not based on by personal knowledge of the Perry property area are referenced in a standard format. In my opinion, the record of previous exploration in the Perry property area is reasonably accurate and correct.

John Ostler; M.Sc., P.Geo.
Registrant of record for the August, 2021 work
on the Perry property

West Vancouver, British Columbia
December 10, 2021

GEOMORPHOLOGICAL and GEOLOGICAL SURVEY on the PERRY PROPERTY

PERRY PROPERTY

49°34'37"N., 115°57'26"W.

U.T.M.: 5,492,140N., 575,370E.

N.T.S.: 82 G/12, B.C.: 082G 051 FORT STEELE M.D., B.C.

JOHN OSTLER; M.Sc., P.Geo. DECEMBER, 2021

Figure 11

CASSIAR EAST YUKON EXPEDITING LTD. EGBC FIRM No. 1000310

N. 15°58' N. mag.

SCALE

0 50 100 150 200 m

0 100 200 300 400 500 600 ft.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA JOHN D. OSTLER GEOSCIENTIST

DEC 10 2021

LEGEND

CLAIMS: PERRY ← claim name; 1073084 ← record number; claim or property boundary

TOPOGRAPHY:

Road; Mapping station; servicable not servicable; PE6

Survey station + EL. 971

Drumlin; ice flow direction

Cut; Fill; Toe of slope

elevation in metres above sea level

Temporary watercourse; Water or sediment flow direction

900 Contour

GEOLOGY:

Approximate contact or slope boundary

Limit of outcrop

Bedding upright; orientation unknown

Cleavage 1st 2nd 3rd 4th

Assumed transcurrent fault; translation direction

HARD-ROCK STRTIGRAPHY:

Eager Formation Cambrian

€eSiSlt — Grey, dark grey weathering, siliceous silty turbidite beds

€eDolSlt — Grey, brown weathering, dolomitic silty turbidite beds