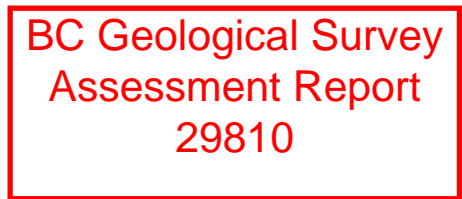
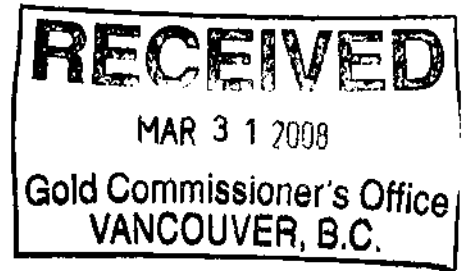


ASSESSMENT REPORT  
ON  
DIAMOND DRILLING  
NORTH STRUCTURE AREA  
Mineral Tenure 510499

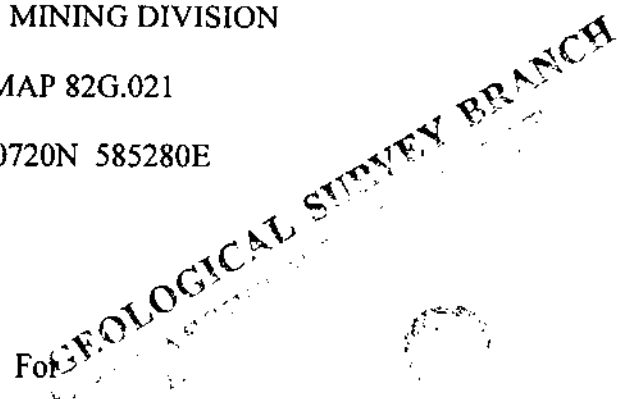


Moyie Lake Area, British Columbia

FORT STEELE MINING DIVISION

TRIM MAP 82G.021

UTM 5460720N 585280E



St. Eugene Mining Corporation

701 - 675 West Hastings St.

Vancouver, B.C., V6B 1N2

By

Peter Klewchuk, P. Geo.

March, 2008



## TABLE OF CONTENTS

	Page
1.00 INTRODUCTION	
1.10 Location and Access	1
1.20 Property	1
1.30 Physiography	1
1.40 History of Previous Work	1
1.50 Scope of Present Program	4
2.00 GEOLOGY	4
3.00 DIAMOND DRILLING	4
4.00 CONCLUSIONS	8
5.00 REFERENCES	8
6.00 STATEMENT OF EXPENDITURES	9
7.00 AUTHOR'S QUALIFICATIONS	10

## LIST OF ILLUSTRATIONS

Figure 1.	Property Location Map	2
Figure 2.	Mineral Tenure Map Showing Location of Drill Holes	3
Figure 3.	Location Map of DDH NS-07-1 & 3	5
Figure 4.	Cross Section of DDH NS-07-1	6
Figure 5.	Cross Section of DDH NS-07-3	7

Appendix 1. Diamond Drill Log

Following Page 10

Appendix 2. Drill Core Analyses

## 1.0 INTRODUCTION

### 1.10 Location and Access

The North Structure area is part of St. Eugene Mining Corporation's Moyie Lake claim block and is located about 25 kilometers south of Cranbrook, B.C. just east of the southern Moyie Lake and just north of the community of Moyie (Figures 1 & 2). Access is via Highway 3/95 south of Cranbrook and the Barkshanty Forest Service Road

### 1.20 Property

The North Structure area is part of a larger block of claims in the Moyie Lake area held by St. Eugene Mining Corporation Ltd. This claim block surrounds the St. Eugene Mine block of claims held by Teck-Cominco and covers a WNW trending geophysical anomaly which parallels the trend of the St. Eugene vein system. The property also covers the Society Girl workings which are on strike of the St. Eugene vein to the ESE of the St. Eugene Mine workings.

### 1.30 Physiography

The Moyie Lake claim block is located to the east and west of Moyie Lake in the McGilvray Range of the Purcell Mountains. Topography is of glacially rounded mountain ridges and tops with generally steep-sided stream valleys. Elevations in the area range from 928 meters at Moyie Lake to about 2075 meters. A mixed forest cover consists mainly of pine, fir and larch with some parts of the property recently logged.

### 1.40 History of Previous Work

The St. Eugene Mine was discovered in 1893 and mined intermittently from 1895 to 1929. Just over one million tons were mined at an approximate grade of 15% Pb, 7 oz/ton Ag and 5% Zn (zinc was not recovered in the early years of mining. Minor production occurred from the Aurora deposit west of the lake and from the Society Girl deposit located "on strike" of the St. Eugene to the ESE. In the spring of 2006 St. Eugene Mining Corp. Ltd. conducted an airborne geophysical survey over their Moyie lake group of claims (Klein, 2006; AR 28450). A WNW anomaly, parallel to the trend of the St Eugene vein system, was detected approximately 1.2 kilometers north of the St Eugene. The area of the anomaly was prospected, geologically mapped and covered with a soil geochemistry survey but only very limited geologic evidence was found to support the presence of a "St Eugene -like" mineralized structure.

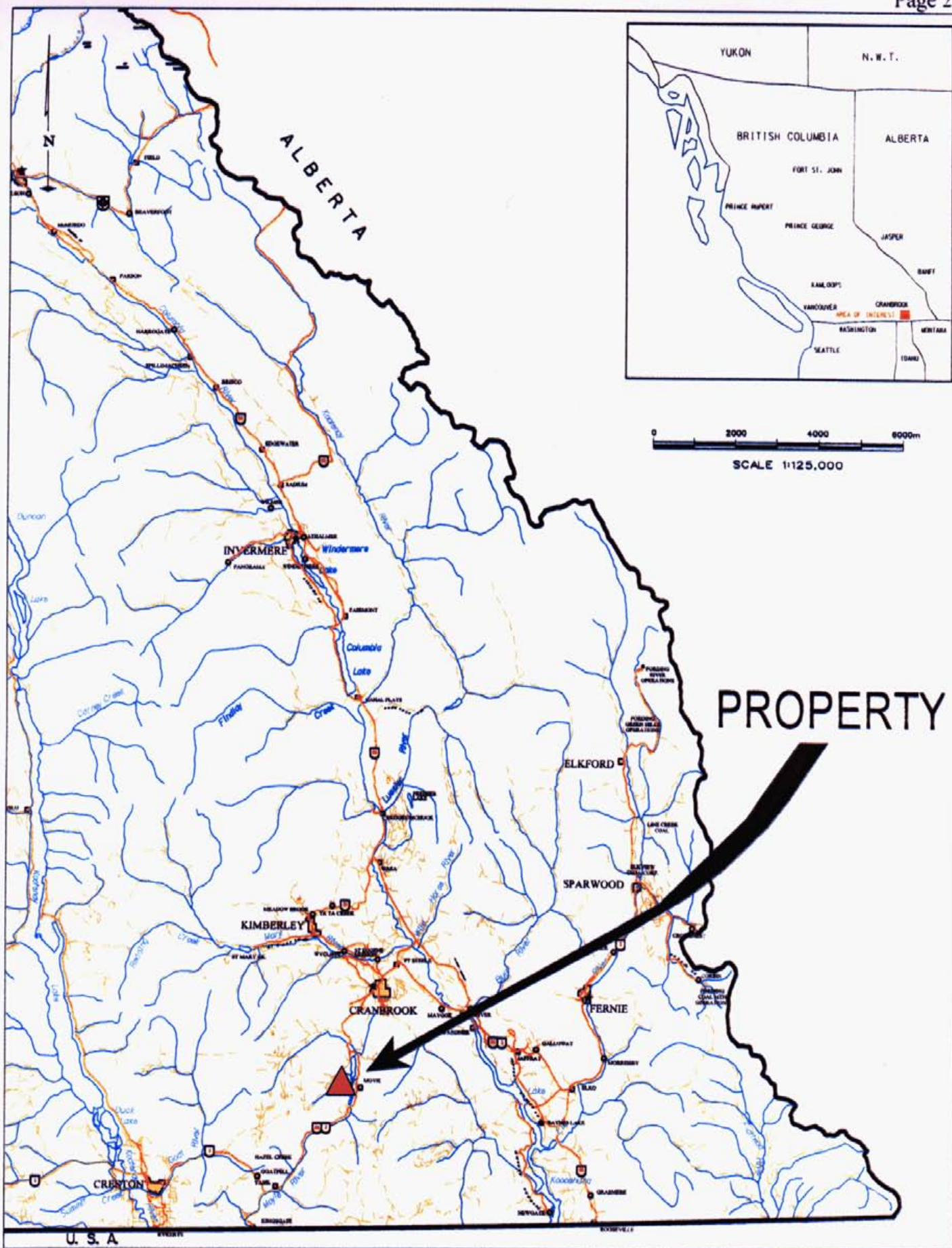
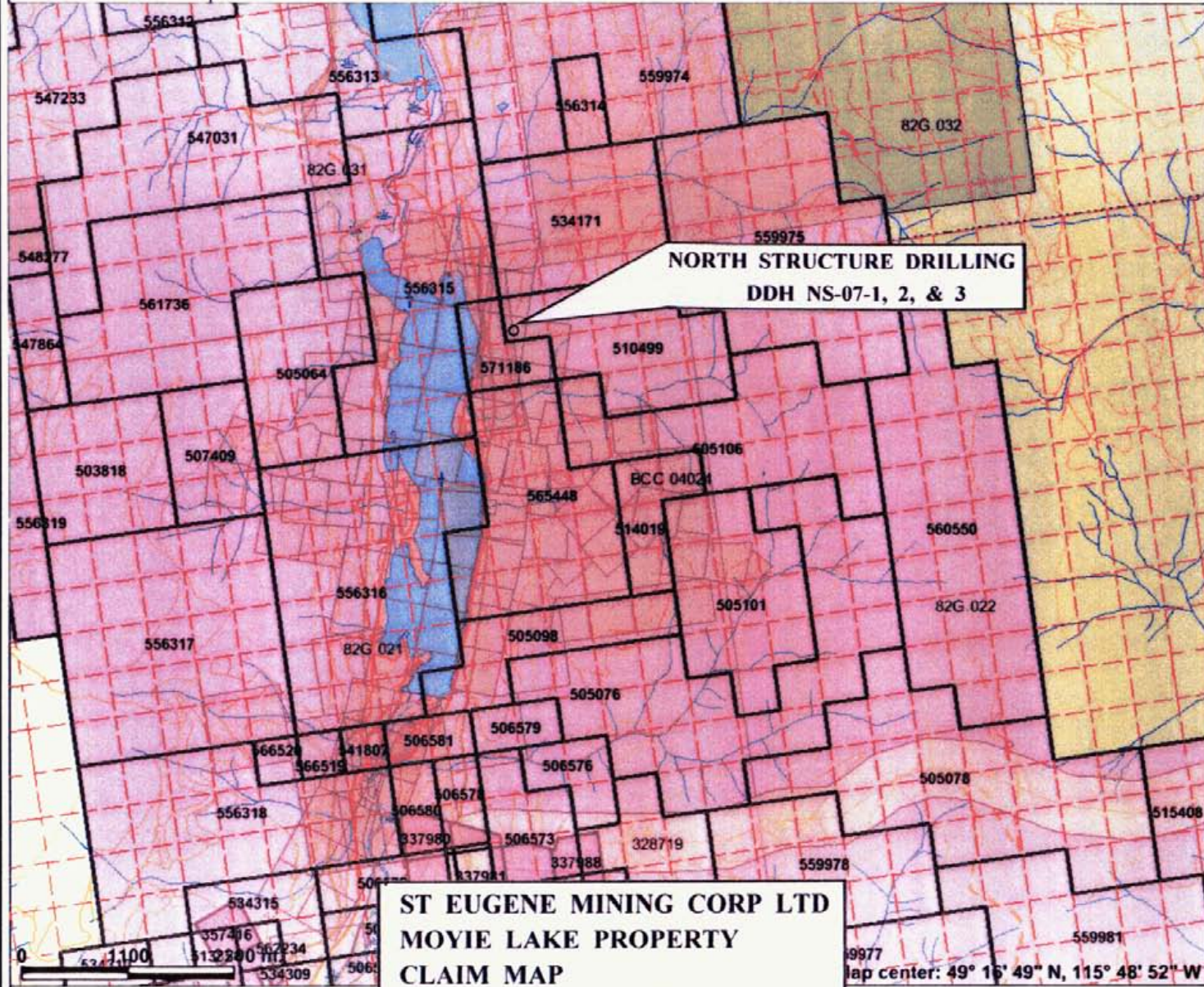


Figure 1. St. Eugene Mining Corp. Property Location Map

# Internet Mapping Framework



### Legend

- Indian Reserves
- National Parks
- Parks
- MTO Grid (MTO)
- Mineral Tenure (current)
- Mineral Claim
- Mineral Lease
- Mineral Reserves (current)
- Placer Claim Designation
- Placer Lease Designation
- No Staking Reserve
- Conditional Reserve
- Release Required Reserve
- Surface Restriction
- Recreation Area
- Others
- Survey Parcels
- BCGS Grid
- Contours (1:250K)
- Contour - Index
- Contour - Intermediate
- Area of Exclusion
- Area of Indefinite Contours
- Transportation - Points (TRIM)
- Helipad
- Transportation - Lines (TRIM)
- Airfield
- Airport
- Airstrip
- Airport Abandoned
- Ferry Route
- Road (Gravel Undivided) - 1 Lane
- Road (Gravel Undivided) - 2 Lanes

Scale: 1:62,215

**ST EUGENE MINING CORP LTD**  
**MOYIE LAKE PROPERTY**  
**CLAIM MAP**  
 Showing Location of Drilling  
**Figure 2**

This map is a user generated static output from an Internet reference only. Data layers that appear on this map may be otherwise reliable. THIS MAP IS NOT TO BE USED FOR...

### 1.50 Scope of Present Program

Three NQ diamond drill holes totalling 1007.06 meters were drilled to test the North Structure in April and May of 2007. Hole NS-07-2 was abandoned at a depth of 218.24 meters when the rods were stuck and subsequent activity caused the core barrel to break off in the hole. Efforts to retrieve the broken core barrel were unsuccessful and the hole was abandoned.

### 2.00 GEOLOGY

The rocks which underlie the North Structure area are of the middle Aldridge Formation and consist of fine grained clastics of turbidite affinity. The area has been most recently mapped by Hoy (1982). The east side of lower Moyie Lake is on the eastern flank of a north-plunging anticline whose axis trends NNE and runs through the lake. Bedding dips gently to moderately east.

### 3.00 DIAMOND DRILLING

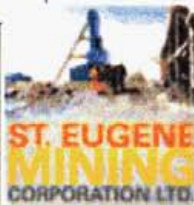
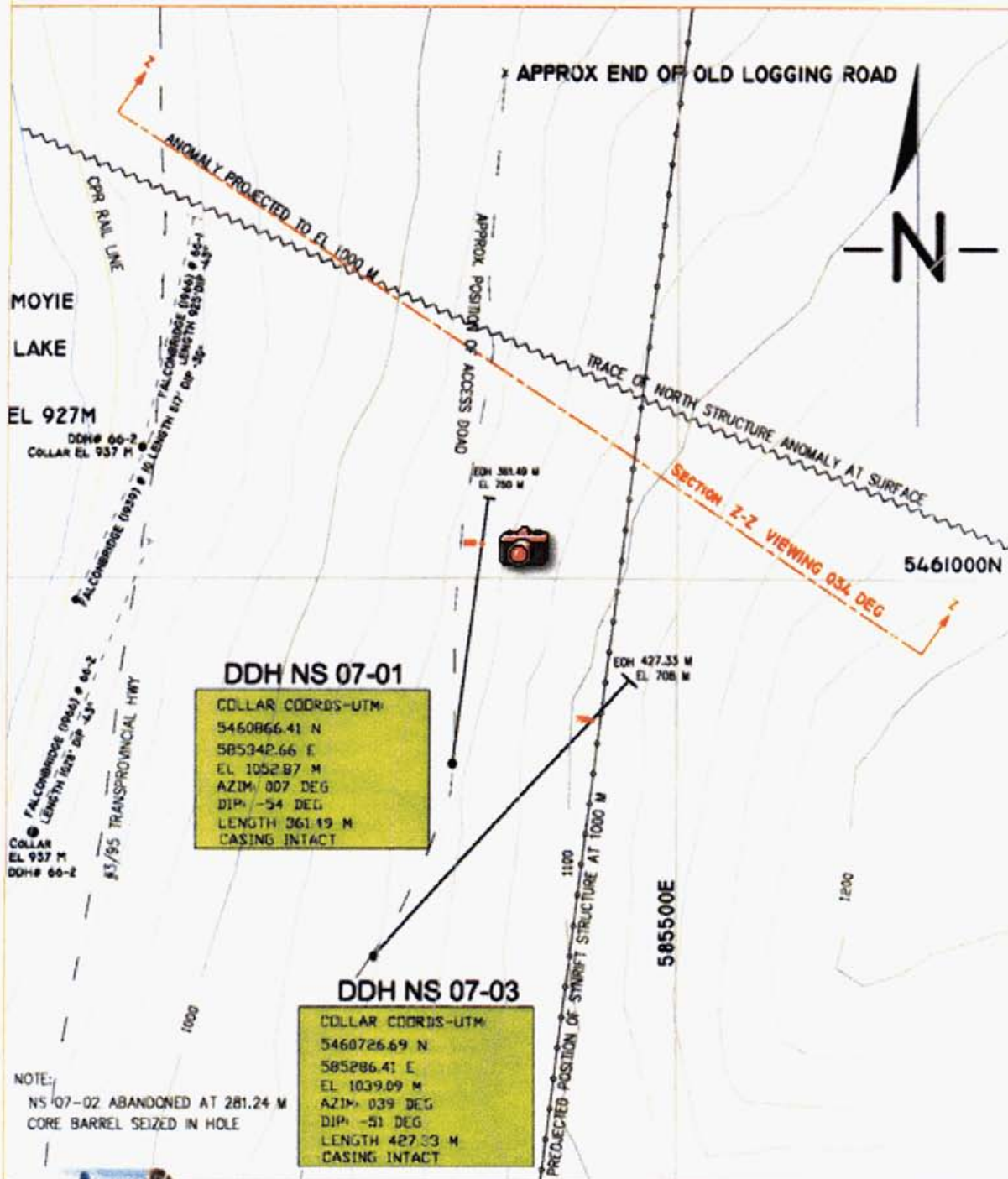
Three NQ diameter diamond drill holes (DDH NS-07-1, 2 & 3) totalling 1007.06 meters were drilled on the "North Structure" between April 28 and May 23, 2007. Figures 2 and 3 show the location of the drill holes; Figures 4 and 5 are cross-sections of DDH NS-07-1 and 3 respectively. DDH NS-07-3 was collared within 10 meters of hole NS-07-2 and drilled parallel to hole 2 thus a separate cross-section for hole 2 was not made. The complete drill logs are in Appendix 1. Selected drill core was sampled by splitting, placed in plastic sample bags and shipped to ALS Chemex Laboratories (ALS Chemex Ltd.) at 212 Brooksbank Avenue, North Vancouver, B.C. where it was analyzed for a 33 element ICP package by standard analytical procedures. Drill core analyses are in Appendix 2.

All 3 diamond drill holes intersected middle Aldridge stratigraphy consisting of siltstones, argillites and impure quartzites. Hole NS-07-1 was collared at  $-54^{\circ}$  toward an azimuth of  $007^{\circ}$  and drilled to a total depth of 361.49 meters. Hole NS-07-2 was collared at  $-52^{\circ}$  toward an azimuth of  $039^{\circ}$  for a total depth of 218.24 meters and hole NS-07-3 was collared at  $-51^{\circ}$  toward an azimuth of  $042^{\circ}$  for a total depth of 427.33 meters.

Drill hole NS-07-2 was abandoned at 218.24 meters because of a core barrel getting stuck and breaking in the hole. The lower portion of the core barrel could not be retrieved.

Drill Holes NS-07-1 & 3 each intersected a narrow mineralized vein system within a shear or fault structure. Sulfides include galena, sphalerite and pyrite. The narrow sulphide-bearing deformation zone occurs within a wider zone of bleached (sericitic?) alteration up to about 20 meters wide. The sulphide vein system intersected by drilling is interpreted to be a WNW-

# NORTH ZONE TARGET - DIAMOND DRILL HOLE PLAN

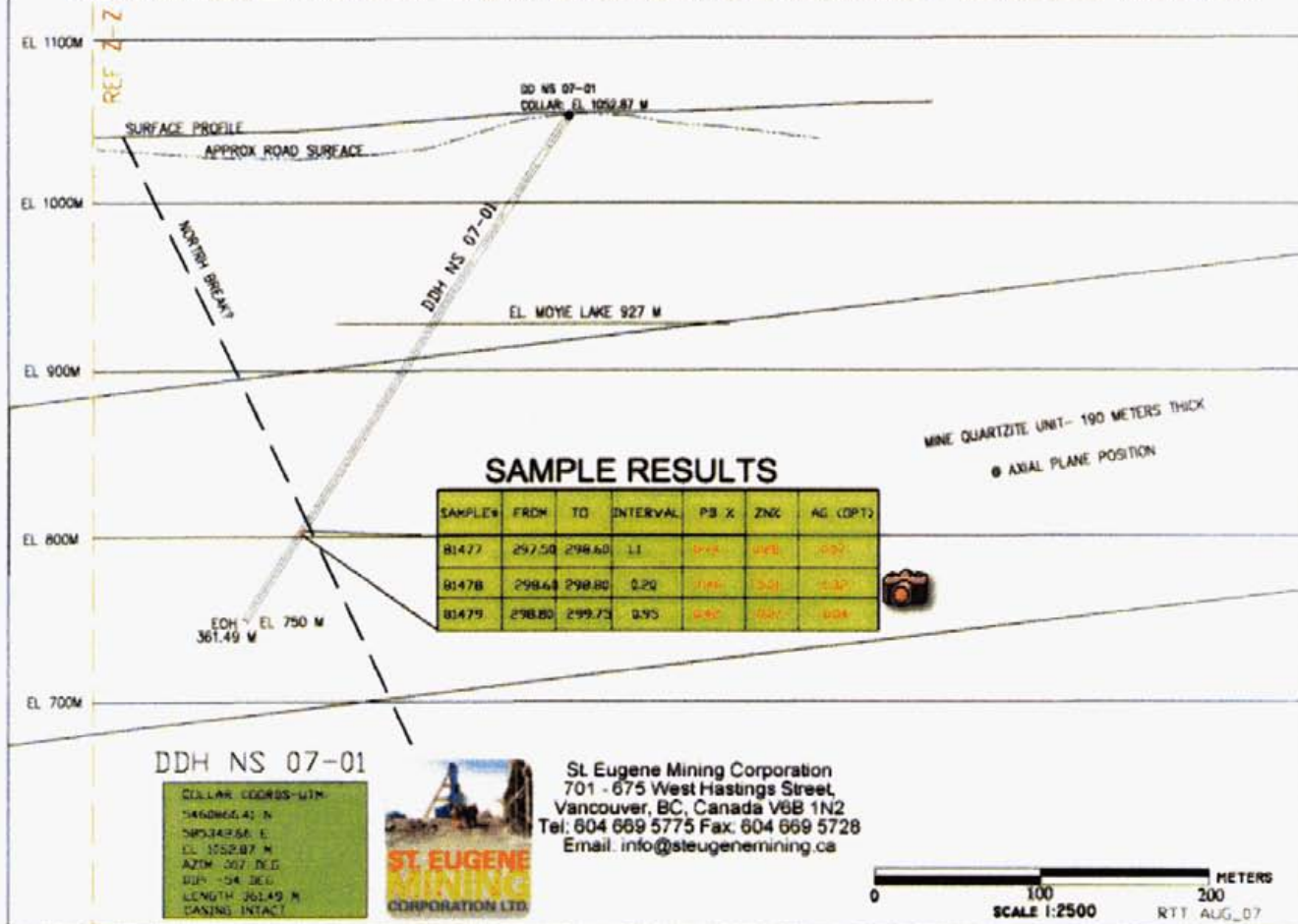


St. Eugene Mining Corporation  
701 - 675 West Hastings Street,  
Vancouver, BC, Canada V6B 1N2  
Tel: 604 669 5775 Fax: 604 669 5728  
Email: info@steugenemining.ca



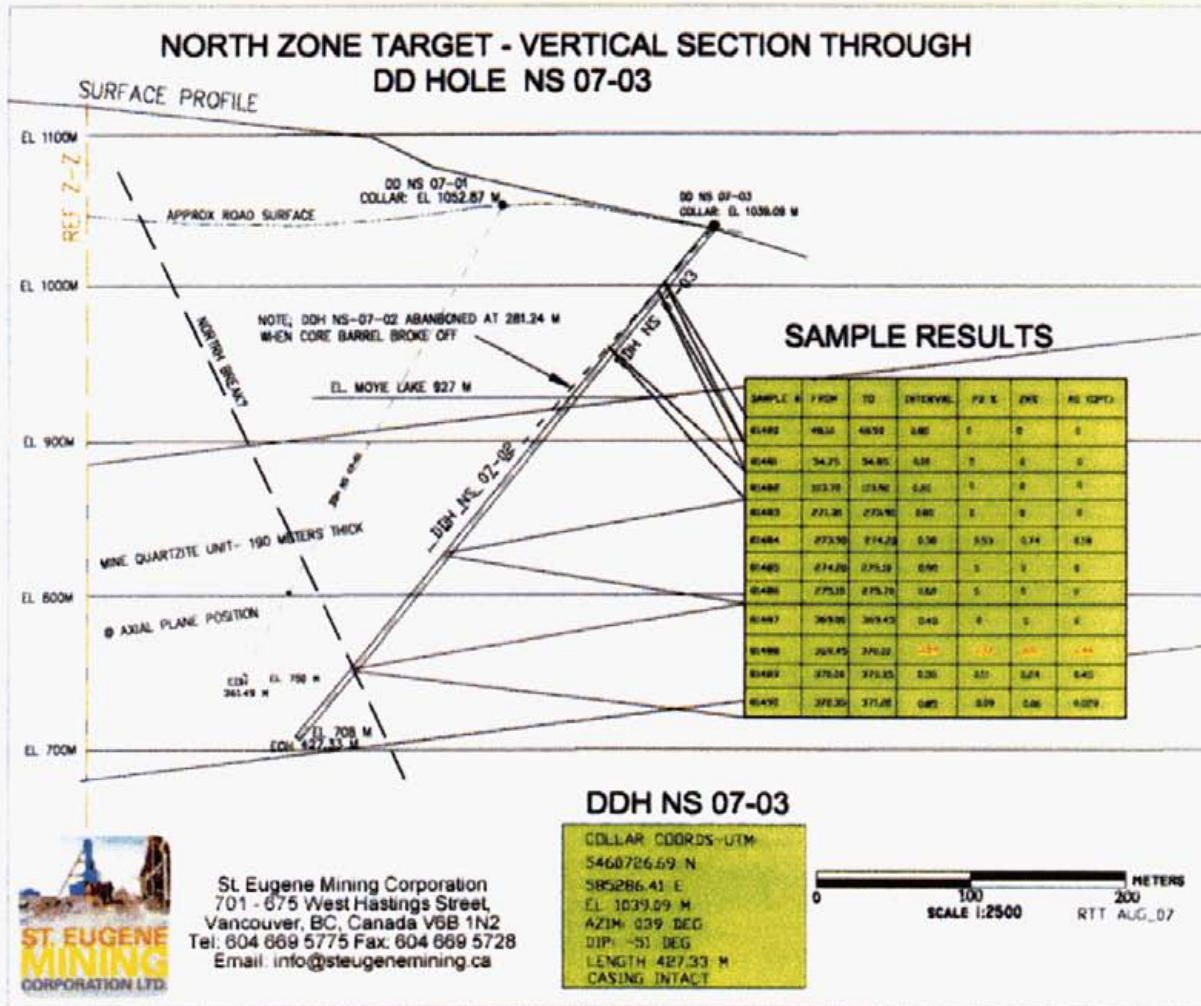
**ST EUGENE MINING CORP LTD**  
**NORTH STRUCTURE AREA**  
**Showing Location of Drilling**  
**Figure 3**

**NORTH ZONE TARGET - VERTICAL SECTION THROUGH DD HOLE NS 07-01**



**ST EUGENE MINING CORP LTD  
 CROSS SECTION DDH NS-07-1  
 Figure 4**





**ST EUGENE MINING CORP LTD**  
**CROSS SECTION DDH NS-07-3**  
**Figure 5**

striking, steeply south dipping structure parallel to the St Eugene vein system and is evidently the cause of the linear geophysical anomaly detected in 2006 by the airborne survey. Details of the mineralized intervals in the 2 holes is:

DDH	DEPTH	LENGTH	#	ICP PPM			ASSAY %	
				Pb	Zn	Ag	Pb	Zn
NS-07-1	297.9-298.6	0.7m	81477	2750	4340	2.3	.28	0.44
	298.6-298.8	0.2m	81478	>10000	>10000	45.5	5.01	3.48
	298.8-299.75	0.95m	81479	830	747	1.3	0.07	0.07
NS-07-3	369.45-370.0	0.55m	81488	>10000	>10000	14.3	1.33	3.02
	370.0-370.35	0.35m	81489	1015	2210	1.4	0.11	0.24
	370.35-371.2	0.85m	81490	846	534	0.9	0.09	0.06

#### 4.00 CONCLUSIONS

DDH NS-07-1 & 3 successfully tested the North Structure, a previously unrecognized WNW striking sulphide-mineralized vein system that parallels the St Eugene vein system to the south. High lead, zinc and silver values – up to 8.49% Pb + Zn over 0.20 meter - are present within a 20 meter wide bleached alteration envelope.

#### 5.00 REFERENCES

- Hoy, T., and Diakow, L., 1982; Geology of the Moyie Lake area; Preliminary map No. 49; British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Klein, Jan., 2006; Report on a Helicopter-borne Aerotem II/Magnetic survey over the Moyie Lake and Monroe Lake grids, SE British Columbia, executed by Aeroquest Limited on behalf of St. Eugene Mining Corporation Ltd. BC Assessment Report 28450.

## 6.00 STATEMENT OF EXPENDITURES



Diamond Drilling; SCS Diamond drilling Ltd. 1007.06 meters @ \$166.56/meter Includes direct and indirect drilling costs; drilling, lubricants, materials costs, lodging and truck	\$167,735.91
Geologist; P. Klewchuk; access trail survey, trail construction supervision, drill layout, drilling supervision and core logging; periods of Dec . 20-31, 2006 and April 15 – May 25, 2007      31 days @ \$400/day	12,400.00
4X4 truck 28 days @ \$135/day	3780.00
Field assistant; J Kechnie; transport drill core; April 26 – May 25, 2007; 21 days @ \$225/day	4725.00
4X4 truck 21 days @ \$95/day	1995.00
Tracked excavator; construct access trail and drill sites; Wild Horse Contracting; Dec. 20-31, 2006 and April 15 – May 15, 2007; 33 hours @ \$117/hr	3861.00
D6 cat; 16 hours @ \$104/hr	1664.00
D6 cat; move drill, modify drill sites; Pighin's Welding; 22 hours @ \$115/hr	2530.00
D6 cat standby; 12 days @ \$125/day	1500.00
Lowbeds	2144.95
Core rack at Vine logging facility; materials and construction	2150.00
Core sampling; move core to racks; B. Collinson; 2 ½ days	500.00
Vine facility core logging facility rental; 23 days @ \$50/day	1150.00
Drill core analyses; ALS Chemex 14 samples @ \$28	392.00
Total	\$206,527.86.00
12% Administration overhead	24,783.00
TOTAL EXPENDITURE	\$231,311.00

## 7.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 1 – 200 Norton Avenue, Kimberley, B.C.
2. I am a graduate geologist with a B. Sc. degree (1969) from the University of British Columbia and an M. Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 32 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia this 25<sup>th</sup> day of March, 2008.

  
Peter Klewchuk, P. Geo. 

## Appendix 1. Diamond Drill Log

<b>Hole No:</b>	NS-07-1	<b>Property:</b>	ST. EUGENE /North Structure
		<b>District:</b>	Fort Steele
<b>Commenced:</b>	April 28, 2007	<b>Owner:</b>	St. Eugene Mining Corp.
<b>Completed:</b>	May 6, 2007	<b>Location:</b>	North Structure
<b>Coordinates:</b>	585289E 5460723N	<b>Contractor:</b>	SCS Diamond Drilling
<b>Core Size:</b>	NQ	<b>Total Length:</b>	361.49 m
<b>Azimuth:</b>	007°	<b>Logged by:</b>	P. Klewchuk
<b>Collar Dip:</b>	-54°	<b>Date:</b>	April 30 – May 8, 2007
<b>Elevation:</b>	1052.9 m		
<b>Objective:</b>	Test North Structure Airborne Geophysics Anomaly		

Meters	Description
0 - 7.62	CASING. Core starts at ~ 4.42 m.
4.42 – 10.25	SILTSTONE and ARGILLITE, minor QUARTZITE Medium to dark grey, thin-bedded and laminated with a few medium thick beds. Bedding at 42°-43° to c/a. Fine-grained pyrite is concentrated in bedding-parallel bands near 9.2 m.
10.25 – 32.3	SILTSTONE and QUARTZITE, minor ARGILLITE Medium grey and bluish-grey. Predominantly medium and thick-bedded with narrow zones of thin-bedded and laminated. Bedding: 42° at 11.5 m; 43° at 14.5 m; 42° at 17.5 m; 46° at 20.5 m; 45° at 22.5 m; 40° at 28 m; 43° at 31.0 m. At 11.6 m 3 quartz veins 5 mm to 3 cm wide cut core at 50°-60° to c/a, close to 90° to bedding. Light grey, granular vuggy quartz. At 13.8 m a 3-4 mm wide rusty quartz vein cuts core at 32° to c/a, close to 90° to bedding; reorienting core indicates WNW-striking steep dip, i.e., St. Eugene vein trend. At 15.0 m a 5-6 mm wide vuggy quartz vein cuts core at 50° to c/a. At 17.0 m 2 rusty, granular vuggy quartz veins cut core at 45° to c/a. Minor associated muscovite. Healed rusty, 'crackle breccia' occurs in underlying 6 cm of core. Near 19.5 m 3 thin, vuggy, light grey quartz veins up to 6 mm wide, cut core at 50° to c/a. At 25.0 m 2 thin quartz veins; very rusty; one cuts core at 20° to c/a; other is light grey, ~ 8 mm wide at 50° to c/a. At 26.21 m 2 quartz veins up to 1.5 cm wide at 50° to c/a. At 27.1 m a massive lens of po is bedding-parallel at 35° to c/a, but only crossed 2/3 of core. At 30.7 m light grey, irregular quartz vein, up to 2 or 3 cm wide in broken core.

## DDH: NS-07-1

Meters	Description
32.3 – 44.5	<p>ARGILLITE, minor SILTSTONE</p> <p>Medium and dark grey, finely-laminated and thin-bedded with few medium thick beds. About 35% of the interval consists of bands of finely-laminated dark grey argillite; 42.3 m to 45.0 m is mostly of this character.</p> <p>Bedding: 45° at 32.3 m; 47° at 36.8 m; 45° at 39.0 m; 48° at 41.0 m; 44° at 44.5 m. 34.7 m to 35.1 m hosts 3 narrow, lensey, bedding-parallel oxidized pyrite bands 1 to 5 mm thick.</p>
44.5 – 67.8	<p>SILTSTONE, minor ARGILLITE</p> <p>Light to medium grey and blue grey; some darker grey. Predominantly medium and a few thick-bedded siltstones with widespread narrow bands of thin-bedded and laminated argillite.</p> <p>Bedding: 43° at 48.5 m; 48° at 52.5 m; 45° at 57.7 m; 47° at 60.3 m; 47° at 67.8 m. Near 57.5 m and 58.2 m few thin, rusty pyritic quartz veins up to 12 mm wide, at 49°-60° to c/a, close to 90° to bedding. Minor ZnS occurs in one thin band. 61.5 m – 62.7 m has a few vuggy, light grey quartz veins at ~ 50°-60° to c/a and close to 90° to bedding. Quartz vein up to 1.5 cm wide.</p> <p>At 58.2 m driller stuck rods; no evidence of fault or bad ground.</p>
67.8 – 77.7	<p>ARGILLITE, SILTSTONE and QUARTZITE</p> <p>Dark, medium and light grey. Mostly thin-bedded and laminated argillite and siltstone; 69.3 m to 72.7 m is thick and medium-bedded, lighter grey siltstone and quartzite. 30-40% of the interval is dark grey, finely-laminated argillite in bands a few mm to 30 cm thick.</p> <p>Bedding: 48° at 67.9 m; 47° at 70.0 m; 50° at 73.5 m; 48° at 76.4 m.</p>
77.7 – 88.6	<p>SILTSTONE and QUARTZITE, minor ARGILLITE</p> <p>Light to medium grey; thick and medium-bedded; 80.3 m to 82.0 m is thin-bedded and laminated argillite and siltstone.</p> <p>Bedding: 48° at 79.7 m; 47° at 81.0 m; 48° at 85.6 m. Weak healed brecciation with thin calcite veinlets at 84.0 m. Few 8 mm wide, light grey quartz and quartz-calcite veins near 86.7 m; bedding-parallel and at ~ 90° to bedding (50° to c/a).</p>
88.6 – 119.6	<p>SILTSTONE, ARGILLITE and minor QUARTZITE</p> <p>Interval of mixed lithologies dominated by medium and thick siltstones (minor quartzite) with intervening bands of thin-bedded and laminated argillite.</p> <p>Bedding: 48° at 90.0 m; 46° at 96.3 m; 46° at 101.0 m; 55° at 109.0 m; 48° at 110.0 m; 44° at 116.0 m; 48° at 119.4 m.</p> <p>At 113.5 m a 3-4 mm massive pyrite vein cuts core at 50° to c/a, ~ 70° to bedding. At 114.6 m a 4-5 cm wide light blue-grey quartz vein cuts core at 85° to c/a. Quartz is foliated/hailed brecciated with adjacent core bleached to pale grey.</p>

## DDH: NS-07-1

Meters	Description
119.6 – 122.6	<b>ARGILLITE</b> Dark, medium and light grey; ~75% of the interval is dark grey finely-laminated argillite. Bedding: 46° at 120.0 m; 46° at 122.0 m.
122.6 – 133.6	<b>SILTSTONE, minor ARGILLITE</b> Dark blue-grey to pale brownish grey (sericitic-altered?). Predominantly medium-bedded with lams and thin beds of argillite. Bedding: 50° at 123.8 m; 50° at 128.0 m; 44° at 130.0 m; 45° at 133.6 m. At 123.75 m two 5-8 mm wide quartz-pyrite-biotite veins cut core at ~50° to c/a, close to 90° to bedding. Minor local healed brecciation with yellow-white quartz vein matrix at 128.3 m.
133.6 – 138.6	<b>ARGILLITE, minor SILTSTONE</b> Approximately 60% is dark grey laminated argillite interbedded with thin beds of light grey argillite; 40% is lighter grey, medium thick siltstone. Bedding: 43° at 134.0 m; 42° at 138.0 m. Broken core at 131.1 m; possible 1.5 m core loss. At 135.3 m drilling encountered a “mud seam”- dark grey mud, similar to core. Est. 1.0 m core loss. No evidence in adjacent core of fracturing or bad ground. At 136.7 m, 5 cm wide bed is healed breccia with chlorite-pyrite veinlet matrix.
138.6 – 167.9	<b>SILTSTONE, minor QUARTZITE and ARGILLITE</b> Light grey to medium grey; few laminated argillite bands are darker grey. Mainly medium and thick-bedded with narrow zones of thin-bedded and laminated argillite. Bedding: 50° at 142.0 m; 40° at 146.0 m; 45° at 150.0 m; 45° at 158.0 m; 48° at 163.0 m; 48° at 167.8 m. At 159.0 m narrow 2-3 mm wide pyrite vein cuts core at 40° to c/a. At 160.4 m narrow 3-4 mm quartz vein cuts core at 43° to c/a.
167.9 – 174.5	<b>ARGILLITE, minor SILTSTONE and QUARTZITE</b> About 40% is dark grey, finely-laminated argillite; 25% is light grey medium thick siltstone and quartzite. 35% is light-medium grey thinner bedded argillite and silty argillite. Bedding: 50° at 170.5 m; 48° at 174.5 m. Narrow, ragged py vein at 170.3 m is partly bedding-parallel, partly cross-cutting at ~ 60° to c/a. At 172.7 m and 172.8 m two 1.0-1.5 cm wide quartz-pyrite veins at 36° to c/a, close to 90° to bedding.
174.5 – 183.0	<b>SILTSTONE and QUARTZITE, very minor ARGILLITE</b> Light to medium grey, medium, thick and thin-bedded. Bedding: 43° at 175.8 m; 47° at 182.8 m.

## DDH: NS-07-1

Meters	Description
183.0 con't.	Scattered thin, lensey yellowish-white quartz veins – parallel and sub-parallel to bedding. Some elongated vugs with open space crystallization. These quartz veins are associated with bleaching - probable sericitic alteration.
183.0 – 191.5	<p>ARGILLITE, minor SILTSTONE and QUARTZITE</p> <p>Est. 55-60% is dark grey, finely-laminated argillite. 188.1 m to 191.5 m is mostly lighter grey thin-bedded argillite. 184.7 m to 185.8 m is more massive siltstone and quartzite.</p> <p>Bedding: 52° at 183.8 m; 48° at 187.0 m; 48° at 191.3m.</p> <p>183.85 – 184.0 m is healed breccia in laminated dark grey argillite; quartz and quartz-pyrite vein matrix is mostly bedding-parallel, much less cross-cutting. Minor ZnS occurs in one thin quartz vein.</p> <p>At 183.3 m narrow py vein at 30° to c/a, close to 90° to bedding.</p> <p>At 183.5 m 1 cm wide bedding-parallel gouge/clay zone; narrow bedding-parallel fault slip.</p>
191.5 – 198.7	<p>SILTSTONE and QUARTZITE, minor ARGILLITE</p> <p>Medium-dark grey, mottled from silicification. Few zones of thin-bedded argillite.</p> <p>Bedding: 45° at 192 m; 54° at 198.5 m.</p> <p>Some broken core but no obvious faulting. Near 198.5 m, 3 quartz, qtz-pyrite and qtz-calcite veins cut core at 60° and 30° to c/a.</p>
198.7 – 201.8	<p>ARGILLITE</p> <p>Light, medium and darker grey. Thin-bedded and laminated. ~ 50% is dark grey finely-laminated argillite.</p> <p>Bedding at 53°-55° to c/a. Disseminated py is common locally in dark grey argillite. Few thin cross-cutting discontinuous py veinlets also present.</p>
201.8 – 216.4	<p>SILTSTONE and QUARTZITE, minor ARGILLITE</p> <p>Light and medium grey to blue-grey. Medium and thick-bedded with scattered bands of thin-bedded argillite.</p> <p>Bedding: 51° at 204.3 m; 48° at 212.1 m; 51° at 214.3 m. Narrow (~8cm) crush zone at ~80° to c/a at 207.5 m – minor fault.</p>
216.4 – 221.2	<p>ARGILLITE, few SILTSTONE beds.</p> <p>Approximately 35% is dark grey, finely-laminated argillite; ~ 40-45% is thin-bedded light grey argillite; remainder is medium beds of siltstone.</p> <p>Bedding: 47° at 217.0 m; 48° at 221.0 m. At 217.6 m a 1 cm wide bedding-parallel abundant pyrite bed.</p>



## DDH: NS-07-1

Meters	Description
221.2 – 242.6	<p>SILTSTONE and QUARTZITE, minor ARGILLITE</p> <p>Light, medium and dark grey, mostly medium and thick-bedded with bands of thin-bedded argillite.</p> <p>Bedding: 43° at 223.0 m; 46° at 225.8 m; 48° at 231.0 m; 49° at 233.7 m; 45° at 237.5 m. At 233.5 m to 234.0 m is dark grey finely-laminated argillite.</p> <p>Bedding-parallel slump zones occur near 231.0 m and 234.3 m. 1.5 cm wide bedding-parallel qtz-py vein at 239.0 m immediately below 4 cm wide zone of crushed argillite; minor bedding-parallel fault.</p>
242.6 – 249.5	<p>ARGILLITE</p> <p>Dark grey, finely-laminated. About 5% is thin and medium-bedded siltstone and light grey argillite.</p> <p>Bedding: 48° at 242.6 m; 45° at 246.0 m; 47° at 248.8 m.</p>
249.5 – 269.8	<p>SILTSTONE and QUARTZITE, minor ARGILLITE</p> <p>Mainly light-medium grey. Medium and thick-bedded with minor scattered bands of thin-bedded argillite.</p> <p>Bedding: 46° at 252.0 m; 46° at 255.5 m; 45° at 263.9 m; 42° at 269.6 m. Weak healed breccia at 249.6 m over ~ 10 cm of core; yellowish quartz veins and minor pyrite. At 252.6 m 15 cm of core is moderately fractured, crushed; very minor fault 3 mm wide quartz vein at 252.9 m at 50° to c/a. Fairly broken core from 257.5 m to 260.9 m; no obvious faulting. At 267.0 m narrow 2-10 mm wide breccia/fracture zone at 62° to c/a, ~ 70° to bedding.</p>
269.8 – 276.4	<p>ARGILLITE, minor SILTSTONE</p> <p>Mainly finely-laminated, dark grey argillite with abundant thin beds of light grey argillite and a few medium thick siltstone beds.</p> <p>Bedding: 32° at 270.8 m; 36° at 273.0 m; 39° at 276.0 m.</p> <p>Minor local healed brecciation with thin lensey calcite and calcite-quartz veinlets. Local healed brecciation with narrow crushed fragmented zones; some distinct fractures show minor offset.</p>
276.4 – 291.8	<p>QUARTZITE and SILTSTONE, minor ARGILLITE</p> <p>Light to medium grey, locally darker grey. Siltstones and quartzites are medium and thick-bedded. Argillites are thin-bedded.</p> <p>Bedding: 38° at 279.0 m; 42° at 283.0 m; 22° at 285.0 m. Quartzites and siltstones are bleached, brecciated (healed with thin quartz veinlets) below 288.3 m. Minor brecciation is more evident below about 280.5 m; bedding-parallel, slightly oblique with higher angle fracturing of brecciation. A few cross-cutting, high angle to core axis veinlets have pyrite. Core is variably broken below 283.3 m but not obviously faulted.</p>

## DDH: NS-07-1

Meters	Description
291.8 – 296.7	<p>Approximately 75% QUARTZITE (minor SILTSTONE), 25% ARGILLITE; healed BRECCIA, minor FAULTING.</p> <p>Bleached quartzites (sericitic altered) display healed breccia texture with thin veinlets of yellow-white quartz; 4 or 5 narrower bands of light to dark grey argillite.</p> <p>Bedding: 36° at 291.8 m; 38° at 294.0 m; 44° at 294.4 m. Argillites display more of the structural disturbance; healed fracturing and narrow bands of brecciation (but no obvious bedding in much of the quartzite). A 6-8 cm band of brecciated siltstone at 291.9 m has patchy pyrite.</p>
296.7 – 299.75	<p>FAULT/SHEAR ZONE; Local PbS, ZnS.</p> <p>Core is variably sheared, brecciated with fabric at 40°-50° to c/a; some rubbly core; some core loss, est. 0.8 m but not obviously where sulfides are present. Interval is ~ 70% argillite, 30% siltstone (excluding sulfide band). 298.6 m to 298.8 m is semi-massive sulfides; irregular veinlets and patches of ZnS, PbS and minor py in a siliceous ('siltstone') host. Fabric is 50°-80° to c/a. Minor py occurs in shear-parallel veinlets near 299.6 m.</p> <p>SAMPLING: <del>81477</del> 297.9 – 298.6                      est. 0.7 m (some core loss)  <del>81478</del> 298.6 – 298.8                      0.2 m semi-massive vein sulfides  <del>81479</del> 298.8 – 299.75                      0.95 m</p>
299.75 – 310.2	<p>Altered SILTSTONE and QUARTZITE; minor ARGILLITE; weak BRECCIATION</p> <p>Sericitic altered, bleached medium thick siltstones and quartzites with some weak brecciation, healed by thin yellow-white quartz veinlets. Scattered bands of thin-bedded argillite with healed fracturing, brecciation. Bleaching and brecciation diminish downward (weak bleaching and few fractures occur below this interval).</p> <p>Bedding: 30° at 300.8 m; 36° at 302.1 m; 52° at 304.3 m; 54° at 307.0 m; 52° at 310.0 m. Below 301.6 m thin-bedded argillite predominates.</p>
310.2 – 361.49	<p>SILTSTONE and QUARTZITE, and lesser ARGILLITE</p> <p>Dominantly lighter grey, medium thick siltstones and quartzite with intervening zones of laminated and thin-bedded argillite:</p> <p>310.2 m – 320.2 m - Mainly siltstone and quartzite.</p> <p>320.2 m – 322.0 m - Argillite - 85% laminated dark grey.</p> <p>322.0 m – 325.1 m - Q &amp; S.</p> <p>325.1 m – 330.15 m - Argillite - Est. 55% laminated dark grey.</p> <p>330.15 m – 336.2 m - Quartzite and siltstone.</p> <p>336.2 m – 339.4 m - Argillite – light grey ~25% siltstone.</p> <p>339.4 m – 341.7 m - S &amp; Q.</p> <p>341.7 m – 344.9 m - Mainly light grey argillite; est. 15-20% medium-bedded S.</p> <p>344.9 m – 351.1 m - S &amp; Q ~ 10-20% Argillite.</p> <p>351.1 m – 361.49 m - S &amp; Q ~ 15% Argillite.</p>

## DDH: NS-07-1

Meters	Description
361.49 con't.	Bedding: 53° at 312.2 m; 53° at 317.0 m; 50° at 322.0 m; 50° at 326.0 m; 53° at 335.6 m; 48° at 342.8 m; 50° at 348.5 m; 49° at 355.0 m; 48° at 361.3 m. At 312.8 m 1 cm wide quartz vein at 50° to c/a; at 325.0 m hairline fractures (healed) at 55° to c/a, ½ mm py veinlet, 5mm displacement; at 328.0 m to 331.0 m local very weak healed brecciation with thin, white quartz-calcite veinlets. At 346.7 m 8 cm crushed argillite; minor bedding-parallel fault.
361.49 m	END OF HOLE

## DRILL HOLE RECORD

<b>Hole No:</b>	NS-07-2	<b>Property:</b>	ST. EUGENE
		<b>District:</b>	Fort Steele
<b>Commenced:</b>	May 7, 2007	<b>Owner:</b>	St. Eugene Mining Corp.
<b>Completed:</b>	May 9, 2007	<b>Location:</b>	North Structure
<b>Coordinates:</b>	585282E 5460719N	<b>Contractor:</b>	SCS Diamond Drilling
<b>Core Size:</b>	NQ	<b>Total Length:</b>	218.24 m
<b>Azimuth:</b>	039°	<b>Logged by:</b>	P. Klewchuk
<b>Collar Dip:</b>	-52°	<b>Date:</b>	May 14, 2007
<b>Elevation:</b>	1038.6 m		
<b>Tests at:</b>	197.0 m -50.5°.		
<b>Objective:</b>	Test North Structure Geophysical Anomaly		

Meters	Description
0 – 6.1	CASING Rubble to 5.8 m; bedrock starts at 5.8 m.
5.8 – 218.2	Normal succession of Upper Middle Aldridge siltstones, quartzites and argillites. <b>Lithologies:</b>
5.8 – 10.5	ARGILLITE – 75 % finely-laminated, dark grey. 25% thin-bedded, light grey, few medium thick siltstone beds.
10.5 – 17.7	QUARTZITE and SILTSTONE – medium and thick-bedded, 10-15% thin argillite beds.
17.7 – 21.7	70% ARGILLITE – laminated dark grey and thin-bedded light grey, 30% siltstone.
21.7 – 29.5	SILTSTONE and QUARTZITE – thick and medium-bedded, very minor (<5%) argillite.
29.5 – 30.7	ARGILLITE – laminated, dark grey; 10-15% thin-bedded, light grey.
30.7 – 34.7	SILTSTONE and QUARTZITE – thick and medium-bedded. 15% thin-bedded argillite.
34.7 – 37.7	ARGILLITE – 60% laminated, dark grey, 40% thin-bedded and light grey.
37.7 – 74.0	SILTSTONE and QUARTZITE – light grey, medium and thick-bedded; est. 15-20% argillite – scattered bands of thin-bedded and laminated argillite.
74.0 – 77.0	ARGILLITE – 65% laminated dark grey; 35% thin-bedded light grey.
77.0 – 86.7	SILTSTONE and QUARTZITE – medium and thin-bedded; 10-15% thin-bedded argillite.
86.7 – 88.9	75% ARGILLITE - 65% laminated dark grey, 35% thin-bedded, light grey; 25% siltstone (one 50 cm bed).
88.9 – 92.2	SILTSTONE and QUARTZITE – 15% thin-bedded argillite.
92.2 – 93.0	ARGILLITE – laminated dark grey.

## DDH: NS-07-2

Meters	Description
218.2 con't	93.0 – 120.6 SILTSTONE and QUARTZITE – medium and thick-bedded 15% thin-bedded argillite.
	120.6 – 126.8 ARGILLITE – 70-75% laminated and dark grey; 25-30% thin-bedded and light grey; about 10% of the interval is medium thick beds of light grey siltstone.
	126.8 – 135.4 SILTSTONE and QUARTZITE – medium and thick-bedded. ~ 5% thin-bedded argillite.
	135.4 – 137.2 ARGILLITE – laminated, dark grey; 10% is thin-bedded and light grey.
	137.2 – 138.5 SILTSTONE and QUARTZITE – thick-bedded.
	138.5 – 144.0 ARGILLITE – 138.5 to 140.3 is laminated and dark grey; 140.3 to 144.0 is thin-bedded and light grey with few thin siltstone beds.
	144.0 – 149.3 SILTSTONE and QUARTZITE – thick and medium-bedded; 5% thin argillite beds.
	149.3 – 150.8 ARGILLITE – thin-bedded, light grey, minor thin siltstone beds.
	150.8 – 156.0 SILTSTONE and QUARTZITE – thick and medium-bedded; 5% thin argillite beds.
	156.0 – 157.8 ARGILLITE – laminated, dark grey.
	157.8 – 167.4 SILTSTONE and QUARTZITE – thick and medium-bedded <5% thin argillite beds.
	167.4 – 169.7 ARGILLITE – 65% dark grey laminated; 35% thin-bedded and light grey.
	169.7 – 185.0 SILTSTONE and QUARTZITE – light-medium grey; thick and medium-bedded; ~5% thin-bedded argillite.
	185.0 – 191.8 70% ARGILLITE – (~50% of this is laminated dark grey); 30% medium thick siltstone.
	191.8 – 210.1 SILTSTONE and QUARTZITE – medium and thick-bedded; 20% is argillite, mostly light grey and thin-bedded; 201.6 m – 202.2 m is laminated, dark grey.
	210.1 – 216.6 ARGILLITE – 85-90% is dark grey, laminated. 10-15% is light grey, thin-bedded; ~10% of the interval is medium thick siltstone.
	216.6 – 218.2 SILTSTONE and QUARTZITE – thick and medium-bedded.

**Bedding:** 44° at 6.3 m; 46° at 14.0 m; 50° at 20.8 m; 55° at 29.5 m; 62° at 35.0 m;  
52° at 41.6 m; 59° at 48.0 m; 50° at 55.5 m; 45° at 65.3 m; 48° at 70.3 m; 50° at 77.0 m;  
50° at 82.0 m; 46° at 87.5 m; 48° at 93.2 m; 47° at 98.5 m; 43° at 104.0 m;  
46° at 110.7 m; 43° at 117.0 m; 44° at 121.3 m; 42° at 125.1 m; 43° at 133.5 m;  
42° at 139.0 m; 48° at 145.0 m; 44° at 150.5 m; 42° at 156.0 m; 38° at 163.3 m; 42° at  
168.5 m; 43° at 173.5 m; 39° at 180.5 m; 40° at 186.0 m; 41° at 190.0 m; 47° at  
198.5 m; 43° at 201.6 m; 45° at 205.3 m; 45° at 210.7 m; 52° at 216.0 m.

## DDH: NS-07-2

## Meters      Description

**Features:**

- At 11.6 m, 1.5 cm wide light grey quartz vein at 75°-80° to c/a with chlorite, biotite and pyrite in host sediments at contact.
- At 12.2 m, 2 quartz veins at 58° to c/a; ½ and 1 cm wide minor pyrite, some calcite.
- At 13.4 m, 12-15 mm wide qtz-calcite vein at 40° to c/a.
- At 22.8 m – 26.7 m, healed breccia. Prominent vein fabric is parallel to c/a; lensey veinlets of dense white quartz; more ragged vein matrix of chlorite, minor pyrite.
- At 32.0 m, granular vuggy and rusty quartz vein ~1 cm wide in broken core; probably at 25°-30° to c/a.
- At 36.2 m, 1 cm wide bedding-parallel qtz-calcite-biotite-pyrite vein.
- At 37.7 m, thin wavy cross-cutting qtz-calcite-biotite-pyrite veins; lensey, up to 3mm wide at 30°-60° to c/a.
- At 38.6 m, 1-2 cm wide quartz vein at 30° to c/a; granular, rusty; some unoxidized pyrite.
- At 43.7 m, thin qtz-chlorite veinlets at 40°-50° to c/a; lensey, wavy.
- At 48.1 to 48.9 m, qtz veining. ~25% included siltstone. Upper contact at ~40° to c/a; lower contact is more irregular. Chlorite concentrated near 48.1 m; patchy, coarse biotite throughout. Very minor PbS in narrow fractures.

**Sampling:**

B081480                      48.1 m – 48.9 m      (0.8 m)

- At 49.2 m, irregular, wavy quartz vein 6 or 8 cm lensing down to <1 cm, with few thin peripheral chlorite veinlets 1-2 mm wide.
- At 49.7 m to 50.1 m, ~9 quartz veins, 2 mm to 2 cm wide, 20° to 70° to c/a. Thicker ones are vuggy, rusty, some calcite with one thicker vein.
- At 54.3 m, 3 quartz veins at 40° to c/a; probably bedding-parallel. Vuggy, rusty, chloritic.
- At 54.8 m, one 6 cm quartz vein at 38° to c/a with coarse chlorite, biotite on margins.

**Sampling:**

B081481                      54.75 m – 54.85 m      (0.1 m)

- At 63.6 m, a 7 cm wide bedding-parallel band of siltstone has wispy lenses and small patches of py and ZnS and 'dendritic' Mn (?).
- Near 70.0 m, very thin bedding-parallel bands and lenses of py in argillite.
- At 79.6 m to 79.8 m, few 1-3 mm lensey, irregular pyrite-calcite-minor ZnS veinlets at 50°-60° to c/a, cut bedding at ~70°. Minor, very small patches of ZnS occur in adjacent sediments.
- At 87.0 m – 87.4 m, healed breccia – crackle type bx with many small fragments. Veinlet matrix of quartz, calcite and pyrite.

## DRILL HOLE RECORD

<b>Hole No:</b>	NS-07-3	<b>Property:</b>	ST. EUGENE
		<b>District:</b>	Fort Steele
<b>Commenced:</b>	May 13, 2007	<b>Owner:</b>	St. Eugene Mining Corp.
<b>Completed:</b>	May 19, 2007	<b>Location:</b>	North Structure
<b>Coordinates:</b>	585274E 5460724N	<b>Contractor:</b>	SCS Diamond Drilling
<b>Core Size:</b>	NQ	<b>Total Length:</b>	427.33 m
<b>Azimuth:</b>	042°	<b>Logged by:</b>	P. Klewchuk
<b>Collar Dip:</b>	-51°		
<b>Elevation:</b>	1039.1 m	<b>Date:</b>	May 19, 2007
<b>Tests at:</b>	176 m; -50°.		
<b>Objective:</b>	Test North Structure Geophysical Anomaly		

### Meters      Description

0 – 3.66      CASING, left in hole.

~3.66 – 196.9 CORE DISCARDED; essentially a duplicate of NS-07-2.

196.9 – 354.0 SILTSTONES, QUARTZITES and ARGILLITES

### Lithologies:      Meters

- 196.9 – 203.4 ARGILLITE, minor SILTSTONE – 30% finely-laminated, dark grey argillite; 35% light grey argillite; 35% siltstone.
- 203.4 – 222.0 SILTSTONE, minor ARGILLITE – thick and medium-bedded siltstone, thin-bedded and laminated argillite. 212.9 – 213.5 is dark grey, laminated argillite.
- 222.0 – 228.8 ARGILLITE, minor SILTSTONE - ~ 80% is dark grey laminated argillite, 10% thin-bedded light grey argillite; 10% medium-thick siltstone.
- 228.8 – 246.5 SILTSTONE and QUARTZITE, minor ARGILLITE – medium and thick-bedded, fairly massive siltstone and quartzite with scattered narrow bands of thin-bedded light and dark grey argillite. About 10% of the interval is argillite.
- 246.5 – 252.5 ARGILLITE, minor SILTSTONE – about 60% dark grey, finely-laminated argillite, 20% light grey thin-bedded argillite and 20% medium thick siltstone.
- 252.5 – 272.8 SILTSTONE and QUARTZITE, minor ARGILLITE – medium and thick-bedded siltstone with about 20% scattered bands of thin-bedded argillite. 267.1 m to 267.8 m is dark gray laminated argillite with a few bedding-parallel and cross-cutting veinlets of yellow dolomite and pyrite.

## DDH: NS-07-3

**Meters**      **Description**  
354.0 con't.

**Lithologies – cont.****Meters**

- 272.8 – 273.9 ARGILLITE – 80% is dark grey, finely-laminated; 20% is light grey.  
 273.9 – 275.9 40% QUARTZ VEINING, 60% ALTERED SILTSTONE with qv.  
     Upper contact of qv at 273.8 m at ~ 80° to c/a.  
     Lower contact of qv at 275.9 m at 65° to c/a.  
 275.9 – 303.6 SILTSTONE with minor QUARTZITE, ~20-25% ARGILLITE. Siltstone and quartzite are medium and thick-bedded. Argillite occurs as thin-bedded units ranging from single beds to zones 70 cm thick.  
 303.6 – 309.0 ARGILLITE, ~15% medium thick SILTSTONE beds. Argillite is ~85% dark grey, finely-laminated and 15% light grey and thin-bedded.  
 309.0 – 353.6 SILTSTONE and QUARTZITE, minor ARGILLITE. Siltstone and quartzite are medium and thick-bedded. Argillite is light to medium grey, thin-bedded, in zones up to ~20 cm thick. A few ~ 10 cm bands of laminated, dark grey argillite are present.  
 353.6 – 354.0 ARGILLITE – Dark grey, laminated. Bottom ~10 cm is a minor fault zone with fine-grained pyrite and blebs of light grey quartz and yellow calcite/dolomite.

**Bedding:** 37° at 197.0 m; 42° at 202.5 m; 40° at 208.0 m; 47° at 213.0 m; 39° at 217.0 m; 41° at 222.0 m; 42° at 227.0 m; 38° at 236.0 m; 42° at 239.5 m; 45° at 243.5 m; 45° at 248.5 m; 40° at 252.5 m; 40° at 258.0 m; 40° at 261.0 m; 45° at 268.0 m; 43° at 273.5 m; 45° at 278.0 m; 43° at 281.0 m; 42° at 284.0 m; 42° at 291.5 m; 43° at 297.0 m; 39° at 303.0 m; 43° at 306.5 m; 40° at 312.0 m; 40° at 320.0 m; 38° at 324.0 m; 38° at 329.5 m; 40° at 337.0 m; 40° at 342.0 m; 33° at 348.0 m; 38° at 351.0 m; 40° at 353.0 m; 25° at 353.7 m.

**Features:** 197.0 m to 201.5 m – very weak healed breccia with very thin dolomite-filled fractures. Few pyrite veinlets; one bedding-parallel 3 mm py-chlorite band at 197.3 m.  
 204.5 m to 207.0 m – Patchy tan-grey bleaching; sericitic alteration zones of bleaching have diffuse boundaries, tend to be bedding-parallel. No obvious associated fault.  
 At 218.0 m – ~5 cm bedding-parallel fault zone in narrow argillite band; shearing and healed brecciation with angular argillite fragments, matrix of quartz and yellow dolomite.  
 Between 213.5 m and 222.0 m – patchy sericite, bleaching may be related to this fault.  
 222.0 m to 228.8 m – finely-disseminated py along with a few py laminations and bedding-parallel dolomite veinlets are present in argillite zone.  
 268.2 m – 269.9 m – bleached (sericitically altered) siltstone/quartzite; quite strongly fractured at 30° to c/a; crush zone at 269.2 m is probable minor Fault Zone.



## DDH: NS-07-3

**Meters**      **Description**  
354.0 con't.

**Features con't.**

- 272.8 m – 273.9 m – variably (healed) brecciated argillite with quartz and dolomite vein matrix. One 4 cm wide quartz vein at 273.5 m, at 85° to c/a, carries patchy py, minor blebs of ZnS.
- 273.9 m – 274.2 m - QUARTZ VEIN. Upper contact at 80°-85° to c/a; lower contact in broken core but est. 70°-75° to c/a. Some healed breccia texture with angular fragments of host argillite in qv near 273.9 m. Ragged patches of ZnS up to 2 cm across, locally at 274.0 m.
- 274.2 m – 275.1 m – Bleached siltstone. Healed breccia texture locally with thin, light grey qv at various orientations.
- 275.1 m – 275.7 m – QUARTZ VEIN. Upper contact at ~ 50° to c/a, bedding-parallel. Lower contact at 63° to c/a. Light grey mottled quartz, locally with elongate vugs at ~ 70°-80° to c/a.

<b>Sampling:</b>	B81483	273.1 m – 273.9 m	(0.8 m)	Bx Argillite
	B81484	273.9 m – 274.2 m	(0.3 m)	Q.v.
	B81485	274.2 m – 275.1 m	(0.9 m)	Bx, bleached siltstone
	B81486	275.1 m – 275.7 m	(0.6 m)	Q.v.

- 275.7 m – 276.5 m – Bleached siltstone with a few quartz-pyrite veins.
- At 303.7 m – narrow (~8 cm) bedding-parallel zone of crushed argillite – minor fault.
- 303.6 m – 309.0 m – Argillite zone hosts weak brecciation with thin calcite-dolomite veinlets. Included siltstones are calcareous; some calcite is present in siltstones through much of the hole.
- 311.2 m – 311.9 m – Healed brecciation, fracturing at 0°-5° to c/a. with very thin, discontinuous calcite veinlets.
- At 319.7m – healed brecciation and bleaching adjacent to fracture at 17° to c/a.
- At 321.1 m - ~ 10 cm zone of crushed argillite, healed breccia texture; minor FAULT. Adjacent siltstone is bleached from 320.7 m to 321.3 m.
- At 342.2 m – local Z-shaped fold in narrow ~10 cm wide zone; 2-3 cm wide quartzitic bed is folded; soft sediment deformation/slumping.
- 350.0 m – 353.6 m – weak bleaching with few scattered dolomite veinlets, mostly bedding-parallel.
- 353.6 m – 354.0 m – FAULT ZONE. Sheared argillite with some fine-grained pyrite. Basal 3 cm has blebs of quartz, dolomite and minor pyrite. Shearing is oblique to bedding, but beds are warped on Hanging Wall side of Fault. Lower contact of fault is at 35° to c/a. and sharp.

## 354.0 – 361.4 ALTERED SILTSTONE.

Mostly pale grey, bleached and sericitically altered. Weak healed breccia through much of the interval with thin yellow dolomite veins at different orientations.  
Bedding: 40° at 354.9 m; 40° at 360.6 m.

## DDH: NS-07-3

Meters	Description
361.4 – 363.7	<p><b>FOLDED ARGILLITE</b>  Laminated, dark grey. Disseminated lenses and rounded porphyroblasts of pyrite common; est. 3%. Weak healed breccia texture with yellowish dolomite veinlets. Folding evident by 362.4 m; mostly ductile but some healed brittle fractures. At 363.6 m – 5 cm of core is broken by fractures (some sub-parallel veinlets of dolomite) at 80°-85° to c/a. Contact at 363.7 m is at 58° to c/a. Bedding: 36° at 361.4 m; 32° at 361.8 m; 20° to 8° at 362.4 m; 40° to 0° to 75° at 362.8 m; more folded between 362.8 m and 363.7 m.</p>
363.7 – 367.7	<p><b>ALTERED SILTSTONE</b>  Pale yellowish grey, bleached, sericitically altered; quite massive; weak healed breccia texture throughout with thin yellow dolomite veinlet matrix. ~ 1 cm wide shear at 365.2 m at 70° to c/a; at 367.1 m weak brecciation over ~ 4 cm at 55° to c/a.</p>
367.7 – 367.8	<p><b>SHEAR/FAULT ZONE</b>  Foliated/sheared at 75°-90° to c/a. Dark grey/black argillite mixed with lensey masses of quartz and sheared siltstone.</p>
367.8 – 369.45	<p><b>HEALED, SILICIFIED BRECCIA; "SILTSTONE"</b>  Yellowish grey, mottled. Texture is distinctly 'foliated' from 367.8 m to 368.6 m with fabric at 55° to c/a. 369.0 m to 369.45 m is a more massive healed breccia with distinct sub-rounded equant small quartzite clasts (&lt;1 mm to ~ 1 cm across) 'floating' in a matrix of yellowish siltstone/quartzite. Basal contact is at 80° to c/a. Narrow (~2 cm wide) shear zones at 368.4 m and 369.0 m are at 55°-60° to c/a.</p> <p><b>Sampling:</b>  B81487      369.0 m to 369.45 m      (0.45 m)      Altered breccia</p>
369.45 – 370.0	<p><b>SHEAR/FAULT ZONE. VEIN SULFIDES</b>  Strong deformation fabric at 75°-90° to c/a; looks like a mixture of argillite and siltstone. Deformation fabric is complex with some crinkling; few healed fractures at 45°-0° to c/a. with few mm of displacement. Contact at 369.45 is crushed argillite for ~10 cm; uniformly dark grey. Lensey and more irregular patchy reddish-brown ZnS is scattered through the interval – est. 35%; lesser fine-grained PbS is associated with some of the ZnS. A basal zone of sulfides, ~6 cm thick, is associated with light grey calcite patches and veins.</p> <p><b>Sampling:</b>  B81488      369.45 m – 370.0 m      (0.55 m)</p>

## DDH: NS-07-3

**Meters      Description****370.0 – 372.5 SHEAR/FAULT ZONE; SILTSTONE, minor ARGILLITE**

Quite strongly sheared but with numerous 5-20 cm zones of less deformed, more massive (some is healed breccia) siltstone. Narrow argillite zones are deformed/sheared at ~ 55°-60° to c/a. Few specks of ZnS noted in upper 20 cm.

At 370.64 m ~ 10 cm of 'foreign' rubble, presumably came from bit change.

**Sampling:**

B81489      370.0 m – 370.35 m      (0.35)

B81490      370.35 m – 371.2 m      (0.85)

**372.5 – 410.0 SILTSTONE and QUARTZITE, minor ARGILLITE**

Medium and thick-bedded siltstone and quartzite with intervening bands, up to ~ 40 cm thick, of thin-bedded argillite. Upper portion, to about 382.2 m, is a healed breccia with scattered calcite and quartz veinlets, rarely with minor py. Most veinlets are at 45° to c/a., but different, irregular, attitudes are present.

Bedding: 25° to c/a at 375.0 m; 27° at 376.9 m; 42° at 379.2 m; 50° at 381.4 m; 38° at 384.4 m; 26° at 387.0 m; 29° at 394.7 m; 27° at 399.0 m; 32° at 405.2 m; 45° at 408.7 m.

At 373.8 m - ~6 cm wide weaker shear zone at 80°-85° to c/a. Healed breccia with qtz-calcite veining is strongest between 373.8 m and 374.8 m.

At 382.2 m -12-20 cm wide calcite-sulfide vein at 36° to c/a. Sulfides are mostly ragged po with very minor Cpy and ZnS.

At 404.1 m – 404.3 m – minor fault; crushed core at 55°-60° to c/a, oblique to bedding. Reorienting core indicates WNW-striking, steep south dip; St. Eugene trend.

**410.0 – 411.7 ARGILLITE**

90% is dark grey, laminated, 10% is thin-bedded, light grey.

Bedding at 37° to c/a.

**411.7 – 415.5 SILTSTONE and QUARTZITE, minor ARGILLITE**

Medium and thick-bedded siltstone and quartzite; ~ 25% is thin beds of light grey argillite.

Bedding: 35° at 414.0 m.

**415.5 – 418.5 ARGILLITE ~5% SILTSTONE**

55% is dark grey, laminated; 35% is thin-bedded, light grey; 10% is medium thick siltstone.

Bedding: 30° at 416.0 m; 40° at 418.5 m.

## DDH: NS-07-3

Meters	Description
418.5 – 427.33	<p data-bbox="360 325 1049 361">SILTSTONE and QUARTZITE, minor ARGILLITE</p> <p data-bbox="360 361 1495 478">Medium thick-bedded siltstone and quartzite; bands of thin-bedded argillite; 425.1 m to 425.3 m and 426.7 m to 427.33 m is dark gray laminated argillite with some thin, light grey argillite beds.</p> <p data-bbox="360 478 1495 542">424.9 m to 425.2 m is a shear-fault zone at 30° to c/a, oblique to bedding, consists of 70% qtz-carbonate veining and 30% crushed dark grey argillite.</p> <p data-bbox="360 542 1495 617">5 cm wide qtz-dolomite vein at 425.4 m at 20° to c/a.; qtz-dolomite is a matrix to abundant angular, disoriented argillite fragments.</p> <p data-bbox="360 659 710 691">427.33 m END OF HOLE</p>



# ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

o: ST. EUGENE MINING CORP  
701 - 675 WEST HASTINGS AVE.  
VANCOUVER BC V6B 1N2

Page: 1  
Finalized Date: 16-JUN-2007  
This copy reported on 3-OCT-2007  
Account: STEUGE

## CERTIFICATE VA07059853

Project:

P.O. No.: 67

This report is for 35 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 11-JUN-2007.

The following have access to data associated with this certificate:

PETER KLEWCHUK  
ROLAND TRENAMAN

ROLAND TRENAMAN  
R. TRENAMAN

R. TRENAMAN

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Pb-AA46	Ore grade Pb - aqua regia/AA	AAS
Zn-AA46	Ore grade Zn - aqua regia/AA	AAS
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Ag-AA46	Ore grade Ag - aqua regia/AA	AAS

To: ST. EUGENE MINING CORP  
ATTN: PETER KLEWCHUK  
1-200 NORTON AVE  
KIMBERLEY BC V1A 1X9

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Lawrence Ng, Laboratory Manager - Vancouver

Appendix 2. Drill Core Analyses



# ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue  
North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

ST. EUGENE MINING CORP  
701 - 675 WEST HASTINGS AVE.  
VANCOUVER BC V6B 1N2

Page: 2 - A  
Total # Pages: 2 (A - C)  
Finalized Date: 16-JUN-2007  
Account: STEUGE

## CERTIFICATE OF ANALYSIS VA07059853

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
B081958		1.40	0.3	1.64	7	<10	90	0.5	<2	0.14	<0.5	18	30	42	3.56	<10
B081959		3.46	<0.2	1.46	20	<10	60	<0.5	<2	0.31	<0.5	13	23	30	3.49	<10
B081960		0.62	<0.2	1.71	2	<10	30	<0.5	2	4.50	<0.5	21	30	153	4.67	<10
B081961		2.94	0.2	1.78	7	<10	20	<0.5	<2	3.96	1.8	31	11	217	9.81	<10
B081483		2.02	<0.2	0.63	105	<10	60	2.0	3	0.98	1.2	18	10	28	5.78	<10
B081484		0.78	6.2	0.15	18	<10	10	<0.5	14	0.09	44.4	8	11	194	0.73	<10
B081485		2.26	<0.2	0.49	21	<10	50	0.6	<2	0.33	<0.5	8	12	4	1.45	<10
B081486		1.30	<0.2	0.11	5	<10	10	0.5	<2	0.11	<0.5	4	19	6	1.44	<10
B081487		1.56	<0.2	0.41	34	<10	30	<0.5	2	1.38	<0.5	6	10	7	3.01	<10
B081488		1.50	14.3	0.88	137	<10	40	1.4	5	0.54	187.5	26	6	201	2.97	<10
B081489		1.28	1.4	1.07	29	<10	50	0.8	<2	1.25	13.8	8	12	47	1.90	<10
B081490		2.30	0.9	0.92	9	<10	40	0.6	2	1.05	3.0	4	8	47	1.44	<10
B081491		2.22	0.8	1.47	12	<10	50	0.6	2	0.30	7.5	10	8	73	2.32	<10
B081492		2.66	1.6	1.37	65	<10	50	0.5	2	0.21	7.6	19	9	108	2.49	<10
B081493		2.72	1.6	1.76	11	<10	50	0.5	2	0.46	6.2	13	12	127	3.26	<10
B081494		2.48	2.3	1.57	34	<10	40	0.5	2	0.47	15.4	17	12	280	2.87	<10
B081495		2.34	35.6	2.59	14	<10	10	<0.5	<2	0.90	171.0	18	24	213	6.60	10
B081496		2.10	>100	1.45	20	<10	<10	<0.5	2	0.37	275	34	13	150	5.11	<10
B081497		1.32	>100	1.63	<2	<10	10	<0.5	2	0.18	374	30	27	164	5.26	<10
B081498		1.20	11.4	2.32	7	<10	40	<0.5	<2	0.11	5.8	12	16	102	4.21	10
B081499		1.60	98.1	1.95	<2	<10	40	<0.5	2	0.91	40.3	17	17	18	3.36	<10
B081500		1.04	27.7	1.98	<2	<10	30	<0.5	<2	0.51	156.5	21	14	66	3.88	<10
B081951		0.80	3.5	2.51	9	<10	40	<0.5	<2	2.51	37.4	12	29	58	4.39	10
B081952		1.02	1.0	5.68	50	<10	20	0.5	<2	0.34	3.1	19	34	95	11.45	10
B081953		0.78	8.0	2.36	38	<10	50	0.5	5	0.17	4.6	21	19	29	4.15	10
B081954		2.16	41.4	3.76	2	<10	<10	<0.5	4	2.42	85.9	16	21	75	8.39	10
B081955		2.14	23.5	3.13	5	<10	10	<0.5	2	3.10	34.3	15	18	84	6.70	10
B081956		2.26	1.9	1.09	30	<10	30	<0.5	2	1.50	22.1	30	8	51	2.66	<10
B081957		0.94	3.4	0.70	48	<10	10	2.5	<2	6.01	39.6	24	6	72	4.42	10
B081477		1.58	2.3	0.44	47	<10	30	0.6	<2	0.35	25.2	9	5	63	1.66	<10
B081478		0.54	45.5	0.18	591	<10	10	0.5	5	0.34	204	33	9	963	3.10	<10
B081479		2.92	1.3	0.52	20	<10	30	0.7	2	0.14	3.9	12	7	103	2.22	<10
B081480		1.60	<0.2	0.75	12	<10	20	<0.5	2	0.07	<0.5	6	12	11	1.65	<10
B081481		0.24	<0.2	4.28	4	<10	130	0.6	3	0.03	<0.5	9	16	28	7.89	10
B081482		0.48	<0.2	1.11	<2	<10	50	<0.5	2	0.08	<0.5	10	15	33	3.13	<10



# ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue  
North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

ST. EUGENE MINING CORP  
701 - 675 WEST HASTINGS AVE.  
VANCOUVER BC V6B 1N2

Page: 2 - B  
Total # Pages: 2 (A - C)  
Finalized Date: 16-JUN-2007  
Account: STEUGE

## CERTIFICATE OF ANALYSIS VA07059853

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
		Hg ppm 1	K % 0.01	La ppm 10	Mg % 0.01	Mn ppm 5	Mo ppm 1	Na % 0.01	Ni ppm 1	P ppm 10	Pb ppm 2	S % 0.01	Sb ppm 2	Sc ppm 1	Sr ppm 1	Th ppm 20
B081958		<1	0.74	20	0.64	340	3	0.03	29	360	19	0.80	<2	2	13	<20
B081959		<1	0.58	10	0.65	584	2	0.05	18	260	21	0.55	<2	3	25	<20
B081960		<1	0.38	10	0.75	954	<1	0.03	40	170	14	0.44	<2	3	114	<20
B081961		<1	0.51	10	0.72	2250	<1	0.02	35	70	60	4.61	<2	3	83	<20
B081483		<1	0.41	20	0.17	1640	2	0.02	41	410	83	1.23	29	2	56	<20
B081484		<1	0.08	10	0.02	154	<1	0.02	9	50	5000	0.52	173	<1	8	<20
B081485		<1	0.34	30	0.10	622	<1	0.01	9	190	37	0.09	2	1	20	<20
B081486		<1	0.06	10	0.02	422	1	0.01	6	10	45	0.08	<2	1	5	<20
B081487		<1	0.23	20	0.58	492	1	0.06	12	240	28	0.30	5	5	108	<20
B081488		2	0.38	20	0.17	310	2	0.02	22	210	>10000	2.58	16	2	38	<20
B081489		<1	0.50	20	0.24	371	1	0.02	14	190	1015	0.31	<2	2	48	<20
B081490		<1	0.43	20	0.20	267	2	0.02	15	190	846	0.31	<2	1	42	<20
B081491		<1	0.54	40	0.48	129	<1	0.02	23	430	684	0.71	3	1	12	20
B081492		<1	0.53	40	0.44	119	1	0.02	28	280	1385	0.77	3	2	11	20
B081493		<1	0.54	30	0.66	181	3	0.02	21	260	1115	1.00	6	2	16	<20
B081494		<1	0.34	20	0.66	205	4	0.02	18	560	2320	0.70	6	2	12	<20
B081495		<1	0.09	<10	1.36	530	<1	0.02	16	160	>10000	3.71	57	2	16	<20
B081496		2	0.03	<10	0.71	286	<1	0.01	10	70	>10000	6.94	277	1	11	<20
B081497		1	0.12	10	0.78	274	<1	0.02	11	100	>10000	8.02	240	2	5	<20
B081498		<1	0.53	30	0.96	243	1	0.02	14	340	>10000	0.45	16	2	9	<20
B081499		<1	0.50	30	0.72	197	<1	0.03	23	250	>10000	2.30	107	2	17	<20
B081500		<1	0.41	20	0.79	251	<1	0.02	13	220	>10000	2.67	37	2	14	<20
B081951		<1	0.46	30	1.00	302	<1	0.02	15	260	3540	0.76	3	3	31	<20
B081952		<1	0.29	10	2.67	776	<1	0.02	33	210	922	0.41	<2	10	16	<20
B081953		<1	0.50	50	0.96	250	1	0.02	26	260	8590	0.44	8	2	12	20
B081954		1	0.06	10	1.98	530	<1	0.01	24	170	>10000	2.86	42	4	40	<20
B081955		1	0.09	10	1.61	392	1	0.01	21	160	>10000	1.65	23	3	45	<20
B081956		<1	0.31	30	0.50	128	2	0.02	25	330	1710	1.00	7	1	23	<20
B081957		<1	0.16	10	0.39	177	2	0.02	26	230	3160	1.85	16	3	78	<20
B081477		<1	0.25	10	0.06	207	1	0.01	18	190	2750	1.05	4	1	16	<20
B081478		2	0.09	<10	0.05	408	<1	0.01	16	50	>10000	3.54	31	<1	8	<20
B081479		<1	0.30	20	0.06	371	1	0.01	29	250	830	0.98	2	1	14	<20
B081480		<1	0.17	60	0.34	187	1	0.03	14	250	60	0.11	<2	1	9	<20
B081481		<1	2.65	10	2.05	606	<1	0.03	41	50	47	0.17	<2	7	6	<20
B081482		<1	0.66	10	0.45	267	1	0.02	8	50	39	0.38	<2	1	6	<20



# ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue  
North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

to: ST. EUGENE MINING CORP  
701 - 675 WEST HASTINGS AVE.  
VANCOUVER BC V6B 1N2

Page: 2 - C  
Total # Pages: 2 (A - C)  
Finalized Date: 16-JUN-2007  
Account: STEUGE

## CERTIFICATE OF ANALYSIS VA07059853

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Ag-AA46	Pb-AA46	Zn-AA46
		Ti	Ti	U	V	W	Zn	Ag	Pb	Zn
		%	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.01	10	10	1	10	2	1	0.01	0.01
B081958		0.10	<10	<10	19	<10	94			
B081959		0.09	<10	<10	21	<10	97			
B081960		0.04	<10	<10	14	<10	83			
B081961		0.04	<10	<10	12	<10	472			
B081483		<0.01	<10	<10	6	<10	396			
B081484		<0.01	<10	<10	1	<10	7070		0.53	0.74
B081485		<0.01	<10	<10	3	<10	77			
B081486		<0.01	<10	<10	1	<10	56			
B081487		<0.01	<10	<10	5	<10	153			
B081488		<0.01	<10	<10	7	<10	>10000		1.33	3.02
B081489		<0.01	<10	<10	7	<10	2210		0.11	0.24
B081490		0.01	<10	<10	6	<10	534		0.09	0.06
B081491		0.03	<10	<10	8	<10	1920		0.07	0.20
B081492		0.04	<10	<10	11	<10	1945		0.14	0.21
B081493		0.04	<10	<10	12	<10	1590		0.13	0.17
B081494		0.04	<10	<10	15	<10	3580		0.25	0.41
B081495		0.02	<10	<10	17	<10	>10000		3.85	4.18
B081496		0.01	<10	<10	11	<10	>10000	175	17.35	6.69
B081497		0.02	<10	<10	11	<10	>10000	145	14.95	9.51
B081498		0.05	<10	<10	16	<10	1480		1.18	0.14
B081499		0.03	<10	<10	13	<10	7850		9.35	0.80
B081500		0.04	<10	<10	12	<10	>10000		3.15	3.59
B081951		0.05	<10	<10	17	<10	8090		0.36	0.89
B081952		0.07	<10	<10	52	<10	1160		0.09	0.12
B081953		0.06	<10	<10	17	<10	1055		0.93	0.10
B081954		0.03	<10	<10	28	<10	>10000		4.82	1.67
B081955		0.03	<10	<10	21	<10	7920		2.76	0.89
B081956		0.03	<10	<10	8	<10	5460		0.17	0.61
B081957		<0.01	<10	<10	8	<10	>10000		0.33	1.18
B081477		<0.01	<10	<10	4	<10	4340		0.28	0.44
B081478		<0.01	<10	<10	2	<10	>10000		5.01	3.48
B081479		<0.01	<10	<10	5	<10	747		0.07	0.07
B081480		0.02	<10	<10	7	<10	74			
B081481		0.22	<10	<10	39	<10	210			
B081482		0.07	<10	<10	9	<10	72			