

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORTS

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Assessment Report on Geology and Drilling

Bingo, David, Harmony, Lew, Lewis, LMC, Moyie, SMC, Thea, Vel and Velvet Claims,  
South Moyie River Area

Fort Steele Mining Division  
British Columbia

NTS Map 82 F/8  
49°20'N Latitude  
116°05'W Longitude

Owner:

Sedex Mining Corp.  
1000-675 W. Hastings Street  
Vancouver, B.C., V6B 1N2

Operator:

Sedex Mining Corp.  
3380 Wilks Road  
P.O. Box 215  
Cranbrook, B.C., V1C 4H7

Report By:

Robert Woodfill, Ph.D.  
Cranbrook Project  
3380 Wilks Road  
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FILMED

November 11, 1996

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

WP7 File: Assrpt.6

Cranbrook Field Office

24,650

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## 1.00 INTRODUCTION

### 1.10 Location and Access

The Bingo, David, Harmony, Lew, Lewis Fraction, Lewis, LMC, Moyie, Moyie Fraction, SMC, Thea Two, Thea, Vel and Velvet mineral claims collectively referred to as the South Moyie River claim block are located approximately 30 km southwest of the town of Cranbrook, B.C. See the index map (figure 1) for the location of the claim block. Access is by road along the Lumberton and Moyie logging roads from Cranbrook. A series of improved and unimproved logging roads provide good access to much of the claim block. Two hydro power lines cross the property.

### 1.20 History

Parts of the South Moyie River claim block have been held and prospected by Cominco for Sullivan-type deposits in the past including the Lew, Ice and Hot claims. Some lode gold prospecting was conducted on the David-Harmony and Laurie claims as well as placer workings along Ridgeway Creek, Weaver Creek and the South Moyie River. In 1996 Sedex Mining Corp. undertook to re-evaluate the entire area for Sullivan-type deposits.

### 1.30 Physiography

The property is situated west of the Rocky Mountain Trench within the Moyie Range of the Purcell Mountains. Topography is moderate to steep with glacially rounded ridges. Within the property area elevations range from 1300 to 2000 meters.

Vegetation cover varies from immature to mature forests of larch, pine, spruce and fir. Considerable clear-cut logging has occurred on the claim group in the recent past and the logged areas are in various stages of regeneration. Traverses are difficult necessitating cut lines and GPS control for location.

### 1.40 Property

The South Moyie River claims block consisting of 743 claim units and 153 claims (figure 2, in pocket) is a contiguous block of claims owned by Sedex Mining Corp., 1000-675 W. Hastings Street, Vancouver, B.C. With the following subdivision:

<u>Claim Name</u>	<u>Tenure No.</u>	<u>No. Units</u>	<u>Current Expiry Date</u>
Bingo 1	317360	20	10-May-99
Bingo 2	332489	1	15-Nov-99
Bingo 3	332490	1	15-Nov-99
Bingo 4	332491	1	15-Nov-99

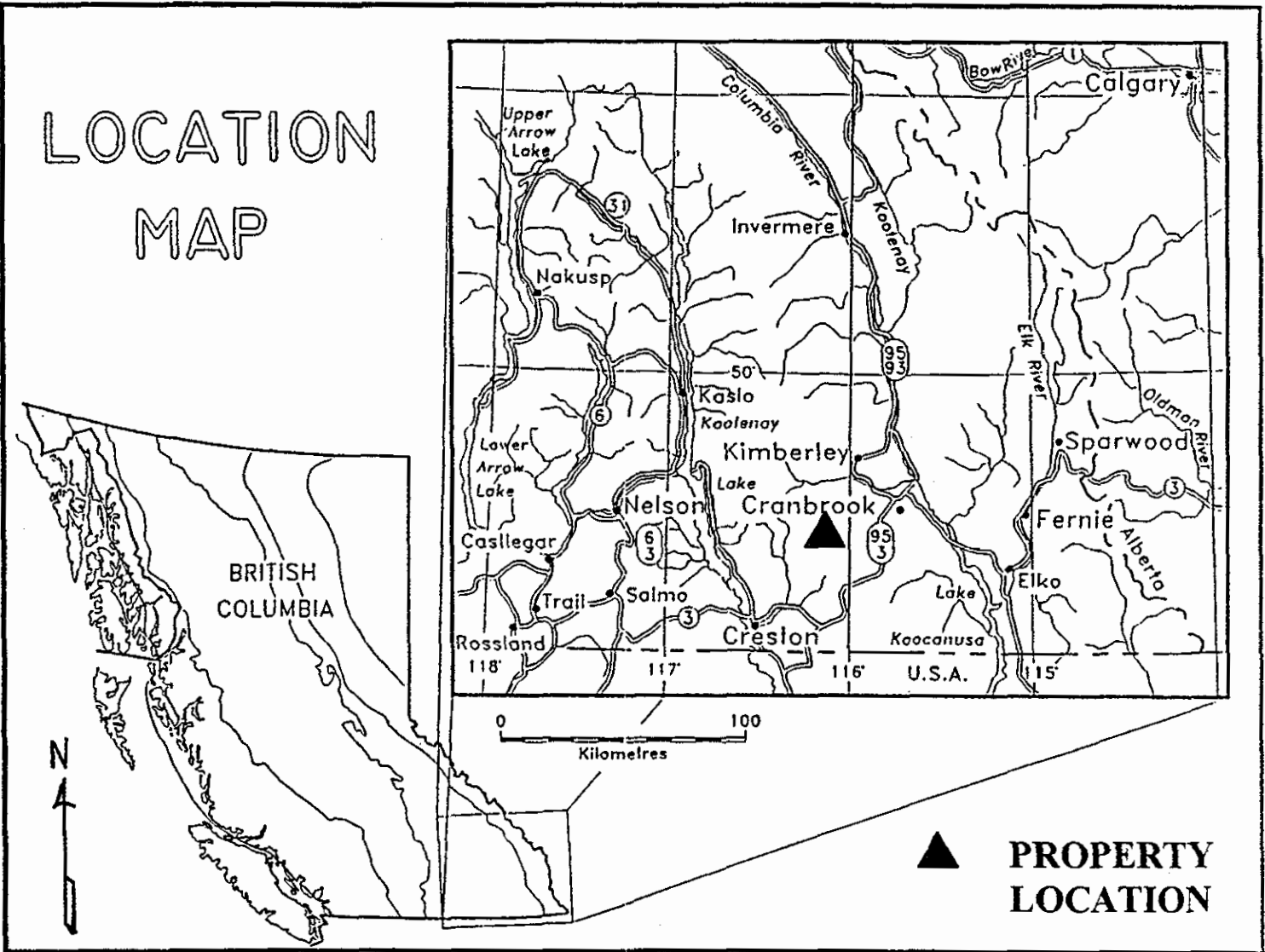


Figure 1.--Location Map.

<u>Claim Name</u>	<u>Tenure No.</u>	<u>No. Units</u>	<u>Current Expiry Date</u>
Bingo 5	340368	1	12-Sep-98
Bingo 6	340369	1	12-Sep-98
Bingo 7	340370	1	12-Sep-98
Bingo 8	340371	1	12-Sep-98
Bingo 9	340372	1	12-Sep-98
Bingo 10	340373	1	12-Sep-98
Bingo 11	340374	1	12-Sep-98
Bingo 12	340375	1	12-Sep-98
Bingo 13	340376	1	12-Sep-98
Bingo 14	340377	1	12-Sep-98
Bingo 15	340344	1	23-Sep-98
Bingo 16	340345	1	23-Sep-98
Bingo 17	340346	1	23-Sep-98
Bingo 18	340347	1	23-Sep-98
Bingo 19	340348	1	23-Sep-98
David 1	210975	1	29-Oct-97
David 2	210976	1	29-Oct-97
David 3	210977	1	29-Oct-97
David 4	210978	1	29-Oct-97
David 5	210979	1	29-Oct-98
David 6	210980	1	29-Oct-98
David 7	211002	1	29-Oct-97
David 8	211003	1	29-Oct-97
David 9	211004	1	29-Oct-97
David 10	211005	1	29-Oct-97
David 11	211006	1	29-Oct-97
David 12	211007	1	29-Oct-97
David 13	211008	1	29-Oct-97
David 14	211009	1	29-Oct-97
David 15	211010	1	29-Oct-97
David 16	211011	1	29-Oct-97
David 17	211012	1	04-Nov-97
David 18	211013	1	04-Nov-97
David 19	211014	1	04-Nov-97
David 20	211015	1	04-Nov-97
David 21	211016	1	04-Nov-97
David 22	211017	1	04-Nov-97
David 23	211099	1	25-Nov-97
David 24	211100	1	25-Nov-97

<u>Claim Name</u>	<u>Tenure No.</u>	<u>No. Units</u>	<u>Current Expiry Date</u>
David 25	211018	1	04-Nov-97
David 26	211019	1	04-Nov-97
David 27	211020	1	04-Nov-97
David 28	211021	1	04-Nov-97
David 29	211022	1	04-Nov-97
David 30	211023	1	04-Nov-97
Harmony 1	336470	1	01-Jun-00
Harmony 2	336471	1	01-Jun-00
Harmony 3	336472	1	01-Jun-00
Harmony 4	336473	1	01-Jun-00
Lew 18	209795	9	05-May-00
Lew 22	209890	12	02-Jun-00
Lew 23	209891	12	02-Jun-00
Lewis 1 Fr.	340097	1	14-Sep-98
Lewis 1	331841	15	18-Oct-98
Lewis 2	331857	1	17-Oct-98
Lewis 3	331858	1	17-Oct-98
Lewis 4	331859	1	17-Oct-98
Lewis 5	331860	1	17-Oct-98
Lewis 6	331840	18	17-Oct-98
Lewis 7	331861	1	17-Oct-98
Lewis 8	331862	1	17-Oct-98
Lewis 9	331863	1	17-Oct-98
Lewis 10	331843	20	16-Oct-99
Lewis 11	331844	20	15-Oct-98
Lewis 12	331864	1	16-Oct-99
LMC 1	331307	20	07-Oct-98
LMC 2	331308	18	07-Oct-98
LMC 3	331309	9	07-Oct-98
LMC 4	331842	20	18-Oct-97
LMC 5	339073	1	11-Aug-98
LMC 6	339074	1	11-Aug-98
LMC 7	339069	12	11-Aug-98
LMC 8	339070	20	14-Aug-97

<u>Claim Name</u>	<u>Tenure No.</u>	<u>No. Units</u>	<u>Current Expiry Date</u>
LMC 9	339071	20	15-Aug-97
LMC 10	339075	1	17-Aug-98
LMC 11	339076	1	17-Aug-98
LMC 12	339077	1	17-Aug-98
LMC 13	339078	1	17-Aug-98
LMC 14	339079	1	17-Aug-98
LMC 15	339080	1	17-Aug-98
LMC 16	339081	1	17-Aug-98
LMC 17	339082	1	11-Aug-98
LMC 18	339083	1	11-Aug-98
LMC 19	340103	1	18-Sep-98
LMC 20	340104	1	18-Sep-98
LMC 21	340105	1	18-Sep-98
LMC 22	340106	1	18-Sep-98
LMC 23	340107	1	18-Sep-98
LMC 24	340108	1	18-Sep-98
Moyie 1	337735	8	03-Jul-98
Moyie 2	337736	8	03-Jul-98
Moyie 3	337737	18	05-Jul-98
Moyie 4	347653	20	07-Jul-98
Moyie 5	337739	20	07-Jul-98
Moyie 6	337740	18	08-Jul-98
Moyie 7	337747	20	08-Jul-98
Moyie 8	337792	20	08-Jul-98
Moyie 9	337793	20	09-Jul-98
Moyie 10	337794	20	09-Jul-98
Moyie 11	347654	15	07-Jul-98
Moyie 12	338372	20	19-Jul-98
Moyie 13	338371	15	20-Jul-98
Moyie 14	337727	1	03-Jul-00
Moyie 17	338379	1	18-Jul-98
Moyie 18	338380	1	19-Jul-00
Moyie 19	338381	1	19-Jul-99
Moyie 22	337789	1	07-Jul-99
Moyie 23	337790	1	07-Jul-99
Moyie 24	337791	1	07-Jul-99
Moyie 27	338836	12	09-Aug-98



<u>Claim Name</u>	<u>Tenure No.</u>	<u>No. Units</u>	<u>Current Expiry Date</u>
Moyie 50	340096	1	14-Sep-99
Moyie 9 Fr	340099	1	14-Sep-98
SMC 1	329000	20	28-Jul-99
SMC 2	328999	20	29-Jul-99
SMC 3	331495	1	08-Oct-00
SMC 4	331496	1	08-Oct-00
SMC 5	331497	1	08-Oct-00
Thea Two	334156	15	14-Jan-99
Thea 1	344471	20	25-Mar-98
Thea 2	344472	15	25-Mar-98
Thea 3	344473	20	25-Mar-98
Thea 4	344476	1	25-Mar-98
Thea 5	344477	1	25-Mar-98
Thea 6	344478	1	25-Mar-98
Thea 7	344479	1	13-Mar-98
Thea 8	344480	1	13-Mar-98
Thea 9	344481	1	15-Mar-98
Thea 10	344482	1	15-Mar-98
Thea 11	344483	1	20-Mar-98
Thea 12	344484	1	20-Mar-98
Thea 13	344485	1	21-Mar-98
Thea 14	344474	20	21-Mar-98
Thea 15	344475	18	21-Mar-98
Vel 1	340044	1	12-Sep-98
Vel 2	340045	1	12-Sep-98
Vel 3	340046	1	12-Sep-98
Vel 4	340047	1	12-Sep-98
Vel 5	340048	1	12-Sep-98
Vel 6	340049	1	12-Sep-98
Velvet 1	335194	1	24-Apr-98
Velvet 2	335195	1	24-Apr-98
Velvet 3	335196	1	24-Apr-98
Velvet 4	335197	1	24-Apr-98
Velvet 5	335198	1	24-Apr-98

<u>Claim Name</u>	<u>Tenure No.</u>	<u>No. Units</u>	<u>Current Expiry Date</u>
Velvet 6	335223	1	26-Apr-98
Velvet 7	332638	1	14-Nov-98
Velvet 8	332639	1	14-Nov-98
Velvet 9	332640	1	14-Nov-98
Velvet 10	332641	1	14-Nov-98

#### 1.50 Scope of Present Program

The 1996 program consists of:

1. Mapping the claim block at a scale of 1:10,000 utilizing GPS control and orthophotographs and
2. Drilling 1210.12 meters of NQ core in five sites to test the surface geology.

### 2.00 GEOLOGY

#### 2.10 Regional Geology

The area of the South Moyie River claim block is underlain by Precambrian Purcell Supergroup rocks of the Aldridge Formation (figure 3). These are fine-grained clastics that include impure quartzites, siltstones and argillites. The rocks have been metamorphosed to lower greenschist facies and have been intruded by a series of basaltic composition sills and dikes.

#### 2.20 Geologic Mapping

Because of the lack of suitable base maps and the difficulty of the location in forested terrain, a 1:10,000 scale topographic base map was constructed from photos by the Orthoshop in Calgary, Alberta. Small page-size parts of the large base map were used in the field for geologic mapping and the field mapping was transferred onto the compiled base. Two field geologists spent two months mapping and sampling the outcrops.

#### 2.30 GPS Survey

To aid in the geologic mapping, a Trimble Pro XL System consisting of a compact dome antenna, Pro LX receiver and TDC1 data collector was used. A field technician accompanied the geologists and entered station locations for outcrops and sample sites. The technician also

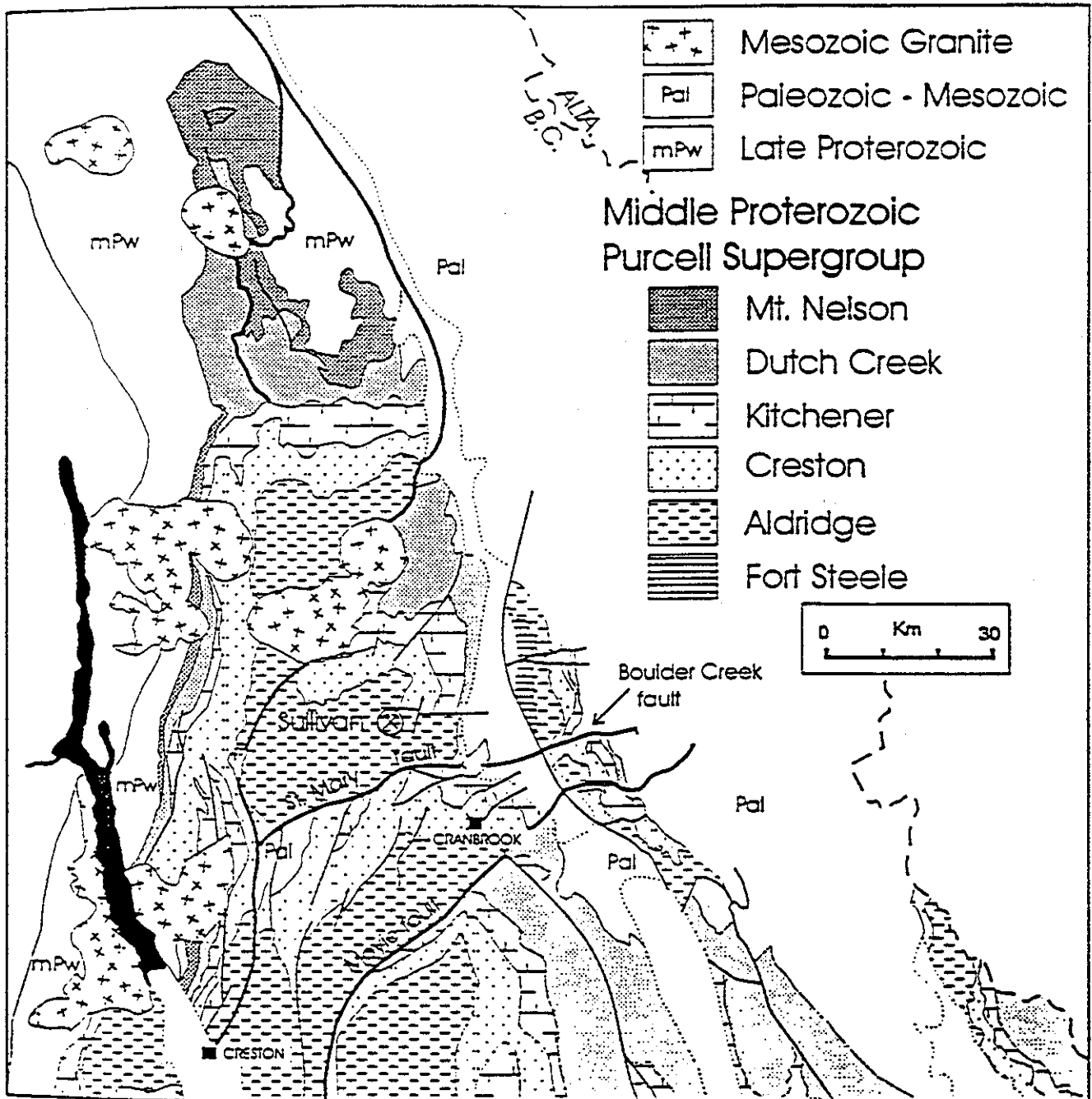


Figure 3.--Regional geology map of the Purcell Supergroup, Southeastern British Columbia.

collected sample/grid location, geological and other information in a field book which correlates with the station. The data was then taken to Kimmur Forestry Consultants Ltd., 25 Cobham Avenue West, Cranbrook, B.C., V1C 4G3 for processing.

Kimmur Forestry Consultants down-loaded the data to a computer, provided a base station for control and processed the data into a map using the data in the field book collected by the technician. Using this method, sample locations, grids, sample lines, DDH location, roads, cultural features and other points of interest can be constructed into a map at any appropriate scale.

#### 2.40 Units Mapped

Figure 4 (in pocket) is a summary of the geology mapped.

Rock types mapped were:

1. Gabbro Dykes and Sills
2. Fragmentals--sedimentary units consisting of monolithic or polyolithic clasts; sedimentary breccias related to current action processes are not classified as fragmentals
3. Disrupted Beds--sedimentary units in which bedding has been disrupted to totally destroyed by either liquifaction or fluid expulsion process
4. Quartz Wacke Turbidites--siltite and silty quartzite, medium to thick beds
5. Quartz Turbidite--clean thick bedded quartzite
6. Laminite--laminated silty argillite, often contains distinct alternating light and dark bands (marker units), typically high in sulphides, carbon and phosphate

Alteration mapped was:

1. Tourmaline--occurs as fine needles disseminated or matted within selected beds or as massive aphanitic replacements
2. Quartz--silicification and veins
3. Chlorite--pervasive and as haloes around veins and shrinkage cracks adjacent to sills and dykes

4. Albite--occurs replacing clastic grains and matrix in late brittle faults and within hornfels aureoles around gabbro sills and dykes
5. Muscovite--generally pervasive alteration of detrital feldspars, also as late fine-grained sericitic alteration associated with brittle faults

## 2.50 Property Geology

On the South Moyie River claim block Precambrian-age Aldridge Formation rocks are generally flat-lying with local dips up to 20°. Outcrops comprise less than 10° of the area and are generally restricted to cliff faces and ridges. Considerable glacial material covers the slopes and valleys. Some outcrop exists in the creek beds. The area mapped can be subdivided into four sub-areas as shown on the geologic map (figure 4, in pocket):

1. Sub-Area #1 (centered near 5 457 500m N, 567 500m E) A northwesterly-trending ridge and cliff face along the southern part of the claim block. Here quartz wackes turbidites are cut by a series of NE-trending gabbro dykes and faults. Locally albite occurs on fractures. Tourmaline and possible markers present. Minor sulphide mineralization is present. A strong WNW-trending fault system along the southern boundary of the mapped area.
2. Sub-Area #2 (centered near 5 459 000m N, 563 000E) A northwesterly-trending ridge and cliff face along the southwestern part of the claim block. Here quartz wacke turbidites and quartz turbidites are interbedded with gabbro sills. The sedimentary units show hornfels, disrupted beds and rip-up clast features from the emplacement of the intrusives. A strong NNE-trending fault parallels a NNE-trending anticlinal feature. No sulphide mineralization present.
3. Sub-Area #3 (centered near 5 461 000m N, 565 000m E) A north-trending ridge and cliff face along the SW-central part of the claim block. Here quartz wacke and quartz turbidite beds form a north-trending synclinal feature. Fragmental and marker rocks are common. Faulting is random but generally north-south-trending. Minor alteration and no sulphide mineralization present.
4. Sub-Area #4 (centered near 5 465 500m N, 566 500m E) A northeast-trending ridge nose with few outcrops. Quartz wacke turbidite beds show minor alteration and one possible marker unit. The minor sulphide mineralization consists of weakly disseminated galena stringers, pyrrhotite-pyrite along bedding and some galena associated with chlorite veinlets.

### 3.00 DIAMOND DRILLING

A total of 1210.12 meters of NQ core were drilled in five holes as follows:

<u>DDH</u>	<u>Meters</u>	<u>Incl.</u>	<u>Azm.</u>	<u>UTM (m N &amp; E)</u>	<u>Claims</u>
SMC-95-1	699.27	-70°	110°	5465432, 565579	SMC-1
SMC-96-1	74.37	-45°	160°	5469000, 568434	Bingo-4
SMC-96-2	86.26	-45°	200°	5469000, 568434	Bingo-4
SMC-96-3	211.84	-60°	180°	5470967, 570364	Moyie-4
SMC-96-4	138.38	-90°	0°	5470967, 570364	Moyie-4

See the Appendix for a listing of the drill hole records. See the claim map (figure 2, in pocket) for the location of the five DDH. DDH SMC-95-1 is plotted on the geological map (figure 4, in pocket).

#### 3.10 SMC-95-1 DDH

The SMC-95-1 DDH was extended from its 1995 TD of 365.7 meters to a new TD of 1066.97 meters between June 3-15, 1996 as a stratigraphic test of the Aldridge rocks in the area.

Results: 699.27 meters of probable Middle Aldridge rocks consisting of quartzites, argillaceous quartzites and argillites were intersected. A gabbro intrusive occurred between 436.71-441.52 and 934.43-990.98 meters. Minor quartz veins with pyrrhotite and chalcopyrite occurred randomly. No significant stratiform sulfides were intersected. No Lower-Middle Aldridge Formation contact was identified. No samples were taken for assay.

#### 3.20 SMC-96-1 DDH

The SMC-96-1 DDH was drilled to a TD of 74.37 meters between July 16-18, 1996 to test the orientation of the South Moyie River fault.

Results: 74.37 meters of probable Middle Aldridge rocks consisting of quartzites, argillaceous quartzites and argillites were intersected. Fault gouge was intersected between 18.59-23.93 meters at the top of the hole indicating that the drill hole was started either on or within the Moyie River fault (zone ?). No samples were taken for assay.

### 3.30 SMC-96-2 DDH

The SMC-96-2 DDH was drilled to a TD of 86.26 meters between July 18-19, 1996 to test the orientation of the South Moyie River fault.

Results: 86.26 meters of probable Middle Aldridge rocks consisting of quartzites, argillaceous quartzites and argillites were intersected. A gabbro intrusive was intersected between 22.4-51.05 meters. No mineralization was identified. No samples were taken for assay.

### 3.40 SMC-96-3 DDH

The SMC-96-3 DDH was drilled to a TD of 211.84 meters between July 19-23, 1996 to test the orientation of the South Moyie River fault.

Results: Fragmental rocks were intersected between 19.81-46.79, 50.7-68.89, 78.58-80.31 and 84.12-100.4 meters. Most of the core consists of probable Middle Aldridge quartzites, argillaceous quartzites and argillites. Except for pyrite and pyrrhotite clasts within the fragmental rocks no major sulfides were identified. No samples were taken for assay.

### 3.50 SMC-96-4 DDH

The SMC-96-4 DDH was drilled to a TD of 138.38 meters between July 24-27, 1996 to test the orientation of the South Moyie River fault.

Results: Fragmental rocks were intersected between 12.19-16.84, 26.93-58.49, 58.49-69.65, 91.14-106.68 and 115.44-115.87 meters. The balance of the core consists of probable Middle Aldridge quartzites, argillaceous quartzites and argillites. No samples were taken for assay.

## 4.00 CONCLUSIONS AND RECOMMENDATIONS

Five DDH were completed and approximately 1/2 of the southern part of the South Moyie River claim block was mapped at a scale of 1:10,000 between May 15 and August 12, 1996. SMC-95-1 designed as a stratigraphic test of Aldridge rocks did not identify the Lower-Middle Aldridge Formation contact. Four DDH designed to test the orientation of the South Moyie River fault did not intersect significant base metal mineralization nor the Lower-Middle Aldridge Formation contact but did find minor amounts of fragmental rocks which do not outcrop.

Additional stratigraphic testing is recommended on the South Moyie River claim block to determine the regional stratigraphic relationships and presence of a "Sullivan-Horizon".

5.00 STATEMENT OF COSTS

Geologic Mapping

Kennecott geologists (Russ Franklin & Chris Hemsted)  
121 days @ \$300/day.....\$36,000

Field Vehicles  
121 days @ \$50/day..... 6,050

Drafting of Geologic Map  
Kennecott Canada, Inc., Vancouver office..... 1,955

GPS Survey

Field Technicians (Jim Stemler and Mark Johnson)  
46 days @ \$100/day..... 4,600

Field Vehicles  
31 days @ \$50/day..... 1,550

Kimmur  
Base Station Rental and Map Preparation..... 1,830

Drilling

Lone Ranger Drilling, Lumby, B.C.  
1210.12 meters of NQ core drilling..... 89,150

Mobilization/Demobilization..... 1,380

Core logging (Jim Stemler)  
16 days @ \$100/day..... 1,600

Supervision/Management

Project Management and Permitting (Glen Rodgers)  
3 days @ \$200/day..... 600

Drilling (Robert Woodfill)  
24 days @ \$400/day..... 9,600



Field Vehicle (Robert Woodfill) 13 days @ \$50/day.....	650
Report Preparation (Robert Woodfill) 2 days @ \$400/day.....	800
Typing Drill Logs 8 hrs @ \$15/hr.....	120
Total.....	\$155,885

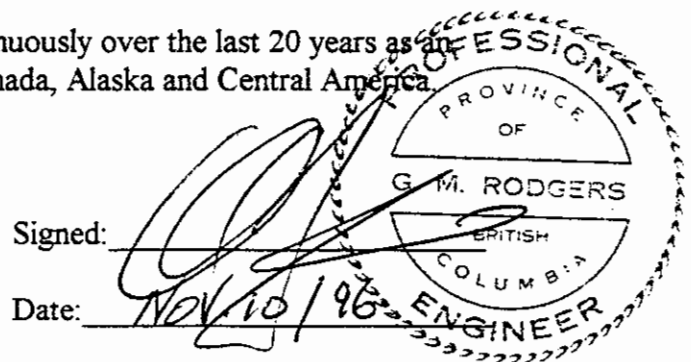
6.00 STATEMENT OF QUALIFICATIONS

I, Glen Rodgers, certify that:

1. I am a graduate of the University of Manitoba School of Geological Engineering (1977) and am registered with the British Columbia Association of Professional Engineers and Geoscientists as a P. Eng.
2. I have based this report on work done by myself during 1996 on the South Moyie River claim block including supervision of the project.
3. I do not expect to receive any share consideration as a result of writing this report.
4. I have practiced my profession continuously over the last 20 years as an exploration geologist working in Canada, Alaska and Central America.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_



I, Robert Woodfill, Ph.D. certify that:

1. I am a Ph.D. graduate of Purdue University in structural geology and a M.S. graduate of the University of Wyoming in geophysics. I am a registered Professional Geologist in the State of Wyoming.
2. I have based this report on work done by myself during 1996 on the South Moyie River claim block.
3. I do not expect to receive any share consideration as a result of writing this report.
4. I have practiced by profession continuously over the last 24 years as an exploration geologist/geophysicist working in the United States, Alaska, Canada, Mexico, Australia and Africa.

Signed: Robert Woodfill  
Date: November 11, 1996

7.00 APPENDIX

Drill Hole Record SMC-95-1

Drill Hole Record SMC-96-1

Drill Hole Record SMC-96-2

Drill Hole Record SMC-96-3

Drill Hole Record SMC-96-4

## Drill Hole Record

Property: MOYIE CLAIMS

District: Fort Steele

Hole No: SMC-95-1

Length of Hole: 1066.97 meters (Drilled 365.7m in 1995 and from 365.7m to 1066.97m in 1996)

Commenced: November 1, 1995 and 3-June-96.

Completed: November 14, 1995 and 15-June-96.

General Location: S. Moyie River, 116°05', 49°18'

Co-ordinates: UTM: 565579m E., 5465432m N.

Elevation: 1494m

Inclination: -70°

Azimuth: 110°

Dip Test Results: -72° @ 512m; -70° @ 1043m.

Hole/Core Size: NQ

Logged By: Glen Rodgers (1995); Jim Stemler (1996).

Objective: Test Aldridge stratigraphy for LMC.

Location of Core: 3380 Wilks Road, Cranbrook.

Drilled By: Lone Ranger Drilling

Type of Drill: Longyear 44

WP7 File No: Tplog.14

Owner: Hastings Management Corp.  
1000-675 W. Hastings Street  
Vancouver, B.C., V6B 1N2

Operator: Sedex Mining Corp  
3380 Wilks Road  
P.O. Box 215  
Cranbrook, B.C., V1C 4H7

Meters	Description
0-15	OVERBURDEN
15-187.8	GABBRO 65° core angle (incipient fractures - parallel to regional bedding, commonly epidotized, slightly albitized)
187.8-189.2	QUARTZ 187.8 - 188.2m white bull quartz (39° hangingwall contact)
188.2-189.2	SILICIFIED GABBRO 188.2 - 189.2m silicified mafic zone (silicified gabbro) 40° fractures. Euhedral pyrite, conformable contact at 80°.
189.2-191.4	GABBRO 189.2-191.4m gabbro - fine grained, sill or dike?, 80° hangingwall contact and 65° footwall contact
191.4-192	SILICIFIED ARGILLITE
192-217	QUARTZ ARENITE Thin bedded, gray-white siliceous, minor cherty (very thin) interbeds of chert/silica; occasional quartz-albite-biotite "concretions" with minor actinolite and pink garnet 192.5 - 194.5m intermittent thin khaki-sericitized silty argillite beds 197.6 - 197.9m intermittent thin khaki-sericitized silty argillite beds Frequent collage type quartz-albite-biotite "concretions" (no actinolite or garnet) Frequent thin bedded biotized quartz-albite "beds". (Py > Po), rare cherty fragments. Sericitization and chloritization common, rare garnets. 206.8m - colloidal silica? 207.8 - 209.2m - quartz-albite, very fine grained, very chloritic

210m - disturbed beds  
210 - 212m - possible laminar marker beds ?

217-272.3

## QUARTZ ARENITE

Has garnet deficient quartz-albite-biotite-actinolite beds and concretions, occasional quartz, rare granular white and red/brown garnets (to 2mm)  
268.5 - 272.3m is strongly chloritized and biotized. 270.9 - 272.3m has occasional clots of massive sulphide (Py and Po) (Pyrrhotite is magnetic). Thin pyrrhotite beds to 1.5cm; biotite, actinolite, Py, Po, and CPy as fracture fillings to 1cm.

272.3-274

## EXHALATIVE/VENTED BED

Magnetic in places, with masses of biotite, chlorite, carbonate, actinolite with irregular clots of pyrrhotite, pyrite and chalcopyrite. Unknown white, fibrous, radiating mineral (tremolite? wollastonite?). Same as Bingo 316.0 - 316.9m but more sulphide.

274-313

## QUARTZITE AND QUARTZ ARENITE

Medium thick bedded with minor thin bedded sericitic, argillaceous layers (beds?). Occasional Po and Py as wisps, clots and disseminations. 274 - 274.5m - very black, cherty quartzite (suspect tourmalinized) very hard and thin bedded, black "psuedo tourmalinized" beds above and below. Flame structures and rip-up clasts common (tops up). 279.5m and below: 95% quartz arenite (medium thick bedded). 289 - 290m; laminated, tan silty argillite beds (1 - 2mm) with fine white tops. ~15% silty argillite beds overall, incipient fractures localize moderate chloritic and sericitic alteration.

## 293.35-293.41m THIN EXHALATIVE/VENTED BED

Masses of black biotite, carbonate, green-black actinolite, Py and Po. Flamed tops on argillaceous layers. Rare angular cherty clasts.

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	296.8 - 296.9m quartz-albite-biotite-actinolite-garnet (collage bed)
	297.3 - 297.4m laminated, silty, very thin argillaceous beds (1- 3mm)
	300.3 - 300.5m laminated, silty, very thin argillaceous beds (1- 3mm)
	305.45 - 305.5m THIN EXHALATIVE/VENTED BED
	Black, biotite and actinolite with large blebs of Po, Py and minor CPy in center of bed. Weak quartz-albite-biotite concretionary development. At 305.2 and 306.3m two thin very hard (tourmalinized?) beds.
313-336.8	QUARTZ ARENITE
	Medium-thick bedded with weak-moderate chloritic and sericitic alteration throughout (more intense on fractures). Occasional angular cherty fragments at 316.5m. Dewatering cracks? (Bo rich?) - sericitized.
336.8-365.7	QUARTZ ARENITE (365.7m EOH in 1995)
	Medium, very fine grained sericitic with 10 - 15% thin, silty argillaceous quartz wacke. Interbeds, occasional rip-up clasts and cherty fragments; locally pervasive chloritization and sericitization on and around incipient fractures. Flamed tops common (tops up).
	336.9-337.3m very thin laminar beds (silty argillite) to 3mm
	339.4-339.5m " "
	347.7-348m " "
	359.5-359m? " "
	362.2-362.3m " "
	365.2-365.7m " "
	348.5 - 349m; quartz arenite with minor albitization, strong chloritization (disrupted) and strong sericitization, silicified with fine grained pyrrhotite disseminated along beds and Bo enriched? dewatering? cracks.
	350.5m - 10cm sheared and distorted bedding (argillaceous).
	363.3m - quartz vein disrupts beds, strongly chloritic and sericitic altered. Contains chlorite, sericite, actinolite, biotite and ? very small grained

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	rare tourmaline needles. Overall: Last 30m of core - very sericitic and chloritic with fine grained disseminated pyrrhotite and occasional clasts throughout. Medium-thick bedded quartz arenite.
365.7-369.92	<u>ARGILLACEOUS QUARTZITE</u> (365.7m start of hole for 1996) Argillaceous quartzite. Moderate bedding - bedding angle ~75°. Some quartzite interbedded.
369.92-375.52	<u>QUARTZITE</u> Quartzite (interbedded argillaceous). Bedding angle ~75°.
375.52-382.51	<u>ARGILLACEOUS QUARTZITE AND QUARTZITE</u> Interbedded argillaceous quartzite and quartzite (almost 50/50). Bedding angle ~70°.
382.51-392.6	<u>QUARTZITE</u> Quartzite (minor argillaceous). Bedding angle ~77°. 391.01m - bleached quartzite? (pyrite present). 391.14m - bedding angle ~70°, surrounding beds disrupted. 391.71m - minor shear zone ~25° trend (pyrite with quartz fracture filling).
392.6-397.45	<u>QUARTZITE</u> Quartzite (argillaceous quartzite for first 20cm, after, minor argillaceous interbedded. Bedding angle ~70°.
397.45-398.46	<u>QUARTZITE</u> Finely bedded argillaceous quartzite (interbedded quartzite). Flute/flame structures (dewatering) present. Bedding angle ~70°.
398.46-401.1	<u>QUARTZITE</u>



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	Massive quartzite. Bedding angle ~70°.
401.1-404.7	QUARTZITE Fine bedded argillaceous quartzite. Interbedded quartzite in thick beds in middle of section ~15cm thick. Flute/flame structures, undulatory bedding. Bedding angle ~60°.
404.7-413.85	QUARTZITE/ARGILLITE Interbedded quartzite/argillaceous 70%/30%. Thickly interbedded quartzite. Bedding angle ~60°. Quartzite bed thickness is 15 - 30cm. Garnets at 413.61m.
413.85-416.05	QUARTZITE Argillaceous quartzite. Bedding angle ~70°.
416.05-421.88	QUARTZITE Thickly interbedded quartzite/argillaceous 70/30. Bedding angle ~70°. Quartzite bed thickness is 15 - 30cm.
421.88-430	INTRUSIVE Gabbro. Alteration of quartzite along fractures near contact. Chill margin present. Pyrite throughout. Quartzite veining. Gradational contact at 430m.
430-436.71	QUARTZITE/ARGILLITE Thin package of interbedded quartzite and argillaceous quartzite. Intensely quartz veined, Cl rich.
436.71-441.52	INTRUSIVE Gabbro - gradational contact.

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441.52-454.75	VEINS Quartz vein, po and chalcopyrite.
454.75-455.21	VEINS Zone of quartz veining and po, chalcopyrite deposition.
455.21-464.48	VEINS Quartz vein (po and chalcopyrite).
464.48-467.12	VEIN Quartz vein and po.
467.12-469.33	MINERAL Po.
469.33-481.55	TRANSITION Gradational.
481.55-485.48	QUARTZITE Quartzite (minor argillaceous beds). Cl altered. Quartz vein (po and chalcopyrite) at 482.81m. 484.31m - 484.56m, zone of garnets (bleached area also).
485.48-511.94	QUARTZITE/ARGILLITE Interbedded quartzite and argillaceous. Bedding angle ~75°. 494.25m - po in fracture. Garnets at 493.92m. Po zone at 500.17m. Bedding angle ~80°. Flute and flake structures present (dewatering).

Quartzite, garnet/chlorite throughout and in large vug. Quartzite/argillite. Po/Cpy in fracture. Evidence of dewatering. Interbedded quartzite and more argillaceous rich units. Cl and Po along fractures throughout. Bedding angle

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	<p>~70°. 501.27m - zone of Po and intense Cl alteration, some Garnets. Possible Marker? Quartzite (minor argillite beds), Cl alteration throughout. Bedding angle ~68°. Argillite moderately bedded, some rip-up clasts. Dewatering evident. Bedding angle ~72°. 505.96m - possible fragmental. Quartzite, minor argillite, white speckling - sericite. 507.37m - Quartzite/argillite - moderate bedding. Minor rip-ups throughout. Some Cl alteration. Disrupted bedding. Bedding angle ~72°.</p>
511.94-513.19	<p>QUARTZITE Quartzite, Cl alteration throughout.</p>
513.19-519.92	<p>QUARTZITE/ARGILLITE Quartz/argillite (50/50). Disturbed bedding. Biotite altered beds. Minor rip-up clasts throughout. Bedding angle ~80°.</p>
519.92-524.26	<p>QUARTZITE Quartzite - Cl alteration throughout. Fracture.</p>
524.26-552.21	<p>QUARTZITE/ARGILLITE Quartzite/argillite (50/50). Bedding disturbed due to dewatering. Cl alteration throughout. Minor rip-up clasts. Rip-ups throughout. Very interbedded quartzite/argillite. Bedding angle ~80°. 533.09m - disrupted beds, fragmental, rip-up clasts, Po. 541.32m - lots of dewatering structures present in argillite beds. 546.20m - intensely fractured Cl altered zone. 548.64m - disturbed bedding and dewatering. 60/40 quartz argillite. Cl alt throughout. Garnet occurs with Cl in quartzite beds as vugs. Bedding angle ~75°.</p>
552.21-554.25	<p>QUARTZITE Quartzite, altered Cl. Quartz veining with Py throughout. Rip-up clasts throughout.</p>

Meters	Description
554.25-563.36	ARGILLITE Quartz argillite. Massive biotite altered beds. G/Cl zones and rip-ups throughout. Disarticulated (dewatering) beds. Bedding angle ~75°.
563.36-572.11	QUARTZITE Quartzite - minor argillite.
572.11-580.82	QUARTZITE/ARGILLITE Quartzite/ argillite - finely bedded and Cl altered throughout. Disrupted beds, rip-ups and possible fragmental. Bedding angle ~75°.
580.82-587.12	QUARTZITE Quartzite with minor disrupted argillite beds. Fractured zone. Bedding angle ~75°. Quartz veins present.
587.12-620.28	ARGILLITE Argillite - finely bedded and minor quartzite. G/Cl alteration occurs in quartzite zone. Some bedding quite disrupted. Minor rip-up clasts (fragmental?). Bedding angle ~75°. 597.41m - Argillite - minor quartzite (usually associated with alteration). Minor clasts, most beds disrupted (dewatering). Bedding angle ~75°. Possible Marker at 607.77m, finely laminated beds. 612.65m - bedding generally fine and not disrupted as much. 70% arg, 20% quartz/arg, 10% quartz. Bedding angle ~75°.
620.28-638.1	ARGILLITE/QUARTZITE Quartz/argillite (40/60). Disrupted bedding, numerous isolated fragments. Bedding angle ~75°. Cl/Bio/G alteration throughout. 633.98m - Argillite/Quartz. Bedding angle ~70°.
638.1-649.2	QUARTZITE Quartzite (minor argillite). Massive. Possible fragmental. Bedding angle ~70°.

Meters	Description
649.2-677.37	ARGILLITE Quartz/argillite. Finely bedded argillite. Salt and pepper quartzites. Beds increasingly disrupted. Bedding angle $\sim 70^\circ$ . 653.49m - possible fragmental, argillite beds disrupted. Bedding angle $\sim 65^\circ$ . 670.56m - Bedding angle $\sim 70^\circ$ .
677.37-682.7	QUARTZITE Quartzite with minor finely bedded argillite. Argillite beds disrupted with minor fragmentation throughout. Bedding angle $\sim 75^\circ$ .
682.7-702.6	QUARTZITE/ARGILLITE Quartz/Argillite (60/40) - bedding disrupted with minor fragmentation throughout. Bedding angle $\sim 70^\circ$ . 691.87m - Bedding angle $\sim 67^\circ$ . Bedding disrupted, large clasts throughout. 694.94m Quartz/argillite (65/35) disrupted bedding and clasts - possible fragmentation. Bedding angle $\sim 65^\circ$ .
702.6-709.5	QUARTZITE Quartzite - minor argillite beds - disrupted. Clasts throughout. Fragmented? Bedding angle $\sim 65^\circ$ .
709.5-736.93	ARGILLITE Quartz/argillite - bedding fine, not as disrupted. Clasts not as common. 710.18m - zone of fracturing and Cl alteration. Bedding angle $\sim 68^\circ$ . Bedding becomes more disrupted downward. 722.38m - quartz/argillite (70/30). Bedding becomes disrupted. Bedding angle $\sim 71^\circ$ . 731.52m - Quartz/argillite (70/30). Bedding fine and commonly disrupted. Bio/Cl throughout. Bedding angle $\sim 70^\circ$ .
736.93-745.02	QUARTZITE Quartzite - salt and papper appearance. Coarse grained Bio rich. Bedding angle $\sim 67^\circ$ .

Meters	Description
	Quartz vein present.
745.02-760.3	QUARTZITE/ARGILLITE Quartz/Argillite (60/40). Bedding very disrupted. Finely bedded argillite in coarser salt and pepper quartzite. Clasts common. Bedding angle ~65°. Quartz vein at 756.1m.
760.3-798.4	QUARTZITE Quartzite - salt and pepper, coarse grained. Bedding angle ~65°. 756.09m - Quartz/argillite. Bedding disrupted, numerous clasts. Not as much alteration. Bedding angle ~60°. Quartz vein present at 787.60m. Py and Po throughout, Zinc at 789.43m. Bedding angle ~70°.
798.4-804.97	QUARTZITE Quartzite - coarse salt and pepper. Py present. Bio, Alb(?) alteration. Bedding angle ~70°. Quartz veins present.
804.97-810.55	QUARTZITE/ARGILLITE Quartzite/argillite - finely bedded, not as disrupted. Bio alteration. Bedding angle ~68°. 804.67m - Po and strataform Po (minor Zn?). Possible marker at 806.19m. Bedding angle ~78°.
810.55-845.26	QUARTZITE/ARGILLITE Quartzite/argillite - light gray - sericite present. Cl alteration throughout. Po common. Light colored bands throughout. Massively bedded. Bedding angle ~65°. 822.96m - 845.26m - Po throughout. Section getting more silicified. Numerous fractures with Cl alteration. Bedding angle ~70°. Silicate bed at 833.63m. Quartz veining with come Cl.
845.26-868.81	QUARTZITE Quartzite with minor lighter colored argillite beds. Po throughout.

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	Massively bedded. Po associated with lighter colored argillite beds. White garnets occur throughout core, not just in association with fine argillite beds like before. Bedding angle $\sim 73^\circ$ at 844.29m, $\sim 70^\circ$ at 854.66m. 862.58m - Quartzite with minor argillite - light colored Po rich. Salt and pepper quartzite, massively bedded, Po Cl rich. Bedding angle $\sim 75^\circ$ .
868.81-873.17	QUARTZITE/ARGILLITE Quartzite/argillite. Argillite units very light in color associated with Po. Silicate layers. Bedding angle $\sim 67^\circ$ .
873.17-890.06	QUARTZITE Quartzite - zones of fine bedded argillite within quartzite. Collage beds darker in this unit. Cl, G, and Bio throughout. Bedding angle $\sim 80^\circ$ .
890.06-934.43	ARGILLITE Quartz/argillite. Moderate to finely bedded argillite and quartzite. Not as altered as previous boxes. Po throughout. Increasing Bio alteration. Quartzite units still thick. Bedding angle $\sim 73^\circ$ . 906.47m - zone of intense quartz veining associated with Cl/Po. Some clasts and disrupted beds seen. Bedding angle $\sim 75^\circ$ . 911.96m - zone of intense fracturing and Cl alteration. brittle altered rock. 921.16m stratiform Po, Bedding angle $\sim 70^\circ$ . 930.85m - intense quartz veining.
934.43-990.98	INTRUSIVE Gabbro. Gets coarser grained towards center. Po present, quartz veining. Biotite rich zones throughout with minor Po associated with some Bio/Cl zones. 968.04m - highly fractured and quartz veined. Bio/Cl altered. 978.41m much finer grained than before.
990.98-1003	ARGILLITE Quartz/argillite. Finely bedded, more argillite beds than before.

Meters	Description
	Darker gray color with dark reddish brown tint. Not as altered. Minor stratiform Po/Py throughout. Bedding angle ~40°.
1003-1019	QUARTZITE Quartzite - dark gray, massive. Minor fine argillite beds. Quartz veining. Increasing Bio alteration throughout. Bedding angle ~45°.
1019-1044.5	ARGILLITE Argillite - finely bedded (minor quartzite). Not as much Bio alteration as before. Minor stratiform Po. Some thicker beds of argillite/quartzite throughout. Bedding angle ~33°. 1024.13m - minor Bio/Cl alteration throughout. Not as much Po. 1036.32m - increase in stratiform Po, still minor though.
1044.5-1066.97	QUARTZITE Quartzite - ~1043.63m Dip test ~70°. Po present. Bio/Cl/G alteration. Bedding angle ~50°.
1066.97	END OF HOLE



Drill Hole Record

Property: MOYIE  
District: Fort Steele M.D.  
Hole No: SMC-96-1  
Length of Hole: 74.37  
Commenced: 16-Jul-96  
Completed: 18-Jul-96  
General Location: On Moyie River near Skidoo Club  
Co-ordinates: 568434m E., 5469000m N.  
Elevation: 1318m Elev.  
Inclination: -45°  
Azimuth: 160°  
Dip Test Results: None  
Hole/Core Size: NQ  
Logged By: Jim Stemler  
Objective: Test S. Moyie River structure  
Location of Core: 3380 Wilks Road, Cranbrook  
Drilled By: Lone Ranger Drilling  
Type of Drill: Longyear 44  
WP7 File No: Tplog.15  
Owner: Hastings Management Corp.  
1000-675 W. Hastings St.  
Vancouver, B.C., V6B 1N2  
Operator: Sedex Mining Corp.  
3380 Wilks Road  
P.O. Box 215  
Cranbrook, B.C., V1C 4H7

Meters	Description
0-18.59	OVERBURDEN
18.59-23.93	FAULT GOUGE Possible fault gouge. Quartzite with talc beds at: ~70'3" to 71', ~74'8" to 75'2", ~73'5" to 74', ~76' to 76'9", ~77'6" to 78'1". Bedding angle at ~50°. Possible fault gouge. Bedding angle ~50°.
23.93-34.29	QUARTZ ARGILLITE Quartz/argillaceous, salt and pepper appearance, talcy in places, collage beds throughout, Fe-Garnet throughout Cl alt throughout. Bedding angle at ~55°. Possible Fault gouge at 30.48m. Bedding angle ~55°.
34.29-40.79	QUARTZITE Quartzite. Fe-Garnet and Cl throughout. Numerous collage beds. Dark to medium gray. Less Fe-Garnet throughout than previous boxes. Bedding angle ~50°.
40.79-46.79	ARGILLITE Argillaceous. Much less altered than previous box. Fine bedded argillaceous. Minor quartzite around collage beds. Minor clasts and disrupted bedding. Bedding angle ~54°.
46.79-74.37	QUARTZ ARGILLITE Quartz/argillaceous. Some disrupted bedding and clasts. Minor Cl throughout. Fault gouge. Bedding angle ~49°. Possible marker at 22.91m to 24.7m. Minor disrupted bedding and clasts. Minor Cl alt in localized areas throughout. Disrupted bedding and clasts increase toward bottom of hole. Bedding angle ~53°.
74.37	END OF HOLE

Drill Hole Record

Property: MOYIE  
District: Fort Steele M.D.  
Hole No: SMC-96-2  
Length of Hole: 86.26 m  
Commenced: 18-Jul-96  
Completed: 19-Jul-96  
General Location: S. Moyie River near Skidoo Club  
Co-ordinates: 568434m E., 546900<sup>0</sup>m N.  
Elevation: 1318m Elev.  
Inclination: -45°  
Azimuth: 200°  
Dip Test Results: None  
Hole/Core Size: NQ  
Logged By: Jim Stemler  
Objective: Test Moyie River fault structure  
Location of Core: 3380 Wilks Road  
Drilled By: Lone Ranger Drilling  
Type of Drill: Longyear 44  
WP7 File No: Tplog.16  
Owner: Hastings Management Corp.  
1000-675 W. Hastings St.  
Vancouver, B.C., V6B 1N2  
Operator: Sedex Mining Corp.  
3380 Wilks Road  
P.O. Box 215  
Cranbrook, B.C., V1C 4H7

Meters	Description
0-14.94	OVERBURDEN
14.94-22.4	QUARTZ ARGILLITE Quartz/argillaceous - highly fractured; Cl alt; fault gouge. Fe-Garnet and collage beds throughout. Quartz also. Fault gouge at 22.4m. Bedding angle ~45°.
22.4-51.05	INTRUSIVE Gabbro dyke. Intensely altered, faulted, fractured. Zone of intense fracturing and alt fault zone. Contacts are altered and fractured. Zn/Pb along fractures.
51.05-53.74	QUARTZITE Quartzite. Cl/Bio/G alt throughout. Massive unit with numerous fractures.
53.74-86.26	QUARTZ ARGILLITE Quartz/argillaceous 50/50 Cl alt throughout. Numerous Fe - G and collage beds. Beddings disrupted. Zone of intense fracturing and quartz filling. Less Cl alt as you go down section. Less alt in general. Possible marker at 75.65m - 76.75m. Bedding angle ~55°.
86.26	END OF HOLE

Drill Hole Record

Property: MOYIE  
District: Fort Steele M.D.  
Hole No: SMC-96-3  
Length of Hole: 211.84 meters  
Commenced: 19-Jul-96  
Completed: 23-Jul-96  
General Location: Near S. Moyie River placer operations  
Co-ordinates: 570364m E., 54709667m N.  
Elevation: 1285m Elev.  
Inclination: -60°  
Azimuth: 180°  
Dip Test Results: -60° at 211.84 meters  
Hole/Core Size: NQ  
Logged By: Jim Stemler  
Objective: Test fragmental  
Location of Core: 3380 Wilks Road  
Drilled By: Lone Ranger Drilling  
Type of Drill: Longyear 44  
WP7 File No: Tplog.17  
Owner: Hastings Management Corp.  
1000-675 W. Hastings St.  
Vancouver, B.C., V6B 1N2  
Operator: Sedex Mining Corp.  
3380 Wilks Road  
P.O. Box 215  
Cranbrook, B.C., V1C 4H7

Meters	Description
0-19.81	OVERBURDEN
19.81-46.79	<p>FRAGMENTAL</p> <p>Fragmental - small dispersed clasts semi-founded or elongate (1 - 3mm). Clasts are light gray and black (soft). Py clasts also present becoming more numerous (along with other clasts) down section. Hosted in a quartz wacke (harder than argillite, softer than quartzite). Fault zone at 28.65m - numerous fractures with limonite. Massive unit (no bedding). Clasts become more numerous (still small). Beyond 28.65m clasts are fewer, predominantly light gray-black. Py still present/limonite alt along fractures still present. Still fragmental. Clasts become more numerous and larger (1 - 6mm) down section.</p>
46.79-50.7	<p>QUARTZWACKE</p> <p>Massive quartz wacke (soft). Some breccia present. Intensely fractured throughout and limonite alt.</p>
50.7-68.89	<p>FRAGMENTAL</p> <p>Fragmental - fewer clasts, mainly light gray. Some large (20mm). Py still throughout. Not as alt as previous. Fault gouge at 57.3m. Larger and more angular clasts down section (40mm).</p>
68.89-78.58	<p>QUARTZ/ARGILLITE</p> <p>Quartz/argillite. Disrupted bedding. Mainly quartzite (70/30) Po, Py, and Cl alt throughout. Py disseminated throughout and along fractures. Bedding angle ~65°.</p>
78.58-80.31	<p>FRAGMENTAL</p> <p>Fragmental - elongate oriented clasts.</p>

Meters	Description
80.31-84.12	QUARTZITE Quartzite
84.12-100.4	FRAGMENTAL Fragmental. Large fragments, some angular, other smaller elongate/rounded ones. Clasts are argillaceous, matrix harder. Py throughout. Po minor but also throughout. 91m - quartzite intensely fractured. Numerous fractures filled with Py - common Py. Hosted in coarse quartz wacke. Argillaceous. Down section - large pieces of argillaceous bedding ripped up in fragments.
100.4-112.01	QUARTZ WACKE Quartz wacke/argillite interbedded. Bedding is disrupted. Py common throughout. A few clasts in unit. Fault zone at 103.6m intensely fractured. Fault gouge at 109.7m.
112.01-117.19	QUARTZ/ARGILLITE Quartz/argillite. Fine bedded argillite. Bleached (albitized) zones throughout. Py common along fractures. Bedding angle ~43°.
117.91-122.47	QUARTZITE Quartzite - numerous bleached zones throughout. Massive unit.
122.47-143.03	QUARTZ ARGILLITE Quartz/argillite - finely bedded argillite in more massive quartzite. Minor disrupted bedding and clasts. Cl alt throughout - minor Py on fractures. Bio rich zone of concretions at 136.85m. Bedding angle ~65°.
143.03-149.29	ARGILLITE Argillite - disrupted finely bedded unit. Bedding angle ~65°.

Meters

Description

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149.29-152.86	QUARTZ ARGILLITE Quartz/argillite. Bedding angle ~66°.
152.86-183.68	ARGILLITE Argillite - intensely faulted/fractured. Bedding disrupted. Bedding angle ~45°. Cl alt along fractures. Possible fault zone at 154.8m and 156.6m. Fault zone from 159.1m - 161.5m. Marker zone from 162.61m - 163.88m. 167.64m - Argillite with disrupted bedding, minor clasts, and minor Cl alt. Numerous fault zones. Bedding angle ~70°.
183.68-196.29	QUARTZ ARGILLITE Quartz argillite. Thin bedded argillite, very disrupted. More massive quartzite. Cl alt throughout. Minor Py along fractures. Minor clasts. Bedding angle ~75°. Marker zone at 189.22m - 190.29m. Numerous fault zones.
196.29-200.35	QUARTZITE Massive quartzite. Bedding angle ~65°.
200.35-211.84	QUARTZ ARGILLITE Quartz/argillite - finely bedded argillite. Moderately disrupted. Cl alt throughout. More massive quartzite beds and alternating G. Bedding angle ~70°. 204.22m - quartz/argillite, moderate Cl alt throughout. G throughout. Bedding angle ~67°.  60° measurement on bottle test @ 211.84 meters (695 feet).
211.84	END OF HOLE



## Drill Hole Record

Property: MOYIE  
District: Fort Steele M.D.  
Hole No: SMC-96-4  
Length of Hole: 138.38 meters  
Commenced: 24-Jul-96  
Completed: 27-Jul-96  
General Location: Near S. Moyie River placer operations  
Co-ordinates: 570364m E., 5470967m N.  
Elevation: 1285m Elev.  
Inclination: -90°  
Azimuth: 0°  
Dip Test Results: None  
Hole/Core Size: NQ  
Logged By: Jim Stemler  
Objective: Test fragmental  
Location of Core: 3380 Wilks Road, Cranbrook  
Drilled By: Lone Ranger Drilling  
Type of Drill: Longyear 44  
WP7 File No: Tplong.18  
Owner: Hasting Management Corp.  
1000-675 W. Hastings St.  
Vancouver, B.C., V6B 1N2  
Operator: Sedex Mining Corp.  
3380 Wilks Road  
P.O. Box 215  
Cranbrook, B.C., V1C 4H7

Meters

Description

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0-12.19	OVERBURDEN
12.19-16.84	FRAGMENTAL Fragmental - rounded and semi-rounded argillite clasts up to 1cm long in an argillite/quartzite matrix. Clasts are light gray to black and extremely fractured with limonite alt along fractures. Cl alt throughout.
16.84-26.93	ARGILLITE/QUARTZITE Argillite/quartzite. Massive unit, hard, scratches. Salt and pepper appearance. Limonite alt on fractures.
26.93-58.49	FRAGMENTAL Fragmental - similar to one described above. Py inclusions throughout. Some large clasts up to 1.5cm long. Clasts are not uniformly distributed throughout but are concentrated in certain parts of the unit relative. Clasts are rounded to semi-rounded, light gray to black argillite. Limonite alt along fractures. Chicken track Bio alt throughout as well as Bio concretions. Py along fractures as well as disseminated throughout. Between 43.28m - 46.63m core intensely fractured and broken up, possibly by drill. Possible fault at 51.21m and 52.12m. Fragments become much less common and smaller (0.1 - 0.4cm).
58.49-69.65	FRAGMENTAL Fragmental - Argillite/quartzite matrix. Small angular to subangular clasts. Clasts light gray to black argillite <0.5cm long. Some clasts are rounded. Clasts are rare in some areas, more common in others. Minor Py on fractures. Minor Py dissipated in matrix. Cl alt on some fractures.
69.65-91.14	ARGILLITE/QUARTZITE Argillite/quartzite. Zone in intense Cl alt as core is broken up throughout unit. Pyrite common along fractures. Possible fault zone.

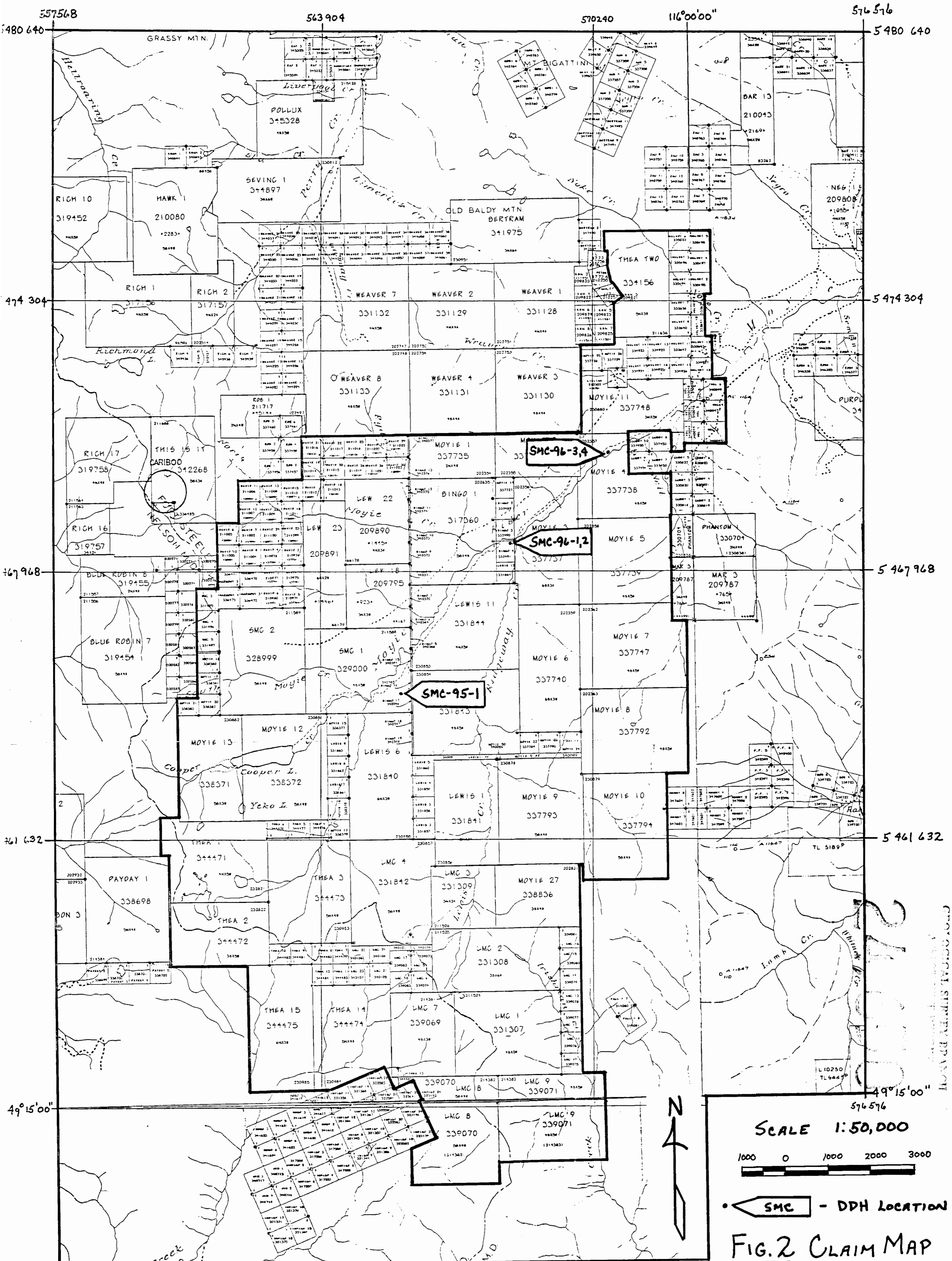
Meters

Description

Page 2 of 2

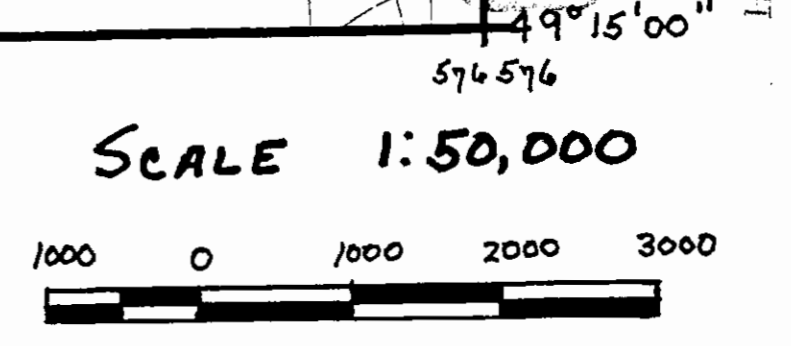
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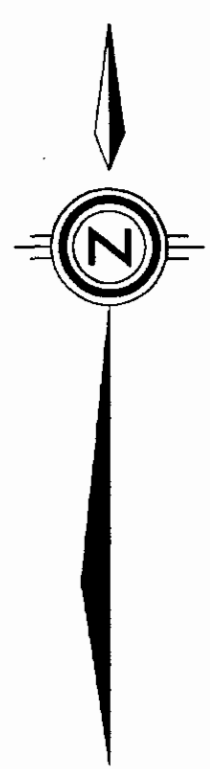
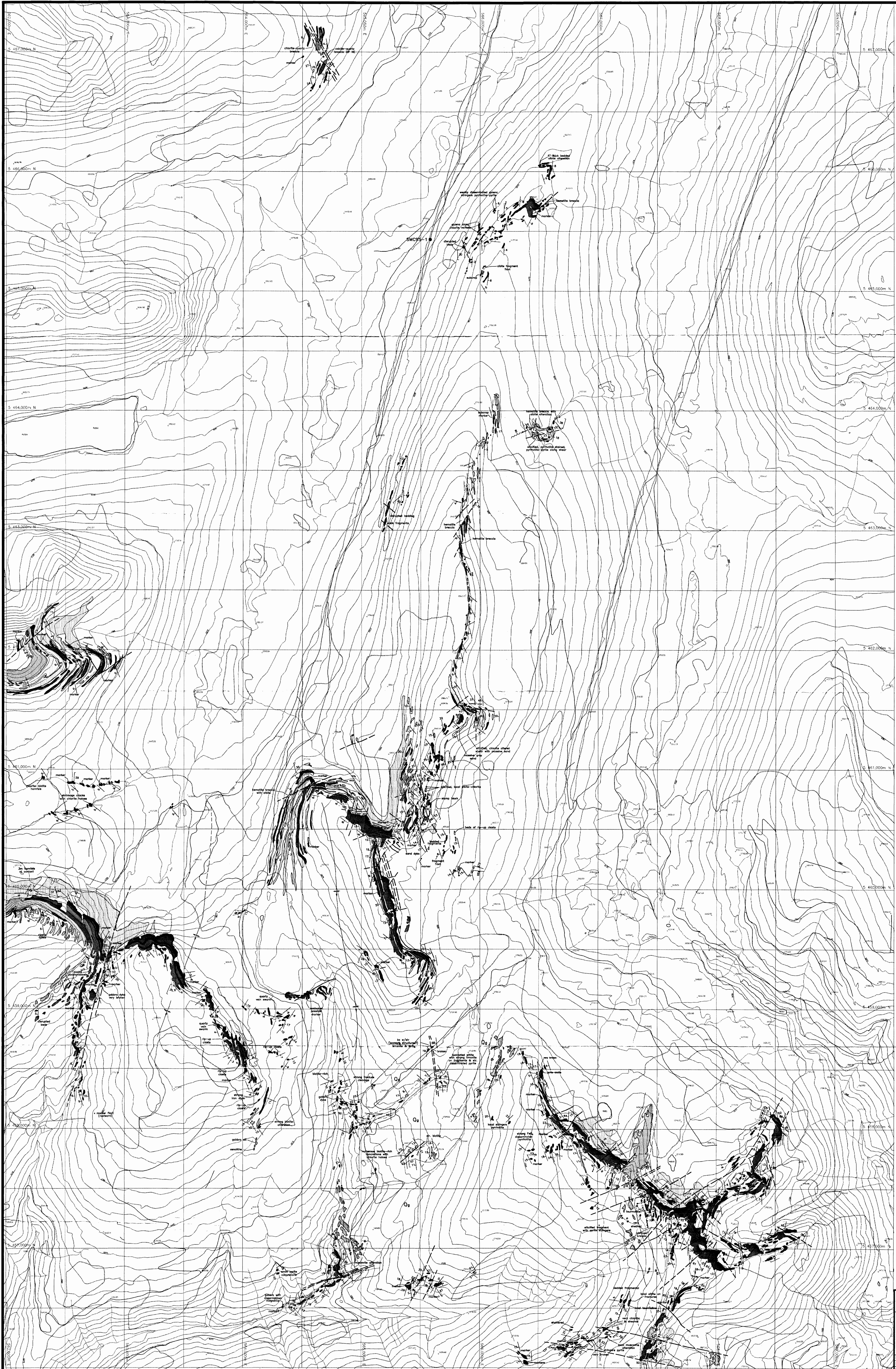
91.14-106.68	FRAGMENTAL Fragmental - quartzite matrix. Very sparse semi-rounded to angular fragments up to 1.5cm long. Core is intensely fractured. Minor Py along fractures and throughout. Clasts are light gray to black argillite.
106.68-109.73	QUARTZITE Quartzite - massively bedded. Cl alt throughout. Minor Py along fractures.
109.73-115.44	QUARTZITE Quartzite - Bedding(?)
115.44-115.87	FRAGMENTAL Fragmental - very sparse clasts similar to above. Minor Py on fractures. Argillite quartzite matrix.
115.87-138.38	QUARTZ ARGILLITE Quartz/argillite. Finely bedded argillite in more massive quartzites. Possible marker at 120.46m. Core is broken possibly due to drilling. May be tourmaline (?) rich zone (some of the pieces are very hard. Bedding angle ~90°.
138.38	END OF HOLE



◀ SMC - DPH LOCATION

FIG. 2 CLAIM MAP





- ROCK TYPES**
- Gabbro Dykes and Sills
  - Fragmentals  
sedimentary units consisting of monolithic or polyhedral clasts, sedimentary breccias related to current action processes are not classified as fragmentals
  - Disrupted Beds  
sedimentary units in which bedding has been disrupted or totally destroyed by either liquefaction or fluid escape processes
  - Quartz Wacke Turbidites  
siltite and siltly quartzite, medium to thick beds
  - Quartz Turbidite  
clean thick bedded quartzite
  - Laminite  
laminar siltly argillites, often with thin distinct alternating light and dark bands (marker units), typically high in sulphide, carbon, and phosphate
- ALTERATION**
- Tourmaline  
occurs as fine needles disseminated or matted within select beds or as massive ophiolite replacements
  - Quartz silicification and veins
  - Chlorite  
serpentine and as halos around veins and shrinkage cracks adjacent to sills and dykes
  - Amphibole  
occurs replacing clastic grains and matrix in late brittle faults and within narrow aureoles around gabbro sills and dykes
  - Muscovite  
generally pervasive alteration of detrital feldspars, also a late fine-grained sericitic alteration associated with brittle faults
- STRUCTURAL FEATURES**
- outcrop, small outcrop
  - geological contact: known, approximate
  - faults: approximate, inferred
  - fault: dip known
  - bedding: dip known, dip unknown
  - bedding: dip known, direction & plunge of L1 lineation
  - cleavage: S1, S2
  - cleavage: S1 with L1 lineation, S2 with L1 lineation
  - anticline: plunge direction known
  - syncline: plunge direction known
  - drillhole: 1995
- OTHER FEATURES**
- trees
  - road
  - river

approximate outline of surface projection of the Sullivan deposit at 1:50,000

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

# 24,650

contour interval 25 metres

scale: 1:10,000

**Kenecott Canada Inc.**  
Vancouver

**MOYIE  
GEOLOGY**

BRITISH COLUMBIA, CANADA

NTS: 83F Projection: UTM11, NAD83 Drawn by: HQ  
Date: 23/09/98 Author: RP, CL, JS  
File: 84MGE010 Scale: 1:10,000 **FIGURE 4.**