



1980 DIAMOND DRILLING REPORT
ON THE
SIAN CLAIM GROUP
NADALEEN RANGE, YUKON TERRITORY
NTS 106-C-2
(64°07'N 132°45'W)

Shelley C. James
November 10, 1980

090697

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LOCATION MAP YUKON TERRITORY

SCALE: 1 inch = 64 miles

LEGEND

★ SIAM CLAIMS

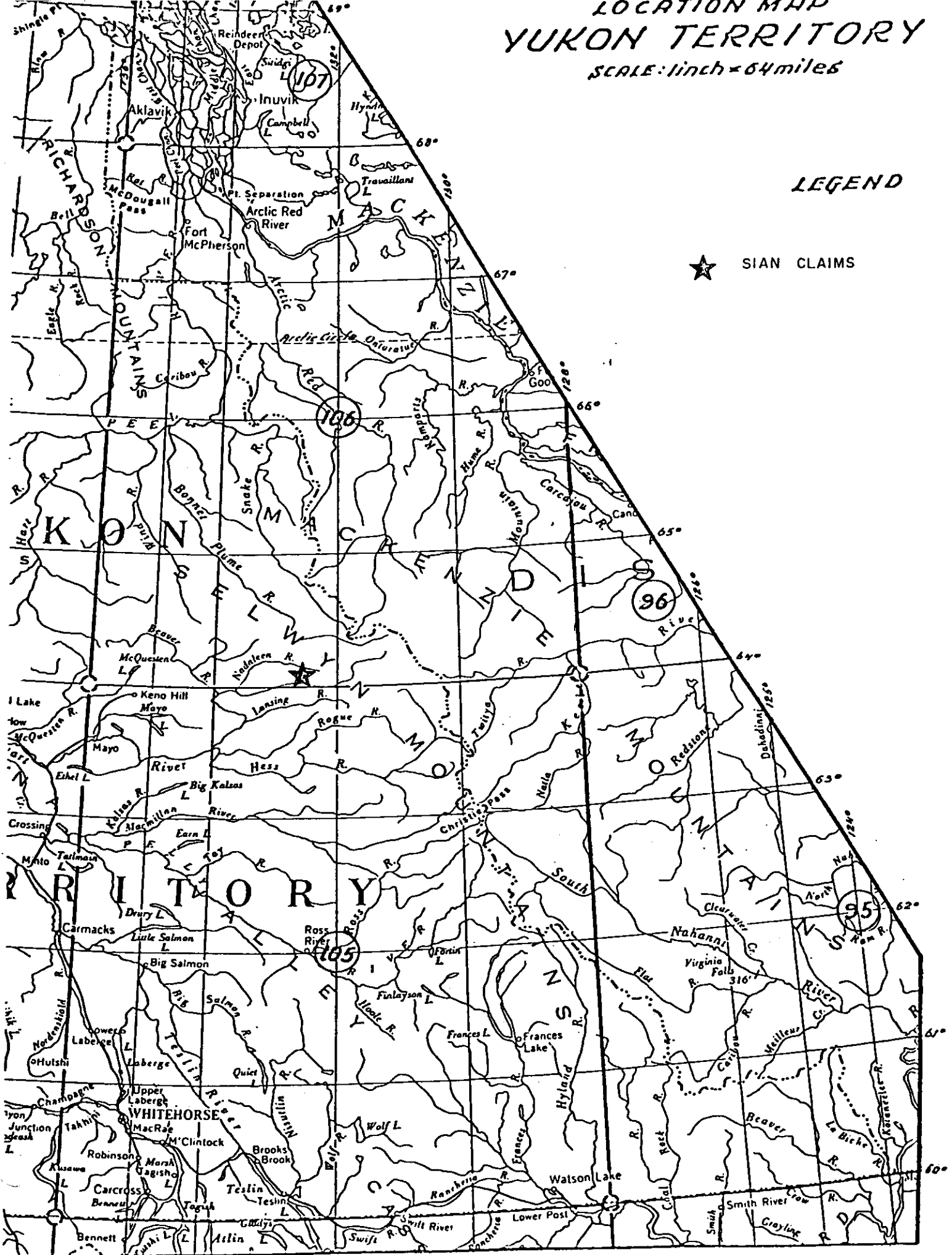


Fig. 1

1. SUMMARY

One diamond drill hole totalling ^{240m} ~~786~~ feet was drilled on the Sian claims as part of the Craig Joint Venture exploration programme in 1980.

No significant mineralization was intersected.

No further drilling is proposed at present.

A total of \$52,885.07 was expended on Sian claims drilling in 1980.

2. INTRODUCTION

The 1980 drilling programme conducted on the Sian claims formed part of Canadian Superior Exploration Limited's Craig Joint Venture project in central eastern Yukon (Fig. 1).

The Sian claim group consists of 104 adjoining claims approximately 110 miles east-northeast of Keno Hill.

The property is underlain by Proterozoic shales, grits and carbonates; and Paleozoic carbonates and shales south of the extension of the so-called Dawson thrust fault.

Drilling was proposed following exposure of lead-zinc mineralization in a number of trenches in 1979.

3. LOCATION AND ACCESS (Fig. 1)

The Sian claims (64°07'N, 132°45'W) are situated in the Mayo Mining District, some 145 miles east-northeast of Mayo. (NTS 106-C-2).

Access to the property is by helicopter from the operational base "Rackla City" camp. This base 15 miles north west of the Sian group, on the East Rackla river, is serviced by fixed wing aircraft from Mayo and Whitehorse.

4. PROPERTY (Figs 2 and 3)

The block of 104 claims extends over approximately 9 square miles midway between Ortell Lake and the Nadaleen River to the north. Elevations vary from 6000 feet A.S.L. along the southern boundary to 3000 feet A.S.L. in river valleys to the north, east and west. Vegetation varies from spruce and alpine fir to open alpine tundra.

<u>Claim name</u>	<u>Date Recorded</u>	<u>Expiry Date</u>	<u>Grant number</u>
Sian no. 1-104	14 September 1976	14 December 1981	YA6771 to YA6874

5. HISTORY OF PREVIOUS WORK

McIntyre Mines Ltd. discovered lead-zinc mineralization, staked and conducted a preliminary evaluation of the Sian claims in 1976. Geological mapping, geochemical and geophysical surveys were undertaken in 1977. Canadian Superior Exploration Ltd. in joint venture with McIntyre Mines evaluated known showings by detailed mapping, sampling and trenching in 1979. Details are contained in reports listed in the bibliography.

6. 1980 PROGRAMME

As part of the 1980 Craig project drilling programme, one diamond drill hole totalling 786 feet was drilled on Sian claim group. (Fig. 4)

6.1 Operations

Helicopter and heating fuel were airlifted to Rackla City camp in May. Field operations supported by a Hughes 500D helicopter were conducted from July 1st to September 17th with a crew varying from 8 to 17 persons. The rig was engaged on the Sian claims from 27th August to 2nd September. Appendices C,D and E indicate personnel employed, a summary of work and helicopter time distribution.

Extensive drill site preparation was necessary as is summarized in appendix F. A Boyles BB 25 A drilling rig with BQ wireline equipment was employed in the work. Two 12 hour shifts operated. Drill statistics for the programme including Sian drilling are summarized in appendix G. Drilling conditions were good. No permafrost was encountered. An Eastman single-shot instrument was used to measure deviation in inclined holes. Logged core is stored in open racks in Rackla City camp.

6.2 Results

The Sian claim group lies immediately south of the so-called Dawson thrust fault which places Hadrynian sediments in contact with those of Ordovician to Devonian age.

Lead-zinc mineralization was exposed in Hadrynian dolomites in trenches in 1979, as detailed in reports listed in the bibliography.

Diamond drill hole CSS-1 (-61.5° , 245°), located 860 feet, north (005°) of claim post YA6771/YA6772/YA6773/YA6774 on claim YA6774 intersected 12 feet of overburden and various dolomites to a depth of 786 feet. Details are contained in appendix H, the core log.

Negligible mineralization was noted.

7. CONCLUSION AND RECOMMENDATION

The potential of the Sian claim group to host an ore body is limited by the limited occurrences of the Craig Dolomite Formation.

Although lead-zinc mineralization is widespread it is low grade as evidenced by trenching and drilling.

No further work is recommended at the present time.

8. BIBLIOGRAPHY

1. Blusson S. 1974 : G.S.C. Open File Report No. 205
2. Birkeland A.O. 1977 : Geological, Geochemical, Geophysical Report; Sian Claim Group
3. Clark A.M.S. 1977 : Reports on the Geology of the Sian Claim Group (Nov. 8 and Dec. 2)
4. Potter R.G. 1979 : Geological Report on the Sian Claim Group Nadaleen Range, Yukon NTS 106 C-2



Shelley C. James
Vancouver, B.C.
November 10, 1980

APPENDIX A

STATEMENT OF EXPENDITURES
SIAN CLAIM GROUP 1980

HELICOPTER - Hughes 500D

- i) 30.8 hrs. drilling programme ie 9.4% of total cost
\$105,832.83 = \$9,948.29
 - ii) Project general : 1/3 of 21.3%=7.1% of total cost
\$105,832.83 = \$7,514.13
 - iii) Helicopter fuel 16.5% of total cost \$10,319.13 =
\$1,702.66
- Sub total \$ 19,165.08

FIXED WING

% proportion using Sian claims drill footage to total
footage 786'/7216' = 10.9% of total cost \$41,437.32 \$ 4,516.67

SALARIES

Geologists : 190 man days @ \$83.70 = \$15,903.00
Assistants : 308 man days @ \$45.00 = \$13,860.00
Cooks : 92 man days @ \$70.00 = \$ 6,440.00
 Craig project total \$36,203.00
Sian claims proportion 10.9% of \$36,203.00 = \$ 3,946.13

OPERATING COSTS

Includes camp provisions, supply services, miscellaneous
equipment for field, drilling, site preparation and
helicopter crews. Sian claims proportion 10.9% of
\$54,919.64 = \$ 5,986.24

DRILLING COSTS

Sian claims proportion of total cost 10.9% of \$161,556.67 = \$ 17,609.68

SITE PREPARATION COSTS

Sian claims porportion : 1 site of total of 15;1/15 =
6.6% of total cost \$13,688.40 = \$ 903.43

ASSAYS: none


MOBILIZATION AND DEMOBILIZATION

Sian claims proportion of total cost 10.9% of \$6,952.62 = \$ 757.84

Total = \$ 52,885.07

I certify the above expenditures to be a true and accurate accounts of
expenses incurred.

Dated on November 10, 1980 in Vancouver, B.C.


S.C. James

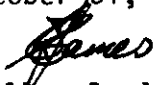
APPENDIX B

CERTIFICATE

I, Shelley C. James do hereby certify that:

1. I am a practicing geologist with residence at Vancouver, B.C.
2. I am a graduate of the University of the Witwatersrand, South Africa (B.Sc. 1970, B.Sc.Hon.Geol. 1971)
3. I am a member in good standing of the Geological Society of South Africa.
4. I have been engaged in the practice of mineral exploration in South Africa and Canada since graduation.
5. I personally supervised the drilling programme on the Sian claims described in this report.
6. I have no financial interest in the subject property.

Dated at Vancouver, B.C.
October 31, 1980


Shelley C. James

APPENDIX C
PERSONNEL EMPLOYED

CANADIAN SUPERIOR EXPLORATION LTD.

R.V. Beavon	Project Manager	8720 Millmore Rd., Richmond, B.C. 274-2208
S.C. James	Supervisor, Geologist	1407-2024 Fullerton Ave. N. Vancouver, B.C. 926-0245
E. Angus	Camp Manager	12474 Crescent Road Surrey, B.C. 531-4146
G. Nixon	Geologist, mapping	5138 E. Boulevard Vancouver, B.C.
B.Y. Kim	Geologist, temporary support	101-222 Ash Street New Westminster, B.C.
M. Jerema	Prospector & Snr. Assistant	10734 120th Street Surrey, B.C.
C. Angus	Assistant	12474 Crescent Road Surrey, B.C. 531-4146
H. Simpson	Cook	c/o Beggars Roost, R.R.#1 Ganges, B.C. 537-2548
D. Angus	Cook, temporary support	12474 Crescent Road, Surrey, B.C. 531-4146

CONTRACTORS AND SUPPLIERS

Wright Drilling Company - Box 3096 MPP, Kamloops, B.C. 374-9698

D. Wright - Contractor/foreman	A. Bartlett
R. Wright	C. Wright
R. Dougan	

ALC Airlift Corporation - 20769 River Rd., Maple Ridge, B.C. 467-6146

J. Bhanwer - pilot	B. Gibbons - engineer
Y. Nishimura - pilot, temporary support	

M.J. Moreau Enterprises Ltd. - P.O. Box 5282 Whitehorse, Yukon Y1A 4Z2

M.J. Moreau + 1 assistant : site preparation

Casual labour : A. Johnny
N. Moses

Major Services/Suppliers

Air charter : Air North Charter and Training Ltd.
Box 4998
Whitehorse, Yukon Y1A 4Z2

Expediting : Tintina Expediting
Box 159
Mayo, Yukon Y0B 1M0
996-2325

Fuel supplier : White Pass Petroleum Services
Whitehorse, Yukon

Provisions : Graham's Genera Store
Mayo, Yukon

Danny's Dept. Store
Mayo, Yukon

Assays & Analyses : Min-En Laboratores Ltd.
705 W. 15th Street
North Vancouver, B.C.

APPENDIX D

SUMMARY OF WORK

1. Fuel supplies transported to base camp - May
2. Camp preparation - June 23rd - July 15th
3. Drill site preparation - July 15th to August 1st; August 27th - September 8th, 15 sites were prepared; 1 on the Sian claims.
4. Diamond drilling - July 15th to September 17th, 7216 feet were drilled, 786 on the Sian claims.

APPENDIX E

HELICOPTER TIME DISTRIBUTION

Claim group/ area	Geology Mapping	Geology Prospecting Reconn.	Drill Program	Camp/ Misc.	Ferry	Total Hours	% Distribution
Craig Proj-Gen.		25.6		20.2	24	69.8	21.3
Craig-Trent zone			30.55			30.55	9.3
-Nadaleen			68.6			68.6	21.0
-West zone			40.9			40.9	12.5
Rod			65.35			65.35	20.0
Sian	21.3		30.8			52.1	15.9
Total hrs.	21.3	25.6	236.2	20.2	24	327.3	100%
% Distribution	6.5	7.8	72.2	6.2	7.3	100%	

APPENDIX F

SITE PREPARATION SUMMARY AND EXPENDITURE

Extensive drill site preparation was necessary. Simple sites required tree felling and levelling. More complicated sites required tree felling, levelling, benching and blasting.

Contractor J. Moreau and assistant were employed as follows:

<u>Date</u>	<u>Area</u>	<u>No. of Sites</u>	<u>Days</u>	<u>Labour cost (\$400/day)</u>
16-17 July	Trent zone	1	2	800
18-19 July	Nadaleen	1	2	800
20-26 July	West zone	4	7	2800
27-30 July	Rod	3	4	1600
31 July-1 Aug	Sian	1	2	800
27 Aug-3 Sept	Nadaleen	3	8	3200
4-7 Sept	Trent zone	2	4	1600
	Totals	<u>15</u>	<u>29</u>	<u>11600</u>

Total labour	\$11,600
Total mobilization/demob.	\$ 1,600
Total materials	\$ 488.40
Total cost	<u>\$13,688.40</u>

APPENDIX G

MONTHLY DRILL STATISTICS 1980

Month	Period	No. of days	No. of shifts	Footage	Footage per day	Footage per shift	Footage per man shift
July	15-31	16	26	1,987	124.2	76.4	38.2
August	1-31	31	50	3,617	116.7	72.3	36.2
September	1-17	17	20	1,612	94.8	80.6	40.3
Totals		64	96	7,216	113.75	75.2	37.6

No. of shifts excludes entire shifts lost due to moving and poor weather.

1980 : Best footage per shift = 141 ft. (hole CST-1) : Wright Drilling Co.

1977 : Best footage per shift = 310 ft; most holes best shift = 200 to 260 ft. :

Coates Drilling Co.

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

PROPERTY Sian (Claim Group)

LOCATION Near the Nadaleen River, Y.T.

DRILL HOLE No. CSS-1

COMMENCED Aug. 26, 1980

ELEVATION 4550' approx. DIPS -61.5°

SHEET No. 1

COMPLETED Sept. 1, 1980

BEARING 245° 860 ft. north of claim

DEPTH 786 ft. post YA6671-4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
0	15	Overburden, no coring. Casing 0-12'								
15	44.5	Dolomite : Medium-fine grained, grey-dark grey dolomite & dolomite breccia generally massive but locally apparent thin to medium bedded features, with steep dip to C.A. (0 30° @). Weakly & extensively shattered (brecciated). Light-colored crack-fills are mostly of fine-fractured dolomite -ankerite with minor clear calcite chunks. Overall broken core mainly due to near-surface weathering.								
44.5	70	Dolomite breccia : same as the above dolomite more, brecciated by shattering, matrix is sparry dolomitized calcite and ankerite with local zebra texture. Minor collapse bands. Frequent oxidized fractures.								
70	97	Dolomite : Medium grained grey-dark grey, mostly massive dolomite with collapse sparry bands. vuggy sparry bands at 84, 92. Open fractures on local cataclastic bands at 94, local weak oxidized fracture faces								
97	125	Dolomite Breccia : Collapse breccia of same dolomite as above 70-97 with local vague thin bedded feature @ 0 45° to C.A.								

CONTRACTOR: Wright Drilling Ltd.

LOGGED BY: B. Kim

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. CS-1

PROPERTY SIAN (Claim Group)

LOCATION Near the Nadaleen River, Y.T.

SHEET No. 2

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
125	254	Dolomite : grey to dark grey, medium-grained vaguely bedded with local massive intersections, dips usually 0° 25° to C.A., brecciation with hairline fractures to heavy cracking filled with white calcitic veining, local vuggy openings in the above calcitic matrix with quartz. Frequent @ 0-10° slip fractures with black carbonaceous and minor crushed sulphide material. The slip fractures are more closely associated with the banded type. They are parallel to the banding. More sparry for the massive type. Black carbonaceous and crushed-sulphide fractures at 174, 176, 181, 184, 188, 199, 204-207, 214, 223, 225, 228, 239. Moderate to strong textures for collapse breccia at 175. 190-192, 202, 209-220, 224, 231-233, 243-252.								
254	284	Massive dolomite : grey to dark grey massive sparry dolomite of medium grained, locally showing speckled appearance, minor breccia with local zebra-textured banding. Occasionally shows the original bedding (10-20° C.A.) Carbonaceous slip fractures at 261,263. Apparent bedded features at 270, Weak breccia texture as various cracking with calcite-ankerite filling throughout. Minor oncolitic at 284' which is lower contact.								

CONTRACTOR: Wright Drilling Ltd.

LOGGED BY: B. Kim

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. CSS-1

PROPERTY Sian (Claim Group)

LOCATION Near the Nadaleen River, Y.T.

SHEET No. 3

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
284	343	Dolomite with graphitic shale partings : grey to black, mostly thin bedded carbonaceous dolomite with interlaminae of graphitic shale. Local massive sparry intersections. Beddings are mostly 0-20° to C.A. usually curved and cross-cut by carbonate fractures. Mostly shattered and folded (for shale intersections), hairline to fine carbonate crack-fillings are usual for shattered dolomite. Local cataclastic breccia resulted from increased intensity of shattering, usual slip movements for interbedded carbonaceous shale, @ 0°-30° graphic slip faces are usual								
343	393	Dolomitic siltstone and shale : Thin bedded graphitic black shale interbedded with fine grained grey-dark grey dolomitic siltstone, @ 0-25° bedding planes delicately folded in minor scale and cross cut frequently by high angle calcite fills. Local cataclastic breccia occasionally in mosaic texture, @ 0-25° slip planes of bedding occasionally with graphitic split face. Fine grained pyrite cubes in black graphitic bands.								
393	406	Silty dolomite : Medium grey, fine grained massive to weakly banded dolomite mostly brecciated with hairline to crack-filling white veining, occasional weak graphitic fractures of @ 10-30°, bedding planes 0-30° C.A. usually folded and cross cut by carbonate veining and small scale								

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

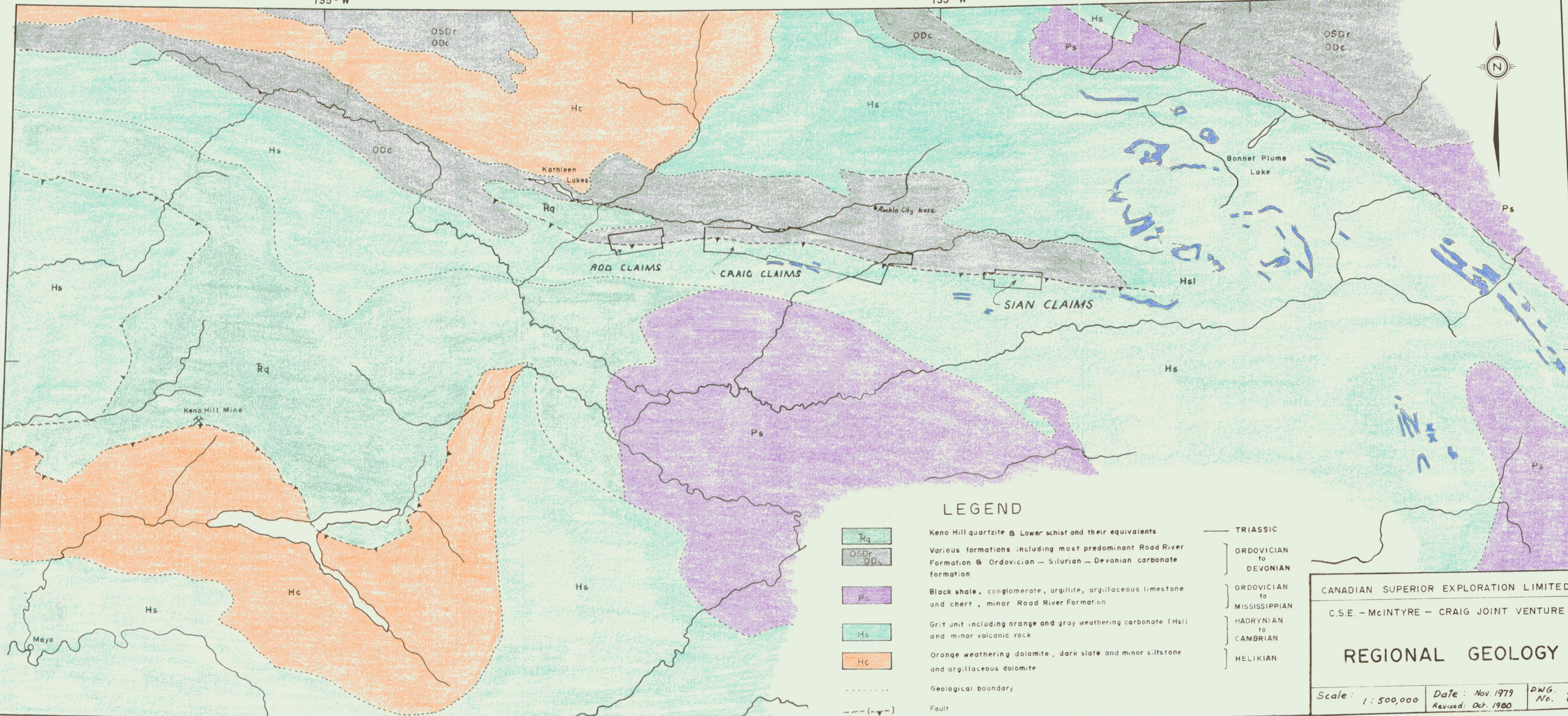
DRILL HOLE No. CSS-1

PROPERTY Sian (Claim Group)

LOCATION Near the Nadaleen River, Y.T.

SHEET No. 5

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE						
		Broken rubbly core with graphitic split fractures 576, 589, 611, 619,											
		623											
627	650	Silty dolomite and graphitic shale interlaminae: Massive to thin-bedded grey to dark grey silty dolomite with variably frequent thin interlaminae of graphitic shale. Usual criss-crossing calcite veinlets and cracks of calcite fill. Weak textures of shatter breccia. Graphitic slips showing very minor pyrite probably with some crushed sulphide on graphitic slip surface											
650	679	Silty dolomite : Well bedded (locally massive), grey to dark grey silty dolomite with only occasional shale partings. Bedding planes mostly 0°-25° to C.A. occasional breccia (cataclastic) with more graphitic and/or calcite-fill matrix.											
679	713	Graphitic shale and dolomitic siltstone : Thin-bedded black graphitic shale inter-bedded with lighter colored dolomitic siltstone, @ 0-40° bedding planes but locally higher angle due to minor scale folding. Usual split bedding plane with slicken-sided graphitic faces. Very graphitic (coaly) spot 681, 691, 701. Weak cross-cut calcite veining and very minor quartz veins, local sparse pyrite cubes.											
713	786	Dolomite and silty dolomite : Grey to dark grey, medium grained massive with local thin bedded (+ 30° to C.A.) very weakly but extensively											



LEGEND

- Rq Keno Hill quartzite & Lower schist and their equivalents
- OSDr
ODc Various formations including most predominant Road River Formation & Ordovician - Silurian - Devonian carbonate formation
- Ps Black shale, conglomerate, argillite, argillaceous limestone and chert, minor Road River Formation
- Hs Grit unit including orange and gray weathering carbonate (Hsl) and minor volcanic rock
- Hc Orange weathering dolomite, dark slate and minor siltstone and argillaceous dolomite
- Geological boundary
- - - (-) Fault

- TRIASSIC
- ORDOVICIAN to DEVONIAN
- ORDOVICIAN to MISSISSIPPIAN
- HADRYNIAN to CAMBRIAN
- HELIKIAN

CANADIAN SUPERIOR EXPLORATION LIMITED
 C.S.E. - MCINTYRE - CRAIG JOINT VENTURE
REGIONAL GEOLOGY

Scale: 1:500,000 Date: Nov. 1979 DWG. No. 2
 Revised: Oct. 1980



N.T.S. 106 - C-2



CANADIAN SUPERIOR EXPLORATION LIMITED

CSE - McINTYRE CRAIG JOINT VENTURE

SIAN CLAIMS 1-104

LOCATION MAP

Drawn by: SCJ

Date: Nov. 1980

DWG. P184-80
Fig 3

Laminated dolostone probably terminated at this point by a fault, at edge of outcrop.

Continued well bedded laminated dolostone as below.

Dark & Light grey weathering, well bedded, laminated, zebra & rubble brecciated, dk grey dolostone. Large sparry calcite crystals infilling many vug cavities.

Possibly a Fault Contact
Contact between platy limestone & thickly bedded dolostone. Limestone is dark grey silty & shaly, ~40' thick, thinning out to the south. Bedding warped in places.

Argillite subcrop

Well bedded, interbedded limestone & argillite outcrop

Argillite talus & subcrop

Argillite talus

Argillite & siltstone talus

Quartzite float

Argillite float

Subcrop to outcrop greyish orange weather dolostone. Limestone reddish-brown spherulite dk grey or dolostone.

Mass med grey dolostone (1) Zn, sph

dk to ll grey weathering, dk grey cracks or dolostone

Crackle dk grey dolostone, argillite orange matrix

Well bedded, zebra dk dolostone, discon spherulite. Very similar to material in San trench #15, where an outcrop.

Rubble subcrop & outcrop of laminated dolostone

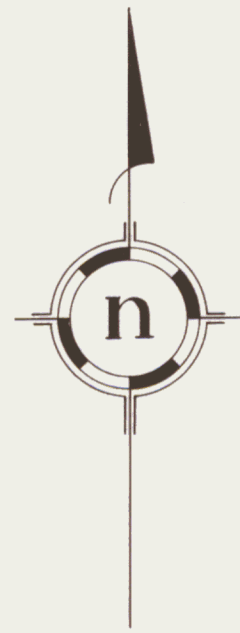
Subcrop to outcrop rubble dk laminated dk grey dolostone

West end of well bedded dolostone. Becomes thinly bedded & shaly grading into argillite.

Well bedded thinly lam highly silty dk grey dolostone in argillite. Minor calcite. Argillite unit to the south.

dk grey argillite. Occasional silty orange surfaces. Similar to material in trench #15. Subcrop dolostone float

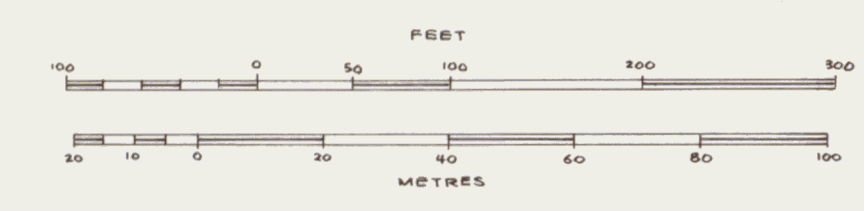
Argillite talus & quartzite boulders



Legend

- Argillite
- Dolostone (Laminated & Zebra bx. unless otherwise noted)
- Limestone (well bedded)
- Quartzite

- Sph/Gn Sphalerite and/or Galena mineralization
- (+) Zn Positive Zinc test
- ○ ○ ○ Rubble
- Trench
- Outcrop boundary
- ~ Fault
- 67 Station Identifier
- Stream
- Geological boundary
- CSS-1 Drill Hole



CANADIAN SUPERIOR EXPLORATION LIMITED			
C.S.E. - McINTYRE - CRAIG JOINT VENTURE			
SIAN CLAIM GROUP - SHOWING 'E'			
DETAILED GEOLOGY		AND DRILL PLAN	
Drawn by A.R. Gunther	Work by W & C. Kilby	Revisions S.C. James Nov. 1980	Dwg No P. 184-79 Fig. 4
Scale 1" = 100', 1:1200	Date Oct 1979		