

1980 DIAMOND DRILLING REPORT
ON THE
CRAIG CLAIM GROUP

NADALEEN RANGE, YUKON TERRITORY
NTS 106-C-3, 106-C-4
(64°09'N 133°20'W)

Shelley C. James
October 31, 1980

090672

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ _____

[Handwritten Signature]

Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

Commissioner of Yukon Territory

not reg'd - drilling

270000

TABLE OF CONTENTS

	<u>Page</u>
1. SUMMARY	1
2. INTRODUCTION	1
3. LOCATION AND ACCESS	2
4. PROPERTY	2
5. HISTORY OF PREVIOUS WORK	2
6. 1980 PROGRAMME	3
6.1 Progress Summary	4
6.2 Operations	5
6.3 Results	5
7. CONCLUSIONS AND RECOMMENDATIONS	6
8. BIBLIOGRAPHY	6

APPENDICES

- A. Statement of expenditure - Parts I and II
- B. Certificate
- C. Personnel employed
- D. Summary of work
- E. Helicopter time distribution
- F. Site preparation summary and expenditure
- G. Monthly drill statistics and drill hole data
- H. Core Logs - in pocket
- I. Core assay results and metal ratios

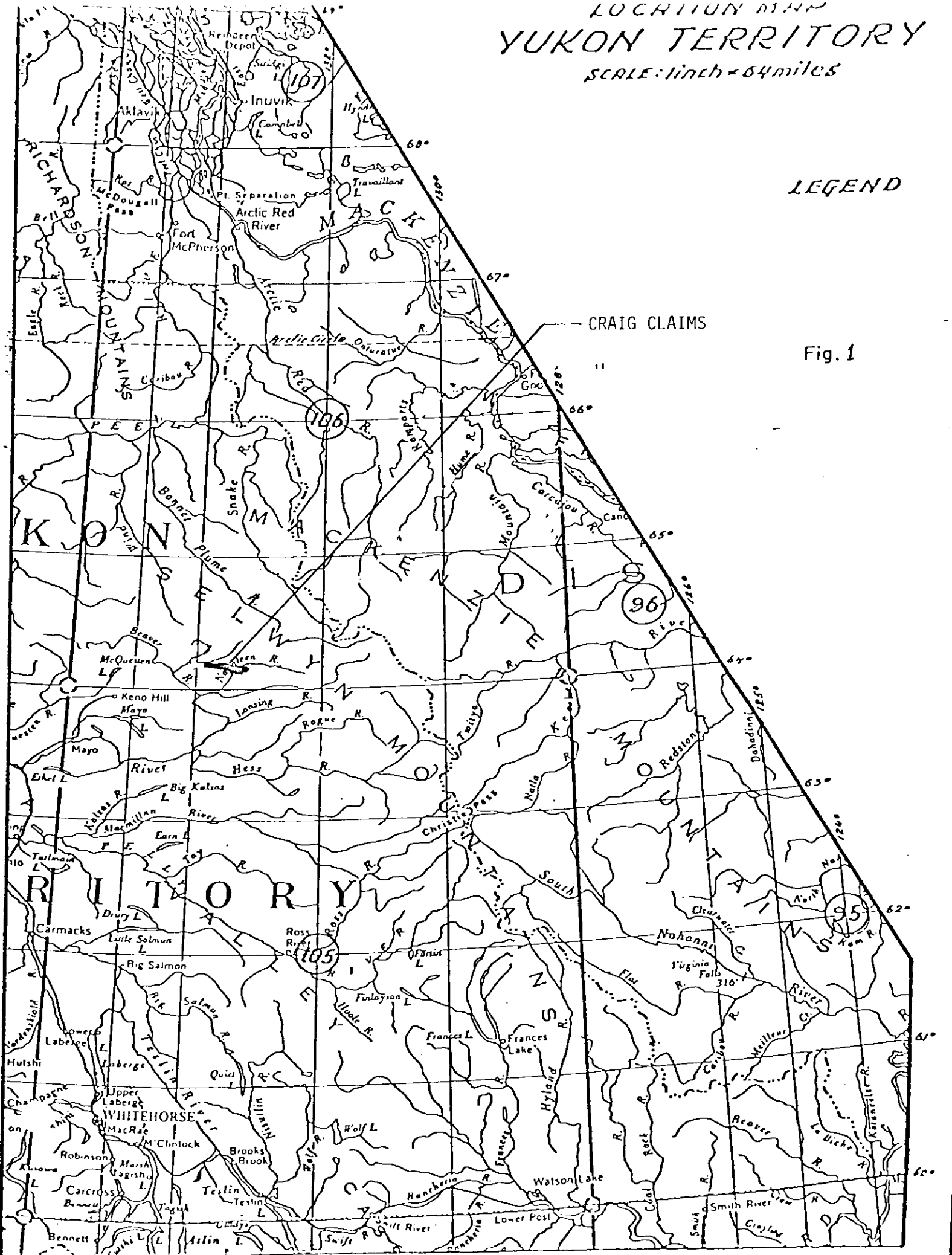
LIST OF ILLUSTRATIONS - Figs. 2-6 in pocket

- Fig. 1. Location map
- 2. Regional geology showing claim blocks 1:500,000
- 3. Craig claims sketch map
- 4. West zone drill plan 1" = 100'
- 5. Nadaleen zone drill plan 1" = 40'
- 6. Trent zone drill plan 1" = 100'

LOCATION MAP
YUKON TERRITORY
 SCALE: 1 inch = 64 miles

LEGEND

Fig. 1



1. SUMMARY

A diamond drilling programme of 5,364 feet with total expenditure of \$293,839.23 was conducted on the Craig claim group in 1980.

Lead-zinc-silver mineralization was intersected in the West, Nadaleen and Trent zones, but is generally low grade.

No further work is planned at the present time.

2. INTRODUCTION

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

The Craig claim group consists of 696 adjoining claims approximately 60 miles northeast of Keno Hill.

The property is underlain by Proterozoic and Paleozoic clastics and carbonates which occur juxtaposed along the east-west striking extension of the so called Dawson thrust system. Geological details are available in reports listed in the bibliography.

Drilling in 1980 was proposed to further explore silver-lead-zinc mineralization in the West and Trent zones and to test the Nadaleen zone.

3. LOCATION AND ACCESS

The Craig Claims (64°09'N 133°20'W, NTS 106C-3/4) are located in the Mayo Mining District approximately 90 to 100 miles northeast of Mayo.

Access to the property is by helicopter from the operational base "Rackla City" camp. The base, on the East Rackla River, is 5 miles north of the claims, and is serviced by wheeled fixed wing aircraft from Mayo and Whitehorse.

4. PROPERTY (Figs 2 and 3)

The claim block of 696 claims falls in map sheets NTS 106 C-3/4 in the Nadaleen Range between East Rakla and Nadaleen Rivers. The claims occupy northern slopes in the west, straddling the range and Nadaleen river valley to the east. Most showings occur between 2,600 and 4,900 feet elevation. Spruce and alpine fir, and open alpine tundra cover lower and upper slopes respectively.

<u>CLAIM NAME</u>	<u>GRANT NUMBER</u>	<u>RENEWAL DATE</u>
Craig No. 1 to 64	YA6244 to YA6307	10 Nov. 1982
Craig No. 65 to 88	YA6603 to YA6626	8 Dec. 1980
Craig No. 89 to 136	YA6627 to YA6674	8 Dec. 1982
Craig No. 137 to 208	YA6675 to YA6746	8 Dec. 1980
Craig No. 209 to 416	YA13499 to YA13706	5 Nov. 1980
Craig No. 417 to 624	YA13707 to YA13914	8 Nov. 1980
Craig No. 625 to 696	YA15494 to YA155565	18 Jul. 1981

5. HISTORY OF PREVIOUS WORK

McIntyre Mines Limited made silver-lead-zinc discoveries in this area during systematic reconnaissance of carbonate terrain developed in the Bonnet Plume region in 1976.

Geological mapping, diamond drilling, geochemical and geophysical surveys were conducted in 1977.

Canadian Superior Exploration Limited continued detailed geological work and trenched additional showings in 1979. Details are contained in reports listed in the bibliography.

6. 1980 PROGRAMME

The new operations base for the Craig Joint Venture is "Rackla City" camp (elevation 2,880 feet) in the East Rackla river valley where a 4,000 foot airstrip was constructed in September 1979. Residual equipment was moved 8.8 miles southwest from the 1979 "Tara base" and this abandoned camp site restored as well as possible to its natural state. Diamond drill core from 1977 remains in core racks at Tara Lake.

Helicopter and heating fuel were airlifted to Rackla City in May. Field operations, supported by a Hughes-500D helicopter, were conducted from July 2nd to September 17th with a crew varying from 8 to 17 persons. Appendices C, D and E indicate personnel employed, a summary of work, and helicopter time distribution.

6.1 Progress Summary

A total of 7,216 feet was drilled during the season, 5,634 feet being drilled on the Craig claims as indicated below:

<u>Zone</u>	<u>No. of holes</u>	<u>Footage</u>
West	2	1,785
Nadaleen	5	2,363
Trent	2	1,216
Totals	<u>9</u>	<u>5,364</u>

Total previous drilling 1977 : 15,756 feet
Total Craig claim group 1980 : 5,364 feet
Total Craig claims to date : 21,120 feet

Details are contained in appendix G, drill hole data.

6.2 Operations

Extensive drill site preparation was necessary as is summarized in appendix F.

Drilling was accomplished by a diesel powered Boyles BB 25A rig with BQ wireline equipment from July 15th to September 17th, 1980. This machine although being capable of drilling to required depths was *not entirely suitable* for use in mountainous terrain. It required extensive tearing down and setting up for removal by Hughes 500-D.

Two - 12 hour shifts operated. Progress details are summarized in the drill statistics table and diamond drill hole record, appendix G. The best footage per shift was 141 feet and average footage per shift at 75.2 feet. (1977: Best shift for most holes was 200 to 260 feet).

Drilling conditions were fair to good. No permafrost was encountered. Overburden varied from 4 to 92 feet. Poor recovery in places is partly attributed to fractured ground, which also caused abandonment of hole CSN-1.

Acid-etch dip tests and an Eastman single-shot instrument were used to measure deviation in inclined holes. The geometry of the Eastman limited its use.

Following core logging, sampled sections were split with half retained for reference. The remainder was submitted to Min-En Laboratories for silver, lead, zinc determinations.

All core is stored in open racks at "Rackla City" camp.

6.3 Results

Locations of drill holes are shown on Figs 4, 5 and 6, drill plans of the West, Nadaleen and Trent zones respectively, which also summarize geological features. Further geological details are available in Potter's and Gifford's reports listed in the bibliography.

Two holes drilled on claims YA6251, and YA6249 in the West zone supplemented 1977 drilling which intersected silver-lead-zinc mineralization.

The Nadaleen zone drilling followed-up mineralization exposed during trenching in 1979 on claims YA6629 and YA6631.

Further drilling on the Trent zone, claims YA6653, YA6654 and YA6652 sought a westward extension of shallow mineralization exposed in the Nadaleen River valley.

Results are contained in appendices: G - drill hole data, H - core logs, and I - core assay results and metal ratios.

7. CONCLUSIONS AND RECOMMENDATIONS

Diamond drilling totalling 5,364 feet at a cost of \$293,839.23 was conducted over various claims on the Craig claim group in 1980.

Best mineralized intersections in the West zone were in the previously known mineral zone. Sporadic low grade disseminations were intersected at depth.

Low grade mineralization was intersected in the Nadaleen zone.

Widespread low grade disseminations are present at the Trent zone with one high grade section of 5 feet: 499-504 feet @ 0.70%Pb 17.40%Zn 0.60 oz/tAg.

No further work is planned at the present time.

8. BIBLIOGRAPHY

1. Blusson S. 1974 : GSC Open File Report No. 205
2. Blusson S 1978 : GSC Paper 78-1A p.77-80
3. Floyd A and Birkeland A.O. 1976 : Summary Report on the Craig Claims and Sian Claims
4. Gifford R.G.1977 : Geological Report on the Craig Property, Mayo Mining District NTS 106/C
5. Gifford R.G.1977 : Data Summary, Craig Property NTS 106/C
6. Potter R.G.1979 : Exploration 1979 of the Craig Joint Venture Properties, Yukon Territory NTS 1050 106B, 106C



Shelley C. James
October 31, 1980

APPENDICES

- A. Statement of Expenditure - Parts I and II
- B. Certificate
- C. Personnel employed
- D. Summary of work
- E. Helicopter time distribution
- F. Site preparation summary and expenditure
- G. Monthly drill statistics and drill hole data
- H. Core logs - in pocket
- I. Core assay results and metal ratios

APPENDIX A

STATEMENT OF EXPENDITURES PART I
CRAIG CLAIM GROUP 1980

HELICOPTER - Hughes 500D

i) 140.05 hrs. drilling programme ie 42.8% of total cost \$105,832.83 = \$45,296.45
ii) Craig project general: 1/3 of 21.3% = 7.1% of total cost \$105,832.83 = \$7,514.13
iii) Helicopter fuel 49.9% of total cost \$10,319.13 = \$5,149.24
= \$57,959.82

FIXED WING

% proportion using Craig claims drill footage to total footage:
5364'/7216' = 74.3% of total cost \$41,437.32 = \$30,787.92

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
Craig claims proportion 74.3% of \$36,203.00 = \$26,898.83

OPERATING COSTS

Includes camp provisions, supply services miscellaneous equipment
for field, drilling, site preparation and helicopter crews:
Craig Claims proportion 74.3% of \$54,919.64 = \$40,805.29

DRILLING COSTS

Craig claims proportion of total cost 74.3% of \$161,556.67 =\$120,036.60

SITE PREPARATION COSTS

Craig Claims proportion : 11 sites of total of 15
11/15 = 73.3% of total cost \$13,688.40 = \$10,033.59

ASSAYS

Craig claims proportion : no. of assays/total no. assay %
41/57 = 71.9% of total cost \$2,992.20 = \$ 2,151.39

MOBILIZATION AND DEMOBILIZATION

Craig Claims proportion of total cost 74.3% of \$6,952.62 = \$ 5,165.79
TOTAL \$293,839.23

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

Dated on October 31, 1980 in Vancouver, B.C.

S.C. James



STATEMENT OF EXPENDITURE PART II
CRAIG CLAIM GROUP

The apportioned value of work done on each Craig claim drilled, on a % footage basis is as follows:

<u>Grant Number</u>	<u>Footage</u>	<u>Footage as %</u>	<u>Expenditure per claim</u>
YA 6249	677	12.6	37,023.74
YA 6251	1,108	20.6	60,530.88
YA 6629	1,976	36.8	108,132.84
YA 6631	387	7.3	21,450.26
YA 6654	262	4.9	14,398.12
YA 6653	644	12.0	35,260.71
YA 6652	310	5.8	17,042.68
Total Craig Claims	<u>5,364</u>	<u>100</u>	<u>\$293,839.23</u>

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 Craig 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

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; 11 on the Craig claims
4. Diamond drilling - July 15th to September 17th, 7216 feet were drilled, 5364 on the Craig 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.

APPENDIX G DRILL HOLE DATA

Hole No.	Grid Co-ordinates		Elevation	Survey Information			Core Size	Footage		O.B. Depth feet	Casing In hole size length	Zone	Claim No.	Section No.	Date		Logged By	Mineralization see log sheets appendices M31
	Northing	Easting		Depth	Dip	Bearing		Depth	Accumulated Depth Total						Started	Completed		
CS1-1	33468	72988	2520'	0 400'	-45° -44°	180°	BQ	600'	600	92		Trent	Collar:YA6654 EDH:YA6653			18-21/7/80	SCJ	sporadic low grade dissemination
CSH-1	36795	67200	3360'	0 326'	-45° -45.5°	032°	BQ	336'	936	4		Nadaleen	YA6629			22-24/7/80	SCJ	negligible
CSH-2	36795	67200	3360'	0 489'	-45.5° -54°27'	000°	BQ	499'	1435	17		Nadaleen	YA6629			24-27/7/80	SCJ	negligible
CSN-3	36795	67200	3360'	0 542'	-61° 64°	032°	BQ	552'	1907	5		Nadaleen	YA6629			27-31/7/80	SCJ	negligible
CSW-3	41679	50514	4529	0 220' 676' 966'	62° 62° 63° 63°	180°	BQ	1000'	2987	31	BW 32	West	Collar:YA6249 EDH:YA6251	S050SE		1-7/8/80	SCJ	166-176' 20% PbZn
CSW-1	41672	50892	4642	0 552' 780'	-45.5° -53°7' -50°	180°	BQ	785'	3772	39		West	YA6251	S0892E		9-13/8/80	SCJ	571.5-576.5' low grade
CSN-4	37305	67060	3640'	0 589'	-53° -54°	125°	BQ	589'	4361	14		Nadaleen	YA6629			3-6/9/80	BYK	low grade
CSN-5	37490	66585	3750'	0 387'	-46.5° -49°	120°	BQ	387'	4744	16		Nadaleen	YA6631			7-9/9/80	BYK	low grade
CS1-2	32765	74125	2613'	0 616'	-45° -45°	090°	BQ	616'	5364	12	BW 11	Trent	Collar:YA6653 EDH:YA6652			11-13/9/80	BYK	499-504' high grade 589-600' low grade

1 Core recovery is indicated on log sheets.
All co-ordinates are approximation as holes were not accurately surveyed.

APPENDIX H

(in pocket)

Core Log Sheets : 1980 Drilling

Craig Claim group :

West Zone : CSW-1 ; CSW-3

Nadaleen Zone : CSN-1 ; CSN-2 ; CSN-3 ; CSN-4 ; CSN-5

Trent Zone : CST-1 ; CST -2

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

PROPERTY ... CRAIG CLAIMS GROUP P-184.
 COMMENCED ... 22/7/80
 COMPLETED ... 24/7/80

LOCATION ... Nadaleen Zone ± 36795N .. 67200E. (not surveyed)
 ELEVATION ... ± 3360 Ft. DIPS ... -45°
 BEARING ... 032° -45°30' @ 326' (acid etch)
 DEPTH ... 336 ft.

DRILL HOLE No. ... CSN-1
 SHEET No. 1 of 4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
0	24	No core recovered								-
	25	Dolomite : medium - dark grey massive with sparry crackle veins								70
	26.5	Slate : black, limonitic staining; dolomitized limestone interbeds, broken core. @ 26.5' contact - gouge. Fault zone.								70
	46.5	Dolomite : medium-dark grey + cream, collapse breccia, fragments of laminated & wispy dolomite, minor limonite staining and silicification								90
	49	Dolomite : medium-coarse grain, medium grey recrystallized with sucrose texture								90
	71.5	Dolomite : medium-dark grey + light yellow-brown. silicious + carbonate (sideritic?) crackling, very minor fine sporadic sph., @ 57-57.5 shatter strong brecciation @ 67 fracture zone								75
										76-96.5' extremely fine sph. + py. as sporadic disseminations
71.5	80.5	Dolomite : Fine-medium grain, medium grey with minor sparry crackle. hairline tectonic crackling stylolite @ 75.3', slightly wispy at 77-78.5' @ 78' < 65°.								85

DIAMOND DRILLING LOG

DRILL HOLE No. CSN-1

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION Nadaleen Zone

SHEET No. 2 of 4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
80.5	83	Dolomite : medium grey, wispy to carbonaceous laminations and very thin carbonaceous shale bed. cleaves bedding $\leq 60^\circ$									100
	87	Dolomite : medium grey, crackle & tectonic brecciation @ 84.5': 3" carbonaceous gouge - fracture zone									100
	96.5	Dolomite-limy : medium grey - stylolite at 89', vague wispy laminations to massive minor crackle brecciation									100
	98	Dolomite : medium grey, faint lamination + very thin to thin beds. minor crackle brecciation									100
	99.5	Dolomite : medium grey massive with minor crackle brecciation									100
	100	Dolomite : medium grey + white alternating bands "zebra type" dolomite @ 100' $\leq 32^\circ$									100
	113	Dolomite : medium grey, thin to medium beds of banded dolomite with minor crackle. 6" pellet dolomite @ 109'									100
	130	Dolomite : medium-dark grey alternating bands of pellet and/or pisolitic dolomite (speckled to pseudo-zebra texture) and finely laminated dolomite. Minor incipient solution collapse particularly from 125'. Laminations carbonaceous									95
	131	Dolomite: : medium grey, massive									100
131	132	Dolomite : medium grey, pisolitic with speckled appearance. Minor hair-line tectonic fracturing @ 137' $\leq 35^\circ$									100

CONTRACTOR: Wright Drilling Co.

LOGGED BY: S.C. James

CANADIAN SUPERIOR EXPLORATION LIMITED
DIAMOND DRILLING LOG

DRILL HOLE No. CSN-1

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION Nadaleen Zone

SHEET No. 3 of 4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
132	142.3	Dolomite : medium grey speckled pellet + massive bands. Occasional stylolite									100
	143	Dolomite : medium-dark grey shatter/cataclastic breccia									100
	144	Dolomite : medium grey massive with pellets, occasional stylolite									100
	155.5	Dolomite : medium-dark grey + light cream, solution collapse breccia. @ 147-149 fractures with limonitic staining. Vuggy.									
		@153.8-155.5 open fractures "crunch" zone									100
	158.5	Dolomite : medium grey massive									100
	159.5	Dolomite : medium grey + buff. incipient breccia. sideritic?? in places									100
	174.5	Dolomite : medium-dark grey massive, very minor sparry solution crackle, incipient tectonic brecciation open fractures 165-168'									100
		Specks of sph @ 160.5. Sph specks + minor gn. @ 165.5									
	179	Dolomite : medium grey sparry solution collapse breccia									100
		@ 177.6-178.2 minor sph. gn in open fractures.									
		@ 178.2-178.7 massive sph. (20%) + minor gn.									
	179.5	Dolomite : medium grey, faintly laminated with sparry crackle @ 179' <80°									100
	183.5	Dolomite : medium grey, medium grain massive, sparry in places									100
	201.5	Dolomite : medium grey vague laminations, crackle and incipient collapse brecciation									100
201.5	210.5	Dolomite : Medium-coarse grain, light-medium grey speckled slightly sandy?									

cont'd

DIAMOND DRILLING LOG

DRILL HOLE No. CSN-1

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION Nadaleen Zone

SHEET No. . 4 . of . 4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
201.5	210.5	Dolomite : bands alternating with massive grey dolomite, minor hairline tectonic crackling.									100
	217	Dolomite : medium grey massive, sparry Fe rich places. Incipient solution collapse, at 217 core ground									16
	248	Dolomite : medium grey massive with minor slightly laminated bands. Sparry crackling in places. 217-237 chips recovered, @ 228' tectonic breccia fracture zone									79
	252	Dolomite : medium-dark grey coarse grain massive with pellets? and pisolitic									100
	290.5	Dolomite : medium grain, medium-dark grey massive. Some speckling in upper 6"; Pellets at 267'. 268-268.5 cataclastic/shatter breccia 284-290.5 rusty open fractures 290.5 gouge on contact. Fault									92
	303	Slates + Limestone : dark grey-black & light grey laminated to thinly inter-bedded @ 295' $\le 15^{\circ}$ cleavage II bedding. Disturbed: @ 295-298' @ 303-312' @ 305-310 gouge slip faulting @ 310-311 crumpling of ls beds due to slip									87
	322	Slates & Dolomitized Limestone interlaminations: slate dark grey-black									85
322	336	Mixed dolomitic fragments, slates, silica and carbonate material and gouge. gritty chips + possibly intrusive material at 336'. Fault zone.									60
Abandoned		END OF HOLE									

CONTRACTOR: Wright Drilling Co.

LOGGED BY: S.C. James

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

PROPERTY ... CRAIG CLAIMS GROUP P-184

LOCATION ... Nadaleen Zone ± 36795N ... 67200E (unsurveyed)

DRILL HOLE No. CSN-2

COMMENCED .. 24/7/80

ELEVATION .. ± 3360 DIPS .. -45.5°

SHEET No. ... 1 of 6

COMPLETED .. 27/7/80

BEARING .. Az. 000° (-54° @ 489' acid etch)

DEPTH .. 499 ft. (result unreliable)

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
0	13	No core recovered									-
	27	Dolomitic Limestone: medium grey + minor slate (very poor recovery)									23
	31	Slate - Limestone : dark grey-black + light grey interlaminated (50% core loss)									50
	38	Dolomite : medium-dark grey "mottled" sparry with minor collapse breccia									
		minor later cross cutting veins SiO ₂ .									50
	41.5	Dolomite : medium-coarse grain, medium-dark grey pisolitic. Minor									
		crackle bx with very minor pyrobitumen									100
	42.5	Dolomite : fine-medium grain, medium-dark grey pisolitic in places.									
		minor crackling, minor hairline tectonic crackling									
		42.5-43.5 sparry									
		45-45.5 solution collapse breccia									100
	48	Dolomite : fine-medium grain, medium-dark grey crackle bx. faint									
		lamination evident @ 47.5' <30°									100
	52.5	Dolomite : light+medium grey sparry solution collapse bx (minor SiO ₂)									100
	58.5	Dolomite limy : dark grey fine incipient crackle bx.									100
	68	Dolomite : light+medium grey sparry solution collapse bx.									100
68	70	Dolomite limy : dark grey faint laminations, minor sparry crackle,									
		@ 68.5' <40°. Pyrobitumen in larger veins.									100

CANADIAN DIAMOND CORPORATION
DIAMOND DRILLING LOG

DRILL HOLE No. CSN-2

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION Nadaleen Zone

SHEET No. ... 3 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
117	129	Dolomite : medium grain, medium grey massive. crackle + incipient solution collapse. minor pyrobitomen, stylolite @ 122.5, slight shatter @ 117.5-122. Fractured.									80
	130.5	Dolomite : medium-coarse grain speckled slightly pisolitic									90
	135	Dolomite : medium grain, medium grey massive. crackle to incipient solution collapse in narrow bands									100
	135.5	Dolomite : coarse grain, medium grey + pellets									100
	153	Dolomite : coarse grain, medium grey vague laminations alternating with wispy bands, minor sparry crackle. @ 136.5 < 59° @ 139.5 < 45° @ 146 < 46°									100
	162	Dolomite : coarse grain, medium grey pisolitic. more massive + pellets near base, broken core, sparry 159-160'. @ 158' cataclastic bx + gouge. Fault									95
	184	Dolomite : coarse grain, light-medium gray sparry solution collapse bx. occasional stylolites, incipient tectonic bx. @ 166.5-167.5 cataclastic bx, @ 174-181 cataclastic bx. - fracture zone									100
	192	Dolomite : medium grain, medium-dark grey massive. hairline/incipient tectonic bx.									100
									@ 187' coarse spec. gn. + alteration in open fractures over 3"		
192	197	Dolomite : medium-dark grey + white incipient cataclastic bx of sparry dolomite									100

CONTRACTOR: Wright Drilling Co.

LOGGED BY: ... S.C. James

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. CSN-2

PROPERTY CRAIG CLAIMS GROUP

LOCATION Nadaleen Zone

SHEET No. 5 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
290	299	Limestone + slate : interlaminated thin beds + occasional thicker carbonaceous slate bands and cross-cutting CaCO ₃ stringers @ 295' <22°									100
	300.5	Limestone : core badly broken @299-304.5 incipient cataclastic bx									100
	335	Dolomitized limestone + carbonaceous slate : @ 332' <33°									100
	349	(slightly limy) Dolomite : medium-coarse grain, dark grey massive, carbonaceous and pyritic - very, very fine. minor calcite crackle (+ 4" wide beds to 338') <38°									
		342-349 incipient cataclastic bx @ 343' 1" SiO ₂ + CaCO ₃ vein									80
	350	Limy Dolomite + Black Slate: interlaminated, carbonaceous + very fine pyrite									80
	350.5	Dolomite : medium + light grey solution collapse bx									80
	355.5	Dolomite : medium grain, dark grey thin beds. carbonaceous + fine py. incipient bx. (upper 6" interbedded ls + black slate)									100
	357	Dolomite : dark grey carbonaceous collapse bx. matrix fine dolomite - sparry									100
	374	Dolomite : carbonaceous massive + thin 6" bands of laminated dolomitized limestone + slate. Minor sparry veinlets. incipient bx in places + py. very fine.									
											@ 370' finely disseminated sph. in carbonate vein 100
374	380	Dolomite : carbonaceous + py very fine 375-380' incipient cataclastic bx. minor open fractures also silicified @ 379' - cataclastic bx. fracture zone									93

DIAMOND DRILLING LOG

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION Nadaleen Zone

DRILL HOLE No. CSN-2

SHEET No. 6 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
							% Pb	% Zn	Ag	
			386-386.5'							
			387.5-389'							
			m. grain disseminated sph and minor gn. less than 5% of rock total							
380	397	Silicified dolomite : strong silicification + weaker silicified bands 391.5 and down increasing cataclastic bx 390.5 and down increasing pyritization	41959	385	390	5'	0.48	0.84	0.18	95
	398	Dolomite : shatter bx silicified pyritic								100
	399	Dyke : talcose, light green grey "silvery sheen" pyritized @ 401' <59°								100
	412	Slates : black carbonaceous + pyrite and quartz stringers								100
	424.5	Slate : carbonaceous + minor wacke <42°								100
	487.5	Slate : carbonaceous + minor interbedded gy dyke 435.5-437' gouge at 437.5' Fault. 487.5 little silicified fracture fault 446' gouge, 459' minor slip, 464' minor slip, @ 450' cleavage 31°								100
	490	Slate + Dyke : carbonaceous + light green grey talcose (no pyrite)								87
	492	Slate : carbonaceous								87
492	499	Slate : carbonaceous + grit/wacke beds. 1½" quartz vein at 499' Cleav/bed variable @ 494 <60°								87
		END OF HOLE								

DIAMOND DRILLING LOG

DRILL HOLE No. ... CSN-3

PROPERTY Craig Claim Groups

LOCATION Nadallen Zone

SHEET No. 2 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
101.5	149	No core recovered. Fault zone								0
	158	One foot recovered : Coarse grain massive dolomite chips								11
	163	Dolomite : collapse bx. Not as sparry as above. Minor laminated and speckled pisolitic? bands incipient tectonic fracturing								100
	170	Dolomite : Coarse grain light-medium grey massive to thick beds (occasional band thin bedded) minor sparry crackle occasional pellets. Minor fracture 164-165' @ 167' $\angle 51^{\circ}$								100
	183	Dolomite : Coarse grain medium + light grey massive. Crystalline (sucrose) bands in places minor narrow collapse bands								100
	190.5	Dolomite : Coarse grain medium + light grey massive with incipient collapse bx bands								100
	207	Dolomite : collapse bx fragments of massive slightly pislitic and thin bed to lamina Minor hairline fracturing.								96
			@ 214	to 216.5'	Three narrow ($\llcorner 1/2''$) fracture bands in minor Sph.					
			@ 216.5	to 216.8'	Sph + gn disseminated $\llcorner 5\%$					
			@ 214	to 219	open fractures with very minor realgar?					
			@ 221'		sporadic minor sph					
207	231	Dolomite : medium-coarse grain massive + thin bed to lamina bands Occasional narrow collapse bands. Styl olite @ 222' $\llcorner 75^{\circ}$								100

CONTRACTOR: D. Wright Drilling

LOGGED BY: S.C. James

DIAMOND DRILLING LOG

DRILL HOLE No. ...CSN-3.....

PROPERTY Craig Claims Group

LOCATION Nadaleen Zone

SHEET No. ... 3 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
231	243.5	Dolomite : coarse grain medium-dark grey coarse speckle: pisolitic + fine pellets. Minor sparry bands + SiO ₂ . 236-237 band of laminated incipient shatter in places @ 243-246 well developed pellets.								100
	265	Dolomite : massive + pellet bands. Thin bands of faint laminations in places incipient crackle breccia								100
	271	Dolomite : medium grain medium grey massive. 259-263 slightly vuggy open fractures 265-266.5 incipient tectonic bx								100
	299	Dolomite : coarse grain coarse pisolitic to oncolitic. 282-283 vuggy								100
	310	Dolomite : coarse grain oncolitic								100
	320	Dolomite : collapse bx upper 2". Sparry oncolitic dolomite + incipient shatter bx stylotitic upper contact								95
	324	Dolomite : sparry + qz veins. Strong shatter bx. Rusty joints/fractures slickensides?? @ 315'; 319'; 322-323' fault zone								95
	333	Slates : carbonaceous (2ft. only recovered)								20
	338.5	Slates + dolomite : carbonaceous slate. Narrow interbedded								30
	339	Dolomite : medium grey massive. qz veining badly broken core								50
339	351	Slates, carbonaceous + dolomite : interbedded. Minor carbonate + silica veining @ 340' <26° @ 342' <36°								50
351	368	Dolomite : shatter bx of crackle veined banded dolomite minor more carbonaceous bands								64

CONTRACTOR: Wright Drilling Co.

LOGGED BY: ... S.C. James

CANADIAN SUPERIOR EXPLORATION LIMITED
DIAMOND DRILLING LOG

DRILL HOLE No. ... CSN-3

PROPERTY Craig Claims Group

LOCATION Nadaleen Zone

SHEET No. ... 4 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery	
368	373	Dolomite : medium-coarse grain dark grey faint banding/bedding										60
	382.5	Dolomite + shale : interbedded medium grain very thin bedded dolomite + carbonaceous shale @ 375' 46° massive band + SiO ₂ veining										100
		377.5-378.5										
	384.5	Dolomite : coarse grain oncolitic medium grey minor shatter bx										100
	394	Dolomite : solution collapse bx of oncolitic dolomite + minor shatter open fractures with Fe staining and quartz veining increasing with depth & very minor realger? 393-394' cataclastic bx Fracture zone.										86
	397	Silicified dolomite breccia										100
	400	Dyke: green gray talcose knife edge contacts. Strongly pyritic lower contact. Fault.										100
	406	Silicified dolomite breccia + shatter bx. oncolitic 401-402. Gouge @ 406'										100
	411.6	Dolomite : very silicious. major pyrite possilbe fine dyke stringers										100
		410-411 green gray pyritic talcose dyke (F.Fill?)										
												@416 & 421' cpy + py dissemination (narrow minor)
	426.3	Dolomite + Slate : interbanded : silica veins + py dolomite sandy. slate carbonaceous. incipient shatter bx also disturbs qz py veins										96
	427	Carbonaceous slate : minor dolomite interlaminated @ 427' 34°										100
427	437	Gritwacke : coarse black + incipient cracking minor qz veins. sheared carbonaceous shale bands 431-433'										100

CONTRACTOR: D. Wright Drilling

LOGGED BY: S.G. James

DIAMOND DRILLING LOG

DRILL HOLE No. CSN-3

PROPERTY Craig Claims Group

LOCATION Nadallen Zone

SHEET No. 5 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% core Recovery
437	440	Pebble wacke/conglomerate : poorly sorted. Minor shatter + qz veins + fine py								100
	441	Wacke : coarse black sandy + quartz veining								100
	457	Carbonaceous slate : cleavage//bedding & horizontal ie<0°. Qz veining py blebs/bands in places occasional gritty bands								100
	465	Pebble conglomerate beds alternating with carbonaceous argillite. both black.								100
	475	Pebble conglomerate/wacke : fine grain dark grey black matrix. minor qz veins py @ 465.5'								100
	493	Grit wacke : coarse. Minor pebble bands								100
	495	Pebble wacke/conglomerate : fine. + minor carbonaceous slate beds @ 497' <46°								100
	501	Pebble wacke/conglomerate : fine								100
	504	Sandstone carbonaceous : Fine → coarse grain with depth. black fractured @ 504.5'								100
	510	Carbonaceous argillite + minor grit beds @ 510' <46°								100
	511	Pebble conglomerate qz veins minor								100
	513.5	Grit : black qz veins minor								100
	514.5	Pebble conglomerate + py dissemination								100
	515.5	Dyke? (not talcose grey green variety) pyritic dark grey/black								100
	531	Carbonaceous silt laminated dark grey black + interfingered dykelets?? (tuffaceous possibly?? rather than dykes)								100
531	552	Slate : carbonaceous dark grey black + minor dark grey								100

CONTRACTOR: D. Wright Drilling

LOGGED BY: S.C. James

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. CSN-4

PROPERTY ... Craig. (Nadaleen zone).....

LOCATION . Near the Nadaleen River, Y.T.

SHEET No. 2.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
82	89	Dyke rock cont'd : Local fine boxwork from pyrite (some fresh cubic pyrites) weak oxidation fractures of steep angles to C.A. Outward appearance quite similar to greenish grey shale or argillite.								
89	176	Silty dolomite (brecciated & locally silicified) & black laminated graphitic shale: Extensively broken and slumped zone of dark colored graphitic shale interlaminated with silty (lighter-colored) layers with frequent dolomite variously brecciated and silicified. Mostly thin-laminated with local massive dolomite. Bedding are 0-40° to C.A. Minor fracture oxidation throughout with occasional boxwork.								
	89-103	Predominantly silty dolomite with thin laminated shale partings Badly broken and chippy core at 92'. Split due to slippage (parallel to C.A.) at 101'.								
	103-113	Well-laminated graphitic shale interbedded with minor dolomitic silty layers. Mostly split core along the bedding plane.								
	113-124	Similar to 89'-103', slightly more shale partings. A few specks of PbS in fine quartz veinlets around 111'.								
	124-129	Tectonically brecciated fault zone (strong slippage & weathering) of thin laminated shale and silty layers.								
	129-143	Silty dolomite with local interlaminated graphitic shale								

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. . CSN-4.....

PROPERTY Craig (Nadaleen zone).....

LOCATION .. Near the Nadaleen River, Y.T.....

SHEET No.3.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
		partings, weakly oxidized & slipped. Brecciated & silicified dolomite around 138' with some open vuggy fractures.								
	143-176	Well laminated black shale with minor intersections of silicified and brecciated dolomite @ 0-40° to C.A. weakly oxidized mostly on slip faces. Limonite-manganese staining and boxwork around 168' and 156-166. Poor core recovery due to faulting.								
176	389.5	Dolomite & dolomite breccia: light grey - grey, medium grained collapse breccia of dolomite with occasional massive intersections (1 6 ft. in apparent thickenss), variously silicified, generally more intense silicification where brecciation is stronger. Minor galena specks and veinlets in silicified-brecciated zone (No 1 ft. intervals shows more than 5% Zn + Pb by visual estimate) Frequent broken zone with fracture-controlled oxidation and limited pervasive oxidation around 194-197 & 204.								
	176-190	Intensively brecciated and silicified with some vuggy openings and minor boxwork. Pervasively oxidized, minor specks and thin veinlets of PbS around 182.								
	190-192	Massive grey-dark grey, medium grained dolomite.								
	192-212	Similar to above brecciated & silicified dolomite at 173-190. Both silicifications & brecciation is somewhat weaker, weak								

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. CSN-4

PROPERTY Craig. (Nadaleen. Zone).....

LOCATION Near. the. Nadaleen. River., Y.T.....

SHEET No.4.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
		192-212 cont'd oxidation.								
		212-218 Similar to above massive dolomite 190-192, weak brecciation vuggy quartz vein (@ 70° to C.A.) with minor PbS & ZnS at 209								
		218-258 Brecciated & silicified dolomite as above. Silicification is local and weak. Sporadic specks of PbS and less frequently ZnS. Occasional weak oxidized fractures. Partly oncolitic appearance. Minor PbS-ZnS disseminations & veining. Vaguely bedded @ 40° to C.A.								
		258-264 Strongly silicified zone, white colored due to criss-cross quartz vein & irregular massive dark colored hairline cracking. Frequent PbS + ZnS specks and occasionally on fractures.								
		264-282 darker colored & much less silicified than above, massive brecciated dolomite. Locally oncolitic. Minor oxidized fractures and tin weak halo. Broken & rubbly core at 279.								
		282-307 Strong silicification as above 258-264. Intense brecciation throughout and occasional stylolites. Minor disseminated PbS ZnS in dark-colored matrix at 285'. ½' boxwork with minor fine grained pyrite and sparse medium grained PbS + ZnS specks around 293'. Local heavy dissemination of medium grained pyrite around 288'								

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No.CSN-4

PROPERTYCraig (Nadaleen Zone)

LOCATION ..Near the Nadaleen River, Y.T.

SHEET No.6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
		341-389.5 cont'd and some limonite crack-fills after pyrite. Pyrobitumen associated with crack-filling quartz.								
389.5	392	Dyke rock : light greenish grey, aphanetic, soft with abundant pyrite as very fine grains & medium sized cubes.								
		Fault (gauged 1½ inches) contact with upper dolomite & sharp cont. with footwall dark grey dolomite breccia (4" thick)								
		Solid pyrite (0.5" thick) vein between dolomite & black shale below.								
392	399	Shale or slate : dark grey-black, well-indulated laminated soft shale or slate. Contact with upper dyke started with 4" dark brecciated dolomite and ½ inch solid pyrite layer then well-defined, slipped contact with black shale. Cleavage or bedding 0 30° to C.A. Lower contact (hanging wall) is broken & gouged								
399	410	Dolomite breccia : Light grey to grey, medium grained silty dolomite with strong shattering and abundant sparry bandings, local quartz veining with vuggy openings and weak ankerite staining.								
410	417	Dolomite : Dark grey, fine to medium grained poorly bedded dolomite with finer grained dark-colored dolomite mud at the top of the section. Bedding seems to be 0-10° to C.A.								

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

PROPERTY Craig (Nadaleen Zone)

LOCATION Near the Nadaleen River, Y.T.

DRILL HOLE No. ... CSN-4

SHEET No. 7

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
417	435	Shale : Well-laminated (cleavage & bedding seems to be parallel) black shale or slate with occasional pyrite nodules & layers. Thin bedded with interbedded dolomite partings at 430'. Broken with fault gouge at 421, 433 & 435 (lower contact).								
435	473.5	Dolomite breccia : same as above dolomite at 410-417. Angular elongated fragments of black shale and grey dolomite in vein-like sparry matrix. Strong tectonic breccia near the lower contact with shale below around 465-470. Broken with oxidized fractures around 455'. Silicified at 465.								
473.5	476	Shale : same as above shale at 417-435. Fault at 475 (broken and gouged), contact with the lower dolomite breccia.								
476	491	Dolomite breccia : Collapse and tectonic breccia (overprinted) with fragments of light grey dolomite and black shale in strong veinlets of criss-cross dolomite and crack-fills. Faulted at the lower contact with silicified mineralized breccia below.								
491	513	Silicified breccia: similar to the above dolomite breccia, the difference is strong silicification and moderate (best of the hole) mineralization associated with it.								

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

PROPERTY..... Craig (Nadaleen Zone).....

LOCATION ... Near the Nadaleen River, Y.T.

DRILL HOLE No. CSN-4

SHEET No. 8

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
							Zn%	Pb%	Ag oz/t	Cu%
		Mineralization mostly made up with brown sphalerite and minor pyrite	41951	491	496	5'	5.25	.75	.22	.166
		galena & cpy. Those minerals restricted on silicified dolomite	41952	496	503	7'	2.68	.22	.10	.054
		or quartz veining. The silicified zone 22' long (491-513) could be	41953	503	513	10'	.47	.06	.04	.019
		main mineralized zone. Two best grade interval seem to be 493-495'								
		(15% Zn + Pb combined by visual estimate) & 496-497 (15% Zn +Pb).								
		When spread out for 22' length the grade will probably be 2-3%. This								
		zone seems to be oncolitic or massive dolomite which was brecciated								
		and tectonically broken later. Fair amount of shale fragments and								
		fracture fills.								
513	589	Shale : Grey to black, mostly thin bedded shale or slate. Soft and easily								
		split core. Poorly developed cleavage appears to be parallel to								
		bedding planes. Frequent white thin dolomite veining with occasional								
		quartz. Broken and gouged core at 562 (fault). Broken and split								
		core at 569 & 576. Minor thin dolomite interlamillac around 521								
		(oncolitic) & 583'.								
		----- E.O.H. -----								
		* Dip test at 589' 54° surface dip 53°								

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

PROPERTY...CRAIG. (Nadaleen Zone).....
 COMMENCED.....Sept..7., 1980.....
 COMPLETED.....Sept. 9, 1980.....

LOCATION ... Near the Nadaleen River, Y.T.....
 ELEVATION ..3750' approx..... DIPS..... 45°.....
 BEARING.....120°..... 37.490N. (approx.).....
 DEPTH.....387. ft..... 66.585E.....

DRILL HOLE No. CSN-5.....
 SHEET No. 1 of 7.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
0	14	Overburden								
14	54	Shale or slate : Badly broken core of greenish grey shale and dark grey to black poorly-bedded silty shale. Original bedding planes obscured due to split and gouged core with strong slippage. Moderately developed cleavage @ 0-30° to C.A. Greenish shale is very fine grained and black shale is locally very graphitic. Poor core recovery (+ 40%). Heavily gouged at lower contact with dolomite, a probable major fault zone. Weak fracture oxidation. No significant mineralization.								
54	75	Dolomite : Rubbly, gravelly & chippy core of light grey to dark grey brecciated dolomite. Occasional fracture-controlled oxidation. Local weak silicification but no visible mineralization. Not a single piece of solid core. 54-64' very poor recovery (15%), probable fault line.								

DIAMOND DRILLING LOG

PROPERTY CRAIG (Nadaleen Zone)

LOCATION Near the Nadaleen River, Y.T.

DRILL HOLE No. ... 03179

SHEET No. 2 of 7

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE						
75	80.5	Shale : Gouged & split core of black laminated carbonaceous soft shale or slate. Cleavage + 10° to C.A. No apparent bedded features.											
80.5	125.5	Dolomite : similar broken core of dolomite as above dolomite at 54-75' 10% recovery (80.5-86') of badly broken, gouged and oxidized core around the upper contact with shale. Some stylolites in more solid core (solid core not longer than 5"). Weak collapse breccia shattered by later tectonic movements.											
125.5	128	Dolomite breccia : Similar to the above dolomite (80.5-125.5'). Solid core of very intense breccia with abundant angular to sub-angular fragments usually 5-10 mm long in dark-colored dolomitic mud. Also fair silicification by strong criss-cross quartz veining.											
128	141	Shale : dark grey, medium grained, bedded features mostly obscured due to tectonic movement & brecciation. Incomplete cleavage. Brecciation represented by cross-cut & shifted white dolomitic bandings as a mosaic texture in black shale. Very broken & weakly gouged on both contacts.											

CONTRACTOR: Wright Drilling Co.

LOGGED BY: B.Y. Kim

DIAMOND DRILLING LOG

PROPERTY ... CRAIG (Nadaleen Zone)

LOCATION ... Near the Nadaleen River, Y.T.

DRILL HOLE No.

SHEET No. 3 of 7

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
141	168.5	Dolomite breccia : similar to the above dolomite (80.5-125.5'). More intensively brecciated & broken with frequent minor oxidation fractures. Fault contact with the upper shale. Broken & split core 141-147.5'. Solid core with strong tectonic brecciation & minor oxidation (147.5-150'). Broken & rubbly (gravel size) core (150-156'). Solid recovery of intensively shattered & locally gouged core (156-168.5').								
168.5	184.5	Shale or slate : laminated fine grained soft black shale and thin-bedded light greenish grey shale, mostly of talc & clay minerals (?) with minor carbonaceous material in black shale. Broken & gouged core at the upper contact. Local quartz-calcite veining & usual slippage. Greenish shale is well-bedded due to thin dolomite partings @ 0-30° to C.A. Thin gouged & slipped fracture @ 30° to C.A. at lower contact.								
184.5	364	Dolomite & dolomite breccia: Light grey to grey, medium grained, mostly massive with local well-bedded. White dolomite veinlets and occurrences of stylolites & zebra-textured dolomite. Minor pyrobitumen is not unusual. Local well-bedded								
			cont'd.....							

CONTRACTOR: ... Wright Drilling Co.

LOGGED BY: ... B.Y. Kim

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. CSN-5

PROPERTY CRAIG. (Nadaleen. Zone)

LOCATION Near the Nadaleen River, Y.T.

SHEET No. 4 of 7

cont'd

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE		
							Zn%	Pb%	Ag ^o /t
184.5	364	features broken by brecciation, quartz-calcite veining & slippage, mostly bedding @ 0-30° to C.A. Frequent crystalline sucrose-textured dolomite with hairline cracks and fine open pores. Sparse mineralization mostly of ZnS associated with crack-filling white dolomite-quartz in shattered & slipped dolomite.							
		184.5-192' medium grey, massive dolomite with local shattered cracks and sparry bands.							
		192-213' medium grey, massive and banded dolomite (often zebra dolomite) with occasional shattered breccia. Dark colored fine cross-cut silica veining. Bandings + 20° to C.A. Sparse ZnS mineralization with sparry bands and minor zebra-textured bands. Specks of ZnS + PbS at 197' (on quartz vein) 202' (on zebra-textured crack); 204 & 205 (with stylolitic crack-fracture on sparry bands) & fine dissemination on silicified bands of laminated dolomite around 208'. Best mineralized zone from 209-213' on silicified patches & bands of banded dolomite probably + 2% Zn + Pb (minor) combined. cont'd....	41954	209	213	4'	2.70	.76	.31

DIAMOND DRILLING LOG

PROPERTY CRAIG (Nadaleen Zone)

LOCATION Near the Nadaleen River, Y.T.

DRILL HOLE No.

SHEET No. 6 of 7

cont'd

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
184.5	364	(+ 1-2%) & 292'								
		295-331' badly shattered & brecciated, mostly massive dolomite, locally crystalline with sucrose texture.								
		Moderate hairline graphitic fractures and fine quartz fracture veining. Sparse mineralization. Carbonaceous fractures increasing to the depth at 297, 303, 307, 313, 316, 318, 319, 321, 322, 324, 326.								
		331-333.5 banded dolomite with fine to hairline cracks.								
		333.5-371 strong shattered breccia with strong graphitic fracture faces, broken, gouged zone at 344-346'. Minor ZnS as fracture clusters and dissemenation around 348'. Weakly gouged & slipped core 360-363'.								
364	371	Dolomite : Non-shattered, fine grained, poorly bedded dolomite with thin layers of graphitic dolomite banding is 0-10° to C.A. Easily split along the core axis due to graphitic layers. Weak quartz-calcite veining. Broken & split faces of core are strongly graphitic.								
371	387	Dolomite : Light grey, shattered, coarse crystalline with minor quartz eyes. Silica fractures and dark colored graphitic hairline fractures. Frequent fine stylolites associated								
				cont'd...						

CONTRACTOR:Wright Drilling Co.....

LOGGED BY:B.Y...Kim.....

**CANADIAN SUPERIOR EXPLORATION LIMITED
DIAMOND DRILLING LOG**

DRILL HOLE No. ...CST-1.....

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION Trent Zone

SHEET No. 2 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
							% Pb	% Zn	Ag	
149.5	160.9	Dolomitic limestone: light grey wavy thin bands 1-5mm. Occasional lamina/thin carbonaceous arg. beds.	41956	159	164	5	0.03	0.10	0.09	
										100
	162.1	Dolomite limy: medium to coarse grain light grey - slightly sandy? stylolite at 161.4								100
	167.2	Dolomite: medium coarse grain light grey - wavy lamination 162.5-162.8 carbonaceous + occasional vugs, + minor sparry/silica incipient crackle. Occasional stylolites. Tectonic shattering incipient.								100
	177.4	Dolomite: Fine grained light to medium grey, vague thin bedding/banding, pisolitic @ 176'	41957	182	187	5	0.03	0.10	0.19	
			41958	187	193	6	0.52	1.68	0.11	93
				182.0-182.2	182.2					
				182.2-185						
				185-185.5						
				185.5-191.2						
				192.3-192.8						
				201.2-201.3						
	202.5	Dolomite: light + medium grey breccia. Chaotic collapse breccia, occasional large later filled vugs + large wispy carbon fragments								100
	205.4	Dolomite: fine medium grey thin bedded to laminated. Incipient solution collapse bands								100
	207	Dolomite: Fine medium grey thin bedded to laminated - strong silicious veining								100
	208.7	Limey Dolomite: medium to light grey thin banded & laminated. minor incipient collapse bands								100
208.7	209.7	Limey Dolomite: Medium + light grey minor incipient collapse bands								100

CANADIAN SUPERIOR EXPLORATION LIMITED
DIAMOND DRILLING LOG

DRILL HOLE No. CST-1

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION Trent Zone

SHEET No. 3 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
			@ 210'	4" x 1/16"			sph filled fracture gn.			v. minor
209.7	211.4	Limey Dolomite: light grey slightly sandy?								100
	214	Limey Dolomite: medium-light grey laminated slightly wavy (algal?) laminations								100
			@ 217.6' and 219'							fine py. laminations
	220.3	Limey Dolomite: medium + light grey brecciated & occasional thin limestone beds.								
		Occasional stylolite.								100
			@ 222.5'							minor gn. in fracture
			@ 223.5'							minor sph.
	227.6	Limey Dolomite: medium grey laminated to thinly bedded. Incipient crackle bx.								100
	228.2	Limey Dolomite: medium grey, incipient tectonic bx. Fracture zone.	@ 228.2'							very minor gn. and minor coarse sph.
	229.5	Limey Dolomite: light-medium grey sucrose	@ 229.5'							v. minor sph.
			@ 229.6'							fracture 3" x 1/16" veinlet gn. + minor sph.
	239	Dolomite: medium + light grey banded. Incipient collapse bx. beginning along bedding								
										96
	240	Dolomitic limestone: light grey pisolitic. Minor fractures & vugs + "silvery micaceous? mineral"								
										100
	245	Dolomite: medium + dark grey banded. Incipient collapse bx. Occasional thin 1/2" black limestone/arg. bands. Pyrite on bed planes								
										100
245	250.5	Dolomite: light-medium gy, thin to medium bedded to laminated. Sparry 247.8-248.5								
										100

**CANADIAN SUPERIOR EXPLORATION LIMITED
DIAMOND DRILLING LOG**

DRILL HOLE No. CST-1

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION Trent Zone

SHEET No. 4 of 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
250.5	252	Dolomite: light-medium grey - slightly sandy								100
	274	Dolomite: medium grey - thin to medium bedded + laminations. Occasional incipient collapse zones (.5 to 1 ft. wide) vuggy. Carbonte + silica. 271-276'	@ 268.5', 271.5'							sph in open fractures: very minor
		broken core, @ 270' < 23°.								99
			@ 275.5; 277; 279-280;							283-284 specs of sph. + gn <1%
282.3		Dolomitic limestone: medium grey solution collapse bx. fragments of laminated + massive.								100
303		Dolomite: medium grey, medium beds to massive. Carbonate silica veining Crackle bx, incipient collapse								92
307.8		Dolomite: coarse grain, medium grey pisolitic - core badly broken 300-316'								80
			@ 316' = 316.5'							fine honey coloured sph in fractures
321.8		Dolomite: light + medium grey collapse bx, stylolitic contact @ 325.5'.								97
325.5		Dolomite: coarse grain, pisolitic massive.								100
			@ 339.9 - 340.5'							6" long ¼" wide sph vein ll core
373.5		Dolomite: medium-coarse grain massive (occasionally pisolitic in places) core broken with incipient collapse crackle @ 372' < 10° @ 358' < 10°.								95
388.5		Dolomite: medium + medium to dark grey uniformly fine grain, vague thin beds @ 385' < 18°	@ 375'							sph. in vug possible "birds eye?" upright dolomite
			@ 389.2-395.7							sporadic coarse sph. 2% from 389.2-391
388.5	403.5	Dolomite: medium grey incipient collapse bx., occasional stylolite in massive incipient psuedo bx.								89

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. ... CST-2

PROPERTY TRENT. (CLAIM. GROUP.)

LOCATION ... Near the Nadaleen River, Y.T.

SHEET No. ... 2 of 8

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
							Zn%	Pb%	Ag ⁰ /t	Cu%
31	40	Dolomite breccia : Medium grey, heavily shattered breccia with abundant fine fragments and criss-cross hairline fractures. Cross-cut bandings around 34' with 30 ⁰ to core axis. Extensive but weak quartz veining with fracture ZnS and occasional oxidized pyritic fractures. Locally pisolitic (?) badly shattered and brecciated.								
40	45	Dolomite : Dark grey, medium grained, moderate sparry bands of dolomite with minor siderite. Occasional ZnS disseminations & fracture-fills associated with minor silica veinlets. Heavy ZnS clusters and oxidized pyrite vein at 45' with local boxwork.	41967	40'	45'	5'	2.50	.29	.18	
45	107.5	Dolomite breccia : Light grey to dark grey, massive with local collapse breccia overprinted (?) by severe shattering. Pyrite fractures (partly oxidized fine grains) and specks of realgar are not unusual. Realgar occurrences associated with quartz vein. ZnS as occasional fracture clusters and minor sporadic specks. Broken and rubbly core 64-73'. Realgar and orpiment occurrences started from 73 feet. 79-89' - poor recovery, mostly rounded (ground-up) core, no sign of significant mineralization. cont'd.....	41968	45'	48'	3'	5.14	.16	.17	

CONTRACTOR: Wright Drilling Co.

LOGGED BY: B.Y. Kim

CANADIAN SUPERIOR EXPLORATION LIMITED
DIAMOND DRILLING LOG

DRILL HOLE No. .CST-2.....

PROPERTY ...TRENT. (CLAIM GROUP).....

LOCATION ..Near the Nadaleen River, Y.T.....

SHEET No. 3 of 8.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			
							Zn%	Pb%	Ag ⁰ /t	Cu%
45	107.5	cont'd 89-107.5' - broken rubbly core mostly of massive light grey dolomite weakly brecciated with sparry bandings. Only specks of ZnS mineralization.								
107.5	123	Dolomite : Light grey, coarse to medium crystalline dolomite with hairline to fine cracks and minor silicification. Fair ZnS clusters	41969	116	121	5'	2.02	.46%	.19	
		116.5 - 121'. 1" massive pyrite around 121' with occasional thin pyritic fractures, usual realgar and orpiment staining and stylolitic fractures.								
123	174	Banded dolomite: Light grey to dark grey, generally thin-bedded, frequent zebra-textured bandings parallel to bedding planes. Slippage fractures	41970	162	168	6'	1.28	.03	.10	
		are graphitic. Minor pyrite in fractures and cluster ZnS. ZnS fractures mostly cross-cutting the bedding planes indicate a certain cross structure (banding 10-20 ⁰ to C.A. and ZnS and pyrite veining predominantly 50-80 ⁰ to C.A.). Massive, weakly silicified 148-150, 151.5-152.5 and 164-165 (moderate mineralization).								
174	179	Massive dolomite: similar to above (107.5-123). Weak silicification and mineralization around 175'.								
179	304	Dolomite (banded with thin silty layers): Grey to dark grey, well-bedded (laminated) dolomite with interlaminated silty (graphitic) layers and local								

cont'd....

CONTRACTOR: ..Wright Drilling Co.....

LOGGED BY: B.Y. Kim.....

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. .CST-2.....

PROPERTY.....TRENT..(CLAIM.GROUP).....

LOCATION ...Near.the.Nadaleen.River,..Y.T.....

SHEET No. .4. of .8.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE						
179	304	cont'd massive sandy dolomite. Bedding planes 10-30° to C.A.											
		Locally shattered with variable sparry bands and crack-											
		fills with minor quartz. Minor amount of fracture and											
		crack-filling pyrite and subordinate ZnS is common. Graphitic											
		slippage is usual, frequently open vugs with druse dolomite											
		and occasional pyrobitumen.											
		179-240' Thin bedded to laminated, grey to dark grey											
		dolomite. Minor thin sparry veining with weak quartz,											
		local graphitic slippage. Bedding 0-30° to C.A. Locally											
		fair mineralization (<1 ft. long) around 206 & 227' (with											
		fracture pyrite). Moderate fracture pyrite 236'.											
		240-245' Massive, medium grained, light grey dolomite											
		with open fractures (240-242'). No mineralization.											
		245-250' Banded dolomite as above (179-240'). Thin											
		graphitic silty layers around 247' along which core tends											
		to split 20° to C.A. no mineralization.											
		250-263' Massive dolomite as above (240-245'), no											
		mineralization. Minor banded interval around 256'.											
		263-304' Banded dolomite as above (245-250'), massive											
		coarse grained sucrose dolomite with open pores 290-292'	cont'd										

CONTRACTOR Wright Drilling Co.

LOGGED BY: B.Y. Kim

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. ... CST-2

PROPERTY ... TRENT (CLAIM GROUP)

LOCATION ... Near the Nadaleen River, Y.T.

SHEET No. 5 of 8

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE						
179	304	Very fine grained, light colored (creamy) ZnS in weakly brecciated, dark-colored (dark grey) bands (sparry banding & crack-filling around)											
304	336.5	Massive dolomite : Light grey, medium to coarse grained massive dolomite, locally sandy with weak silicification. Minor specks of PbS associated with silica vein & ZnS clusters on cracks. Weak shattering and local slippage with dark carbonaceous split fractures. Occasional strong sparry bandings with minor vuggy quartz and pyrobitumen.											
		326-331' Dyke-like fine grained, greenish grey dolomite with weak fine disseminated pyrite and local galena. Fracture staining from realgar and orpiment extensively.											
336.5	383	Dolomite breccia : Strong collapse breccia of banded dolomite. Darker-colored and well-banded dolomite fragments in strong sparry banding matrix with minor vuggy quartz. Local graphitic fracture cracks originated from thin shaly layers.											
		359-362' Darker-colored fragments with weaker light-colored veinlets, therefore weak breccia texture, local speckled texture of fragment dolomite.											
			cont'd...										

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. ...CST-2.....

PROPERTY...TRENT..(CLAIM.GROUP).....

LOCATION ...Near the Nadaleen River, Y.T.....

SHEET No. 6 of 8.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE		
							Zn%	Pb%	Ag ⁰ /t
336.5	383	cont'd... Strong clusters of ZnS and pyrite on stylolitic fractures at 363-364'. Minor ZnS as clusters and in fine fractures at 369 & 378'.							
383	385	Dolomite : Dark grey, medium grained, thin-bedded dolomite. Delicate fine zebra-texture at upper contact around 384'.							
385	411	Dolomite : Banded and well-shattered; comparably well-mineralized mostly of fracture clusters of ZnS with minor PbS. Silicification is very weak. Better dissemination of PbS at 400.5 ft. with coarse grained dolomite with small dark muddy pellets.	41971 41972 41973 41974	388 393 398 404	393 398 404 409	5' 5' 6' 5'	1.04 1.68 .70 1.70	.05 .32 .19 .15	.10 .20 .12 .12
411	423.5	Breccia : Collapse breccia from massive and banded dolomite. Banded (411-418) & massive (418-423.5). Mineralization improved approximately from the contact between banded & massive type which is around 417 feet. Brownish ZnS as crack-fill veinlets predominantly cross-cutting the banded structure. Occasional pyrite fractures and minor disseminations.	41975 41976	416 421	421 426	5' 5'	1.40 2.00	1.50 .11	.48 .12
423.5	465	Dolomite : Massive coarse to medium grained dolomite frequently oncolitic with small (1-3 mm in diameter) spheroidal particles. Vuggy veining of dolomite-quartz with local							

LOGGED BY: ...B.Y. Kim.....

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. CST-2

PROPERTY ... TRENT. (CLAIM GROUP)

LOCATION .. Near the Nadaleen River, Y.T.

SHEET No. 7 of 8

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE		
							Zn%	Pb%	Ag ⁰ /t
423.5	465	cont'd... zebra texture. Darker banded interval 432-433'. Minerali-							
		zation visually barren 432-452'. Common fracture staining							
		of orpiment and occasional pyrobitumen on open fractures							
		with well-crystallized dolomite and rare quartz.	49177	460	465	5'	.98	.26	.14
465	504	Dolomite breccia : Collapse breccia (local zebra) of banded dolomite strong	49178	465	470	5'	2.29	.61	.30
		texture with abundant sparry bandings and crack-fills.	49179	470	475	5'	.76	.41	.20
		Locally laminated due to thin carbonaceous interlayers.	49180	475	480	5'	7.75	.87	.42
		Fair ZnS mineralization 462-480, probably the best	49181	480	485	5'	.27	.07	.10
		of the hole. Abundant ½-1½ inch solid ZnS veining in							
		476-486, + 1" solid ZnS vein almost running parallel to							
		core axis 501-503.5'.							
504	545	Dolomite : Massive and oncolitic, dark grey, medium grained with	49182	499	504	5'	17.40	.70	.60
		broken oncolitic pieces of core. Broken extensively							
		506-516' with frequent quartz veining and abundant							
		pyrobitumen. Very poor zone for mineralization. Weakly							
		brecciated zone with minor disseminated galena on fracture							
		around 522 and disseminated ZnS around 526'. The lower							
		stylolitic contact with banded dolomite below. The contact							
		10-20 ⁰ to C.A.							

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

DRILL HOLE No. CST-2
SHEET No. 8 of 8

PROPERTY TRENT. (CLAIM GROUP)

LOCATION .. Near the Nadaleen River, Y.T.

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE		
							Zn%	Pb%	Ag ⁰ /t
545	561	Dolomite : banded, grey to dark grey, sparry bandings along bedding planes with minor quartz veining cross-cutting the bedding. Locally thin graphitic fractures are strong. 1 - 2" bedded, disseminated ZnS around 547'. Strong graphitic fractures 545-549'. Mass quartz with graphitic (locally pyrobitumen) fractures at 550'. Very poor core recovery 553.5 - 561 (30%) due to mechanical trouble. Ground-up rubbly core with no sign of significant mineralization.							
			49183	565	570	5'	1.52	1.30	.35
			49184	570	575	5'	.94	.26	.16
561	616	Dolomite : massive, light grey to grey, only locally brecciated with vuggy quartz-sparry dolomite mass and veining. Local speckled texture. Fair mineralization of ZnS and minor PbS around 590'. Pyrite is common with occasional realgar and orpiment usually as fracture staining. Fine to hairline dark grey muddy pellets in a lineation 10 ⁰ to C.A.. Coarse clean quartz crystal (druse) with pyrobitumen and cluster of white dolomitic crystals at 612'. 590-600' local strong disseminated PbS with minor ZnS on weakly silicified bandings. Fair ZnS as fracture-fill clusters, particularly strong around 590'.							
			49185	589	594	5'	2.64	2.43	.56
			49186	594	600	6'	.26	3.44	.70
		End of Hole							

* Dip test at 616' 45⁰, surface dip 45⁰.

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

(+ 41672N
50892E) unsurveyed

PROPERTY... CRAIG CLAIMS GROUP..... P-184.....
 COMMENCED... 9 August, 1980.....
 COMPLETED... 13 August, 1980.....

LOCATION... WEST ZONE (Section 50892, 522 ft. N of C-77-15).....
 ELEVATION... ± 4642'..... DIPS... -45.5°.....
 BEARING... 180°..... (-53°?? acid etch at 552').....
 DEPTH... 785 ft. -50° eastman @ 780'.....

DRILL HOLE No. CSW-1.....
 SHEET No. 1 of 9.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
0	41	No core recovered									-
	43	Silty sandstone : medium grey + medium-dark brown, oxidized beds/bedding planes									50
	44	Argillite : medium grey + oxidation streaks									50
	67	Slate : black carbonaceous + rudaceous dolomite bands									32
	84	Dolomite + slate bands : alternating, carbonaceous slate. Dolomite with incipient shatter. Shatter bx on upper contact. Fault. Quartz veining. Fracture zone.									50
	87	Silicified dolomite: fracture zone									10
	94	Sparry dolomite : with Fe/or ankeritic staining + qz. veins + pyritic grey talcose dyke stringers. Fracture zone.									56
	96	Slate : black + cataclastic bx with clay matrix fault. Fracture zone									25
	101	Dolomite chips									20
	110	Dolomite, sparry : cream colour pervasive strong spar. Some ankerite? Incipient shatter bx.									94
	120	Dolomite : banded + sparry in places. qz. veining									86
120	159	Dolomite : light-medium grey, coarse recrystallized? coarse speckle to salt + pepper texture possibly coarsely pisolitic (cont'd)									

CANADIAN SOLID FUELS LTD. DIAMOND DRILLING LOG

PROPERTY ... CRAIG CLAIMS GROUP P-184

LOCATION ... West Zone

DRILL HOLE No. CSW-1

SHEET No. 2. of ... 9.

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
120	159 (cont'd)	Small vugs + pyrobitumen. Incipient shatter throughout.									
		Minor qz. veins. 143-144' shatter bx.; @ 145' 6" massive dolomite; below 140' coarse pellets, some more definite pisolites; oncolitic grains. @ 150' stylolite; @ 156' minor collapse bx									97
	182	Dolomite : breccia - polymictic sub-rounded fragments. Matrix slightly Fe stained, ankeritic? minor qz. veins; later incipient shatter; occasional speckle band (sharp upper + lower contacts) @ 174-175'									100
	188	Dolomite : light-medium grey less coarsely specked. Pisolitic occasional mud galls/large pellets, minor incipient shatter + qz. veins.									100
	188.5	Dolomite : very light grey - cream sparry + shatter brecciated									100
	189	Sandy dolomite : medium brownish grey									100
	190	Sparry dolomite : coarse; cream + coarse pellets. Shatter bx. occasional qz veins									100
190	195	Dolomite : medium-light grey, medium to coarse speckled appearance, coarse pisolites? Occasional large mud fragments; minor qz. veins upper part. 194-195' increased shatter bx and increasingly sparry									100

CANADIAN SUPERIOR
DIAMOND DRILLING LOG

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION West Zone

DRILL HOLE No. ...

SHEET No. ... 3 of 9

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
195	199	Dolomite : cataclastic bx + qz. veins Fault									100
	201	Dolomite : speckled as 190-195' but very sparry upper and lower contacts incipient shatter bx + qz. veins									100
	202	Dolomite cataclastic bx: open fractures, slightly vuggy, altered (limonitic) fracture fault									100
	202.6	Silicified dolomite									100
	208.5	Dolomite : speckled as previously noted 190-195'. Sparry. Incipient shatter + qz. veins. @ 203.5' 2" cataclastic bx; Stylolite @ 205' and 206' minor collapse bx 206-206.5', 207.5-208.5' shatter bx going into cataclastic bx.									100
	210	Dolomite : bands of dark and cream sparry types. Incipient shatter + quartz stringers.									100
	218	Dolomite : medium-fine grain, coarsely speckled to mottled to sparry. some pellets. strong shatter developing into cataclastic breccia + qz. veining 210-213', 210-211' fracture/shear?? 213-218' incipient shatter. 217-218' fracture intense. @ 217' 3" pellet band. Fracture zone.									100
	224.5	Dolomite : cataclastic bx; open vuggy; very minor orpiment/realgar @ 218-220'. qz. veining Fault								@ 221 ft. 1/2" fracture + gn filled	100
224.5	234	Dolomite : speckled minor pellets coarsely pisolitic. Incipient shatter (cont'd)									

CANADIAN SUPERIOR
DIAMOND DRILLING LOG

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION West Zone

DRILL HOLE No. CSWTJ

SHEET No. 4 of 9

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
224.5	234 (cont'd)	230-231.5' very sparry + shatter bx.									90
	237	Dolomite : fine grain black some sparry bands. 235-237' bands speckled dolomite									91
	239	Dolomite : sparry + pellets, qz., incipient shatter									91
	241	Dolomite : bx; + dark grey-black to brown. 240-240.5' fine dark dolomite, 240.5 - 241' Fe stained. Fracture Zone									91
	266	Dolomite : sparry (cream) + irregularly interbanded speckled dolomite + pellets + shatter. @ 251-252' cataclastic bx Fe stained Fault									95
	277	Dolomite : speckled (pisolitic) @ 273-274' sparry, minor qz. + pyrobitumen in vugs, minor qz veining, minor Fe staining.									100
	282	Dolomite : cataclastic bx. Tube not locked, one foot only recovered									20
	306	Dolomite : massive; minor speckle and sparry; coarse shatter bx and cataclastic zones, qz veining & vugs. Fault zone									79
306	367	Dolomite : medium-coarse grain, medium-dark grey irregular faint banding/ thin bedding. Minor sparry crackle + qz veining (some vugs - qz filled) 306-311' minor open joints Fe stained. Stained occassional joints 306-362'; 311-312'; 314-315' pisolitic bands @ 333.5' silicified major vug/vein qz., 336-337' shatter. 337-338' cataclastic bx. @ 355' 2" oncolites, @ 361' <sup>0									100

CANADIAN SOUTHERN
DIAMOND DRILLING LOG

DRILL HOLE No. ... CSW-1

PROPERTY .. CRAIG CLAIMS GROUP

LOCATION ... West Zone

SHEET No. 5 of 9

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
367	370	Dolomite : slightly wavy thin bedded. algal?? + qz veining @ 370' <47°									100
	400	Dolomite : medium grey vague thin bedding to lamination. occasional carbonate + qz veining. 4" sparry band at 374'									
		377-378' possible dyke stringers? pyritic									
		386-387' pellets									
		390-391' open fractures, vuggy									95
408		Dolomite : shatter to cataclastic bx. Fracture Zone. Fault.									97
415		Dolomite : thin bedded to laminated + qz veins/strings @ 410' pyritic 3" @ 412.5-414' intense qz veining, @ 408' <48°, @ 414' <45°									100
424		Dolomite : thin bedded to laminated + sparry bands. 422-424' incipient shatter									100
437		Dolomite : collapse bx + incipient shatter. 433-437' superimposed shatter bx.									100
446		Dolomite : coarse grain, medium-dark grey massive + sparry crackle. Banded 442.5-443' occasional py stringers 437-440'; incipient shatter									
		minor qz., syllolitic @ 442.5'									100
449		Dolomite : medium-dark + light grey incipient collapse bx of banded dolomite + py blebs									100
459		Dolomite : banded sparry to crackle. Narrow incipient collapse bands in places. @ 454-457 zebra type dolomite @ 451' <63°, @ 456' <57°									90
459.5		Cataclastic bx : gouge + ground matrix. Fault									90
459.5	477	Dolomite : medium-fine grain, dark grey irregular banded to massive with (cont'd)									

CONTRACTOR: Wright Drilling Co.

LOGGED BY: S.C. James

DIAMOND DRILLING LOG

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION WEST ZONE

DRILL HOLE No. ... USW-1

SHEET No. ... 8 of 9

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
585	617.5	Dolomite : banded thin to thin-medium beds. Occasional sparry bands. 590-592' broken core. alteration on joints 591.7-595' minor cataclastic bx. 596-600' jointing, blocky open fractures, Fe stained 601-602' cataclastic bx.									77
625		Dolomite : incipient collapse bx/pseudo bx									100
633		Dolomite : medium-dark grey banded sparry + thin-medium beds + bands of depositional -intraformational slump bx.									90
635		Dolomite : dark grey-black, medium grain sandy to cherty									90
646		Dolomite : dark grey bx (depositional) + sparry collapse in places. Carbon- aceous fragments.									100
672		Dolomite : medium+dark grey to dark grey to black @ 660' medium-coarse grain bands of thin to medium bedded + bands of deposition bx dolomite. @ 660-661' cataclastic bx + fine qz veins, 665-667' crystalline massive. @ 650' <50°, @ 658' <54°									100
672	686	Dolomite : dark grey to black. medium grain massive with pseudo bx bands. sandy to cherty?? 681-682' interbeds of depositional bx, carbonaceous shale & massive. minor py. 683-685' dark grey to black carbonaceous galls in intraformational bx band. specks py.									100

CONTRACTOR: ... Wright Drilling Co.

LOGGED BY: S.C. James

DIAMOND DRILLING LOG

PROPERTY ... CRAIG CLAIMS GROUP ... P-184

LOCATION ... West Zone

DRILL HOLE No. ... CSW-1

SHEET No. 9 of 9

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
686	696	Dolomite : dark grey to black, medium grain cherty? carbonaceous irregular shale laminations + bands of massive to intraformational bx + sparry bands. 691-692' qz + carbonate veins									100
	710	Dolomite : banded medium-dark grey to black, sparry bands to crackle. Qz + pyrobitumen @ 705' < 45°									100
	711.5	Dolomite : sparry collapse bx + py dissemination.									100
	730	Dolomite : dark grey to black banded medium to thin beds carbonaceous on bedding planes + intraformational breccia/gall bands. @ 719' < 44°, 722.5-724' "zebra bands" sparry. @ 725' 1" cataclastic bx, @ 722.5' < 40°.									100
	740	Dolomite : alternating bands of medium-dark grey massive (in places pisolitic) + sparry with bands of thick bedded to sparry dolomite. @ 738' < 49°									100
	743	Dolomite : dark grey to black minor sparry bands. slightly cherty?									100
	747.5	Dolomite : medium-dark grey + narrow sparry bands									92
	754.5	Dolomite : light grey pisolitic oolitic. 752-754' + banded dolomite									92
	772	Dolomite : oncolitic 768-771' Incipient shatter to shatter bx. Slightly altered									96
772	785	Dolomite : medium grey originally band + slightly sparry bands/veins. minor qz veins. 773-785' incipient shatter bx, blocky, altered									
		774-775' cataclastic intense shatter 768-785' fracture zone									100
		END OF HOLE									

CONTRACTOR: ... Wright Drilling Co.

LOGGED BY: ... S.C. James

CANADIAN SUPERIOR EXPLORATION LIMITED

DIAMOND DRILLING LOG

PROPERTY .. CRAIG. CLAIMS. GROUP..... P-184
 COMMENCED ... 1st August, 1980
 COMPLETED ... 7th August, 1980

LOCATION .. West. Zone..... 41679N 50514E.....
 ELEVATION 4529' DIPS .. -62°
 BEARING..... 180° @220' -62° Eastman.....
 DEPTH ... 1000 ft. @676' -63° Eastman.....
 @966' -63° Eastman.....

DRILL HOLE No. .CSW-3.....
 SHEET No. ... 1 of 11.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
0	31	No core recovered									-
	36	Slate : grey-green with rusty joints. strongly cleaved parallel to bedding @ 30' < 67°									60
	58	Slate : black carbonaceous + rusty limonitic. cleaved @ 45' < 76°									45
	59	Dolomite : strongly silicified bx									38
	82	Slate : black slates, rusty + grey bands? dyke material? 52-64' fault: pyritic, gouge, chaotic cleavage 66' pyritic 70-73' slightly pyritic @ 70' < 83°									35
	86	Dolomite : shatter bx. fault contact with slates 82-82.4 pyrite + carbonate									38
	87	Dolomite : coarse grained silicified bx. limonitic joints. fault gouge @ 86'									40
	90	Slate : black carbonaceous minor py. at lower contact (dykes?)									83
	93	Limey dolomite : dark grey + numerous CaCO ₃ filled tension gashes. Shatter bx.	sph. blebs		92.5-93	2%					83
	96	Dolomite : medium-dark grey massive + silica veins 1/4" to 1" thick. Minor carbonate veins, py. @ 94'									66
	102	Dolomite : medium-dark grey massive with incipient shatter to cataclastic bx. Silica veins									83
			2" stringer sph.		@ 101.5'	±30%					
102	103.5	Gouge + slate; black + fine dolomitic? fragments fault									50

DIAMOND DRILLING LOG

PROPERTY CRAIG. CLAIMS. GROUP..... P-184..

LOCATION .. West. Zone

DRILL HOLE No.

SHEET No. ...2. of. 1.].....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery	
103.5	108	Dolomite : medium grey shatter bx. Crosscutting silicious veins 5-10 ⁰ .										
		originally with bands of laminated dolomite: bedding? 90 ⁰ .	minor	blebs	sph.	@ 104'						100
	112	Dolomite : medium grey shatter brecciated, occassional qz veinlet										100
	113.3	Dolomite : silicified + pyritic (dyke stringers??)	@ 113-	113.3	ft.	coarse gn.	minor	sph.				100
	126	Dolomite : medium grey shatter bx (pyritic @ 115.5')	@ 116	ft.	minor	blebs	sph.					31
	130	Dolomite : coarse grain sucrosic, recrystallized medium grey limonitic, shatter										
		bx + open fractures										63
	135.8	Dolomite : coarse grain grey recrystallized shatter bx										75
	136.6	Gouge + silicified fragments: Driller lost water. Fault zone										38
	137	Dolomite : pisolitic + silica veining. Fault zone										63
	138.6	Gouge : black + minor dolomitic fragments. Fault zone										63
	139.6	Dolomite : coarse grain sucrosic recrystallized shatter bx + qz veining										50
	141	Slate : black; pyritic + gouge? Fault zone?										50
			@ 148	ft.	very	minor	fine	sph				
	150.6	Dolomite : medium grey recrystallized (sucrosic) shatter bx. minor open										
		fractures, strong shatter @ 142'										70
			@ 151	ft.	sph.	disseminated,	minor	gn.	<5%			
			@ 155	ft.	sph	vein						
150.6	156	Dolomite : medium-dark grey massive shatter bx + silica veining, rusty										
		@ 152' 154-156 ft. virtually cataclastic Fault?										100

CONTRACTOR: ...Wright Drilling Co.....

LOGGED BY: ..S.C.. James.....

DIAMOND DRILLING LOG

PROPERTY ... CRAIG CLAIMS GROUP ... P-184

LOCATION ... West Zone

DRILL HOLE NO. ...

SHEET No. 3 of 11

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
							Pb%	Zn%	Ag/oz/t	
156	176	Dolomite : massive, shatter bx + quartz veins + disseminated gn throughout; very minor sph.	42251	156	161	5		+ 5%	Sph>gn.	100
	182	Dolomite : coarse grain, dark grey shatter bx + minor silica veins (pisolitic/ oncolitic to 182'?)	42252	161	166	5		+ 5%	Sph = gn	71
	191	Dolomite : medium-coarse grain, dark grey massive, (ex-pisolitic or oncolitic in places) shatter bx + qz veins	42253	166	171	5		+ 20%	gn >> sph	63
	196	Dolomite : originally collapse bx with strong shatter to cataclastic over- print	42254	171	176	5		+ 20%	gn >> sph	60
	199	Dolomite : coarse grain, dark grey oncolitic to pisolitic. Shatter bx								100
	209	Dolomite : coarse grain, medium-dark grey shatter to cataclastic bx. Occasional stylolite								100
	214	Dolomite : coarse grain, medium-dark grey. cataclastic bx 209-211 ft. & 213 ft. some qz veins	41960	198.5	201.5	3	0.10	1.70	0.12	
			42255	201.5	206.5	5	1.02	25.10	0.81	100
	220	Dolomite : coarse grain, medium-dark grey shatter bx slightly vuggy	41961	206.5	209.5	3	0.16	0.92	0.17	88
	222	Dolomite : dark grey cataclastic bx veined + altered Fault zone								88
	236	Dolomite : coarse grain, medium-dark grey massive + banded with shatter bx & qz veining								93
	245	Dolomite : cataclastic bx + vuggy. Fault zone.								100
245	254	Dolomite : coarse grain, medium-dark grey banded with shatter bx and silica veining. altered								100

CONTRACTOR: ... Wright Drilling Co.

LOGGED BY: ... S.C. James

DIAMOND DRILLING LOG

PROPERTY... CRAIG CLAIMS GROUP..... P-184..

LOCATION ... West Zone.....

DRILL HOLE No.

SHEET No. 4 of 11.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
254	260	Dolomite : coarse grain, medium-dark grey massive + shatter bx. occasional qz veins									86
	268	Dolomite : coarse-medium grain, medium-dark grey banded (medium to thin beds) @ 262' < 53°.									90
	282	Dolomite : coarse grain, medium grey sucrosic recrystallized. Banded 269-271' 3" wispy dolomite @ 276'. Hairline cracking @ 270' < 43°									93
	301	Dolomite : alternating. coarse grain, medium grey massive pisolitic in places + hairline cracking with banded medium thick bedded dolomite with incipient sparry + qz collapse bx along some bed planes @ 296.5 rusty + shatter bx small									100
	315	Dolomite : coarse grain, medium grey "speckled" sucrosic recrystalline. occasionally sparry wispy @ 301.5 and 313.5 ft.									100
	330	Dolomite : bands of thin to medium bedded with minor sparry crackling and thin incipient collapse bands (+qz & pyrobitumen) alternating with lesser massive dolomite as at 301-315' @ 312' < 40° @ 326' < 52° occasional silica veining, minor hairline cracking. 2" cata- clastic bx rusty @ 323 ft., occasional stylolite e.g. 320' pellets @ 330' @ 330' < 52°.									97
330	369	Dolomite : coarse grain, medium grey massive (medium to thick beds 355-359') crackle to sparry incipient collapse bx along bedding. pisolitic 348.5 - 351 ft. Stylolite @ 359 ft. pisolitic 361.5 - 362.5'									86

CONTRACTOR: Wright Drilling Co.....

LOGGED BY: S.C. James.....

DIAMOND DRILLING LOG

PROPERTY ... CRAIG CLAIMS GROUP P-184

LOCATION ... West Zone

DRILL HOLE No. C3W73

SHEET No. 5 of 11

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery
							Pb%	Zn%	Ag oz/t	
369	381.5	Dolomite : coarse grain, medium-dark grey massive oncolitic? 373-374' de-								
		finately oncolitic; 374-381'originally incipient collapse bx.								
		shatter bx. cataclastic @ 376'	42256	382	387	5	0.30	7.02	0.42	100
	397	Dolomite : originally massive to oncolitic? Shatter bx massive sphalerite								
		in places	42257	387	390	3	1.29	24.40	1.25	94
	402	Dolomite : mix of sparry originally collapse.& shatter bx over minor qz								
		veinlets. minor gn; massive sph	42258	390	397	7	0.02	0.21	0.03	88
	405	Dolomite : coarse grain, sparry collapse bx + shatter overprint. 403.5 -								
		404' cataclastic bx	42259	397	402	5	3.02	16.60	1.27	72
	421	Dolomite : shattered + cataclastic bx minor qz @ 421 ft. Fault zone								61
	428	Dolomite : banded medium-coarse grain dark grey + beds of sparry incipient								
		collapse. minor hairline cracking + shatter ; occassional wavy								
		algal bands @ 424' <38 ⁰								100
	432	Dolomite : massive medium-coarse grain medium grey + shatter bx. Pisolitic								
		431.5' - 432'								100
	432	456.5 Dolomite : banded medium-coarse grain, dark grey + beds of sparry incipient								
		collapse 444'-446.5' band of massive + shatter bx.								
		453'-454' collapse bx sparry @ 432' <35 ⁰								
		@ 442' <35 ⁰								
		@ 452' <43 ⁰								
		@ 456' <44 ⁰								96

CONTRACTOR:Wright Drilling Co.....

LOGGED BY:S..C...James.....

CANADIAN SOUTHERN ENERGY LTD.
DIAMOND DRILLING LOG

PROPERTY ... CRAIG CLAIMS GROUP

P-184

LOCATION ... West Zone

DRILL HOLE No. ... CSW-3

SHEET No. 6 of 11

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
456.5	467	Dolomite : massive pisolitic in places. Occassional incipient minor collapse bx + shatter bx									91
	471	Dolomite : alternating banded dolomite with incipient collapse and massive pisolitic? wispy carbon lamination 469'-470'; minor qz veins @ 471'									86
495.5		Dolomite : banded medium-fine, dark-grey + incipient sparry collapse bands & crackle; minor small vugs; lesser occasional massive bands with pellets or pisolites wispy 483'-484'; pisolitic 490.5'-491'; Shatter bx 492'-493'; 494'-495' some alteration on joints @ 476' < 48 ⁰ @ 485' < 50 ⁰									94
517.5		Dolomite : banded medium to thin bedded with incipient sparry collapse bands with massive & pisolitic/pellet beds									86
519		Dolomitic cataclastic bx - sandy matrix Fault									69
525		Dolomite : shattered chips. (fault fracture zone)									69
526		Dolomite : medium-fine grain massive + SiO ₂ veins Styrolite @ 525.5'									100
528		Dolomite : medium-coarse grain oncolitic									100
528	551	Dolomite : fine-medium grain, medium grey vague lamination to thinly bedded. Slight silica + carbonate crackle. occassional incipient collapse band. pyritic dyke? stringer @550' & 551' @ 529' < 90 ⁰ , @ 535' < 70 ⁰ , @ 545' < 56 ⁰									100

CONTRACTOR: ... Wright Drilling Co:

LOGGED BY: S..C...James.....

DIAMOND DRILLING LOG

DRILL HOLE No. . CSW-3.....

PROPERTY ... CRAIG CLAIMS GROUP..... P-184....

LOCATION .. West Zone.....

SHEET No. 7 of 11.....

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
584		Dolomite : medium grain, dark grey crackle breccia, intensity increasing with depth. Minor quartz + sparry veins. fine pyritic dyke fingering @ 562' & 571' @ 556' <73° @ 570' <67°									100
586		Dolomite : medium grain, dark grey laminated to thin beds + incipient crackle breccia. Minor quartz veins @ 585' <54°									100
595.5		Dolomite : crackle to collapse brecciation of thin bedded type. Quartz veins, pyritic blebs, dyke fingers @ 597' <54°									100
599.5		Dolomite : medium-fine grain, light-medium grey vague laminated to wispy. occassional thin pellet bed								1/4" sphalerite bleb @ 596.5'	100
640		Dolomite : medium-fine grain, medium grey laminated to thin bedded, occassional sandy dolomite band 600'-620'; minor sparry veins + slight crackle brecciation. Open fractures + vugs with qz filling; occassional stylolites; 602-603' pyritic dyke fingers; 606.5-610' wavy algal?; 630-632' pyritic dyke stringers; 630-640' core chips fracture zone?; 639' core tube not locked 1.5' ground; @ 607' <57°; @ 624' <55°; @ 636' <57°.									91
640	646	Dolomite : fine grain, light-medium grey massive texture with thin to medium beds. irregular wavy bedding planes. minor shatter breccia from 643'; @ 642 <60°.									100

CONTRACTOR: Wright Drilling Co.....

LOGGED BY: S.C. James.....

DIAMOND DRILLING LOG

PROPERTY ... CRAIG CLAIMS GROUP P-184 ..

LOCATION .. West Zone

DRILL HOLE No. ... CSW-3

SHEET No. ... 8 of 11

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery	
646	668	Dolomite : fine-medium grain, light-medium grey banded (lam. to thin to medium beds). Sparry beds; minor collapse bx @ 652-653'										
		@660' <60°										95
	670	Dolomite : light-medium grey oncolitic										100
	676	Dolomite : light-medium grey oncolitic + depositional? breccia bands. 3" pisolites @ lower contact										100
	728.5	Dolomite : medium-coarse, medium-light grey banded laminated, thin to medium beds. Slight sparry crackle; occasional quartz vein. Slightly sandy in places; pyritic very thin ½-2" dyke fingers 698'-699'? 703'-704'; 709'-710'; minor incipient shatter bx 702'-703'; 708'-710'; 723'; minor joints/fractures 716'-726'; incipient narrow collapse bands increasing with depth from 718'.										100
	737	Dolomite : sparry solution collapse breccia + vuggy; open minor fractures, incipient shatter bx, stylolites 729'-730'										100
	749	Dolomite : medium-coarse grain, light-medium grey laminated + thin bedded (irregular) sparry bands, minor SiO ₂ veins										
		@ 747' minor shatter bx @ 743' pyritic fine dissemination ¼"										100
749	763.5	Dolomite : fine-medium grain, dark grey laminated to medium beds. sparry crackle. upper contact gradational pyritic stringers @ 750'; 756 - 757' @ 751' cataclastic bx minor shatter - @ 781.5'										
		@ 740' <57°; @ 755' <46°										100
												sph. fine sph blebs in sparry band @ 761'

CONTRACTOR: Wright Drilling Co.....

LOGGED BY: ..S.C...James.....

DIAMOND DRILLING LOG

DRILL HOLE No. CSW-3

PROPERTY CRAIG CLAIMS GROUP P-184

LOCATION West Zone

SHEET No. 9 of 11

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE				% Core Recovery
763.5	768	Dolomite : fine-medium grain, medium-dark grey sandy to cherty? dolomite (fine py dissemination in places)									100
	778	Dolomite : medium-coarse grain, medium+dark grey; laminated to thin bedded with sparry crackle + very fine pyritic dykelet fingers @ 770' <51° @ 772' <41°									100
781.5		Dolomite : bands of massive, laminated and pellets									100
783		Dolomite : sparry incipient solution collapse bx									100
794		Dolomite : breccia; pellets + various dolomite fragments. Sparry in places									100
803		Dolomite : medium-coarse grain massive slightly sandy; minor hairline fractures; py. minor sparry crackle									100
848		Dolomite : dark-grey-black interbanded massive; with lithic, pellet and oncolitic bx; occassional fine py dissemination. Occassional SiO ₂ veinlets - cherty? 815'-820' Minor incipient fracturing 832'-848' @ 817' <51°.									100
854		Dolomite : medium-coarse grain, medium-dark grey sparry crackle	@ 854.5 sph								100
861		Dolomite : breccia + oncolitic, pisolites and internally massive frags with superimposed incipient sparry collapse. Minor late SiO ₂									100
861	862.5	Dolomite : coarse oncolitic light-medium grey									100
			@863 to 864" sph-coarse blebs/fracture fills 1/2"								
			maximum width little or no associated gn <5%								

CONTRACTOR: Wright Drilling Co.

LOGGED BY: S.C. James

DIAMOND DRILLING LOG

PROPERTY .. CRAIG CLAIMS GROUP P-184

LOCATION .. West Zone

DRILL HOLE No. ... CSW-3

SHEET No. ..10 of 11

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	ASSAY VALUE			% Core Recovery	
							% Pb	% Zn	oz/t Ag		
862.5	868	Dolomite : breccia oncolitic + varied dolomite fragments. Incipient shatter	41962 bx	862.5	867.5	5	0.01	4.11	0.19	100	
			41963	867.5	872.5	5	0.54	8.10	0.41		
				@ 868' to 870' sph - as in 863'-864' but blebs up to 1 - 2"							
	870	Dolomite : oncolitic minor incipient bx. narrow open or SiO ₂ filled fractures vugs		@ 870' to 872' sph + minor gr. coarse fracture fill 5 - 10%							100
				@ 872' 2" high grade massive sph.							
	877	Dolomite : breccia oncolitic + varied dolomite fragments. Sparry 870.5 - 871. minor SiO ₂ . minor py @ 871.8'								83	
	893	Dolomite : breccia bands as above + bands laminated to thin bedded. Slightly sandy in places. minor incipient shatter. Minor SiO ₂ . 877.5 - 878.5' fine disseminated py in matrix. Cataclastic @ 877' 880 - 881' collapse bx sparry 892 - 893' very fine py.								75	
				@ 904 - 906' sporadic small blebs sph.							
	910	Carbonaceous limy dolomite: irregular thin bedding to laminated approaching intraformational slump bx in places. 893-898 ± 90° @ 903' <43°								100	
	910	912 Carbonaceous limy dolomite + interbedded pisolitic limy dolomite								100	
				@ 913-915' medium-coarse disseminated sph blebs in fracture							

CONTRACTOR: Wright Drilling Co.

LOGGED BY: S.C. James

APPENDIX I

CORE ASSAY RESULTS AND METAL RATIOS

Hole No.	Interval/length Feet	% Cu	% Pb	% Zn	oz/t Ag	Ratio for values \geq 0.5% Pb or Zn			
						Pb/Zn	Ag/Pb	Ag/Zn	Ag/Pb+Zn
<u>CRAIG CLAIMS</u>									
<u>West Zone</u>									
CSW-3	198.5-201.5/3		0.10	1.70	0.12				
	201.5-206.5/5		1.02	25.10	0.81	<.1	0.79	<.1	<.1
	206.5-209.5/3		0.16	0.92	0.17				
	382-387/5		0.30	7.02	0.42	<.1		<.1	<.1
	387-390/3		1.29	24.40	1.25	<.1	1.0	<.1	<.1
	390-397/7		0.02	0.21	0.03				
	397-402/5		3.02	16.60	1.27	0.18	0.42	<.1	<.1
	862.5-867.5/5		0.01	4.11	0.19	<.1	<.1	<.1	<.1
	867.5-872.5/5		0.54	8.10	0.41	<.1	0.76	<.1	<.1
CSW-1	571.5-576.5/5		3.60	3.49	1.27	1.03	0.35	0.36	0.18
<u>Nadaleen</u>									
CSN-2	385-390/5		0.48	0.84	0.18	0.57		0.21	0.14
CSN-4	491-496/5	0.166	0.75	5.25	0.22	0.14	0.29	<.1	<.1
	496-503/7	0.054	0.22	2.68	0.10	<.1		<.1	<.1
	503-513/10	0.019	0.06	0.47	0.04				
CSN-5	209-213/4		0.76	2.70	0.31	0.28	0.41	0.11	<.1
	255-260.5/5.5		0.44	4.19	0.36	0.11	0.82	<.1	<.1
CSN-1	No assays								
CSN-3	No assays								
<u>Trent zone</u>									
CST-1	159-164/5		0.03	0.10	0.09				
	182-187/5		0.03	0.10	0.19				
	187-193/6		0.52	1.68	0.11	0.31	0.21	<.1	<.1
CST-2	14-18/4		4.22	0.19	0.98	22.21	0.23	5.16	0.24
	26-29/3		3.12	2.32	0.70	1.34	0.22	0.30	0.13
	40-45/5		0.29	2.50	0.18	0.12		<.1	<.1
	45-48/3		0.16	5.14	0.17	<.1		<.1	<.1

APPENDIX I cont'd

Hole No.	Interval/length Feet	% Cu	% Pb	% Zn	oz/t Ag	Ratio for values $\geq 0.5\%$ Pb or Zn			
						Pb/Zn	Ag/Pb	Ag/Zn	Ag/Pb + Zn
<u>Trent Zone</u>									
CST-2	116-121/5		0.46	2.02	0.19	0.23		<.1	<.1
	162-168/6		0.03	1.28	0.10	<.1		<.1	<.1
	388-393/5		0.05	1.04	0.10	<.1	2.00	<.1	<.1
	393-398/5		0.32	1.68	0.20	0.19	0.63	0.12	0.1
	398-404/6		0.19	0.70	0.12	0.27	0.63	0.17	0.13
	404-409/5		0.15	1.70	0.12	<.1	0.80	<.1	<.1
	416-421/5		1.50	1.40	0.48	1.07	0.32	0.34	0.17
	421-426/5		0.11	2.00	0.12	0.06	0.92	0.06	<.1
	460-465/5		0.26	0.98	0.14	0.26	0.54	0.14	0.11
	465-470/5		0.61	2.29	0.30	0.27	0.49	0.13	0.10
	470-475/5		0.41	0.76	0.20	0.54	0.49	0.26	0.17
	475-480/5		0.87	7.75	0.42	0.11	0.48	<.1	<.1
	480-485/5		0.07	0.27	0.10				
	499-504/5		0.70	17.40	0.60	<.1	0.86	<.1	<.1
	565-570/5		1.30	1.52	0.35	0.86	0.27	0.23	0.12
	570-576/6		0.26	0.94	0.16	0.28	0.62	<.1	0.13
	589-594/5		2.43	2.64	0.56	0.92	0.23	0.21	0.11
	594-600/6		3.44	0.26	0.70	13.23	0.20	2.69	0.19

106C-4
106C-3

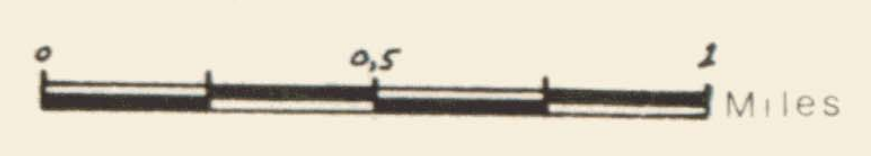
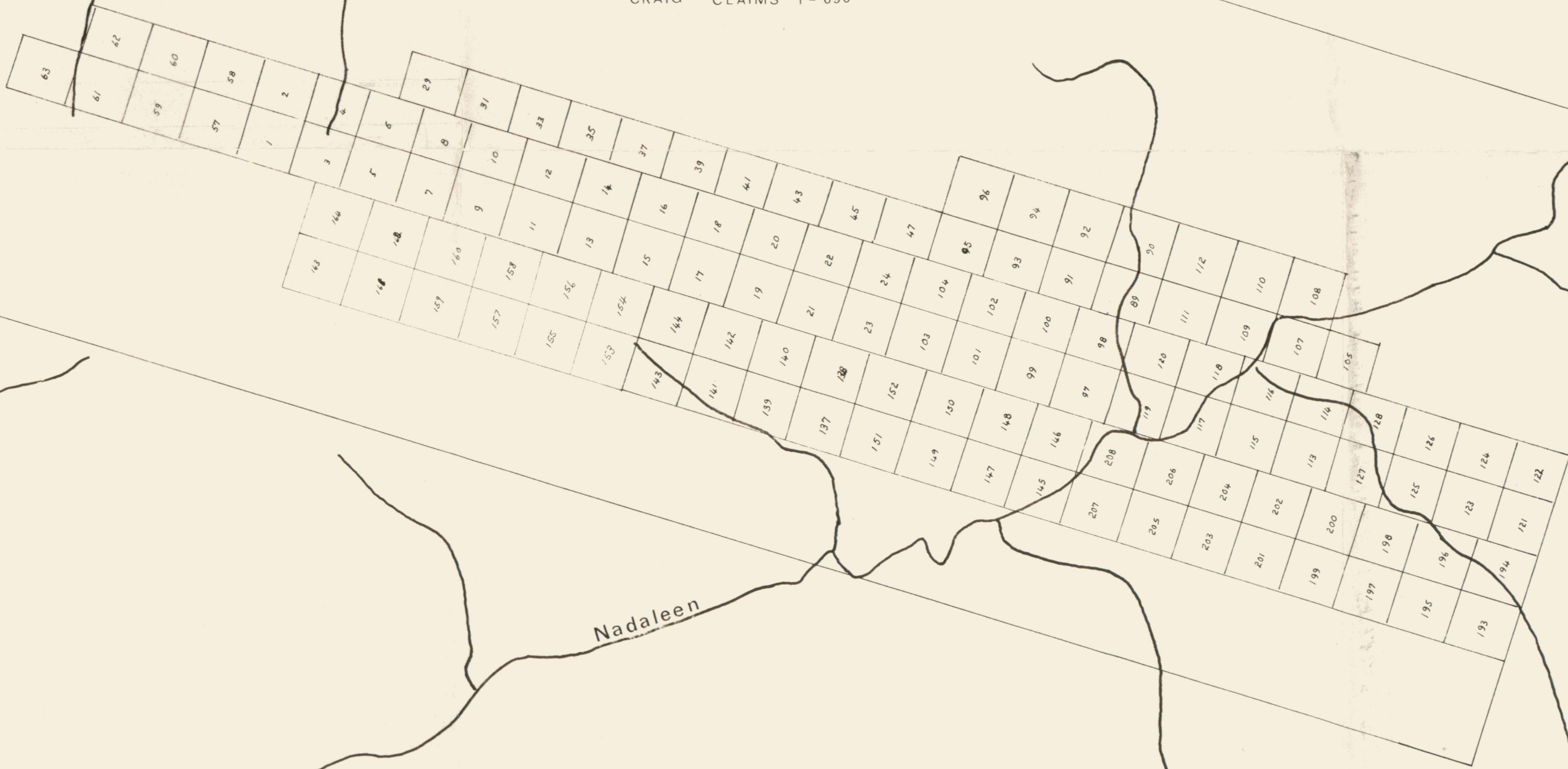


East Rackla River

River

Nadaleen

CRAIG CLAIMS 1-696



CANADIAN SUPERIOR EXPLORATION LTD		
CRAIG CLAIMS 1-696 (east)		
LOCATION MAP		
Work by	Date	DWG
SCJ	23 Sept 1977	P/B4-80
Revised	Oct 1980	FIG 3



LEGEND

- Dolomite
- Limestone
- Ferradolomite
- Serpentinite
- Argillite / shale
- Volcaniclastics
- Dykes
- Major Fault
- Claim post
- Drill holes: 1980

NTS 106-C-3



CANADIAN SUPERIOR EXPLORATION LIMITED

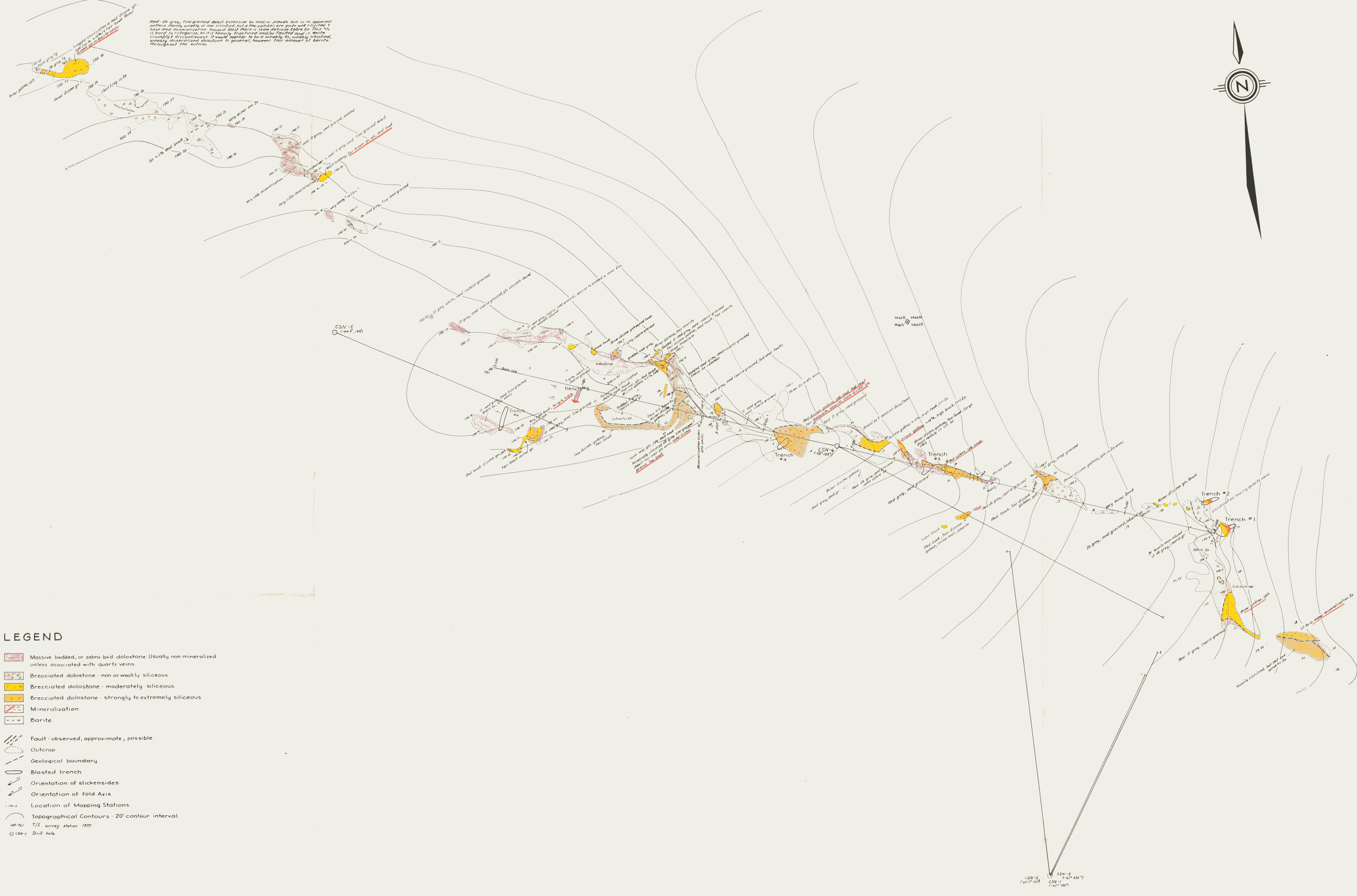
C.S.E - McINTYRE - CRAIG JOINT VENTURE

CRAIG CLAIM GROUP - WEST ZONE

DRILL HOLE PLAN

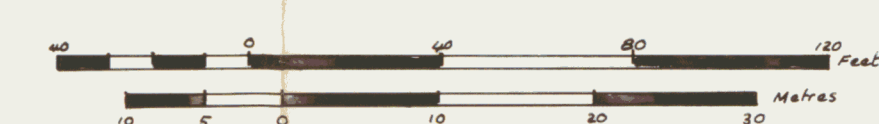
Drawn by: RT Falak	Work by: R.G. Ward 1977	Revisions: redrawn SC James 1980	Dwg. Title: 106-C-3
Scale: 1" = 100 Feet	SC James 1980		FIG 4

Med. dk. grey, fine grained dolost. Extensive to massive siliceous beds in an apparent pattern, possibly worthy of further investigation, but in this section are quite well developed & have some mineralization. However, most of these are in the zone of the fault. This is a fault of the type known as a 'stepped' fault. It would appear to be a weakly to moderately fractured, weakly mineralized dolostone in general, however, fair amount of barite throughout the section.

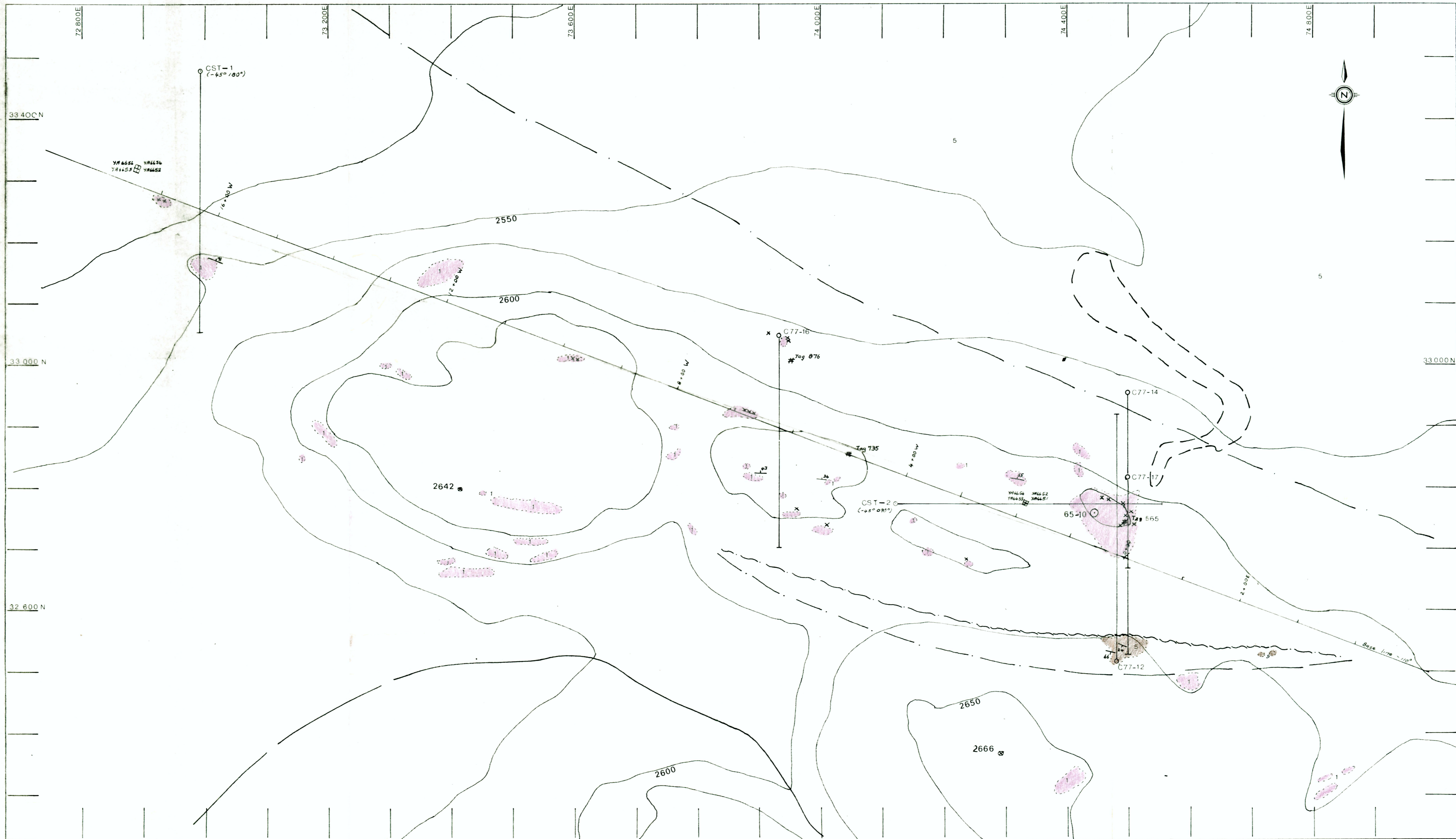


LEGEND

- Massive bedded, or zebra bxd. dolostone. Usually non mineralized unless associated with quartz veins.
- Brecciated dolostone - non or weakly siliceous.
- Brecciated dolostone - moderately siliceous.
- Brecciated dolostone - strongly to extremely siliceous.
- Mineralization.
- Barite.
- Fault - observed, approximate, possible.
- Outcrop.
- Geological boundary.
- Blasted trench.
- Orientation of slickensides.
- Orientation of fold Axis.
- Location of Mapping Stations.
- Topographical Contours - 20' contour interval.
- T/I survey station 1977.
- Drill hole.



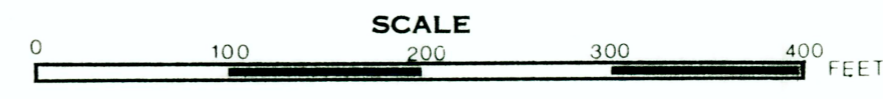
CANADIAN SUPERIOR EXPLORATION LIMITED			
C.S.E. - McINTYRE - CRAIG JOINT VENTURE			
CRAIG CLAIM GROUP - NADALEEN ZONE			
DETAILED GEOLOGY			
DRILL PLAN			
Drawn by A.R. Gunther	Work by T. Neale 1979	Revisions S.C. James 1980	Draw No. P184-80
Scale 1" = 40'	S.C. James 8/6/1980		Fig. 5



LEGEND

- Dolomite
- Argillite shale
- Pb Zn mineralization
- Fault
- contact: inferred
- outcrop
- surveyed point
- drill hole
- claim post

N.T.S. 106 C/3



CANADIAN SUPERIOR EXPLORATION LIMITED	
C.S.E - McINTYRE — CRAIG JOINT VENTURE	
CRAIG CLAIMS GROUP - TRENT ZONE	
DRILL HOLE PLAN	
Drawn by SCJames	Work - Gifford 1977
Scale 1" = 100'	Date - James 1980 Kins 1980
	DWG. P184-80 Fig 6

C90672