

\*  
CYPRUSMINE LSA  
CYPRUSEXPL VCR

TO	REPLY	
	COMMENT	
RETURN TO		
APR 2 1971		
1	WOL	5
2	202(2)	6
3		7
4		8

APRIL 2/71

TO W O IRISH  
FROM J G SIMPSON  
SUBJECT DRILL TARGETS ON BIG ONION  
REF 146-WVL

DRILL TARGETS ON BIG ONION AS FOLLOWS:-

B A KNOBB SITUATED APPRX 1-1/2 MILES SOUTH OF MAIN ORE ZONE CONSISTS OF INTRUSIVE PLUG IN PYRITIC ARGILLITES

SUGGESTED 1,500 - 2,000', 2 OR 3 HOLES SITED AS FOLLOWS:-

2,000'

DDH 71/1 CLAIM BA10 TO CHECK I P ANOMALY WITHIN INTRUSIVE. ALTITUDE VERTICAL, GRID LOCATION 48S 50E

DDH 71/2 CLAIM BA 7 AND 8 TO CHECK INTRUSIVE/ ARGILLITE CONTACT WHICH ALSO SHOWS ANOMALOUS I P EFFECTS. ALTITUDE DIP SOUTHERLY, GRID LOCATION APPROX 40S 35E

MAIN ORE ZONE

4,000' TO CHECK SOUTHERN AND IN DEPTH CONTINUATION OF PREVIOUSLY INTERSECTED ORE GRADE MATERIAL

+ (9#  
4"0  
8 3

4,000'

,3) DDH 71/3 CLAIM JACK 6 TO CHECK INTERSECTION OF ORE ZONE, ASTLAIS CREEK FAULT AND S E EXTENSION OF DYKE, ATTITUDE STEEP WEST GRID LOCATION 20N 00E

CORRECTION: ALTITUDE ON THE ABOVE SHUD READ ATTITUDE

DDH 71/4 TO CHECK FOR DEPTH EXTENSION BELOW DDH 70/5, GRID LOCATION 28N 00E

DDH 71/5 TO FOLLOW UP SOUTHERLY EXTENSION OF ORE ZONE AS INDICATED BY PREVIOUS 1970 HOLES AND RESULTS OF 71/3 AND 71/4

BURN AREA

PROPOSED 500 - 1,000' TO CHECK I P ANOMALIES PROBABLY RESULTING FROM PYRITE BUT POSSIBLY INDICATING BURIED MINERALIZED INTRUSIVE

DDH 71/6 DEEPEN DDH 70/4, GRID LOCATION 04S 36E

AREA BETWEEN MAIN AND NORTH SULPHIDE ZONES

PROPOSED 1,000 - 1,500'

1,000'

DDH 71/7 CLAIM JACK 10 TO CHECK BENEATH LARGE GOSSAN ZONE AND PROVIDE FILL-IN FOR GAP IN CROSS-SECTION OF INTRUSIVE AND TO TEST POSSIBLE EXTENSION OF MAIN ORE ZONE TO NORTH. INCLINATION STEEP WEST., GRID LOCATION APPROX 56N 10W

1,000'

ALL ABOVE ARE SUBJECT TO REVIEW DEPENDENT ON RESULTS FROM EARLY HOLES

I HAVE LEFT MESSAGE FOR CAREW TO FORWARD ANY REPORTS ON BIG ONION 1970 WORK NOT ALREADY IN YOUR HANDS

KLAWLI RIVER CLAIMS

AS FOLLOWS:- GINNY 1 - 32 ✓

STAKED MARCH 4/71  
RECORDED MARCH 15/71

SITUATED 4 MILES NORTH OF CHUCHI LAKE OPPOSITE NATION COPPER PROSPECT. OBJECT OF STAKING - CU, MO GEOCHEM ANOMALIES OUTSIDE NATION AGREEMENT AREA

PIMAINUS GROUP

AS FOLLOWS:- E G 1 - 38 } 46 claims  
E G 41 - 48 }

STAKED FEBRUARY 18-20/71  
RECORDED FEBRUARY 24/71

LOCATED ASTRIDE MAIN VANCOUVER - CACHE CREEK HIGHWAY 20 MILES SOUTH OF CACHE CREEK IN THE FRASER VALLEY. OBJECT OF STAKING - STRUCTURAL SITUATION, HIGH GRADE COPPER SHOWS AND ALTERATION SIMILAR TO MAGGIE MARGINS

HAPPY EASTER !!!

GLENN

## BIG ONION

### SUMMARY LOG DDH 19

- 0-11            Overburden
- 11-81          Andesite, Unfractured, Trace Pyrite
- 81-90          Siliceous Tuff, Unfractured, Tr Pyrite
- 90-192        Andesite, Unfractured, Tr Pyrite
- 192-207       Rusty Zone, Broken Near 198, Fault Zone?
- 207-214       Andesite
- 214-504       Siliceous Tuff, Unfractured Tr Pyrite
- 504-905       Andesite, tr pyrite mainly but locally more where epidote alteration is developed. CPY as desim. Blebs first noted at 590 and continues weakly and sporadically to bottom of unit. Best CPY 650-680 (0.1-0.2 CU) suggests lateral mineralization along andesite between siliceous tuffs and may not be very meaningful.
- 905-1116      Siliceous crystal tuffs, unfractured, tr. pyrite.

## BIG ONION

### SUMMARY LOG DDH 18

- 0-35 Overburden
- 35-295 Siliceous andesite unfractured 5% pyrite decreases to 1% or less by 200', sporadic trace chalcopyrite below 163' nowhere concentrated, i. e. 0.1% copper or less
- 295-1150 Andesite variably siliceous with weak chalcopyrite, light pyrite above 500', 500-900' unaltered variable weak pyrite no chalcopyrite. Near 900' more silicified with more pyrite and very weak chalcopyrite 0.1% Cu; locally strong magnetite. Silicification and pyrite decrease by 1000', chalcopyrite continues very weakly. Near 1125' pyrite silicification begin to increase; unit mostly unfractured.
- 1150-1300 Siliceous andesite, 1-2% pyrite, trace chalcopyrite and  $\text{MoS}_2$  grades into weakly siliceous andesite by 1300'.
- 1300-1398 Andesite 25' weakly siliceous with 5% pyrite alteration and pyrite decrease rapidly with depth. Alteration NIL by 1325'. Pyrite less than 1% by 1350'. No chalcopyrite below 1325'.
- 1398 BOTTOM



CROSS-SECTION DRILL HOLE C-14

Big Onion Project

11 miles east of Smithers, B. C.

W

E

Elevation

VERSION A

5600' —

5400' —

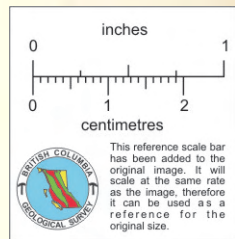
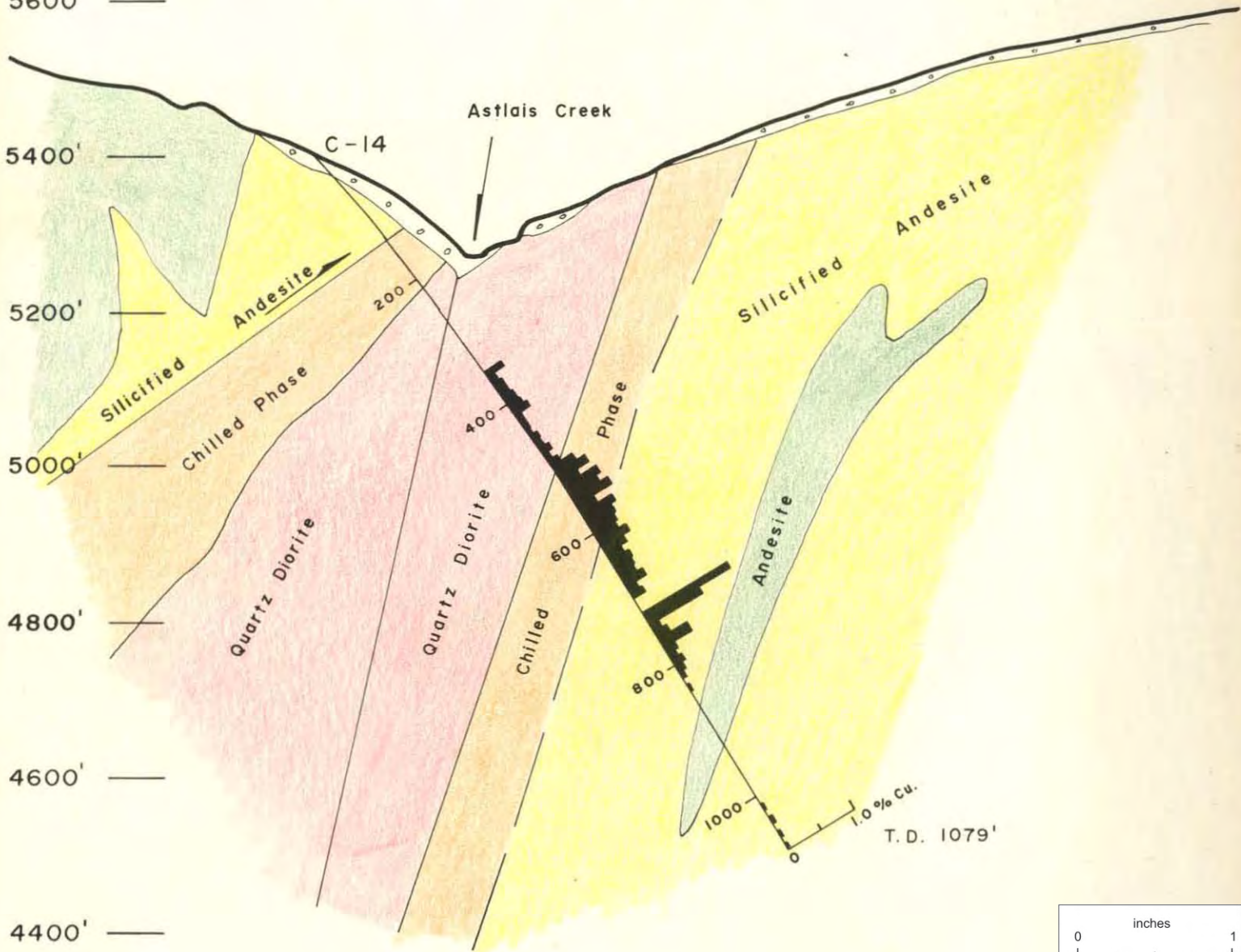
5200' —

5000' —

4800' —

4600' —

4400' —



SCALE 1" = 200'

CROSS-SECTION DRILL HOLE C-14

Big Onion Project

11 miles east of Smithers, B. C.

W

E

Elevation

VERSION B

5600 —

5400 —

5200 —

5000 —

4800 —

4600 —

4400 —

Astlais Creek

C-14

200

400

800

1000

T. D. 1079'

Andesite

Silicified Andesite

fault

Chilled Phase

fault ?

Quartz Diorite

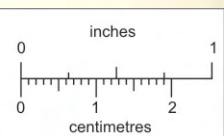
fault

Chilled 600

Phase

Silicified Andesite

Andesite



BRITISH COLUMBIA GEOLOGICAL SURVEY  
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

SCALE 1" = 200'



CROSS-SECTION DRILL HOLE C-15  
 Big Onion Project  
 11 miles east of Smithers, B. C.

Elevation

5200'

5000'

4800'

4600'

4400'

4200'

4000'

3800'

C-15

Silicified Andesite

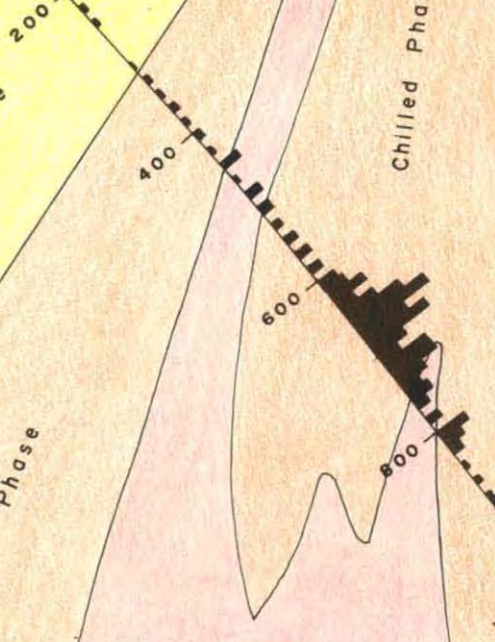
fault?

Chilled Phase

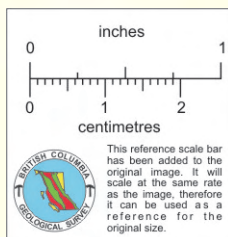
Quartz  
Diorite

Chilled Phase

Tuffs



SCALE 1" = 200'





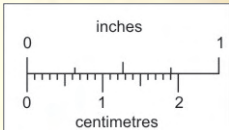
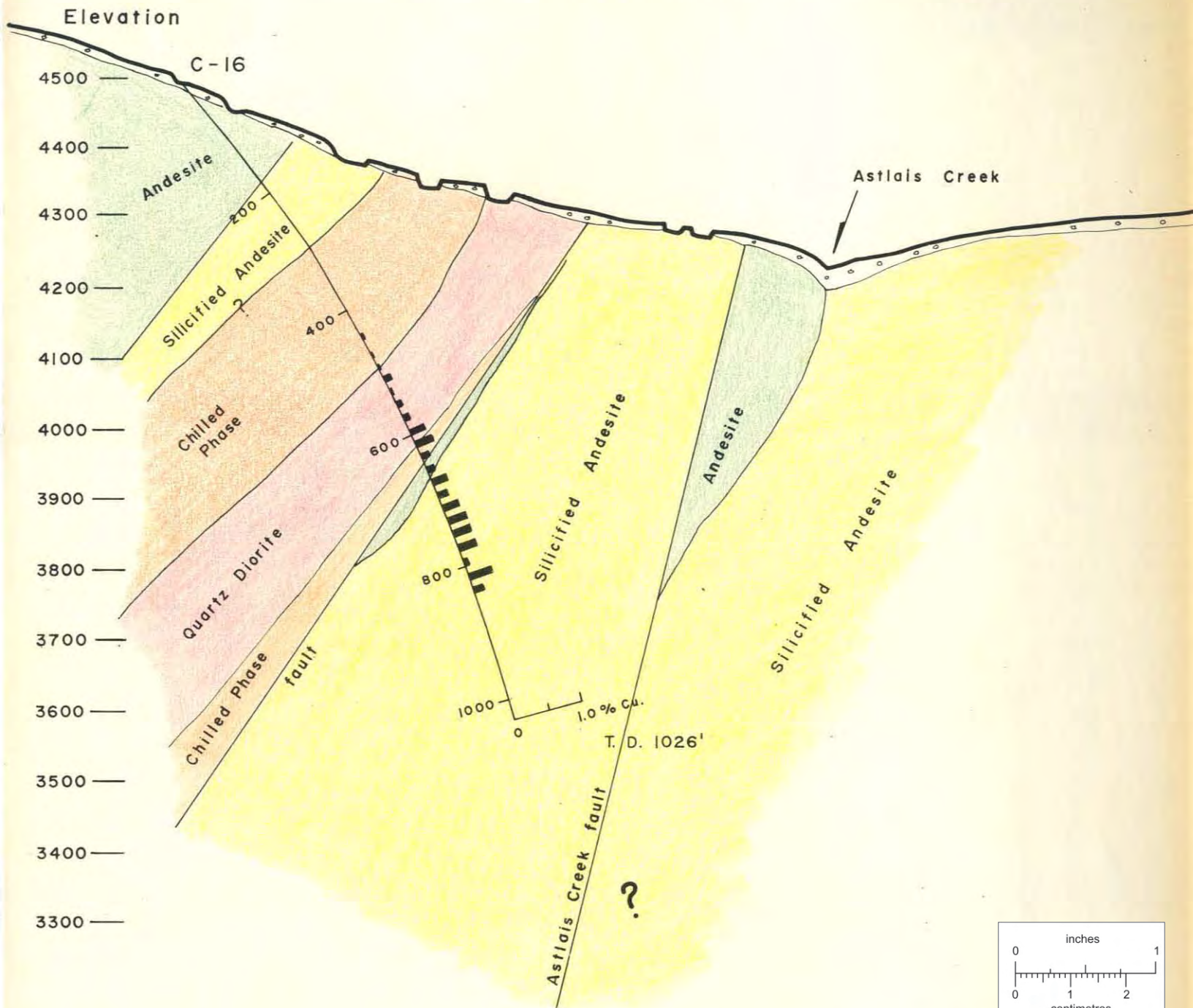
CROSS-SECTION DRILL HOLE C-16

Big Onion Project

11 miles east of Smithers, B. C.

N. 30° W

S 30° E



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

SCALE 1" = 200'

BIG ONION PROSPECT

DRILL HOLE DATA SUMMARY

<u>Hole No.</u>	<u>Total Depth</u>	<u>Inclination</u>	<u>Direction</u>	<u>Assay Data and Remarks</u>
C-1	1,350'	-45°	S80°E	<sup>360'</sup> 770'-1130' .33Cu .027Mo
C-2	1,426'	-55°	S75°E	1340'-1420' .16Cu .02Mo
	Deepened to 1,610'			1420'-1430' .46Cu .02Mo
C-3	968'	-80°	N50°W	Intervals in .1% Cu range
C-4	102'	-	-	No mineralization encountered
C-5	737'	-65°	N55°W	<sup>460'</sup> 90'-560' .59Cu .025Mo 230'-240' 2.44Cu .02Mo
C-6	752'	-60°	N53°W	110'-170' .55Cu .03Mo 540'-570' .33Cu
C-7	1,148'	-50°	S20°E	610'-720' .39Cu .02Mo
C-8	1,975'	-50°	N40°W	No significant mineralization
C-9	850'	-45°	S30°E	Intervals in .1% Cu range
C-10	1,207'	-80°	S38°E	110'-120' .54Cu 40'-740' .14Cu avg.
C-11	826'	-60°	S30°E	70'-90' .67Cu 130'-180' .3Cu Other intervals .2Cu
C-12	1,246'	-55°	S61°E	85'-110' .51Cu 25' 640'-840' .39Cu 200' 85'-910' .25Cu 825'
C-13	1,516'	-60° (est)	S 43° E (est)	270-290 .34Cu 20' 420-440 .78Cu 20' 1000-1060 .32 Cu 60' 1390-1430 .39 Cu 40'
C-14	916'			500-772 .37Cu 272' 720-772 .59Cu 52'
C-15	1,050'			620-810 .48Cu 190' ✓
	<u>16,069'</u>			



BIG ONION PROSPECT

DRILL HOLE DATA SUMMARY

<u>Hole No.</u>	<u>Total Depth</u>	<u>Inclination</u>	<u>Direction</u>	<u>Assay Data and Remarks</u>
C-1	1,350'	-45°	S80°E	770'-1130' .33Cu .027Mo
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C-4	102'	-	-	No mineralization encountered
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C-12	1,246'	-55°	S61°E	85'-110' .51Cu 640'-840' .39Cu 85'-910' .25Cu

INTER OFFICE MEMO

CYPRUS EXPLORATION CORPORATION LTD.  
VANCOUVER OFFICE

TO	REPLY	
	COMMENT	
RETURN TO		
NOV 30 1970		
1	<del>6002</del>	5
2		6
3		7
4		8

Date: November 24, 1970

To: J.B.P. Sawyer  
From: C.C. McFall  
Subject: PROGRESS AT BIG ONION

Yesterday afternoon at 4 p.m. C-17 was being rigged up and should start drilling this morning about 10. Water will be pumped up to C-17 from near the adit. C-18 was drilling below 298' in silicified andesite (?), after a late start Nov. 22nd.

The D-7 had a broken hydraulic hose to the transmission but should be operative and have the C-19 site at 40N, 12E prepared when needed. The road to C-19 will be an extension of the one to C-8.

CCMc:ma

*Sally grad. No record  
copy to [unclear] for [unclear] info.*

*cc: W.O. Irish*



# INTER OFFICE MEMO

## CYPRUS EXPLORATION CORPORATION LTD.

VANCOUVER OFFICE			
TO		REPLY	
		COMMENT	
RETURN TO			
NOV 23 1970			
1	<i>Q.P.A.T.</i>	5	
2	<i>B.F.</i>	6	
3		7	
4		8	

Date: November 18, 1970  
Ref: 763-CVL

To: C.A. Mark  
From: J.B.P. Sawyer  
Subject: CROSS-SECTION OF DRILL HOLES C-7,8, and 9 at BIG ONION

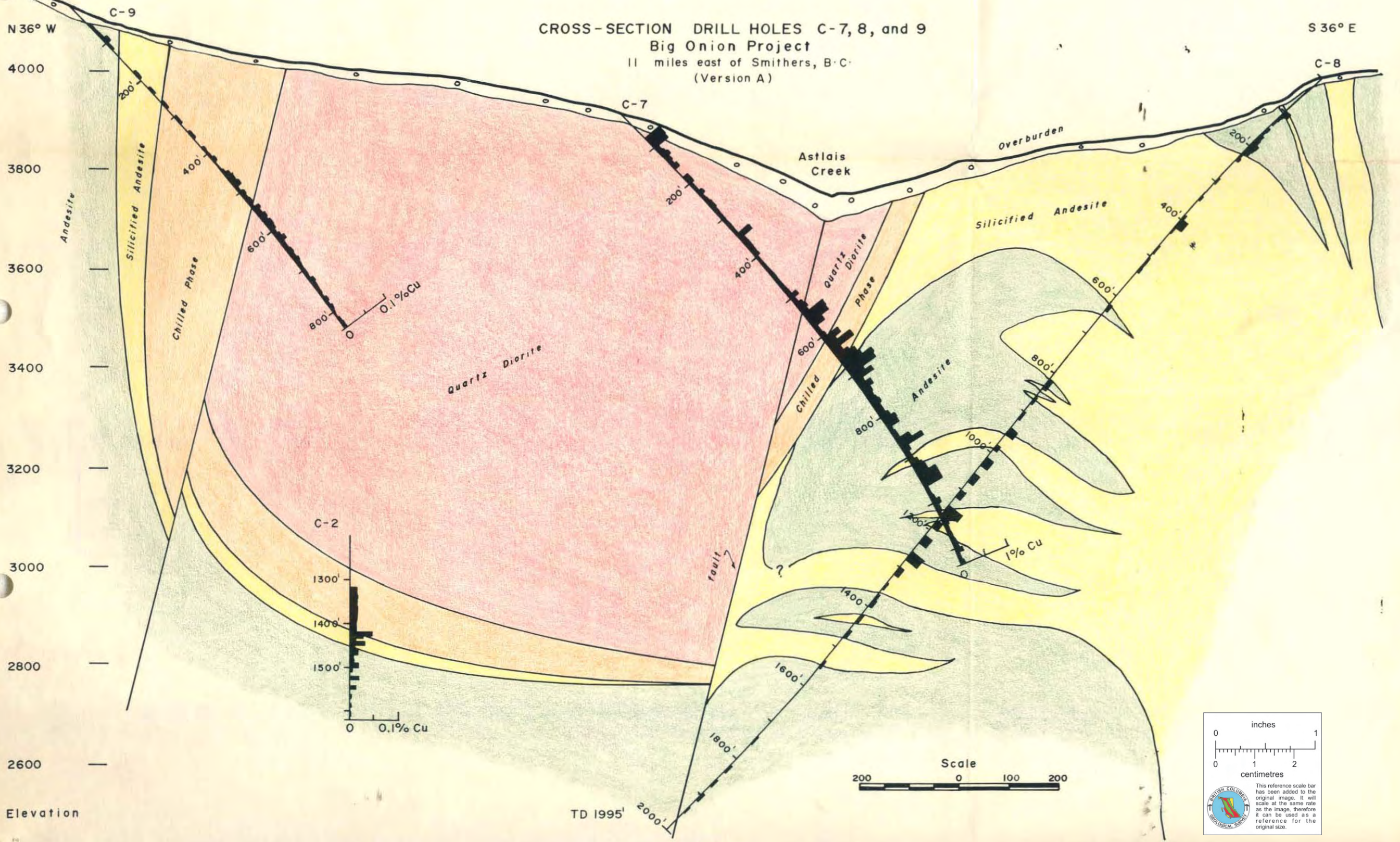
The accompanying cross-section of drill holes C-7,8, and 9 at Big Onion shows one possible shape of the lower pluton at the Big Onion Project. Equally or even more probable is Version B (to be sent later) showing the pluton as sill-like extending off to the northwest beneath C-9.

cc: W.O. Irish

Encl.







0 1  
 inches

0 1 2  
 centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

TD 1995'



# INTER OFFICE MEMO

CYPRUS EXPLORATION CORPORATION LTD. NOV 2 1970  
VANCOUVER OFFICE

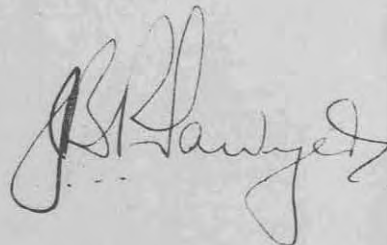
TO	REPLY
RETURN TO	COMMENT
1	<del>5</del>
2	6
3	7
4	8

Date: November 18, 1970  
Ref: 763-CVL

To: C.A. Mark  
From: J.B.P. Sawyer  
Subject: CROSS-SECTION OF DRILL HOLES C-7,8, and 9 at BIG ONION

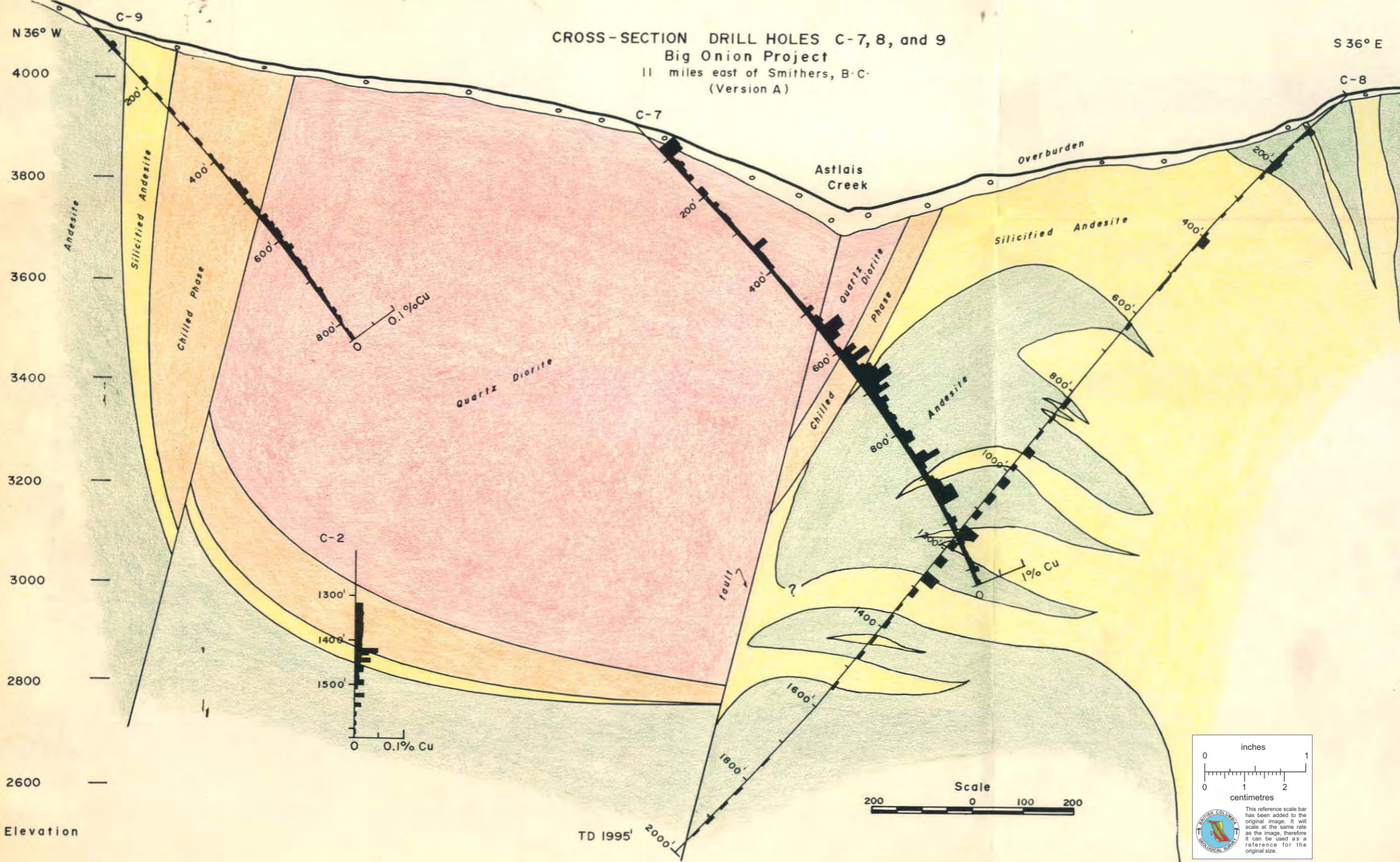
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cc: W.O. Irish ✓  
Encl.





CROSS-SECTION DRILL HOLES C-7, 8, and 9  
 Big Onion Project  
 11 miles east of Smithers, B.C.  
 (Version A)



N 36° W  
 4000  
 3800  
 3600  
 3400  
 3200  
 3000  
 2800  
 2600  
 Elevation

S 36° E

C-8

C-7

Astlais  
 Creek

Overburden

Silicified Andesite

Quartz Diorite  
 Phase

Chilled

Andesite

Quartz Diorite

Chilled Phase

Silicified Andesite

Andesite

C-2

1300'

1400'

1500'

0 0.1% Cu

Scale

200 0 100 200

0 inches 1  
 0 1 2 centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

TD 1995'

2000'

fault

1% Cu

0.1% Cu

800'

600'

400'

200'

800'

600'

400'

200'

800'

600'

400'

200'

200'

800'

600'

400'

200'

1200'

1000'

800'

600'

400'

200'

1600'

1400'

1200'

1000'

800'

600'

400'

200'

2000'

1800'

1600'

1400'

1200'

1000'

800'

600'

400'

200'

0



\*  
CYPRUSMINE LSA

CYPRUSEXPL VCR

OCTOBER 27/70

TO W O IRISH

FROM J B P SAWYER

REF 81 WVL

SUBJECT BIG ONION DDH C14

TO	REPLY	
	COMMENT	
RETURN TO		
OCT 27 1970		
1	<del>WVL</del>	5
2	CAM	6
3	YGT	7 JONE CAM
4		8

*Gloria - please change JBPS MEMO*

*WJ*

COLLAR LOCATION FOR C 14 IS 79°00N 8°70W.

THE COLLAR LOCATION GIVEN IN MY MEMO REF 685CVL

IS CORRECT PLUS OR MINUS A FEW FEET FOR C 15

\*  
CYPRUSMINE LSA

CYPRUSEXPL VCR

0

INTER OFFICE MEMO

CYPRUS EXPLORATION CORPORATION LTD.  
VANCOUVER OFFICE

To: C. A. Mark  
From: J. B. P. Sawyer  
Subject: BIG ONION - DDH C 13

Date: October 27, 1970

Ref: 691-CVL

TO	REPLY	
	COMMENT	
RETURN TO		
OCT 29 1970		
1	<del>CAM</del>	5
2	<del>C.A.M.</del>	6
3		7
4		8

Enclosed, please find the detailed log for drill hole C.13 on the Big Onion which was completed to a depth of 1516 ft. on October 16, 1970. Copies of the assay results from this hole were forwarded to you earlier.



JBPS/aw

c.c. W. O. Irish

Datum: 64+30N, 5+50W  
 Elevation: 5080'  
 Ultimate Depth: 1516'  
 Started: Oct. 3, 1970  
 Completed: Oct. 16, 1970

Depth	Bearing	Dip
0	S47°E	-50°
500	S42°E	-63°
1000	S52°E	-68°
1109	S37°E	-62°
1500	S42°E	-70°

Logged by: G. Jilson  
 Drilled by: D.W. Coates Enterprises  
 Recovery: Essentially 100%  
 Assays by: TSL, Smithers, B.C.

BIG ONION

HOLE NO. C-13 PAGE 1 of 7

DIAMOND DRILL RECORD

DESCRIPTION		CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
FROM	TO	FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	AU W	AG W	CU W	
0	138												
138	187					140	150	.01	Tr				
						150	160	.01	Tr				
						160	180	Tr	Tr				
						180	190	.06	Tr				
						190	200	.16	Tr				
187	390					200	210	.10	Tr				
						210	220	.10	Tr				
						220	230	.24	Tr				
						230	240	.07	Tr				
						240	250	.23	Tr				
						250	260	.10	Tr				
						260	270	.16	Tr				
						270	280	.39	Tr				
						280	290	.28	.01				
						290	300	.17	Tr				
						300	310	.16	Tr				
						310	320	.10	Tr				
						320	330	.02	Tr				
						330	340	.16	Tr				
						340	350	.13	Tr				
						350	360	.14	Tr				
						360	370	.12	Tr				
						370	380	.15	Tr				
						380	390	.18	Tr				





## DIAMOND DRILL RECORD

FROM	TO	DESCRIPTION	CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
			FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	AU W	AG W	CU W	
		fault gouge at 438' (fault contact)												
438	664	Andesite - much less pyrite. Pyrite mainly along fractures and usually less than 1% - amount decreases away from above fault. Epidote alteration along fractures becoming common beyond 448' (seems to increase as pyrite decreases). Epidote is vugular. Andesite is variably magnetic - often quite strongly. Porphyritic 516' - 524' Grey with calcite cemented fractures 524'-529' Tr. chalcopyrite at 534' With pyrite and abundant magnetite on fractures starting at 565'. Magnetite decreases considerably in about 20' Trace chalcopyrite at 615' Possible chalcocite and trace chalcopyrite near 646' Core becoming lighter colored at 656'					440	450	.05	Tr				
							450	460	.02	.01				
							460	470	.02	Tr				
							470	480	.02	Tr				
							480	490	.02	Tr				
							490	500	.04	Tr				
							510	520	.09	Tr				
							530	540	.03	Tr				
							550	560	.04	Tr				
							570	580	.03	Tr				
							590	600	.02	Tr				
							610	620	.03	Tr				
							630	640	.05	Tr				
							650	660	.03	Tr				
664	696	Silicified Andesite - (could be chilled phase) partly silicified - considerable kaolinization of					670	680	.01	Tr				



## DIAMOND DRILL RECORD

1

FROM	TO	DESCRIPTION	CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
			FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	AU W	AG W	CU W	
		feldspar phenocrysts - very light grey. Abundant disseminated pyrite. Highly fractured.					690	700	.03	Tr				
		(sheared contact)												
696	748	Andesite - greenish grey - very fine grained to aphanitic - highly fractured to little fractured					710	720	.06	Tr				
		Vugular along fractures					730	740	.02	Tr				
		Calcite and/or epidote along some fractures												
		Disseminated pyrite especially near fractures (intrusion contact)												
748	1126	Chilled phase of quartz diorite mottled off white/light grey. Silicified. Some kaolinization - locally vugular - highly to moderately fractured					750	760	Tr	Tr				
		Fault at 780' with adjacent shearing					770	780	Tr	Tr				
		Disseminated pyrite with lesser chalcopyrite. Trace bornite chalcocite and molybdenite (mainly on shears)					790	800	.12	Tr				
		(Note: the identity of the core as chilled phase is not certain until 995' due to intense silicification and/or shearing. It is possible that some of the core is actually silicified andesite or tuff.)					810	820	.12	Tr				
		Near 1020' appreciable widths of approx. 1/2% chalcopyrite with up to 1% chalcopyrite.					830	840	.10	Tr				
		Possible faults at 1007', 1013', 1027', 1039'					850	860	.19	Tr				
							870	880	.18	Tr				
							890	900	.21	Tr				
							910	920	.12	Tr				
							930	940	.14	.01				
							950	960	.24	.01				
							970	980	.27	.01				
							990	1000	.14	.01				
							1000	1010	.27	.01				
							1010	1020	.70	.01				
							1020	1030	.22	Tr				

## DIAMOND DRILL RECORD

DESCRIPTION		CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
FROM	TO	FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	AU W	AG W	CU W	
	1044' and 1048' - Astlais Creek fault zone (?)					1030	1040	.26	.01				
	Below fault chilled phase - gypsum seams.					1040	1050	.24	Tr				
	Up to 1% disseminated pyrite and .2% chalcop- pyrite. Lightly to moderately fractured.					1050	1060	.21	Tr				
	(intrusive contact)					1060	1070	.18	Tr				
						1070	1080	.16	Tr				
						1080	1090	.15	.02				
						1090	1100	.19	.01				
						1100	1110	.27	.02				
						1110	1120	.27	.01				
						1120	1130	.15	.01				
1126	1151					1130	1140	Tr	Tr				
	fractured and essentially unmineralized.					1140	1150	.01	.01				
	(intrusive contact)												
1151	1170					1150	1160	.16	.01				
	Chilled phase of quartz diorite - chalcopyrite and traces of molybdenite					1160	1170	.20	.02				
	(intrusive contact)												
1170	1176					1170	1180	.12	.02				
1176	1188					1180	1190	.15	.02				
	Chilled phase with short stretches of dacite porphyry - chalcopyrite and pyrite mainly in chilled phase.												
1188	1225					1190	1200	.02	Tr				
	Chilled phase with up to 1% pyrite. Some chalcopyrite and traces of moly - moderately fractured.					1200	1210	.03	Tr				
						1210	1220	.26	.01				









INTER OFFICE MEMO

CYPRUS EXPLORATION CORPORATION LTD.  
VANCOUVER OFFICE

Date: October 27, 1970

Ref: 691-CVL

To: C. A. Mark  
From: J. B. P. Sawyer  
Subject: BIG ONION - DDH C 13

TO	REPLY	
	COMMENT	
RETURN TO		
OCT 29 1970		
1	<del>W.D.I.</del>	5
2		6
3		7
4		8

Enclosed, please find the detailed log for drill hole C.13 on the Big Onion which was completed to a depth of 1516 ft. on October 16, 1970. Copies of the assay results from this hole were forwarded to you earlier.



JBPS/aw

c.c. W. O. Irish

Datum: 64+30N., 5+50W  
 Elevation: 5080'  
 Ultimate Depth: 1516'  
 Started: Oct. 3, 1970  
 Completed: Oct. 16, 1970

Depth	Bearing	Dip
0	S47°E	-50°
500	S42°E	-63°
1000	S52°E	-68°
1109	S37°E	-62°
1500	S42°E	-70°

Logged by: G. Jilson  
 Drilled by: D.W. Coates Enterprises  
 Recovery: Essentially 100%  
 Assays by: TSL, Smithers, B.C.

BIG ONION

HOLE NO. C-13 PAGE 1 of 7

DIAMOND DRILL RECORD

DESCRIPTION		CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
FROM	TO	FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	AU W	AG W	CU W	
0	138												
138	187					140	150	.01	Tr				
						150	160	.01	Tr				
						160	180	Tr	Tr				
						180	190	.06	Tr				
						190	200	.16	Tr				
187	390					200	210	.10	Tr				
						210	220	.10	Tr				
						220	230	.24	Tr				
						230	240	.07	Tr				
						240	250	.23	Tr				
						250	260	.10	Tr				
						260	270	.16	Tr				
						270	280	.39	Tr				
						280	290	.28	.01				
						290	300	.17	Tr				
						300	310	.16	Tr				
						310	320	.10	Tr				
						320	330	.02	Tr				
						330	340	.16	Tr				
						340	350	.13	Tr				
						350	360	.14	Tr				
						360	370	.12	Tr				
						370	380	.15	Tr				
						380	390	.18	Tr				





## DIAMOND DRILL RECORD

FROM	TO	DESCRIPTION	CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
			FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	AU W	AG W	CU W	
		fault gouge at 438'												
		(fault contact)												
438	664	Andesite - much less pyrite. Pyrite mainly					440	450	.05	Tr				
		along fractures and usually less than 1% -					450	460	.02	.01				
		amount decreases away from above fault. Epidote					460	470	.02	Tr				
		alteration along fractures becoming common					470	480	.02	Tr				
		beyond 448' (seems to increase as pyrite					480	490	.02	Tr				
		decreases). Epidote is vugular.					490	500	.04	Tr				
		Andesite is variably magnetic - often quite					510	520	.09	Tr				
		strongly.												
		Porphyritic 516' - 524'					530	540	.03	Tr				
		Grey with calcite cemented fractures 524'-529'												
		Tr. chalcopyrite at 534'					550	560	.04	Tr				
		With pyrite and abundant magnetite on												
		fractures starting at 565'. Magnetite decreases					570	580	.03	Tr				
		considerably in about 20'												
		Trace chalcopyrite at 615'					590	600	.02	Tr				
		Possible chalcocite and trace chalcopyrite												
		near 646'					610	620	.03	Tr				
		Core becoming lighter colored at 656'												
							630	640	.05	Tr				
							650	660	.03	Tr				
664	696	Silicified Andesite - (could be chilled phase)												
		partly silicified - considerable kaolinization of					670	680	.01	Tr				

## DIAMOND DRILL RECORD

FROM		TO	DESCRIPTION	CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
				FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	AU W	AG W	CU W	
			feldspar phenocrysts - very light grey. Abundant disseminated pyrite. Highly fractured.					690	700	.03	Tr				
			(sheared contact)												
696		748	Andesite - greenish grey - very fine grained to aphanitic - highly fractured to little fractured					710	720	.06	Tr				
			Vugular along fractures					730	740	.02	Tr				
			Calcite and/or epidote along some fractures												
			Disseminated pyrite especially near fractures (intrusion contact)												
748		1126	Chilled phase of quartz diorite mottled off white/light grey; Silicified. Some kaolinization - locally vugular - highly to moderately fractured					750	760	Tr	Tr				
			Fault at 780' with adjacent shearing					770	780	Tr	Tr				
			Disseminated pyrite with lesser chalcopryrite.					790	800	.12	Tr				
			Trace bornite chalcocite and molybdenite (mainly on shears)					810	820	.12	Tr				
			(Note: the identity of the core as chilled phase is not certain until 995' due to intense silicification and/or shearing. It is possible that some of the core is actually silicified andesite or tuff.)					830	840	.10	Tr				
			Near 1020' appreciable widths of approx. 1/2% chalcopryrite with up to 1% chalcopryrite.					850	860	.19	Tr				
			Possible faults at 1007', 1013', 1027', 1039'					870	880	.18	Tr				
								890	900	.21	Tr				
								910	920	.12	Tr				
								930	940	.14	.01				
								950	960	.24	.01				
								970	980	.27	.01				
								990	1000	.14	.01				
								1000	1010	.27	.01				
								1010	1020	.70	.01				
								1020	1030	.22	Tr				



## DIAMOND DRILL RECORD

		DESCRIPTION	CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
FROM	TO		FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	CU W	AG W	AU W	
		1044' and 1048' - Astlais Creek fault zone (?)					1030	1040	.26	.01				
		Below fault chilled phase - gypsum seams.					1040	1050	.24	Tr				
		Up to 1% disseminated pyrite and .2% chalcopyrite. Lightly to moderately fractured.					1050	1060	.21	Tr				
		(intrusive contact)					1060	1070	.18	Tr				
							1070	1080	.16	Tr				
							1080	1090	.15	.02				
							1090	1100	.19	.01				
							1100	1110	.27	.02				
							1110	1120	.27	.01				
							1120	1130	.15	.01				
1126	1151	<u>Dacite porphyry dike</u> - light green - lightly fractured and essentially unmineralized.					1130	1140	Tr	Tr				
		(intrusive contact)					1140	1150	.01	.01				
1151	1170	<u>Chilled phase</u> of quartz diorite - chalcopyrite and traces of molybdenite					1150	1160	.16	.01				
		(intrusive contact)					1160	1170	.20	.02				
1170	1176	<u>Dacite porphyry</u>					1170	1180	.12	.02				
1176	1188	Chilled phase with short stretches of dacite porphyry - chalcopyrite and pyrite mainly in chilled phase.					1180	1190	.15	.02				
1188	1225	Chilled phase with up to 1% pyrite. Some chalcopyrite and traces of moly - moderately fractured.					1190	1200	.02	Tr				
							1200	1210	.03	Tr				
							1210	1220	.26	.01				

## DIAMOND DRILL RECORD

FROM		TO		DESCRIPTION	CORE LENGTH				ASSAYS				ACCUMULATIVE AVERAGES			
					FROM	TO	ACC WIDTH	SAMPLE NO.	FROM	TO	% CU	% MO	FROM	TO	% CU	% MO
1225	1245			Dacite porphyry - light green - plagioclase and less common quartz phenocrysts in very silicic matrix. Lightly fractured - very slight pyrite content.					1220	1230	.11	Tr				
									1230	1240	.02	Tr				
									1240	1250	.06	Tr				
1245	1327			Quartz diorite - medium grey, medium grained - slightly porphyritic more than equigranular. Moderately to lightly fractured. Disseminated pyrite and pyrite along fractures. Chalcopyrite as disseminations and fracture coatings - gypsum seams. Chalcopyrite uniform but sparse.					1250	1260	.08	Tr				
				(intrusive contact)					1260	1270	.05	Tr				
									1270	1280	.05	Tr				
									1280	1290	.06	Tr				
									1300	1310	.11	Tr				
									1320	1330	.16	Tr				
1327	1336			Dacite porphyry - as above					1340	1350	.13	Tr				
				(intrusive contact)					1360	1370	.09	Tr	1300	1430	.236	
1336	1348			Quartz diorite - greenish-grey, moderately to lightly fractured. Light pyrite and chalcopyrite. Feldspars are light green and somewhat rounded set in finer kaolinized (?) matrix												
				(intrusive contact)												
1348	1361			Dacite porphyry												
				(intrusive contact)												
1361	1440			Chilled phase of quartz diorite, greenish feldspars. Becoming much finer grained with depth - very fine grained at contact					1380	1390	.26	.01				
									1400	1410	.35	.02				
				(sheared intrusive contact)					1420	1430	.55	.01				

