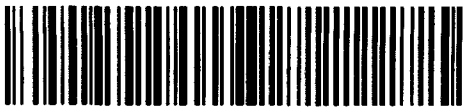


SUMMARY REPORT

PHAETON EXPLORATION LTD.

COBALT, ONTARIO OPTION

FORMERLY SMITH-COBALT PROPERTY

by

C. W. Archibald, B.A.Sc.

7 May 1985

I N D E X

A P P E N D I C E S

SUMMARY REPORT
PHAETON EXPLORATION LTD.
COBALT, ONTARIO OPTION
FORMERLY SMITH-COBALT PROPERTY

S U M M A R Y

The Company has just completed a diamond drill program on their Cobalt Option with three holes drilled for a total of 2,261 feet.

In my opinion, the results obtained from the drill program warrant further exploration.

Although no silver values were located, intense alteration, highly fractured rock, mineralization in the form of chalcopyrite, pyrite, pyrrhotite, pentlandite and galena, and an area with calcite-quartz veins was located which could be close to silver-cobalt deposition.

As the alteration decreased to the south of Hole number 1, drilling is recommended to be continued north of this hole and, if practicable, to deepen Hole 1.

The minimum recommended diamond drilling is approximately 2,500 feet in three holes at an estimated cost of $63,000.00.

PROPERTY

The property consists of eight contiguous, patented mining claims in Coleman and Lorrain Townships of the Cobalt District of Northern Ontario. The claims cover an area of approximately 176 acres, as shown on the attached Plate I, and are as described below:

COLEMAN TOWNSHIP

Claim No.	Concession	Lot	Acres
64	6	1	20
1737	5	1	20
706	5	1	20
654	5	1	20
1397	5	1	± 16
1007	5	1	20
19498	5	1	20
LORRAIN TOWNSHIP			
15592	11	1	40
Total	8 claims		± 176 acres

LOCATION and ACCESS

The property is as shown on Plate I and is approximately 2.5 mibs east of the Town of Cobalt, Ontario.

It can be reached by road (see Plate I) with the last mile and a half by gravel road from Highway 11 B.

H I S T O R Y

Silver was discovered in the area in 1903 when surface prospecting was done over this general area.

In 1905 this property was staked by W. H. Smith and Associates, but little was done other than prospecting and a small amount of trenching until 1926.

In 1926, Mining Corporation of Canada Limited optioned the property and completed 2 diamond drill holes on the property. The following year, they sank a 400 foot shaft and carried out drifting and cross-cutting from the bottom level in four directions.

In 1928, Mining Corporation dropped their option and the Smith Cobalt Mines was incorporated.

To the best of my knowledge, no further work was done on the property between 1928 and 1934 when the underground was de-watered, a winze was sunk on the South Vein to a depth of 452 feet and lateral work was carried out on the North and South Veins.

In 1935, a winze was sunk from the 452 foot level to the 500 foot level and some drifting was done on the North Vein.

During the period of underground development 10,027 pounds of cobalt was produced with most of it being from the 452 foot level on the North Vein.

In 1959, Dolmac Mines Limited optioned the property and drilled 12 surface diamond drill holes for a total footage of 6,010 feet. With the exception of Holes SC 7 and 9, the drilling is shown on Plate I.

From 1960 to 1984, no further exploration was attempted on the property.

In 1984, Phaeton Exploration Ltd. optioned the property, researched available data on this property and those adjoining it and then diamond drilled 3 holes with a total of 2,261 feet.

A copy of the logs and sections of the three holes is appended.

U N D E R G R O U N D D E V E L O P M E N T

The attached Plate 2 shows a composite plan of the underground workings plus the surface.

The shaft has a depth of 412 feet with one level at 400 feet.

On the 400 foot level, cross-cuts and drifts were driven in four directions.

A winze was put down on the 'South Vein' to the 452 foot level and additional cross-cutting and drifting was again done on this level, which included a line drive cross-cut to the 'North Vein'.

On the 452 foot level at the 'North Vein", a winze was sunk an additional 50 feet and a small amount of exploratory drifting done on the 'North Vein' at the 500 foot horizon.

G E O L O G Y

PROPERTY

The property is mainly underlain by Nipissing diabase with Keewatin volcanics outcropping in the claim in Lorrain Township.

The diabase sill in the shaft area has a thickness of approximately 250 feet which is underlain by Huronian sediments that are mainly conglomerates.

These Huronian rocks are in turn underlain by Keewatin sediments and volcanics.

The diamond drill sections attached to this report show the approximate vertical positions of the various rock types.

Several nearly vertical faults with which veins are associated are noted on the property. Similarly, at least two flat faults have been encountered in the old workings as well as in the drilling. The latter faults are probably post ore.

ECONOMIC

Four steeply dipping veins were encountered in the underground workings striking nearly east-west. The 'North' and 'South' veins contained cobalt and nickel but had only negligible silver values. Most of the cobalt produced came from the 'North' vein and both the 'North' and 'South' veins

were reported to be more productive in the Keewatin than in the Cobalt conglomerate.

On surface, three additional veins have been located. Two of these striking east-west are in Claim T-19498. The third vein, which is in Claim T-1007, strikes north-south. All three veins were tested by diamond drilling in 1959 and had previously been trenched but none of them carried silver values.

The latest diamond drilling has encountered an extremely altered horizon with considerable fracturing, veining and mineralization as well as intersecting two flat faults. Heavy chlorite spotting alteration was encountered in all three holes with Hole I, at the point it was abandoned, in the most heavily altered of the three holes. This type of intense chlorite spotted alteration has previously been noted as being in close proximity to channels for mineralization, which were channels for the silver-cobalt mineralizing fluids.

The flat faulting encountered in the drilling, being post-ore faulting, would have no effect on the mineralization but would affect the displacement of the veins. A possible displacement is shown on the section of drill Holes 2 and 3.

C O N C L U S I O N S

Much of the property remains unexplored.

Underground development and former diamond drilling have explored that area of the property adjacent to the Cross Lake-O'Brien property to test the eastern continuity of veins developed and mined on that property. From this work, the 'North' and 'South' Veins were decidedly the strongest of those encountered and a small cobalt production was obtained.

The most recent diamond drilling has been done to test the continuity of the known veins still further to the east and has resulted in locating a highly altered vein zone near a north-south fault.

The intensity of the alteration is decreasing to the south so it would be logical to continue exploration north of Hole I.

If past experience with chlorite spotted alteration, combined with a highly fractured rock and much mineralization is any indication, drill Hole I could be in the near proximity to a silver-cobalt bearing vein.

Hole I was abandoned due to the difficulties encountered due to the fracturing of the rock but it could probably be continued if it were cemented.

The area in and about the easterly continuation of number 10 Vein, where it intersects the postulated north-south fault shown on Plate 3 at approximately the 450 foot horizon, could contain ore possibilities.

Little exploration has been done on the property north of the 'North' vein and other areas could be located along the north-south fault where cross fracturing could produce ore bearing possibilities.

Drilling from surface through the diabase sill is a costly procedure but the cost of rehabilitating the underground and continuing underground development to a location suitable for underground diamond drilling would be even more costly.

RECOMMENDATIONS

I would recommend continuing the diamond drilling north of Hole I and drilling the area where the 'North' vein and the north-south fault intersect at the 450 foot horizon.

A minimum of three diamond drill holes is contemplated or a possible minimum of 2,500 feet of drilling.

COST ESTIMATE

Diamond drilling		$50,000.00
Assaying, travel, engineering		5,000.00
	Sub Total	$55,000.00
Contingencies		8,000.00
	Total	$63,000.00

C. W. Archibald

Totonto, Ontario
7 May 1985

C. W. Archibald
B.A.Sc., P.Eng.

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 84-1

LOCATION: Coleman Twp. Claim #654

ELEVATION 968'
LATITUDE: 2,000 N.
DEPARTURE: 2,000 E.

BEARING: N 53° 10' E (T)
ANGLE DIP: -45°
@200' -47° 30' @ 400', -46° @ 600', -45° m

STARTED: 15 Nov. '84
FINISHED: 23 Feb. '85
LOGGED BY: W. Hammerstro

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
0'	6.5'	CASING - 0.0 - 2.0 casing above surface 2.0 - 4.5 overburden, boulders etc. 4.5 - 6.5 bedrock					
6.5	343.0	NIPISSING DIABASE, massive, medium grain, even texture. Few to numerous slips and fractures; mostly jointing. 117.4 - 120.0 VEIN ZONE, six quartz-calcite veinlets and seams to quarter inch in width @ 20 - 30° C.A. Few fine specks of chalcopyrite in several areas. Weak light and dark wallrock alteration. Quarter-inch vein at 120.0' has a free wall on upper side. 125.0 - 135.5, fractured and broken rusty sections. Possible post mineral faulting. @ 206.6', 1/8" quartz-calcite at 50° to core. Few specks pyrite and chalcopyrite. @ 208.3', 1/16" quartz-calcite at 50° to core. @ 230.5', 1/8" talcose shear at 40° to core. @ 275.8', 1/8" - 1/4" chloritic shear at 55° to core axis. Specks pyrite and chalcopyrite. @ 276.8', 1/8" chloritic shear with some calcite. Grains pyrite and chalcopyrite at 50° to core. Also 1/16" calcite veinlet at 90° to above. @ 308.0', 1/8" sheared quartz-calcite 55° to core. @ 314.0', 1/4" " " " 40° " "					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 84-1

STARTED: 15 Nov.'84

LOCATION: Coleman Twp. Claim #654 | LATITUDE: | DEPARTURE: | BEARING: | ANGLE DIP: | FINISHED: | LOGGED BY: W. Hammerstrom

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH	Ag. oz/ton	Au. oz/ton
		331.0 - 335.0, FAULT ZONE, Fractured and broken; especially last six inches of section. A little calcite locally along fractures. Few fine pyrite specks. Striated slip at 335.0', 44° to C.A.				
		334.0' - 335.0' Sample	1	1.0'	Tr.	.006
	343.0	CONTACT: Irregular chilled edge of Nipissing Diabase.				
343.0	368.5	SLATE - GREYWACKE: (HURONIAN) For the most part thinly laminated 30-40° to C.A. 343.0 - 356.5, much broken core. 365.0 - 368.0, numerous slips. Broken core.				
	368.5	CONTACT: Sharp change at about 45° to C.A.				
368.5	387.0	GRIT CONGLOMERATE: (HURONIAN) Fine, gritty material with odd fragment up to 1/4". Massive, fairly hard rock. Few slips.				
	387.0	CONTACT: Fairly sharp change.				
387.0	439.0	CONGLOMERATE: (HURONIAN) Glacial Till? Fairly close packed, poorly rounded fragments or pebbles, several up to 6" diameter; mostly granite with chloritic matrix. Massive rock. Scattered slips at all angles to C.A.				

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 84-1

STARTED: 15 Nov. '84

LOCATION: Coleman Twp. Claim #654

LATITUDE: DEPARTURE: BEARING: ANGLE DIP: FINISHED:

LOGGED BY: W. Hammerstrom

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH	Ag. oz/ton	Au. oz/ton	
		420.0 - 426.0, A few irregular white calcite threads at 35 - 45° to C.A.					
	439.0	CHANGE TO:					
439.0	507.0	GRIT CONGLOMERATE: (HURONIAN) Similar to section 368.5 - 387.0'. Few larger granitic fragments in poorly bedded gritty material at about 45° to core axis. Scattered to numerous slips at all angles.					
		488.0 - 504.0, much broken core; slips and fractures at all angles.					
		504.0 - 507.0, massive, few slips.					
	507.0	FAIRLY SHARP CHANGE TO:					
507.0	568.9	BASAL CONGLOMERATE - COBALT SERIES: (HURONIAN) Assorted pebbles and boulders with chloritic matrix. Fairly hard, massive rock. Few slips.					
		513.5 - 515.0, granite boulder.					
		527.2 - 527.3, three quartz threads at 50 - 60° C.A. A few very fine sulphide specks.					
		518.0 - 532.0 gradually lighter colour. Carbonated?					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 84-1

LOCATION:

LATITUDE:

DEPARTURE:

BEARING:

ANGLE DIP:

STARTED:

FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
		524.7 - 532.0 irregular fracture along core. Thin calcite coatings or films locally 531.0 - 532.0 badly broken, slightly oxidized and bleached 534.0 - 537.0 VEIN ZONE , seven or eight calcite threads and veinlets up to 1/8" widths. 30° to 50° C.A. a little alteration of feldspars to reddish brown along walls of veinlets in places. A few fine chalcopyrite specks.. 544.5 = 546.0 broken core, numerous slips @ 547.0 calcite thread @ 547.6 " " 558.0 - 568.9 much broken core, numerous slips at all angles. 568.9 CONTACT. Irregular at high angle.					
568.9	602.5	CONGLOMERATE - Huronian, fine grained, light to medium greenish grey. A few small fragments or pebbles and one granite boulder. Chlorite spotting well developed. A little scattered pyrite, pyrrhotite, chalcopyrite 568.9 - 575.0 much broken core 594.3 - 595.5 granite boulder 597.0 - 602.5 fine bedding at about 45° to C.A. 602.5 Sharp change					
602.5	626.0	CONGLOMERATE - Huronian. Very numerous small fragments and pebbles. Few chlorite spots. A little scattered pyrite, pyrrhotite, chalcopyrite					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 84-1

LOCATION:

LATITUDE:

DEPARTURE:

BEARING:

ANGLE DIP:

STARTED:

FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
		@ 612.9, ½ - 3/4" irregular white quartz vein @ 50° @ 626.0, CONTACT 15° to core axis. Some pyrite					
626.0	699.0	GREYWACKE - Keewatin, fine grain to cherty in places. Some fine bedding in places. Medium greyish rock. Fairly hard and brittle. Numerous slips. Some chlorite spots. Scattered calcite veinlets. A little pyrite, pyrrhotite and chalcopyrite 628.0 - 629.3 core badly broken 628.7, 1/8" quartz veinlet @ 45° to C.A. @ 629.5, talcose slip @ 10° to core axis @ 633.9, 3/16" quartz-calcite-chlorite @ 50° C.A. @ 634.9, 3/8" pink calcite. Chlorite along walls. a few specks of pyrite and chalcopyrite @ 638.2,1/16" calcite @ 638.7, 1/8" " @ 640.1, irregular calcite veinlet up to ½". Strong slip at upper side @ 35° to core axis. 640.0 - 660.0 several quartz-calcite threads @ 661.8, ¼" quartz-calcite 45 - 50° to C.A. @ 662.5, 1/8" " " 50° " " @ 664.5, 1" white quartz with magnetite and chlorite. some irregular pink calcite @ 25° @ 676.6, 3/8" pink calcite. Much included chlorite grains. Considerable chalcopyrite. Slip walls @ 45° to core axis. 683.1 - 683.3 white quartz with some magnetite and chlorite @ 50° to C.A.					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 84-1

LOCATION:

LATITUDE:
DEPARTURE:

BEARING:
ANGLE DIP:

STARTED:
FINISHED:
LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
		686.7 - 687.4 white quartz with some magnetite and chlorite. Some irregular pinkish calcite 50° to C.A. @ 695.3, 1/8" seam calcite-chlorite @ 45° 696.0 - 697.0 lost core 698.6 - 699.0 cherty					
	699.0	END OF HOLE					

NOTES

1. Much trouble was encountered in drilling due to, in places, badly fractured ground and loss of sludge return.
2. Casing left in place
3. Cementing would be required in order to deepen the hole.

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-2

LOCATION : in claim 654
2,000' north
2,000' east

1985

STARTED: 26 Feb.
FINISHED: 13 March

LOCATION: Coleman Twp.

LATITUDE: 2,436 North
DEPARTURE: 2,396 East

BEARING: N 70° E
ANGLE DIP: -44°
@ 200'-44° @ 600' -49°

LOGGED BY: W. Hammerstrom

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH		
0	7.0	CASING through cement shaft cap with 5.0 - 7.0 in ledge				
7.0	10.0	NO CORE				
10.0	358.0	NIPISSING DIABASE, massive, fairly hard. Numerous talcose & chloritic slips at all angles. Some bleaching in places. Some narrow broken places. A few narrow, scattered quartz=calcite veinlets with the chief ones as follows: @ 41.0', 1/8" sheared qtz.-calcite @ 25° @ 160.5', ¼" talcose shear at 20° to core @ 164.0', strong joint slip at 10° 179.0 - 179.5, three quartz-calcite threads @ 30° to 40°. Some light and dark border alteration. @ 181.0', two quartz-calcite threads @ 35° @ 208.5', 3½" APLITE @ 25-30° core axis About 1" white - grey - reddish calcite with inclusions of aplite along upper wall and thread of whitish calcite along lower wall. A little chalco pyrite and some fine mineral (cobalt?) in small chloritic spots in calcite. 205.2 - 210.3 contains numerous chloritic slips and some broken core. @ 274.3', ¼" quartz-calcite @ 45° @ 286.5', 1/8" calcite-talc-pyrite crystals @ 30°				

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-2

LOCATION:

LATITUDE:

DEPARTURE:

BEARING:

ANGLE DIP:

STARTED:

FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
		@ 309.0', 3" sheared and epidotized @ 30°. ¼" oxidized calcite-chlorite with strong slips in centre of zone. @ 327.5', joint slip @ 10° @ 329.0', irregular joint with up to 1/8" calcite-chlorite fillings at about 10° to core. @ 352.5', irregular epidote seam & 1/16" calcite-chlorite @ 354.3', 355.3', irregular calcite veinlet along core @ 357.0', up to 1/8" calcite-chlorite, 55° @ 357.3', " " " " " , 45° @ 358.0', CONTACT, chilled edge of diabase, irregular at high angle to core axis.					
358.0	388.5	SLATE - GREYWACKE (Huronian), Finely bedded at about 45° to core 358.0 - 362.0, broken core, numerous slips 362.0 - 372.0 FAULT ZONE?. Very badly broken, About 6' lost core. 377.0 - 381.0 broken core 383.5 - 388.5 numerous slips					
388.5	410.0	GRIT CONGLOMERATE (Huronian), a few scattered pebbles and fragments. A little scattered pyrite & chalcopyrite. A few chloritic spots. @ 398.5', 2" FAULT ZONE at 10 - 15°. Gouge and breccia with some calcite and chlorite fillings. FLAT FAULT?					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-2

LOCATION:

LATITUDE:

DEPARTURE:

BEARING:

ANGLE DIP:

STARTED:

FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
410.0	579.7	CONGLOMERATE (Huronian) For the most part, close packed pebbles and fragments up to several inches in diameter. Numerous broken core sections. A few qtz-calcite threads 414.0 - 416.0 FAULT ZONE, broken core @ 414.5', striated slip at 50° @ 415.0', 1½" white quartz @ 45-50° @ 415.2', 1/8" quartz at 50° LOST WATER AT THIS POINT @ 579.7 Sharp change at 35° to core axis					
579.7	630.4	ARGILLITE-CONGLOMERATE (Huronian) Fine grained with a few small fragments or pebbles. Chlorite spotting well developed. A little pyrite and chalcopyrite 584.0 - 586.5 broken core @ 621.7', 3/8" pink calcite at 40° @ 622.1', 1/8" irregular white calcite seam @ 622.5', up to ½"irregular pink calcite @ 50° @ 628.0', 1" VEIN with ¼" quartz along upper wall and the remainder pinkish calcite. A few specks pyrite & chalcopyrite. Striated fracture at lower side @ 45° @ 628,2', up to 1" irregular pink calcite @ 629.6', small irregular patches pink calcite					
630.4	800.0	GREYWACKE (Keewatin) Generally fine grained. Locally short sections showing well defined bedding varying from 30-50° to core axis. Some scattered pyrite & chalcopyrite.					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-2

LOCATION:

LATITUDE:

DEPARTURE:

BEARING:

ANGLE DIP:

STARTED:

FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
		@ 632.4', up to 1/8" pink calcite-chlorite with specks of chalcopyrite @ 45°					
		@ 632.6', up to ¼" pink calcite-chlorite @ 50°					
		@ 633.2', 1" quartz-chlorite @ 40°					
		@ 634.0', ¼" irregular quartz-chlorite-calcite					
		@ 634.4', 1" quartz-chlorite					
		* @ 634.8', ¼" pink calcite-chlorite. Speck chalcopyrite. Upper wall free slip at 60° to core					
		@ 638.5', ¼" irregular quartz-chlorite					
		@ 642.5', 1" white quartz @ 60°					
		@ 643.7', " " " " 50°					
		@ 644.5', 11/8" " " " 65°					
		@ 645.0', ¼" irregular quartz					
		@ 645.5', 1" quartz-calcite-chlorite @ 60°					
		@ 646.5', ½" grey quartz-chlorite @ 60°					
		@ 656.5', ¼" quartz-chlorite @ 55°					
		663.0 - 667.5 about 30% quartz-chlorite veinlets and veins up to 6" in width, mostly at high angles to core. A little pyrite.	5	5.0			
		@ 699.0', fine bedding at 30°. Some quartz and pyrite along bedding.					
		@ 701.5', ½" brownish cherty bedding @ 30° to core. Well mineralized with pyrite and chalcopyrite					
		@ 704.7', brownish cherty bedding @ 35°. Fairly heavy py					
		719.0 - 719.5 brownish cherty bedding @ 35°. " " "					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-2

LOCATION:

LATITUDE:

DEPARTURE:

BEARING:

ANGLE DIP:

STARTED:

FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
		@ 730.2', up to 1" streak heavy pyrite along irregular bedding @ 35°					
		* @ 730.4', 1" greyish quartz @ 50°. Few specks pyrite. shearing at lower edge with pink calcite.					
		* 730.5 - 732.0, broken core, slightly rusty					
		* @ 737.3', 1½" greyish quartz with chloritic inclusions Splash and specks of chalcopyrite. Specks of pyrite and a little cobalt. Several small showings of galena or argentite?? 55°	4	0.3			
		* @ 739.8', 11/8" quartz-chlorite vein. Specks pyrite, galena, cobalt 50°					
		* @ 742.9', 3" quartz. Specks galena & pyrite @ 50-60°					
		@ 743.3', ¼ - ½" irregular quartz-chlorite. Specks py.					
		@ 743.6', 1/8" quartz-chlorite					
		@ 744.3', 1/8" " "					
		744.5 - 744.9 quartz-chlorite inclusions @ 55°					
		748.7 - 749.5 30-40% quartz-chlorite veining @ 55°. Some coarse pyrite.					
		750.0 - 751.7 30-40% quartz-chlorite veins					
		748.8 - 751.8 SAMPLE	6	3.0			
		@ 754.0', ¼" quartz-chlorite					
		@ 754.8', 11/4" " " . Some white calcite					
		755.4 - 755.6 quartz-chlorite vein					
		@ 766.7', ½" quartz-chlorite @ 45°, Specks py & chalco					
		@ 775.0', 1½" quartz-chlorite @ 50°					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-2

LOCATION:

LATITUDE:

DEPARTURE:

BEARING:

ANGLE DIP:

STARTED:

FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO	SAMPLE LENGTH			
		@ 780.2', 2" quartz-chlorite @ 782.7', 3" " " 790.1-790.6, 80% quartz-chlorite					
	800.0	END OF HOLE					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-3

STARTED: 20/03/85
FINISHED: 11/04/85

LOCATION: Coleman Twp.
LATITUDE: 2,436 North
DEPARTURE: 2,397 East
BEARING: N 70° E
ANGLE DIP: -35° @200' -37°30' @ 400' -38° @ 600' -38° 30'
LOGGED BY: W.Hammers on

FROM	TO	REMARKS.	SAMPLE NO.	SAMPLE LENGTH			
0.0'	5.0'	CASING:- (0 - 4.0' above surface), (4.0 - 5.0' in bedrock)					
5.0	438.5	NIPISSING DIABASE:- Massive, fairly hard rock. Numerous talcose & chlorite slips at all angles to core axis. Some bleaching in places. Some narrow broken sections. A few quartz-calcite veins & veinlets; the chief ones as follows: * @ 177.0', 2-1/2" zone calcited & aplitic or diabasic dike material at 25°. Zone contains 1/2" pink calcite & some shearing. @ 230.7' - 231.4', VEIN ZONE at 55° to core axis. @ 230.7', 1/4" sheared quartz-calcite-chlorite. @ 231.4', 1/8" calcite with light & dark wallrock alteration. * @ 320.0 - 325.5', FAULT ZONE. Rusty, broken sections. irregular 1/8" calcite veinlet along core and at 323.7", 1/2" - 3/4" rusty, gouge and shearing at about 25° to core. @ 352.5' - 353.5', broken core and gouge seams. @ 360.0', 1/4" gouge seam at 45° to core. @ 380.6' - 382.0', broken core with gouge seams. @ 394.8' - 397.5', broken core.					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-3

LOCATION:

LATITUDE: BEARING: STARTED:

DEPARTURE: ANGLE DIP: FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO.	SAMPLE LENGTH			
		@ 433.0', up to 1" irregular epidote Vein. 15 - 20°. @ 433.2', up to 1/4" quartz-epidote Vein. 15 - 20°. @ 433.6', 1/2" epidote Vein at 15 - 20° to core. @ 435.0', up to 1/2" epidote at 15 - 20°. @ 435.5', up to 1" epidote at 15 - 20°. @ 436.5', 1/8" white quartz-calcite at 45°. @ 438.5', Contact: Chilled edge of diabase at 40°.					
438.5	478.0	SLATE-GREYWACKE:- HURONIAN. For the most part showing finely laminated bedding at about 35° to core axis. Broken core in places. @ 465.1', 1/8" quartz-calcite-chlorite at 60° to core axis. Small splash chalcopyrite. @ 478.0', Contact: Sharp change at 45°.					
478.0	709.0	CONGLOMERATE:- HURONIAN. Fairly hard, massive rock. Scattered boulders and generally close packed small fragments and pebbles in gritty to argillaceous matrix. * @ 494.5', 2" VEIN ZONE:- White to pinkish calcite veinlets and 1/2" breccia cemented with calcite at 40° to core axis. Numerous small vugs. Reddish wallrock alteration. @ 603.5' - 604.5', granite coulder. Chloritized mafic minerals and feldspars altered to reddish brown. A little pyrite.					

PHAETON EXPLORATIONS LIMITED

DIAMOND DRILL HOLE 85-3

LOCATION:

LATITUDE: BEARING:

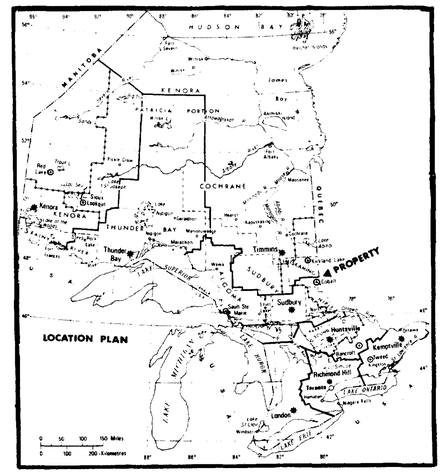
DEPARTURE: ANGLE DIP:

STARTED:

FINISHED:

LOGGED BY:

FROM	TO	REMARKS	SAMPLE NO.	SAMPLE LENGTH			
		@ 606.5' - 611.8', broken core. FAULT?					
		* @ 622.0', 3/4" quartz-calcite vein at 40° to core axis.					
		@ 683.3', irregular pink calcite thread at 30° " " .					
		@ 684.9', " " " "					
		709.0', Contact:- Well defined. 30° to core axis.					
709.0	753.0	ARGILLITE CONGLOMERATE:- HURONIAN. Scattered pebbles and fragments in a fine-grained argillite matrix. Chlorite spotting well developed. A few pyrite. @ 730.9', Up to 3/8" irregular pink calcite at 45° to core @ 733.1', 1/16 to 1/8* pink calcite at 65° to core axis.					
753.0	762.0	KEEWATIN SEDIMENTS:- GREYWACKE. Fine laminated bedding in places at 20° to core axis. few pink calcite threads and veinlets. @ 759.4', 1/16" pink calcite. @ 761.5', 1/8" " "					
	762.0	END OF HOLE:- April 11, 1985					



LOT 1, CON. 12

LOT 4 — LOT 3 — LOT 2 — LOT 1

LOT 1 CON. II

COLEMAN TWP. — LORRAIN TWP.

PROPERTY & GEOLOGICAL PLAN

PHAETON EXPLORATIONS LIMITED

COLEMAN & LORRAIN TOWNSHIPS, ONT.

SCALE

0 100 200 300 400 500 1000

MODIFIED AFTER O.D.M. P97

Plate I

2000 E
2200 E
2400 E
2600 E
2800 E
3000 E

3000 N
2800 N
2600 N
2400 N
2200 N
2000 N

POORLY DEFINED TRACE
21 VEIN
WELL DEFINED
STRONG BREAK
84-1
O'BRIEN 10 VEIN EXTENSION 400 LEVEL
O'BRIEN 10 VEIN SURFACE
ROAD to Cobalt 3 miles
NORTH VEIN
SHAFT 85-3
85-2
85-3
CROSS LAKE O'BRIEN (DEERHORN) PROPERTY BOUNDARY
WINZE
SOUTH VEIN

LEGEND

- 400' LEVEL
- 450' LEVEL
- 500' LEVEL
- CONTACT
- FAULT
- AIR PHOTO TRACE
- VEIN
- DIAMOND DRILL HOLE (PROPOSED)
- SURVEY POST
- DIP & STRIKE
- 5 DIABASE
- 4 SLATE, GREYWACKE
- 3 CONGLOMERATE
- 2 RHYOLITE, TUFF
- 1 BASIC VOLCANICS

PROPERTY PLAN

Frolecks Pond
Coleman Twp.
Lorrain Twp.
Cross Lake
Lead
64
964
1737
706
1397
19498
1007
19592

COMPOSITE PLAN AREA

N

PHAETON EXPLORATIONS LIMITED

COMPOSITE PLAN

SMITH-COBALT PROPERTY

SCALE

0 40 80
FEET

Plate 3

31M05NE0105 63.4825 LORRAIN

220

SW

NE

Elevation feet

1000

900

800

700

600

500

400

1020'

963'

ROAD

S U R F A C E

North Vein

10 Vein

21 Vein

5

4

3

4th Level

699.0

LEGEND

5 Diabase

4 Greywacke

3 Conglomerate

1. Volcanics

Vein

Fault

OM84-8-C-370
#63.4625

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SECTION
D.D.H. 84-1

SCALE
40 30 20 10 0 40
feet

SW

NE

S U R F A C E

Elevation feet

977

900

700

506

441

552

DIABASE

D I A B A S E

SHAFT

N-S FAULT

85-3

85-2

GREYWACKE

G R E Y W A C K E

CONGLOMERATE

C O N G L O M E R A T E

400 Level

CONG.

GWKE.

800'

782'

?

p

LEGEND

5 Diabase

4 Greywacke

3 Conglomerate

1. Volcanics

Vein

Fault

Chlorite spotting

OM84-8-C-370

* 63.4625

PHAETON EXPLORATIONS LIMITED

SECTION

D.D.H. 85-2-3

SCALE

40 30 20 10 0 40

feet