

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY012

PROJECT IDEN : SYLVESTER START DATE : 14 NOV 91 COMPLETION DATE : 7 DEC 91 LOGGED BY: DAVID JOHN CROSSING
 COLLAR NORTHING: 60998.75 COLLAR EASTING : 57816.76 COLLAR ELEVATION: 305.45 GRID AZIMUTH : 0.00
 DRILLED BY : LONGYEAR TOTAL LENGTH : 495.10 CORE/HOLE SIZE : HQ

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
	0.00		190.00	-60.00	60998.75	57816.76	305.45
	30.00		192.50	-61.00			
	60.00		192.00	-61.00			
	90.00		192.00	-61.50			
	120.00		191.00	-62.00			
	150.00		191.50	-62.80			
	180.00		192.50	-63.50			
	210.00		194.00	-63.50			
	240.00		192.00	-63.80			
	268.00		194.00	-64.00			
	297.00		199.00	-64.00			
	333.00		199.00	-64.00			
	366.00		200.50	-63.80			
	400.00		200.00	-63.80			
	430.00		204.50	-63.00			
	494.00		204.50	-63.80			
	495.10		204.50	-63.80			

ED This hole was collared from the Trial Harbour road and was
 ED designed to intersect the Balstrup Fault about 250m downdip
 ED from the SY003 intersection. The hole traversed Crimsom Creek
 ED turbidites to 432.5m, where it entered Oonah Formation.
 ED Sandstone across a sharp contact marked by an insignificant
 ED (5mm) fault. The hole intersected the Balstrup fault over the
 ED interval 440 - 443.8m. Then it intersected 12.6m of massive
 ED pyrite-pyrrhotite with up to 10% combined sphalerite-galena. The
 ED sulphides are replacing recrystallised carbonate and the base
 ED metals are concentrated toward the carbonate contact. Below 457m
 ED the hole remained in recrystallised carbonate to the end of the
 ED hole (495.1m). These carbonates contain a stockwork of
 ED pyrite-carbonate-sphalerite-galena veinlets.
 ED The mineralisation encountered is almost identical to that
 ED encountered in SY003, and occurs at the same
 ED structure/stratigraphic position. Based on the SY003/SY012
 ED intersections the Balstrup Fault dips North - NorthEast at 70
 ED degrees, and the true thickness of sulphides in SY012 is about
 ED 9 metres.

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 SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

Interval From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
0.00	15.00		PRECOLLAR.	
15.00	82.10		MUDSTONE: grey-green, slightly weathered, medium bedded, massive, bedding: ca 30, firm, highly broken core, 0.3% veins of epidote.	CAMBRIAN CRIMSON CK FOR
15.00	82.10		Wide spaced fault surface, often with fibre and epidotized, form set at 45 degrees and 10 - 30 degrees to the C.A. BCA's vary 20 - 45 degrees.	
15.00	82.10		15.00 30.00 100% MUDSTONE: grey-green, slightly weathered, medium bedded, disrupted bedding, fractured, microfaults, fault: ca 25, fault: ca gradational base, 45, firm, highly broken core, 1% veins of epidote.	CAMBRIAN CRIMSON CK FOR
20.00	23.00		Fault sets well developed with strong fibre growth.	
			30.00 35.00 5% LITHIC ARENITE: light grey, irregularly interbedded, graded bedding, medium bedded, bedding: ca 20.	
			42.20 43.20 50% LITHIC ARENITE: disrupted bedding, fractured, fracture: ca 05, 3 % veins of quartz, 1% veins of epidote, 1% veins of pyrite, 1% veins of sercite.	
			67.40 67.50 100% FAULT: fault: ca 30.	
			69.00 69.01 100% STRUCTURAL MEASUREMENT: bedding: 312 / 64.	
82.10	86.10		FAULT: light grey, vuggy, sheared, brecciated, fault: ca 40, 3 % veins of carbonate.	
82.10	86.10		A composite structure with an early formed shear fabric which has been refolded and cross - out by later brittle structures at 30-50 degrees to the C.A. The latter are slickensided.	
82.10	86.10		Puggy zones and breccia zones are also present.	
			82.10 86.10 30% LITHIC ARENITE: light grey, slightly altered, slightly carbonated, massive, disrupted bedding.	
			82.10 84.90 100% FAULT: light grey, vuggy, sheared, brecciated, fault: ca 40, 3 % veins of carbonate, 0.3% disseminations = veins of epidote, 5% disseminations = veins of pyrite.	
86.10	127.50		MUDSTONE: dark grey, medium bedded, coarse bedded, bedding: ca 30, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 0.3% veins of epidote, 3 % veins of pyrite.	CAMBRIAN CRIMSON CK FOR
			86.10 127.50 30% LITHIC ARENITE: medium grey, irregularly interbedded, medium grained, medium bedded, 3 % veins of carbonate, 0.3% veins of epidote, 3 % veins of pyrite.	
			108.50 127.50 100% MUDSTONE: dark grey, moderately calcareous, medium bedded, coarse bedded, bedding: ca 15, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 0.3% veins of epidote, 3 % veins of pyrite.	CAMBRIAN CRIMSON CK FOR

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SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SYD12 (CONTINUED)

Interval From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
			115.00 121.00 100% MUDSTONE: dark grey, medium bedded, coarse bedded, bedding: ca 30, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 0.3% veins of epidote, 3 % veins of pyrite, 0.1% veins of galena, 0.1% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
			124.00 126.00 100% MUDSTONE: dark grey, medium bedded, coarse bedded, bedding: ca 30, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 5% veins of quartz, 3 % veins of carbonate, 3 % veins of epidote, 3 % veins of pyrite, 0.1% veins of galena, 0.1% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
127.50	143.00		LITHIC ARENITE: grey-green, slightly bleached, moderately calcareous, massive, coarse bedded, medium grained, bedding: ca 15, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 1% veins of epidote, 1% veins of pyrrhotite. 127.50 143.00 10% MUDSTONE: light grey. 132.60 132.61 100% STRUCTURAL MEASUREMENT: vein: 243 / 35, 70% veins of siderite, 20% veins of epidote, 10% veins of pyrrhotite.	CAMBRIAN CRIMSON CK FOR
134.00	134.01		Upper block has moved east and up. 134.00 134.01 100% STRUCTURAL MEASUREMENT: fault: 211 / 32, fault: 266 / 15. 134.90 134.91 100% STRUCTURAL MEASUREMENT: vein: 302 / 17, 60% veins of talc, 30% veins of siderite, 10% veins of pyrite.	
143.00	147.60		GABBRO: grey-green, moderately calcareous, massive, medium grained, basal contact: ca intrusive contacts, 5, hard, moderately broken core, 1% veins of epidote.	
147.60	151.80		MUDSTONE: light grey, medium bedded, basal contact: ca intrusive contacts, 35, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 1% veins of epidote. 147.60 151.80 20% LITHIC ARENITE: irregularly interbedded, fine bedded, graded bedding.	
151.80	153.80		GABBRO: grey-green, moderately calcareous, massive, medium grained, basal contact: ca intrusive contacts, 45, hard, moderately broken core, 3 % veins of quartz, 1% veins of epidote, 1% veins of pyrite.	
153.80	161.00		LITHIC ARENITE: light grey, coarse bedded, medium bedded, hard, moderately broken core, 3 % veins of carbonate. 153.80 161.00 40% MUDSTONE: medium dark grey, microfaults,	CAMBRIAN CRIMSON CK FOR

E.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

Interval From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
			microfault: ca 45. 3 % veins of carbonate.	
161.00	167.40		GABBRO: grey-green, massive, medium grained, basal contact: ca intrusive contacts, 20, hard, moderately broken core. 161.00 162.40 100% GABBRO: grey-green, moderately altered, spotted, medium grained, fractured, basal contact: ca intrusive contacts, 20, hard, moderately broken core, 3 % in fractures of clay.	
166.60	166.61		Upper block moved toward 072, upward. 166.60 166.61 100% STRUCTURAL MEASUREMENT: fault: 180 / 30, fibre: 252 / 10.	
167.40	171.60		LITHIC ARENITE: medium bedded, disrupted bedding, convolute folds, brecciated, basal contact: ca intrusive contacts, 35, hard, moderately broken core, 1% veins of quartz, 5% veins of carbonate, 3 % veins of epidote, .03% disseminations = veins of pyrrhotite. 167.40 171.60 40% MUDSTONE: 1% veins of quartz, 5% veins of carbonate, 3 % veins of epidote, .03% disseminations = veins of pyrrhotite.	CAMBRIAN CRIMSON CK FOR
168.20	168.21		Upper block moved toward 076. 168.20 168.21 100% STRUCTURAL MEASUREMENT: fault: 200 / 25, fibre: 256 / 10.	
168.60	168.61		Upper block moved upward toward 070 (very definite, based on well developed fibres). 168.60 168.61 100% STRUCTURAL MEASUREMENT: fault: 204 / 15, fibre: 260 / 14.	
171.60	191.50		GABBRO: medium grey, massive, coarse grained, basal contact: ca intrusive contacts, 45, hard, moderately broken core, 1% veins of carbonate. 190.70 191.50 60% GABBRO: medium brown, highly calcareous, massive, coarse grained, basal contact: ca intrusive contacts, 45, 1% veins of carbonate. 191.45 191.46 100% STRUCTURAL MEASUREMENT: basal contact: 035 / 70, intrusive contacts.	
191.50	268.50		MUDSTONE: light grey, fine bedded, medium bedded, bedding: ca 25, microfault: ca gradational base, 35, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 0.3% veins of epidote, .03% disseminations = veins of pyrrhotite.	CAMBRIAN CRIMSON CK FOR
191.50	268.50		The sequence is disrupted near top, with numerous micro meso-scale faults. BCA varies 0 - 35 degrees, AVE 25.	
191.50	268.50		191.50 268.50 30% LITHIC ARENITE: medium grey, irregularly	

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 SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

Interval From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
			interbedded, medium bedded, graded bedding. 1% veins of quartz, 3 % veins of carbonate, 0.3% veins of epidote, .03% disseminations = veins of pyrrhotite.	
			193.45 193.45 100% STRUCTURAL MEASUREMENT: bedding: 210 / 80.	
			199.00 199.01 100% STRUCTURAL MEASUREMENT: bedding: 200 / 68.	
			222.00 222.01 100% STRUCTURAL MEASUREMENT: bedding: 198 / 67.	
			224.00 224.01 100% STRUCTURAL MEASUREMENT: vein: 196 / 75, 60% veins of talc, 30% veins of siderite, 10% veins of pyrite.	
			226.20 226.21 100% STRUCTURAL MEASUREMENT: bedding: 194 / 90.	
			234.00 234.01 100% STRUCTURAL MEASUREMENT: bedding: 170 / 75.	
			234.10 234.11 100% STRUCTURAL MEASUREMENT: bedding: 150 / 80.	
			237.10 237.11 100% STRUCTURAL MEASUREMENT: bedding: 140 / 77, fault: 230 / 60.	
			238.00 239.00 100% MUDSTONE: light grey, fine bedded, medium bedded, bedding: ca 25, microfault: ca gradational base, 35, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 0.3% veins of epidote, .03% veins of galena, .03% disseminations = veins of pyrrhotite, .03% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
			246.50 246.51 100% STRUCTURAL MEASUREMENT: bedding: 180 / 48.	
			252.50 252.51 100% STRUCTURAL MEASUREMENT: bedding: 226 / 70.	
			257.90 257.91 100% STRUCTURAL MEASUREMENT: bedding: 060 / 65.	
			266.60 266.61 100% STRUCTURAL MEASUREMENT: bedding: 096 / 65, vein: 246 / 55, 90% veins of epidote.	
268.50		305.90	LITHIC ARENITE: medium grey, medium bedded, graded bedding, medium grained, intraclastic, bedding: ca 50, uphole facing, hard, slightly broken core, 3 % veins of carbonate.	CAMBRIAN CRIMSON CK FOR
			291.00 293.00 100% LITHIC ARENITE: medium grey, medium bedded, graded bedding, medium grained, intraclastic, bedding: ca 50, uphole facing, hard, slightly broken core, 3 % veins of carbonate, 3 % disseminations > veins of pyrite, .03% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
			293.50 293.51 100% STRUCTURAL MEASUREMENT: bedding: 040 / 50.	
			298.50 298.51 100% STRUCTURAL MEASUREMENT: bedding: 035 / 42.	
			299.50 305.90 30% MUDSTONE: irregularly interbedded, 3 % veins of carbonate.	
305.90		325.60	MUDSTONE: light grey, medium bedded, bedded, disrupted bedding, microfaults, 80. fault: ca 45, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate.	CAMBRIAN CRIMSON CK FOR
			305.90 325.60 30% LITHIC ARENITE: intergradational, medium bedded, graded bedding.	
			316.60 325.60 100% MUDSTONE: medium dark grey, medium bedded,	CAMBRIAN CRIMSON CK FOR

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 SYLVESTER GRID
 SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

Interval From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
			bedded, disrupted bedding, microfaults, 80, fault: ca 45, hard, moderately broken core. 1% veins of quartz, 3 % veins of carbonate.	
325.60	366.00		LITHIC ARENITE: grey-green, massive, coarse bedded, intraclastic, bedding: ca 60, uphole facing, gradational base, hard, slightly broken core.	CAMBRIAN CRIMSON CK FOR
326.40	330.00		Disturbed, with boudinaged intraclasts of lithic arenite and mudstone cut by occasional slickensided fault surfaces (near top). Numerous carbonate veins. Moderately calcareous. Intraclast conglomerate.	
326.40	330.00			
326.40	330.00			
357.50	357.80			
366.00	432.50		MUDSTONE: light grey, medium bedded, bedding: ca 55, basal contact: ca sharp base, 60, hard, moderately broken core.	CAMBRIAN CRIMSON CK FOR
			366.00 432.50 20% LITHIC ARENITE: irregularly interbedded, medium bedded, graded bedding.	
			375.20 378.40 100% MUDSTONE: light grey, disrupted bedding, boudinaged, brecciated, bedding: ca 55, basal contact: ca sharp base, 60, hard, moderately broken core, 3 % veins of quartz.	CAMBRIAN CRIMSON CK FOR
			383.00 400.70 100% MUDSTONE: light grey, medium bedded, bedding: ca 55, basal contact: ca sharp base, 60, hard, moderately broken core, 0.3% veins of quartz, 3 % veins of carbonate, 0.1% veins of epidote, 1% disseminations = veins of pyrite, 1% disseminations = veins of pyrrhotite.	CAMBRIAN CRIMSON CK FOR
			407.40 407.41 100% STRUCTURAL MEASUREMENT: bedding: 045 / 84.	
			409.40 409.41 100% STRUCTURAL MEASUREMENT: bedding: 250 / 55.	
412.70	412.71		Reverse movement (upper block up, toward 276 AM6).	
			412.70 412.71 100% STRUCTURAL MEASUREMENT: fault: 070 / 45, fibre: 096 / 40.	
			429.80 432.50 100% MUDSTONE: light grey, slightly altered, slightly bleached, disrupted bedding, microfaults, bedding: ca 55, basal contact: ca sharp base, 60, hard, moderately broken core, 3 % disseminations = veins of pyrrhotite.	CAMBRIAN CRIMSON CK FOR
			431.80 432.10 100% FAULT: fault: ca 50, 1% infilling shear/fault pyrite, 20% infilling shear/fault pyrrhotite.	
432.49	432.50		The basal contact is sharp, somewhat irregular and marked by 5mm of talcy selvedge. It is sub-parallel to weak foliation in underlying sandstone, and approximately parallel to recognizable faults both above and below. It may represent a relatively insignificant fault.	
432.49	432.50			
432.49	432.50			
432.49	432.50			
432.49	432.50			
432.50	434.80		SANDSTONE: medium grey, massive, coarse bedded, disrupted bedding, faulted, fault: ca 60, hard, moderately broken core,	UPPER OONAH

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 SYLVESTER GRID
 SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

Interval From (m) To (m)	Rec. (m)	ROD (m)	Description	Unit
			5% veins of quartz, 3 % disseminations = veins of pyrite, 1% disseminations = veins of pyrrhotite.	
434.80		434.90	FAULT: slickensided, fault: ca 55, 90% infilling shear/fault carbonate, 10% infilling shear/fault pyrrhotite.	
434.90		440.00	SANDSTONE: medium grey, fine bedded, well bedded, strongly folded, microfaults, basal contact: ca 25, hard, moderately broken core, 1% disseminations = veins of pyrite, 3 % disseminations = veins of pyrrhotite. 436.00 436.20 100% FAULT: fault: ca 25, 50% infilling shear/fault quartz, 3 % infilling shear/fault pyrite.	UPPER DONAH
440.00		443.80	FAULT: sheared, brecciated, basal contact: ca 30, crumbly, highly broken core, 5% disseminations = veins of carbonate.	BALSTRUP FAULT
440.00		443.80	A composite structure comprising of early formed strain fabric (angular vein quartz fragments in carbonaceous, foliation matrix grading to lenticular quartz and sandstone, boudins aligned with strong foliation - of melange. Fabric is at 25 - 45 degrees to the CA.) Which is cut by later brittle features (eg breccia at 45 degrees to CA and puggy breccia at 50 degrees to CA).	
441.80		442.70	100% FAULT: highly calcareous, puggy, brecciated, vuggy, brecciated, fault: ca 50, crumbly, highly broken core, 20% disseminations = veins of carbonate.	BALSTRUP FAULT
443.80		457.00	MASSIVE SULPHIDES: yellow brown, massive, coarse grained, basal contact: ca diffuse base, 80, hard, slightly broken core.	
443.80		457.00	The massive sulphides are replacing carbonate adjacent to the Balstrup Fault. Pyrite is euhedral and pyrrhotite is interstitial to pyrite where they occur together. Sphalerite is irregularly distributed and interstitial to pyrite. The outer contact is diffuse over a 3cm wide interval. Sphalerite and galena tend to concentrate toward the outer contact and around remnant patches of carbonate within the interval.	
443.80		457.00	100% MASSIVE SULPHIDES: yellow brown, massive, coarse grained, basal contact: ca diffuse base, 80, hard, slightly broken core, 10% interstitial quartz, 3 % interstitial carbonate, 70% massive/ semi - massive pyrite, 0.3% disseminations of pyrrhotite.	
447.00		450.60	100% MASSIVE SULPHIDES: yellow brown, massive, coarse grained, basal contact: ca diffuse base, 80, hard, slightly broken core, 1% interstitial quartz, 3 % interstitial	

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 SYLVESTER GRID
 SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

	Interval	Rec.	RQD	Description	Unit
	From (m) To (m)	(m)	(m)		
				carbonate, 10% patches of pyrite, .03% veins of galena, 80% massive/ semi - massive pyrrhotite, 0.1% veins of sphalerite.	
	450.60 457.00	100%		MASSIVE SULPHIDES: yellow brown, massive, coarse grained, basal contact: ca diffuse base. 80, hard, slightly broken core, 70% massive/ semi - massive pyrite, 3 % disseminations of galena, 10% patches of pyrrhotite, 5% disseminations of sphalerite.	
	451.40 451.80	100%		SHALE: black, bedding: ca 45. 3 % interstitial quartz, 3 % interstitial carbonate, 5% disseminations of pyrite, 5% disseminations of pyrrhotite.	
ND	457.00 495.10			CARBONATE: mottled-grey, massive, recrystallised, coarse grained, hard, slightly broken core, 0.3% stockwork of magnetite, 1% stockwork of pyrite, .03% stockwork of galena, 0.3% stockwork of pyrrhotite, .03% stockwork of sphalerite, 0.3% stockwork of serpentine.	UPPER OONAH
	457.00 495.10			Galena and sphalerite occur associated with a stockwork of regular pyrite-carbonate veins and replacive patches. These veins typically contain about 5 % combined sphalerite-galena and accessory minerals including magnetite and pyrrhotite.	
	457.00 495.10			457.00 469.50 100% CARBONATE: mottled-grey, massive, recrystallised, coarse grained, hard, slightly broken core, 0.1% stockwork of magnetite, 1% stockwork of pyrite, 0.3% stockwork of galena, 0.3% stockwork of pyrrhotite, 0.3% stockwork of sphalerite, 0.3% stockwork of serpentine.	UPPER OONAH
	477.70 477.71	100%		STRUCTURAL MEASUREMENT: vein: 052 / 75.	
	483.40 483.41	100%		STRUCTURAL MEASUREMENT: vein: 280 / 56.	

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