R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY016

PROJECT IDEN :SYLVESTER	START DATE : 27 MAR 92	COMPLETION DATE : 2 APR 92	LOGGED BY:DAVID JOHN CROSSING
COLLAR NORTHING: 60728.50	COLLAR EASTING : 58589.90	COLLAR ELEVATION: 318.90	GRID AZIMUTH : 0.00
DRILLED BY : D.D.T	TOTAL LENGTH : 413.00	CORE/HOLE SIZE : HQNQ	

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		177.50	-52.00	60728.50	58589.90	318.90
001	29.00		177.50	-52.00			
002	74.50		176.00	-51.00			
003	106.00		177.50	-50.00			
004	136.00		179.00	-49.00			
005	166.00		182.00	-49.00			
006	196.00		182.50	-48.50			
007	226.00		183.50	-48.00			
008	257.50		184.50	-48.00			
009	288.50		186.00	-48.00			
010	323.00		187.00	-48.00			
011	359.50		190.00	-47.50			
012	394.50		191.00	-48.00			
013	413.00		191.00	-48.00			

R HED This hole was drill to test for replacement of massive
R HED sulphides in cabonates of the Upper Oonah Formation in the
R HED immediate footwall of the Balstrup Fault.The fault was
R HED intersected over the interval 330 - 337.6m, and Limestones in
R HED the immediate footwall were partially replaced by
R HED quartz-pyrite-sphalerite over 1.3m. Below that depth, the
R HED limestones were unaltered.

Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
0.00	43.50			NO CORE.	
43.50	77.20			MUDSTONE: light grey, medium bedded, coarse bedded, bedding: ca 30, firm, highly broken core.	CAMBRIAN CRIMSON CK FOR
				43.50 77.20 40% LITHIC ARENITE: light grey, inter bedded, medium bedded, coarse bedded, completely broken core.	
				43.50 72.00 100% MUDSTONE: light grey, slightly weathered, medium bedded, coarse bedded, bedding: ca 30, firm, highly broken core.	CAMBRIAN CRIMSON CK FOR
				74.50 75.00 100% MUDSTONE: light grey, medium badded, coarse bedded, microfault: ca 10, firm, highly broken core.	CAMBRIAN CRIMSON CK FOR

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SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	77.20	90.90	4.5		FAULT: black, slightly carbonated, puggy, brecciated, basal contact: ca 30, firm, exceptionally broken core, 5% disseminations of pyrite.	
R	77.20	90.90			Driller reports numerous water-filled cavities over this	
R	77.20	90.90			interval.	
					77.20 90.90 60% NO CORE.	
	90.90	194.70			LITHIC ARENITE: light grey, medium bedded, coarse bedded, graded bedding, bedding: ca 45, uphole facing, sharp base, firm, moderately broken core, 5% veins of carbonate.	CAMBRIAN CRIMSON CK FOR
					90.90 194.70 40% MUDSTONE: light grey, inter bedded, 5% veins of carbonate.	
R	95.10	98.30			A 0 - 60cm wide tensional vein that lenses out at ends, with	
R	95.10	98.30			jagged jig-saw fit edges and some entrained breccia fragments .	
R	95.10	98.30			No displacement observed.	
					95.10 98.30 30% VEIN: vein: ca 0, 40% veins of quartz, 3 % veins of talc, 3 % veins of galena.	
					178.00 194.40 100% LITHIC ARENITE: light grey, medium bedded, coarse bedded, graded bedding, bedding: ca 60, uphole facing, sharp base, firm, moderately broken core, 5% veins of carbonate.	CAMBRIAN CRIMSON CK FOR
	194.70	267.50			MUDSTONE: very dark grey, moderately calcareous, medium bedded, well bedded, bedding: ca 45, basal contact: ca faulted base, 25, firm, moderately broken core, 10% veins of carbonate, 5% disseminations of pyrite.	CAMBRIAN CRIMSON CK FOR
R	194.70	267.50			Varies from slightly to strongly calacerous.Locally highly	
R	194.70	267.50			strained and boudinaged at shallow angle to bedding.Fine	
R	194.70	267.50			grained disseminated pyrite is common showing preference for	
R	194.70	267.50			mudstone beds which can have up to 50% syngenetic pyrite.	
					194.70 267.50 20% LITHIC ARENITE: irregularly interbedded, medium bedded, well bedded, 10% veins of carbonate.	
R	214.00	247.50			A disturbed interval displaying moderate to locally high strain	
R	214.00	247.50			and consequantly boudinaging of coarser beds (lithic arenite).	
					214.00 247.50 40% MUDSTONE: very dark grey, moderately calcareous, disrupted bedding, sheared, boudinaged, shear: ca 45, basal contact: ca faulted base, 25, firm, mederately broken core, 10% veins of carbonate, 3 % patches of pyrite.	CAMBRIAN CRIMSON CK FOR
					257.80 264.00 100% MUDSTONE: very dark grey, moderately calcareous, medium bedded, well bedded, breccia: ca 45, basal contact: ca faulted base, 25, firm, moderately broken core, 10% veins of carbonate, 5% disseminations of pyrite.	CAMBRIAN CRIMSON CK FOR
					261.00 262.00 100% FAULT: very dark grey, highly calcareous, brecciated, well bedded, bedding: ca 45, basal contact: ca	CAMBRIAN CRIMSON CK FOR

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SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					faulted base, 25, firm, moderately broken core, 50% alteration haloes of carbonate, 5% disseminations of pyrite, .03% disseminations of sphalerite.	
	267.50	268.00			FAULT: fault: ca 15, 10% infilling shear/fault quartz, 20% infilling shear/fault carbonate, 5% patches of pyrite.	
	268.00	274.60			DYKE: medium grey, porphyritic, massive, chilled margin, basal contact: ca intrusive contacts, 55, hard, moderately broken core, 1% disseminations of pyrite.	
R	268.00	274.60			Unusual porphyritic mafic dyke with phenocrysts ranging 0.5 to	
R	268.00	274.60			20mm, consisting of A) Euhedral/subhedral, translucent dull	
R	268.00	274.60			white often zoned phenocrysts (= H6, moderately cleaved in 3	
R	268.00	274.60			directions, ?plagioclase.	
R	268.00	274.60			B) Subhedral transparent phenocrysts	
R	268.00	274.60			brillant to vitreous lustre, (highly refractive), cleavage not	
R	268.00	274.60			dominant,)H6.	
R	268.00	274.60			C) An intermediate type, zoned with	
R	268.00	274.60			alternating translucent and transparent bands.Sometimes	
R	268.00	274.60			poikilitically enclosed matrix toward outer margins. ?Perthitic	
R	268.00	274.60			plagioclase/sanidine.	
R	268.00	274.60			D) Anhedral mafic mineral possibly a	
R	268.00	274.60			pyroxene.	
R	268.00	274.60			E) Euhedral pyrite.	
R	268.00	274.60			The dyke is undeformed clearly postdating highly deformed and	
R	268.00	274.60			altered host rocks.Both margins are chilled margins.Matrix is	
R	268.00	274.60			medium grained.The intrusive has intruded a fault zone.	
	274.60	280.10			FAULT BRECCIA: altered, brecciated, sheared, hornfelsic structured, fault: ca 30, hard, moderately broken core, 5% disseminations = veins of quartz, 10% disseminations = veins of carbonate, 5% disseminations (veins of pyrite, 0.3% veins of sphalerite.	
R	274.60	280.10			A zone of brecciated altered Crimson Creek turbidites,	
R	274.60	280.10			hornfelsed near dyke.Graphitised slickensided fault surfaces	
R	274.60	280.10			are common.	
					277.70 279.10 100% FAULT BRECCIA: altered, brecciated, sheared, hornfelsic structured, fault: ca 30, hard, moderately broken core, 30% patches of quartz, 10% interstitial carbonate, 30% interstitial pyrite, 3 % interstitial sphalerite.	
	280.10	290.50			LITHIC ARENITE: medium light grey, slightly calcareous, medium bedded, coarse bedded, bedding: ca 50, basal contact: ca 55,	CAMBRIAN CRIMSON CK FOR

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SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 1% disseminations (veins of pyrite. 280.10 290.50 30% MUDSTONE: medium light grey, irregularly interbedded, medium bedded, coarse bedded, 1% veins of quartz, 3 % veins of carbonate, 1% disseminations (veins of pyrite. 280.10 290.50 20% SHALE: very dark grey, irregularly interbedded, fine bedded, laminated, 1% veins of quartz, 3 % veins of carbonate, 1% disseminations (veins of pyrite.	
	290.50	291.30			DYKE: medium grey, porphyritic, massive, basal contact: ca 55, hard, moderately broken core, 1% disseminations of pyrite.	
R	290.50	291.30			Identical to dyke at 267.6 - 274.6 m.	
	291.30	292.65			MUDSTONE: dark grey, slightly altered, slightly graphitic, disrupted bedding, hard, moderately broken core, 5% veins of magnetite, 5% disseminations = veins of pyrite, 0.3% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
	292.65	299.90			GABBRO: medium grained, massive, basal contact: ca 45. 295.80 296.50 100% LITHIC ARENITE: medium grey, slightly altered, basal contact: ca 30. 298.00 299.10 90% CARBONATE: light grey, 40% patches of quartz. 299.10 299.50 100% MUDSTONE: medium grey, disrupted bedding.	
	299.90	330.00			MELANGE: mottled-grey, moderately graphitic, massive, hard, moderately broken core, 0.3% disseminations of fe-oxides.	UPPER OONAH
R	299.90	330.00			Typical Oonah Formation melange, grading from moderately	
R	299.90	330.00			strained psammo-pelites featuring boudinaged quartzite	
R	299.90	330.00			interbeds to highly strained and broken rock featuring angular	
R	299.90	330.00			to lenticular quartzite/quartz fragments in sheared, graphitic	
R	299.90	330.00			pelitic matrix. Near the top of the interval, fragments of	
R	299.90	330.00			Crimson Creek turbities and carbonate are common decreasing in	
R	299.90	330.00			occurance downward to become absent below 321m. Hematitic	
R	299.90	330.00			alteration 317.7m to 320m. 303.40 303.50 100% STRUCTURAL MEASUREMENT: bedding: 023 / 75. 303.50 303.70 100% STRUCTURAL MEASUREMENT: shear: 212 / 85.	
	330.00	332.40	1.4		FAULT: black, moderately graphitic, puggy, crumbly, highly broken core, 10% patches of quartz.	
	332.40	334.30			CARBONATE: disrupted bedding, brecciated, stockworked, firm, moderately broken core, 10% veins of quartz, 10% veins of carbonate, 1% patches of talc, 5% disseminations = veins of	

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	From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					pyrite. 332.40 334.30 30% SHALE: inter bedded, disrupted bedding, brecciated, stockworked, 10% veins of quartz, 10% veins of carbonate, 5% disseminations = veins of pyrite.	
	334.30	337.60			FAULT: moderately graphitic, slickensided, fault: ca 30, crumbly, highly broken core, 20% patches of quartz, 10% disseminations) veins of carbonate, 1% disseminations of pyrite. 336.10 337.60 50% SHALE: moderately graphitic, laminated, disrupted bedding.	
	337.60	340.00			CARBONATE: light grey, massive, stylolitic, gradational base, 40% patches of talc, 0.3% disseminations of pyrite.	UPPER OONAH
R	337.60	338.90			The carbonate is replaced by quartz-pyrite-sphalerite adjacent	
R	337.60	338.90			to fault. 337.60 338.90 100% CARBONATE: light grey, highly altered, recrystallised, stylolitic, gradational base, 50% massive/ semi - massive quartz, 3 % patches of talc, 30% massive/ semi - massive pyrite, 1% disseminations of sphalerite.	UPPER OONAH
	340.00	343.15			SHALE: dark grey, laminated, bedding: ca 60, gradational base, hard, moderately broken core. 340.00 343.15 50% SANDSTONE: medium light grey, finely interbedded, fine bedded. 340.80 341.10 100% STRUCTURAL MEASUREMENT: bedding: 347 / 60. 342.80 343.00 100% STRUCTURAL MEASUREMENT: bedding: 345 / 61. 343.00 343.10 100% STRUCTURAL MEASUREMENT: bedding: 336 / 55. 343.10 343.11 100% STRUCTURAL MEASUREMENT: fault: 354 / 55, fibre: 070 / 20.	UPPER OONAH
	343.15	348.20			LIMESTONE: light green, fine bedded, medium bedded, bedding: ca 60, firm, moderately broken core, 5% veins of carbonate. 345.40 345.41 100% STRUCTURAL MEASUREMENT: vein: 080 / 70. 345.80 345.81 100% STRUCTURAL MEASUREMENT: bedding: 328 / 55.	
	348.20	350.60			FAULT: black, moderately graphitic, fault: ca 40, 10% disseminations = veins of quartz, 1% disseminations of pyrite. 349.80 350.40 100% BRECCIA: light green, highly altered, highly calcareous, 5% disseminations of chlorite, 10% disseminations of pyrite, 1% disseminations of sphalerite.	
	350.60	363.80			SHALE: moderately carbonaceous, laminated, fine bedded, bedding: ca 80, hard, moderately broken core.	

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SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					350.60 363.80 50% SANDSTONE: light grey, finely interbedded, fine bedded, medium bedded.	
					350.60 354.10 100% SHALE: moderately carbonaceous, disrupted bedding, strongly folded, cleaved, bedding: ca 80, hard, moderately broken core.	
					354.10 355.00 80% CARBONATE: 10% disseminations of pyrite.	
END	363.80	413.00			SANDSTONE: light grey, medium bedded, fine bedded, bedding: ca 70, hard, moderately broken core, 3 % veins of quartz.	
R	363.80	413.00			Silty intervals are generally moderately to strongly cleaved	
R	363.80	413.00			and facings of graded beds give conflicting facings (both	
R	363.80	413.00			uphole and downhole).Around 387m the cleavage is axial planar	
R	363.80	413.00			to small tight asymmetrical folds, but near E.O.H. 2 cleavages	
R	363.80	413.00			are present neither axial planar to small folds. One cleavage	
R	363.80	413.00			is locally folded by small folds.	
					363.80 413.00 20% SILTSTONE: medium grey, inter bedded, fine bedded, laminated, graded bedding.	
					378.00 378.10 100% STRUCTURAL MEASUREMENT: bedding: 320 / 35.	
R	379.10	379.11			Fibres indicate upper block moved toward 368 degrees AMG.	
					379.10 379.11 100% STRUCTURAL MEASUREMENT: fault: 282 / 15.	
					379.11 379.12 100% STRUCTURAL MEASUREMENT: fibre: 358 / 5.	
R	407.20	407.21			Fibres indicate upper block moved up (toward 076 deg AMG.).	
					407.20 407.40 100% STRUCTURAL MEASUREMENT: bedding: 278 / 10.	
					407.20 407.21 100% STRUCTURAL MEASUREMENT: fault: 302 / 45.	
					407.20 407.21 100% STRUCTURAL MEASUREMENT: fibre: 356 / 40.	
					410.40 410.60 100% STRUCTURAL MEASUREMENT: cleavage: 180 / 80.	
					410.50 410.51 100% STRUCTURAL MEASUREMENT: fold axis: 110 / 5.	
					411.40 411.41 100% STRUCTURAL MEASUREMENT: fold axis: 200 / 5.	
R	411.50	411.60			Cleavage measured was crenulation (c2), and was consistent in	
R	411.50	411.60			orientation but earlier (c1) cleavage was folded. "Fold axes"	
R	411.50	411.60			measurement was a measure of bedding/cleavage (c2)	
R	411.50	411.60			intersection.	
					411.50 411.60 100% STRUCTURAL MEASUREMENT: cleavage: 300 / 45, fold axis: 205 / 02.	
					412.00 412.10 100% STRUCTURAL MEASUREMENT: cleavage: 310 / 60.	
					412.00 412.10 100% STRUCTURAL MEASUREMENT: bedding: 150 / 18.	
					412.50 412.60 100% STRUCTURAL MEASUREMENT: cleavage: 302 / 30. cleavage: 310 / 45.	
					412.50 412.60 100% STRUCTURAL MEASUREMENT: fold axis: 015 / 02.	