Generally grey in colour with some cream bleached sections. Common thin fractures, some qtz filled, up to 5mm in thickness and contain AsPy. 144.5 - 3cm qtz vein @ 90°.180°. Some AsPy + 1 speck vis Au. 145.4 Thin qtz vein,some AsPy and minor Py + tiny speck Au? 145.8 - 146 Thin zone of fracturing 60° TCA and peripheral bleaching around fractures, close spaced ~ 1cm. Intermittent veining 45° TCA <5mm with minor AsPy and Py 148.8 - 149 zone of thin qtz veining 45° TCA AsPy > Py. 151.2 - 151.4 qtz veining + silcif^{n} Abt AsPy. 153.5 - 154 vis 151.2 - 151.4. 156 - 157.6 Bleached silicified sand stn intensely veined bottom 30cm @ 45° TCA. Minor AsPy. 159.4 qtz vein 2cm thick. Some AsPy>Py. Some disseminated into host. Minor Py on fracture surfaces. 160.1-2 generations of veining - prevalent thin 45° TCA ones and 1cm thick 140° TCA. Minor AsPy and Some Silic^{n}. 160.1 - 165.4 some qtz veining and minor AsPy, Py and grey silt stone layers.

Summary : **GRD-6 (0-298m)**

Collar : **5415546.31mN, 585827.17mE**

Drilled : **-60° ⇒ 135° (MAG)**

3.7 -12.4	fg qtz sand stone. Highly broken and fractured ground. Abt fe staining.
12.4 - 25	Cream, green fg sand stone. 18.5 - 19 brecciated. Factures 0° TCA + 45° TCA.
21.5 - 23	Brecciated, patchy silicified sand stone and some qtz. Some fracturing 30° TCA.
25 - 34.7	Cream fg sand stone + thin v intermittent slt st. 25.3 - 26.4 brecciated sand stone & slt st and qtz.
34.7 - 36.2	Slt st. Cream, green
36.2 - 42	Interbedded sand stone and slt st, bedding Perpendicular TCA. 36.4 - 36.6 Broken ground. 41.1 - 41.2 Silicified fractured sand stone 70° TCA.
42 - 44	Green and pink slt st. Minor fracturing 45° TCA.

44 - 63.8	fg Cream Green qtz lithic sand stone and some thin <10cm slt st layers. Some fracturing 20° TCA and 45°. 49 - 49.2 1cm qtz vein parallel TCA with associated bleaching. 50.3 - 50.7 qtz veining 2cm parallel TCA vuggy, buck. 54.5 10cm breccia.
63.8 - 94	64m orientation fractures 75.220 bedding 40°.220°. Grey sand stone and slt st, slt st layers <20cm & intermittent. 68.7 10cm breccia bedding 90° TCA laminations of slt st 90° TCA. 69.5 large parallel qtz vein 4mm thick. 70.3 vis 69.5. Silt st layers have occasional layer parallel <7mm qtz veins. 71.2 - 71.4 brecciated sand stone with qtz infilling interparticle spaces. 71.5 - 72 Silicified fractured sand stone. Fractures 45° + 160° TCA. 72.6 - 72.85 Follow - bleached (soft) sand stone. 73 - 74 Silicified sand stone fractured 160° TCA. 76.5 - 76.7 silicified brecciated sand stone. 79m orientation fractures 80°.190°. 81 - 81.3 brecciated, silicified sand stone. Some fracturing, associated peripheral bleaching 30° TCA. Some fracturing parallel TCA. 88 10cm broken sand stone and qtz bedding 80° TCA. 91m orientation fractures flat lying.
94 - 97.7	Grey laminated silt stone. 80° TCA
97.7 -102	fg green, grey sand st and intermittent thin <5cm slt st layers bedding 80° TCA. 100m orientation fractures SV.230° bedding flat lying.
102 - 110.2	fg, grey, qtz lithic sand stone. Fractured @ 30° TCA lost H_20 @ 102.7 interpreted fault. Some fractures Si filled <3mm thick 103.2 - 103.8 1-3cm thick qtz vein parallel TCA. 109 - 109.2 Broken core and qtz veins 30° TCA and some AsPy. 110 - 110.5 brecciated and veined sand st. Breccia matrix is vughular qtz. Vein 20° TCA <5mm.
110.2 - 131.9	fg, grey qtz lithic sand stone and intermittent slt st layers <20cm usually <10cm. 110.7 - 111 1-2cm qtz vein 10° TCA (qtz vein perpendicular to 100° fractures) 114 - 114.2 silicified and veined sand stone. Vein 20-30° TCA and contain AsPy fractured 30° TCA. 123.5 orientation fractures 80°.200°. 120.6 - 120.8 Slight brecciation. Qtz veins have thin vfg sph linings and minor Py. 122 - 122.2 <1cm qtz vein parallel TCA. 122.8 1cm TCA qtz vein. 124 - 129.5 Bleached sand st and slt st fractured 20-30° TCA.

Peripheral bleaching. (Qtz veining 45° TCA. 127.4 - 127.8). Qtz vein and AsPy. Sparse qtz veining 30° <1cm & AsPy.

131.9 - 133.2 Grey laminated slt st. 80° TCA.

133.2 - 159.9 Vis 110.2 - 131.9. 137.8 - 142 common qtz veining <1cm 30° TCA associated silic^{n} and bleaching and common AsPy and minor Py.

144.6 1cm qtz vein 30° TCA + AsPy

148 - 148.4 Spotted slt st and small vfg aggregates of Py and vvfg diss throughout - probably primary.

152.6 - 153.2 Zone of qtz veining 30° TCA <1cm with AsPy

159.9 - 177.9 166m orientation bedding 1.0°.045°. Interbedded slt st and sand stone. Sparse qtz veins 20°-30° TCA. Most veins contain some AsPy and Py.

177.9 - 196 Grey and speckled slt st. 179.3 - 180.2 Silicified slt stn. Some contorted bedding.

181 - 187.5 bleached altered slt st. Still has speckled appearance but v pale. Laminations 75° TCA. Some veining (qtz) <5mm abt AsPy and Py. 83.5 - 83.8 disseminated AsPy through host. 184.8 - 185.3 broken core abt AsPy and Py on fracture surfaces. 186 - 186.2 zone of veining (qtz) 30° TCA. Veins generally <5mm. 187.3 - 187.9 qtz veining and silicification. Qtz veins up to 2.5cm. Minor Py. 190.2 - 190.5 qtz veining 30° TCA. Some AsPy and Py and some disseminated Py and AsPy in host rock.

196 - 223 196m orientation bedding flat lying. Grey vfg qtz lithic sand stone (silty) bedding horizontal. From 200m some sporadic qtz veining 30° TCA generally <1cm thick. Veins usually contain some AsPy and Py. Some offset of veins along bedding surfaces. 211 orientation veins 80°.230°. 212 2cm qtz vein 45°.230° laminated green and pink in colour. 213.6 2cm qtz vein Abt euhedral AsPy. 214.2 - 214.35 speckled slt st. Speckles <5mm. 218.3 brecciated host and qtz and silicification, host has abt Py in fractures parallel to bedding plans.

219.2 - 219.4 Qtz vein SV.230° contains abt AsPy and Galena and Intergrowths of both. Several specks vis Au. Some AsPy diss into host.

221.4 - 221.6 Bleached silicified snd st intermittent thin qtz veins 80°.230°.

223 - Vis 196 - 223 but with thin intermittent slt st layers and snd st tending to sandy silt stone.
223 - 223.5 silicified snd st/ slt stn.
224.2 - 224.5 vis 223 - 223.5.
225.6 - 225.8 as above.
229 - 229.8 3cm qtz vein 20° TCA and silicified host. Minor AsPy and Galena and some dissemination of AsPy into host.
230.6 - 230.8 vis 223 - 223.5
232.2 - 232.6 vis 223 - 223.5
229 - 335 intermittent veining <1cm (qtz) 20° TCA. Some Euhedral AsPy.
236.8 - 238.2 qtz vein top contact 30° TCA contains xenoliths of host rock which have been bleached and silicified and contain diss AsPy. Qtz contains Abt large Euhedral AsPy and some Galena and Py and intergrowths of AsPy and Galena and common specks of vis Au.
238.7 - 238.9 vis 223 - 223.5
239.8 - 3cm fault breccia.
238.2 - 247 intermittent qtz vein @ 30° TCA generally <1cm. Contain common AsPy and minor Py. These veins are offset by rare So parallel 1cm qtz veins (120° TCA).
240.6 - 241 silicified host and fault breccia @ 30° TCA and minor AsPy in qtz breccia fill.
244 - bedding (So) 70° TCA
243 - 243.2 Silicified sandy silt stone.
247 orientation bedding flat lying veins SV.200°.
250 - 250.1 silicified host and fault breccia
251 - 2cm breccia qtz infill 30° TCA
256.4 - 256.9 vis 250 - 250.1
258.3 - 258.5 silicified + 2 - 2cm So parallel qtz veins
259 - TD intermittent qtz veins some AsPy and Py generally <1cm thick. Also intermittent silicified sections of host 10-30cm thick but no associated mineralisation.

275.5 - 2cm qtz vein common AsPy

292.8 - 2cm So parallel qtz vein 70° TCA
295 - orientation - bedding flat lying.

GOLDEN RIDGE
SCAMANDER
BRILLIANT PROSPECT
GEOLOGICAL LOGS

GRD006

DEPTH FROM	DEPTH TO	LITHOLOGY 1	LITHOLOGY 2	COLOUR	MINERALS 1	MINERALS 2	GRAIN SIZE	SULPHIDES	STRUCTURE TYPE	STRUCTURE ANGLE TCA	STRUCTURE NOTES	VEIN MIN	VEIN ANGLE TCA	ALTERATION	COMMENTS
0.00	3.70	No Core													Broken & fractured ground; abt Fe staining
3.70	12.40	Snd St		CR	Qu	Fe	fg		fractures						
12.40	18.50	Snd St		CR GR			fg								Brecciated
18.50	19.00	Snd St		CR GR			fg		fractures	0 & 45					
19.00	21.50	Snd St		CR GR			fg								Brecciated, partly Si/d Snd St + Qu
21.50	23.00	Snd St		CR GR	Qu		fg		fractures	30					
23.00	25.00	Snd St		CR GR			fg								Thin, intermittent Slt St
25.00	25.30	Snd St	Slt St	CR			fg								Brecciated
25.30	26.40	Snd St	Slt St	CR	Qu		fg								Thin, intermittent Slt St
26.40	34.70	Snd St	Slt St	CR			fg								
34.70	36.20	Slt St		CR GR											Interbedded Snd St / Slt St
36.20	36.40	Snd St	Slt St						bedding	0					Broken Ground
36.40	36.60	Snd St	Slt St												Interbedded Snd St / Slt St
36.60	41.10	Snd St	Slt St						bedding	0					Si/d
41.10	41.20	Snd St							fractures	70					Interbedded Snd St / Slt St
41.20	42.00	Snd St	Slt St						bedding	0					
42.00	44.00	Slt St		GR / PK					fractures	45					Qu, lithic; rare <10cm Slt St layers
44.00	49.00	Snd St	Slt St	CR GR	Qu		fg		fractures	20 & 45					Bleaching associated to vein
49.00	49.20	Snd St	Slt St	CR GR	Qu		fg		fractures	20 & 45		Qu	0 (1cm)		Qu, lithic; rare <10cm Slt St layers
49.20	50.30	Snd St	Slt St	CR GR	Qu		fg		fractures	20 & 45					*Vuggy, buck vein*
50.30	50.70	Snd St	Slt St	CR GR	Qu		fg		fractures	20 & 45		Qu	0 (2cm)		Qu, lithic; rare <10cm Slt St layers
50.70	54.50	Snd St	Slt St	CR GR	Qu		fg		fractures	20 & 45					
54.50	54.60	Breccia			Qu		fg								
54.60	63.80	Snd St	Slt St	CR GR	Qu		fg		fractures	20 & 45					Slt St layers < 20cm & intermittent
63.80	68.70	Snd St	Slt St						bedding	0					
68.70	68.80	Breccia													
68.80	71.20	Snd St	Slt St						bedding	0					Brecciated + Qu infilling interpatch spaces
71.20	71.40	Snd St			Qu										
71.40	71.50	Snd St	Slt St						bedding	0					Si/d
71.50	72.00	Snd St							fractures	45 & 160					
72.00	72.60	Snd St	Slt St						bedding	0					Bleached, soft
72.60	72.85	Snd St		YE											
72.85	73.00	Snd St	Slt St						bedding	0					Si/d
73.00	74.00	Snd St							fractures	160					
74.00	76.50	Snd St	Slt St						bedding	0					Si/d, brecciated
76.50	76.70	Snd St													
76.70	81.00	Snd St	Slt St						bedding	0					Brecciated, Si/d
81.00	81.30	Snd St							fractures	30	Periph bleach				
81.30	88.00	Snd St	Slt St						fractures	0					Broken
88.00	88.10	Snd St			Qu				bedding	80					
88.10	94.00	Snd St	Slt St						bedding	80					
94.00	97.70	Slt St		GY					laminations	80					Intermittent <5cm Slt St layers
97.70	102.00	Snd St	Slt St	GR GY			fg		bedding	80					Qu, lithic; 102.7 - lost H2O = interpreted fault

GRD006 ***Continued***

DEPTH FROM	DEPTH TO	LITHOLOGY 1	LITHOLOGY 2	COLOUR	MINERALS 1	MINERALS 2	GRAIN SIZE	SULPHIDES	STRUCTURE TYPE	STRUCTURE ANGLE TCA	STRUCTURE NOTES	VEIN MIN	VEIN ANGLE TCA	ALTERATION	COMMENTS
102.00	103.20	Snd St		GY			fg		fractures	30	Some Si fill				
103.20	103.80	Snd St		GY			fg		fractures	30	Some Si fill	Qu	0 (1-3cm)		Qu, lithic
103.80	109.00	Snd St		GY			fg		fractures	30	Some Si fill				Broken
109.00	109.20	Snd St		GY			fg	AsPy	fractures		Some Si fill	Qu	30		
109.20	110.00	Snd St		GY			fg		fractures	30					Brecciated; breccia matrix = vugular Qu
110.00	110.50	Snd St		GY	Qu		fg		fractures	30		Qu	20 (<5mm)		Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
110.50	110.70	Snd St	Slt St	GY	Qu		fg		fractures	30					Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
110.70	111.00	Snd St	Slt St	GY	Qu		fg		fractures	30		Qu	10 (1-2cm)		Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
111.00	114.00	Snd St	Slt St	GY	Qu		fg		fractures	30					Si/d; veins contain AsPy
114.00	114.20	Snd St		GY	Qu		fg	AsPy	fractures	30		Qu	20-30		Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
114.20	120.60	Snd St	Slt St	GY	Qu		fg		fractures	30					Slight brecciation; veins have thin vfg Sph? + minor Py
120.60	120.80	Snd St	Slt St	GY	Qu		fg	Sp? AsPy	fractures	30		Qu	0		Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
120.80	122.00	Snd St	Slt St	GY	Qu		fg		fractures	30					Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
122.00	122.20	Snd St	Slt St	GY	Qu		fg		fractures	30		Qu	0 (<1cm)		Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
122.20	124.00	Snd St	Slt St	GY	Qu		fg		fractures	30		Qu	90 (1cm @ 122.8m)		Bleached
124.00	129.50	Snd St	Slt St	GY	Qu		fg	AsPy	fractures	20-30	Periph bleach	Qu	45 (127.4 - 127.8m)		Veins include AsPy
129.50	131.90	Snd St	Slt St	GY	Qu		fg	AsPy	fractures	20-30		Qu	30 (1cm)		
131.90	133.20	Slt St		GY					laminations	80					Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
133.20	137.80	Snd St	Slt St	GY	Qu		fg	AsPy	fractures	20-30					Common vein + ass/d Si/n, bleaching + common AsPy + uncom Py
137.80	142.00	Snd St	Slt St	GY	Qu		fg	AsPy>Py	fractures	20-30		Qu	30 (<1cm)		Vein contains AsPy
142.00	148.00	Snd St	Slt St	GY	Qu		fg	AsPy	fractures	20-30		Qu	30 (1cm @ 144.6m)		Spotted; small vfg aggregates of Py + vvfg diss $ throughout
148.00	148.40	Slt St		GY	Qu		fg	Py	fractures	20-30					Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
148.40	152.60	Snd St	Slt St	GY	Qu		fg	AsPy	fractures	20-30					Zone of Qu veining with AsPy
152.60	153.20	Snd St	Slt St	GY	Qu		fg	AsPy	fractures	20-30		Qu	30 (<1cm)		Qu, lithic; intermittent Slt St layers <20cm, usually <10cm
153.20	159.90	Snd St	Slt St	GY	Qu		fg	AsPy	fractures	20-30					Interbedded; most veins contain some AsPy & Py
159.90	177.90	Slt St	Snd St	GY	Qu		fg	AsPy Py				Qu	20-30		"Speckled"
177.90	179.30	Slt St		GY											"Speckled"; Si/d
179.30	180.20	Slt St		GY					bedding	contorted					"Speckled"
180.20	181.00	Slt St		GY											"Speckled"; v pale = bleached; abt AsPy & Py in veins
181.00	183.50	Slt St		GY				AsPy Py	laminations	75		Qu	20 (<5mm)		Disseminated AsPy through host
183.50	183.80	Slt St		GY				diss AsPy	laminations	75					"Speckled"
183.80	184.80	Slt St		GY				AsPy Py	laminations	75					Broken core; abt AsPy + Py on fracture surface
184.80	185.30	Slt St		GY				AsPy Py	fractures		$ on surfaces				"Speckled"
185.30	186.00	Slt St		GY				AsPy Py	laminations	75					Zone of veining
186.00	186.20	Slt St		GY				AsPy Py	laminations	75		Qu	30 (<5mm)		"Speckled"
186.20	187.30	Slt St		GY				AsPy Py	laminations	75					Si/n; minor Py
187.30	187.90	Slt St		GY				Py	laminations	75		Qu	30 (up to 2.5cm)		"Speckled"
187.90	190.20	Slt St		GY				AsPy Py	laminations	75					Some AsPy + Py; some disseminated Py + AsPy in host rock
190.20	190.50	Slt St		GY				AsPy Py	laminations	75		Qu	30		"Speckled"
190.50	196.00	Slt St		GY				AsPy Py	laminations	75					Qu, lithic; Si/d; from 200m sporadic veins contain $
196.00	214.20	Snd St		GY			vfg	AsPy Py	bedding			Qu	30 (<1cm)		Speckled - speckles <5mm
214.20	214.35	Slt St		GY			vfg	AsPy Py	bedding						Veins contain $, some offset of veins along bedding surfaces
214.35	219.20	Snd St		GY			vfg	AsPy Py	bedding						Vn contains abt AsPy & Gl => intergrowth; AsPy diss in host

GRD006 ***Continued***

DEPTH FROM	DEPTH TO	LITHOLOGY 1	LITHOLOGY 2	COLOUR	MINERALS 1	MINERALS 2	GRAIN SIZE	SULPHIDES	STRUCTURE TYPE	STRUCTURE ANGLE TCA	STRUCTURE NOTES	VEIN MIN	VEIN ANGLE TCA	ALTERATION	COMMENTS
219.20	219.40	Snd St		GY			vfg	AsPy Py Gl	bedding			Qu	sv.230		Veins contain $, some offset of veins along bedding surfaces
219.40	221.40	Snd St		GY			vfg	AsPy Py	bedding						Bleached; Si/d, intermittent thin vns
221.40	221.60	Snd St		GY			vfg	AsPy Py	bedding			Qu	80.230		
221.60	223.00	Snd St		GY											Si/d
223.00	223.50	Snd St	Slt St	GY											
223.50	224.20	Snd St	Slt St	GY											Si/d; viz 223 - 223.5m
224.20	224.50	Snd St	Slt St	GY											
224.50	225.60	Snd St	Slt St	GY											Si/d; viz 223 - 223.5m
225.60	225.80	Snd St	Slt St	GY					fractures	30					
225.80	227.20	Snd St	Slt St	GY					fractures	30					Si/d; viz 223 - 223.5m
227.20	227.30	Snd St	Slt St	GY					fractures	30					
227.30	228.10	Snd St	Slt St	GY					fractures	30					Si/d; viz 223 - 223.5m
228.10	228.60	Snd St	Slt St	GY					fractures	30					
228.60	229.00	Snd St	Slt St	GY											Si/d; minor AsPy, Gl + some diss of AsPy into host
229.00	229.30	Snd St	Slt St	GY				AsPy Gl				Qu	20 (3cm)		Si/d; minor AsPy, Gl + some diss of AsPy into host
229.30	230.60	Snd St	Slt St	GY				AsPy Gl+EuhAsPy				Qu	20 (<1cm)		Si/d; viz 223 - 223.5m
230.60	230.80	Snd St	Slt St	GY				AsPy Gl+EuhAsPy				Qu	20 (<1cm)		Si/d; minor AsPy, Gl + some diss of AsPy into host
230.80	232.20	Snd St	Slt St	GY				AsPy Gl+EuhAsPy				Qu	20 (<1cm)		Si/d; viz 223 - 223.5m
232.20	232.60	Snd St	Slt St	GY				AsPy Gl+EuhAsPy				Qu	20 (<1cm)		Si/d; minor AsPy, Gl + some diss of AsPy into host
232.60	236.80	Snd St	Slt St	GY				AsPy Gl+EuhAsPy				Qu	20 (<1cm)		Contains X/liths host rock + diss AsPy; abt $ - intergrowth
236.80	238.20	Qu			Qu			AsPy Gl+EuhAsPy				Qu	30		
235.90	238.20	Snd St	Slt St	GY				Au							Veins offset by rare So parallel 1cm Qu veins @ 120 TCA
238.20	238.70	Snd St	Slt St	GY	Qu			AsPy Py				Qu	30 (<1cm)		Si/d; viz 223 - 223.5m
238.70	238.90	Snd St	Slt St	GY	Qu			AsPy Py				Qu	30 (<1cm)		239.8m = fault breccia (3cm)
238.90	240.60	Snd St	Slt St	GY	Qu			AsPy Py	fault			Qu	30 (<1cm)		Si/d host + breccia @ 30 TCA; min AsPy in Qu breccia fill
240.60	241.00	Snd St	Slt St	GY	Qu			AsPy Py	fault			Qu	30 (<1cm)		Veins offset by rare So paraller 1cm Qu veins @ 120 TCA
241.00	243.00	Snd St	Slt St	GY	Qu			AsPy Py				Qu	30 (<1cm)		Si/d, sandy
243.00	243.20	Slt St		GY	Qu			AsPy Py				Qu	30 (<1cm)		Veins offset by rare So paraller 1cm Qu veins @ 120 TCA
243.20	250.00	Snd St	Slt St	GY	Qu			AsPy Py	bedding	70		Qu	30 (<1cm)		Si/d host and fault breccia
250.00	250.10	Snd St	Slt St	GY	Qu				fault						251m = 2cm breccia with Qu infill
250.10	256.40	Snd St	Slt St	GY	Qu				fault	30					Si/d host and fault breccia = viz 250 - 250.1m
256.40	256.90	Snd St	Slt St	GY					fault						
256.90	258.30	Snd St	Slt St	GY											Si/d; vns = So parallel
258.30	258.50	Snd St	Slt St	GY								Qu	70 (2cm)		
258.50	259.00	Snd St	Slt St	GY											Int/t vns + $, int/t Si/d sections of host 10-30cm thick
259.00	298.00	Snd St	Slt St	GY				AsPy Py				Qu	70? (<1cm & 2cm)		