104 - 104.4	Sand stone, unbleached as for 103 - 104.
104.4 - 106	Vis 103 -104. Very highly bleached & silicified. Brecciated in parts. Some large quartz veins <5cm thick @ 60° TCA also from 0-30° TCA. Minor chlorite present in some fractures. 5cm quartz vein @ 104.7m contains vvfg As Py aggregates, also present in silicified host.
106 - 123	vfg sand stone and intermittent silt stone layers from 1 - 3cm thick @ 106m. Up to 25cm thick @ 118m. These alternating units appear to be fining upward sequences. Abt thin quartz veins with AsPy and some disseminated into host. Thicker quartz veins contain large aggregates of As Py. Occasional laminated greenish quartz vein @ 80° TCA. 115.8 - 116.1 bleached section containing disseminated AsPy. 119.3 - 119.8 bleached sand stone, with fault gouge at bottom contact. 120.4 - 121.5 bleached sand stone, minor AsPy disseminated throughout. Silicified bottom contact. 122.6 - 3cm quartz vein with peripheral bleaching and silicification, contains minor vfg AsPy.
123 - 129.3 (TD)	Dark grey, vfg, quartz lithic sand stone with intermittent silt stone layers. Minor quartz veining 30° TCA. Minor fg Py present on fracture surfaces.

Summary : GRD-3 (0 - 148m)

Collar : 5415548.33mN, 585878.10mE

Drilled : -60° ⇒ 148° (MAG)

0-16	Oxidised fg sandstone. Abundant Fe stained fractures.
16-22.8	Green, Grey siltstone some fracturing and bleaching.
22.8-22.9	Fault breccia
22.9-29.4	Vis 16-22.8

29.4-30	Fault breccia with associated silicification
30-34.9	Sandstone and abundant fractures, some fractures filled by Qtz veins containing vfg free Au (minor)
34.9-37.9	Siltstone some veining.
37.9-72.0	Sandstone and intermittent thin siltstone layers. 43.8-44.5 Bleached above, abundant fractures. 46.9-48.6 Silicified above and fractures and veining with minor Py plus Au.
72.0-72.7	Gy, Gr siltstone
72.7-90.3	Vis 37.9-72.0. Small sections of bleaching - multiple generations of fracturing, some Qtz filled.
90.2-97.0	Gy,Bk siltstone, some fracturing and Qtz veining.
97-105	Fracturing and Qtz veining. Vfg aggregates of Py in sandstone and fg euhedral Py on some fracture surfaces. Minor clay alteration
109.5-110	Totally bleached and altered (v soft) sandstone/siltstone. Abt euhedral AsPy on fracture surfaces.
110-115	Bleached, silicified sandstone. Abt fracturing and Qtz veining. Minor AsPy.
119.8-120.3	Fractured silicified zone.
123.7-124.4	Totally bleached and silicified sandstone. Abt fractures.
124.6	2cm Qtz vein vvfg Sph?
127.6-127.9	Bleached silicified sandstone 30° TCA fractures have movement perpendicular TCA.
128.8-129.1	Qtz veining Abt AsPy (<5mm euhedral) and minor Py.
133-135	Highly fractured sandstone. Disseminated AsPy and Py throughout. Thin siltstone layers taking up shearing.
137-138	Abt disseminated AsPy in sandstone. Qtz veins contain AsPy/Galena intergrowths and some Py.
140.6	3cm Qtz vein Abt AsPy, minor Py and Tr vis Au. Sulphides also disseminated in sandstone.

140.9-141	Shear zone. Intermittent, thin (2cm Qtz veins and fracturing. Qtz veins contain AsPy, Py,Galena which is also disseminated through the host sandstone). Peripheries of Qtz veins generally silicified.

Summary : GRD-4 (0-79m)

Collar : 5415522.29mN, 585841.75mE

Drilled : 37° ⇒ 135° (MAG)

0 - 16.6	Oxidised cream fg sandstone to grey green quartz lithic fg sand stone. Abt fracturing and Fe staining, some Mn coatings. 3.1 - 3.2 fault Breccia.
16.6 - 29	Laminated silt st, laminations 40° TCA 19 - 19.3 Silcified breccia zone, 20m thin fault zone. 20.3 - 22.4 Broken ground, highly fractured and brecciated Abt Fe staining. 23.3 thin section (5cm) of Silicified, brecciated ground. Fractures 60° and 120° TCA. 26.7 - 27 vis 23.3. 28.7 - 29 Fault breccia & Fe staining.
29 - 33.6	Cream, Grey Fg sand stone, minor fracturing 45° + 135° TCA
33.6 - 34.7	Grey, green silt st.
34.7 - 43.5	Interbedded fg sand stone (Quartz lithic) & silt stone. sand st layers <70cm silt stone <40cm. Some fracturing 30° + 20° TCA. Bedding 60° TCA.
43.5 - 71	Grey cream fg quartz, lithic sand st. 45.4 - 46.5 Bleached silicified zone, brecciated (10cm) @ 46.4 - 46.5. Fractured 60° + 140° TCA. Rare thin 10cm Slt St layers; bedding 50° TCA. 48.7 - 50 Abt thin fractures 40° TCA - peripheral bleaching. 52-5 - 53.3 vis 48.7 - 50. 60-65 Quartz veining 45 ° + 0° TCA. Quartz veins have minor peripheral bleaching and silicification. 64 - 71 Some brecciation and fracturing with associated bleaching and silicification.
71 - 78.4	Grey fg quartz, lithic sand stone with minor thin slt st layers. 72.6 10cm quartz + slt st shear zone. Lamination surfaces have slicken sides - 80° TCA. Some minor fracturing 60° TCA.

GOLDEN RIDGE
SCAMANDER
BRILLIANT PROSPECT
GEOLOGICAL LOGS

GRD003

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	1.00	Snd St			Qu										Highly broken ground; Xcut fractures, dom = 60 TCA; soft
1.00	7.20	Snd St			Qu	Fe			fractures	60	Fe in fractures				Some blotches on core, prob H2O effect; quite soft
7.20	11.00	Snd St		CR	Qu	Fe	fg		fractures	30 & 70	Fe - frac plane				As above, + intermittent 5-10cm slt st bands + Md st clasts
11.00	16.00	Snd St		CR	Qu	Fe	fg		bedding	60	Fe - frac plane				Bleaching evident around fracs; Fe?
16.00	22.80	Slt Stn		GR-GY	Si				fracs / bed	60+30 / 60	Si infill			Si after CO3	Slt St frags in clay matrix
22.80	22.90	Breccia							fault breccia						4cm Si band @ 60 deg TCA
22.90	29.40	Slt St		GR-GY	Si	Fe			fractures	30 & 60	Si vug fill/Fe	Si	60 (4cm)	Si after CO3	mm-cm frags Si Slt St + Slt St in grange matrix; some Si
29.40	30.00	Breccia							fault breccia						Si/d; abt fracs; large vein + frag country rock
30.00	34.70	Snd St		CR GR	Si		vfg		fractures	15-25	Qu fill; mm-3cm			Si	bottom of fining upward sequence?
34.70	34.90	Snd St			Si	An	mg								Si 30 deg; some Qu fil 80 deg; PK Fe stain around fracs
34.90	37.90	Slt St		GR-GY	Fe	Si			fractures	30 & 80	Si & Qu fill			Fe stain	
37.90	37.93	Mud St													
37.93	40.20	Snd St		GY	Qu		vfg		fractures	10	Qu fill				Snd St - qu, lithic
40.20	40.40	Snd St	Slt St	GY	Qu				bedding	60					Intermittent Slt St layer 3-10cm
40.40	42.00	Snd St	Slt St	GY			vfg		frac / bed	/ 50-60					Alternating 10-30cm Slt St / Snd St layers
42.00	43.80	Snd St	Slt St						frac / bed	/ 50-60					Bleached
43.80	44.50	Snd St							fractures	30 & 0					
44.50	46.90	Snd St		GY			fg		fractures	30					Minor Py and An
46.90	48.60	Snd St		BR GY	Si			Py	fractures	30 & 0		Qu	80 (47.7m=1.5cm vn)		Bleached above; intermittent 1-2cm Slt St layers
48.60	50.20	Snd St		BR GY	Si			Py	fractures	30 & 0		Qu	30		intermittent Slt St layers <15cm; fracs - bleached margins
50.20	53.50	Snd St		GY BR					fractures	30	Xline Si fill	Qu	80 & 30-10		intermittent Slt St layers <15cm; fracs - bleached margins
53.50	53.70	Snd St		CR					fractures	30	Xline Si fill	Qu	80 & 30-10		intermittent Slt St layers <15cm; fracs - bleached margins
53.70	54.30	Snd St		GY BR					fractures	30	Xline Si fill	Qu	80 & 30-10		
54.30	54.40	Clay		BR PK											intermittent Slt St layers <15cm; fracs - bleached margins
54.40	72.00	Snd St		GY BR					fractures	20	Xline Si fill	Qu	80 & 30-10		Not fractured
72.00	72.70	Slt St		GY GR					bedding	80	GR GY & CR lam				
72.70	74.00	Snd St	Slt St	GY BR					fractures	30					Bleached
74.00	74.80	Snd St							fractures	30		Qu	80 & 30		Sandy; bleached + Si/d; multiple generation of fractures
74.80	75.80	Slt St			Si				fractures	0-20	Qu & vuggy fill				Fining upward sequence - snd st 1m capped by 5-15cm Slt St
75.80	80.90	Snd St	Slt St	GY/GY GR			fg		fractures	30		Qu	30		Sandy Slt St grading downwards to lightly frac Snd St
80.90	81.50	*Slt St*	*Snd St*		Qu				*fractures*	*20*	*Xline Qu fill*				*Sandy; bleached + Si/d; mult. generation frac - Qu + vuggy*
81.50	85.60	Slt St			Si				fractures	0-20	Qu & vuggy fill				Bleached, Si/d
85.60	90.30	Snd St			Si				fractures	30		Qu	5-30		Intermittent 0.5 - 1cm Qu veining
90.30	97.00	Slt St		GY BK	Si				lam / frac	80 / 60		Qu	80 (97m = 2cm vein)		Int. thin Slt St layers. Vfg aggregates of Py in Snd St
97.00	105.00	Snd St	Slt St	GY	Si		vfg	Py / fg euh Py	fractures	30	Euh $ - f.plane	Qu	80 & 30 (mm - 1 cm)	minor clay altn	Bleached, Si/d; Lam/d & vuggy vein - 107.8 & 108.5 <= 4cm
105.00	109.50	Snd St			Si		vfg		fractures	30 & 70		Qu	20-30		Totally bleached & alt. (soft) Snd St / Slt St
109.50	110.00	Fault						Abt Euh AsPy	fractures	30	Euh $ - f.plane				Bleached, Si/d
110.00	115.90	Snd St		GY	Si		vfg	< 1% AsPy	fractures	30 & 60		Qu	90 (113.3m = 8cm)		Intermittent <8cm bands Slt St; common AsPy in veins
115.90	119.80	Snd St	Slt St	GY	Si		vfg	AsPy / Py	frac / bed	20-30 / 80	Qu fill+vug X Q	Qu			Fractured Si/d zone
119.80	120.30	Snd St		GY	Si		vfg	AsPy / Py	fracture	30	Si zone				Intermittent <8cm bands Slt St; common AsPy in veins
120.30	123.70	Snd St	Slt St	GY	Si		vfg	AsPy / Py	frac / bed	20-30 / 80	Qu fill+vug X Q	Qu			Frac/d & totally bleached; Si/d
123.70	*124.40*	*Snd St*			*Si*		*vfg*	*AsPy / Py*	*fractures*	*20-30*					Slt St layers = 40cm; Snd St layers = 60cm
124.40	124.60	Snd St	Slt St	GY	Si		vfg	AsPy / Py	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Lam/d vein

GRD003 ***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
124.60	124.62	Qu Vein		GR WH	Qu			AsPy / Py				Qu	30 & 80		Slt St layers = 40cm, Snd St layers = 60cm
124.62	127.30	Snd St	Slt St	GY	Si		vfg	AsPy / Py	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Totally bleached
127.30	127.60	Slt St			Si		vfg	AsPy / Py	frac / bed	30 / 80	Qu fill+vug X Q	Qu		Clay altn	Bleached, Si/d
127.60	127.90	Snd St			Si		vfg	AsPy > Py	frac / faulting	30 / 90	Qu fill+vug X Q	Qu			Slt St / Snd St layers
127.90	128.80	Snd St	Slt St	GY	Si		vfg	AsPy / Py	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Minor Py; AsPy < 5mm euhedral
128.80	129.10	Snd St	Slt St	GY	Si		vfg	Abt AsPy				Qu	30		Slt St / Snd St layers
129.10	133.00	Snd St	Slt St	GY	Si		vfg	AsPy / Py	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Diss $ in Snd St
133.00	135.00	Snd St	Slt St	GY	Si		vfg	diss AsPy / Py	highly frac/d	30		Qu	30 (minor)		Slt St / Snd St layers
135.00	137.00	Snd St	Slt St	GY	Si		vfg	AsPy / Py	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Abt diss $ in Snd St; slightly bleached.
137.00	138.00	Snd St	Slt St	GY	Si		vfg	AsPy / Py / Gl	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Slt St / Snd St layers
138.00	140.20	Snd St	Slt St	GY	Si		vfg	AsPy / Py	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Bleached Si/d Snd St
140.20	140.70	Snd St			Si		vfg	AsPy / Py / An	frac / bed	30 / 80	Qu fill+vug X Q	Qu	30 (140.6m = 3cm)		Slt St / Snd St layers
140.70	140.90	Snd St	Slt St	GY	Si		vfg	AsPy / Py / An	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Qu veins contain $; $ diss thro host rock
140.90	141.00	Slt St	Snd St	GY	Si		vfg	AsPy / Py / An	shear			Qu	30 (int/ent <2cm)		Slt St / Snd St layers
141.00	148.00	Snd St	Slt St	GY	Si		vfg	AsPy / Py / An	frac / bed	30 / 80	Qu fill+vug X Q	Qu			Ox/d; abt Fe stain esp in & around fracs; some Mn on f.surfs