047

The Shell Company of Australia Limited
METALS DIVISION

DRILL LOG SHEET

Hole No : DDH BD 8

PROJECT : HIGHCLERE

LOCATION CODE : MQ 03

COLLAR CO-ORDINATES : 300S/1850W

COLLAR R.L. :

LOCATION : BUCKBY

MAP/PHOTO REFERENCE : 5435900mN 399000mE

DATE STARTED	16-11-80	HOLE SIZE		FROM	TO	TOTAL	CORE STORAGE	DEVONPORT
DATE FINISHED	8-12-80	NON CORE					No OF TRAYS	
TOTAL DEPTH	272.20m						SAMPLE STORAGE	
LOGGED BY	I.J. Buchhorn	CORE					ASSAY LAB.	ANALABS/AMDEL
CONTRACTOR	A.D.D.						ASSAY REPORTS	
RIG								
DRILL CREW	M. Blight N. Bellinger	CASING					MIN. & PET. LAB.	C.M.S.
							MIN. & PET. REPORTS	
		CASING LEFT	NQ	0	6m	6m		

HOLE SURVEY DATA

INSTRUMENT :

DEPTH	INSTRUMENT INCL.	INSTRUMENT AZ.	ACID ETCH INCL.	ACID ETCH AZ.	REMARKS
COLLAR	060	083			
163.3m	057	080			
269.0m	055	089			

GRAPHIC / LETTER SYMBOL LOGGING KEY

STRUCTURE / ALTERATION CODE

- B BEDDING
- J JOINTING
- C CLEAVAGE
- F FOLIATION
- sh SHEARING
- q QUARTZ VEINS
- O OXIDATION

DRILLING SUMMARY :

667048

[redacted] E SH[redacted] COMP[redacted] OF A[redacted] RALI[redacted] D. - [redacted] LS D[redacted] ON [redacted]

PROJECT: HIGHCLERE - BUCKBY

DIAMOND DRILL LOG - SAMPLING RECORD

HOLE NO: DDH BD8

048

From	To	Interl (m)	Core Rec'd	% Rec	Sample No.	Compos No.	Assays Sn	W	CaF2 %	Cu	Pb	Zn	Mo	Au	Magnetic Susceptibility x10⁻⁵ SI Ag	Bi	Ni		% Estimates cpy	py	po	Core Angles				Alt	T.S P.S	Description
0·0	15·0	15·0	2·00	13														10										Yellow-brown completely weathered basalt & basaltic soil.
15·0	19·90	4·90	1·50	30	1217		9	<10		115	30	80	1·5		<0·5	<1	135	10-100										Dk grey diopside skarn, minor talc weathered to clay.
19·90	21·34	1·44	1·30	90	1218	C1	<3	<10	0·66	30	<5	15	1·5	-	<0·5	<1	85	30		tr	tr							Brecciated, fine laminated - massive diopside skarn, trace calcite & pyrite in fractures (tr po)
21·34	23·94	2·60	2·38	92	1219		6	<10		155	<5	30	5		<0·5	<1	70	200-600		2	5							Brecciated, fine laminated diopside skarn v.f.g. disseminated po, py
23·94	27·10	3·16	3·10	98	1220	C2	4	<10	0·65	80	5	30	4	-	<0·5	<1	70	100		1	1							Diopside skarn breccia, extensive chloritic shearing, c.g. euhedral py on fractures, v.f.g. disseminated po.
27·10	30·48	3·38	3·30	96	1221	C3	24	40	0·12	100	15	65	2	-	1	10	25	100-200		1	1							Brecciated diopside skarn, dissem. v.f.g. po, py. c.g. py joint coating euhedral 1-2mm.
30·48	31·69	1·21	1·21	100	1222		38	30		80	15	55	5		<1	10	20	100-300		1	1							Diopside skarn, dissem. v.f.g. (<0·5mm) po py. Moderate hairline calc-argillic veining 0·5-5%. c.g. blk sulphides (chalcocite?) assoc. with py blebs.
31·69	34·55	2·86	2·86	100	1223	C4	20	10	0·20	85	15	60	3	-	<1	10	35	100-300		2	1							Finely laminated, cherty crystal dolomitic mudstone, dissem. v.f.g. py (0·1-0·5mm & subhedral po, recrystallised py.
34·55	37·30	2·75	2·75	100	1224	C5	20	<10	0·08	90	10	30	2	0·05	<1	10	35	50-250		2								Fine laminated pyritic diopside skarn, dissem. 0·1-1mm anhedral py blebs, possibly dolomitic.
37·30	41·50	4·20	4·20	100	1225		14	25		60	15	42	2		<1	10	30	100-300		2	1							Fine laminated pyritic diopside skarn 1-20mm bdd possibly dolomitic. Strong hairline polyg. fractures occassionally with py, po. Po increases downward.
41·50	43·70	2·20	2·04	93	1226		20	<10		245	5	90	<1		<0·05	<1	50	200-450		2	8							Massive diopside - pyrrhotite skarn. Variable py, po 1-5mm blebs.
43·70	46·00	2·30	2·30	100	1227		25	<10		175	<5	35	17		<0·05	2	45	400-800		1	10							" " " " 1-10mm po blebs. 45·5m "limestone conglomerate" Carbonate fragments in skarn.
46·00	49·00	3·00	3·00	100	1228	C6	45	<10	0·45	165	<5	20	1	-	<0·05	<1	45	400-1000	tr	1	10							Massive diopside - pyrrhotite skarn. po irregular aggregates, interconnected veinlets tr chalcopyrite.
49·00	50·40	1·40	1·40	100	1229		25	<10		315	<5	25	6·5		<0·05	<1	65	200-800		2	5							Massive diopside-pyrrhotite skarn. 1-10mm irregular po aggregates, minor py blebs. 50·1m "conglomerate". Py assoc. with c.g. crystalline calcite. Probably acc. amphibole.
50·40	56·10	5·70	5·70	100	1230	C7	<3	<10	0·62	30	<5	20	3	-	<0·05	<1	80	100-200		1	1							Light pink-brown, mottled & brecc. diop. skarn (possibly cherty dolomitic), strong polyg. fractures often py coated. Minor dissem. py, po mainly as micro veinlets. 54·2m fragments are cherty 2-10mm matrix light grey pyritic.
56·10	58·60	2·58	2·58	100	1231	C8	25	<10	1·09	165	<5	25	2·5	-	<0·05	<1	50	300-900	tr	1	8							Conglomeratic diopside-pyrrhotite skarn, frags. subrounded 2-10mm possible diffusion effect although definite chert & limestone pebbles occur.
58·60	61·62	2·94	2·94	100	1232		6	<10		80	<5	15	5·5		<0·05	<1	50	50-200		tr	1-2							Diopside-quartz skarn becoming "breccia-conglomerate", cherty to base, dissem. po blebs, variable.
61·62	63·12	1·50	1·50	100	1233		15	<10		380	<5	25	2		<0·05	<1	60	800-1200		3	8							Massive diopside - po skarn, blebs & veinlets po-py irregular intergrowths with diopside
63·12	66·71	3·59	3·59	100	1234	C9	10	<10	0·39	70	<5	15	170	-	<0·05	1	100	200-600		2	4							Subrounded grey chert fragments (2-30mm) in grey-yellow cherty diopside (?) matrix, dissem. py, po, py-microveinlets associated with grey chert, common diopside - po skarn bands transitional to chert - lenticular banding pervasive, core angles increasing to 75°.
66·71	68·20	1·49	1·49	100	1235		<3	<10		65	5	10	6·5		<0·05	1	100	200-600		1	4							Diopside-po skarn, irregular convoluting v.f. yellow dissem. fluorescene at 67·5m, 68·1m minor conglomerate fragments including soft clayey yellow "pebbles", dark color possibly carbonaceous, probably not biotite.
68·20	75·08	6·88	6·88	>100	1236		4	200		170	10	130	5		7	10	55	200-400		1	2							Lentic banded "conglomeratic" chert & grey diopside-po skarn - clasts probably from soft sediments, disruption of chert bands (2-20mm) / yellow bands "softer" probably clayey, grey bands diopside rich, contain pyrrhotite, very minor grey chert bands.
75·08	76·70	1·62	1·62	100	1237	C10	4	20	0·12	110	10	36	3	0·05	<1	10	25	100-500		tr	1							Conglomeratic cherty diopside-pyrrhotite skarn, pyrrhotite v.f. (<0·3mm) dissem. po veinlets.
76·70	78·27	1·57	1·57	100	1238		14	90		75	20	75	4		2	10	25	10-20		tr	tr							Brecciated cherty diopside skarn, probably fault zone.
78·27	79·75	1·48	1·48	100	1239		10	20		70	10	20	4		<1	10	25	200-400		1	1							Banded yellow clayey "chert" & grey diopside-qtz skarn, 1-20mm banding, dissem. v.f. py po, minor quartz rich bands, strong yellow fluores. associated with yellow "chert" - probably metasomatic altered interbanded calcareous sandstone (qtz-diopside skarn) & clayey chert.
79·75	82·02	2·27	2·27	100	1240		6	30		90	10	20	5		<1	10	30	200-400		1	1							As above, but yellow fluorescent mineral only minor.
82·02	85·20	3·18	3·18	100	1241	C11	20	<10	0·64	170	<5	25	5·5	-	<0·05	<1	60	400-1600		1-5	5-15							Massive diopside-po skarn / 83·4 brown cherty fragments in skarn, sulphides 1-5mm interlocking aggregates (blebs) po-py-diopside.
85·20	87·92	2·72	2·72	100	1242		7	<10		155	5	30	5		<0·05	<1	80	50-400		2-4	5							Massive diopside-po skarn, becoming cherty / 85·25, 56·1 10cm zones, massive coarse euhed py, relative py increase wrt po.
87·92	90·14	2·22	2·22	100	1243		18	<10		70	10	38	12		<1	10	35	5-30		2	1							Massive dolomitic chert, v.f. (<0·5mm) dissem. py-po, variable diopside, commonly "brecciated", dark grey subrounded 5mm chert fragments in light grey diopside skarn matrix.

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[redacted] SE [redacted] COMP [redacted] OF [redacted] RALI [redacted] D. - [redacted] LS D [redacted] ON [redacted]

PROJECT: HIGHCLERE - BUCKBY

DIAMOND DRILL LOG - SAMPLING RECORD

HOLE NO: DDH BD8

From	To	Interval	Core Rec'd	% Rec	Sample No.	Composite No.	Assays Sn	W	CaF_2 %	Cu	Pb	Zn	Mo	Au	Magnetic Susceptibility x 10^{-5} S.I. Ag	Bi	Ni		% Estimates cpy	py	po	Core Angles				Alt	T.S P.S	Description
90·14	92·50	2·36	2·36	100	1244	C12	42	380		65	10	36	47		<1	10	10	60-70		tr	tr							Massive diopside-dolomite skarn, "mottled" calcite aggregates, 1-2% po-py basal 30cm, trace cp / 91·2 trace galena blebs, 3mm.
92·50	93·84	1·34	1·34	100	1245		14	15	0·58	300	5	40	8	0·05	<1	10	20	45		5	2							Massive dolomitic diopside skarn, dissem. po-py "conglomeratic" sulphide skarn diffusion texture with light grey diopside "pebbles" fringed by black biotite (?) metasomatized argilite? py as blebs & microveinlets, 0·5-3mm, also remobilized 5mm veins & 2mm euhed crystals.
93·84	95·57	1·65	1·73	95·6	1246	C13	100	<10	3·04	485	<5	75	1	-	<1	<1	60	1000 - 15,000	5	10-15							Pyrrhotite-magnetite bearing dolomite conglomerate, coarse mag-po blebs associated with light grey diopside "pebbles" in dark biotitic matrix, trace cp associated with po "pebbles" of magnetite-pyrrhotite assoc. with dark matrix.
95·57	98·38	2·81	2·81	100	1247		210	<10		360	5	65	0·5		<1	<1	65	100-700	2	5							Pyrrhotite-biotite bearing, dolomitic limestone conglomerate, common diopside, minor tremolite needles / trace coarse (1-3mm) scheelite, epidote to base.
98·38	102·80	4·42	4·42	100	1248		6	<10		60	25	120	1		<1	20	35	10	tr								Dolomitic limestone conglomerate, subrounded limestone fragments (1-40mm) in calc-phlogopite (-talc) matrix, common epidote alteration of limestone fragments / clasts unsupported in argillac matrix.
102·80	105·60	2·80	2·80	100	1249	C14	14	<15	0·29	20	10	60	6	-	<1	10	25	10	1-2								Brecciated & altered brown cherty shale, min. conglomerate band, medium shear & brecc., biotite throughout (contact metamorph.) dissem. py blebs ore veinlets / 104·8 limestone conglomerate band, 10cm.
105·60	109·10	3·50	3·50	100	1250		<4	<10		55	30	110	4		<1	10	50	5	1-2								Dolomitic limestone conglomerate, subrounded limestone fragments in argillac (phlog-biot?) matrix, fragments typically 1cm / epidote alteration of limestone clasts / v.f. dissem. py in matrix.
109·10	110·75	1·65	1·65	100	1251		4	<10		38	10	38	6		<1	10	20	10-15	2								Massive cherty dolomite to dolomitic quartzite / 109·1 - 109·3 10% dissem. py blebs / dissem. 1-2mm py blebs pervasive / 110·6 5cm chert conglomerate band 5-10mm pebbles.
110·75	116·70	5·95	5·70	95·8	1252	C15	4	15	0·29	30	15	50	6	-	1	10	20	10-20	1-2								Dolomitic limestone conglomerate, limestone fragments in biotite-calc-quartz matrix, more indurated, less altered than overlying conglomerate, common cherty biotite quartzite bands, min. limestone bands (<1·0cm), occassional chert conglomerate / strongly fractured especially cherty quartzites / 113·0 - 113·2 10% dissem. v.f. py associated with cherty quartzite, epidote assoc. with py.
116·70	121·15	2·50	4·45	56·2	1253	C16	10	<10	0·90	45	15	135	3	-	<1	<1	55	10	1-2								Dolomite conglomerate, subrounded 2-10mm dol (-epidote) fragments in biotite phlog. matrix / strongly altered brecciated.
121·15	122·74	1·59	1·59	100	1254		6	<10		15	5	80	0·5		<1	<1	45	50-250	1								wh. massive dolomite, trace disseminated v.f. (0·5mm) magnetite, common vuggy leaching associated with fracture zones at 122·1, 122·3
122·74	126·70	2·40	3·96	60·6	1255	C17	7	<10	0·38	10	<5	55	2	-	<1	<1	75	10	1-2								Strongly brecciated, py veined chert, possibly silty, extensive tension gash veining (pyrite, with pervasive chlorite coating) / chert occ. v.f. (<0·5mm) laminations / py microveinlets, occassional disseminated py.
126·70	131·10	1·90	4·40	43·2	1256	C18	<3	<10	0·86	10	<5	40	1	-	<1	<1	40	10	1-3								Conglomeratic chert (interformational), weakly dolomitic, minor phlog-biot-qtz. matrix rich conglomerate / pyrite rich zones, microveinlets & disseminated.
131·10	137·00	4·10	5·90	69·5	1257	C19	10	<10	0·43	35	<5	75	2·5	-	<1	1	70	5	1-4								Dolomitic conglomerate, dolomite fragments in friable sugary calc-phlog-qtz matrix source of fragments "intraform. dolomites" such as 121·15 - 122·74 / dissem. f epidote in matrix / pyrite v.f. (<0·05mm) restricted to matrix / 132·7 - 133·2 wh. dolomitic chert / chlorite common from 133·1, associated with microfraction.
137·00	139·90	1·10	1·90	51·9	1258	C19	9	<10	0·43	10	<5	50	1	-	<1	<1	60	10-300	2-4								Conglomeratic biotite quartzite, py & mag. disseminated in basal 50cm, probably diopside bearing / py 0·5-1·0mm disseminated euhed blebs & veinlets / fragments upto 3cm, include 1cm chert & light grey diopside (?) (altered dolomite) (minor epidote associated with pyrite)
139·90	143·50	0·70	4·60	15·7	1259		<3	<10		115	5	30	1·5		<1	<1	55	5-20	1								Massive dolomitic chert-quartzite, dissem. v.f. euhed py (0·5mm) minor chlorite-epidote alteration along fractures.
143·50	148·20	1·05	4·70	22·3	1260		<3	<10		40	<5	80	1·5		<1	<1	70	5-20	1-2								Pebbly sericite-chlorite conglomerate, fragments of completely argillized dolomite matrix intense alteration to very soft phlog-chlor-talc assemblage, dissem. v.f. euhed py (<0·5mm) minor epidote.
148·20	152·85	2·05	4·65	44·1	1261	C20	5	<10	0·73	20	5	35	1	-	<1	<1	70	5	1								Mauve conglomerate cherty quartzite, subrounded 2-10mm chert fragments, diffusely gradational into cherty matrix (through recrystalization), py joint coating & as dissem. blebs & microveinlets / minor chloritic alteration / minor irregular dolomite zones (diffuse 1-4cm) often assoc. py, coarse euhed.
152·85	153·70	0·65	0·85	76·5	1262		<3	<10		30	5	95	2·5		<1	1	55	5-10	4-8								Strongly altered, brecc. chloritic conglomerate, phlog-biotite-qtz matrix, chert fragments strongly pyritic, v.f. euhed blebs, pervasive, often epidote association.
153·70	155·90	2·10	2·20	95·5	1263		4	<10		35	10	90	1·5		<1	<1	55	5-20	2								Dolomitic conglomerate, ovoid chert dolomite fragments in phlog-qtz-(dol.) matrix, pervasive epidote alteration of fragments / clasts 5-30mm, always ovoid, often zoned, metasomatic effect.

Sheet 2 of 5 Sheets

049

69-10-50

050

PROJECT: **HIGHCLERE - BUCKBY**

DIAMOND DRILL LOG - SAMPLING RECORD

HOLE NO: **DDH 808**

From	To	Interl (m)	Core Rec'd	% Rec	Sample No.	Compos No.	Assays Sn	W	CaF_2 %	Cu	Pb	Zn	Mo	Au	Magnetic Susceptibility x 10^{-6} S.I. Ag	Bi	Ni		% Estimates cpy	py	po	Core Angles	Alt	T.S P.S	Description
155.90	157.10	0.25	1.20	20.8	1264	C21	<3	<10		35	5	40	0.5		<1	<1	50	20		tr					Intensely brecciated, pink cherty quartzite, breccia surfaces pyrite coated.
157.10	161.23	2.40	4.13	58.1	1265		<3	<10		45	10	65	0.5		<1	<1	45	20-50		1-2					Quartose conglomerate, chert fragments in qtz-phlog matrix, becoming dolomitic from 160.3, 160.83 - 161.23 massive white dolomite, strong chlorite alteration, variably pebbly / epidote absent.
									0.73					-											
161.23	165.35	3.69	4.12	89.6	1266		<4	<10		60	5	80	3		<1	10	20	25-60		1					Quartoze conglomerate, altered chert & dolomite fragments in quartz, phlog. matrix, minor dissem. pyrite, epidote / well developed phlog. tending to foliated / minor late stage brecciation with py-chlor veinlets between fragments eg 162.6 / fragments often zoned, common dissem. mag. & py, occassional epidote with sulphides / minor pebbles & pyrite in basal 20cm of conglomerate cycle - possibly a common trend, reflects increased dolomite fragments (intraformational) at base of erosional cycle.
						C22			0.37					-											
165.35	167.00	1.65	1.65	100	1267		<4	30		60	5	360	3	-	<1	10	20	10-100		<1	tr				Phlog. dolomite, common mag. (dissem.) & chlorite (-talc) alternated with shears / diffuse mottled alteration, light green, probably phlog. & v.f. dissem. epidote, common dissem. f. py / coarse py blebs & veinlets associated with chlor. alt / from UV dolomite is fragmentary, remobilized aggregates.
167.00	169.68	2.63	2.68	98.1	1268		<4	<10		30	10	100	6		<1	10	10	10-200		1-2	1				Phlogopitic dolomite as above, with increased magnetite-chlorite alteration & increased dissem. py (-po) blebs, magnetite occurs as 0.5-2mm bleby aggregates / dolomite re-mobilized, brecciated aggregates (UV) / note in view of light green color of alteration may be sericite instead of phlogopite. / phlog. (or serecite?) alt. is intense, upto 40% of dolomite, occurs as irregular veinlet network.
						C23			0.37					-											
169.68	173.09	3.41	3.41	100	1269		<4	15		30	10	110	8		<1	10	65	10-60		1-2					Dolomitic conglomerate, ovoid chert, dolomite fragments / in bn. phlog.-qtz matrix black-green chlorite microveinlets in matrix / poss. 40% 2-30mm clasts, subrounded diffuse, recrystal. into matrix / min. epidote alteration, 1-3mm blebs, minor black-green chlorite veinlets, matrix to clasts / 172.54 coarse mag. blebs (2mm) in 1cm veinlet 45° c/a.
173.09	175.05	1.80	1.96	91.8	1270		6	<10		40	5	65	<1		<1	<1	340	10-20		2					Chloritic shear zone - intensely brecciated & sheared dolomitic conglomerate to chert-matrix phlog. altered to blue-green chlorite (occ. transitional) / strong network inter-connect py veinlets / strong incip. phlog. alteration of dol. congl.-chert country rock.
175.05	178.68	3.63	3.63	100	1271		<3	<10		70	10	55	2.5		<1	<1	180	100-350		2	tr				(Dolomitic) chert, minor phlog. alteration, intense brecc. veined with py.-magnetite-chlorite vn selvedge / angular, in-place fragments average 3-15mm, always vein margin.
						C24			0.53					-											
178.68	188.62	1.94	1.94	100	1272		65	<10		170	<5	75	<1		<1	<1	410	20-200							Strong chlorite shearing, altered phlog.-qtz matrix conglomerate, 15% subrounded 5-20mm chert pebbles, other clasts strong phlog. alteration / chlorite, shearing related to underlying serpentinite / 179.9 - 180.3 conglomerate, strong mag-po-py alteration, sulphides 0.5-2mm blebs, total 5% / alteration very strong, original pebbles (dol.?) mainly apparent as diffuse light grey phlog. mottling in a brown (biotite, phlog.?) matrix / overall green color probably a phlog. (seric) variant, chlorite restricted to discrete shears.
180.62	181.85	1.19	1.23	96.7	1273		15	<10		120	<5	110	<1		<1	<1	1800	4000-10000		1	1				Phlogopite serpentinite, minor bands of hybrid "conglomerate"-serpentinite rock. / serpentinite v.f., dense, massive black rock, v.f. dissem. magnetite, often mag. bands. / irregular microveinlets py dolomite.
						C25			3.14					-											
181.85	182.60	0.75	0.75	100	1274		190	<10		240	<5	75	<1		<1	<1	330	2000-8000		1	2				(Dolomitic) phlogopite matrix conglomerate, strongly developed brown phlogopite matrix, associated sutured contacts between clasts - recrystalization? / dissem. v.f. (<0.05mm) magnetite / 65% 2-10mm subrounded chert & dolomite fragments, complete alteration.
182.60	184.90	2.30	2.30	100	1275		200	<10		35	<5	75	<1		<1	<1	150	30-80		tr					(Dolomitic) phlogopite matrix conglomerate. Common bands of serpentinite (up to 10cm) and chlorite alteration. / strong brown phlog. alteration, diffuse clast-matrix contact, occas. chert fragments to 2cm, clasts mainly light grey altered dolomite / minor dissem. po-py associated with serpentinite bands.
						C26			4.62					-											
184.90	186.80	1.90	1.90	100	1276		170	<10		80	<5	80	<1		<1	<1	185	2000-15000		1	2-4				Strongly sheared phlogopite conglomerate, strong magnetite metasomatism (v.f. mag. dissem.) / fragments 2-30mm subrounded chert / dolomite.
186.80	188.00	1.20	1.20	100	1277		160	<10		250	<5	110	<1		<1	<1	430	10000-30000		1	8				Chloritized phlogopite conglomerate, strong pyrrohtite-magnetite metasomatism, dissem. v.f. magnetite, pyrrohtite / chlorite blue-green, mainly clast alteration / trace chalcopy. blebs associated with pyrrhotite.
188.00	191.65	3.65	3.65	100	1278		10	<10		90	<5	140	0.5		<1	<1	1700	500-3000		1	2.8				Massive serpentinite, intense dolomite vein, polygonal network, minor chert bands (remnant sediment) 0.5-3cm, phlog. altered / pyrrhotite - 10mm blebs and veinlets, pervasive v.f. dissem. dolomite-phlog. veins, 0.1-10mm, variable zones intense coarse phlog. alteration especially associated with dolomite veining.
						C27			2.82					-											
191.65	192.65	1.00	1.00	100	1279	C28	4	55		160	10	85	7		11	10	85	10		1					Brecciated chert, slightly dolomitic, dissem. veinlet, py in fracture, chloritic joint and shear.
									0.20					-											
192.65	194.73	1.70	2.08	81.7	1280		10	<10		30	<5	110	6		<1	10	600	10-60		1	1				Strongly altered dolomite congl. (relic dolomitic congl. clasts) with subrounded interband massive chloritic serpentinite / very strong phog. alteration in dolomitic congl. including clasts / congl. clast-rich, 80% 2-15mm subrounded dolomite, matrix chlorite rich (green) due to serpentinites / med. py microveinlets pervasive.

PROJECT: **HIGHCLERE-BUCKBY**

DIAMOND DRILL LOG – SAMPLING RECORD

HOLE NO: **DDH BD8**

051

From	To	Interv'l (m)	Core Rec'd	% Rec	Sample No.	Compos No.	Sn	W	CaF_2 %	Cu	Pb	Zn	Mo	Au	Ag	Bi	Ni	Magnetic Susceptibility x 10^{-5} SI	% Estimates cpy	py	po	Core Angles	Alt	T.S P.S	Description
194.73	198.20	3.44	3.47	99.1	1281	C29	<4	10	1.05	70	5	110	3	–	<1	10	1500	2000–4500		<1	2-4				Black and light grey serpentinite subrounded light grey-green dolerite bands, dissem. v.f. pyrrhotite magnetite / possibly originally pyxite, no relic olivine or plag./white spots, possibly altered plag. now phlopyite/serpentinite lacks normal bl-gn color and waxy luster/dolomite appears to be alteration effect, strong shear & phlog association eg. 196.2-196.5, phlog. crs. platolets up to 8mm/early stage phlog.-dol. shears cross cut by higher angle, late stage dol. joints (≤1mm).
198.20	200.65	1.50	2.45	61.2	1282	C30	<4	20	1.75	36	10	70	2	–	<1	10	600	10–100		–	–				Light grey green dolomite-phlogopite rock, strong dol. & phlog. veining, irregular low angle veining / very irregular contact of overlying serp. with dol-phlog. – dol-phlog embayed into serp, small fragments serp (1cm) rafted into dol-phlog i.e. dol-phlog. late stage, selvedge of white dol. around serp. 1-10mm, then into crs (15mm) plates of phlog with dol./phlog. common as radiating 10mm sheets of spinifex texture.
200.65	204.00	3.25	3.35	97.0	1283		4	<10		70	5	160	6		<1	10	1900	1000-1500		<1	1-2				Very fine dark grey massive serp. v.f. dol. veining pervasive, dissem. py-po <1mm blebs, minor phlog. alteration, serp. appears 'cherty'/207.1 20cm zone massive coarse phlog. alteration.
204.00	208.00	4.00	4.00	100	1284	C31	4	<10	0.74	120	5	130	5	0.05	<1	20	2100	3500-6000		2	1				Very fine dark grey massive serp. as above, minor asbestos v.f. dissem. py-po blebs. <1mm up to 4% v.f. cherty appearance, soft, probably altered/minor diffuse zones of grey-yellow phlog. alteration.
208.00	212.00	4.00	4.00	100	1285		<4	45		150	10	150	3		<1	10	2300	5000-1000		3-6	10				Very dark grey massive serp. as above decreasing dol. veins moderate pyritic, v.f. dissem. blebs/low angle phlog. alteration zones at 208.0-208.5.
212.00	216.00	4.00	4.00	100	1286		6	<10		30	10	170	7		<1	<10	1700	3000-8000		tr	1				Very fine black serpentinite, dol. vein pervasive, dissem. 1-3mm flakes phlog. decrea. sulphides, minor asbestos microveinlets/214.2-214.4 massive light grey yellow heavy calc-silicate (possibly pyroxene?) dissem coarse (1-2mm) magnetite blebs.
216.00	218.80	2.80	2.80	100	1287		8	<10		70	5	120	2		<1	10	2000	4000-10000		1	1				Very fine black serpentinite as above, base of dissem. po-py/218.3-218.7 1cm coarse phlog. alt. vein, undulating, variable low c/a (0-10)/diffuse zones phlog. alteration pervasive.
218.80	223.14	4.34	4.34	100	1288	C32	<4	<10	0.78	55	5	140	8	–	<1	10	2200	4500-7000		1	<1				Very fine grey serpentinite, visible sulphides decreasing dissem. v.f. py., v.f. mag. microveinlets/222.2-222.7 zone strong phlog-dol. alteration c/a 30° vcrs phlog. plates, interconnect phlog veinlets v.f. dol./dissem. po increase from 221/minor zones of irregular, diffuse phlog. alteration.
223.14	225.95	2.81	2.81	100	1289		12	10		95	5	140	6		<1	10	2200	3000-6400		1-2	<1				Very fine black serpentinite, common phlog. alteration zones, commonly developed grey mineral, phlog-plag?/223.4-223.8 massive phlog-dol. alteration, coarse brown and light green phlog. plates, coarse crystal white dol. fragments dark grey serp./ dissem. py blebs, minor po as interlocking aggregates and veinlets.
225.95	228.58	2.63	2.63	100	1290	C33	4	<10	1.90	50	<5	50	<1	–	<1	1	620	200-1000			0-4				Intensely altered phlog-talc rock, minor remnant dol. congl. clasts, congl. becoming better developed away from serp. contact/irregular po development as bands (max 1cm) dissem. & veinlets, minor dissem. mag. bands/from 227.0 easily recognised dol. congl, white phlog-dol. clasts (1-20mm) in brown phlog. matrix /from 227.4, massive po aggregates common, associated with light green talc "ovoids" altered dol. clasts?
228.58	229.60	1.02	1.02	100	1291		65	<10		200	<5	235	1		<1	1	245	200-600			6				Diopside-phlog-pyrr. skarn, pyrr. as 1-3mm bleby aggregates.
229.60	231.20	1.60	1.60	100	1292		<3	<10		70	<5	30	3		<1	<1	175	20-80		1					Strongly brecc. chert, chlor. & py platelets on shear planes, trace dissem. v.f. py.
231.20	232.76	1.56	1.56	100	1293		100	<10		120	5	110	0.5		<1	<1	170	20-40			1-2				Dolomitic congl., intensive shear & brecc., chloritized, matrix phlogopite.
232.76	235.59	2.83	2.83	100	1294	C34	50	<10	1.33	160	5	95	<1	–	<1	<1	135	80-350		2	2				Diopside-dol. (-pyrr-py) skarn, 0.5-3mm blebs py-po, minor py veinlets/remnant diffuse pebbly textures, altered white dolomite clasts, often with sulphide assoc. /233.8 20cm zone shearing & calc vein.
235.59	238.86	3.27	3.27	100	1295		4	45		70	25	180	6		1	10	60	10-50		1-2					Grey yellow chert & fine pink-mauve sst. dissem. v.f. py, strongly sheared, calcite veining concord. to bedding/235.59-236.6 dissem. mag.
238.86	243.60	4.74	4.74	100	1296		6	45		80	40	200	1		1	10	100	80-200		tr					Brecciated & sheared grey-mauve fine cherty biotitic sst, minor magnetite veining & dissem., variably calc., including fine calcite veining, disrupted "lumpy" bedding, 2-20mm / from 242.0 becoming grey yellow chert with argillac. biotitic bands.
243.60	248.20	4.60	4.60	100	1297	C35	6	20	0.25	75	10	80	5	–	2	10	170	40-150		1					Interlaminated my chert & fine grey biotitic sst, biotite contact metamorphic effect, especially as selvedge at chert-sst band contacts, v.f. dissem. & veinlet py, possibly syngenetic, especially in chert bands/white biotite sst, "brecciate & invade" chert, "sst" probably phlogopite rich/from 245, phlogopite alteration pervasive sst softer /towards base, sst med. crs., occassional qtz. granules.
248.20	249.76	1.56	1.56	100	1298		16	15		70	15	70						40-100							Grey poorly banded chert, lenticular bedding, including intraformational brecc. and congl./remobilized, cross-cutting, brown biot-phlog, irregular py veinlets throughout/249.3 trace scheelite assoc. with amph-biot-py alteration veins in chert

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PROJECT: **HIGHCLERE - BUCKBY**

DIAMOND DRILL LOG – SAMPLING RECORD

HOLE NO: **DDH BD8** 052

From	To	Interl (m)	Core Rec'd	% Rec	Sample No.	Compos No.	Assays Sn	W	CaF_2	Cu	Pb	Zn	Mo	Au	Magnetic Susceptibility $\times 10^{-5}$ SI Ag	Bi	Ni		% Estimates cpy	py	po	Core Angles	Alt	T.S P.S	Description
249.76	251.75	1.99	1.99	100	1299	C36	40	<10		20	10	135	1		<1	<1	60	1000 – 40000			tr				Magnetite-tremolite-phlogopite skarns, coarse tabular tremolite crystals, variable actinolite (light & dark green fibrous mineral) especially towards base /mag. massive blebs up to 8mm
									3.64					–											
251.75	253.94	2.19	2.19	100	1300		14	<10		28	16	50	7		1	10	55	20-30		1					Upper grey diop. skarn with brecc. chert bands & actinolite, becoming massive pink & grey (pyritic, diopside) chert, basal 30 cm cherty dolomite, dissem. f. py blebs / granite contact strong fracturing, possibly fault contact, no granite veining of host chert although strong recrystallization.
						C37			0.45					–											
253.94	257.60	3.66	3.66	100	1301		4	80		38	30	100	1		3	10	15	2							Pink fine-med. QF granite, phenocryst 1-5mm, no mica, minor 1-2mm qtz. vein / no alteration apart from cloudy chloritic-sericite alteration of feldspar & chlor. alteration of joints / occassional qtz. (& kspar) phenocrysts to 10mm weakly porphyritic texture
257.60	262.10	4.50	4.50	100	1302		8	70		36	20	60	4		2	10	5	5							Pink porph. QF granite as above, increased qtz. vein, bleaching and chloritic-epidote alteration associated with fracturing, minor serecite zones / 257.6-258.0 massive qtz vein, barren / granite tending to porph. anhedral 10mm qtz phen. in pink feldspar rich matrix, common green sericite alt. plag. phenocrysts.
						C38			0.08					–											
262.10	263.66	1.56	1.56	100	1303		6	25		14	5	30	6		1	20	<5	5							Light grey green QF granite, phyllic (ser-chlor) alteration, minor calc. alteration as veinlets, plag. complete alt. to yellow waxy sericite, groundmass v.f. & sericite alt., no mica, pink feld., soft, yellow alteration / diffuse zones of unaltered pink grey remnants.
263.66	266.91	3.25	3.25	100	1304		4	55		22	15	38	2		1	20	5	100-550							Pink porphyry QF granite, variable dissem. mag. 1-3mm blebs 1-2% chloritized biotite, pink feld. & white plag unaltered / occ. ovoid pink kspar with white feld. inclusions / finer grained (1-3mm) to base.
266.91	269.20	2.29	2.29	100	1305		14	30		14	55	120	4		2	10	5	2							Light yellow-green-grey QF granite, yellow-green sericite alteration, qtz veining & shearing, diffuse zones (c/c = 0-10) replacing pink gr. no mica / kspar replaced to gn. sericite, all plag. alt to yellow-green-white sericitised feld. minor relic fresh feld. / vuggy actinolite-qtz. in joint fractures.
						C39			0.08					–											
269.20	272.20	3.00	3.00	100	1306		12	40		28	25	55	5		1	10	<5	5-15							Pink porph. QF granite, pink fine felsic matrix, phenocrysts ≤5mm, mainly anhedral qtz. / qtz greisen vein 271.0-272.2m, barren / yellow green sericite replaces plag. phenocrysts / trace hbl (-biotite?) no mica / minor bleaching & silification adjacent veins, also white bleaching adjacent hbl veins.

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