019

387050 mE
49750 mN } GRID

S1 – 80143

726020

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 01

TENEMENT NAME LAKE MARGARET No. 5/85

PLAN – MAP REFERENCE

386950 mE
349750 mN } AMG

CO-ORDINATES 386950 mE 349750 mN AMG AZIMUTH N.A. DRILLERS Diamond Drillers COMMENCED 10-3-1988 DEPTH 600m HOLE No. DD88MS1

RL COLLAR ~ 850 (est.) INCLINATION -90° DRILL TYPE Longyear 38 COMPLETED 10-4-1988 CASING LEFT DPO No(s) 46280

DEPTH From (M) (edge cut off)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ALS (PERTH)) Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
·0	0-2	0	HQ		Pre-Core		1655029	0·0	3·0		<0·01	1	4	15	20	10		2·91%	<5
2	4·0	3·8	HQ		PEBBLE CONGLOMERATE – Oxidized pinky coloured. Clast supported with a sandstone matrix. Clasts 3-10mm diam sub-angular to subrounded. Clasts are quartzose and vary from red chert to sandstone in content. 3·0 → 3·5m is a more sand rich interval.														
·0	5·4		HQ		INTERBEDDED PEBBLE CONGLOMERATE/SILTSTONE. Conglomerate is as above except the average clast diam ≈ 9mm. Interbeds 5-10 cm wide of medium grained siltstone. These interbeds are at 90° to the Core Axis (C.A.). Trace pyrite at base of interbeds. Flame structures indicate the sequence is younging upwards.		1655030	3·0	6·0		<0·01	<1	2	10	15	10		2·56%	5
4	9·4		HQ		PEBBLE CONGLOMERATE: Clast supported and 5-20mm diam and sub-angular shaped clasts. Between 6·4 to 8·0m see 4 cm wide bands of siltstone showing good bedding at 90° to C.A. & young up. Between 8·3 and 8·5m see en echelon tension gash.		1655031	6·0	9·0		<0·01	<1	2	10	15	10		1·53%	<5
·4	10·0		HQ		INTERBEDDED PEBBLE CONGLOMERATE/SANDSTONE: Conglomerate as above with dark maroon coloured fine grained sandstone 50mm wide with graded bedding showing the sequence to be younging upwards.		1655032	9·0	12·0		<0·01	1	8	10	35	25		2·81%	<5
·0	13·1		HQ		AS ABOVE: See sandy beds between 12·9–13·1m, 12·3–12·6m. At 12·8m see a strong cleavage developed at 30° to C.A. Cleavage defined by rotation of clasts, some silica redistribution.		1655033	12·0	15·0		<0·01	1	3	10	15	15		3·01%	40
·1	18·4		HQ		PEBBLE CONGLOMERATE: Clasts 2-20mm diam, sub-angular → sub-rounded. Average clast diam 8-10mm diam with lesser qtz sandy matrix. One siliceous sandstone bed between 17·1 and 17·2m.		1655034	15·0	18·0		<0·01	<1	2	10	15	15		2·85%	220

020 381050 mE } GRID
+9750 mN

726021

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 02

TENEMENT NAME LAKE MARGARET No. 5/85

PLAN – MAP REFERENCE

CO-ORDINATES 380950 mE } A.M.G. 53+9750 mN AZIMUTH N.A DRILLERS DIAMOND DRILLERS COMMENCED [illegible] 1983

DEPTH 600 m HOLE No. DD88 MS 1

RL COLLAR ≈ 350 (±5 m) INCLINATION -90° DRILL TYPE LONGYEAR 38 COMPLETED [illegible] 1983

CASING LEFT PVC DPO No(s) 46280

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
·4	19·15		HQ		SANDSTONE: Quartzose, medium grained, well sorted, mod. well rounded and oxidized. Tension gashes seen between 18·5 and 18·7m. See occasional quartz veins at 45° to C.A which contains trace unidentified black mineral.		1655035	18·0	21·0		<0·01	<1	2	10	15	10		2·34	25
·15	21·45		HQ		PEBBLE-GRIT CONGLOMERATE: Siliceous, clast supported as above.		1655036	21·0	24·0		<0·01	<1	1	5	20	10		0·67	95
·65	21·60		HQ		SANDSTONE: Quartzite, medium grained, tan-grey colour.		1655037	24·0	27·0		<0·01	<1	2	10	15	10		0·60	95
·0	26·70		HQ		PEBBLE CONGLOMERATE: Clasts 2-17mm diam, sub-angular and clast supported. Very siliceous. At 26·23m see 8mm wide milky quartz veins at 60° to the C.A. Trace chl/jarosite around some clast boundaries.		1655038	27·0	30·0		<0·01	<1	2	5	15	15		1·94	75
·70	27·30		HQ		SANDSTONE/PEBBLE CONGLOMERATE: Pink colour, increasing conglom towards 27·3m. Otherwise as above.		1655039	30·0	33·0		<0·01	<1	16	45	15	15		2·74	160
·7·30 m			CHANGE		CORE SIZE TO NQ		1655040	33·0	36·0		<0·01	<1	3	65	15	15		0·89	95
·30	27·8		NQ		PEBBLE CONGLOMERATE: Matrix supported with minor 0·1% chl on grain boundaries, siliceous conglomerate.		1655041	36·0	39·0		<0·01	<1	2	175	20	5		1·20	75
80	28·35		NQ		SANDSTONE: Fine grained, siliceous and is light-pink-green colour. 28·0→28·2 see lots of chl on structures at 75-90° to the C.A. At 28·15m see a qtz-chl vein with pyrite selvages, 4mm wide.		1655042	39·0	42·0		<0·01	<1	2	35	20	10		1·03	135
·35	28·4		NQ		PEBBLE CONGLOMERATE: Light pink-grey colour, clast supported. 0·2% dissem and laminated chlorite and minor (0·05%) dissem pyrite. Clasts and matrix quartz rich.		1655043	42·0	45·0		<0·01	<1	2	140	15	5		1·40	115

ASSAY VALUES (Analysed by ALS (Bris))

021 387050 mE / 49750 mN } GRID

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 03

TENEMENT NAME Lake Margaret No. 5/85

PLAN – MAP REFERENCE

CO-ORDINATES 386950 mE / 49750 mN } AMG AZIMUTH N.A. DRILLERS Diamond Drillers COMMENCED 10-3-1988 DEPTH 600 m HOLE No. DD88.MS1

RL COLLAR ~ 850 (% Sm) INCLINATION -90° DRILL TYPE Longyear 38 COMPLETED 1?-4-1988 CASING LEFT P.V.C. DPO No(s) 46180

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
.90	31.65		NQ		SANDSTONE: Fine grained, maroon colour, variable qtz and mica content. 20 cm grit layer between 29.9 and 30.1 m. Sheared chlorite veins at 70° to the C.A.														
65	32.80		NQ		PEBBLE CONGLOMERATE: Siliceous, clast supported with a cleavage at 20° to the C.A. Minor dissᵗ pyrite (0.05%) concentrated around grain boundaries.														
80	35.00		NQ		SANDSTONE: Coarse grained, quartzose. From 32.8–34.2 m see 5 mm wide milky quartz veins at 70° to the C.A. See tension gashes between 33.5 and 33.9 m which show chl + pyrite infillings. Chl veins at 80° to C.A. at 33.2 m. Pyrite 0.1% with two generations seen 1) yellow dissem and 2) a more brassy type which is concentrated around clasts. This uncorroded pyrite is thought to be a latter introduced type and probably the cause of the I.P anomaly.														
5.00	37.20		NQ		PEBBLE CONGLOMERATE: Sub-angular to sub-rounded clasts. Brassy pyrite 0.08% is generally fine grained and concentrated around grain boundaries.														
20	39.60		NQ		SANDSTONE / PEBBLE CONGLOMERATE: Disseminated pyrite 0.1–0.2% some coarse grained clasts to 9 mm diameter. Between 37.2 and 37.27 m we see milky quartz veins at 90° to the C.A. with some chl content.														
.60	44.00		NQ		PEBBLE CONGLOMERATE: Variable clast size, two populations one are 10 mm diam and other 4 mm diam. Pyrite 0.1% see QTZ-PY veins at 80° to C.A between 42 and 44 m. Clast >> vein pyrite. Between 43 and 43.7 m see milky quartz tension														

ASSAY VALUES (Analysed by A.L.S. (AAS))

622

337050 mE } GRID
49750 mN }

726023

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 04

TENEMENT NAME LAKE MARGARET No. 5/85

PLAN – MAP REFERENCE

386450 mE } AMG

CO-ORDINATES 5349750 mN } AZIMUTH N.A. DRILLERS DIAMOND DRILLERS COMMENCED 10-3-1988 DEPTH 600 m HOLE No. DD88MS1

RL COLLAR ± 350 (+/- 5m) INCLINATION -60° DRILL TYPE LONGYEAR 38 COMPLETED 10-4-1988 CASING LEFT PVC DPO No(s) 46250

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
.00	45.30		NQ		SANDSTONE/GRIT: (90:10) Quartzose sandstone with variable qtz clast content. Sandstone is coarse grained and contains 0.1% dst pyrite.		1655044	45.0	48.0		<0.01	<1	2	65	15	10		1.69	60
5.30	46.30		NQ		PEBBLE CONGLOMERATE: Average clast diam 8mm diam, and 0.05% disseminated pyrite. Dissolution textures seen in matrix.														
.30	47.50		NQ		SANDSTONE: Quartzose which is very coarse grained with 0.05% dst pyrite. Odd 8mm diam clasts seen.														
.50	50.60		NQ		PEBBLE CONGLOMERATE: Clasts sub-rounded, 2-25mm diam which average 6mm diam. Clast supported with abundant milky quartz veins at 50° and 80° to the C.A which show minor chl, pyrite enclosed. Rare dissem pyrite. Vein chlorite at 80° at C.A. at 49.9m.		1655045	48.0	51.0		<0.01	<1	3	20	15	10		2.00	600
0.60	51.55		NQ		SANDSTONE: Siliceous, no pyrite with a 5mm wide band of micaceous material at 10° to C.A seen at 51.2m i.e. S0 = 80° to C.A		1655046	51.0	54.0		<0.01	<1	3	10	15	10		2.42	230
1.55	54.90		NQ		PEBBLE CONGLOMERATE: Pinky-grey colour. Clast supported, clasts 4-25mm diam, rock has a quartzose sand matrix. Chlorite seen to fill fractures in clasts. Tension gash at 52.7m. J0 at 25° to C.A														
4.90	55.65		NQ		SANDSTONE: Occasional 2mm wide bands of conglomerate and micaceous siltstone. Bedding is at 88° to the C.A		1655047	54.0	57.0		<0.01	<1	4	5	20	10		2.40	65
.65	58.00		NQ		INTERBEDDED CONGLOMERATE/SILTSTONE: Siliceous siltstone and conglomerates with 10cm wide interbeds of micaceous sandstone. Excellent bedding at 90° to C.A.		1655048	57.0	60.0		<0.01	<0.1	2	5	3	1			
[illegible]					[illegible]														

0: 023

387050 mE / 49750 mN } GRID

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

726024

SHEET No. 05

TENEMENT NAME: LAKE MARGARET No. 5/85

PLAN – MAP REFERENCE:

CO-ORDINATES: 386950 mE / 6249750 mN } A.M.G. AZIMUTH: N.A. DRILLERS: DIAMOND DRILLERS COMMENCED: [illegible] DEPTH: 600m HOLE No. DD88MS1

RL COLLAR: ≃ 850 (+/- 5m) INCLINATION: -90° DRILL TYPE: LONGYEAR 38 COMPLETED: [illegible] CASING LEFT: PVC DPO No(s): 46283

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
0	59.40		NQ		PEBBLE CONGLOMERATE: Quartzose clasts 2-25mm diam. Clast supported. Rare disseminated pyrite between 58.0 and 59.0m and JO at 35° to C.A.														
40	60.60		NQ		SILTSTONE > PEBBLE CONGLOMERATE: Fine to very coarse grained siltstone with clast supported conglomerate. At 60.5m So=90° to CA; JO=20° to CA.														
60	66.60		NQ		PEBBLE CONGLOMERATE: Siliceous clast supported conglomeratic sandstone interbeds between 62.10 – 62.40 and 63.70 – 66.40m. Base of oxidation at 62.70m. Below 62.7m is pale grey colour with only occasional irregular oxidized (pink) material. No sulphides visible, unidentified black mineral disseminated throughout ≃ 0.3%.		1655049	60.0	63.0		<0.01	0.3	2.9	20	3	2			
70	= BOX						1655050	63.60	66.0		<0.01	0.3	16	60	5	1			
60	66.75		NQ		SANDSTONE: Olive-grey medium grained and no sulphides were visible. Occasional siliceous pebble or half oxidized silt bands.		1655051	66.0	69.0		<0.01	0.3	20	55	13	4			
75	69.00		NQ		PEBBLE CONGLOMERATE: Light grey colour, no magnetite. Clasts 3-15 mm diam with a quartzose sandy matrix. Occasional dots of v.f.g pyrite seen in the matrix between 68.7 and 68.9m total 0.1%. Milky quartz veins seen between 68.2m and 68.5m.														
00	71.00		NQ		SANDSTONE: Medium grained with occasional pebble entrained. No sulphides and fractures seen // to the CA. Milky quartz veins seen between 70.65 and 70.75m		1655052	69.0	72.0		<0.01	0.2	7.4	48	12	2			
00	74.00		NQ		PEBBLE CONGLOMERATE: Light grey colour to 73m and pink below 73m. Top Of Oxidation at 73m. Often see fine grained pyrite associated with rare silt bands at 90° to CA. see 72.3m, 72.5m and 73m.		1655053	72.0	75.0		<0.01	0.2	4.0	19	2	<1			
00	= TOX																		

ASSAY VALUES (Analysed by ALS (Perth))

024

337050 mE } GRID
49750 mN }

726025

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 06

TENEMENT NAME LAKE MARGARET No. 5/85

PLAN – MAP REFERENCE

386950 mE } AMG.

CO-ORDINATES 5344750 mN AZIMUTH DRILLERS DIAMOND DRILLERS COMMENCED 10-3-88 DEPTH 600m HOLE No. RR88MS1

RL COLLAR INCLINATION DRILL TYPE LONGYEAR 38 COMPLETED 10-4-88 CASING LEFT PVC DPO No(s) 46233

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
.30	77.30		NQ		PEBBLE CONGLOMERATE: Oxidized with clast range from changing from 2mm to 10mm. Clast supported with a sandy matrix		1655054	75.0	78.0		<0.01	0.1	0.5	5	2	<1			
30	82.30		NQ		SANDSTONE: Medium to very coarse grained, quartzose with minor 4cm wide IB's of micaceous siltstone ie 81→81.2m; 80.3-80.5, see So at 90° to the C.A. Tension gashes between 77.3-78.1 and 79.7-79.85. Vein at 81.9-82.0m see abundant botryoidal haematite. Base of oxidation at 78.9m and Top Of Oxidation at 81.00m.		1655055	78.0	81.0		<0.01	<0.1	2.6	2	3	<1			
.8 m	= Box																		
0 m	= Top																		
.30	86.40		NQ		PEBBLE CONGLOMERATE: Oxidized clast supported conglom with a sandy matrix. At 84.8m see So at 80° to the C.A. Dissolution features seen between 84-84.2m and 86.1m		1655056	81.0	84.0		<0.01	0.2	0.5	7	4	1			
							1655057	84.0	87.0		<0.01	<0.1	0.5	16	2	<1			
.40	91.70		NQ		SANDSTONE/SILTSTONE: Maroon quartzose sand and micaceous/quartzose siltstone. One conglom layer between 88.1 and 88.3m. Between 86.4-89m see interbeds (So) at 70° to the C.A. Some chlorite developed in the fine grained beds. At 91m see QZ-CHL vein at 60° to CA		1655058	87.0	90.0		<0.01	<0.1	0.4	2	2	1			
70	92.80		NQ		PEBBLE CONGLOMERATE: Pyrite (medium grained) is disseminated and constitutes 0.1% often associated with chlorite. Quartzose composition and dissolution textures seen between 92.7-92.8m. Base of oxidation seen at 92.1m		1655059	90.0	93.0		<0.01	<0.1	2.1	50	2	1			
4.1 m	= BOX																		
80	94.80		NQ		SANDSTONE/SILTSTONE (90/10) Unoxidized medium grey-green colour. So = 70° to CA at 93.4m. See dots of pyrite along grain boundaries, especially between 93.3-93.5m = 0.15% pyrite		1655060	93.0	96.0		<0.01	0.2	7.4	28	5	2			
80	100.55		NQ		PEBBLE CONGLOMERATE/SILTSTONE (90/10) Medium grey-green colour. At 97.4m see So at 80° to CA. JO at 45° to CA. Clasts 5-25mm diam		1655061	96.0	99.0		<0.01	<0.1	6.9	18	2	1			

025

387050 mE } GRID
49750 mN

726026

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 07
TENEMENT NAME CAPE MARGARET No. 5/35
PLAN – MAP REFERENCE

336950 mE } A.M.G.
CO-ORDINATES [illegible] mN AZIMUTH N.A. DRILLERS DIAMOND DRILLERS COMMENCED [illegible] DEPTH 600 m HOLE No. DD88MS1
RL COLLAR [illegible] INCLINATION -90° DRILL TYPE LONGYEAR 38 COMPLETED [illegible] CASING LEFT PVC DPO No(s) 46183

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
-.55	102.80		NQ		SANDSTONE: Medium to very coarse grained Med. grey colour. Qz rich		1655062	99.0	102.0		<0.01	0.2	3.9	65	1	1			
.80	104.00		NQ		PEBBLE CONGLOMERATE: Siliceous clasts 2-12 mm diam average 7 mm diam. 5 cm wide band of silt at 103.5 m. 0.1% clot pyrite. Distinctive black HE?? rich clasts sub-rounded & wisp shaped present, especially between 103.6 - 103.9 m.		1655063	102.0	105.0		<0.01	0.3	7.9	36	3	1			
.00	104.50		NQ		SANDSTONE: Medium grained; 0.05% clot pyrite, see the odd black clast in the matrix. Common 3 mm wide siltstone bands and So at 80° to the C.A.														
.50	107.00		NQ		PEBBLE CONGLOMERATE: Clasts 4-12 mm diam and averages 6 mm. Clast supported. Between 105.4 - 105.7 see a siltstone bed at 80° to the core axis with minor chlorite developed		1655064	105.0	108.0		<0.01	<0.1	1.3	4	3	1			
7.00	109.60		NQ		SANDSTONE/SILTSTONE (60:40) No sulphides, leucoxene spots 2 mm in diam evenly disseminated throughout 108.2 - 108.5 m conglom band														
OX at 106.40 m					Top Of Oxidation 106.40 m; Base of Oxidation 107.80 m														
OX at 107.80 m																			
.60	115.00		NQ		SANDY MARL: Interbedded fine and coarse grained material Olive grey colour, So at 90° to C.A. Rare disseminated pyrite seen in minor discontinuous sandstone beds. At 113.4 m see a 3 mm wide chl-py vein at 45° to C.A which shows signs of shearing. Between 113.3 - 113.6 m see clasts with rimming of black material.		1655065	108.0	111.0		<0.01	<0.1	4.7	34	3	8			
							1655066	111.0	114.0		<0.01	0.2	8.7	75	6	18			
15.00	117.00				SANDSTONE: Oxidized maroon colour. Medium to coarse grained No sulphides. Band of olive grey siltstone between 115.75 and 116.1 m which contains carbonate. Thought to have a marley character.		1655067	114.0	117.0		<0.01	0.2	2.9	30	11	11			
5 = Box																			
6.9 = Tox																			

026

387050 mE
49750 mN } GRID

726027

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 8

TENEMENT NAME Lake Margaret No. 5/85

PLAN – MAP REFERENCE

CO-ORDINATES 386950 mE 5349750 mN } A.M.G. AZIMUTH N.A. DRILLERS [illegible] COMMENCED [illegible] DEPTH 600 m HOLE No. DD88MS1

RL COLLAR ≈ 350 ([illegible]) INCLINATION -90° DRILL TYPE Longyear 38 COMPLETED [illegible] CASING LEFT PVC DPO No(s) 46 583

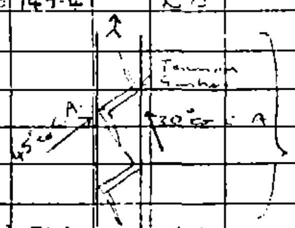
DEPTH From (m)	To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
											ASSAY VALUES (Analysed by ALS (Brisb...))								
.00	119.00		NQ		MARLEY/ SILTSTONE: Unoxidized, olive grey colour with very coarse siltstone lenses at 85° to the C.A. No visible sulphides. Shearing // to bedding, this may be the cause of the irregular coarse grained beds. Some carbonate in the beds. SURVEY AT 118.0 m SHOWS HOLE AT -89°, 108° (mag)		1655068	117.0	120.0		<0.01	0.2	5.9	65	9	5			
.00	121.40		NQ		SANDSTONE Quartzose with minor conglomerate bands. Light medium grey colour. Pyrite common between 119.9 → 120.0 with lesser pyrite seen to 121.4. Between 120.1 and 120.6 see ×510 cm wide bands of olive mostly siltstone and pebble conglomerate at 90° to CA (ripple bedding).		1655069	120.0	123.0		<0.01	0.1	2.7	38	5	<1			
1.44 = TOX					Top of Oxidation														
.40	126.30		NQ		PEBBLE CONGLOMERATE: Oxidized, red → maroon colour and siliceous in character. Clasts 2 → 15 mm diam and average 6 mm, red chert fragments common. Occasional thin ≈5 1 cm wide beds of sandy material seen approximately at 90° to the CA.		1655070	123.0	126.0		<0.01	<0.1	0.3	6	1	<1			
.30	130.30		NQ		PEBBLE CONGLOMERATE/SANDSTONE (70:30) Sandstone is siliceous and medium to coarse grained and occurs as interbeds. One maroon coloured siltstone interbed, 5 cm wide, is seen at 126.55 m and contains considerable pyrite. Conglomerate clast sizes as above and towards 130 m see an increasing proportion of haematite rich shale clasts		1655071	126.0	129.0		<0.01	<0.1	<0.2	3	1	<1			
.30	133.40		NQ		PEBBLE CONGLOMERATE Moderately sorted, clasts 1-20 mm diam and average 4 mm and sub-angular to sub-rounded. 5% of clasts are strongly haematized chert/shale. [illegible]		1655072	129.0	132.0		<0.01	<0.1	0.4	<1	1	<1			

027 381550 mE } GRID
49750 mN }

726028

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 09
TENEMENT NAME Lake Margaret No. 5/85
PLAN – MAP REFERENCE
CO-ORDINATES 386950 mE } AMG 5345750 mN } AZIMUTH N/A DRILLERS [illegible] COMMENCED [illegible] DEPTH [illegible] HOLE No. [illegible]
RL COLLAR [illegible] INCLINATION -90° DRILL TYPE [illegible] COMPLETED [illegible] CASING LEFT [illegible] DPO No(s) [illegible]3

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION / SPECIAL FEATURES (Weath, Alteration, Fracturing, Veining, Mineralization)	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
..40	134.80		NQ		SANDSTONE/PEBBLE CONGLOMERATE (60:40) Sandstone varies from very fine grained to very coarse grained type and a maroon colour. Trace disseminated pyrite. In conglom maroon strongly haematized clasts constitute 2%. At 133.9 see a pyrite + chl?/amp? vein.	1655073	132.0	135.0		<0.01	<0.1	0.6	2	2	<1			
..80	142.20		NQ		PEBBLE CONGLOMERATE/SANDSTONE (60:40) Siliceous sub-rounded clasts set in a sandy quartzose matrix, maroon coloured. Weakly bedded sandstone is locally dominant S0=80° to CA average grainsize = 1mm No sulphides Twisting at 10-20° to CA b/w 139-140m	1655074	135.0	138.0		<0.01	<0.1	<0.2	14	1	<1			
						1655075	138.0	141.0		<0.01	<0.1	0.4	3	1	<1			
..20	149.4		NQ		PEBBLE CONGLOMERATE/SANDSTONE (90:10) Siliceous sub-rounded to sub-angular clasts set in a fine grained siliceous matrix. Clasts 2-20 mm ave 6mm diam. Red HE rich clasts are more siliceous and comprise 5% of clasts. Tension gashes seen between 147.0-147.3, 147.5-147.7m which contain chl but no pyrite	1655076	141.0	144.0		<0.01	<0.1	2.5	3	2	<1			
						1655077	144.0	147.0		<0.01	<0.1	1.1	5	1	<1			
						1655078	147.0	150.0		<0.01	<0.1	1.8	17	1	<1			
149.40	151.30		NQ		SANDSTONE/PEBBLE CONGLOMERATE (80:20) Sandstone, coarse grained and maroon in colour, So at 30° to C.A. Between 149.4-150.0 see a strong cleavage at 20° to C.A. Irregular bands of conglom are seen with clasts 2-12 mm and average 4mm diam.	1655079	150.0	153.0		<0.01	<0.1	1.2	17	1	<1			
..30	162.4		NQ		PEBBLE CONGLOMERATE: Oxidized, clast supported, clasts 3-12mm ave 4mm diam. Occasional c.g. sandstone interbeds, see 153.0-153.2 and 156.5-156.8m. Between 157.4 and 157.7m see 3.5cm wide quartz vein (barren) between 50° & 80° to CA. At 151.3m see one qz vein, 1cm wide, at 80° to CA	1655080	153.0	156.0		<0.01	<0.1	1.2	6	1	<1			
						1655081	156.0	159.0		<0.01	<0.1	0.4	7	3	<1			
						1655082	159.0	162.0		<0.01	<0.1	<0.2	4	1	<1			
..40	169.10				PEBBLE CONGLOMERATE/SANDSTONE (70:30) Siliceous clasts 2-15 [illegible]	1655083	162.0	165.0		<0.01	<0.1	<0.2	1	2	2			

ASSAY VALUES (Analysed by ALS (Beris))

028

387050 – E } GRID
49750 – N

726029

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 10

TENEMENT NAME LAKE MARGARET No. 5/85

PLAN – MAP REFERENCE

CO-ORDINATES 386950 – E } AMG 5349750 – N AZIMUTH N.A DRILLERS DIAMOND DRILLERS COMMENCED 10-3-88 DEPTH 600 m HOLE No. DD88MS1

RL COLLAR ~350 (+/- 5m) INCLINATION -90° DRILL TYPE LONGYEAR 38 COMPLETED 10-4-88 CASING LEFT ENE DPO No(s) 16283

Depth From (M)	Depth To (M)	Core Rec. (M)	Core Size	Graphic Log	Core Description / Special Features (Weath, Alteration, Fracturing, Veining, Mineralization)	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
-4	169.10	cont.	NQ		Interbeds of v.f.g. to c.g. sandstone. At 164.20 see So at 75° to CA. defined by a 5cm wide band of micaceous siltstone.	1655084	165.0	168.0		<0.01	<0.1	<0.2	2	<1	<1			
-10	171.30		NQ		SANDSTONE/PEBBLE CONGLOMERATE: (80:20) Light pink colour. Light red HE rich clasts constitute 1% of clasts. Core is extremely siliceous and med → c.g. and Jo at 25° to CA. Core is very broken between 168.7 and 170.0 m	1655085	168.0	171.0		<0.01	<0.1	<0.2	3	<1	<1			
-30	176.00		NQ		SANDSTONE: Very siliceous, coarse grained (c.g.) with minor chl?/mica in matrix. Common joints at 25-30° to CA. Medium grained section between 170-176m. At 174.5m see QZ + PY + EPIDOTE?? vein at 30° to CA. Extremely rare vein pyrite. SURVEY AT 172m shows -89°, BEARING 128°	1655086	171.0	174.0		<0.01	<0.1	<0.2	18	<1	<1			
						1655087	174.0	177.0		<0.01	<0.1	<0.2	5	<1	<1			
-00	181.50		NQ		SANDSTONE/PEBBLE CONGLOMERATE: Siliceous medium - coarse grained sandstone light pink with darker pink conglomerate. Minor disseminated chlorite and an unidentified tabular black mineral (not Mn). At 176.6 see PY + SERICITE?? vein at 20° to CA. Also rare milky QZ veins at 20° to CA.	1655088	177.0	180.0		<0.01	<0.1	<0.2	3	<1	<1			
-50	185.40		NQ		PEBBLE CONGLOMERATE/SANDSTONE (70:30) Conglomerate has generally fine grained clasts 1-30 and diam are 4mm. Dark maroon HE rich clasts constitute 10% of the clasts. Quartzose sandstone is pink-grey in colour and is orientated at 80° to CA.	1655089	180.0	183.0		<0.01	<0.1	<0.2	3	<1	<1			
						1655090	183.0	186.0		<0.01	<0.1	<0.2	6	<1	<1			
-40	191.50		NQ		SANDSTONE: Pink-grey colour, very siliceous and medium grained. Ubiquitous black spots - HE rich? are disseminated throughout and constitute 5% of the rock. Periodic tension gashes seen at 186.9, 187.9 and 189.4 and 190.1 + 191.1: note 1m period. At 185.8m see QZ + Chl?/Sericite? vein. Occurs conc. band	1655091	186.0	189.0		<0.01	<0.1	<0.2	1	4	<1			
						1655092	189.0	192.0		<0.01	0.2	0.9	1	<1	<1			

ASSAY VALUES (Analysed by ALS (BRIS.))

629

337050 mE } GRID
49750 mN }

726030

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 11

TENEMENT NAME [illegible] No. 5/85

PLAN – MAP REFERENCE

CO-ORDINATES [illegible] } A.M.G. AZIMUTH N.A. DRILLERS [illegible] COMMENCED [illegible] DEPTH [illegible] HOLE No. DD83 [illegible]

RL COLLAR [illegible] INCLINATION -90° DRILL TYPE [illegible] COMPLETED [illegible] CASING LEFT [illegible] DPO No(s) [illegible] 3/5

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
[illegible]	195.90		NQ		SANDSTONE/PEBBLE CONGLOMERATE: (80 20) Pink coloured fg →		1655093	192.0	195.0		<0.01	0.1	1.5	1	<1	1			
					cg with occasional conglomerate bands with clasts 2→20														
					are 4 mm [illegible]. So still at 80° to CA and black clasts														
					still common (5% of clasts present)														
[illegible]	199.30		NQ		SANDSTONE: Oxidized light pink colour. Black angular HE?		1655094	195.0	198.0		<0.01	<0.1	1.2	<1	2	<1			
					fragments present throughout (1% of rock). Generally medium														
					grained and no sulphides present. Joints (Jn) at 15° to CA														
					cause very broken core between 197.2–197.9m. Milky qz														
					veins are seen at 45° to CA between 1907 and 199.1m														
[illegible]	200.6		NQ		PEBBLE CONGLOMERATE Quartzose clasts 2–6mm [illegible]		1655095	198.0	201.0		<0.01	<0.1	1.4	<1	<1	1			
					[illegible] and clast supported. Black angular fragments (non-														
					magnetic) still present. No sulphides observed														
[illegible]	205.90		NQ		SANDSTONE Siliceous, medium to fine grained with 2% being		1655096	201.0	204.0		<0.01	<1	9	<5	10	5	460	2.12	70
					black angular (HE rich) fragments. Chlorite is present on														
					joints at 10° to CA. At 203.7m see a brecciated vein		1655097	204.0	207.0		<0.01	<1	4	<5	<5	<5	40	0.84	80
					[illegible] qz filled with chlorite and drusy tooth qz. At 205.9														
					m see vein QZ-CHL/SE?? Occasional clasts of red chert														
[illegible]	256.[illegible]		NQ		SANDSTONE: Oxidized pale pink to dark maroon colour. Fine to		1655098	207.0	210.0		<0.01	<1	3	<5	5	<5	100	0.82	30
					coarse grained with minor grit interbeds. Siliceous in		1655099	210.0	213.0		<0.01	<1	8	<5	<5	<5	80	0.65	60
					character. Between 213.3–213.[illegible]m see a siltstone bed at 90° to CA		1655100	213.0	216.0		<0.01	<1	2	<5	<5	<5	80	0.50	20
					and between 219–222m abundant HE chips in the sandstone		1653406	216.0	219.0		<0.01	<1	6	<5	<5	<5	230	1.19	70
					Quartz-(Chlorite) tension gashes prominent between 212.9–		1653407	219.0	222.0		<0.01	<1	2	<5	<5	<5	120	0.62	40
					213m, 213.4–213.5m, 215.9–216m; 236.1–236.2 and 239–239.2m		1653408	222.0	225.0		<0.01	<1	1	<5	<5	<5	50	0.99	40
					Chl/Sericite/HE veins seen at 247.7–249.7 and 257–257.[illegible]m		1653409	225.0	228.0		<0.01	<1	2	<5	<5	<5	130	0.88	100
					At 210.7m see QZ-PY-CHL vein at 30° to CA		1653410	228.0	231.0		<0.01	<1	3	<5	<5	<5	170	1.05	30
					At 217.3m [illegible] QZ-PY vein at 5° to CA		1653411	231.0	234.0		<0.01	<1	8	<5	<5	5	340	2.02	70

ASSAY VALUES (Analysed by A.A.S. ([illegible]))

030 387050 mE / 44750 mN } GRID

726031

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 13

TENEMENT NAME Lake Margaret No. 5/85

PLAN – MAP REFERENCE

CO-ORDINATES 336950 mE / 6349750 mN } A.M.G. AZIMUTH N.A. DRILLERS [illegible] COMMENCED [illegible] DEPTH 600m HOLE No. [illegible]

RL COLLAR ≈ 850 (+/- 5m) INCLINATION -90° DRILL TYPE [illegible] COMPLETED [illegible] CASING LEFT [illegible] DPO No(s) [illegible]

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
[illegible]	[illegible]		NQ		SILTSTONE/SANDSTONE (60:40) Massive, laminated	[illegible] coarse grain	1653412	234.0	237.0		<0.01	<1	6	<5	<5	<5	170	1.03	50
					ed siltstone and fine grained	sandstone. Both are siliceous	1653413	237.0	240.0		<0.01	<1	2	5	<5	<5	90	1.06	20
					and well defined bedding (S₀)	is at 80° to C.A. Between 273-	1653414	240.0	243.0		<0.01	<1	<1	<5	<5	<5	30	1.07	20
					278.3m see occasional very coarse	pebbles [illegible] diam ≈ 3cm.	1653415	243.0	246.0		<0.01	<1	<1	<5	<5	<5	30	1.08	50
					Between 277.3-277.6m see QZ-	SPEC. HAEM - ?? BLACK LUSTROUS	1653416	246.0	249.0		<0.01	<1	2	<5	<5	<5	160	1.19	20
					MINERAL VEINS. QZ-CHL/SE? veins	at 35° to C.A. very common	1653417	249.0	252.0		<0.01	<1	2	5	<5	<5	150	1.65	30
					Shear zone between 273.5-275	m where [illegible] have been	1653418	252.0	255.0		<0.01	<1	<1	<5	<5	<5	50	1.28	40
					rotated into parallelism with 10°	to C.A. and [illegible] of sericite	1653419	255.0	258.0		<0.01	1	5	<5	<5	<5	290	1.86	110
					/clay developed in the matrix.		1653420	258.0	261.0		<0.01	<1	10	45	<5	<5	680	1.96	30
							1653421	261.0	264.0		<0.01	<1	6	10	<5	<5	260	1.20	60
[illegible]	413.00		NQ		COBBLE PEBBLE CONGLOMERATE (Clast	supported. Clasts 5-40mm	1653422	264.0	267.0		<0.01	<1	4	<5	<5	<5	190	1.12	60
					[illegible] and average 12mm diam.	[illegible] with only one	1653423	267.0	270.0		<0.01	<1	5	<5	<5	<5	270	1.26	50
					quartz vein at 3[illegible] which	is 3cm wide. Haematite and	1653424	270.0	273.0		<0.01	<1	5	<5	<5	<5	230	1.43	40
					specular haematite developed	between [illegible] m occurring	1653425	273.0	276.0		<0.01	<1	6	<5	<5	<5	230	1.57	50
					as interstitial fillings. From	34[illegible].7 → [illegible] see an increasing	1653426	276.0	279.0		<0.01	<1	11	<5	<5	<5	370	1.73	30
					sericite content in matrix	[illegible] more commonly on fractures	1653427	279.0	282.0		<0.01	<1	14	<5	<5	<5	540	1.70	50
					at 45° to C.A. Clasts are	dominantly siliceous sandstone	1653428	282.0	285.0		<0.01	<1	17	<5	<5	<5	460	1.51	50
					[illegible] with occasional diorite?	clasts, some acid volcanic clasts	1653429	285.0	288.0		<0.01	<1	13	<5	<5	<5	400	1.41	30
					SURVEY OF HOLE AT 327m	shows -89° bearing 030°	1653430	288.0	291.0		<0.01	<1	17	<5	<5	<5	380	1.73	40
					SURVEY OF HOLE AT 410m	shows -88° bearing 210°	1653431	291.0	294.0		<0.01	<1	11	<5	<5	5	390	1.39	40
					At 372.80m a QZ-Specular haematite	vein at 70° to the C.A. (3mm	1653432	294.0	297.0		<0.01	<1	12	<5	<5	<5	440	1.39	40
					wide) is seen to [illegible] a	4mm wide vein of pyrophyllite?	1653433	297.0	300.0		<0.01	<1	9	<5	<5	<5	290	1.39	50
					clay at 30° to C.A. This mineral is	also seen in the matrix.	1653434	300.0	303.0		<0.01	<1	1	<5	<5	<5	30	1.14	40
					At 390m vein SE (pyrophyllite?)	at 45° to C.A. Massive	1653435	303.0	306.0		<0.01	<1	5	<5	<5	<5	190	0.86	40
					[illegible] SE? pyrophyllite? seen between	386.4-386.5m also present	1653436	306.0	309.0		<0.01	<1	4	<5	<5	<5	170	0.85	50
					in matrix and is sheared into	vein like structures at 45° to C	1655643	309.0	312.0		<0.01	<1	5	<5	<5	<5	200	0.88	20
					412.80m has PYRITE+PYROPHYL	LITE (± CHL?) veins at 20° to C A	1655644	312.0	315.0		<0.01	<1	6	<5	<5	<5	170	0.36	50
					Acid igneous clasts noted in	this region. Between 412.3	1655645	315.0	318.0		<0.01	<1	7	<5	<5	<5	230	1.02	50
					and 412.35m once pure quartzite?	has been recrystallized [illegible]	1655646	318.0	321.0		<0.01	<1	9	<5	<5	<5	260	1.03	30
							1655647	321.0	324.0		<0.01	<1	6	<5	<5	<5	250	0.89	40

(031 337050 mE } GRID
44750 mN

336950 mE } AMG

726032

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 13
TENEMENT NAME CAPE MARGARET No. [illegible]
PLAN – MAP REFERENCE

CO-ORDINATES [illegible] AZIMUTH [illegible] DRILLERS [illegible] COMMENCED [illegible] DEPTH [illegible] HOLE No. DD88MS1
RL COLLAR [illegible] INCLINATION -90° DRILL TYPE [illegible] COMPLETED [illegible] CASING LEFT [illegible] DPO No(s) [illegible]

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
8.90	413.00		NQ/BQ		Note Reduction from NQ to BQ at 406m		1655648	324.0	327.0		<0.01	<1	8	<5	<5	<5	270	1.13	60
					Interval is oxidized and is clast supported. Clasts range		1655649	327.0	330.0		<0.01	<1	5	<5	<5	<5	30	1.33	50
					from 8-90 mm diameter average 30mm and a very coarse		1655650	330.0	333.0		<0.01	<1	9	<5	<5	<5	330	1.29	30
					sand - granule matrix fills the interstices.		1655651	333.0	336.0		<0.01	<1	10	<5	<5	10	290	1.27	60
							1655652	336.0	339.0		<0.01	<1	14	<5	<5	<5	390	1.56	50
00	429.00				PEBBLE CONGLOMERATE: Clast diameter ranges from 5-60mm and		1655653	339.0	342.0		<0.01	<1	10	<5	<5	<5	200	1.36	40
					average 20mm. Rare sandstone interbeds are observed. The		1655654	342.0	345.0		<0.01	<1	4	<5	<5	<5	<10	1.72	60
					conglomerate has a granule matrix and is clast supported.		1655655	345.0	348.0		<0.01	<1	8	<5	<5	<5	300	1.44	20
					Bedding is seen to be at 45° to the C.A. at 418.8m where		1655656	348.0	351.0		<0.01	<1	12	<5	<5	<5	350	1.48	60
					it is defined by a 5cm thick bed of oxidized sandstone.		1655657	351.0	354.0		<0.01	<1	15	<5	<5	<5	460	1.61	30
					Towards 429m see an increase in the matrix component.		1655658	354.0	357.0		<0.01	<1	14	<5	<5	<5	370	2.08	100
					413-429m contains a white clay in the matrix KA'A?		1655659	357.0	360.0		<0.01	<1	11	5	<5	<5	360	1.45	30
					423.5m a sheared tension gash is observed and it contains		1655660	360.0	363.0		<0.01	<1	11	<5	<5	<5	340	1.77	40
					QZ-HAEM (SPECULAR). A strong cleavage is developed at 45° to		1655661	363.0	366.0		<0.01	<1	6	<5	<5	<5	220	1.38	250
					CA as are some pyrophyllite? veinlets		1655662	366.0	369.0		<0.01	<1	12	<5	<5	<5	440	1.78	60
							1655663	369.0	372.0		<0.01	<1	10	<5	<5	<5	390	1.50	40
1.00	439.00		BQ		GRANULE: Average clast diameter 2-4mm with occasional		1655664	372.0	375.0		<0.01	<1	2	<5	<5	<5	160	0.86	30
					pebble clast. The rock is clast supported and the matrix		1655665	375.0	378.0		<0.01	<1	18	10	<5	25	550	1.59	70
					has chlorite + clay (pyroph?) locally developed		1655666	378.0	381.0		<0.01	<1	15	<5	10	<5	480	1.86	70
							1655667	381.0	384.0		<0.01	1	15	<5	<5	<5	520	1.77	60
9.00	440.00		BQ		GRANULE - PEBBLE CONGLOMERATE (90:10). NOTE: 439.50 to		1655668	384.0	387.0		<0.01	<1	18	<5	<5	10	410	1.58	70
					439.70 a Rhyolite dyke seen to intrude the conglomerate.		1655669	387.0	390.0		<0.01	<1	13	<5	<5	5	370	1.55	50
					see pet sample 1653187. The sediment is oxidized.		1655670	390.0	393.0		<0.01	<1	13	<5	<5	<5	380	1.58	60
							1655671	393.0	396.0		<0.01	<1	18	5	<5	10	130	1.92	70
0.00	447.20		BQ		PEBBLE CONGLOMERATE Occasional cobble clasts are noted with		1655672	396.0	399.0		<0.01	<1	18	<5	<5	<5	540	1.94	70
					clast diam ranging from 5-60mm and average 15mm diam		NOT DESPATCHED	399.0	402.0										
					The rock is clast supported and has minor grit matrix.		1653437	402.0	405.0			<1	38	10	30	15	190	1.58	50
					Some acid igneous clasts, well rounded noted.		1653438	405.0	408.0			<1	38	<5	20	10	430	2.05	60
					NOTE: RHYOLITE DYKE between 443.4 - 443.6m which is		1653439	408.0	411.0			<1	30	<5	20	10	350	1.39	60
					[illegible]		1653440	411.0	414.0			<1	24	<5	20	10	150	1.33	30

032 33 1050 mE +9 750 mN } GRID

726033

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 14

TENEMENT NAME LAKE MARGARET No. 3/85

PLAN – MAP REFERENCE

CO-ORDINATES 366 950 mE 5349750 mN } A.M.G. AZIMUTH N.A. DRILLERS DIAMOND DRILLING COMMENCED [illegible] DEPTH 600 m HOLE No. [illegible]

RL COLLAR ≈ 350 (A.S.L.) INCLINATION -90° DRILL TYPE LONGYEAR 38 COMPLETED [illegible] 1988 CASING LEFT [illegible] DPO No(s) 46396/[illegible]

DEPTH From (M)	DEPTH To(M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
.20	448.90		BQ		RHYOLITIC INTRUSIVE: Qz and feldspar phenocrysts present		1653441	414.0	417.0		<0.01	<1	20	5	5	15	300	1.18	25
					anhedral and euhedral respectively. This Rhyolite is seen to be		1653442	417.0	420.0		<0.01	<1	30	<5	20	10	310	1.63	40
					cut by QZ and QZ+CALCITE veins which are at 15 & 70° to the CA		1653443	420.0	423.0		<0.01	<1	24	<5	15	10	330	1.51	40
							1653444	423.0	426.0		<0.01	<1	26	<5	15	15	420	1.86	30
.90	471.00		BQ		PEBBLE CONGLOMERATE: Clast diameter ranges from 5-120 mm and		1653445	426.0	429.0		<0.01	<1	17	<5	35	5	640	1.79	40
					averages 10 mm. Moderate carbonate alteration dominantly as		1653446	429.0	432.0		<0.01	<1	46	15	25	20	790	3.23	140
					matrix replacement and as narrow irregular sided veins at		1653447	432.0	435.0		<0.01	<1	46	5	40	40	830	3.18	200
					10° to the C.A. Strong calcite development between 458 → 478m		1653448	435.0	438.0		<0.01	<1	44	5	60	35	940	2.04	760
					Base Of Oxidation is gradational at around 455m		1653449	438.0	441.0		<0.01	<1	38	5	50	65	920	2.57	530
							1653450	441.0	444.0		<0.01	<1	38	5	50	65	1000	2.64	700
.00	542.00		BQ		PEBBLE CONGLOMERATE: Occasional cobble sized clasts and		1653451	444.0	447.0		<0.01	<1	42	5	45	65	830	2.58	550
					granule interbeds developed, see below. All sequences are		1653452	447.0	450.00		<0.01	<1	50	15	60	80	820	3.04	730
					clast supported with only minor granule matrix, very little		1653453	450.0	453.0		<0.01	<1	44	10	45	65	980	2.57	970
					sand sized material. Calcite generally weak-moderately developed		1653454	453.0	456.0		<0.01	<1	46	10	40	85	450	2.53	1300
					with strongly developed calcite between 514-516.5m; 540.3-		1653455	456.0	459.0		<0.01	<1	44	10	35	85	980	2.49	1300
					541.6 and 545.4-547m. Milky vein quartz is seen to be [illegible]		1653456	459.0	462.0		<0.01	<1	38	15	50	95	330	2.55	970
					to the CA between 511.5-511.6m. Calcite-chlorite veins		1653457	461.0	465.0		<0.01	<1	50	15	50	115	980	2.85	1200
					[illegible] than 5 cm wide is seen between 537.85-7.90; 536-536.5 and		1653458	465.0	468.0		<0.01	1	12	10	40	110	940	2.92	1100
					536.80-537.0m and a more pervasive CALCITE-CHL developed between		1653459	468.0	471.0		<0.01	1	38	10	40	90	320	2.36	710
					535.9-539.0 m. At 542.4m a 1cm wide QZ-CALCITE vein is		1653460	471.0	474.0		<0.01	1	46	15	55	105	890	2.61	920
					seen at 70° to CA. A VC SAND-GRANULE interbed is seen between		1653461	474.0	477.0		<0.01	<1	55	10	60	130	1200	3.05	990
					542-542.8m and ∴ of lower porosity shows less carbonate than		1653462	477.0	480.0		<0.01	<1	44	10	55	105	340	2.58	1150
					RHYOLITE INTRUSIVES: Do not contain Mt, occasionally seems to		1653463	480.0	483.0		<0.01	<1	46	10	60	120	930	2.80	1050
					grade into sediment, see especially 517.15 to 518m		1653464	483.0	486.0		<0.01	<1	50	10	50	100	1050	2.66	760
					DARK MAROON RHYOLITIC INTRUSIVE: Feldspar phyric seen between 523.35 to		1653465	486.0	489.0		<0.01	<1	48	35	65	130	1050	3.18	830
					523.75; 529.9 to 530.2 these are unveined and is not // sided.		1653466	489.0	492.0		<0.01	<1	50	5	50	125	920	3.09	710
					RHYOLITE INTRUSIVES: Light pink, Quartz-Feldspar phyric, no		1653467	492.0	495.0		<0.01	<1	44	10	55	105	1050	2.58	680
					magnetite seen 525.1-5.3 and 535.4-5.6 with minor VQz at 20° [illegible]		1653468	495.0	498.0		<0.01	<1	48	10	65	105	1050	2.73	690
					Also 525.2 → 5.9 and 548.7 → 548.8 Dykes seen between		1653469	498.0	501.0		<0.01	<1	55	20	50	100	360	3.29	1450
											<0.01	<1	55	10	45	95	850	2.60	1300

033 357050 mE / 49750 mN } GRID.

726034

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 15

TENEMENT NAME [illegible] No. [illegible]

PLAN – MAP REFERENCE

356950 mE } A.M.G.

CO-ORDINATES 534975.? mN AZIMUTH N.A. DRILLERS [illegible] COMMENCED [illegible] DEPTH [illegible] HOLE No. [illegible]

RL COLLAR [illegible] INCLINATION -90° DRILL TYPE [illegible] COMPLETED [illegible] CASING LEFT [illegible] DPO No(s) [illegible]

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	Au	Ag	As	Cu	Pb	Zn	Ba	Fe	Mn
2.00	568.00				PEBBLE CONGLOMERATE: A marked increase in the matrix (which		1653471	504.0	507.0		<0.01	<1	55	15	50	90	1050	2.91	1150
					is of granule size). The matrix grainsize ranges from 2-8mm		1653472	507.0	510.0		<0.01	<1	42	10	50	75	970	2.16	790
					diam and averages 6mm while the clasts range from 10-		1653473	510.0	513.0		<0.01	<1	16	15	55	105	990	2.67	930
					90mm and average 30mm diam. The rock's matrix supported		1653474	513.0	516.0		<0.01	<1	46	10	45	105	860	3.26	1050
					and where coarser sections are encountered we see an		1653475	516.0	519.0		<0.01	<1	46	15	50	95	950	2.85	1150
					increased degree of carbonate alteration ie. 562.5 → 566.5 m.		1653476	519.0	522.0		<0.01	<1	60	15	50	115	1000	3.28	1100
					Five mm wide vein calcite is seen at:		1653477	522.0	525.0		<0.01	<1	50	10	75	85	830	2.83	530
					562.5m where it is at 30° to CA.		[illegible]	525.0	[illegible]		<0.01	<1	55	15	65	100	820	[illegible]	730
					568.7m " " " 90° to CA.		[illegible]	528.0	531.0		<0.01	<1	50	10	60	90	[illegible]	[illegible]	[illegible]
					568.75m " " " 90 to CA.		1653480	531.0	534.0		<0.01	<1	55	25	60	105	[illegible]	[illegible]	[illegible]
					QZ-CALCITE-CHL veins are seen between 568.9-567.1m and		1653481	534.0	537.0		<0.01	2	46	60	35	95	360	2.78	800
					570.1 – 570.2m.		1653482	537.0	540.0		<0.01	1	55	25	50	75	1250	3.33	1400
							1653483	540.0	543.0		<0.01	<1	60	10	50	120	1350	3.00	1200
8.0	600.0		BQ		PEBBLE CONGLOMERATE: Pebble sized clasts with a very coarse		1653484	543.0	546.0		<0.01	<1	50	20	35	100	1050	3.53	1150
					sand matrix. Clasts range 10-60mm and average 25mm while		1653485	546.0	549.0		<0.01	<1	44	15	50	105	1000	2.81	1050
					the sand averages ≈ 1.75mm. Moderate carbonate alteration		1653486	549.0	552.0		<0.01	<1	65	20	45	105	1000	3.38	1150
					evident to 600m averages 5% of the matrix volume, some		1653487	552.0	555.0		<0.01	<1	65	25	50	100	1250	4.29	1150
					vein control. Vein calcite-QZ at 40° to CA at 599.54, 9.72, 9.76.		1653488	555.0	558.0		<0.01	<1	50	20	55	105	1050	3.08	1400
					RHYOLITIC INTRUSIVES seen at 582.2-582.3m, 593.7-593.9m		1653489	558.0	561.0		<0.01	<1	46	10	45	90	1150	3.46	700
					over this last interval the dyke is cross-cut by calcite		1653490	561.0	564.0		<0.01	<1	46	28	60	105	1450	3.19	950
					veins at 45° and 0° to the CA. Lesser quartz and pyrite		1653491	564.0	567.0		<0.01	<1	48	35	45	145	370	3.53	1150
					are also associated with this veining. At 597m a		1653492	567.0	570.0		<0.01	<1	55	20	40	115	1000	3.45	1050
					CARB-QZ-CHL-PY vein 15mm wide is seen at 20° to the CA		1653493	570.0	573.0		<0.01	<1	44	10	40	110	900	3.05	860
					CALCITE-QZ-CHL ± PY veins 9mm wide are seen at 80-90° to		1653494	573.0	576.0		<0.01	<1	50	20	70	120	950	3.54	1050
					the CA at a frequency of 1/m from 593-600m.		1653495	576.0	579.0		<0.01	<1	60	20	40	95	1050	3.33	1100
					600m = E.O.H.		1653496	579.0	582.0		<0.01	<1	55	15	55	95	1150	3.87	1150
					SURVEY CARRIED OUT AT 600m ⇒ DECLIN ~ -85°, BEARING ≈ 280°		1653497	582.0	585.0		<0.01	<1	40	10	40	75	1050	2.70	940
							1653498	585.0	588.0		<0.01	<1	50	10	40	90	930	3.23	1050
							1653499	588.0	591.0		<0.01	<1	42	20	60	95	1150	2.16	910
							1655360	591.0	594.0		<0.01	<1	46	15	45	80	1150	2.75	730
							1655361	594.0	597.0		<0.01	<1	46	15	60	440	1400	3.47	930

ASSAY VALUES (Analysed by [illegible])

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C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 16
TENEMENT NAME LAKE MARGARET No. 5/85
PLAN – MAP REFERENCE

870050 mE } GRID
49750 mN }
386950 mE AMG

CO-ORDINATES 534 750 mN AZIMUTH N/A DRILLERS Diamond Drillers COMMENCED 10-3-1988 DEPTH 600m HOLE No. DD88MS2
RL COLLAR 850.55m INCLINATION -90° DRILL TYPE Longyear 38 COMPLETED 10-4-1988 CASING LEFT NONE DPO No(s)

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)

GRAINSIZE CLASSIFICATION: Udden–Wentworth scale used

64–256 mm Cobble conglom
4 – 64 mm Pebble conglom
2 – 4 mm Granule
1/16 – 2 mm Sand
1/256 – 1/16 mm Silt

DOWNHOLE SURVEYS:

Depth	Declination	Bearing (mag)
58 m	-89.5°	328°
118 m	-89°	108°
173 m	-89°	128°
327 m	-89°	030°
410 m	-88°	310°
500 m	-86.3°	≈ 070° very faint
600 m	-85°	≈ 290° very faint

685

726036

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 17

TENEMENT NAME LAKE MARGARET No. 5/85

PLAN – MAP REFERENCE

387050 E, 49750 N } GRID

386950 mE } AMG

CO-ORDINATES 5349750 mN AZIMUTH N.A DRILLERS Diamond Drillers COMMENCED 10-3-1988 DEPTH 600 m HOLE No. DD88MS1

RL COLLAR 850 (±5m) INCLINATION -90° DRILL TYPE Longyear 38 COMPLETED 10-4-1988 CASING LEFT NONE DPO No(s) 46281/28

ASSAY VALUES (Analysed by AMDEL)

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)
.60	99.70		NQ		1652980 Pebble Conglomerate/Sandstone: Identified as being a Quartz breccia. Intensely deformed. The dark clasts noted in hand specimen are comprised mainly of clay or chlorite and are a deformed argillaceous lens. QZ-65%, CY/CHL 28%, SE-6%					
-90	114.00		NQ		1652981 SANDY MARL, alternating bands of argillaceous material and bands of detrital quartz grains cemented by interstitial dolomite. Muscovite flakes are concentrated in the quartz rich bands and is thought to be detrital. SE/CY 40% DOL 30% QZ 20%, MUSC 5%, CHL 3%, OPAQ 2%					
3.00	188.10		NQ		1652982 QUARTZITE, the black patches (voids) are composed of quartz and black Fe oxides QZ-90%, SE/CY 4%, CHL 1%, OP 5%					
2.00	252.10		NQ		1652983 TENSION GASH QZ-70% PYRO 20% CHL 7% OP 3%. Vein quartz with abundant deformed prismatic haematite.					
2.40	302.50		NQ		1652984 CONGLOMERATE; Siliceous with high T epithermal mineral assemblage. QZ 65%, PYRO 10% KAOL 10% MUSC 10% PY 5%					
0.00	360.10		NQ		1652985 CONGLOMERATE, Some probable acid volcanic clasts dominantly quartz. Typical epithermal assemblage, QZ 50%, PYR 30%, KA 10%, OP 10% pyrite present					
9.00	389.10		NQ		1653181 PEBBLE-COBBLE CONGLOMERATE: Identified as being a breccia. Quartz rich clasts separated by a QZ-PYROPHYLLITE matrix. QZ-70%, PYRO 20%, KAOL 4%, CAL 1%, OPAQ 5%					
5.40	416.00		NQ		1653182 GRANULE CONGLOMERATE: Identified as being a altered lithic conglomerate. Considerable component of acid					

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726037

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 18

TENEMENT NAME LAKE MARGARET No. 5/85

PLAN – MAP REFERENCE

3870500E } GRD
4975ON }
386950 E } AMG

CO-ORDINATES 5411750N AZIMUTH N.A DRILLERS Diamond Drillers COMMENCED 10-3-1988 DEPTH 600 m HOLE No. DD88MS1

RL COLLAR 850 ± 5m INCLINATION -90° DRILL TYPE Longyear 38 COMPLETED 10-4-1988 CASING LEFT NONE DPO No(s) 46281/282

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ....)
50	439.60		BQ		1653187 RHYOLITIC PYAP: Maroon porphyry. Altered feldspar qtz phenos set in a v.f.g. felsic matrix. Calcite intergrown with the sericite patches.						
10	442.30		BQ		1653186 RHYOLITE: Qz & Fld phenos set in a red-brown matrix. Identified as a tuff but the feature AMDEL identified as being a compaction foliation is actually the S1 cleavage plane. Calcite is disseminated through the whole rock						
-90	461.00		BQ		1653183 CALCITE CEMENTED CONGLOMERATE. Mainly QZ and calcite with minor musc & chlorite. Trace Kspar.						
70	538.80		BQ		1653184 GRANULE CONGLOMERATE - CALCITE VEINED. Most clasts are acid volcanic and have a porphyritic texture. See QZ-CALCITE veins with marginal chlorite.						
10	578.20		BQ		1653185: PEBBLE CONGLOMERATE WITH CALCITE & SPEC HAEM IN THE MATRIX. Clasts are dominantly acid volcanic in character. Disseminated calcite which cements the rock along with minor sericite and chlorite.						
					SEE APPENDIX 2 FOR COMPLETE DESCRIPTIONS						