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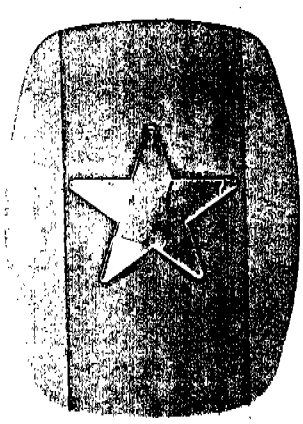
CARPENTARIA EXPLORATION COMPANY PTY. LTD.

McARTHUR RIVER SERIES

1 INCH TO 1600 FEET GEOLOGICAL MAPS



Record Card
Header 378
Detail 379

FEB. 73

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

DRILL HOLE ASSAY LOG

PAGE 1

MINE / PROSPECT: MC ARTHUR

NAME: MYRTLE DD 3

core: ~~sludge/cuttings/chip~~

NAME	LEVEL	NORTHING	EASTING	COLLAR R.L. ground / pipe	BRG. M/T/G degrees	BRG. M/T/G min.	INCLINE degrees	INCLINE min.	RECOV. Y % / kg	MINE CODE	HOLE CODE	PREPARED BY	CHECK.
MYRTLE DD 3	SUR						-90					assay:	
												calc.n:	
												logged: R.G.L.	

LENGTH	STARTED day	STARTED month	STARTED year	FINISHED day	FINISHED month	FINISHED year	HOLE / CORE SIZE	ELEMENT SYMBOLS	SAMPLE STORED	SAMPLE N° prefix	
27.34							NQ / BQ	ACPBZNCU	MCA	Q	punch in all cards 108 to 116
											contractor A.D.D.
											assayer: M.I.M.
											collar survey by: date: method:
											down hole survey by: date: method:

INTERVAL from	INTERVAL to	INTERVAL length	RECOV. Y m / kg	SAMPLE N°	Ag	Pb	Zn	Cu	PROGRESSIVE TOTALS
0.0	3.4	3.4	0.0						NO CORE
3.4	117.5								LENGTH 117.5; RECOVERY 113.6 ; NOT SAMPLED
117.5	117.6	0.1	0.1	14179	4	70	30	30	
117.6	119.5	1.9	1.9						NOT SAMPLED
119.5	119.6	0.1	0.1	14180	3	100	30	560	
119.6	121.8	2.2	2.2						NOT SAMPLED
121.8	121.9	0.1	0.1	14181	2	70	20	70	
121.9	125.0	3.1	3.0						NOT SAMPLED
125.0	125.1	0.1	0.1	14182	3	50	20	30	
125.1	127.6	2.5	2.5						NOT SAMPLED
127.6	127.7	0.1	0.1	14183	3	60	40	40	
127.7	131.2	3.5	3.5						NOT SAMPLED
131.2	131.3	0.1	0.1	14184	3	40	30	10	
131.3	136.2	4.9	4.9						NOT SAMPLED
136.2	136.3	0.1	0.1	14185	3	60	20	140	
136.3	139.3	3.0	3.0						NOT SAMPLED
139.3	139.4	0.1	0.1	14186	1	60	30	60	
139.4	144.1	4.7	4.7						NOT SAMPLED
144.1	144.2	0.1	0.1	14187	4	50	20	50	
144.2	143.5	2.4	2.3						NOT SAMPLED
143.6	143.7	0.1	0.1	14188	3	80	20	30	
143.7	148.3	4.6	4.6						NOT SAMPLED
148.3	148.4	0.1	0.1	14189	3	40	30	40	
148.4	150.7	2.3	2.3						NOT SAMPLED

MINE CODE | HOLE CODE (108 110 111) punch in all cards 108 to 116

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CARPENTARIA EXPLORATION COMPANY PTY. LTD.

DRILL HOLE ASSAY LOG

MINE / PROSPECT: MC ARTHUR | NAME: MYRTLE DD 3 | core ~~/chips/cutting/chip/~~

INTERVAL from	INTERVAL to	length	RECOV.Y m / kg	SAMPLE N°	ASSAY RESULTS Ag	Pb	Zn	Cu	PROGRESSIVE TOTALS
1507	1508	01	01	140190	2	50	20	90	
1508	1426	18	18						NOT SAMPLED
1523	1527	01	01	140191	2	50	40	30	
1527	1563	36	36						NOT SAMPLED
1563	1565	01	01	140192	2	80	10	40	
1564	1595	31	31						NOT SAMPLED
1595	1596	01	01	140193	1	50	20	40	
1596	1624	28	28						NOT SAMPLED
1624	1625	01	01	140194	1	50	20	60	
1625	1663	38	38						NOT SAMPLED
1663	1664	01	01	140195	1	60	20	50	
1664	1690	26	26						NOT SAMPLED
1690	1691	01	01	140196	2	50	20	70	
1691	1701	10	10						NOT SAMPLED
1701	1702	01	01	140197	3	70	20	40	
1702	1743	41	41						NOT SAMPLED
1743	1744	01	01	140198	3	70	50	60	
1744	1789	45	44						NOT SAMPLED
1789	1790	01	01	140199	2	50	30	40	
1790	1814	24	24						NOT SAMPLED
1814	1815	01	01	142000	1	50	30	40	
1815	1847	32	32						NOT SAMPLED
1847	1848	01	01	142001	2	50	20	40	
1848	1871	23	23						NOT SAMPLED
1871	1872	01	01	142002	2	50	30	50	
1872	1894	22	22						NOT SAMPLED
1894	1895	01	01	142003	2	50	20	40	
1895	1945	50	49						NOT SAMPLED
1945	1946	01	01	142004	2	40	20	20	
1946	1963	17	17						NOT SAMPLED
1963	1964	01	01	142005	3	50	30	30	
1964	1980		16						NOT SAMPLED

MINE CODE | HOLE CODE | C.E.C. 150 FEB. 73

(108 | 110 | 111 | 116) punch in all cards 108 to 116

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

DRILL HOLE ASSAY LOG

MINE / PROSPECT: MC ARTHUR

NAME: MYRTLE DD 3

core / ~~sludge~~ / ~~cutting~~ / ~~chips~~

INTERVAL from	INTERVAL to	length	RECOV. m / kg	SAMPLE N°	ASSAY RESULTS Ag	Pb	Zn	Cu	PROGRESSIVE TOTALS
1980	1981	01	01	14206	2	60	30	30	
1981	2014	33	33						NOT SAMPLED
2014	2015	01	01	14207	1	50	20	30	
2015	2055	40	39						NOT SAMPLED
2055	2056	01	01	14208	2	60	30	20	
2056	2077	21	20						NOT SAMPLED
2077	2078	01	01	14209	2	50	20	30	
2078	2114	36	36						NOT SAMPLED
2114	2115	01	01	14210	3	50	20	40	
2115	2154	39	39						NOT SAMPLED
2154	2155	01	01	14211	1	40	20	30	
2155	2171	16	16						NOT SAMPLED
2171	2172	01	01	14212	2	50	30	20	
2172	2211	39	39						NOT SAMPLED
2211	2212	01	01	14213	2	80	20	30	
2212	2245	33	33						NOT SAMPLED
2245	2246	01	01	14214	1	90	20	50	
2246	2257	11	11						NOT SAMPLED
2257	2258	01	01	14215	0	60	10	30	Ag = Tr
2258	2277	19	19						NOT SAMPLED
2277	2278	01	01	14216	2	50	30	50	
2278	2311	33	33						NOT SAMPLED
2311	2312	01	01	14217	2	200	30	60	
2312	2734	422	422						NOT SAMPLED
									END OF HOLE

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GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 1

MINE / PROSPECT: McARTHUR | NAME: MYRTLE 3DD | core

LEVEL: SURFACE | NORTHING: | EASTING: | COLLAR R.L. ground/pipe:

BEARING M/T/G: — | INCLINE: -90° | LENGTH: 273.4 m | STARTED: 2.10.74 | FINISHED: 15.10.74

HOLE/CORE SIZE: 0 - 6.1, HQ; 6.1-61.0, NQ; 61.0 - 273.4 BQ | INTERVALS ASSAYED:

DOWN HOLE SURVEY-Method: | date: | by: | LOGGED BY: RGL: GC

INTERVAL from	to	length	RECOV. m/kg	DESCRIPTION
0	3.4(?)	3.4	0	
3.4(?)	6.1	2.7	2.7	Oxidized pink and grey dolarenite and dolomite. Fractures, etc. strongly leached, forming vughs partially filled by clay. Weak fractures filled with dolomite.
6.1	7.4	1.3	1.3	Pink grey oxidized massive dolomite with dolomitic siltstone beds. Rare small arenitic lenses and beds up to 10 mm. CBA 80°
7.4	12.9	5.5	5.5	Pink grey oxidized interbedded massive dolomite and dolarenite. Fractures filled by white clay. At 10.8 (400 mm) and 13.8 (100 mm) dolomite with small (up to 2 mm) dolomite speroids partially replaced by silica. CBA 80°
12.9	15.2	2.3	2.3	Pink and grey thin to medium bedded dolomite with occasional dolarenite. Partly oxidized. Dolomite contains wisps of carbon parallel to bedding. CBA 80°
15.2	17.3	2.1	1.9	Partly oxidized pink grey strongly fractured thin to laminated dolomite. Minor open spaces filled by dolomite.
17.3	17.9	0.6	0.6	Sedimentary polymictic breccia. Fragments light grey dolomite and black carbonaceous dolomite in light grey dolomite matrix. Small (up to 1 mm fragments off-white cryptocrystalline silica.
17.9	40.5	22.6	22.6	Grey thin to medium bedded dolomite. Rare laminations. Rare small lenses dolarenite. At 26.8 (100 mm) polymictic breccia (fragments of dolomite in brown and white dolomitic matrix). At 28.1 (60 mm) sedimentary breccia with dolomite fragmens in dolomite matrix with minor chalcedony. At 30.4 load structure, slumped breccia into dolomite. At 34.5 dolarenite with carbonaceous and dolomitic matrix. At 38.4 (40 mm), 39.0 (60 mm) and 39.3 (60 mm) sedimentary breccia with carbonaceous dolomitic matrix. CBA 80°

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 2

MINE/PROSPECT: McARTHUR | NAME: MYRTLE | LEVEL: SURFACE

from	to	length	m/kg	DESCRIPTION
40.5	45.5	5.0	4.8	Grey weakly fractured thin to massive dolomite. Occasional dolarenite and fine grained sedimentary breccia beds with carbonaceous and dolomitic matrix. Minor fractures filled with dolomite. CBA 80°
45.5	49.6	4.1	4.1	Light grey thin to laminated dolomite with abundant coarse grained dolarenite beds and lenses, some with crude grading. Rare dolomite fragments up to 4 mm. CBA 77°
49.6	51.0	1.4	1.4	Light grey coarse grained dolarenite. At 50.9, 20 mm dolomite. CBA 75°
51.0	51.8	0.8	0.8	Light grey dolomite and fine grained dolarenite. CBA 75°
51.8	53.9	2.1	2.1	Oxidized pink/brown fine grained and coarse grained dolarenite. At 52.9, 20 mm oxidized dolomite fractures coated with "limonite".
53.9	54.6	0.7	0.7	Partly oxidized light grey dolomite with arenitic fragments. Oxidation confined to upper sections and along fractures, etc.
54.6	60.9	6.1	6.1	Dark grey shaly dolomite and dolomitic shale. Abundant light grey angular and sub-rounded dolomite fragments. Trace pyrite. At 57.6 siltstone (?) concretions with breccia fragments. Freshly broken core gives off hydrocarbon smell.
60.7	61.4	0.7	0.7	Massive dark grey shaly dolomite with thin interbedded shale. From 60.8 to 60.9 specks of siliceous spheroids. Minor fractures. At 61.3 down to 61.4 poorly sorted arenaceous materials intermixed with the light grey dolomitic shale. Very minor traces of pyrite. CBA 80°
61.4	63.5	2.1	2.1	Fairly massive light grey dolarenite interbedded in same portion by dololutite. Poorly sorted dolomite fragments. Traces of pyrite along fractures some are intermixed with the fragments. At 62.7 and 63.2 light grey dololutite is 2 mm and 1 mm thick respectively. CBA 90°
63.5	64.4	0.9	0.9	Massive light grey dololutite with minor thin interbeds of dark grey shaly dolomite and dolarenite. The pyrite is fine grained. CBA 80° - 85°
64.4	64.7	0.3	0.3	Massive poorly sorted dolarenite. Fragments are sub-rounded to rounded. At 64.6 much coarser. CBA 85°
64.7	69.8	5.1	5.1	Massive light grey dololutite with some interbeds of dolarenite and thin laminations of shaly dolomite. At 66.5 thin laminations of .03 m dark grey shaly dolomitic grading to .1 m light grey.

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GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 3

MINE/PROSPECT: McARTHUR | NAME: MYRTLE 3 DD | LEVEL: SURFACE

from	to	length	m/kg	DESCRIPTION
				dolarenite. 0.2 metres of dolarenite at 66.3. CBA 85°
69.8	72.3	2.5	2.5	Massive light grey dolarenite with some interbeds of dololutite, at 69.1 in a thin lamination of light grey dololutite. Dolarenite is poorly sorted fragments of dolomite. It has a carbonacous matrix. Again at 71.1 and 71.7, 0.2 metres of light grey dololutite. CBA 80° - 85°
72.3	77.2	4.9	4.9	Massive medium to coarse grained dolarenite with some laminations of dark grey shaly dolomite and light grey dololutite. Some pods and various shapes of dark grey shaly dolomite associated with dolarenite in some portion of the core. At 74.7, 75.8 and 76.3 thin interbeds of light grey dololutite. At 76.3 and 77 very fine traces of pyrite along fractures. CBA 70° - 85°
77.2	79.7	2.5	2.5	Graded bedding in dolarenite with some interbeds of light grey dololutite; massive with minor fractures. Various shapes of dark grey shaly dolomite in some portions. At 78.5 fragments are composed of weathered limestone (?) and dolomite. Generally they are cemented by calaceous material.
79.7	80.4	0.7	0.7	Light grey dololutite with thin lamination of dark grey shaly dolomite. Starting at 79.9 fine grained pyrite in almost all fractures. CBA 90°
80.4	82.7	2.3	2.3	Poorly sorted intermixture of dolarenite and dololutite as though there was disturbance in sedimentation. Some thin lamination and various shapes of dark grey shaly dolomite in some portion. No sulphides noted. CBA 65°
82.7	85.1	2.4	2.4	Massive medium to coarse grained ddarenite with some thin lamination and fragments of light grey dololutite. At 83.1 and 83.6 thin lamination of 0.1 metre light grey dololutite. At 84.7 0.1 metre dark grey shaly dolomite. CBA 85°
85.1	86.2	1.1	1.1	Poorly sorted medium to coarse grained dolarenite. Looks as though there is disturbance in sedimentation. Matrix cemented by calaseous material. No sulphides noted. CBA 85°
86.2	92.9	6.7	6.7	Massive light grey dololutite with some very thin lamination of dark grey shaly dolomite. Abundant fine grained pyrite mostly confined in dark grey shaly dolomite. Fracturing occurs mostly in the bedding of dark grey shaly dolomite. CBA 80°

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 4

MINE/PROSPECT: McARTHUR | NAME: MYRTLE 3 DD | LEVEL: SURFACE

from	to	length	m/kg	DESCRIPTION
92.9	98.4	5.5	5.5	Massive dark grey shaly dolomite with some thin lamination of light grey dololutite and dolarenite fine grained pyrite mostly along fractures. At 94.7 and 96.6 are thin laminations of dolarenite. At 94.8 it looks as though there was slumping disturbance for 0.2 m. Thin, at 97.3 m, calcite veins with some chalcopyrite (?) and pyrite. CBA 80°
98.4	101.3	2.9	2.9	Massive dololutite with laminations of dark grey shaly dolomite and dolarenite. At 99.4 and 100.7 0.2 m slumping (?) in sedimentation. Thickness of some dololutite and shaly dolomite lamination varies from 1 mm to 2 cm. Fine grained pyrite confined along fractures. CBA 80°
101.3	103.7	2.4	2.3	Massive dolarenite with some interlayered dark grey shaly dolomite and laminated light grey dololutite. Between 101.3 and 102.3 0.6 m laminated shaly dolomite and dololutite is in between dolarenite. At 101.5 pyrite along dark grey laminae. Pyrite is generally minor fine grained and confined in the black layer. At bed of dolarenite starts at 103.4. CBA 45° - 85°
103.7	108.8	5.1	5.1	Massive black shaly dolomite with thin interlayering of dolarenite and light grey dololutite. Pyrite is generally fine grained and confined in the black stuff. Weakly fractured at 105.1 and 108.7. Much interlayering of black stuff, dolarenite and dololutite between 104.5 to 104.7 and 108.6 to 108.8. CBA 85°
108.8	115.9	7.1	7.1	Massive dolarenite with minor interlayering of black shaly dolomite. At 108.9 and 110 is thin interlayering of the black stuff and dolarenite. Graded bedding at 108.7. Calcarious spheroids at bottom of 108.9. At 110.2 sedimentary breccia (?). Dolarenite is unsorted consisting of sub-angular to sub-rounded fragments of dolomite, quartz and black impurities. It is cemented by calcarious material. Lath and pod shape shaly dolomite is noted in some portion of the core. Pyritization very weak in black stuff and nil in dolarenite.
115.9	123.9	8.0	8.0	Massive light grey dololutite with some thin interlayering of black shaly dolomite. Weak fine-grained pyrite mostly in the black stuff and fractures. Weak fracturing at 118.9, 120.9 and 121.4. At 116.3 and 117.5. CBA is 70°. Bedding is generally 80°. CBA 70° - 80°

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 5

MINE/PROSPECT: McARTHUR | NAME: MYRTLE 3 DD | LEVEL: SURFACE

from	to	length	m/kg	DESCRIPTION
123.9	124.7	0.8	0.8	Massive light grey dololutite with some thin interlayering of black shaly dolomite. CBA is much higher. Slumping (?) at 124. CBA 85° - 90°
124.7	127.4	2.7	2.6	Light grey dololutite with some interlayered fine grained dolarenite. Slumping at 125, 125.2 and 125.4. Pyrite is very fine grained and in the form of blebs. At 127.2 much banding of light grey and dark grey dololutite. CBA 85° - 90°
127.4	132.1	4.7	4.7	Massive dark grey dololutite with minor banding of light grey dololutite. Stylolite at 127.9, CBA from 127.4 - 127.9 is 90° then at 128.4 CBA is 80°. Slumping at 130.7. Fine grained pyrite occurs as blebs in fractures. CBA 80° - 90°
132.1	133.2	1.1	1.1	Massive grey dololutite with abundant light grey bands. Slumping at 132.4. Very weak in pyrite. CBA 75° - 80°
133.2	137.0	3.8	3.8	Massive dark grey dololutite with some minor light grey bands. Weak fracture at 133.5. Minor fine grained pyrite in some fractures. CBA 80° - 85°
137.0	141.5	4.5	4.5	Same as above. At 140.4 banding of light grey dololutite very intense; At 137.9 light grey dololutite grading to dark shaly dolomite for 0.5 m. Weakly pyritized in some fractures and light grey dololutite bands. CBA 85° - 90°
141.5	142.2	0.7	0.7	Ditto. Slumping of light grey bands at 141.8, 141.9 and 142.2. Specks of pyrite occur only from 142 to 142.2. CBA 85° - 90°
142.2	143.7	1.5	1.4	Ditto. Sphalerite Zn (?) at 142.4 along banding. Blebs of fine grained pyrite along fractures. CBA 85° - 90°.
143.7	145.8	2.1	2.1	Massive dark grey dololutite with much light grey bands. Fine grained pyrite up to 145.3 only. CBA 85° - 90°
145.8	148.4	2.6	2.4	Ditto. Fine grained pyrite seen only at 147.9. Generally nil to very weak pyrite content. CBA 85° - 90°
148.4	157.4	9.0	9.0	Massive dark grey dololutite with less interlayering of light grey bands. Fine grained pyrite along fractures especially at 150.2, 150.7, 155, 156 and 157.4. Pyrite band at 154.4. CBA 85°

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 6

MINE/PROSPECT: McARTHUR | NAME: MYRTLE 3 DD | LEVEL: SURFACE

from	to	length	m/kg	DESCRIPTION
157.4	160.6	3.2	3.2	Massive light grey dololutite with grey banding and tuff (?). Fine grained pyrite in dark grey bands and along fractures. At 158.7 is interlayered tuff (?) for about 0.1 metre. CBA 85°-90°
160.6	163.7	3.1	3.1	Massive light grey dololutite with thin grey lamination. Weak fracture at 160.7. Fine grained pyrite confined in fractures and dark grey dololutite. CBA 85°-90°
163.7	170.9	7.2	7.2	Ditto, but slightly darker. Fracture at 145.1 with 2 cm calcite vein. Specks of pyrite associated with it. Pyrite band at 170. At 168.2 7 cm tuff (?) band. Weak fracture at 170.3. CBA 85° - 90°
170.9	171.9	1.0	1.0	Massive light grey dololutite with some lamination of tuff (?) and dolomite. At 171.3 a 1 mm band of pyrite. At 171.4 to 171.9 are interlayering of light grey dololutite, tuff and dolomite. CBA 85° - 90°
171.9	176.1	4.2	4.1	Massive dark grey dololutite with minor light grey bands. Weak fractures at 172.9, 174. Pyrite band at 172.6. Fine grained pyrite confined along some fracture. At 173.5 pyrite with some galena. CBA 90°.
176.1	177	0.9	0.9	Massive dark grey dololutite with intense light grey bands. At 176.5 stylolites parallel to bedding. Only pyrite along fracture at 176.8. CBA 85° - 90°
177	178	1.0	1.0	Massive white tuff or leached dolomite. Graded bedding. Pyrite in some fractures. Slumping at 177.4. CBA 90°
178	179.1	1.1	1.1	Massive dark grey dololutite with minor light grey bands. 1 mm pyrite band at 178.8. Some pyrite confined in fractures. Weak fracture at 178.4. CBA 90°
179.1	179.3	0.2	0.2	Massive interlayering of dark grey dololutite and tuff (?). Calcite vein in fracture. CBA 85°-90°
179.3	188.2	8.9	8.9	Massive dark grey dololutite with minor light grey bands. Weak fracture at 179.4, 187.4 and 188. Fine grained pyrite in some fractures. At 185 are specks of chalcopyrite.

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 7

MINE/PROSPECT: McARTHUR | NAME: MYRTLE 3 DD | LEVEL: SURFACE

from	to	length	m/kg	DESCRIPTION
188.2	190.1	1.9	1.9	Massive dark grey dololutite with minor light grey bands. Speck of pyrite at 189.4. Weak to nil pyrite content. CBA 85° - 90°
190.1	197.4	7.3	7.2	Dark grey dololutite with intense light grey bands. Minor fault at 191 and 196.8. Weak fracture at 191.3, 194.2, 195.4 and 196.5. Calcite veinlet with speck of chalcopyrite at 190.9. Fine grained pyrite confined in some fractures especially in dark grey bands. Some bands are like tuff, e.g. 190.9, 191.5 and 195.2 CBA 85° - 90°
197.4	204.2	6.8	6.8	Massive interlayering of dark grey and light grey dololutite. Fine grained pyrite confined along fractures and in some bedding. Specks of chalcopyrite between 197.4 to 197.7. At 198.9 to 199 and 202.4 are white bands leached dolomite (?). Slumping at 202.4. CBA 85° - 90°
204.2	206.5	2.3	2.1	Moderately fractured dark grey dololutite with minor light grey bands. Specks of pyrite at 206.3. At 204.2 calcite veinlet has some pyrite and chalcopyrite. Stylolites in some portion. CBA 85°
206.5	215.8	9.3	9.3	Massive dark grey dololutite with thin light grey banding. Minor fault at 210.3. Weak fractures at 211.6 and 212.9. Fine grained pyrite confined in some fractures and bedding. CBA 85°
215.8	219.7	3.9	3.9	Ditto, but CBA in lower. Fine grained pyrite confined in some fractures and bedding. Some of the pyrite is tarnished so that it looks like chalcopyrite. CBA 70° - 75°
219.7	220.2	0.5	0.5	Massive grey dolomite with fine grained pyrite confined in fractures
220.2	224.7	4.5	4.5	Dark grey dololutite; light grey bands not too distinct. Weak fractures at 222.8 and 223.4. Fine grained pyrite confined in some bedding and fractures. Bleb of pyrite at 224.3.
224.7	227.7	3.0	3.0	Ditto, but slightly coarser grains. Weak fracture at 225. CBA is 65°. Slumping at 225.4. Fine grained pyrite confined along bedding. At 226.2 pyrite occurs in small patches. CBA 90°

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GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 8

MINE/PROSPECT: McARTHUR | NAME: MYRTLE 3 DD | LEVEL: SURFACE

from	to	length	m/kg	DESCRIPTION
227.7	231.8	4.1	4.1	Massive fine grained dark grey dololutite. Fine grained confined generally in bedding but some occur as small blebs like at 230.5. Pyritization is very abundant at this depth. CBA 80°
231.8	232.9	1.1	1.1	Massive grey dolomite slightly coarser grain. Slumping at 231.8; fine grained pyrite congined along bedding. Some pyrite occurs as small blebs and does not follow bedding. CBA 85° - 90°
232.9	234.0	1.1	1.1	Distinct change in lithology. Light grey dolomite. Pyrite confined along microfracture. Slumping at 233. Calcite crystals at 233.7 CBA 60°
234	240.3	6.3	6.3	Moderately fractured light grey dolomite. Fracturing may be due to solution brecciation or diagenesis. Calcite crystals in some portions. At 238.9 and 239.4 breccia fragments caused by tectonics(?). At 240 is a siliceous band. Blebs of pyrite confined to bedding. Some pyrite confined along microfractures. CBA 80°
240.3	241.8	1.5	1.5	Brecciated light grey dolomite due to tectonic (?). Blebs of pyrite at 240.4 and 240.8 CBA 55°
241.8	245.0	3.2	3.2	Moderately fractured light grey dolomite. At 241.8 and 244.6 dolomite is highly brecciated. Blebs of pyrite and calcite crystals in some portions. CBA 60° - 65°
245	252.1	7.1	7.1	Intensely fractured light grey dolomite. Siliceous veinlet at 245.6. At 246.1 and 248.8 are green, waxy mineral, probably talc (?). Blebs of pyrite becoming scarce. Specks of pyrite confined mainly in fractures. At 248.8 minor fault with breccia fragments. Fragments are composed of some dolomitic stuff cemented by recrystallized arenaceous dolomitic material. At 251.4 it is moderately fractured. Black organic material confined in fractures. CBA 65°
252.1	256.7	4.6	4.6	Intensely fractured light grey dolomite with calcite infilling and green waxy mineral (talc ?); blebs of fine grained pyrite at 254.2 and 255.5. Specks of pyrite and bornite at 256.4. Generally sulphides is nil. CBA 30°

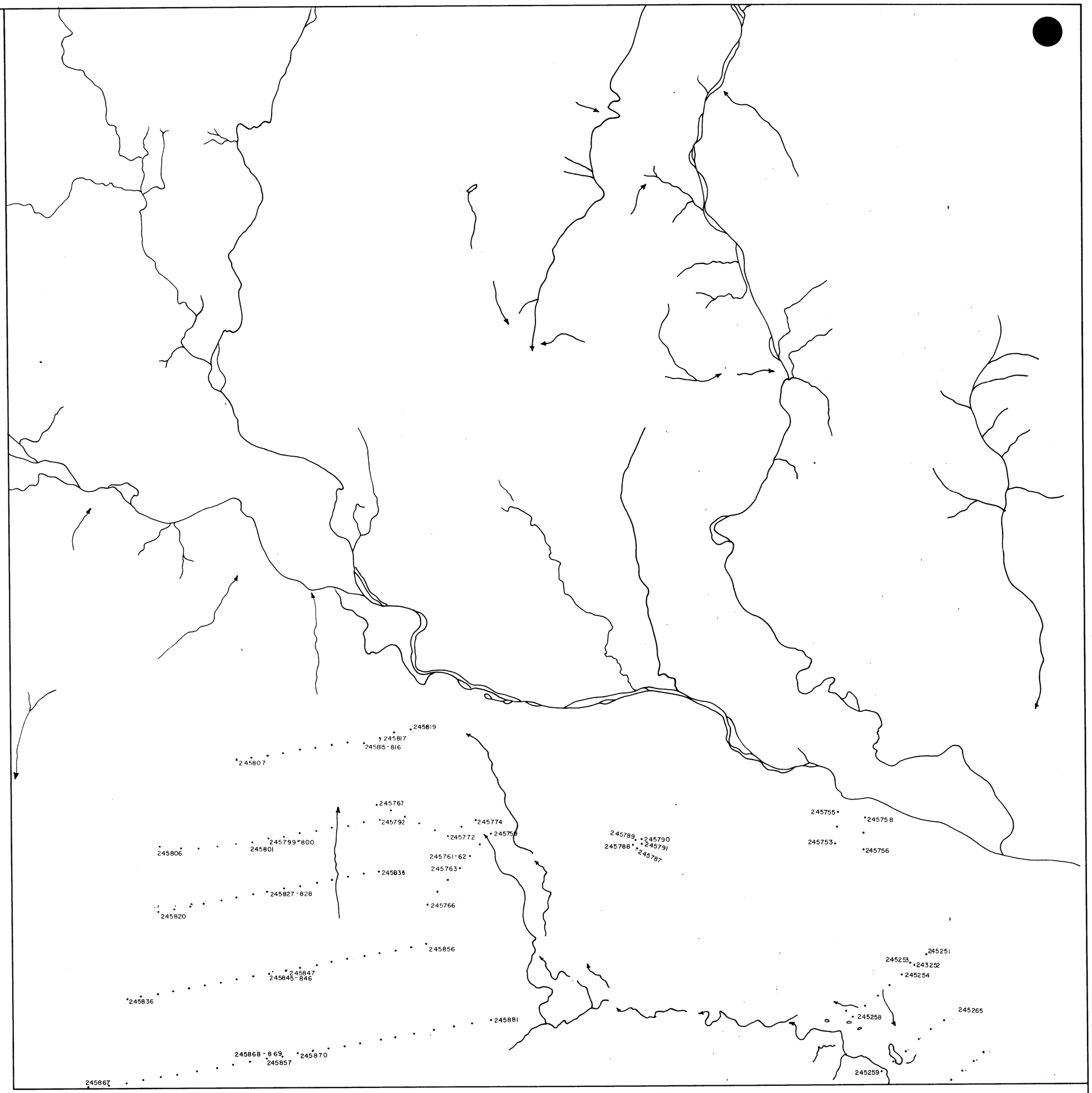
CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL LOG

MINE CODE | MS CODE | PAGE 9

MINE/PROSPECT: McARTHUR | NAME: MYRTLE 3 DD | LEVEL: SURFACE

from	to	length	m/kg	DESCRIPTION
256.7	258.4	1.7	1.6	Moderately fractured light grey laminated dolomite. At 258 calcite fillings in fracture. Bleb of pyrite at 258.6. Pyrite is generally nil. Talc (?) at 258. CBA 85°
258.4	264.4	6.0	6.0	Intensely fractured light grey dolomite with calcite infilling. Talc in some fractures. Bleb of pyrite at 258.8. Sulphides generally very weak to nil. CBA 70° - 75°
264.4	271.2	6.8	6.8	Brecciated light grey dolomite with minor calcite infillings. At 265.7 laminated dolomite. A fault at 266.8. Breccia fragments much coarser on top of hole and gradually decreases to bottom. Green waxy mineral (talc ?) in some fractures. Very minor specks of pyrite.
271.2	273.4	2.2	2.2	Weakly fractured light grey dolomite, slightly massive, moderately fractured at 272.8 up to the end of hole. Stylolites in some portions. CBA 90°
				END OF HOLE



KEY TO ADJOINING SHEETS

	HOT SPRINGS	LOOKING GLASS
	BARNEY	BUFFALO LAGOON
	LEILA	ROCKY YARD

TRUE
MAG

1600 0 1600 3200 4800 5600 FEET
320 0 320 640 960 1280 1600 1920 METRES

REVISION		CARPENTARIA EXPLORATION COMPANY PTY LTD		
		Mc ARTHUR SERIES		
		BARNEY SHEET		
		GEOCHEMICAL STREAM SEDIMENT SAMPLING		
		LOCATIONS		
		SCALE: 1" = 1600'	GEOL.: I.V.B.	DATE: January 1973
		CHECKED:	DRAWN: R.C.T./R.C.	DRG. No 6789

KEY TO ADJOINING SHEETS

	HOT SPRINGS	LOOKING GLASS
	BARNEY	BUFFALO LAGOON
	LEILA	ROCKY YARD

TRUE MAG

1600 0 1600 3200 4800 5600 FEET
320 640 960 1280 1600 1920 METRES

REVISION	ARRENTARIA EXPLORATION COMPANY PTY LTD
	Mc ARTHUR SERIES
	BARNEY SHEET
	GEOCHEMICAL STREAM SEDIMENT SAMPLING
	ZINC
	SCALE 1:50000 | PLATE 28 | DATE July 1972
9-11-1972 G.L.E.	DRAWN R.C. | DWG. No. 6790

KEY TO ADJOINING SHEETS

	HOT SPRINGS	LOOKING GLASS
	BARNEY	BUFFALO LAGOON
	LEILA	ROCKY YARD

TRUE
MAG

1600 0 1600 3200 4800 5600 FEET
320 0 320 640 960 1280 1600 1920 METRES

REVISION	CARPENTARIA EXPLORATION COMPANY PTY LTD		
	Mc ARTHUR SERIES		
	BARNEY SHEET GEOCHEMICAL STREAM SEDIMENT SAMPLING COPPER		
	SCALE 1" = 1600	PLATE 1/8	DATE July 1972
9-11-1972 G.L.E.	CHECKED	DRAWN R.C.	No. 6797

KEY TO ADJOINING SHEETS

	HOT SPRINGS	LOOKING GLASS
	BARNEY	BUFFALO LAGOON
	LEILA	ROCKY YARD

TRUE MAG

1600 0 1600 3200 4800 6400 METRES

1/2 0 1/2 1 2 3 4 5 MILES

REVISION	CARPENTARIA EXPLORATION COMPANY PTY LTD		
	Mc ARTHUR SERIES		
	BARNEY SHEET		
	GEOCHEMICAL STREAM SEDIMENT SAMPLING		
	LEAD		
	SCALE 1"=1600	PLOTTED IVB	DATE July 1972
9-11-1972 G.L.E.	CHECKED	DRAWN R.C.	No. 6798

LEGEND

- LOWER CRETACEOUS — KL
- LOWER CAMBRIAN ? BUKALARA SANDSTONE — €Lb

PROTEROZOIC.?

McARTHUR GROUP

ROPER GROUP
- BESSIE CREEK SANDSTONE — Pre
- CORCORAN FORMATION — Prc
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Pr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pri

AMELIA DOLOMITE

BATTEN SUB GROUP
- KARNS DOLOMITE — Pmk
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

BARNEY CK MEMBER
- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc
- H.Y.C. PYRITIC SHALE — Py
- BASAL TUFF BEDS — Bt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — Mi
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Pm
- WOLLOGORANG FORMATION — Pro

- GRANITIC INTRUSIONS — Ps
- SILICIFICATION
- CHERT

REFERENCE

GEOLOGICAL BOUNDARIES.
- ESTABLISHED BOUNDARY — POSITION ACCURATE
- " " — POSITION APPROXIMATE
- INFERRED, PROBABLE BOUNDARY CONCEALED.
- OUTCROP BOUNDARY.
- SUB-OUTCROP BOUNDARY.

BEDDING
- STRIKE AND DIP OF STRATA — 25
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

JOINTS

STRIKE AND DIP OF JOINTS
- INCLINED — 25
- VERTICAL
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED " — ?..?..

- LEAD MINERALISATION — Pb.
- ZINC " — Zn.
- COPPER " — Cu.
- MINE OR PROSPECT
- DIAMOND DRILL HOLE. VERTICAL
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

LEILA	ROCKY YARD	MITCHELL YARD
	KILGOUR	MYRTLE

INDEX TO ADJOINING SHEETS.

TRUE NORTH
MAG NORTH

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

APPROX SCALE.
1600' 0' 1600' 3200' 4800' 6400' 8000'

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF KILGOUR

(McArthur River Series)

5

	GEOL.: A.D.M./J.J.	DATE: MAR. 1967
CHECKED:	DRAWN: D.E.K.	2612

LEGEND

- LOWER CRETACEOUS — KL
- LOWER CAMBRIAN ? BUKALARA SANDSTONE — CLb

PROTEROZOIC ?

McARTHUR GROUP

ROPER GROUP
- BESSIE CREEK SANDSTONE — Pre
- CORCORAN FORMATION — Pro
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Pr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pr

AMELIA DOLOMITE

BARNEY CK MEMBER
- KARNS DOLOMITE — Pmk
- BILLENGARRAH FORMATION — Pmb
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy

BATTEN SUB GROUP
- LOOKING GLASS FORMATION — Pmg
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LLOWER LYNOTT FORMATION — LL
- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc
- H.Y.C. PYRITIC SHALE — Py
- BASAL TUFF BEDS — Bt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — Mi
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Mn
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pmi

TAWALLAH GROUP
- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pto

- GRANITIC INTRUSIONS — Ps
- SILICIFICATION — CHERT

REFERENCE

GEOLOGICAL BOUNDARIES
- ESTABLISHED BOUNDARY — POSITION ACCURATE
- " " — POSITION APPROXIMATE
- INFERRED, PROBABLE BOUNDARY CONCEALED
- OUTCROP BOUNDARY
- SUB-OUTCROP BOUNDARY

BEDDING
- STRIKE AND DIP OF STRATA — 25
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

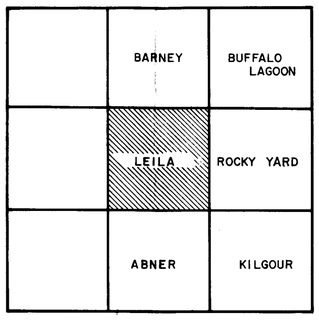
JOINTS

STRIKE AND DIP OF JOINTS
- INCLINED — 25
- VERTICAL
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED " "

- LEAD MINERALISATION — Pb
- ZINC " — Zn
- COPPER " — Cu
- MINE OR PROSPECT
- DIAMOND DRILL HOLE VERTICAL
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY



INDEX TO ADJOINING SHEETS.

APPROX SCALE.
1600' 0' 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF LEILA

(McArthur River Series)

SCALE: 1" = 1600'	GEOL: JASHAW	DATE: FEB. 1968
CHECKED:	DRAWN: D.K. / G.A.Y.	2615 A

LEGEND

LOWER CRETACEOUS — Kl

LOWER CAMBRIAN ? BUKALARA SANDSTONE — Cb

PROTEROZOIC ?

McARTHUR GROUP

ROPER GROUP
- BESSIE CREEK SANDSTONE — Pre
- CORCORAN FORMATION — Pcr
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Pcr
- MAINORU FORMATION — Pm
- L MMEN SANDSTONE — Pri

KARNS DOLOMITE — Pmk

BILLENGARRAH FORMATION — Pmb

STOTT FORMATION — Pms

SMYTHE SANDSTONE — Pmy

BATTEN SUB GROUP
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — Ll

AMELIA DOLOMITE
- REWARD DOLOMITE — Mr
- REWARD VOLCANICS — Mrv
- UPPER BRECCIAS — Mbr

BARNEY CK MEMBER
- SURPRISE CREEK DOLOMITE — Sc
- HYC PYRITIC SHALE — Hy
- BASAL TUFF BEDS — Mt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — M
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pto
- ROSIE CREEK SANDSTONE — Ptr
- SLY CREEK SANDSTONE — Ptl
- PETERS CREEK VOLCANICS — Ptp

GRANITIC INTRUSIONS — Ps

SILICIFICATION — CHERT

REFERENCE

GEOLOGICAL BOUNDARIES
- ESTABLISHED BOUNDARY — POSITION ACCURATE
- " " — POSITION APPROXIMATE
- INFERRED, PROBABLE BOUNDARY CONCEALED

OUTCROP BOUNDARY

SUB-OUTCROP BOUNDARY

BEDDING
- STRIKE AND DIP OF STRATA — 25
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

JOINTS

STRIKE AND DIP OF JOINTS
- INCLINED — 25
- VERTICAL
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED "

- LEAD MINERALISATION — Pb
- ZINC " — Zn
- COPPER " — Cu.
- MINE OR PROSPECT
- DIAMOND DRILL HOLE VERTICAL
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

KANGAROO WATERHOLE

Stott Creek

Tawallah Fault

Barney Creek

Hard. pink quartzite formation

Hard, pink quartzite bed

Pink quartzite

HOT SPRINGS

Yard

INDEX TO ADJOINING SHEETS

	HOT SPRINGS	LOOKING GLASS
	BARNEY	BUFFALO LAGOON

TRUE NORTH
MAG. NORTH

APPROX SCALE.
1600' 0' 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF

HOT SPRINGS

(McArthur River Series)

SCALE. 1"=1600'	GEOL. JASHAW	DATE JAN. 1968
CHECKED	DRAWN. G.A.Y.	2613

LEGEND

LOWER CRETACEOUS — Kl

LOWER CAMBRIAN ? BUKALARA SANDSTONE — €lb

PROTEROZOIC

ROPER GROUP
- BESSIE CREEK SANDSTONE — Prc
- CORCORAN FORMATION — Prco
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Prr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pri

McARTHUR GROUP

AMELIA DOLOMITE
- KARNS DOLOMITE — Pmk
- BILLENGARRAH FORMATION — Pmb
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy

BATTEN SUB GROUP
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmc
- DONNIGAN MEMBER — Pmcd
- UPPER LYNOTT FORMATION — Pmcu
- LOWER LYNOTT FORMATION — Pmcl

BARNEY CK MEMBER
- NEWARA DOLOMITE — Pmn
- NEWARA VOLCANICS — Pmv
- UPPER BRECCIAS — Pmcu
- SURPRISE CREEK DOLOMITE — Pmc
- BASAL PYRITIC SHALE — Pmc
- BASAL TUFF BEDS — Pmc
- LAMINATED DOLOMITE — Pmc
- MITCHELL YARD DOLOMITE — M
- MARA TRANSITIONAL SERIES — Ma
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pto

- GRANITIC INTRUSIONS — Pg
- SILICIFICATION — CHERT

REFERENCE

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- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

JOINTS

STRIKE AND DIP OF JOINTS
- INCLINED — 25
- VERTICAL
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED "

- LEAD MINERALISATION — Pb
- ZINC " — Zn
- COPPER " — Cu
- MINE OR PROSPECT
- DIAMOND DRILL HOLE VERTICAL
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

Barney Creek

Dolomite slump breccia

UL ? White sandstone

Quartz veins

To Leila Yard

Slump breccia

	HOT SPRINGS	LOOKING GLASS
	BARNEY	BUFFALO LAGOON
	LEILA	ROCKY YARD

INDEX TO ADJOINING SHEETS.

TRUE NORTH
MAG NORTH

APPROX SCALE.
1600' 0 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF BARNEY

(McArthur River Series) (8)

SCALE: 1":1600'	GEOL.: JASHAW	DATE: FEB. 1968
CHECKED:	DRAWN: G.A.Y.	2614

LEGEND

- LOWER CRETACEOUS — Kl
- LOWER CAMBRIAN ? BUKALARA SANDSTONE — Clb

PROTEROZOIC ?

McARTHUR GROUP

ROPER GROUP
- BESSIE CREEK SANDSTONE — Prs
- CORCORAN FORMATION — Pro
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Prr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pri

AMELIA DOLOMITE
- KARNS DOLOMITE — Pmk
- BILLENGARRAH FORMATION — Pmb
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy

BATTEN SUB GROUP
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

BARNEY CK MEMBER
- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc
- H.Y.C. PYRITIC SHALE — Py
- BASAL TUFF BEDS — Bt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — Mi
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pto
- ROSIE CREEK SANDSTONE — Ptr
- SLY CREEK SANDSTONE — Ptl
- PETERS CREEK VOLCANICS — Ptp

- GRANITIC INTRUSIONS — Ps
- SILICIFICATION — CHERT

REFERENCE

GEOLOGICAL BOUNDARIES

- ESTABLISHED BOUNDARY — POSITION ACCURATE
- " " — POSITION APPROXIMATE
- INFERRED, PROBABLE BOUNDARY CONCEALED
- OUTCROP BOUNDARY
- SUB-OUTCROP BOUNDARY

BEDDING

- STRIKE AND DIP OF STRATA — 25
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

JOINTS

STRIKE AND DIP OF JOINTS

- INCLINED — 25
- VERTICAL
- HORIZONTAL

FOLDS

- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS

- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED " — ?..?.

- LEAD MINERALISATION — Pb. o
- ZINC " — Zn. o
- COPPER " — Cu. o
- MINE OR PROSPECT
- DIAMOND DRILL HOLE VERTICAL
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

To Balbirini Homestead

McARTHUR RIVER (position approximate)

Leila Creek

MOUNT LYNOTT

McARTHUR RIVER

Bessie Creek

BESSIE SPRINGS (position approximate)

Bessie Creek (position approximate)

Graded Track

	LEILA	ROCKY YARD
	ABNER	KILGOUR

INDEX TO ADJOINING SHEETS.

TRUE NORTH
MAG. NORTH

APPROX SCALE.
1600' 0' 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF ABNER

(McArthur River Series)

SCALE: 1" : 1600'	GEOL.: JASHAW	DATE: Feb 1968
CHECKED:	DRAWN: L.E.	2615 b

LEGEND

- LOWER CRETACEOUS — KL
- LOWER CAMBRIAN ? BUKALARA SANDSTONE — CLb

ROPER GROUP
- BESSIE CREEK SANDSTONE — Pre
- CORCORAN FORMATION — Prc
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Prr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pr

BATTEN SUB GROUP
- KARNES DOLOMITE — Pmk
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmn
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

PROTEROZOIC ?

McARTHUR GROUP

AMELIA DOLOMITE

BARNEY CK MEMBER
- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc
- H.Y.C. PYRITIC SHALE — Py
- BASAL TUFF BEDS — Bt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — M
- MARA TRANSITIONAL SERIES — Ms
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Mr
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pto

- GRANITIC INTRUSIONS — Ps
- SILICIFICATION — CHERT

REFERENCE

GEOLOGICAL BOUNDARIES
- ESTABLISHED BOUNDARY — POSITION ACCURATE
- " — POSITION APPROXIMATE
- INFERRED, PROBABLE BOUNDARY CONCEALED
- OUTCROP BOUNDARY
- SUB-OUTCROP BOUNDARY

BEDDING
- STRIKE AND DIP OF STRATA
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA

JOINTS
- STRIKE AND DIP OF JOINTS
- INCLINED
- VERTICAL
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " APPROXIMATE
- " SYNCLINAL " ACCURATE
- " " " APPROXIMATE

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " APPROXIMATE
- INFERRED "

- LEAD MINERALISATION
- ZINC
- COPPER
- MINE OR PROSPECT.
- DIAMOND DRILL HOLE VERTICAL
- " " INCLINED
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

Buffalo Creek
Deep Creek No.1 Aband 30A'
Hot Spring Creek
Barney Creek
Buffalo Lagoon
Buffalo R.

HOT SPRINGS	LOOKING GLASS	DONNEGAN
BARNEY	BUFFALO LAGOON	REWARD
LEILA	ROCKY YARD	MITCHELL YARD

INDEX TO ADJOINING SHEETS

TRUE NORTH
MAG NORTH

APPROX SCALE.
1600' 0 1600' 3200' 4800' 6400' 8000'

BASE MAP IS COMPILED FROM UNCONTROLLED AIR PHOTO MOSIACS.
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF BUFFALO LAGOON

(McArthur River Series) 10

	GEOL. F.S./C.A./A.R./J.S.	DATE MAR. 1966
CHECKED	DRAWN JC/L.E.	2610

LEGEND

LOWER CRETACEOUS — Kl

LOWER CAMBRIAN ? BUKALARA SANDSTONE — CLb

ROPER GROUP
- BESSIE CREEK SANDSTONE — Prs
- CORCORAN FORMATION — Pro
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Pr
- MAINORU FORMATION — Prv
- LIMMEN SANDSTONE — Pri

BATTEN-SUB GROUP
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

McARTHUR GROUP

AMELIA DOLOMITE
- REWARD DOLOMITE — Pd
- REWARD VOLCANICS — Pdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc

BARNEY CK MEMBER
- H.Y.C. PYRITIC SHALE — Hy
- BASAL TUFF BEDS — Bt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — Mi
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Mo
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — Sl
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pto

PROTEROZOIC ?
- GRANITIC INTRUSIONS — Ps

SILICIFICATION — CHERT

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- " " — POSITION APPROXIMATE
- INFERRED, PROBABLE BOUNDARY CONCEALED.
- OUTCROP BOUNDARY.
- SUB-OUTCROP BOUNDARY.

BEDDING
- STRIKE AND DIP OF STRATA — 25
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

JOINTS

STRIKE AND DIP OF JOINTS
- INCLINED — 25
- VERTICAL
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE.
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE.

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED "

- LEAD MINERALISATION — Pb.
- ZINC " — Zn.
- COPPER " — Cu.
- MINE OR PROSPECT
- DIAMOND DRILL HOLE. VERTICAL.
- " " " INCLINED
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK.
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

Looking Glass Creek
Hot Spring Creek
Buffalo Creek
Deep Creek

HOT SPRINGS	LOOKING GLASS	DONNEGAN
BARNEY	BUFFALO LAGOON	REWARD

INDEX TO ADJOINING SHEETS.

TRUE NORTH
MAG. NORTH

APPROX SCALE.
1600' 0' 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF LOOKING GLASS

(McArthur River Series) 11

	GEOL.: J. J.	DATE: July 1966
CHECKED:	DRAWN: L.C.E	2609

LEGEND

LOWER CRETACEOUS — Kc

LOWER CAMBRIAN ? BUKALARA SANDSTONE — €Lb

ROPER GROUP
- BESSIE CREEK SANDSTONE — Prs
- CORCORAN FORMATION — Pro
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Prr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pri

McARTHUR GROUP

BATTEN SUB-GROUP
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

AMELIA DOLOMITE
- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc

BARNEY CK. MEMBER
- H.Y.C. PYRITIC SHALE — Py
- BASAL TUFF BEDS — Bt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — Mi
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pto

PROTEROZOIC ?
- GRANITIC INTRUSIONS — Ps
- SILICIFICATION
- CHERT

REFERENCE

GEOLOGICAL BOUNDARIES.
- ESTABLISHED BOUNDARY — POSITION ACCURATE
- " " — POSITION APPROXIMATE
- INFERRED, PROBABLE BOUNDARY CONCEALED.
- OUTCROP BOUNDARY.
- SUB-OUTCROP BOUNDARY.

BEDDING
- STRIKE AND DIP OF STRATA — 25
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

JOINTS
- STRIKE AND DIP OF JOINTS
- INCLINED — 25
- VERTICAL
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED " — ?

- LEAD MINERALISATION — Pb.
- ZINC " — Zn.
- COPPER " — Cu.
- MINE OR PROSPECT
- DIAMOND DRILL HOLE. VERTICAL.
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK.
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

Barney Creek

Barney Creek - 3 DD

BMR 200

Dolomite, tuff silt, fault breccia, 10 Cu (tr.)

ROCKY WATERHOLE

ROCKY YARD

To Cape Crawford

To H.Y.C.

Mc ARTHUR RIVER

BARNEY	BUFFALO LAGOON	REWARD
LEILA	ROCKY YARD	MITCHELL YD.
	KILGOUR	MYRTLE

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TRUE NORTH
MAG. NORTH

APPROX SCALE.
1600' 0 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF

ROCKY YARD

(McArthur River Series) 2

	GEOL. JAS / J.	DATE SEPT. 1966
CHECKED	DRAWN: D.E.K.	2611

LEGEND

PROTEROZOIC ?

LOWER CRETACEOUS — Kc

LOWER CAMBRIAN ? BUKALARA SANDSTONE — Clb

McARTHUR GROUP

ROPER GROUP

- BESSIE CREEK SANDSTONE — Prb
- CORCORAN FORMATION — Prc
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Pr
- MAINORU FORMATION — Prm
- [illegible]MMEN SANDSTONE — Pr

BATTEN SUB GROUP

- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pm
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmn
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

AMELIA DOLOMITE

BARNEY CK MEMBER

- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc
- HYC PYRITIC SHALE — Py
- BASAL TUFF BEDS — St
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — M
- MARA TRANSITIONAL SERIES — Mi
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — Sl
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pm

TAWALLAH GROUP

- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pto

GRANITIC INTRUSIONS — Pg

SILICIFICATION — CHERT

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- OUTCROP BOUNDARY
- SUB-OUTCROP BOUNDARY

BEDDING

- STRIKE AND DIP OF STRATA
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA

JOINTS

- STRIKE AND DIP OF JOINTS
- INCLINED
- VERTICAL
- HORIZONTAL

FOLDS

- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " APPROXIMATE
- " SYNCLINAL ACCURATE
- " " APPROXIMATE

FAULTS

- ESTABLISHED FAULT POSITION ACCURATE
- " " APPROXIMATE
- INFERRED

- LEAD MINERALISATION
- ZINC
- COPPER
- MINE OR PROSPECT
- DIAMOND DRILL HOLE VERTICAL
- " INCLINED
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

MYRTLE CREEK

MYRTLE 3 DD (1974)

ROCKY YARD	MITCHELL YARD	COXCO
KILGOUR	MYRTLE	AMELIA
		MASSACRE HILL

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TRUE NORTH
MAG. NORTH

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

APPROX SCALE.
1600 0 1600 3200 4800 6400 8000

CARPENTARIA EXPLORATION COMPANY PTY LTD.

GEOLOGICAL MAP OF

MYRTLE

(McArthur River Series) 13

	GEOL D.W. F.S	DATE OCT 1966
CHECKED	DRAWN D.K./L.E	2608

LEGEND

LOWER CRETACEOUS — Kl

LOWER CAMBRIAN ? BUKALARA SANDSTONE — €lb

PROTEROZOIC ?

McARTHUR GROUP

ROPER GROUP
- BESSIE CREEK SANDSTONE — Pre
- CORCORAN FORMATION — Pro
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Prr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pl

BATTEN SUB GROUP
- KARNES DOLOMITE — Pmk
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy
- LOOKING GLASS FORMATION — Pmo
- STRETTON SANDSTONE — Pm
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmng
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

AMELIA DOLOMITE
- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc

BARNEY CK MEMBER
- HYC PYRITIC SHALE — Hy
- BASAL TUFF BEDS — Bt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — M
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — My
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pmi

TAWALLAH GROUP
- MASTERTON FORMATION — Ptm
- WOLLOGORANG FORMATION — Pto

GRANITIC INTRUSIONS — Pg

SILICIFICATION — CHERT

REFERENCE

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- SUB-OUTCROP BOUNDARY

BEDDING
- STRIKE AND DIP OF STRATA — 25
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

JOINTS

STRIKE AND DIP OF JOINTS
- INCLINED — 25
- VERTICAL
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED " "

- LEAD MINERALISATION — Pb.
- ZINC " — Zn.
- COPPER " — Cu.
- MINE OR PROSPECT
- DIAMOND DRILL HOLE. VERTICAL.
- " " " INCLINED
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK.
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

Amelia Creek

Pre-Bukalara erosion surface

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MYRTLE	AMELIA	
	MASSACRE HILL	

TRUE NORTH
MAG. NORTH.

APPROX SCALE.
1600' 0' 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF

MASSACRE HILL

(McArthur River Series) /4

	GEOL. F. J.C.A./A.R.J./J.S.	DATE. DEC. 1966
CHECKED:	DRAWN: D.E.K.	2604

LEGEND

LOWER CRETACEOUS — Kl

LOWER CAMBRIAN ? BUKALARA SANDSTONE — Clb

ROPER GROUP
- BESSIE CREEK SANDSTONE — Pre
- CORCORAN FORMATION — Pro
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Prr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pri

BATTEN SUB GROUP
- KARNES DOLOMITE — Pmk
- STOTT FORMATION — Pms
- SMYTHE SANDSTONE — Pmy
- LOOKING GLASS FORMATION — Pml
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

McARTHUR GROUP

AMELIA DOLOMITE

BARNEY CK MEMBER
- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc
- H.Y.C. PYRITIC SHALE — Hy
- BASAL TUFF BEDS — Bt
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — Mi
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Pro

GRANITIC INTRUSIONS — Pg

SILICIFICATION — CHERT

PROTEROZOIC

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- OVERTURNED STRATA — 72

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STRIKE AND DIP OF JOINTS

- INCLINED — 25
- VERTICAL
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FOLDS

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- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS

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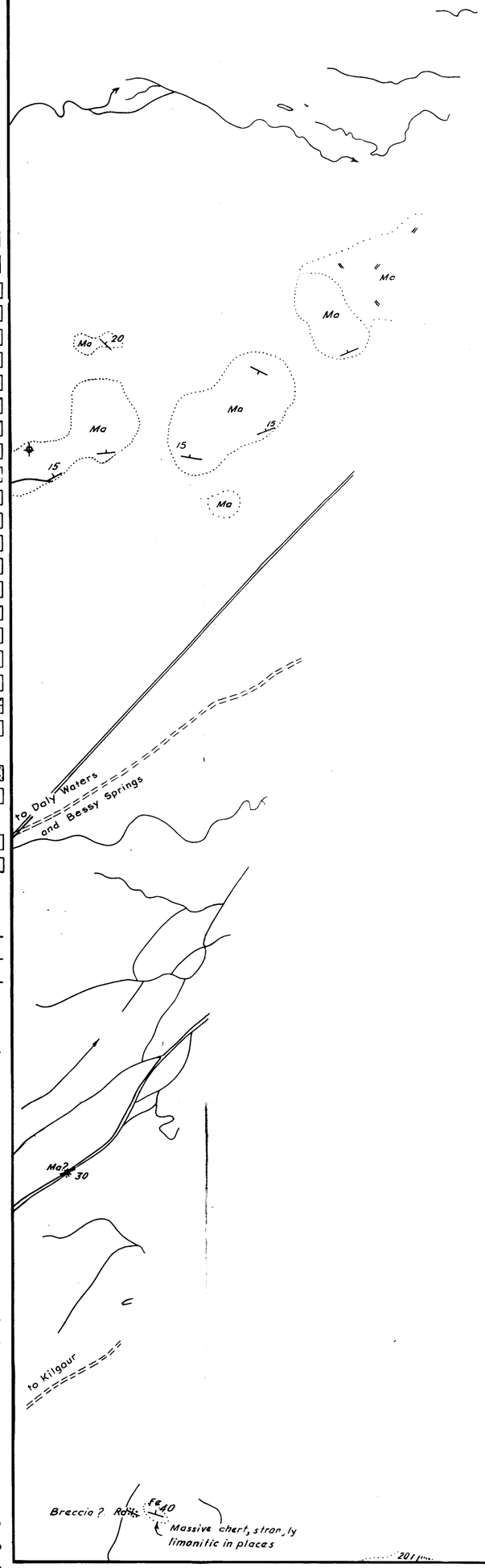
- " " " APPROXIMATE
- INFERRED "

- LEAD MINERALISATION — Pb. O
- ZINC " — Zn. O
- COPPER " — Cu. O
- MINE OR PROSPECT
- DIAMOND DRILL HOLE. VERTICAL
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY



BUFFALOO LAGOON	REWARD	H.Y.C.
ROCKY YARD	MITCHELL YARD	COXCO
KILGOUR	MYRTLE	AMELIA

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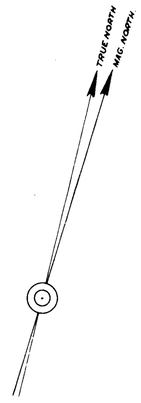

APPROX SCALE.

1600' 0' 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF MITCHELL YARD

(McArthur River Series) 15

	GEOL. A.M./J.S	DATE: NOV. 1966
CHECKED:	DRAWN: L.C.E./D.E.Y.	2607

LEGEND

LOWER CRETACEOUS — Kc

LOWER CAMBRIAN ? BUKALARA SANDSTONE — €Lb

PROTEROZOIC ?

McARTHUR GROUP

ROPER GROUP
- BESSIE CREEK SANDSTONE — Prc
- CORCORAN FORMATION — Prb
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Prr
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Prl

BATTEN SUB GROUP
- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- CONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

AMELIA DOLOMITE

BARNEY CK MEMBER
- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
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- SURPRISE CREEK DOLOMITE — Sc
- H.Y.C. PYRITIC SHALE — Py
- BASAL TUFF BEDS — St
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — M
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — Sl
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP
- MASTERTON FORMATION — Ptm
- WOLLOGORANG FORMATION — Pto

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SILICIFICATION — CHERT

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BEDDING
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JOINTS

STRIKE AND DIP OF JOINTS
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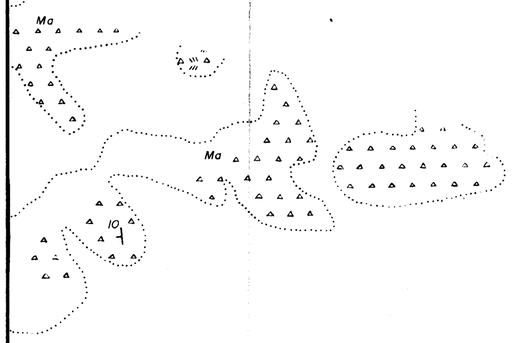
- HORIZONTAL

FOLDS
- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " " " APPROXIMATE
- " SYNCLINAL " " ACCURATE
- " " " " APPROXIMATE

FAULTS
- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED " "
- LEAD MINERALISATION — Pb
- ZINC " — Zn
- COPPER " — Cu
- MINE OR PROSPECT
- DIAMOND DRILL HOLE VERTICAL
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY



LOOKING GLASS	DONNEGAN	EMU
BUFFALOO LAGOON	REWARD	H.Y.C.
ROCKY YARD	MITCHELL YARD	COXCO

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TRUE NORTH
MAG NORTH

APPROX SCALE.
1600' 0 1600' 3200' 4800' 6400' 8000'

BASE MAP IS COMPILED FROM UNCONTROLLED AIR PHOTO MOSIACS.
GEOLOGY PLOTTED FROM FIELD DATA.

CARPENTARIA EXPLORATION COMPANY PTY LTD.

GEOLOGICAL MAP OF

REWARD

(McArthur River Series) 16

	GEOL. JASHAW	DATE MAY 1966
CHECKED	DRAWN: D.E.K.	2606

LEGEND

LOWER CRETACEOUS — Kl

LOWER CAMBRIAN ? BUKALARA SANDSTONE — €lb

PROTEROZOIC ?

ROPER GROUP

- BESSIE CREEK SANDSTONE — Pre
- CORCORAN FORMATION — Prc
- ABNER SANDSTONE — Pra
- CRAWFORD FORMATION — Pry
- MAINORU FORMATION — Pru
- LIMMEN SANDSTONE — Pr

McARTHUR GROUP

BATTEN SUB-GROUP

- STRETTON SANDSTONE — Pmr
- YALCO FORMATION — Pmj
- DONNEGAN MEMBER — Pmnd
- UPPER LYNOTT FORMATION — UL
- LOWER LYNOTT FORMATION — LL

AMELIA DOLOMITE

BARNEY CK. MEMBER

- REWARD DOLOMITE — Rd
- REWARD VOLCANICS — Rdv
- UPPER BRECCIAS — Ubr
- SURPRISE CREEK DOLOMITE — Sc
- H.Y.C. PYRITIC SHALE — Hy
- BASAL TUFF BEDS — St
- LAMINATED DOLOMITE — Ld
- MITCHELL YARD DOLOMITE — M
- MARA TRANSITIONAL SERIES — Ts
- MARA DOLOMITE — Ma
- BASAL MARA DOLOMITE BRECCIA — Mb
- MYRTLE SHALE — Ms
- SLAB TOP DOLOMITE — St
- CATTLE CREEK BEDS — Cc
- MALLAPUNYAH FORMATION — Pml

TAWALLAH GROUP

- MASTERTON FORMATION — Ptn
- WOLLOGORANG FORMATION — Ptw

GRANITIC INTRUSIONS — Ps

SILICIFICATION — CHERT

REFERENCE

GEOLOGICAL BOUNDARIES

- ESTABLISHED BOUNDARY — POSITION ACCURATE
- " — POSITION APPROXIMATE
- INFERRED, PROBABLE BOUNDARY CONCEALED
- OUTCROP BOUNDARY
- SUB-OUTCROP BOUNDARY

BEDDING

- STRIKE AND DIP OF STRATA — 25
- VERTICAL STRATA
- HORIZONTAL STRATA
- OVERTURNED STRATA — 72

JOINTS

STRIKE AND DIP OF JOINTS

- INCLINED
- VERTICAL
- HORIZONTAL

FOLDS

- ESTABLISHED ANTICLINAL AXIS POSITION ACCURATE
- " " APPROXIMATE
- " SYNCLINAL ACCURATE
- " " APPROXIMATE

FAULTS

- ESTABLISHED FAULT POSITION ACCURATE
- " " " APPROXIMATE
- INFERRED " ? ? ?

- LEAD MINERALISATION — Pb
- ZINC " — Zn
- COPPER " — Cu
- MINE OR PROSPECT
- DIAMOND DRILL HOLE VERTICAL
- " " " INCLINED — 60°
- TRIG STATION
- MAIN ROAD
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY

Carambirini Creek

To Borroloola

Corcoran Creek

Starvation Hill

2162

2171

2172

2173

DONNEGAN	EMU	
REWARD	H.Y.C.	

INDEX TO ADJOINING SHEETS

TRUE NORTH

MAG NORTH

APPROX SCALE.

1600 0 1600 3200 4800 6400 8000

BASE MAP IS COMPILED FROM UNCONTROLLED AIR PHOTO MOSIACS. GEOLOGY PLOTTED FROM FIELD DATA.

CARPENTARIA EXPLORATION COMPANY PTY LTD.

GEOLOGICAL MAP OF

EMU

(McArthur River Series) 17

	GEOL JASHAW	DATE MAY 1966
CHECKED	DRAWN D.E.K.	2600

LEGEND

Unit	Symbol
LOWER CRETACEOUS	
LOWER CAMBRIAN ? BUKALARA SANDSTONE	

ROPER GROUP

Unit	Symbol
BESSIE CREEK SANDSTONE	Pre
CORCORAN FORMATION	
ABNER SANDSTONE	
CRAWFORD FORMATION	
MAINORU FORMATION	

PROTEROZOIC — McARTHUR GROUP

Unit	Symbol
STOTT FORMATION	Pms
SMYTHE SANDSTONE	Pmy
LOOKING GLASS FORMATION	Pmo

BATTEN SUB GROUP

Unit	Symbol
BRITTON SANDSTONE	
FALCO FORMATION	Pm
DONNEGAN MEMBER	Pmnd
UPPER LYNOTT FORMATION	
LOWER LYNOTT FORMATION	
REWARD DOLOMITE	
REWARD VOLCANICS	Rdv
UPPER BRECCIAS	Ubr
SURPRISE CREEK DOLOMITE	

AMELIA DOLOMITE — BARNEY CK MEMBER

Unit	Symbol
HYC PYRITIC SHALE	
BASAL TUFF BEDS	
LAMINATED DOLOMITE	
MITCHELL YARD DOLOMITE	M
MARA TRANSITIONAL SERIES	
MARA DOLOMITE	Md
BASAL MARA DOLOMITE BRECCIA	Mb
MYRTLE SHALE	Ms
SLAB TOP DOLOMITE	St
CATTLE CREEK BEDS	Cc
MALLAPUNYAH FORMATION	Pml

TAWALLAH GROUP

Unit	Symbol
MASTERTON FORMATION	Ptn
WOLLOGORANG FORMATION	Pto
GRANITIC INTRUSIONS	Ps
SILICIFICATION / CHERT	

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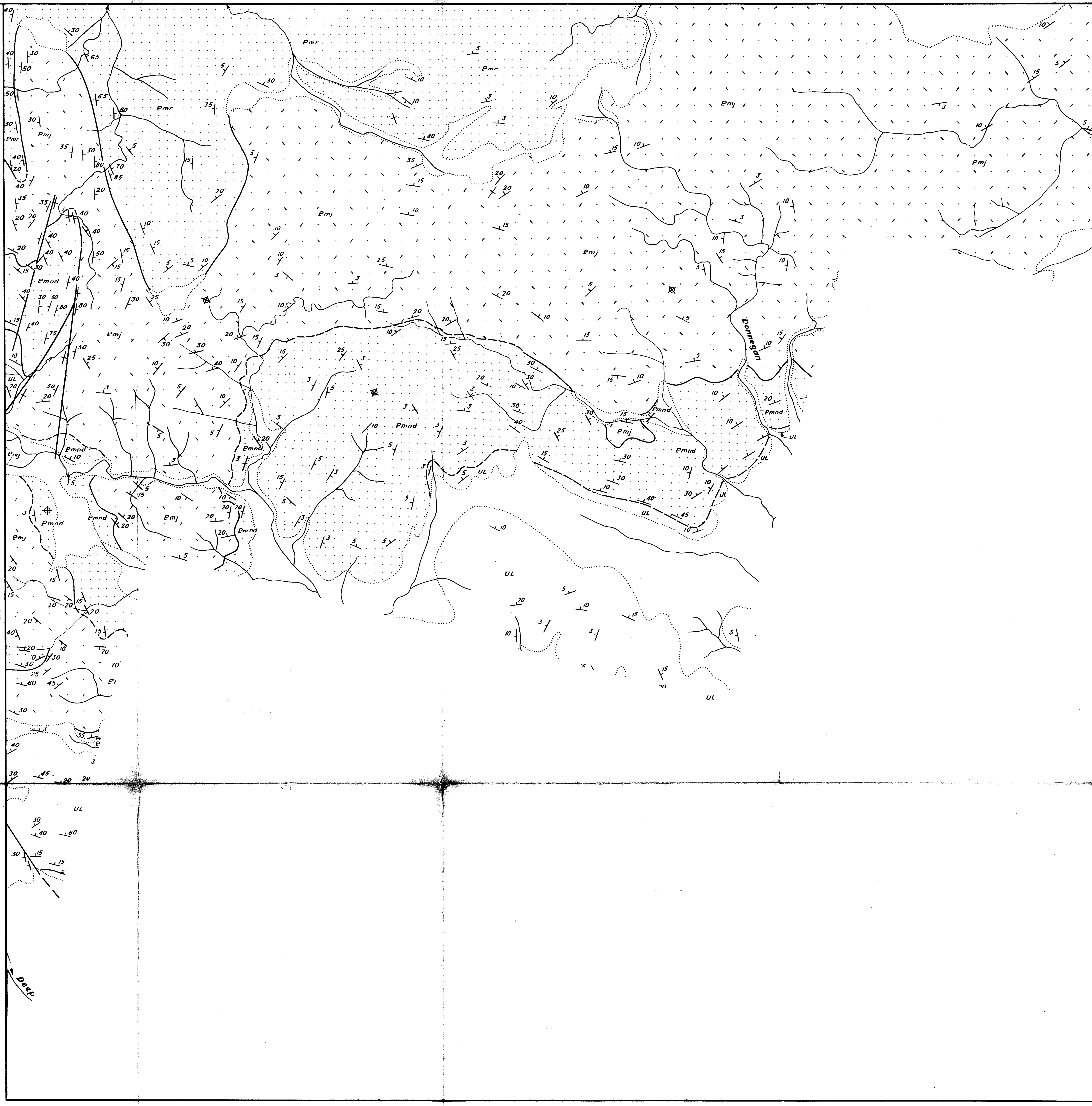
- VEHICLE TRACK
- LEASE BOUNDARY
- FENCE
- SHAFT
- COSTEAN
- PIT
- RIVER
- STREAM OR GULLY



LOOKING GLASS	DONNEGAN	EMU
BUFFALOO LAGOON	REWARD	H.Y.C.

INDEX TO ADJOINING SHEETS.

TRUE NORTH
MAG NORTH

APPROX SCALE.
1600' 0' 1600' 3200' 4800' 6400' 8000'

BASE MAP COMPILED FROM UNCONTROLLED AERIAL PHOTO MOSAICS
GEOLOGY FROM FIELD DATA

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

GEOLOGICAL MAP OF

DONNEGAN

(McArthur River Series) 18

	GEOL. J.J	DATE JULY 1966
CHECKED	DRAWN D.E.K.	2605