

LAKES OIL NL BUNGA CREEK-1
CUTTINGS AND GAS LOG

Depth metres	Drill Rate min/m	Gas Units	Description	Comments
0-10	8.5	N/O	60% SAND: lt brn gy, consisting of poorly sorted f-cg, occ vcg subrounded to rounded clear, milky and Fe stained qtz grns. 40% CLAY: gy-brn, ,soft, dispersive. Common Tr. black liths. No fluorescence.	Gas detector not operational until surface casing set.
20	7.0	N/O	SAND: a/a Common Tr liths a/a. Rare Tr yellow mineral fluorescence.	
30	12.0	N/O	70% SAND: a/a Common Tr liths a/a 30% SANDSTONE: lt-md brn vf-fg qtz and common coral/shell frags, calc. Dull yell. min fluor. No cut	Several hard bands due to calc. cementation Top Tambo R. Fm ~28 m.
40	11.0	N/O	50% SAND: poorly sorted a/a, some subang. Common Fe staining. 50% LIMESTONE & MARL: Lst is lt gy-cream. Unconsolidated, cons. of coarse to very coarse coral and shell frags. incl bryozoa, gasteropods, lamellibranchs, echinoid spines. Fragments show evidence of rounding. Dull yell. min fluor. No cut Comm. Tr calc. sst. a/a	
50	3.0	N/O	30% MARL: gy, soft, calc. silty grading to calc. sltst.,sl. carb. 30% SAND: a/a 40% LIMESTONE & MARL: a/a. Tr mica. Dull yell. min fluor. No cut	
60	2.0	N/O	50% MARL: a/a grding to calc. sltst. 50% LIMESTONE & MARL: a/a. Dull yell. min fluor. No cut	Surface casing Point. End 9.7/8" hole @ 59.4 m. Top Gippsland Lstone est. 55 m

63	2.0	0	80% LIMESTONE & MARL: a/a 10% SSTONE: lt[md gy, vf-fg, calc, sl carb. sl. mic.firm 10% SLTST.:md gy, firm, non calc.	Gas detector operational
66	2.0	0	90% LIMESTONE & MARL: a/a 5% SSTONE: a/a 5% SLTST: a/a	
69	2.0	0	70% LIMESTONE & MARL: a/a 20% SSTONE: a/a msotly non calc. 10% SLTST: a/a Coom tr carb flecks.	
72	2.0	0	90% LIMESTONE & MARL: a/a 10% SSTONE: a/a	
75	2.0	0	90% LIMESTONE & MARL: a/a 10% SSTONE: a/a	
78	2.0	0	90% LIMESTONE & MARL: a/a 10% SSTONE: a/a	
81	2.0	0	90% LIMESTONE & MARL: a/a 10% SSTONE: a/a	
84	1.0	0	70% LIMESTONE & MARL: a/a 30% SANDSTONE: pred lt gy, calc, vf-fg,	
87	2.0	0	90% LIMESTONE & MARL: a/a 10% SSTONE: a/a	
90	2.0	0	100% LIMESTONE & MARL: a/a	Marl matrix not evident in cuttings - appears to be passing into solution,

				producing highly viscous mud.
93	2.0	0	100% LIMESTONE & MARL: a/a	. Marl appears to be lt brn. soft, dispersive
96	2.0	0	100% LIMESTONE & MARL: a/a	
99	2.0	0	100% LIMESTONE & MARL: a/a	
102	1.0	0	100% LIMESTONE & MARL: a/a	
105	1.0	0	100% LIMESTONE & MARL: a/a	Bit blocked POH clean
108	2.0	0	80% LIMESTONE & MARL: a/a 20% SANDSTONE: a/a	Carbide check – carbide blocked bit.
111	2.3	0	100% LIMESTONE & MARL: a/a	Carbide gave 5 units when circulation restored
114	2.5	0	100% LIMESTONE & MARL: a/a	
117	3.7	0	100% LIMESTONE & MARL: a/a Tr gy slst.	
120	2.0	0	100% LIMESTONE & MARL: Lst is unconsolidated, cons. of pred. f-mg coral and shell frags. incl bryozoa, gasteropods, lamellibranchs, echinoid spines. Dull yell. min fluor. No cut Marl is washing out, but appears to be soft, lt brn gy dispersive.	
123	2.0	0	100% LIMESTONE & MARL: a/a	
126	1.5	0	100% LIMESTONE & MARL: a/a f-mg	
129	1.5	0	100% LIMESTONE & MARL: a/a f-mg	
132	1.5	0	100% LIMESTONE & MARL: a/a pred fg	
135	1.5	0	100% LIMESTONE & MARL: a/a pred. fg-occ mg.	
138	1.5	0	100% LIMESTONE & MARL: a/a pred fg	
141	2	0	100% LIMESTONE & MARL: a/a f-mg	
144	3.3	0	100% LIMESTONE & MARL: a/a fg-occ mg.	
147	3.3	0	100% LIMESTONE & MARL: a/a fg	
150	2	0	100% LIMESTONE & MARL: a/a fg Tr mica	
153	2.0	0	100% LIMESTONE & MARL: a/a f-occ mg	

156	2.6	0	100% LIMESTONE & MARL: a/a fg tr mica	
159	1.7	0	100% LIMESTONE & MARL: a/a f-mg. Tr glauc.	Resumed drilling after 4 day break @1.11 p.m.
162	2.0	0	100% LIMESTONE & MARL: a/a fg Tr glauc a/a	
165	1.7	0	90% LIMESTONE & MARL: a/a 10% SILTSTONE: gy,gy brn, brn, firm, calc. Tr. glauc.	
168	3.0	0	100% LIMESTONE & MARL: a/a fg. Tr. Sltst Tr glauc a/a.	
171	1.7	0	100% LIMESTONE & MARL: a/a fg Tr glauc.	
174	1.0	0	100% LIMESTONE & MARL: a/a fg Tr glauc.	
177	1.7	0	100% LIMESTONE & MARL: a/a fg Tr glauc. Tr slst a/a	
180	2.0	0	100% LIMESTONE & MARL: a/a fg Tr glauc	Carbide test 211 units from 50 g carbide. Lag time 12 minutes
183	1.7	0	100% LIMESTONE & MARL: a/a fg Tr glauc. Tr carb flecks.	Continue to make mud – marl being dispersed, not noted in washed samples. Marl appears to be lt brn. soft, dispersive
186	1.7	0	100% LIMESTONE & MARL: a/a fg Tr glauc	
189	1.7	0	100% LIMESTONE & MARL: a/a fg Tr glauc	
192	2.0	0	100% LIMESTONE & MARL: a/a fg Tr glauc Comm. Tr. calc sltst. a/a	
195	1.0	0	100% LIMESTONE & MARL: a/a fg Tr glauc Comm. Tr. calc sltst. a/a	
198	3.7	0	90% LIMESTONE & MARL: a/a fg 10% MARL: lt grn, soft, dispersive, v.calc.	Note: Sample probably 40-50% marl for ~ last 130 m
201	2.7	0	100% LIMESTONE & MARL: a/a fg Tr glauc Comm. Tr. calc brn sltst. a/a	
204	2.7	0	100% LIMESTONE & MARL: a/a fg Tr glauc Comm. Tr. calc sltst. a/a	
207	3.3	0	100% LIMESTONE & MARL: Interbedded. Lt Gy-cream. Unconsolidated, cons. of f-mg coral and shell frags. incl bryozoa, gasteropods, lamellibranchs, echinoid spines. Dull yell. min fluor. No cut. Rare Tr glauc.	

210	2.0	0	100% LIMESTONE & MARL: a/a Rare Tr glauc .	
213	3.0	0	100% LIMESTONE & MARL: a/a Common tr green claystone, soft calc. Tr glauc.	
216	5.0	0	100% LIMESTONE & MARL: a/a Tr glauc.	
219	5.0	0	100% LIMESTONE & MARL: a/a Tr glauc, Tr grn claystone	
222	3.7	0	100% LIMESTONE & MARL: f-mg a/a Tr glauc	
225	4.6	0	100% LIMESTONE & MARL: f-mg a/a Tr glauc	
228	5.0	0	100% LIMESTONE & MARL: f-mg a/a Tr glauc	
231	4.7	0	100% LIMESTONE & MARL: f-mg a/a Tr glauc	
234	4.8	0	100% LIMESTONE & MARL: f-mg a/a Tr glauc Tr dark green calc. siltstone	
237	3.0	0	100% LIMESTONE & MARL :f-mg a/a common glauconite common tr dark green-brn siltstone	
240	5.3	0	90% LIMESTONE & MARL f-mg a/a common glauconite 10% SILTSTONE siltstone gy brn calc. tr pyrite	
243	2.7	0	25% LIMESTONE & MARL a/a 75% SILTSTONE a/a Tr glauconite, Tr pyrite	
246	5.3	0	100% LIMESTONE & MARL a/a Tr glauconite Tr pyrite	
249	4.0	0	25% LIMESTONE & MARL a/a 75% SILTSTONE a/a Tr glauconite tr pyrite	
252	2.7	0	25% LIMESTONE & MARL a/a 75% SILTSTONE a/a Tr glauconite Tr pyrite	
255	3.0	0	90% LIMESTONE & MARL; a/a 10% SILTSTONE: a/a Comm. tr glauconite	
258	3.7	0	50% LIMESTONE & MARL a/a 50% SILTSTONE: a/a Comm. tr glauconite	
261	4.6	0	50% LIMESTONE & MARL a/a 50% SILTSTONE: a/a Comm. tr glauconite	
264	4.3	0	80% SILTSTONE: a/a gy grn, calc. 20 % LIMESTONE & MARL a/a Comm. tr glauconite	

267	3.3	0	60% SILTSTONE: a/a gy grn, calc. 40% LIMESTONE & MARL a/a Comm. tr glauconite	
270	3.3	0	50% LIMESTONE & MARL a/a 50% SILTSTONE gy gn , calc common pyrite Comm. tr glauconite	Carbide test 82 units from 15 gm carbide. 19 mins bottoms up.
273	4.0	0	60% LIMESTONE & MARL a/a 40% SILTSTONE a/a Comm. tr glauconite	Suspect limestone is recycled from pit.
276	7.0	1	70% LIMESTONE & MARL a/a 30%SILTSTONE a/a Comm. tr glauconite	
279	7.0	1	70% LIMESTONE a/a 30% SILTSTONE a/a Comm. tr glauconite	
282	6.8	1	80% LIMESTONE a/a 20% SILTSTONE a/a Comm. tr glauconite	
285	9.3	2	90% SILTSTONE: gy grn, gy brn, arg, calc.soft 10% LIMESTONE: a/a Tr glauc.	
288	15.7	2	50% SILTSTONE : gy grn, gy brn,arg,calc,soft 50%LIMESTONE: a/a (Recycled?) Tr glauconite	,
291	9.7	2	50% SILTSTONE : a/a 50% LIMESTONE : a/a (Recycled?) Tr glauconite	
294	18.3	2	50% SILTSTONE :a/a 50% LIMESTONE :a/a (Recycled?) Tr glauconite Tr pyrite	
297	9.3	2	70% LIMESTONE a/a (Recycled?) 30%SILTSTONE :a/a Tr glauconite; common Tr pyrite	
300	8.3	3	70% LIMESTONE a/a (Recycled?) 30%SILTSTONE :a/a Tr glauc.	
303	5.7	2	50% LIMESTONE a/a (Recycled?) 50%SILTSTONE :a/a Tr glauc. Tr sst vfg, arg,calc.	Mud wt in 8.6 lb/gall Mud wt out 8.7 lb/gall
306	7.1	2	80% LIMESTONE a/a (Recycled?) 20%SILTSTONE :a/a Tr glauc.	

309	7.0	2	60% LIMESTONE a/a (Recycled?) 40%SILTSTONE :a/a Tr glauc.	
312	10.7	2	60% LIMESTONE a/a (Recycled?) 40%SILTSTONE :a/a Tr glauc.	
315	4.3	2	80% LIMESTONE a/a (Recycled?) 20%SILTSTONE :a/a Tr glauc. Comm. tr pyrite Tr blk carb spx.	
318	7	2	50% LIMESTONE a/a (Recycled?) 50%SILTSTONE :a/a Tr glauc.Tr pyr	
321	4	3	50% LIMESTONE a/a (Recycled?) 50%SILTSTONE :a/a Tr glauc. Tr pyr	
324	5.3	3	50% LIMESTONE a/a (Recycled?) 50%SILTSTONE :a/a Tr glauc. Tr pyr Tr Sst lt brn, vfg, w/s, arg, calc soft	
327	4.7	2	60% LIMESTONE a/a (Recycled?) 35% SILTSTONE: a/a 5% SST lt brn, vfg, w/s,calc, carb. soft. Tr glauc.	
330	9.0	2	70% LIMESTONE a/a (Recycled?) 30% SILTSTONE: a/a Comm. Tr glauc.Tr SST a/a	
333	11.7	2	70% LIMESTONE a/a (Recycled?) 30% SILTSTONE: a/a Comm. Tr glauc.Tr SST a/a	
336	10.3	3	70% LIMESTONE a/a (Recycled?) 30% SILTSTONE :a/a commonTr glauconite ,Tr SST a/a	
339	6.6	3	60% LIMESTONE a/a (Recycled?) 30% SILTSTONE: a/a Comm.. 10% SST lt brn, grn, vfg, w/s, arg, calc. soft Tr glauc	
342	7	3	60% LIMESTONE a/a (Recycled?) 30% SILTSTONE: a/a Comm.. 10% SST lt brn, grn, vfg, w/s, arg, calc. soft Tr glauc	
			<i>At 342 m switched to continuous coring.</i>	