
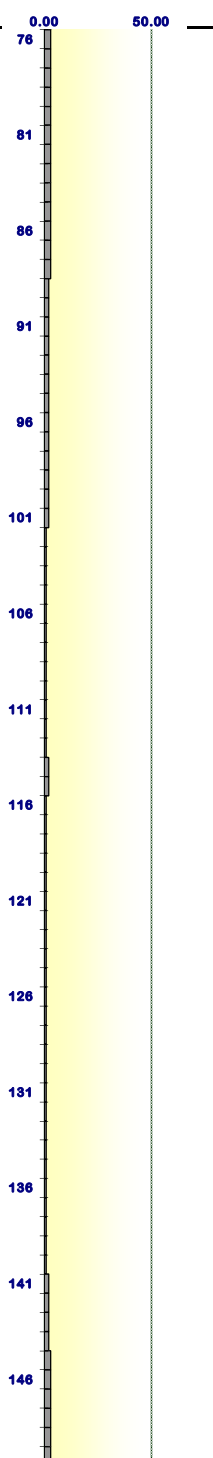

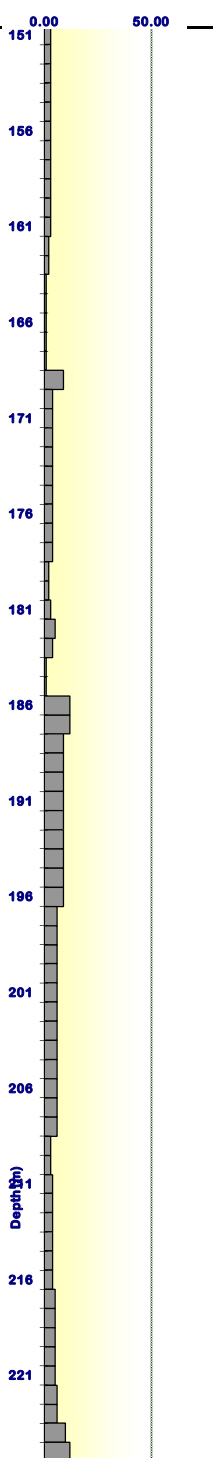



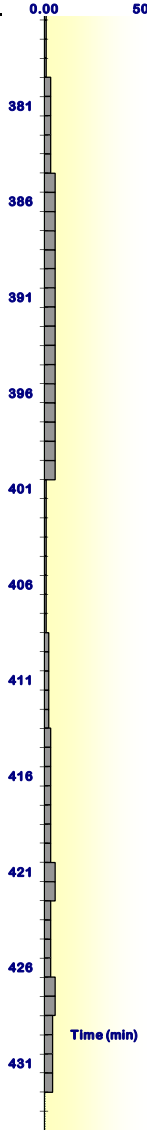
Well Data		Pumping		Strata Encountered		Min	Bar Chart	
Date	Hole (380 - 200mm) 300mm PVC (0m - 60m)	Water Air Lift (m ³ /h)	Geological Formation	Conductivity	Depth (m)	Geological Descriptions of Strata from Cuttings Recovered	Penetration rate	Penetration chart Depth(m) vs Time(min)
25-May-13	380mm 60m	GROUT	Recent Lava	GROUT	1	1.00 - 26.00	10.00	0.00 50.00
					2	15.00		
					3	Strong light grey Slightly Weathered Basalt	15.00	
					4	(small cavity between 19 - 20m)	15.00	
					5		15.00	
					6		18.00	
					7		18.00	
					8		18.00	
					9		18.00	
					10		18.00	
					11		18.00	
					12		18.00	
					13		20.00	
					14		20.00	
					15		20.00	
					16		20.00	
					17		20.00	
					18		20.00	
					19		20.00	
					20		4.00	
					21		4.00	
					22		4.00	
					23		15.00	
					24		18.00	
					25		22.00	
					26		22.00	
					27	26.00 - 49.00	1.00	
					28		1.00	
					29	Soft brown low plasticity Clay with frequent	1.00	
					30	small fragments of weak weathered basalt	1.00	
					31		1.00	
					32		1.00	
					33		1.00	
					34		1.00	
					35		1.00	
					36		1.00	
					37		1.00	
					38		1.00	
					39		1.00	
					40		1.00	
					41		1.00	
					42		1.00	
					43		1.00	
					44		1.00	
					45		1.00	
					46		1.00	
					47		1.00	
					48		1.00	
					49		1.00	
					50	49.00 - 52.00 Strong dark grey with orange	14.00	
					51	discolorations slightly vesicular	14.00	
					52	Slightly Weathered Basalt	6.00	
					53	52.00 - 60.00	2.00	
					54	Soft light brown CLAY	2.00	
					55		2.00	
					56		2.00	
					57		2.00	
					58		2.00	
					59		4.00	
					60	60.00 - 68.00	4.00	
					61		1.00	
					62	Moderately Strong dark grey slightly vesicular	1.00	
					63	weathered basalt with rare fragments of weak	1.00	
					64	red weathered basalt	1.00	
					65		1.00	
					66		1.00	
					67		1.00	
					68		1.00	
					69	68.00 - 76.00	3.00	
					70		3.00	
					71	Moderately strong dark grey Highly to Moderately	3.00	
					72	Weathered Basalt	3.00	
					73		3.00	
					74		3.00	
					75		3.00	

 Gradient Well						BOREHOLE LOG WITH BASIC DATA				
PROJECT Job No. Location Client Contractor Logged By		Geothermal Gradient Well ORB 13063 MPU Camp Thorel - Salazie Ministry of Energy and Public Utilities Water Research Co.Ltd. JCR/OB				B.H No - Date started 25-May-13 Date Completed 27-Jun-13 Rig Used Super Rock Hole Diameter 380 /200mm Depth of Hole 432m (27/6/13)				
		Remarks Drilling with 1 compressor : 0m - 188m 2 compressors : 188m - 228m 2 compressors + booster pump: 228 - 432m				Lining Type 300mm PVC (0m - 60m)				
Well Data		Pumping		Strata Encountered		Min	Bar Chart			
Date	Hole(380 - 200mm) 300mm PVC (0m - 60m)	Water Air Lift (m³/h)	Geological Formation	Conductivity	Depth (m)	Geological Descriptions of Strata from Cuttings Recovered	Penetration rate	Penetration chart Depth(m) vs Time(min)		
			Recent Lava		76		3.00			
					77	76.00 - 101.00			3.00	
					78				3.00	
					79				3.00	
					80	Strong light grey with cream discolorations			3.00	
					81	slightly vesicular Slightly Weathered			3.00	
					82	Basalt			3.00	
					83				3.00	
					84				3.00	
					85				3.00	
					86				3.00	
					87				3.00	
					88				3.00	
					89				2.00	
					90				2.00	
					91				2.00	
					92				2.00	
					93				2.00	
					94				2.00	
					95				2.00	
					96				2.00	
					97				2.00	
					98				2.00	
					99				2.00	
					100				2.00	
					101				2.00	
					102	101.00 - 113.00			1.00	
					103				1.00	
					104	Moderately weak grey Highly Weathered			1.00	
					105	Basalt with abundant brown clay			1.00	
					106				1.00	
					107				1.00	
					108				1.00	
					109				1.00	
					110				1.00	
					111				1.00	
					112				1.00	
					113				1.00	
					114	113.00 - 115.00 Moderately strong			2.00	
					115	dark grey Highly to Moderately Weathered Basalt			2.00	
				Intern	116	115.00 - 117.00			1.00	
						117	Red high plasticity Clay			1.00
						118	117.00 - 140.00			1.00
						119				1.00
						120	Moderately strong dark grey			1.00
						121	Moderately Weathered Basalt			1.00
						122				1.00
						123				1.00
						124				1.00
						125				1.00
						126				1.00
						127				1.00
						128				1.00
						129				1.00
						130				1.00
					131				1.00	
					132				1.00	
					133				1.00	
					134				1.00	
					135				1.00	
					136				1.00	
					137				1.00	
					138				1.00	
					139				1.00	
					140				1.00	
					141	140.00 - 161.00			2.00	
					142				2.00	
					143	Strong dark grey Moderatelt to Slightly			2.00	
					144	Weathered Basalt			2.00	
					145				3.00	
					146				3.00	
					147				3.00	
					148				3.00	
					149				3.00	
					150				3.00	


 Gradient Well						BOREHOLE LOG WITH BASIC DATA		
PROJECT Job No. Location Client Contractor Logged By		Geothermal Gradient Well ORB 13063 MPU Camp Thorel - Salazie Ministry of Energy and Public Utilities Water Research Co.Ltd. JCR/OB				B.H No - Date started 25-May-13 Date Completed 27-Jun-13 Rig Used Super Rock Hole Diameter 380 /200mm Depth of Hole 432m (27/6/13)		
		Remarks Drilling with 1 compressor : 0m - 188m 2 compressors : 188m - 228m 2 compressors + booster pump: 228 - 432m				Lining Type 300mm PVC (0m - 60m)		
Well Data		Pumping		Strata Encountered		Min	Bar Chart	
Date	Hole(380 - 200mm) 300mm PVC (0m - 60m)	Water Air Lift (m³/h)	Geological Formation	Conductivity	Depth (m)	Geological Descriptions of Strata from Cuttings Recovered	Penetration rate	Penetration chart Depth(m) vs Time(min)
			Intermediate Lava		151		3.00	
					152		3.00	
					153		3.00	
					154		3.00	
					155		3.00	
					156		3.00	
					157		3.00	
					158		3.00	
					159		3.00	
					160		3.00	
					161		3.00	
					162	161.00 - 168.00	2.00	
					163		2.00	
					164	Moderately Strong grey with slight cream	1.00	
					165	discolorations Moderately Weathered Basalt	1.00	
					166		1.00	
					167		1.00	
					168		1.00	
					169	168.00 - 169.00 Red high plasticity Clay	9.00	
					170	169.00 - 178.00	4.00	
					171		4.00	
					172	Strong dark grey Slightly Weathered Basalt	4.00	
					173		4.00	
					174		4.00	
					175		4.00	
					176		4.00	
					177		4.00	
					178		4.00	
					179	178.00- 180.00 Moderately strong dark grey	2.00	
					180	Moderately Weathered Basalt with red Clay	2.00	
					181	180.00 - 183.00	3.00	
					182	Strong dark grey Slightly Weathered Basalt	5.00	
					183		4.00	
					184	183.00 - 185.00 Strong grey with cream	1.00	
					185	discolorations vesicular Slightly Weathered	1.00	
					186	185.00 - 194.00	12.00	
					187		12.00	
					188	Strong dark grey Slightly Weathered Basalt	9.00	
					189		9.00	
					190		9.00	
					191		9.00	
					192		9.00	
					193		9.00	
				194	194.00 - 196.00	9.00		
				195	Moderately strong dark grey Slightly	9.00		
				196	Weathered Basalt	9.00		
				197	196.00 - 208.00	6.00		
				198		6.00		
				199	Strong dark grey with a slight greenish shade	6.00		
				200	Slightly Weathered Basalt. Presence of	6.00		
				201	translucent green and colourless specks	6.00		
				202		6.00		
				203		6.00		
				204		6.00		
				205		6.00		
				206		6.00		
				207		6.00		
				208	208.00 - 210.00	6.00		
				209	Moderately strong dark grey with a slight	3.00		
				210	greenish shade Slightly Weathered Basalt	3.00		
				211	210.00 - 240.00	4.00		
				212	Strong light grey with a slight greenish shade	4.00		
				213	Slightly Weathered Basalt. Presence of	4.00		
				214	translucent green and colourless specks	4.00		
				215		4.00		
				216		4.00		
				217		5.00		
				218		5.00		
				219		5.00		
				220		5.00		
				221		5.00		
				222		6.00		
				223		6.00		
				224		10.00		
				225		12.00		

Well Data		Pumping		Strata Encountered		Min	Bar Chart
Date	Hole(380 - 200mm) 300mm PVC (0m - 60m)	Water Air Lift (m³/h)	Geological Formation	Conductivity	Depth (m)	Geological Descriptions of Strata from Cuttings Recovered	Penetration rate
PROJECT		Geothermal Gradient Well		B.H No		-	
Job No.		ORB 13063 MPU		Date started		25-May-13	
Location		Camp Thorel - Salazie		Date Completed		27-Jun-13	
Client		Ministry of Energy and Public Utilities		Rig Used		Super Rock	
Contractor		Water Research Co.Ltd.		Hole Diameter		380 /200mm	
Logged By		JCR/OB		Depth of Hole		432m (27/6/13)	
Remarks		Drilling with 1 compressor : 0m - 188m		Lining Type		300mm PVC (0m - 60m)	
		2 compressors : 188m - 228m					
		2 compressors + booster pump: 228 - 432m					
			Old Lava		226		12.00
			Breccia Old Lava		227		10.00
				228		33.00	
				229		0.45	
				230		0.45	
				231		0.45	
				232		0.45	
				233		0.45	
				234		0.45	
				235		0.45	
				236		0.45	
			Breccia Old Lava		237		0.45
				238		0.45	
				239		0.45	
				240		0.45	
				241	240.00 - 246.00	1.30	
				242		1.30	
				243	Strong light grey basalt with clast of reddish brow	1.00	
				244	Slightly Weathered Breccia.	1.00	
				245		1.00	
				246	246.00 - 260.00	1.00	
			Old Lava		247		1.00
				248	Strong light grey with a slight greenish shade	0.45	
				249	Slightly Weathered Basalt. Presence of	0.45	
				250	translucent green and colourless specks	0.45	
				251		0.45	
				252		0.45	
				253		0.45	
				254		1.00	
				255		1.00	
				256		1.00	
			Breccia		257		1.00
				258		1.00	
				259		2.30	
				260		2.30	
				261	260.00 - 262.00 Reddish brown	0.30	
				262	High Plasticity Completely Weathered Breccia ?	0.30	
				263	262.00 - 268.00	0.20	
				264		0.20	
				265	Compact creamish brown with black mottles	0.20	
				266	& shiny specks very fine grained sandy SILT	0.20	
			267	Pyroclasts (ash)	0.20		
			268		0.20		
			269	268.00 - 318.00	1.30		
			270		1.30		
			271	Strong slightly greenish grey basalt	1.30		
			272	with reddish brown clasts of basalt	1.30		
			273	Slightly to Moderately Weathered Breccia	1.30		
			274		1.30		
			275		1.30		
			276		1.30		
			277		2.00		
			278		2.00		
			279		2.00		
			280		2.00		
			281		2.00		
			282		2.00		
			283		2.00		
			284		2.00		
			285		1.30		
			286		1.30		
			287		1.30		
			288		1.30		
			289		1.30		
			290		2.00		
			291		2.00		
			292		2.00		
			293		2.00		
			294		2.00		
			295		1.15		
			296		1.15		
			297		1.15		
			298		1.15		
			299		1.15		
			300		1.15		

Well Data		Pumping		Strata Encountered		Min	Bar Chart
Date	Hole(380 - 200mm) 300mm PVC (0m - 60m)	Water Air Lift (m³/h)	Geological Formation	Conductivity	Depth (m)	Geological Descriptions of Strata from Cuttings Recovered	Penetration rate
			Breccia		301		1.20
					302		1.20
					303		1.20
					304		1.20
					305		1.20
					306		1.20
					307		1.30
					308		1.30
					309		1.30
					310		1.30
					311		1.30
					312		1.30
					313		1.30
					314		1.30
					315		1.30
					316		1.30
					317		1.30
					318		1.30
					319	318.00 - 330.00	1.00
					320		1.00
					321	Moderately Strong slightly greenish grey basalt	1.00
					322	with reddish brown clasts of basalt	1.00
					323	Highly to Moderately Weathered Breccia	1.00
					324		1.00
					325		1.00
					326		1.00
					327		1.00
					328		1.00
					329		1.00
					330	330.00 - 360.00	1.00
					331		1.00
					332	Moderately Strong slightly greenish grey basalt	1.00
					333	with reddish brown clasts of basalt	1.00
					334	Moderately Weathered Breccia	1.00
					335		1.00
					336		1.00
					337		1.30
				338		1.30	
				339		1.30	
				340		1.30	
				341		1.30	
				342		1.30	
				343		1.30	
				344		2.00	
				345		2.00	
				346		2.00	
				347		2.00	
				348		2.00	
				349		2.00	
				350		2.00	
				351		2.00	
				352		2.00	
				353		2.00	
				354		2.00	
				355		2.00	
				356		1.20	
				357		1.20	
				358		1.20	
				359		1.20	
				360		1.20	
				361	360.00 - 366.00	1.00	
				362		1.00	
				363	Strong grey basalt with reddish brown	1.00	
				364	clasts of basalt	1.00	
				365	Slightly Weathered Breccia	1.00	
				366		1.00	
				367	366.00 - 384.00	1.00	
				368		1.00	
				369	Moderately Strong grey basalt vesicular	1.00	
				370	with reddish brown clasts of basalt	1.00	
				371	Moderately Weathered Breccia	1.00	
				372		1.00	
				373		1.00	
				374		1.00	
				375		1.00	

 Gradient Well					BOREHOLE LOG WITH BASIC DATA		
PROJECT Job No. Location Client Contractor Logged By		Geothermal Gradient Well ORB 13063 MPU Camp Thorel - Salazie Ministry of Energy and Public Utilities Water Research Co.Ltd. JCR/OB			B.H No - Date started 25-May-13 Date Completed 27-Jun-13 Rig Used Super Rock Hole Diameter 380 /200mm Depth of Hole 432m (27/6/13) Lining Type 300mm PVC (0m - 60m)		
		Remarks Drilling with 1 compressor : 0m - 188m 2 compressors : 188m - 228m 2 compressors + booster pump: 228 - 432m					
Well Data		Pumping		Strata Encountered	Min	Bar Chart	
Date	Hole(380 - 200mm) 300mm PVC (0m - 60m)	Water Air Lift (m ³ /h)	Geological Formation Conductivity	Geological Descriptions of Strata from Cuttings Recovered	Penetration rate	Penetration chart Depth(m) vs Time(min)	
			Breccia		1.00		
				376			1.00
				377			1.00
				378			1.00
				379			1.00
				380			3.00
				381			3.00
				382			3.00
				383			3.00
				384	384.00 - 396.00		3.00
				385			5.00
				386			5.00
				387	Strong grey basalt with purplish brown		5.00
				388	clasts of basalt Moderately to Slightly Weathered		5.00
				389	Breccia with translucent green and colourless specks		5.00
				390			5.00
				391			5.00
				392			5.00
				393			5.00
				394			5.00
				395			5.00
				396	396.00 - 400.00		5.00
				397			5.00
				398	Strong slightly greenish grey basalt with		5.00
				399	reddish brown clasts of basalt		5.00
				400	Slightly Weathered Breccia		5.00
				401	400.00 - 408.00		1.00
				402			1.00
				403	Moderately Strong slightly greenish grey basalt		1.00
				404	with reddish brown clasts of basalt		1.00
				405	Highly to Moderately Weathered Breccia		1.00
				406			1.00
				407			1.00
				408			1.00
				409	414.00 - 432.00		2.00
				410			2.00
				411			2.00
				412	Very strong greenish grey basalt with reddish		2.00
				413	brown clasts Moderately Weathered Breccia		2.00
				414			3.00
				415			3.00
				416			3.00
				417			3.00
			418		3.00		
			419		3.00		
			420		3.00		
			421		5.00		
			422		5.00		
			423		3.00		
			424		3.00		
			425		3.00		
			426		3.00		
			427		5.00		
			428		5.00		
			429		4.00		
			430		4.00		
			431		4.00		
			432		4.00		

As at 27 June 2013

Legend
 - - - - - Slotted PVC
 _____ Plain PVC
 Water Strike