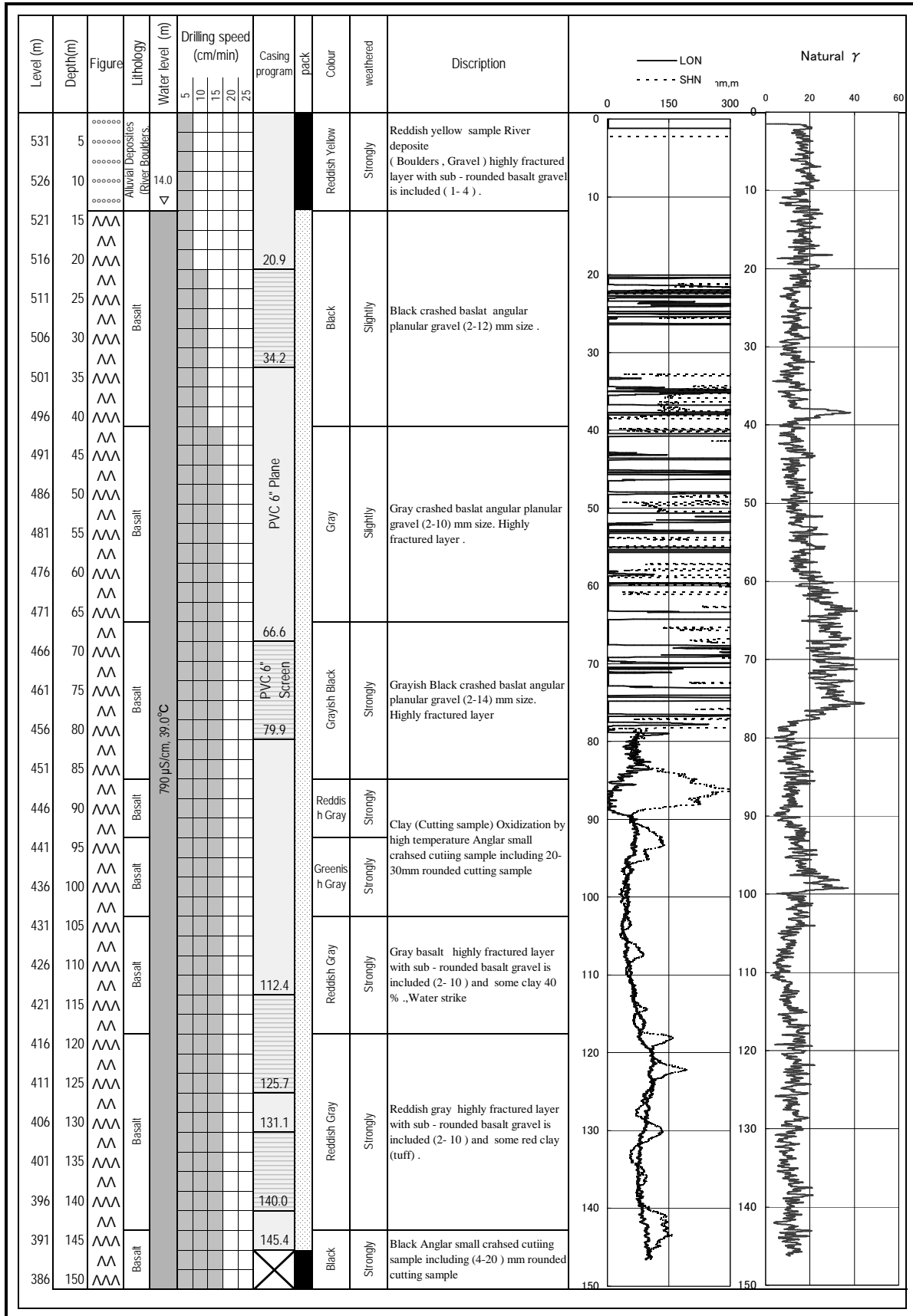


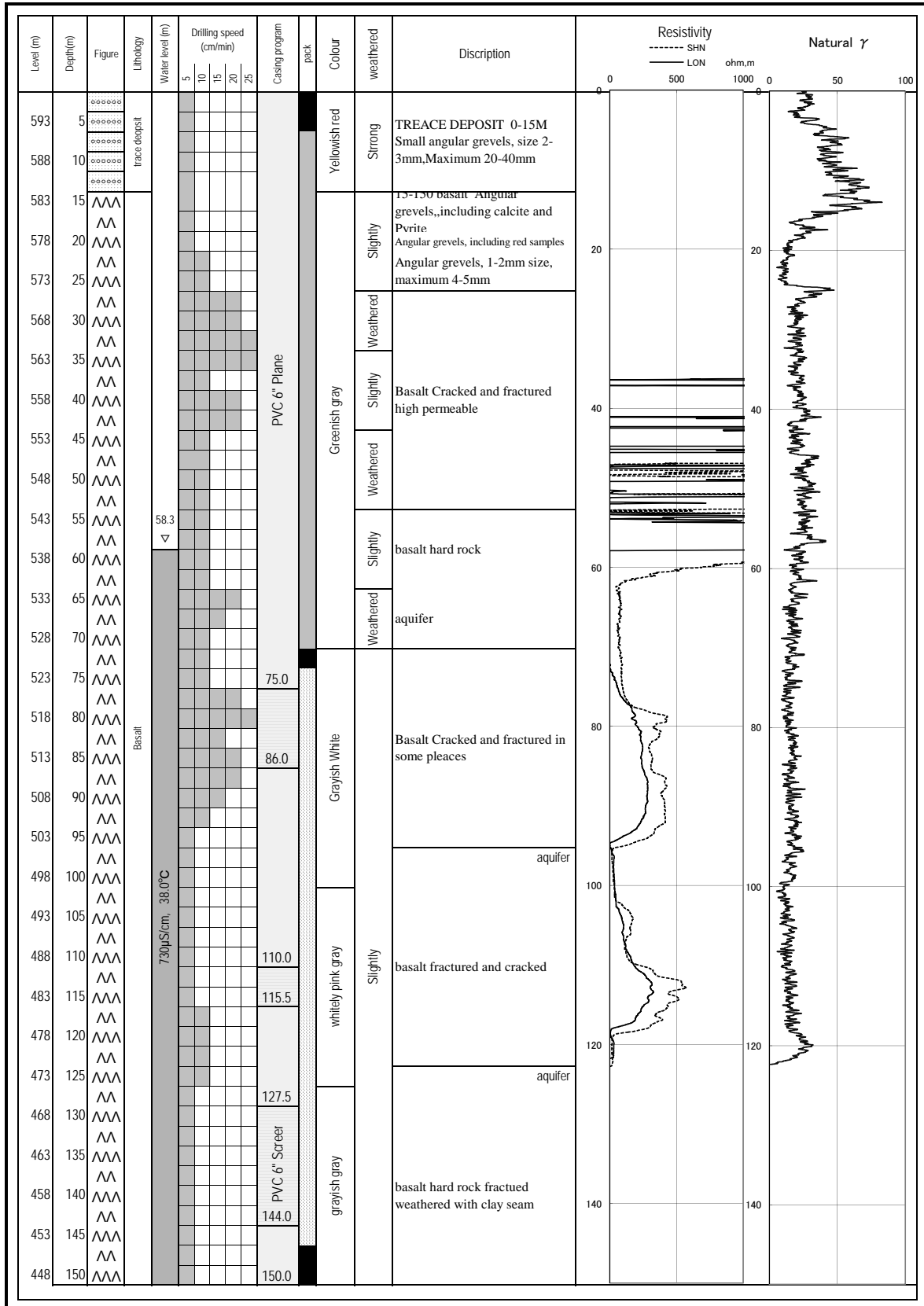
Drilling BH JW-8
Coordinates: 11.08629N, 42.40719E

Date: 2010/10/14~15
Village name: AFKA ARRABA
Altitude: 536m



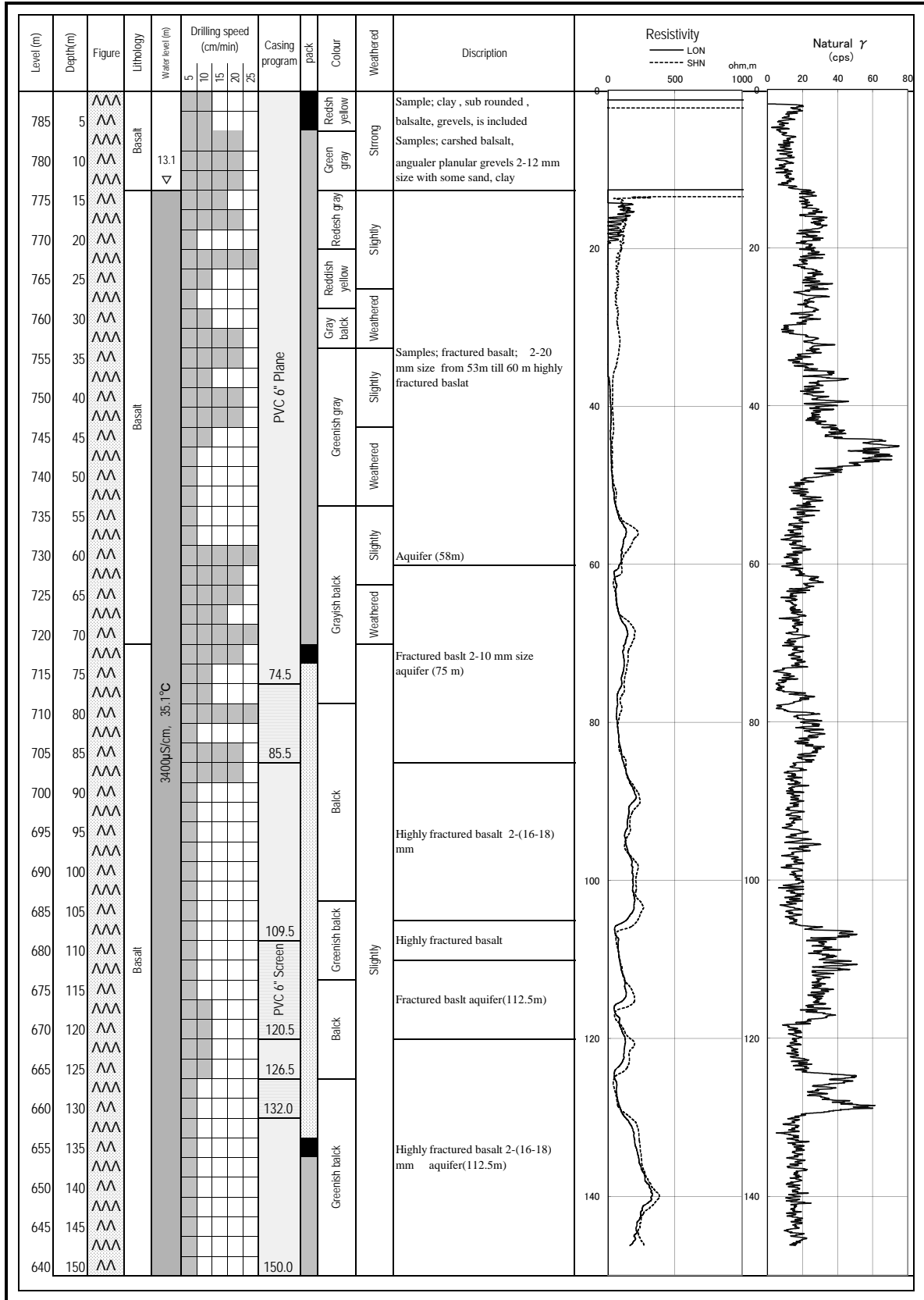
Drilling BH JW-9
 Coordinates: 11.21184N, 42.67193E

Date: 2010/9/29~10/1
 Village name: HAMBOUCTA
 Altitude: 598m



Drilling BH JW-10
 Coordinates: 11.09704N, 42.65063E

Date: 2010/10/3~5
 Village name: GUELLILE
 Altitude: 790m



SUMMARY OF WELL CONDITION

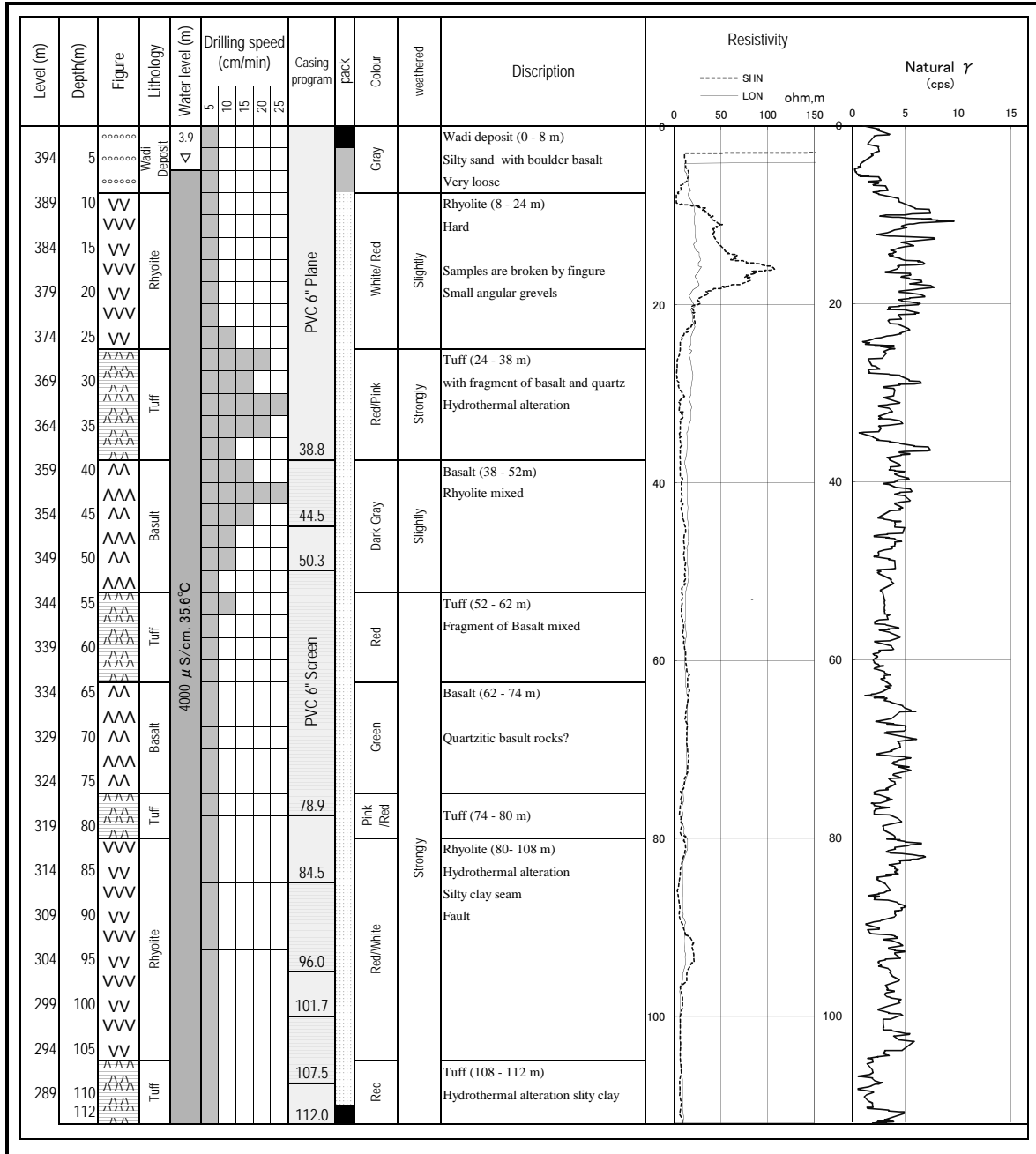
LOCATION: MIDGARRA

DATE: 20-Aug-10

	GEO MARK	LITHOLOGY	WATER LEVEL	SUMMARY OF WATER PUMP TEST
0		0-8m Wadi Deposit sand rich gravel with boulder	S.W.L= 3.9	5 STEP TEST Not done
	^^			
	^^^	8-112m		
	^^	Basalt		
	^^^	Weathered and		
	^^	hydrothermal		
	^^^	alteration lava		
	^^			
	^^^		DWWL= 30.3	24 HOURS CONTINUOUS UP LIFT
	^^	High permeability		UPLIFT Q= 6.7 L/S
	^^^			TOTAL Q= 578.9 M ³ /24 HOURS
50	^^^	24-38m		DRAW DOWN=26.4M
	^^	52-62m		TRANSMISIVITY=13.2M ² /DAY
	^^^	74-80m		
	^^	Tuff Hydrothermal		
	^^^	alteration		
	^^			
	^^^			RECOVERY TEST
	^^			RECOVERY TIME=160 MIN
	^^^	80--108m		TRANSMISIVITY=8.1M ² /DAY
	^^	Rhyolite		
	^^^	Red with white fragment		
	^^	Silty clay seam		
	^^^			
	^^			WATER QUALITY
	^^^			EC=4,310 μS/cm
100	^^			PH=7.1
	^^^	108-112m		TEMPERATURE=35.6°C
	^^	Red tuff		
	^^^	Hydrothermal alteration		
112	^^			

Drilling BH JW-11
 Coordinates: 11.16117N, 42.96377 E

Date: 2010/7/23~27
 Village name: MIDGARRA
 Altitude: 399m



SUMMARY OF WELL CONDITION

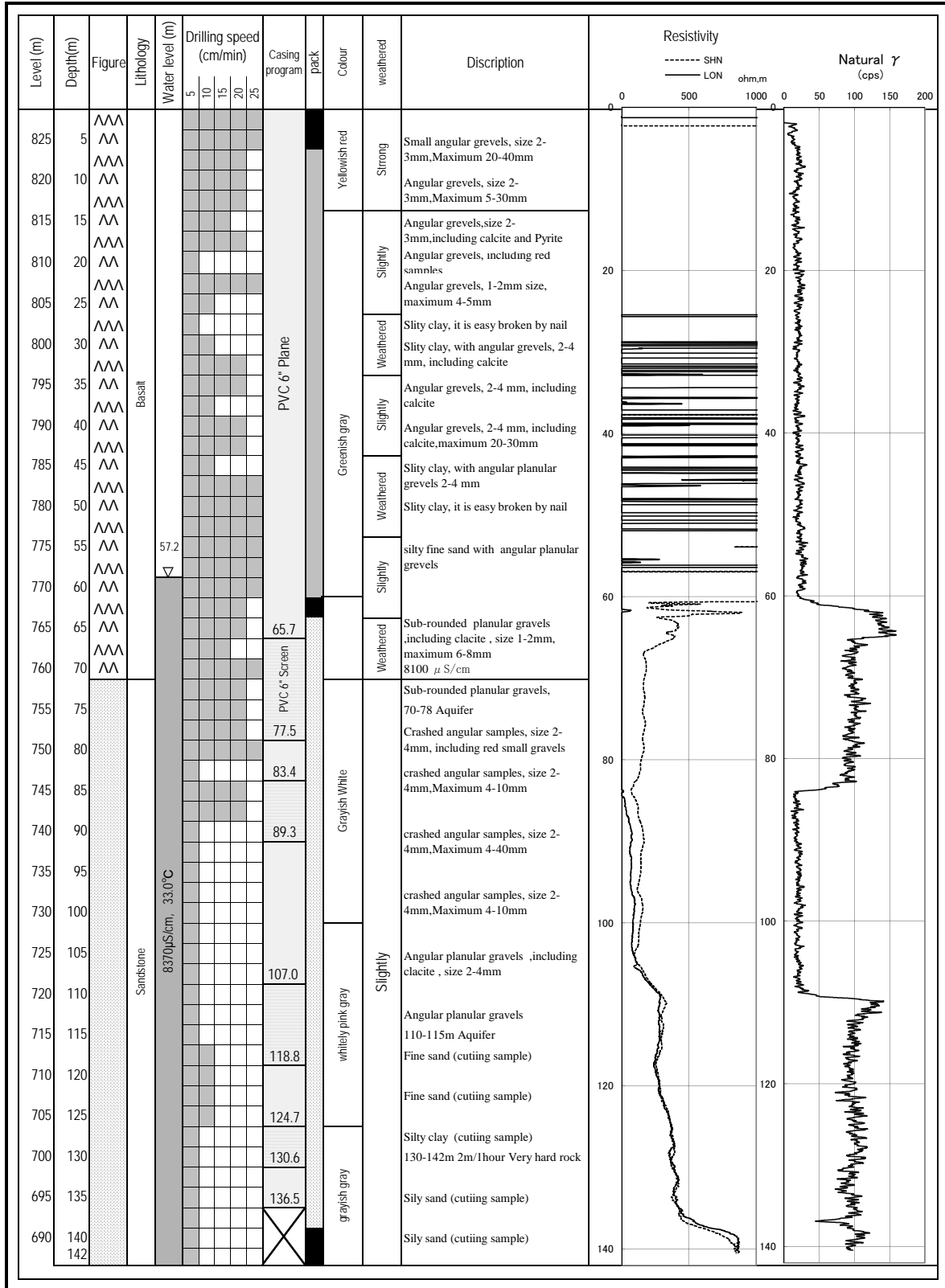
LOCATION: OUARABALEI

DATE: 17-Aug-10

	GEO MARK	LITHOLOGY	WATER LEVEL	SUMMARY OF WATER PUMP TEST
0	^^^	0-70m		<p><u>5 STEP TEST</u></p> <p>Not done</p> <p><u>24 HOURS CONTINUOUS UP LIFT</u></p> <p>UPLIFT Q= 4 L/S TOTAL Q= 345.6 M³ / 24 HOURS DRAW DOWN=59.05M TRANSMISIVITY=3.0M2/DAY</p> <p><u>RECOVERY TEST</u></p> <p>RECOVERY TIME= 90 MIN TRANSMISIVITY=2.5M2/DAY</p> <p><u>WATER QUALITY</u></p> <p>EC=8,370 μ S/cm PH= TEMPERATURE= 33.0°C</p>
	^^	Basalt		
	^^	Weathered		
	^^	cracked and		
	^^	fractured into		
	^^	fragments		
	^^	Porous partly	S.W.L= 31.1	
	^^			
	^^	Scoria-like		
50	^^	High permeability		
	^^			
	^^	aquifer 65-70m		
	^^			
	^^			
	^^			
	^^			
	^^			
	^^			
100		70-142m		
		Sandstone		
		with minoy mudstone		
		louse and soft		
		High permeability	DWWL= 90.2	
		Partly bearing		
		salty material		
142				

Drilling BH JW-12
 Coordinates:11.08918N, 42.76075E

Date: 2010/7/27~29
 Village name: OUARABALEI
 Altitude: 830m



SUMARRAY OF WELL CONDITION

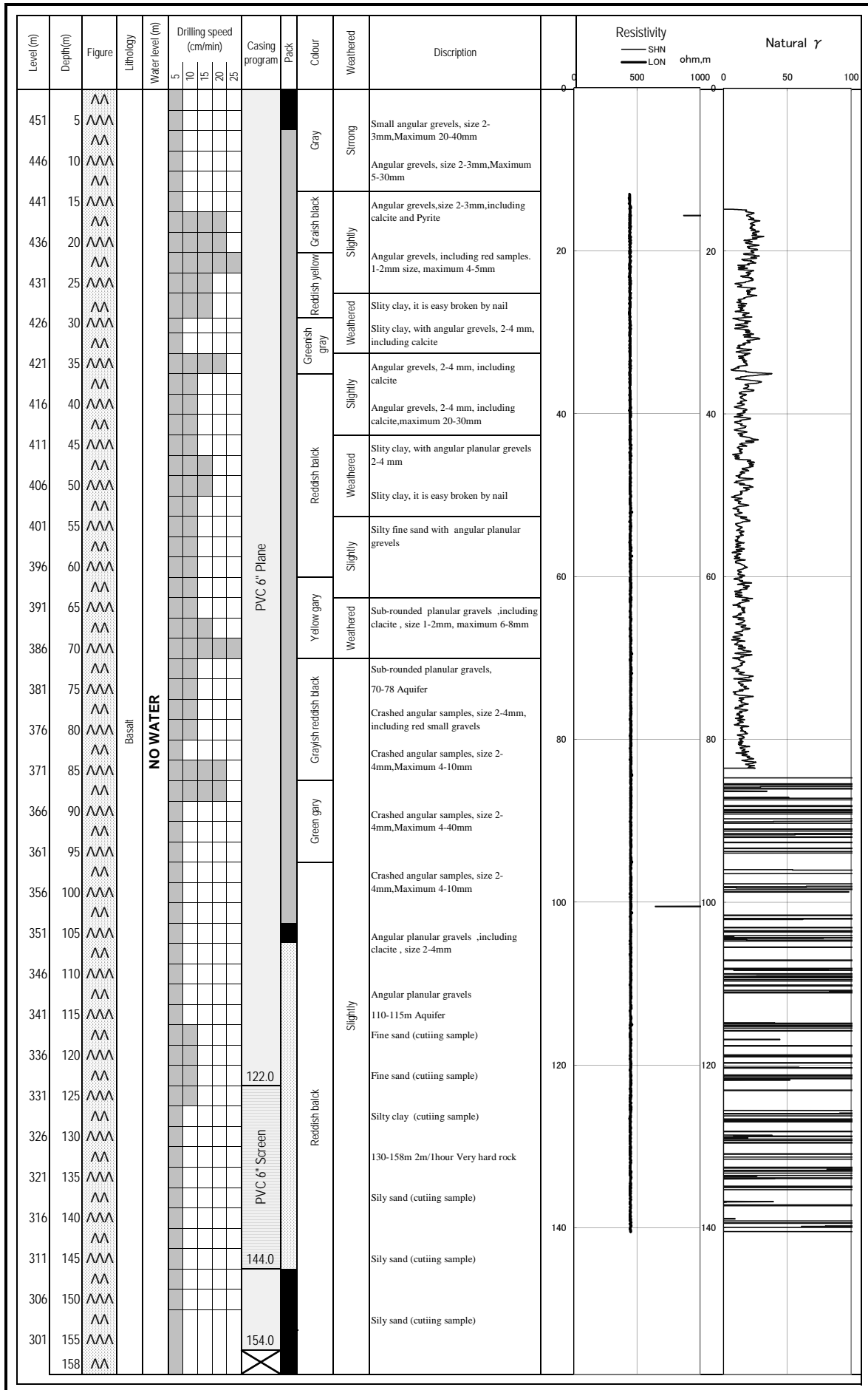
LOCATION: HILBAHEY

DATE: 10-Oct-10

	GEO MARK	LITHOLOGY	WATER LEVEL	SUMMARY OF WATER PUMP TEST
0		0-12m Gravel boulder		
	^^^	12-158m Basalt lava		5 STEP TEST NO WATER
	^^			
	^^^	Typical lava hard and tight rock		24 HOURS CONTINUOUS UP LIFT NO WATER
	^^			
	^^^	Cracked is rare		
	^^			
50	^^^	Weathered in some plaeces		
	^^			
	^^^	Fresh locally fractured		RECOVERY TEST NO WATER
	^^			
	^^^			
	^^			
	^^^			WATER QUALITY NO WATER
100	^^			
	^^^			
	^^			
	^^^			
	^^			
	^^^			
	^^			
	^^^			
	^^			
	^^^			
	^^			
150	^^^			
	^^			
158	^^^			

Drilling BH JW-13
Coordinates: 11.4774N, 42.85307E

Date: 2010/10/6~10
Village name: HILBAHEY
Altitude: 456m



SUMMARY OF WELL CONDITION

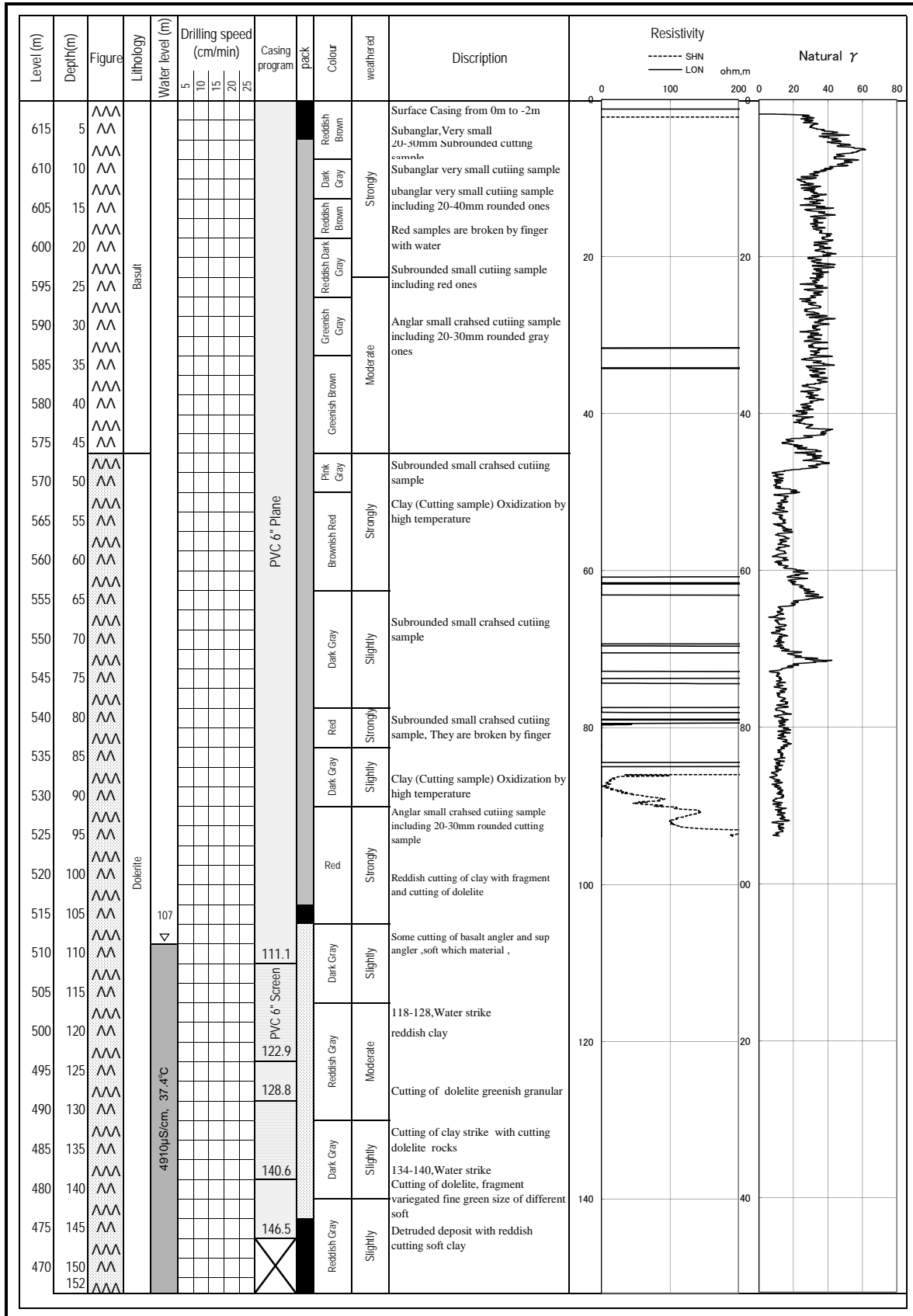
LOCATION: PETIT BARA

DATE: 4-Aug-10

	GEO MARK	LITHOLOGY	WATER LEVEL	SUMMARY OF WATER PUMP TEST
0	^^	0--150m		<p>5 STEP TEST</p> <p>Not done</p> <p>24 HOURS CONTINUOUS UP LIFT</p> <p>UPLIFT Q= 7 L/S TOTAL Q= 604.8 M³ / 24 HOURS DRAW DOWN=0.86M TRANSMISIVITY=460.6M²/DAY</p> <p>RECOVERY TEST</p> <p>RECOVERY TIME= 45 MIN TRANSMISIVITY=407.4M²/DAY</p> <p>WATER QUALITY</p> <p>EC=4,910 μ S/cm PH=7.33 TEMPERATURE= 37.4°C</p>
	^^^	Basalt Lava		
	^^	Hard and tight rock		
	^^^	partially only cracked		
	^^	Low permeability		
	^^^			
	^^			
	^^^			
	^^	0--40m		
	^^^	Weathered and fractured		
	^^	with clay seam		
	^^^			
	^^			
50	^^^	50--55m		
	^^	Weathered with clay		
	^^^			
	^^	60--65m		
	^^^	Weathered reddish		
	^^	in color		
	^^^			
	^^			
	^^^			
	^^			
	^^^			
	^^			
100	^^^	100m below		
	^^	Cracked and fractured		
	^^^	High permeability		
	^^		S.W.L= 110.9	
	^^^		DWWL= 111.76	
	^^			
	^^^	118m below		
	^^	Aquifer rich		
	^^^			
	^^			
	^^^			
	^^			
	^^^			
	^^			
150	^^^			
152	^^			

Drilling BH JW-14
 Coordinates: 11.35762E, 42.78563 E

Date: 2010/7/16~22
 Village name: PETIT BARA
 Altitude: 620m



Drilling BH JW-15
 Coordinates: 11.52272N, 42.91245E

Date: 2010/7/11~15
 Village name: PK-30
 Altitude: 323m

