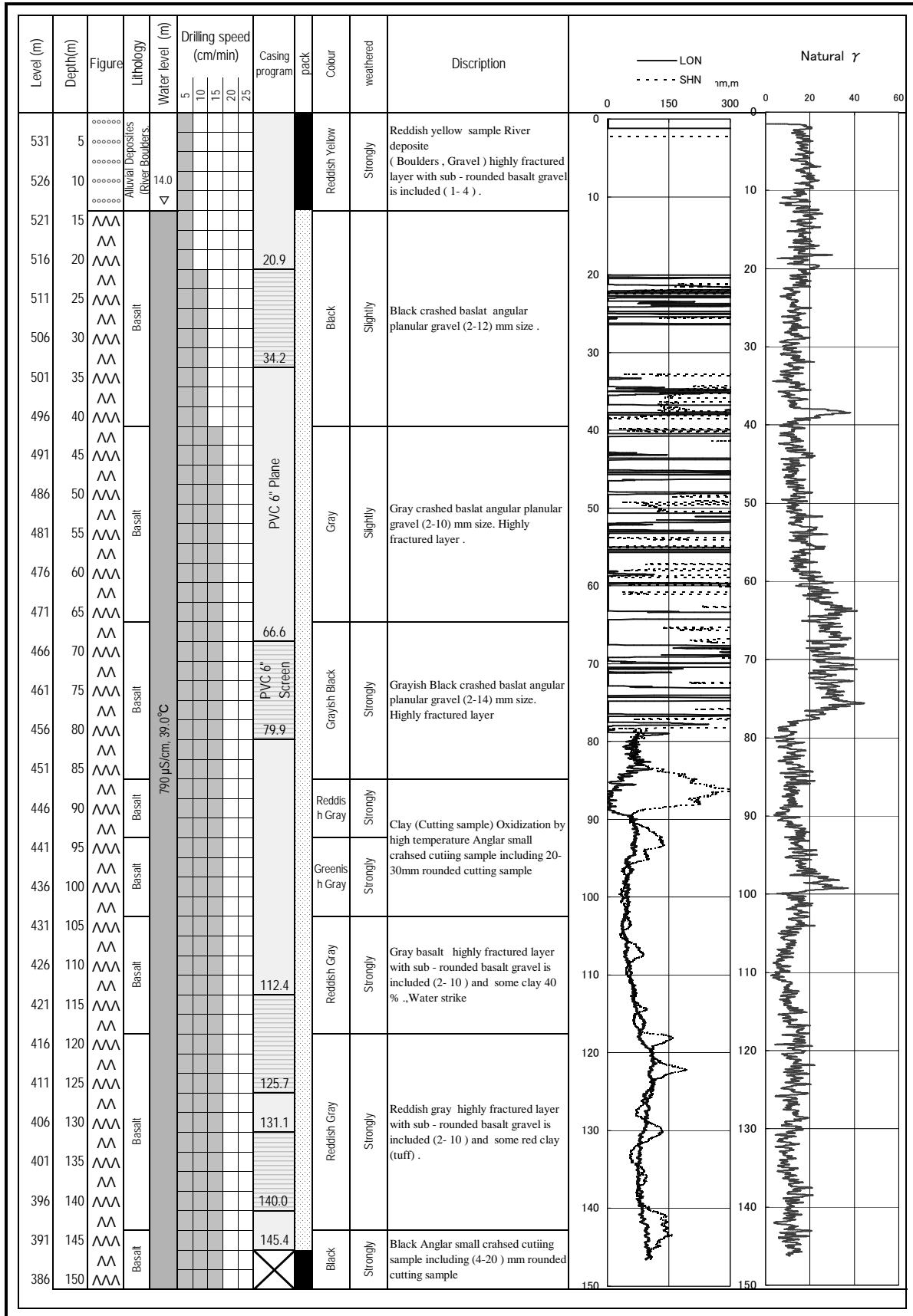


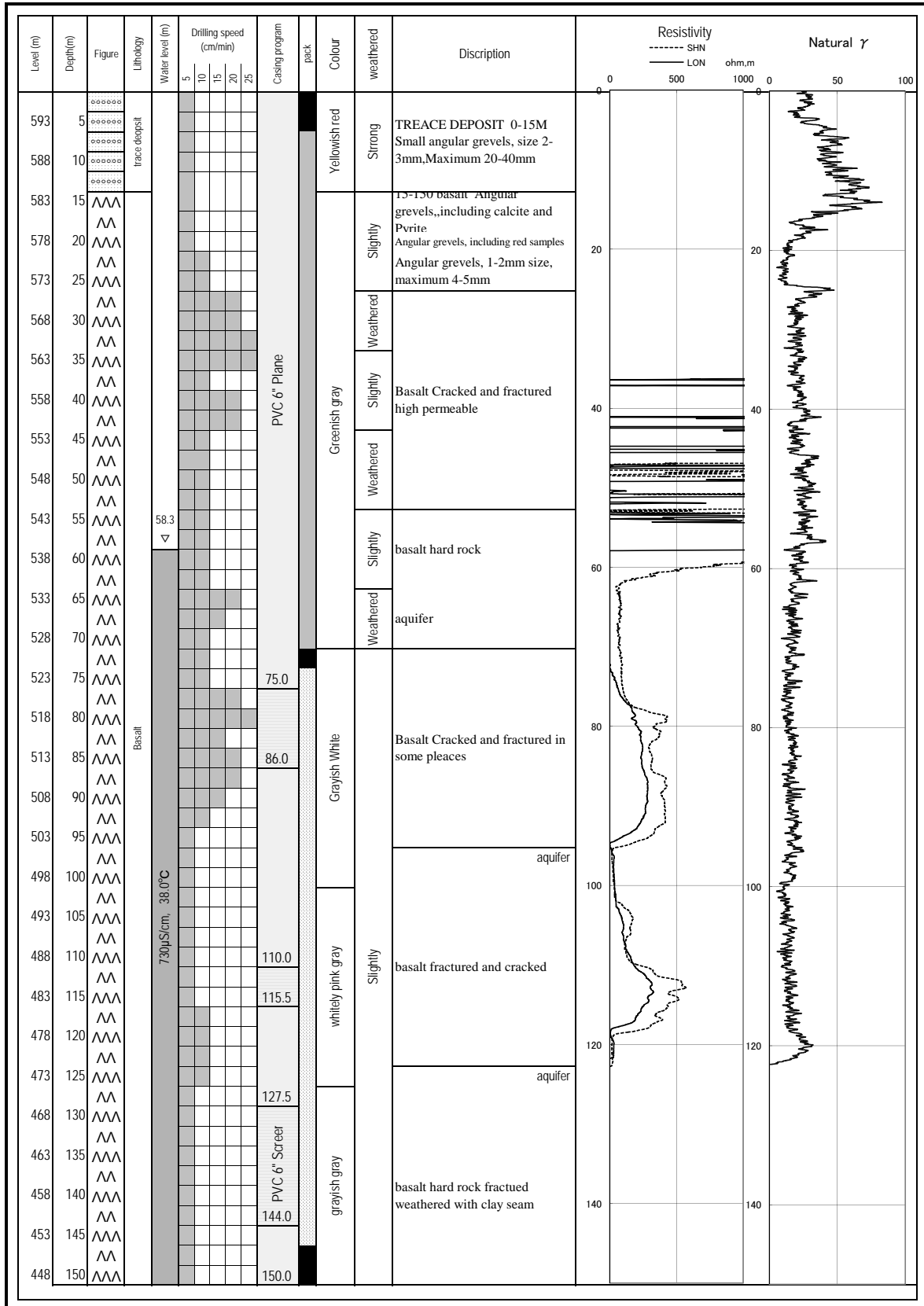
Drilling BH JW-8  
Coordinates: 11.08629N, 42.40719E

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



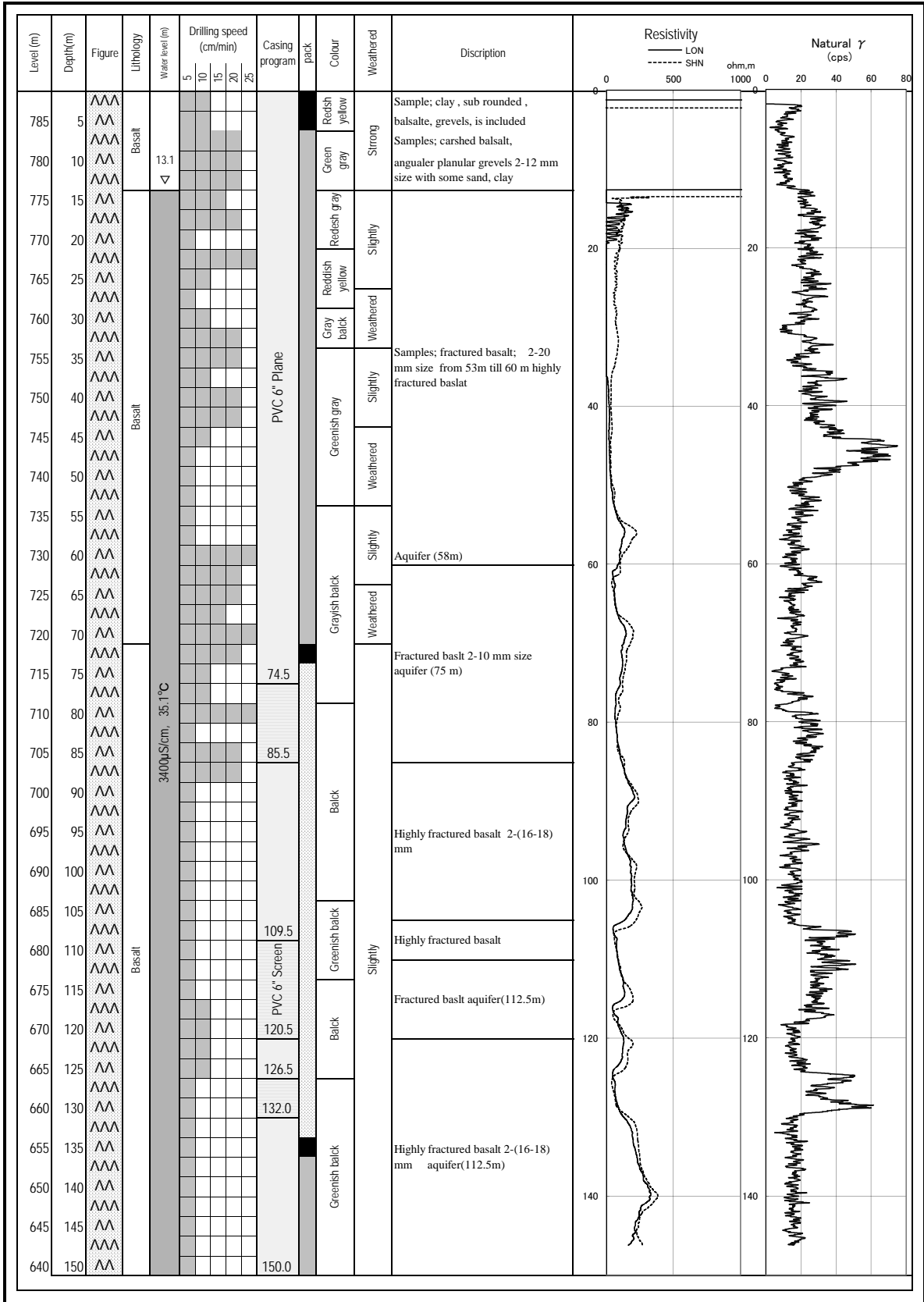
Drilling BH JW-9  
 Coordinates: 11.21184N, 42.67193E

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**

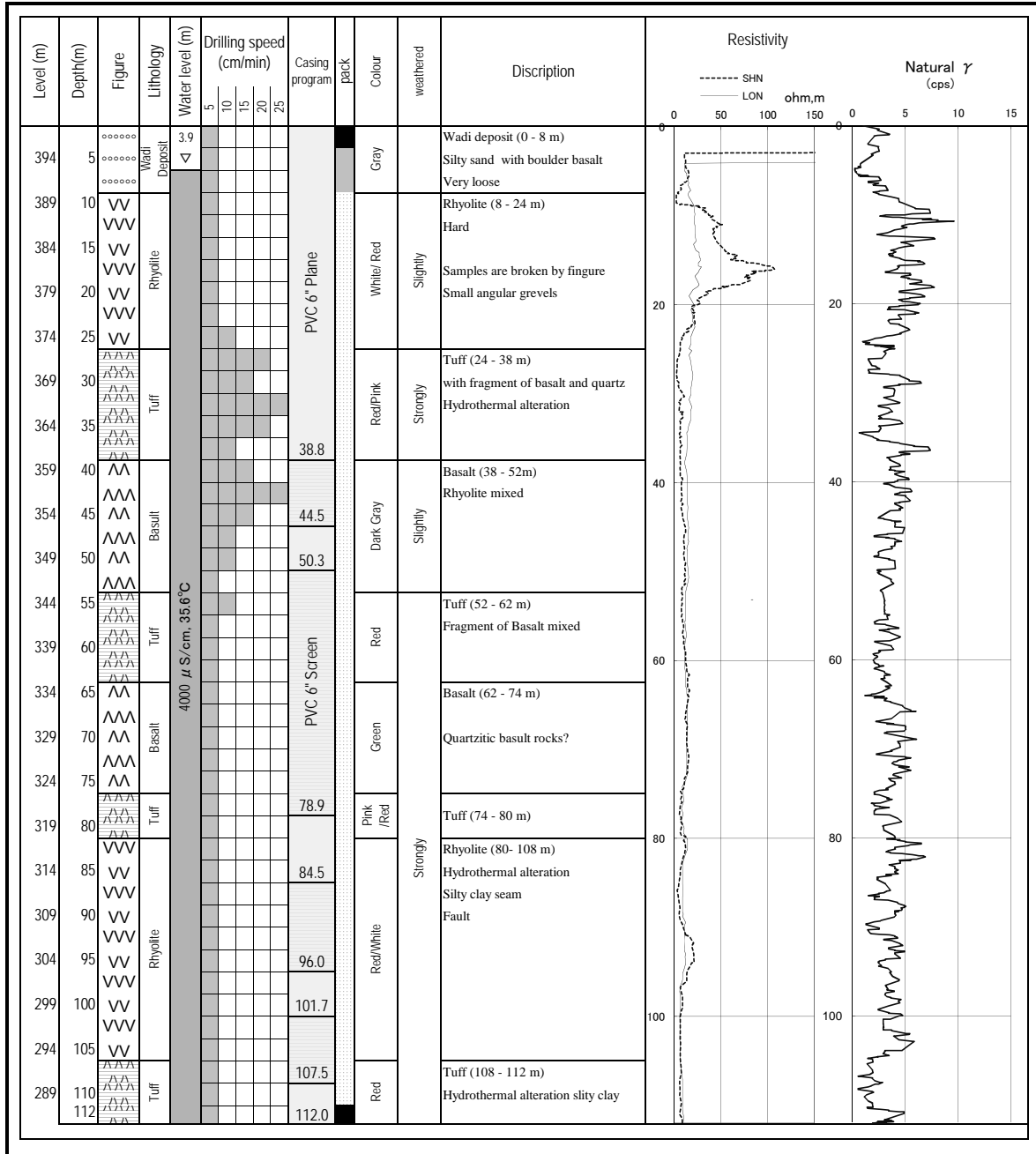
**LOCATION:** MIDGARRA

**DATE:** 20-Aug-10

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

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

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



**SUMMARY OF WELL CONDITION**

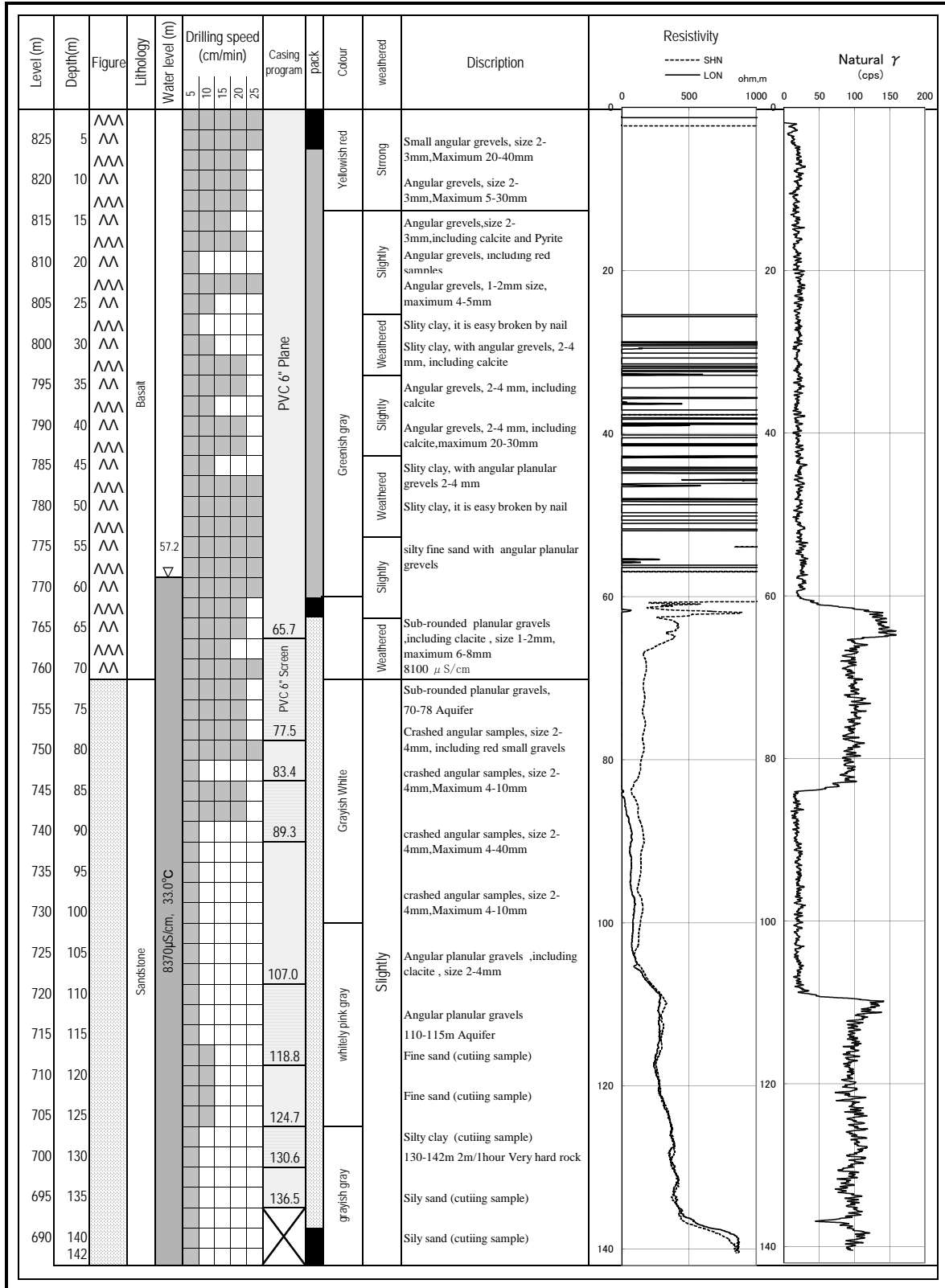
**LOCATION:** OUARABALEI

**DATE:** 17-Aug-10

	GEO MARK	LITHOLOGY	WATER LEVEL	SUMMARY OF WATER PUMP TEST
0	^^^	0-70m		<p><b><u>5 STEP TEST</u></b></p> <p>Not done</p> <p><b><u>24 HOURS CONTINUOUS UP LIFT</u></b></p> <p>UPLIFT Q= 4 L/S                      TOTAL Q= 345.6 M<sup>3</sup> / 24 HOURS                      DRAW DOWN=59.05M                      TRANSMISIVITY=3.0M2/DAY</p> <p><b><u>RECOVERY TEST</u></b></p> <p>RECOVERY TIME= 90 MIN                      TRANSMISIVITY=2.5M2/DAY</p> <p><b><u>WATER QUALITY</u></b></p> <p>EC=8,370 μ S/cm                      PH=                      TEMPERATURE= 33.0°C</p>
	^^	Basalt		
	^^	Weathered		
	^^	cracked and		
	^^	fractured into		
	^^	fragments		
	^^			
	^^	Porous partly	<b>S.W.L=</b> 31.1	
	^^			
	^^	Scoria-like		
	^^			
50	^^	High permeability		
	^^			
	^^	<b>aquifer</b> 65-70m		
	^^			
	^^			
	^^			
	^^			
	^^			
	^^			
	^^			
100		70-142m		
		Sandstone		
		with minoy mudstone		
		louse and soft		
		High permeability	<b>DWWL=</b> 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

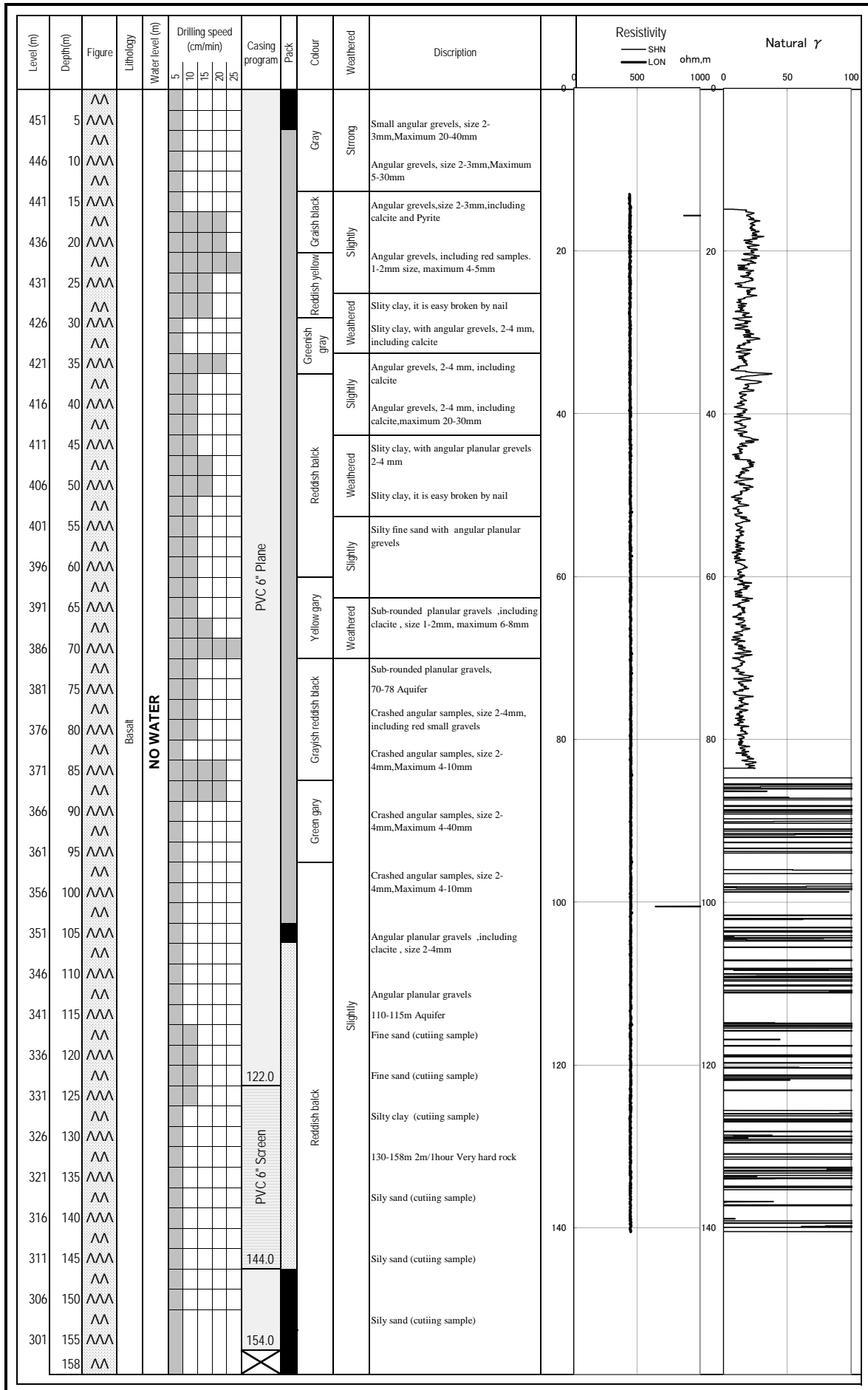
**DATE:** 10-Oct-10

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

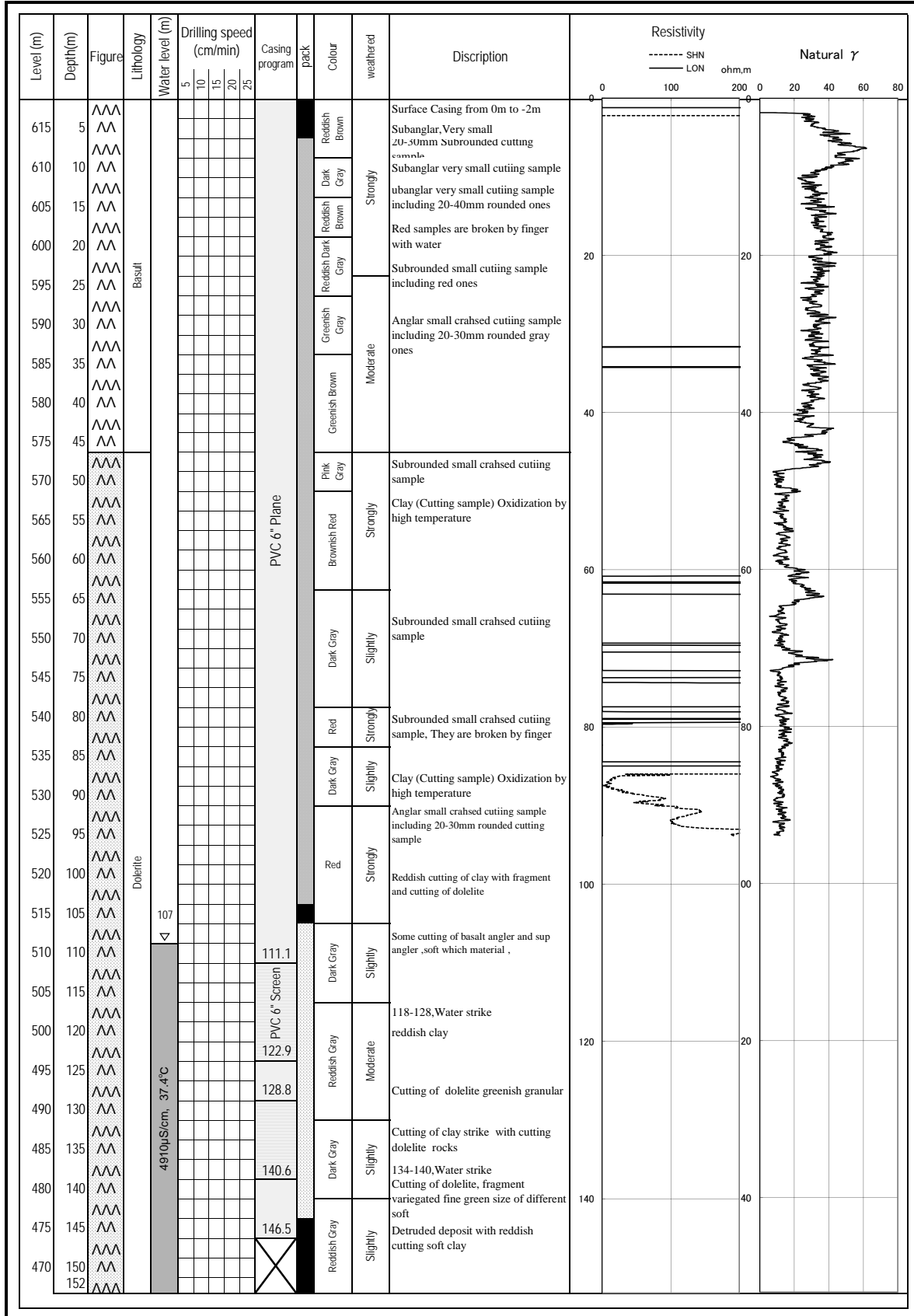
**LOCATION:** PETIT BARA

**DATE:** 4-Aug-10

	GEO MARK	LITHOLOGY	WATER LEVEL	SUMMARY OF WATER PUMP TEST
0	^^	0--150m		<p><b><u>5 STEP TEST</u></b></p> <p>Not done</p> <p><b><u>24 HOURS CONTINUOUS UP LIFT</u></b></p> <p>UPLIFT Q= 7 L/S                      TOTAL Q= 604.8 M<sup>3</sup> / 24 HOURS                      DRAW DOWN=0.86M                      TRANSMISIVITY=460.6M<sup>2</sup>/DAY</p> <p><b><u>RECOVERY TEST</u></b></p> <p>RECOVERY TIME= 45 MIN                      TRANSMISIVITY=407.4M<sup>2</sup>/DAY</p> <p><b><u>WATER QUALITY</u></b></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

