

MANAGEMENT RECOMMENDATIONS

BASIC SITE INFORMATION: *Site Identifier:* 2530DDR0006 *Number:* MB-01162 *Site Type:* Borehole
Distr./Farm No.: MPJT631 *Site Name:* BOERLANDS/MARK TEKLENBURG
Latitude [°]: -25.7681200 *Alt. No. 1:* *Diam. [mm]:* 165 *Last static water lev. [m]:* 3.68
Longitude [°]: 30.8942700 *Alt. No. 2:* *Depth [m]:* 29.85 *Piezometer:* 0
Altitude [m]: 853.00 *Rep. Inst.:* In-Situ Groundwater Services *Col. Ht. [m]:* 0.32 *Date WL meas.:* 20200423
 Coordinate System: WGS 84 / Lat/Long

EXISTING EQUIPMENT:

PUMP: **ENGINE:**
Type of Inst.: *Type of Power:*
Manufacturer: *Manufacturer:*
Depth to intk. [m]: *Power Rating [kW]:*

USE APPLICATION:

Site Status: Unused
Purpose: Production (water supply)
Consumer: Farm(s)
Application: Agricultural - irrigation

WATER CHEMISTRY:

<i>Sample No.:</i>	<i>Date sampled:</i>	<i>Depth sampl. [m]:</i>	<i>Comment:</i>
Chemical and Physical Parameters:		Bacteriol. Parameters:	Calculated Parameters:
<i>pH:</i>	<i>Na:</i>	<i>Cl:</i>	<i>E. Coli:</i>
<i>EC [mS/m]:</i>	<i>K:</i>	<i>NO3 as N:</i>	<i>Faec. Col.:</i>
<i>TDS:</i>	<i>Si:</i>	<i>SO4:</i>	<i>Total Col.:</i>
<i>Tot. Alk.:</i>	<i>Al:</i>	<i>F:</i>	<i>SPC:</i>
<i>Ca:</i>	<i>Fe:</i>		<i>Ion Bal. Err. [%]:</i>
<i>Mg:</i>	<i>Mn:</i>		<i>Tot. Hardness:</i>
			<i>SAR:</i>

Concentrations in [mg/l] where applicable
 Bacteriological parameters in [counts/100ml]

CASING DETAILS:

<i>Depth to top [m]</i>	<i>Depth to bot. [m]</i>	<i>Diam. [mm]</i>	<i>Material</i>	<i>Thickn. [mm]</i>	<i>Type of openings</i>	<i>Openings [mm]:</i>	<i>Hor. Dist.</i>	<i>Vert. Dist.</i>
<i>Length</i>	<i>Width</i>							
-0.32	11.15	165	Steel	2	Plain casing			

TESTING DETAILS:

<i>Description</i>	<i>Date</i>	<i>Durat. [min]</i>	<i>Depth to intk. [m]</i>	<i>Disch. rate [l/s]</i>	<i>Drawd. [m]</i>	<i>Recovery [m]</i>	<i>%</i>	<i>[min]</i>	<i>T [m²/d]</i>	<i>Storage</i>	<i>Spec. capac.</i>	<i>Comment</i>
STEP TEST 1	20200423	60	28.78	1.16	0.83							
STEP TEST 2	20200423	60	28.78	2.24	1.72							
STEP TEST 3	20200423	60	28.78	4.58	3.79							
STEP TEST 4	20200423	60	28.78	12.02	10.84	10.63	98.0	120				
CONSTANT TEST	20200423	1440	28.78	10.05	11.06	10.06	91.0	720				

RECOMMENDATIONS:

<i>Prior.</i>	<i>Rec. equipm.</i>	<i>Depth to intk. [m]</i>	<i>Type of power</i>	<i>Duty cyc. [hrs]</i>	<i>Disch. rate [l/s]</i>	<i>Water quality</i>	<i>Dyn. water level [m]</i>	<i>Crit. water level [m]</i>
1	No information	28.00	No information	12	10.00	NOT SAMPLED	14.00	26.00

Note: This borehole is able to deliver a sustainable yield of 36 000L/hr or 432 000L/day at the recommended pumping rate.



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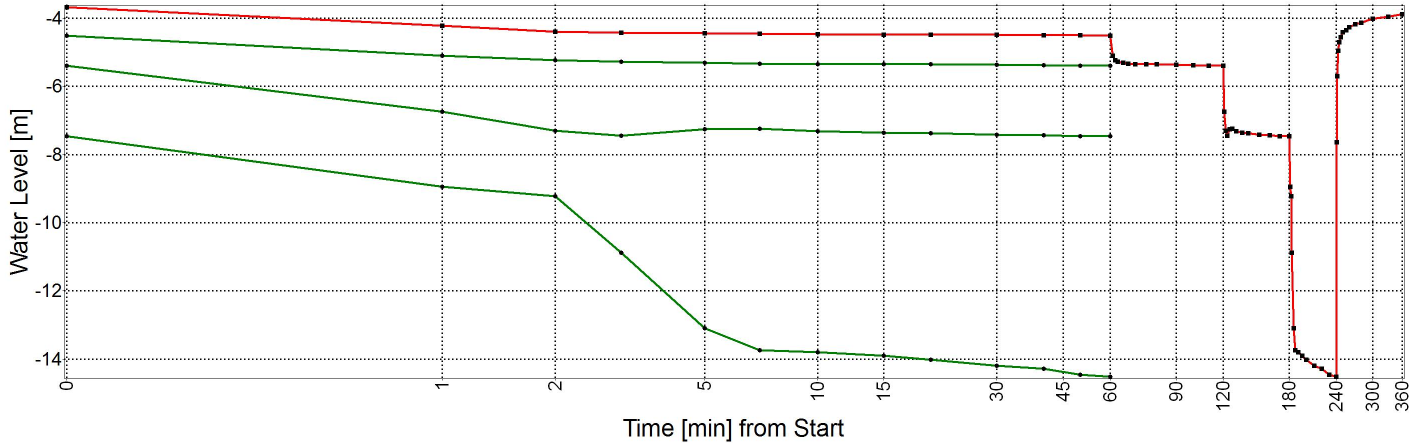
Email: rrrroos@xsinet.co.za

PUMPING TEST REPORT

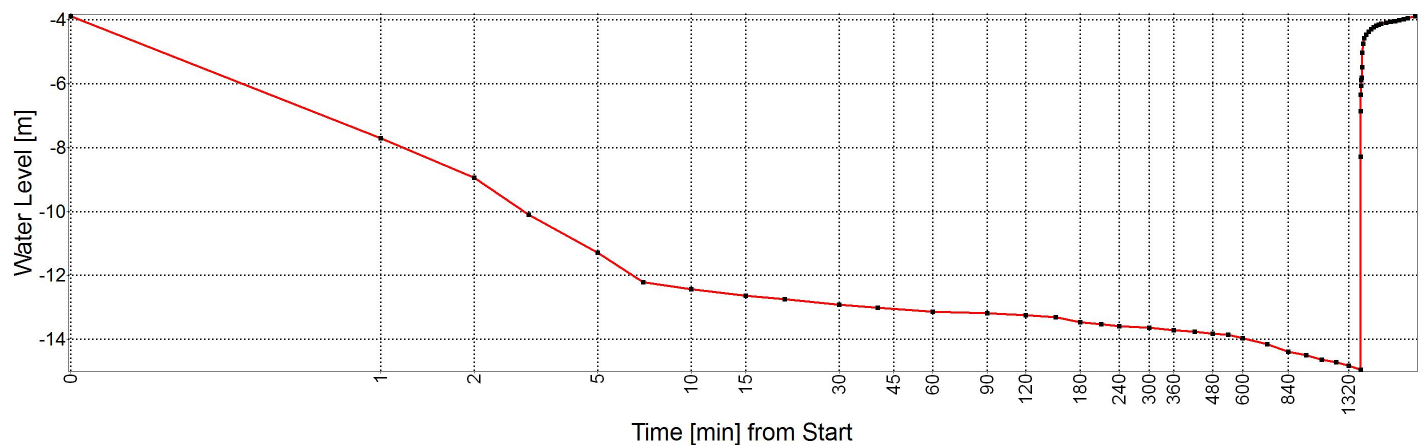
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Distr./Farm No.: MPJT631 **Site Name:** BOERLANDS/MARK TEKLENBURG
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Step Test



Constant Rate Test



PUMPING TEST

Rep. Inst.	Meth. tested	Depth to intk. [m]	Starting Date	Time	End Date	Time	Transm. [m ² /d]	Storativity
In-Situ Groundwater Services	Step test	28.78	2020/04/23	08:39	2020/04/23	14:39		
In-Situ Groundwater Services	Constant rate test	28.78	2020/04/23	14:44	2020/04/25	02:44		

TESTING DETAILS:

Description	Time started	Durat. [min]	Depth to intake [m]	Disch. rate [l/s]	Drawd. [m]	Recovery: [m]	%	Durat. [min]	Transm. [m ² /d]	Perm. [m/d]	Spec. Storac.	Capac.	Q/st
STEP TEST 1	08:40	60	28.78	1.16	0.83								1.398
STEP TEST 2	09:40	60	28.78	2.24	1.72								1.306
STEP TEST 3	10:40	60	28.78	4.58	3.79								1.208
STEP TEST 4	11:40	60	28.78	12.02	10.84	10.63	98	120					1.109
CONSTANT TEST	14:45	1440	28.78	10.05	11.06	10.06	91	720					0.909



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