

Town of Cary Pump Station Inspection Sheet



Facility Name: Morris Branch

Inspection Date: 3/10/2010

ID Number: 019

Pump

Condition: Good

Type: Submersible

Pump One: 2,886 gpm

Discharge Diameter: 18"

Pump Two: 2,897 gpm

Control: VFD

Firm Capacity 2,886 gpm

Manufacturer: Flygt

Rep: HD SUPPLY WATERWORKS

704-504-8804

828-324-9705

Wetwells: Four - 6' by 14' 6.5' Deep

Vol: 4084 Gal

Channel: 25'- 8" by 4'-2" 6' Deep

Vol: 4800 Gal

Odor:

At the Fence: 0.000 ppm

Wetwell: 0.218 ppm

Odor Control: 2 Stage Biofilter/Ferrous Sulfate Condition: Good

Generator:

Generator: Gregory Poole – Olympia

Condition: Good

Model 3412

Volts: 480 amps: 1204

Grinder:

Grinder: Muffin Monster

Condition: Good

Bypass Channel and Bar Screen

Sound:

At the Fence: 58 dB Gen off

Wetwell: 72

db Pump off

At the Fence: 72 dB Gen on

Wetwell: 75

db Pump on

Comments:

- some surface corrosion on the stairs bar screen room
- wetwell shows signs high water
- signs of a ferrous sulfate spill
- valve vault damp
- biofilter lowered the H2S from 0.218 to 0.002 ppm
- room for two more pumps

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Morris Branch PS Pump Curve



TEST REPORT

PRODUCT

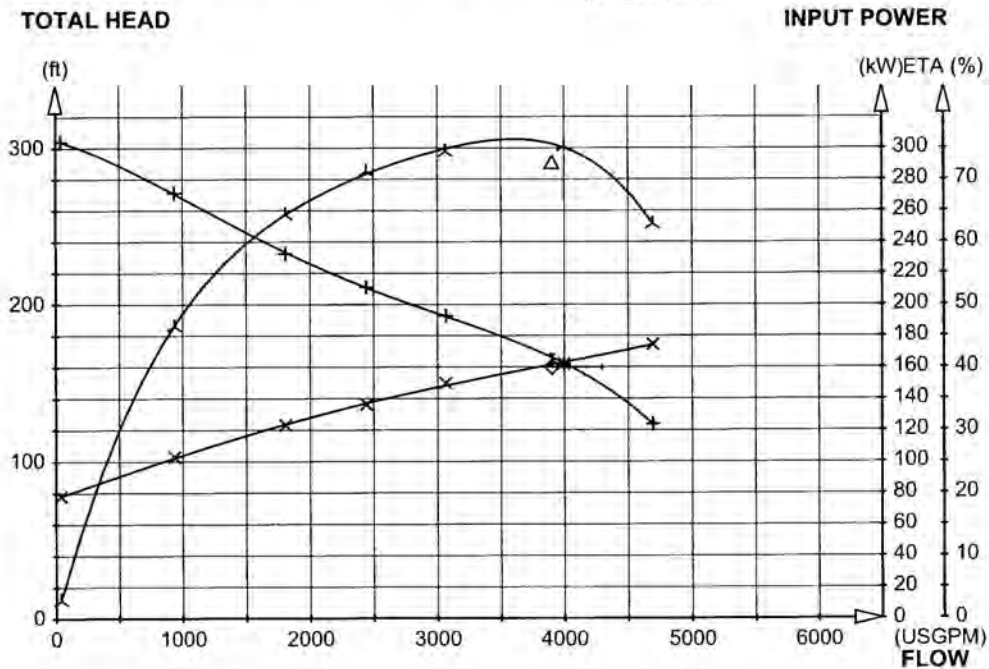
Serial No. 3231.735		Performance curve No. 63-430		Motor module/type 43-44-4AA		Voltage (V) 460	
Base module 000		Impeller No. 621 10 11		Gear type Gear ratio		Imp.diam/Blade angle 405	
						Water temp °C 26	

TEST RESULTS

Pump total head H (ft)	Volume rate of flow Q (USGpm)	Motor input power P (kW)	Voltage U (V)	Current I (A)	Overall efficiency η (%)
304.05	39.1	77.90	464	142.5	2.88
271.31	934.5	102.79	463	168.8	46.53
232.41	1808.6	123.24	463	191.1	64.34
210.93	2442.5	136.26	463	207.6	71.32
192.74	3065.3	149.76	463	222.7	74.42
161.95	3996.9	162.22	462	238.4	75.27
123.87	4693.5	174.48	461	254.4	62.86

Accepted after HI	Test facility Lindas Q2 Sweden	Test date 04-01-14	Time 06:54	Chief tester 1042
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PLOTTED TEST RESULTS Measured point : + = Q/H Duty point : ◊ = Q/H
 X = Q/P □ = Q/P Calculated point : Δ = Q/ETA overall
 Δ = Q/ETA overall 1



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Morris Branch Pump Station



Electrical Room



Ferrous Sulfate



Generator



Chemical Building



Morris Branch Pump Station



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Crane



Valve Vault



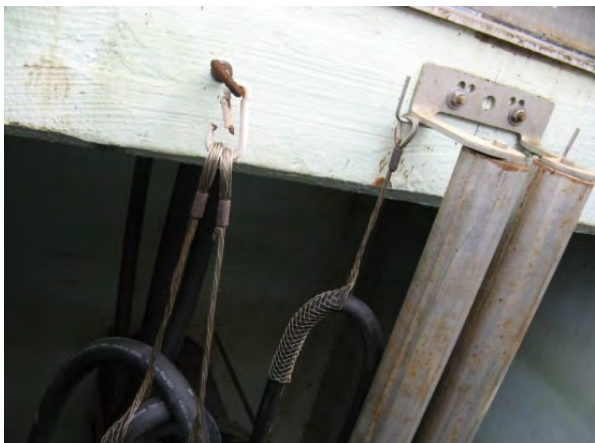
Chemical Pumps



Biofilter



Wetwell



Wetwell

