



February 29, 2009

Harris County MUD #69  
c/o Municipal District Services  
Attn: Board of Directors  
16758 Telge  
Cypress, Texas 77429

Reference: Water Well #1- Performance Testing

Members of the Board,

Collection and evaluation of field data pertaining to the operation of the well and well pumping equipment was recently completed at the facility referenced above. Included in this report please find the test results and pump curve generated by the testing. Historical performance data is presented in graphical format.

<b>PERFORMANCE TEST REVIEW</b>				
Hydraulic Performance of pump is 984 GPM @ 339' field head	Excellent	___	Good	<u>X</u> Marginal ___ Poor ___
Overall efficiency is 64 percent	Excellent	___	Good	<u>X</u> Satisfactory ___ Poor ___
Pump Submergence 127 feet	Excellent	<u>X</u>	Good	___ Marginal ___ Poor ___
Vibration Analysis (N/A)	Excellent	___	Good	___ Marginal ___ Poor ___
Suspended Solids Testing	Excellent	<u>X</u>	Good	___ Marginal ___ Poor ___
Brass Observed in SST	None	<u>X</u>	Trace	___ Substantial ___ Excessive ___
Flowmeter Accuracy is 96.7 percent				

The test indicates the pump appears to be operating in satisfactory condition.

We appreciate this opportunity to be of service. If you have any questions or comments, please call.

Sincerely,  
Gary McMurrey  
G-M Services



# Performance Test Report

SPECIALIZED INSPECTION SERVICES FOR THE WATER INDUSTRY

website: www.g-mservices.com

phone: 281-894-8971

**Facility** Harris County M.U.D. #69 - well #1 **Test Date** 02/12/2009  
**U.S.G.S. #** LJ-65-03-615

### PUMP DATA

Manufacturer : Flowserve  
 Bowl Type : 10" EBM  
 Stages : 12  
 Setting : 448  
 Column Size : 8" X 2 1/2" X 1 1/16"  
 Design Point : 1000 GPM @ 375' TDH

### MOTOR DATA

Manufacturer : U.S. Motors  
 Size (HP) : 200  
 Amps/Volts : 228/460  
 Serial # : R-6377-08-424  
 Frame : 445TPA  
 Speed (RPM) : 1770

### PERFORMANCE TEST DATA

Static Lvl (ft)	-281	
Discharge Pressure	8	8
Capacity (GPM)	984	984
Pumping Lvl (ft)	-321	-318
Drawdown (ft)	40	37
Specific Capacity	24.60	26.59
Field Head (ft)	339.48	336.48
Water Horsepower	84.35	83.69
Overall Efficiency	64%	64%
Horsepower Input	131.32	131.32
Kilowatt Input	98	98
Amp Draw	146-144-134	146-144-134
Voltage	491-488	491-488
Sand (PPM)	1	1
Time (min)	45	45

### Additional Data

Pump Submergence (ft)	127	Brass Detect	Trace	Airline Functional	Yes
KWH/Million Gallons	1,659.89	ETM Read	6531	Right Angle Drive	Yes
Start-up Sand (PPM)	1	Meter Read	100932	Meter Accuracy	96.7%

Flowmeter registers 952 GPM at 8 PSI discharge pressure.

### Remarks

Pump valved back to 35 PSI and a couple of minutes later -pump stops and starts. Re-opened valve back to normal.

# Harris County M.U.D. #69

## Well #1

