



Madison Water Utility

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Request for Bids to Remove a Lakos Sand Separator from Madison Well 16

Date: June 7th 2021

From: Doug Van Horn, Maintenance Supervisor

Subject: **Lakos Sand Separator, Transducer PVC Pipe, and Fill Removal**

In 2015 Madison Water Utility installed a Lakos sand separator in an attempt to control sand pumping at Well 16.

In mid may the deep well pump failed at Well 16 due to a pump shaft break. When the pump was removed it was discovered that the Lakos had fallen off sometime during the previous 5 years. Photos of the depths and placements noted at the end.

A video survey of the well revealed that the top of the Lakos was located at approximately 913 feet below ground level. A copy of the video log of the well is available for review at request. The total well depth is 1004 feet. Madison Water Utility has purchased a new pump and a Lakos Sand separator for Well 16. The existing sand separator needs to be removed from the well per DNR guidelines.

MWU is requesting a price to retrieve the sand separator and the pvc pipe and then remove the remaining fill. Initial attempts will be limited to an initial maximum of 30 hours. Additional time may be authorized if justified. If it is apparent that retrieval is not possible, the Utility reserves the right to stop at any time without penalty.

MWU is also requesting a price to use an alternative destructive method to clear the hole. This suggestion is based on the fact MWU removed an AquaStream from MWU Well 3 using drilling techniques. A cable tool drill was used to break up the AquaStream and remove it. Cost for drilling is limited to an initial maximum of 80 hours. Additional time may be authorized if justified.

Please provide a price to video survey the well following all the work.

Coordination and Control of Work

The work shall be coordinated and controlled by Madison Water Utility. Utility reserves the right to stop the work at any time.

Submit a retrieval plan to MWU and discuss plan with Utility engineers. MWU reserves the right to proceed with retrieval or not based on the risk and potential success of the plan submitted to MWU. Payment shall be per hour for retrieval operations and shall be approved by MWU prior to commencing work.

Submit a removal plan to MWU and discuss plan with Utility engineers. MWU reserves the right to proceed with removal as defined in the submitted plan or require modifications to the plan based on the risk of the plan submitted to MWU. Payment shall be per hour for removal operations and shall be approved by MWU prior to commencing work.

All work shall be reviewed and approved by the DNR and shall comply with any and all rules and regulations for this type of work. Contractor is required to obtain any necessary permits for the work and file any and all construction reports.

Suggested sequence of activities

- 1) Start work within 5 working days of receipt of approved purchase order
- 2) Obtain any permits and approvals
- 3) Coordinate setup and operations with the Utility
- 4) Complete work as approved by the MWU.
- 5) Video survey the well to document conditions following treatment
- 6) Prepare and submit any construction reports
- 7) Demobilize and cleanup