Jordive Limited

Remote Removal of Water Storage Tank Sediment

2013 Clean and Safe Drinking Water Conference (Gander, NF)

Mark Jordan, General Manager, Jordive Limited

A bit of history…

- Est. 1974, became Jordive Limited in 1986
- Potash removal from rail cars in Saint John River, 1987
- Successful use of airlifts (4” – 14”) for sediment removal from ocean and river beds
- Successful methods of sediment removal in various industrial and potable water settings

Adaptive & Innovative

"Every move we've made has been to meet a need."

- Custom fabrication of inspection equipment for pipelines
- Development of slurry technique to remove potash from submerged rail cars
- Design and fabrication of 14" air lift to remove sediment from ocean and river beds

More needs we've met…

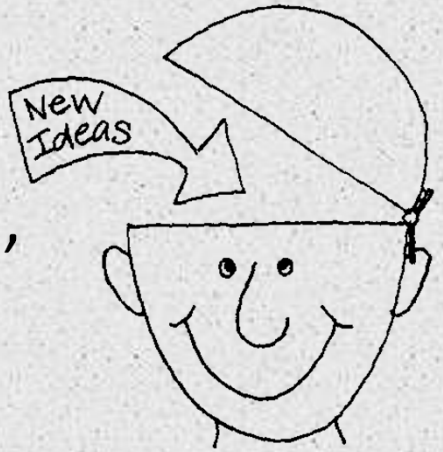
- Remote removal of mussel shells and heavy sediment from intakes and screens

- Detection and repair of leak in potable water storage tank

Remote Leak Detection

What brought us here…

- Success in remotely removing of up to 4’ of sediment from bottoms of municipal water tanks and storage facilities and in industrial settings
  - New Brunswick, Newfoundland, Nova Scotia, Ontario
  - Minnesota, North Dakota



“BEFORE & AFTER”

Why clean?

- Sediment settles on bottom of tanks over time

- Bacteria grows between layers of sediment
  - If tank is before treatment plant - increased use of chemicals to make water safe for drinking
  - If tank is after treatment plant – bacteria finds its way into water system

- Regular inspection is important

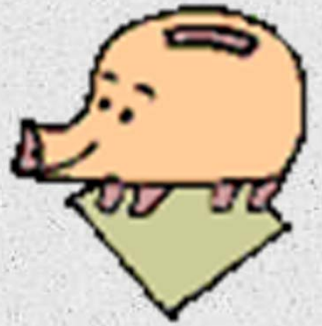
Potable Water Cleaning

- Traditional methods:
  - Divers in tank with suction hoses from vac trucks and manual cleaning of tank
    - **Time consuming and costly**
  - Tank taken out of service and dewatered; manual cleaning; requires secondary source of water
    - **Time consuming and costly**

Jordive's Method:

A cost-effective alternative

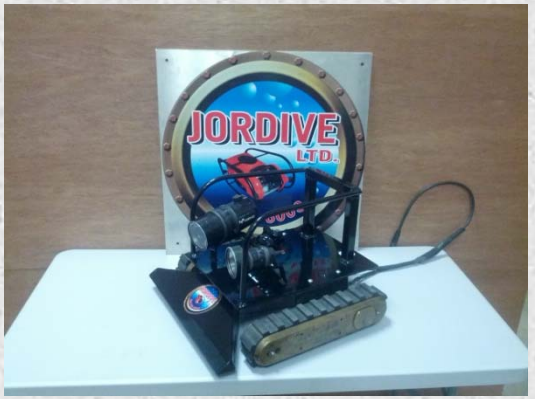
- Interruptions to your operations are kept to minimum
  - In most cases, tank can remain in service
- We remotely remove sediment
- Work requires very few personnel
  - nobody has to enter the tank
- Cleaning can occur 24-7 if needed
- Video of cleaning is supplied
- We can assist you in developing a cleaning schedule to help maintain the quality of service you provide



Jordive's System of Removal

- Remotely operated crawler tracks carry a specially designed body for cleaning sediment at bottom of tank

- 3 crawler bodies to choose from



Hydraulic Power Pump Crawler Body

- 3” hydraulic trash pump
- Suction rate of 400 gallons per minute
  - Up to 25% solid material
- Runs on completely biodegradable hydraulic oil (100% potable water safe)
- Fits in standard 24” x 24” tank entrance

Hydraulic Pump Crawler

3” External Pump Crawler

- 3” external trash pump
  - Sets up outside the tank entrance
- Suction rate of 200-250 gallons a minute
  - Approximately 15% solid material
- Effective in up to 10” of heavy sediment
  - 18” of light sediment
- Fits into 23” x 22” tank entrance

2” External Pump Crawler

- 2” external trash pump
  - Sets up outside tank entrance
- Suction rate of 150-200 gallons per minute
  - Approximately 10% solid material
- Effective in sediment up to 12” deep
- Fits in tank entrance as small as 16” x 16”

2” External Pump Crawler


Any
Questions


THANK
YOU


JORDIVE
.CA
506.763.6003