Water Solutions Services
SAVING OUR MOST VALUABLE RESOURCE

Water Management Solutions for the Oil and Gas Industry
Recovery : Reclamation : Recycling
Basic Energy Services researches, develops and implements emerging technologies and strategies for managing water in the oil and gas industry.

Processes include treatment options for:

- Produced water
- Drilling wastewater
- Flowback water

Additional services include logistical support, solids recovery and chemical treatments.
Our Approach

Every project is different.

• Variables include:
  - Geology, Drilling/Frac program; Water quality/ quantity; Disposal;
    Logistics; Regulatory environment; Public relations; Costs

Solutions to complex water issues are developed with the client.

• We ask questions *first*.
  - Strategic plans are developed around actual project conditions and
    customized for the client’s operations.

* Treat to the Minimum Required Parameters!!! *
• Electrocoagulation (EC)
• Chlorine Dioxide (ClO2)
• Media Filtration – utilizing crushed glass
• Dewatering – all flowable solids
Chlorine Dioxide - ClO2

Treatment options include:

- Open Pits
- Frac Tanks
- Downhole
- Line Cleanouts

Basic’s ClO2 solution treats:

- Hydrogen Sulfide (H2S)
- Removes Iron Sulfide
- Breaks gels and friction reducers
- Kills Bacteria
- Eliminates Emulsions and Biomass
Treatment options include, but not limited to:

- pH Control
- TSS (Suspended Solids)
- Iron
- Oil & Grease
- Hardness (Magnesium, Calcium)
- Bacteria
- Turbidity
- Alkalinity
- Bicarbonates
- 500 GPM & Scalable

Effectively we end up with a Clean Brine…

*Barnett Shale water treated using EC process 3-2012*
Multi-Media Filtration

Treatment options include:

- TSS Reduction for flowback & produced water
- Pretreatment to frac
- Pretreatment to SWD
- Polisher to any treatment process
- 750 GPM & Scalable

Glass Media vs. Sand/Cartridge

- Longevity
- Maintenance
- < 20 Micron
- Removes twice the iron
- Self-sanitizing
- Ionically Charged
Benefits

- Improves safety
- Lowers operating costs
- Minimizes fresh water use
- Helps meet water supply needs
- Environmentally friendly
- Relieves pad site congestion
- Increases production efficiencies
We focus here… so you can focus here.

**Decreasing:**
- fresh water needs
- water hauling
- disposal
- pad site congestion

**Saving:**
- time
- money
- and WATER
Meet Your Water Solutions Needs Efficiently, Reliably and Responsibly.

Brody Dame – Division Manager
  o Office: 817.579.9220
  o Cell 325.665.9696
  o William.dame@basicenergyservices.com

Richard Harms – Water Solutions Manager
  o Office 817.579.9220
  o Cell 970.380.8589
  o Richard.harms@basicenergyservices.com

James Lee – Technical Manager
  o Office: 940.682.2177
  o Cell 940.395.6047
  o James.lee2@basicenergyservices.com

Sanders Campbell – Water Solutions Sales
  o Office: 817-579-9220
  o Cell 214.850.7877
  o sanders.campbell@basicenergyservices.com

George Atcherson – Water Solutions Sales
  o Office: 817.579.9220
  o Cell 814.389.3460
  o George.atcherson@basicenergyservices.com