

Case Study #3

Industrial Sludge with Metal Contamination

Campbell County Landfill - Gillette, WY

LBI was provided with a thick, black solution with a strong, pungent odor by the Campbell County Landfill staff. The sample was collected from a drain sump in former diesel technology training center shop. The solution had a high suspended solid content. The base liquid was analyzed for the “RCRA Eight” metals. Due to the high solids content, a 30/50 digestion was performed.

DualZorb was hydrated with tap water and added to a mixing vessel, which contained one pound of the liquid, until the liquid was completely absorbed. Approximately one pound of hydrated DualZorb was required to absorb the liquid. In this test, DualZorb was hydrated with tap water in a separate container. The DualZorb was allowed to hydrate for approximately two minutes before being mixed with the liquid. After one minute of mixing DualZorb with the liquid to ensure complete absorption, a sample spent DualZorb was sent to Inter-Mountain Laboratories in Sheridan, WY for analysis. The results are summarized below:

Constituent	Raw Total Metals	Treated TCLP Metals
Arsenic	2 mg/Kg	ND
Barium	44.2 mg/Kg	ND
Cadmium	2 mg/Kg	ND
Chromium	ND	ND
Lead	20 mg/Kg	ND
Selenium	2.8 mg/Kg	ND
Silver	ND	ND
Mercury	ND	ND

ND – Not Detected

Data collected during this test clearly shows that DualZorb is effective at removing metal contamination from liquid.