

## ARCADIS/CSX GAUTIER OIL SITE

CLIENT	ARCADIS/CSX
LOCATION	Gautier, MS
VALUE	\$105,313
DATE	May 2008 – June 2008 <i>(approximately two and a half weeks)</i>
SAFETY	Zero OSHA Recordables



### Subaqueous Capping

ARCADIS, on behalf of its client CSX Transportation, Inc., retained NorthStar to provide a free-product non-aqueous phase liquid (NAPL) recovery trench and install ancillary equipment and utilities at a property that had been used to preserve wood pilings with creosote. NAPL was present from approximately two feet below ground surface (bgs) to approximately eight feet bgs, the top of a large horizontal zone of inorganic clay. The water table varied with the season and tide and was approximately one to five feet bgs.

The project proceeded as outlined below:

- Recovery trench construction
- Piezometers and recover sump pump installation
- Backfill installation
- Vault, ancillary equipment and monitoring system installation

NorthStar constructed the recovery trench 15 feet deep, 50 feet long, and 3 feet wide. The NAPL-contaminated soil was loaded directly into roll-off boxes and shipped off-site for disposal as non-hazardous soil.

After the excavation was complete, we installed two 2-inch by 15-foot stainless steel piezometers and one 18-inch by 15-foot corrugated recovery sump pipe wrapped in stainless steel wire cloth. The trench was then backfilled with washed stone up to the ground water elevation. Above that we installed a 16-oz geotextile fabric to provide separation between the stone and the clay layer that was backfilled to the top of the trench.

We installed three AASHTO H-20 rated well vaults, a 36-inch square well vault around the 18-inch recovery sump pipe, and two eight-inch well vaults around the piezometers. Once the vaults were in place we installed the DNAPL recovery pumps, hoses, storage tanks, telemetry monitoring system.

Fencing encloses the storage tanks and recovery systems.