

BIG MACHINES IN

BIG FOOT'S BACKYARD



Billy Cleveland, Delta Directional LLC, USA, discusses the directional drilling equipment successfully used in an environmentally protected area.

Deep in the heart of southeastern Louisiana (40 miles or 64 km northeast of New Orleans) lies Honey Island. It is the home of a vast marshland known as Honey Island Swamp. It is one of the least-altered river swamps in the US. Considered by many to be one of the country's most pristine swampland habitats, the Honey Island Swamp covers an area that is over 20 miles (30 km) long and nearly 7 miles (10 km) wide, with 34 896 of its 70 000 acres (280 km²) as permanently protected wildlife area by the government. Honey Island Swamp's 'claim to fame' relates to the Honey Island Swamp Monster; a Big Foot-like creature said to roam the area leaving four-toed footprints throughout the landscape.





Figure 1. Delta Directional owner, Billy Cleveland (closest to pipe) watches as 6228 ft (1898 m) of natural gas pipeline is installed on Honey Island.



Figure 2. The DD-625 crew from Delta Directional stands proudly in front of their American Augers rig. Another job well done!

Notwithstanding the mystique surrounding Honey Island, the DD-625 crew from Delta Directional forged ahead to run an enormous crossing of 16 in. (40.6 cm) natural gas pipe, 6228 ft (1898 m) underneath the marshy Honey Island floor and adjacent Pearl River; the longest crossing for Delta Directional to date. The customer, Enterprise Products Pipeline, contracted with Progressive Pipeline of Meridian, Mississippi to ream the long tunnel. Progressive called on the field-proven professionals with the right rig to get the job done: Delta Directional LLC, proud owners of an American Augers DD-625 boasting 625 000 lbs (283 t) of push/pullback. James Ozment, Project Manager for Progressive stated, "Progressive Pipeline chose Delta Directional because of their proven customer service, above average craftsmanship and high quality of equipment. With these three qualities on their side it makes them a very elite horizontal directional drilling company."

Purchased by Delta Directional in 2008, the rig and extra large operator's cabin has performed flawlessly for Delta's owner, Billy Cleveland, since it began running pipeline jobs throughout the US. Known as 'Blue' throughout the drilling industry, blue-eyed Cleveland continues to rave about the DD-625 in addition to his other American Augers rigs –

DD-210 and DD-440T. According to Billy, American Augers maxi-rigs "own" the large directional drilling market.

The Honey Island natural gas pipeline project was estimated to take slightly over two weeks to complete once the job began, but Mother Nature was prolonging the onset of the work because of Tropical Storm Lee. Stalling off the coast of Louisiana, the storm's winds increased in strength due to a large portion of circulation over the warm waters of the Gulf of Mexico and weakened more slowly than a typical tropical cyclone would as it moved inland. Lee finally moved inland over south-central Louisiana and the Honey Island area on the morning of 4th September 2011, with winds of 45 mph (75 km/hr). High winds also produced a storm surge that submerged parts of nearby Slidell and Honey Island by up to 4 ft (1.2 m). The crew placed the jobsite equipment on floats stacked six-high to protect it from the floodwaters before drilling even began. Floodwater finally sub-sided a few weeks later and the job was underway.

Located a two and a half hour drive from Delta Directional headquarters in Newton, Mississippi, the DD-625 crew took a mere 16 days to finish the job; well within the estimated time frame of completion. Approximately 25 Delta employees working double shifts were involved over that 16 day period to ensure proper pipeline instalment, precise deadline achievement and that strict environmental guidelines were followed.

The Louisiana Department of Natural Resources has appointed Honey Island Swamp as one of its GEMS (Gulf Ecological Management Site); a geographic area that has special ecological significance to the continued production of fish, wildlife and other natural resources that represents unique habitats. Therefore, the green technology involved with horizontal directional drilling is necessary to run the pipeline throughout the project site. Delta Directional was easily able to abide by the state's strict guidelines and several daily visits to the jobsite by Louisiana state officials, by the proven methods HDD provides.

Rig Superintendent, Steve McCrary, commented that the ground conditions for the pipeline project consisted of sand, clay and gravel. The entire 6228 ft (1898 m) area had different earth elements throughout, but the DD-625's last 800 ft (244 m) proved especially difficult. The gravel formation and size of gravel changed every 10 ft (3 m). Re-drilling was occurring during that last segment to ensure proper installation was maintained.

Meeting the DD-625 toward the end of its long drill and assisting in the massive job was the DD-210, another American Augers machine that Billy Cleveland is proud to own. Both machines performed "flawlessly" to accomplish this impressive task. The bits of each machine were tagged near the middle and stayed together all the way out of the hole so as to not lose hole integrity, thus completing the extremely long pass. This was truly an accomplishment the DD-625 crew was proud of, especially in the short time it involved. 