



nanoUmbilical Workshop

Introduction

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Project Goals

Goal: Develop a Polymeric Conductor with
Conductivity Greater than Copper

Target Use: Off-Shore Oil & Gas Production

Project Cost and Duration

Start Date: 12-05-08

End Date: 12-04-09

Budget: \$560,000

Deliverables

- ▶ Deliver an actual piece of ‘polymeric conductor’. One foot long – and operating at room temperature, be able to carry 500 amps at one half the diameter of copper wire at the same voltage.
- ▶ Deliver a final report that documents the project results.
 - ▶ An explanation / discussion of how manufacture of such conductors could be scaled up
 - ▶ A preliminary economic analysis of the cost of the conductor at long lengths
 - ▶ Identification of remaining technical / engineering hurdles
- ▶ Conduct a workshop in Houston to present and discuss results.

Partners

- ▶ NanoRidge – Project Lead
- ▶ Rice University – Technical Lead
- ▶ DUCO – Umbilical Manufacturer
- ▶ Technip USA
- ▶ Chevron



Key Players

- ▶ Dr. Rick Barrera – Technology Lead – Rice
- ▶ Dean Hulsey – Program Manager – NanoRidge
- ▶ Art Schroeder – RPSEA Manager
- ▶ Dr. Jim Dailey – Technip
- ▶ Dave Madden – Duco