Alta Mesa Holdings, LP

Houston, Texas

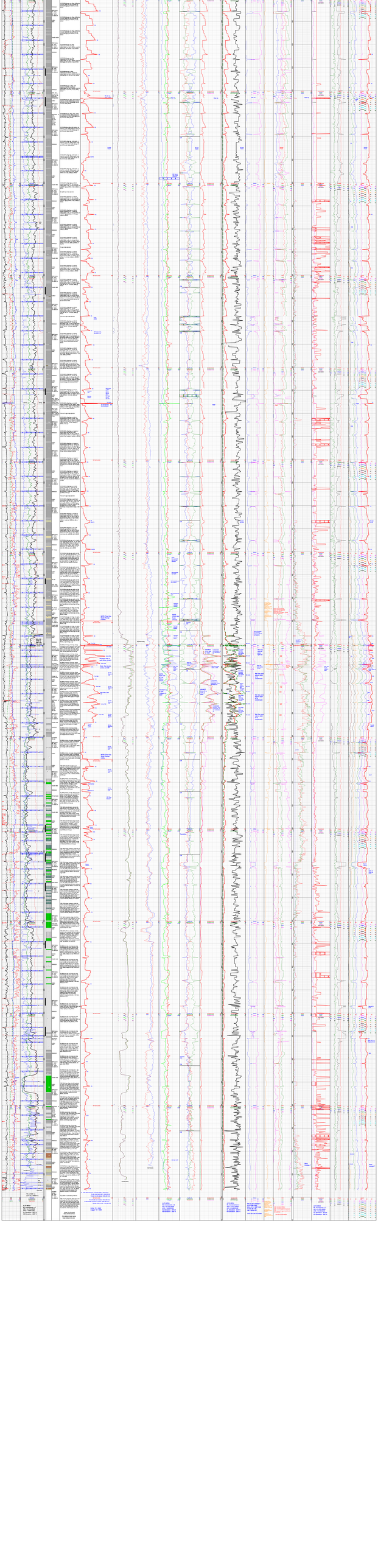
Well Name: Mc Cullough 2
Field: Lake Creek
County, State: Montgomery, Texas
Surface Location: Abstract 128 J Ferguson
API #: 42-339-31611
Logging Company: Halliburton
Date Logging Started: 11/7/2011
Date Logging Finished: 11/8/2011
Drilling Contractor: Patterson-UTI Drilling
Rig: 255
Elevation (Feet above MSL): KB: 270 feet above MSL; DF: 268 feet above MSL; GL: 248 feet above MSL
Total Depth: Driller: 11,100 feet; Logger: 11,100 feet
Casing Shoe: Driller: 11,100 feet; Logger: 11,100 feet
Bit Size: 7.875 inches
Type of Fluid in Hole: Brine
Max Rec Temp: 240 degrees F
Equipment: Left Hand Drill Pipe Conveyed Logging Service; 1.69 API Gun Size Deployed Gun

Recorded by: Jim Ellis
Witnessed by: Mr. Jason Ellis

Company Man: Jason Stephens, Brandon Ellis
Drilling Supervisor: Jason Ellis, Jason Stephens, Jason Ellis
Drilling Engineer: Jeff Ellis, Jeff Ellis, Jeff Ellis
Consultant: Jeff Ellis, Jeff Ellis, Jeff Ellis, Jeff Ellis
Mud Company: Halliburton, Halliburton, Halliburton, Halliburton
Mud Engineer: Halliburton, Halliburton, Halliburton, Halliburton
Drill Contractor: Patterson-UTI Drilling, Patterson-UTI Drilling, Patterson-UTI Drilling, Patterson-UTI Drilling
Logging Company: Halliburton, Halliburton, Halliburton, Halliburton
Wireline Engineer: Jim Ellis, Jim Ellis, Jim Ellis, Jim Ellis
Logging Engineer: Jim Ellis, Jim Ellis, Jim Ellis, Jim Ellis
Logging Truck: 10-Ellis, 10-Ellis, 10-Ellis, 10-Ellis

Mud Type: Brine, Brine, Brine, Brine
Density: 9.0 lb/gal, 9.0 lb/gal, 9.0 lb/gal, 9.0 lb/gal
Viscosity: 28 sec, 28 sec, 28 sec, 28 sec
Fluid Loss: 10 cc, 10 cc, 10 cc, 10 cc
Resistivity: 0.0 ohm-m, 0.0 ohm-m, 0.0 ohm-m, 0.0 ohm-m
Chlorides: 300,000 mg/l, 300,000 mg/l, 300,000 mg/l, 300,000 mg/l
Ph: 7.0, 7.0, 7.0, 7.0

Max Rec Temp: 240 degrees F, 240 degrees F, 240 degrees F, 240 degrees F
Circulation Stopped: 11:00, 11:00, 11:00, 11:00
Logger On Bottom: 14:00, 14:00, 14:00, 14:00
Unit Number: 10-Ellis, 10-Ellis, 10-Ellis, 10-Ellis
Equipment: Left Hand Drill Pipe Conveyed Logging Service; 1.69 API Gun Size Deployed Gun

Logged 1: Bottom, Bottom, Bottom, Bottom
Logged 2: Top, Top, Top, Top
Scale: 1:240, 1:240, 1:240, 1:240

Tool Name: Gamma Ray, Gamma Ray, Gamma Ray, Gamma Ray
Serial #: 10-Ellis, 10-Ellis, 10-Ellis, 10-Ellis
Distance: 15.0 ft, 15.0 ft, 15.0 ft, 15.0 ft