



# ANALYSIS REPORT

Lab #: 218734

Job #: 16094

Sample Name: HSR-Reese 5-33

Co. Lab#:

Company: LT Environmental

Date Sampled: 8/23/2011

API 05123 14347

Container: IsoTube®

Field/Site Name: PO 014211159

Location:

Formation/Depth:

Sampling Point:

Date Received: 8/25/2011

Date Reported: 9/16/2011

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	$\delta\text{D}$ ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	0.0320			
Hydrogen -----	0.0011			
Argon -----	nd			
Oxygen -----	0.006			
Nitrogen -----	1.68			
Carbon Dioxide -----	0.16			
Methane -----	79.33	-51.63	-231.6	
Ethane -----	8.59	-31.77		
Ethylene -----	nd			
Propane -----	5.80	-29.48		
Iso-butane -----	1.03			
N-butane -----	1.98			
Iso-pentane -----	0.496			
N-pentane -----	0.500			
Hexanes + -----	0.390			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 1263

Specific gravity, calculated: 0.733

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen is relative to VSMOW. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.