

## Isotech Gas Data

Job 12538

Project 009-2532

Isotech Lab No.	Sample Name	Location	GC Analysis Date	He %	H <sub>2</sub> %	Ar %	O <sub>2</sub> %	CO <sub>2</sub> %	N <sub>2</sub> %	CO %	C <sub>1</sub> %	C <sub>2</sub> %	C <sub>2</sub> H <sub>4</sub> %	C <sub>3</sub> %	C <sub>3</sub> H <sub>6</sub> %	iC <sub>4</sub> %	nC <sub>4</sub> %	iC <sub>5</sub> %	nC <sub>5</sub> %	C <sub>6</sub> + %	Mass Spec Date	δ <sup>13</sup> C <sub>1</sub> ‰	δDC <sub>1</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	Specific Gravity	BTU	* Helium Dilution Factor
179831	MILL2	Miller	2/12/2010			0.911	2.36	0.18	51.93	0	44.00	0.565	0	0.0547	0	0.0007	0.0007	0.001	0.0014	0	02/16/2010	-51.94	-203.5	-27.6	0.794	457	0.72

Chemical analysis based on standards accurate to within 2%

\*Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.72

\*Addition of helium negates the ability to detect native helium or hydrogen.

\*\* ethane isotopes obtained online via GC-C-IRMS