

05-123-32570



### NATURAL GAS ANALYSIS

PROJECT NO. : **200910139** ANALYSIS NO. : **01**  
COMPANY NAME : **NOBLE ENERGY** ANALYSIS DATE: OCTOBER 27, 2009  
ACCOUNT NO. : SAMPLE DATE :  
PRODUCER : TO:  
LEASE NO. : CYLINDER NO. : 1L TEDLAR BAG  
NAME/DESCRIP : K09-01; FIVE RIVERS

#### \*\*\*FIELD DATA\*\*\*

SAMPLED BY : AMBIENT TEMP.:  
SAMPLE PRES. : GRAVITY :  
SAMPLE TEMP. : VAPOR PRES. :  
COMMENTS :

| COMPONENTS   | NORM.<br>MOLE% | GPM @<br>14.65 | GPM @<br>14.73 |
|--------------|----------------|----------------|----------------|
| HELIUM       | 0.00           | -              | -              |
| HYDROGEN     | 0.00           | -              | -              |
| OXYGEN/ARGON | 0.62           | -              | -              |
| NITROGEN     | 1.25           | -              | -              |
| CO2          | 0.00           | -              | -              |
| METHANE      | 79.48          | -              | -              |
| ETHANE       | 11.13          | 2.961          | 2.977          |
| PROPANE      | 4.32           | 1.184          | 1.190          |
| ISOBUTANE    | 0.72           | 0.234          | 0.236          |
| N-BUTANE     | 1.22           | 0.383          | 0.385          |
| ISOPENTANE   | 0.41           | 0.149          | 0.150          |
| N-PENTANE    | 0.34           | 0.123          | 0.123          |
| HEXANES+     | 0.51           | 0.221          | 0.223          |
| TOTAL        | 100.00         | 5.255          | 5.283          |

|                         |              |              |
|-------------------------|--------------|--------------|
| BTU @ 60 DEG F          | <b>14.65</b> | <b>14.73</b> |
| NET DRY REAL (LOW) =    | 1113.3       | 1119.4       |
| NET SATURATED REAL =    | 1093.9       | 1099.9       |
| GROSS DRY REAL (HIGH) = | 1228.1       | 1234.8       |
| GROSS SATURATED REAL =  | 1206.6       | 1213.3       |

RELATIVE DENSITY ( AIR=1 @14.696 PSIA 60F) : 0.7170

COMPRESSIBILITY FACTOR : 0.99658