



Received 12/1/2011  
Rifle COGCC  
Re COA#2 Rem 6682

## ISOTOPIC ANALYSIS

PROJECT NO. : **201109139** ANALYSIS NO. : **05**  
COMPANY NAME : **MARALEX RESOURCES** ANALYSIS DATE: NOVEMBER 10, 2011  
ACCOUNT NO. : SAMPLE DATE : SEPTEMBER 19, 2011  
PRODUCER : TO:  
LEASE NO. : CYLINDER NO. : 951  
NAME/DESCRIP : FEDERAL 26-3  
OFF BRADENHEAD

\*\*\*FIELD DATA\*\*\*  
SAMPLED BY : JIM GRAVES AMBIENT TEMP.:  
SAMPLE PRES. : 360 PSIG GRAVITY :  
SAMPLE TEMP. : VAPOR PRES. :  
COMMENTS : *NO PROBE*

| <u>COMPONENTS</u> | <u>DELTA 13C</u><br>per mil | <u>DELTA D</u><br>per mil | <u>DELTA 15N</u><br>per mil |
|-------------------|-----------------------------|---------------------------|-----------------------------|
| HELIUM            |                             |                           |                             |
| HYDROGEN          |                             |                           |                             |
| OXYGEN/ARGON      |                             |                           |                             |
| NITROGEN          |                             |                           |                             |
| CO2               |                             |                           |                             |
| METHANE           | -38.96                      | -165.60                   |                             |
| ETHANE            | -25.04                      |                           |                             |
| PROPANE           | -24.21                      |                           |                             |
| ISOBUTANE         |                             |                           |                             |
| N-BUTANE          |                             |                           |                             |
| ISOPENTANE        |                             |                           |                             |
| N-PENTANE         |                             |                           |                             |
| HEXANES+          |                             |                           |                             |

*Note: Isotopic composition of carbon is relative to VPDM. Isotopic composition of hydrogen is relative to VSMOW.*

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