



Certificate of Analysis

Number: 2030-2012110011-001A



For: Taani Martinez
Noble Energy, Inc.
800 Airport Road
Rifle, Colorado 81650

Sample ID:
Station Name: Federal 7G Pad
Station Number:
Project / Station Location: Federal 7 43A
Project Number:
Project Name:
Sampled by: BW-SPL

Report Date: 11/01/2012
Sample Of: Gas
Sample Date: 10/28/2012 @ 13:40
Sample Pres (psig): N.G. psi
Sample Temp (D.F.): N.G. °F
Sample Point:
PO / Ref. No:
Cylinder No: Tedlar

SULFUR ANALYSIS Method: GPA-2199

SULFIDES		MERCAPTANS		DISULFIDES	
	ppm (wt.)		ppm (wt.)		ppm (wt.)
Hydrogen	281.9	Methyl	3.3	Carbon	N/D
Carbonyl	N/D	Ethyl	<1.0	DiMethyl	N/D
DiMethyl	N/D	Isopropyl	<1.0	Methyl Ethyl	N/D
Methyl Ethyl	N/D	n-Propyl	N/D	DiEthyl	N/D
DiEthyl	N/D	Isobutyl	N/D	Di-iso-propyl	N/D
Di-iso-propyl	N/D	sec-Butyl	N/D	Di-n-Propyl	N/D
Di-n-Propyl	N/D	tert-Butyl	N/D	Di-iso-butyl	N/D
Di-iso-butyl	N/D	n-Butyl	N/D	Di-sec-Butyl	N/D
Di-sec-Butyl	N/D	Isoamyl	N/D	Di-tert-Butyl	N/D
Di-tert-Butyl	N/D	pri-Amyl	N/D	Di-n-Butyl	N/D
Di-n-Butyl	N/D	n-Amyl	N/D	Unknown Disulfides	N/D
Unknown Sulfides	N/D				
OTHER					
Thiophene	N/D ppm(wt.)				
Thiophane	N/D ppm(wt.)				
TOTAL SULFUR	267.2 ppm(wt.)				
	0.02672 weight %				
	9.741 grains/100 cu.ft.				

REMARKS:

Note: N/D = None Detected
<1.0 = Detected @ unquantifiable level below 1.0 ppm.

SPL Data Reviewer

