



**GAS MEASUREMENT EMISSIONS TESTING LABORATORY**  
307.856.0866  
www.precision-labs.com

<b>Client:</b>	EOG Resources	<b>Analysis Date:</b>	4/25/2013
<b>Sample ID:</b>	Arbalest 22-15H	<b>Date Sampled:</b>	4/17/2013
<b>Unique #:</b>	NI	<b>Purpose:</b>	NI
<b>Sample Temperature:</b>	75 DEGF	<b>Sample Pressure:</b>	58 PSI
<b>Sampled By:</b>	Cody Wilson	<b>Type Sample:</b>	Spot
<b>County:</b>	Campbell		

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<u>Components</u>	<u>Mole %</u>	<u>Weight %</u>	<u>Liq. Vol. %</u>
Carbon Dioxide.....	1.7691	2.402	1.260
Hydrogen Sulfide.....	0.0000	0.000	0.000
Nitrogen.....	0.0725	0.063	0.033
Methane.....	43.7877	21.671	30.970
Ethane.....	31.5489	29.266	35.200
Propane.....	0.0000	0.000	0.000
iso-Butane.....	4.4558	7.990	6.083
n-Butane.....	9.1158	16.345	11.990
iso-Pentane.....	3.1438	6.998	4.797
n-Pentane.....	2.4937	5.551	3.771
Cyclopentane.....	0.2249	0.487	0.278
n-Hexane.....	0.7424	1.974	1.274
Cyclohexane.....	0.4232	1.099	0.601
Other Hexanes .....	1.1961	3.180	2.052
Heptanes.....	0.4682	1.447	0.901
Methylcyclohexane.....	0.1828	0.554	0.306
2,2,4-Trimethylpentane...	0.0000	0.000	0.000
Benzene.....	0.2590	0.624	0.302
Toluene.....	0.0848	0.241	0.118
Ethylbenzene.....	0.0003	0.001	0.000
Xylenes.....	0.0024	0.008	0.004
C8+ Heavies.....	0.0286	0.101	0.061
Totals .....	100.000	100.000	100.000

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# **ADDITIONAL BETX DATA**

<b>Components</b>	<b>Mole %</b>	<b>Weight %</b>	<b>Liq. Vol. %</b>
Cyclopentane	0.2249	0.487	0.278
Cyclohexane	0.4232	1.099	0.601
2-Methylpentane	0.7528	2.001	1.292
3-Methylpentane	0.4433	1.178	0.760
n-Hexane	0.7424	1.974	1.274
Methylcyclohexane	0.1828	0.554	0.306
2,2,4-Trimethylpentane	0.0000	0.000	0.000
Benzene	0.2590	0.624	0.302
Toluene	0.0848	0.241	0.118
Ethylbenzene	0.0003	0.001	0.000
m-Xylene	0.0004	0.001	0.001
p-Xylene	0.0016	0.005	0.003
o-Xylene	0.0004	0.001	0.001

<b>SPECIFIC GRAVITY @ 60/60 F, calculated.....</b>	<b>1.1192</b>
<b>TOTAL GPM (Ethane Inclusive).....</b>	<b>16.191</b>
<b>CALCULATED BTU / REAL CF @ 14.73 PSIA, dry basis.....</b>	<b>1853.636</b>
<b>CALCULATED BTU / REAL CF @ 14.73 PSIA, wet basis.....</b>	<b>1822.078</b>
<b>AVERAGE MOLECULAR WEIGHT.....</b>	<b>32.414</b>
<b>MOLAR MASS RATIO.....</b>	<b>1.1192</b>
<b>RELATIVE DENSITY ( G x Z (Air) / Z ), calculated.....</b>	<b>1.1301</b>
<b>IDEAL GROSS HEATING VALUE, BTU / IDEAL CF @ 14.696 PSIA.....</b>	<b>1831.575</b>
<b>COMPRESSIBILITY FACTOR (Z).....</b>	<b>0.99037</b>

<b>PROPANE GPM .....</b>	<b>0.0000</b>
<b>BUTANE GPM .....</b>	<b>4.3209</b>
<b>GASOLINE GPM (PENTANE AND HEAVIER) .....</b>	<b>3.4545</b>
<b>TOTAL ACID GAS MOLE %.....</b>	<b>1.7691</b>
<b>H2S MOLE % .....</b>	<b>0.0000</b>
<b>H2S PPM .....</b>	<b>0</b>
<b>VOC WEIGHT FRACTION .....</b>	<b>0.466</b>

NOTATION: ALL CALCULATIONS PERFORMED USING PHYSICAL CONSTANTS FROM GPA 2145-09, THE TABLES OF PHYSICAL CONSTANTS FOR HYDROCARBONS AND OTHER COMPOUNDS OF INTEREST TO THE NATURAL GAS INDUSTRY.