



Realize Production Potential

Zedi US Inc
541 E. Garden Dr. Unit O
Windsor, CO 80550
970-460-0055

Client:	Verdad	Analysis Date:	12/7/2016
Sample ID:	Johnson 8N wellhead	Date Sampled:	12/06/16
Unique #:	NI	Purpose:	Meter run
Sample Temperature:	29.5 DEG F	Sample Pressure:	500.0 PSI
Sampled By:	Jacob Stephens	Type Sample:	Spot
County:	Weld		

<u>Components</u>	<u>Mole %</u>	<u>Weight %</u>	<u>Liq. Vol. %</u>
Carbon Dioxide.....	1.1262	2.443	1.030
Hydrogen Sulfide.....	0.0000	0.000	0.000
Nitrogen.....	1.1270	1.556	0.665
Methane.....	82.3101	65.091	74.785
Ethane.....	8.6231	12.781	12.359
Propane.....	3.6681	7.973	5.416
iso-Butane.....	0.5016	1.437	0.880
n-Butane.....	1.5274	4.376	2.581
iso-Pentane.....	0.3637	1.293	0.713
n-Pentane.....	0.3940	1.401	0.765
Cyclopentane.....	0.0169	0.058	0.027
n-Hexane.....	0.0576	0.245	0.127
Cyclohexane.....	0.0092	0.038	0.017
Other Hexanes	0.0813	0.345	0.179
Heptanes.....	0.1091	0.539	0.270
Methylcyclohexane.....	0.0251	0.121	0.054
2,2,4-Trimethylpentane...	0.0001	0.001	0.000
Benzene.....	0.0076	0.029	0.011
Toluene.....	0.0211	0.096	0.038
Ethylbenzene.....	0.0019	0.010	0.004
Xylenes.....	0.0024	0.013	0.005
Octanes.....	0.0229	0.129	0.063
Nonanes.....	0.0036	0.023	0.011
Decanes+.....	0.0002	0.001	0.001
Totals	100.000	100.000	100.000

ADDITIONAL BETX DATA

Components	Mole %	Weight %	Liq. Vol. %
Cyclopentane	0.017	0.058	0.027
Cyclohexane	0.009	0.038	0.017
2-Methylpentane	0.051	0.217	0.113
3-Methylpentane	0.030	0.128	0.066
n-Hexane	0.058	0.245	0.127
Methylcyclohexane	0.025	0.121	0.054
2,2,4-Trimethylpentane	0.000	0.001	0.000
Benzene	0.008	0.029	0.011
Toluene	0.021	0.096	0.038
Ethylbenzene	0.002	0.010	0.004
m-Xylene	0.000	0.002	0.001
p-Xylene	0.002	0.009	0.003
o-Xylene	0.000	0.002	0.001

SPECIFIC GRAVITY @ 60/60 F, calculated.....	0.7004
TOTAL GPM (Ethane Inclusive).....	4.375
CALCULATED BTU / REAL CF @ 14.73 PSIA, dry basis.....	1196.942
CALCULATED BTU / REAL CF @ 14.73 PSIA, wet basis.....	1176.876
AVERAGE MOLECULAR WEIGHT.....	20.286
MOLAR MASS RATIO.....	0.7003
RELATIVE DENSITY (G x Z (Air) / Z), calculated.....	0.7027
IDEAL GROSS HEATING VALUE, BTU / IDEAL CF @ 14.696 PSIA.....	1190.314
COMPRESSIBILITY FACTOR (Z).....	0.99675
PROPANE GPM	1.0080
BUTANE GPM	0.6440
GASOLINE GPM (PENTANE AND HEAVIER)	0.4227
TOTAL ACID GAS MOLE %.....	1.1262
H2S MOLE %	0.0000
H2S PPM	0
VOC WEIGHT FRACTION	0.181

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.