



Realize Production Potential

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

Client:	Verdad	Analysis Date:	2/23/2017
Sample ID:	Girard #2-63 11-1H	Date Sampled:	2/22/2017
Unique #:	NI	Purpose:	Meter run
Sample Temperature:	48 DEG F	Sample Pressure:	11 PSI
Sampled By:	Erik Hollaway	Type Sample:	Spot
County:	NI		

<u>Components</u>	<u>Mole %</u>	<u>Weight %</u>	<u>Liq. Vol. %</u>
Carbon Dioxide.....	2.7403	4.536	2.243
Hydrogen Sulfide.....	0.0008	0.001	0.001
Nitrogen.....	0.7856	0.828	0.415
Methane.....	66.2656	39.985	53.893
Ethane.....	10.9072	12.336	13.994
Propane.....	8.7535	14.518	11.569
iso-Butane.....	1.2728	2.783	1.998
n-Butane.....	4.2881	9.374	6.485
iso-Pentane.....	1.0354	2.810	1.817
n-Pentane.....	1.4188	3.850	2.467
Cyclopentane.....	0.0992	0.262	0.141
n-Hexane.....	0.4285	1.389	0.845
Cyclohexane.....	0.0707	0.224	0.115
Other Hexanes	0.4855	1.574	0.958
Heptanes.....	0.7478	2.818	1.655
Methylcyclohexane.....	0.1364	0.504	0.263
2,2,4-Trimethylpentane...	0.0006	0.003	0.001
Benzene.....	0.0581	0.171	0.078
Toluene.....	0.1719	0.596	0.276
Ethylbenzene.....	0.0356	0.142	0.066
Xylenes.....	0.0452	0.180	0.084
Octanes.....	0.2016	0.866	0.495
Nonanes.....	0.0408	0.197	0.110
Decanes+.....	0.0101	0.054	0.030
Totals	100.000	100.000	100.000

ADDITIONAL BETX DATA

<u>Components</u>	<u>Mole %</u>	<u>Weight %</u>	<u>Liq. Vol. %</u>
Cyclopentane	0.099	0.262	0.141
Cyclohexane	0.071	0.224	0.115
2-Methylpentane	0.306	0.991	0.603
3-Methylpentane	0.180	0.583	0.355
n-Hexane	0.428	1.389	0.845
Methylcyclohexane	0.136	0.504	0.263
2,2,4-Trimethylpentane	0.001	0.003	0.001
Benzene	0.058	0.171	0.078
Toluene	0.172	0.596	0.276
Ethylbenzene	0.036	0.142	0.066
m-Xylene	0.007	0.029	0.013
p-Xylene	0.031	0.122	0.057
o-Xylene	0.007	0.030	0.014

SPECIFIC GRAVITY @ 60/60 F, calculated.....	0.9180
TOTAL GPM (Ethane Inclusive).....	9.005
CALCULATED BTU / REAL CF @ 14.73 PSIA, dry basis.....	1501.920
CALCULATED BTU / REAL CF @ 14.73 PSIA, wet basis.....	1476.517
AVERAGE MOLECULAR WEIGHT.....	26.586
MOLAR MASS RATIO.....	0.9157
RELATIVE DENSITY (G x Z (Air) / Z), calculated.....	0.9234
IDEAL GROSS HEATING VALUE, BTU / IDEAL CF @ 14.696 PSIA.....	1489.639
COMPRESSIBILITY FACTOR (Z).....	0.99410
PROPANE GPM	2.4054
BUTANE GPM	1.7638
GASOLINE GPM (PENTANE AND HEAVIER)	1.9259
TOTAL ACID GAS MOLE %.....	2.7411
H2S MOLE %	0.000775
H2S PPM	7.75
VOC WEIGHT FRACTION	0.421

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.