



TECHNOLOGY LABORATORY, INC.

Centre Professional Office Park
1012 Centre Avenue
Fort Collins, Colorado 80526
(970)-490-1414

Extended Natural Gas Analysis (DHA)

Whiting Oil & Gas Corp.
1700 Broadway
Denver, CO 80290-2300

Sampled: 04/22/15
Received 04/22/15
Analyzed 05/19/15

Customer Contact: Dan Holmen

Sample ID: Gas
Well #: TwoMile 15 - 1033 AH
Lab ID: B3023-19
Sampled By: TLI
Analyzed By: Bill Emery

Field: Redtail
Cylinder: 150 SS
Sep. Temperature °F: 120
Line Pressure (psig): 50
Sampling Method: ASTM

<u>COMPONENT</u>	<u>Mole %</u>	<u>Weight %</u>
Helium	0.000	0.000
Hydrogen	0.000	0.000
Carbon Dioxide	2.818	4.948
Nitrogen	2.670	2.984
Methane	72.269	46.260
Ethane	7.474	8.967
Propane	7.548	13.280
Isobutane	0.866	2.008
n-Butane	3.212	7.449
Isopentane	0.763	2.197
n-Pentane	1.032	2.971
Cyclopentane	0.132	0.369
n-Hexane	0.323	1.111
Cyclohexane	0.095	0.318
Other Hexanes	0.571	1.959
Heptanes	0.438	1.746
Methycyclohexane	0.124	0.485
2,2,4- Trimethylpentane	0.000	0.000
Benzene	0.042	0.131
Toluene	0.051	0.185
Ethylbenzene	0.006	0.025
Xylenes	0.026	0.110
C8+ heavies	0.489	2.497
Subtotal	100.948	100.000
Oxygen/Argon	0.000	0.0000
Total:	100.000	100.000

Analytical Methods: ASTM D1945 & D6730 (DHA)

Hydrogen Sulfide Below 2 ppmv
Gross Wet Real BTU/scf at 60°F & 14.696 psia: 1358.4
Gross Dry Real BTU/scf at 60°F & 14.696 psia: 1334.7
Relative Density (AIR=1): 0.847

