

June 16, 2010

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Client: ORRCO
Address: 4150 N. Suttle Road
Portland, OR 97217

Date Collected: 05/24/2010
Date Received: 06/08/2010
Project #: N/A
Client ID #: 100N
Laboratory ID #: 1008449-01
Matrix: Liquid

<u>Parameter</u>	<u>Method</u>	<u>Results</u>	<u>Date of Analysis</u>
Acid Number	ASTM D974	0.28 mgKOH/g	06/09/2010
API	D4052	33.1	06/08/2010
Ash	D482-02	<0.1%	06/11/2010
BSW, %	ASTM 1796	<0.2%	06/09/2010
BTU/lb	D-240-09	19875/lb	06/08/2010
Carbon Residue, %	D-524	0.132%	06/10/2010
Color	ASTM D1500	0.5 ASTM Color Units	06/08/2010
Copper Strip Corrosion	ASTM D130	1A	06/09/2010
API @ -15°C	ASTM D-1250-80	29.2	06/11/2010
Flash Point	1010	>200°F	06/09/2010
Pour Point, F	ASTM D-97	12°F	06/09/2010
Sulfur	6010	170ppm	06/09/2010
Viscosity Index	D-2270	112	06/09/2010
Viscosity cSt@100°C	D-445	5.29	06/09/2010
Viscosity, cSt@40°C	D-445	29.38	06/09/2010
Volatility @250°C/1hour	In house	7.43%	06/10/2010
Volatility @371°C/1hour	In house	55.49%	06/10/2010



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Cetane Index	ASTM D976	53.16	06/10/2010
Distillation Temp, IBP	D1160	443.5°F	06/10/2010
Distillation Temp @90%	D1160	693.0°F	06/10/2010
Distillation End Point	D1160	99%@ 703.2°F	06/10/2010
Saturate Content, Mass%	D2007-02	93.0%	06/14/2010
Aromatics Content, Mass%	D2007-02	<0.1%	06/14/2010
Polar Content, Mass%	D2007-02	7.0%	06/14/2010