GORGE ANALYTICAL

1685 Tucker Road
Hood River, OR 97031
541.386.0249 (office)
866.293.1337 (fax)

Client:	**Utah Biodiesel Supply**	**Sample Matrix:**	B100
Contact Name:	Graydon Blair	**Feedstock:**	Waste Vegetable Oil (WVO)
Client Sample ID:	Joe's Valley Biofuel	**Lot Number:**	JVB20130816-1
Date/Time Received:	8/27/2013 08:00	**Sample Collection Date/Time:**	8/25/2013 18:00
GA Sample ID:	1322013239101	**Lot Volume (gal):**	530

Summary of Analytical Results

Analysis Performed	Analytical Method	Date Analyzed	Result	fn	Reporting Units	Reporting Criterion	Acceptable
Distillation Temperature, vacuum	ASTM D1160	8/27/2013	**353**		° C	360 max	Pass
Copper Strip Corrosion Rating	ASTM D130	8/27/2013	**1a**		n/a	No. 3 max	Pass
Cloud Point	ASTM D2500	8/27/2013	**4**		° C	n/a	n/a
Water and Sediment of Middle Distillate Fuels by Centrifuge	ASTM D2709	8/27/2013	**0.005**		% Volume	0.05 max	Pass
Visual Inspection - Part 1	ASTM D4176 - Part 1	8/27/2013	**1**	1	Haze Rating	n/a	n/a
Visual Inspection - Part 2	ASTM D4176 - Part 2	8/27/2013	**Free of Particulate**	1	n/a	Free of Particulate	Pass
Kinematic Viscosity @ 40° C	ASTM D445-40	8/27/2013	**4.658**		mm^2/s	1.9 - 6.0	Pass
Micro-Carbon Residue	ASTM D4530	8/27/2013	**0.004**	2	% Mass	0.050 max	Pass
Phosphorus by ICP-OES	ASTM D4951	8/27/2013	**< 0.0001**		% Mass	0.0010 max	Pass
Sulfur by UVF	ASTM D5453 - Distillates/BD	8/27/2013	**8.6**		ppm (wt/wt)	15 max	Pass
Karl Fischer Moisture - Coulometric	ASTM D6304	8/27/2013	**0.0490**		% Mass	n/a	n/a
Total Glycerin (Free and Bound)	ASTM D6584 - 0 Total Glycerin	8/27/2013	**0.113**		% Mass	0.240 max	Pass
Free Glycerin	ASTM D6584 - 00 Free Glycerin	8/27/2013	**0.002**		% Mass	0.020 max	Pass
Total Monoglycerides	ASTM D6584 - 1 Monoglycerides, Total	8/27/2013	**0.282**		% Mass	n/a	n/a
Total Diglycerides	ASTM D6584 - 2 Diglycerides, Total	8/27/2013	**0.149**		% Mass	n/a	n/a
Total Triglycerides	ASTM D6584 - 3 Triglycerides, Total	8/27/2013	**0.155**		% Mass	n/a	n/a
Total Acid Number	ASTM D664	8/27/2013	**0.52**		mg KOH/g	0.50 max	Fail
Derived Cetane Number of Diesel Fuel Oils	ASTM D6890	8/27/2013	**53.5**	3	n/a	47 min	Pass
Cold Soak Filtration Test	ASTM D7501	8/27/2013	**130**		Seconds	360 max	Pass
Sulfated Ash	ASTM D874	8/27/2013	**0.002**		% Mass	0.020 max	Pass

Client-Based Solutions and High-Quality, Rapid Results

GORGE ANALYTICAL

1685 Tucker Road
Hood River, OR 97031
541.386.0249 (office)
866.293.1337 (fax)

Client:	**Utah Biodiesel Supply**	**Sample Matrix:**	B100
Contact Name:	Graydon Blair	**Feedstock:**	Waste Vegetable Oil (WVO)
Client Sample ID:	Joe's Valley Biofuel	**Lot Number:**	JVB20130816-1
Date/Time Received:	8/27/2013 08:00	**Sample Collection Date/Time:**	8/25/2013 18:00
GA Sample ID:	1322013239101	**Lot Volume (gal):**	530

Summary of Analytical Results

Analysis Performed	Analytical Method	Date Analyzed	Result	fn	Reporting Units	Reporting Criterion	Acceptable
Flash Point, Pensky Martens	ASTM D93	8/27/2013	**120.5**		° C	93 min	Pass
Methanol Content	EN 14110:2003	8/27/2013	**0.12**		% Mass	0.2 max	Pass
Ca, Mg by ICP-OES	EN 14538:2006 - Ca, Mg	8/27/2013	< **2.0**	4	ppm (wt/wt)	5 max	Pass
Na, K by ICP-OES	EN 14538:2006 - Na, K	8/27/2013	**4.5**	5	ppm (wt/wt)	5 max	Pass
Oxidation Stability (Accelerated Method) at 110° C	EN 15751:2009	8/27/2013	**4.6**		Hours	3 min	Pass

Footnotes:

Acceptance criteria for B100 biodiesel are found in ASTM D6751. ASTM analyses are performed in accordance with the most current methods.

1. Visual Inspection was performed at 24° C.
2. Sample was analyzed for Micro-Carbon Residue in accordance with (IAW) ASTM D4530 and reported IAW ASTM D6751 Appendix X1.9.
3. The test's average charge air temperature was 552.7°C.
4. Calcium and Magnesium are reported as a combined value.
5. Sodium and Potassium are reported as a combined value.

Reviewed By: M. Fetkenhour, Laboratory Director **Date:** 8/27/2013

Digitally signed by Michelle D. Fetkenhour
DN: cn=Michelle D. Fetkenhour, o=Gorge Analytical, LLC, ou, email=michelle@gorgeanalytical.com, c=US
Reason: I attest to the accuracy and integrity of this document
Date: 2013.08.27 10:07:39 -07'00'

Client-Based Solutions and High-Quality, Rapid Results