

## Report of Analysis

<b>Conducted For:</b> INTERTEK AR 5404 Bandera Road San Antonio,		<b>Labcode:</b> 2021B9FUA
<b>Client Code:</b> SEQ. VI LUBE		<b>Alt. Code:</b> TANK 70
<b>Sponid:</b> 0		<b>AR Code:</b> TF00044A
<b>Requester:</b> ALFONSO, A		<b>Grade:</b> N/A
		<b>Ref No.:</b>
		<b>Date Completed:</b> 20200702
		<b>Report Printed:</b> 20200707

<u>Test</u>	<u>Result</u>	<u>Units</u>	<u>Test Method</u>
Gravity, API	59.4200		D4052
Color/Visual	pink		COLOR
Cu Strip Corrosion	COPPER STRIP RATING	1A	D130
Cu Strip Corrosion	TEST TEMPERATURE	50.0	°C
Cu Strip Corrosion	TEST HOURS	3.0	Hours
Density at 15°C		0.74087	g/mL
Distillation of Fuel	Initial Boiling Point	32.4	°C
Distillation of Fuel	5%	42.8	°C
Distillation of Fuel	10%	50.5	°C
Distillation of Fuel	20%	60.3	°C
Distillation of Fuel	30%	71.6	°C
Distillation of Fuel	40%	87.0	°C
Distillation of Fuel	50%	101.9	°C
Distillation of Fuel	60%	110.2	°C
Distillation of Fuel	70%	116.4	°C
Distillation of Fuel	80%	126.4	°C
Distillation of Fuel	90%	157.6	°C
Distillation of Fuel	95%	170.3	°C
Distillation of Fuel	Final Boiling Point	199.3	°C
Distillation of Fuel	Recovered	96.2000	vol. %
Distillation of Fuel	Residue	0.9000	vol. %
Distillation of Fuel	Loss	2.9000	vol. %
Gum, Unwashed		10.4	mg/100 ml
Gum, Washed		0	mg/100 ml
Heat of Combst Gross	Heat of Combution Gross	45.790	MJ/kg
Heat of Combst Gross	Heat of Combution Gross	19685	BTU / lb
Heat of Combst Net	Heat of Combustion Net	43.729	MJ/kg
Heat of Combst Net	Heat of Combustion Net	18799	BTU / lb
ICP Acid Digestion	Silver	<0.0001	%
ICP Acid Digestion	Aluminum	<0.0001	%
ICP Acid Digestion	Boron	<0.0001	%
ICP Acid Digestion	Barium	<0.0001	%
ICP Acid Digestion	Calcium	<0.0001	%
ICP Acid Digestion	Cadmium	<0.0001	%
ICP Acid Digestion	Chromium	<0.0001	%
ICP Acid Digestion	Copper	<0.0001	%
ICP Acid Digestion	Iron	<0.0001	%
ICP Acid Digestion	Potassium	<0.0001	%
ICP Acid Digestion	Magnesium	<0.0001	%
ICP Acid Digestion	Manganese	<0.0001	%
ICP Acid Digestion	Molybdenum	<0.0001	%
ICP Acid Digestion	Sodium	<0.0001	%
ICP Acid Digestion	Nickel	<0.0001	%
ICP Acid Digestion	Phosphorus	<0.0001	%
ICP Acid Digestion	Lead	<0.0001	%
ICP Acid Digestion	Sulfur	<0.0001	%
ICP Acid Digestion	Antimony	<0.0001	%
ICP Acid Digestion	Silicon	<0.0001	%
ICP Acid Digestion	Tin	<0.0001	%
ICP Acid Digestion	Zinc	<0.0001	%
ICP Acid Digestion	Vanadium	<0.0001	%
Motor Octane Number		88.7	D2700
Oxidation Stability	Temperature	100	°C
Oxidation Stability	Induction Time	>1000	Minutes
Oxidation Stability	20% Pressure Drop From Maximum	NA	Minutes
Oxygenates	METHANOL	NA	mass %



Oxygenates	METHANOL	<0.20	vol. %	D4815
Oxygenates	ETHANOL	NA	mass %	D4815
Oxygenates	ETHANOL	<0.20	vol. %	D4815
Oxygenates	2-PROPANOL	NA	mass %	D4815
Oxygenates	2-PROPANOL	<20	vol. %	D4815
Oxygenates	T-BUTANOL	NA	mass %	D4815
Oxygenates	T-BUTANOL	<0.20	vol. %	D4815
Oxygenates	1-PROPANOL	NA	mass %	D4815
Oxygenates	1-PROPANOL	<0.20	vol. %	D4815
Oxygenates	MTBE	NA	mass %	D4815
Oxygenates	MTBE	<0.20	vol. %	D4815
Oxygenates	DIPE	NA	mass %	D4815
Oxygenates	DIPE	<0.20	vol. %	D4815
Oxygenates	2-BUTANOL	NA	mass %	D4815
Oxygenates	ISOBUTANOL	NA	mass %	D4815
Oxygenates	2-BUTANOL	<0.20	vol. %	D4815
Oxygenates	ISOBUTANOL	<0.20	vol. %	D4815
Oxygenates	ETBE	NA	mass %	D4815
Oxygenates	ETBE	<0.20	vol. %	D4815
Oxygenates	T-PENTANOL	NA	mass %	D4815
Oxygenates	T-PENTANOL	<0.20	vol. %	D4815
Oxygenates	1-BUTANOL	NA	mass %	D4815
Oxygenates	1-BUTANOL	<0.20	vol. %	D4815
Oxygenates	TAME	NA	mass %	D4815
Oxygenates	TAME	<0.20	vol. %	D4815
Oxygenates	TOTAL OXYGEN	<0.20	mass %	D4815
RVP	RVP	60.00	kPa	D5191
RVP	Volume Container Size	QUART		D5191
Sulfur		2.7	mg/kg	D5453
WATER AND SEDIMENT		<0.01	%	D2709

**Remarks:** NONE.

In the opinion of the designated chemist, the testing on this report was conducted in a valid manner according to the test method listed. Test results only apply to sample(s) provided.

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J. Franklin  
Director, Analytical Testing



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<b>Sponid:</b>	0	<b>AR Code:</b>	TF00044A
<b>Requester:</b>	ALFONSO, A	<b>Grade:</b>	N/A
		<b>Ref No.:</b>	
		<b>Date Completed:</b>	20200702
		<b>Report Printed:</b>	20200707

LAB Intertek-AR  
Fuel Batch ID SEQ. VI LUBE

Date(s) Analyzed: 20200702

<u>Test</u>	<u>Result</u>	<u>Units</u>	<u>Test Method</u>	<u>Max</u>	<u>Min</u>
Distillation					
	IBP	32.4	D86	35.0	23.9
	5%	42.8	D86		
	10%	50.5	D86	57.2	48.9
	20%	60.3	D86		
	30%	71.6	D86		
	40%	87.0	D86		
	50%	101.9	D86	110.0	93.3
	60%	110.2	D86		
	70%	116.4	D86		
	80%	126.4	D86		
	90%	157.6	D86	162.8	151.7
	FBP	199.3	D86		
	RECOVERED	96.2000	D86		
	RESIDUE	0.9000	D86		
	LOSS	2.9000	D86		
API Gravity (60°F/60°F)	59.4200		D4052	61.2	58.7
Gums, Washed	0		D381	5	
RVP	60.00		D5191	63.4	60.8
Sulfur, ppm	2.7		D5453	15	3

Remarks: NONE.

