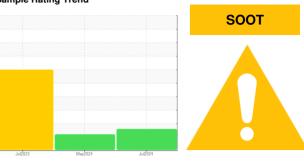


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

FREIGHTLINER 86

Diesel Engine

PETRO CANADA DURON SHP 15W40 (13 LTR)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Light concentration of carbon/soot present in the oil. Tests confirm the presence of fuel in the oil.

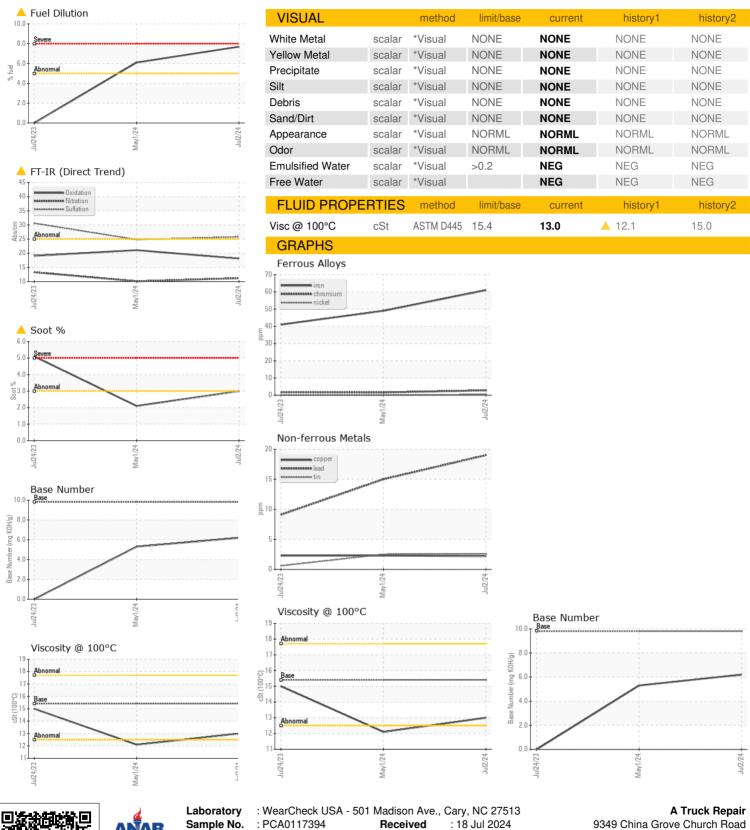
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Machine Age mls Client Info 575831 547476 444369 Oil Age mls Client Info 25000 25000 24577 Oil Changed Client Info Changed Changed Changed Sample Status method limit/base current history1 history2 Water WC Method >0.2 NEG NEG NEG Glycol WC Method NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 61 49 41 Chromium ppm ASTM D5185m >5 3 2 2 2 Nickel ppm ASTM D5185m >3 0 0 0 0 Aluminum ppm ASTM D5185m >3 0 0 0 1 Lead ppm ASTM D5185m >30 2 <1	_TR)		Jul	2023	May2024 Jul202		
Sample Date Client Info 02 Jul 2024 01 May 2024 24 Jul 2023 Machine Age mls Client Info 575831 547476 444369 Oil Age mls Client Info 25000 25000 25000 24577 Oil Changed Client Info Changed Changed Changed Changed ABNORMAL	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 02 Jul 2024 01 May 2024 24 Jul 2023 Machine Age mis Client Info 25000 25000 24500 24500 Oil Age mis Client Info 25000 25000 24577 444369 Oil Changed Client Info 25000 25000 24577 444369 Oil Changed Client Info Changed Changed Changed Changed Sample Status WC Method NEG NEG NEG NEG Wear WC Method NEG NEG NEG NEG Wear WC Method NEG NEG NEG NEG NEG WEAR METALS method limit/base current history2 history2 Iron ppm ASTM D5185m >80 61 49 41 Chromium ppm ASTM D5185m >5 3 2 2 Iron ppm ASTM D5185m >3 0 0 <	Sample Number		Client Info		PCA0117394	PCA0104966	PCA0102657
Oil Age mls Client Info 25000 25000 24577 Oil Changed Client Info Changed ABNORMAL Changed ABNORMAL Changed ABNORMAL Changed ABNORMAL Changed ABNORMAL Changed ABNORMAL ABNORMAL <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>02 Jul 2024</th> <th>01 May 2024</th> <th>24 Jul 2023</th>	Sample Date		Client Info		02 Jul 2024	01 May 2024	24 Jul 2023
Oil Changed Sample Status Client Info Changed ABNORMAL ABNORMA	Machine Age	mls	Client Info		575831	547476	444369
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG NEG Glycol WC Method NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 61 49 41 Chromium ppm ASTM D5185m >5 3 2 2 Nickel ppm ASTM D5185m >2 <1 0 0 ASTM D5185m >3 0 0 0 0 Alluminum ppm ASTM D5185m >30 2 <1 <1 Lead ppm ASTM D5185m >30 19 15 9 Copper ppm ASTM D5185m >30 2 <1 <1 Vanadium ppm ASTM D5185m >0 2 1 1 Cadmium ppm	Oil Age	mls	Client Info		25000	25000	24577
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG NEG NEG NEG Glycol WC Method NEG NEG NEG 0.06 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 61 49 41 Chromium ppm ASTM D5185m >5 3 2 2 Nickel ppm ASTM D5185m >2 <1 0 0 Silver ppm ASTM D5185m >30 0 0 0 Silver ppm ASTM D5185m >30 19 15 9 Copper ppm ASTM D5185m >30 19 15 9 Copper ppm ASTM D5185m 0 2 2 2 Tin ppm ASTM D5185m 0 0 <1 1	Oil Changed		Client Info		Changed	Changed	Changed
Water WC Method >0.2 NEG NEG NEG Glycol WC Method NEG NEG A 0.06 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 61 49 41 Chromium ppm ASTM D5185m >5 3 2 2 Nickel ppm ASTM D5185m >5 3 2 2 Silver ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >30 2 <1	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 61 49 41 Chromium ppm ASTM D5185m >5 3 2 2 Nickel ppm ASTM D5185m >2 <1 0 0 Titanium ppm ASTM D5185m 3 0 0 0 Aluminum ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >30 19 15 9 Copper ppm ASTM D5185m >150 2 2 2 Tin ppm ASTM D5185m 0 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 <1 ADDITIVES method limit/base current history1 history2 Barium ppm ASTM D5185m 0 0 <1	Water		WC Method	>0.2	NEG	NEG	NEG
Iron	Glycol		WC Method		NEG	NEG	△ 0.06
Chromium ppm ASTM D5185m >5 3 2 2 Nickel ppm ASTM D5185m >2 <1 0 0 Titanium ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >30 2 <1 <1 Aluminum ppm ASTM D5185m >30 2 <1 <1 Lead ppm ASTM D5185m >30 19 15 9 Copper ppm ASTM D5185m >150 2 2 2 Tin ppm ASTM D5185m 0 0 0 <1 Vanadium ppm ASTM D5185m 0 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 <1 Boron ppm ASTM D5185m 0 2 1 18 Barium ppm ASTM D5185m 0 0 <1 0 <th>WEAR METAL</th> <th>S</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>80	61	49	41
Titanium	Chromium	ppm	ASTM D5185m	>5	3	2	2
Silver	Nickel	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >30 19 15 9 Copper ppm ASTM D5185m >150 2 2 2 Tin ppm ASTM D5185m >5 3 2 <1	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper ppm ASTM D5185m >150 2 2 2 2 Tin ppm ASTM D5185m >5 3 2 <1 Vanadium ppm ASTM D5185m 0 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 2 1 18 Barium ppm ASTM D5185m 0 0 <1 0 Molybdenum ppm ASTM D5185m 0 <1 1 <1 Marganese ppm ASTM D5185m 0 <1 1 <1 Magnesium ppm ASTM D5185m 1070 984 1008 1078 Phosphorus ppm ASTM D5185m 1070 984 1008 1078 Sulfur ppm ASTM D5185m 1270	Aluminum	ppm	ASTM D5185m	>30	2	<1	<1
Tin	Lead	ppm	ASTM D5185m	>30	19	15	9
Vanadium ppm ASTM D5185m 0 0 <1	Copper	ppm	ASTM D5185m	>150	2	2	2
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 2 1 18 Barium ppm ASTM D5185m 0 0 <1	Tin	ppm	ASTM D5185m	>5	3	2	<1
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 2 1 18 Barium ppm ASTM D5185m 0 0 <1 0 Molybdenum ppm ASTM D5185m 60 52 60 62 Manganese ppm ASTM D5185m 0 <1 1 <1 Magnesium ppm ASTM D5185m 1010 879 933 898 Calcium ppm ASTM D5185m 1070 984 1008 1078 Phosphorus ppm ASTM D5185m 1270 1167 1163 1138 Sulfur ppm ASTM D5185m 2060 3167 3218 3054 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 3 3 2222 Potassium ppm ASTM D5185m 3 3	Vanadium	ppm	ASTM D5185m		0	0	<1
Boron ppm ASTM D5185m 0 2 1 1 18 Barium ppm ASTM D5185m 0 0	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 60 52 60 62 Manganese ppm ASTM D5185m 0 <1	Boron	nnm	AOTA DELOE	^	•	4	10
Manganese ppm ASTM D5185m 0 <1		ppiii	ASTM D5185M	U	2	I	10
Magnesium ppm ASTM D5185m 1010 879 933 898 Calcium ppm ASTM D5185m 1070 984 1008 1078 Phosphorus ppm ASTM D5185m 1150 975 979 908 Zinc ppm ASTM D5185m 1270 1167 1163 1138 Sulfur ppm ASTM D5185m 2060 3167 3218 3054 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 6 5 Sodium ppm ASTM D5185m >20 2 0 55 Fuel % ASTM D5185m >20 2 0 55 Fuel % ASTM D3524 >5 7.7 6.1 <1.0	Barium						
Calcium ppm ASTM D5185m 1070 984 1008 1078 Phosphorus ppm ASTM D5185m 1150 975 979 908 Zinc ppm ASTM D5185m 1270 1167 1163 1138 Sulfur ppm ASTM D5185m 2060 3167 3218 3054 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 6 5 Sodium ppm ASTM D5185m >20 2 0 55 Fuel % ASTM D544 >3	Barium Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Phosphorus ppm ASTM D5185m 1150 975 979 908 Zinc ppm ASTM D5185m 1270 1167 1163 1138 Sulfur ppm ASTM D5185m 2060 3167 3218 3054 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 6 5 Sodium ppm ASTM D5185m >20 2 0 55 Fuel % ASTM D5185m >20 2 0 55 Fuel % ASTM D3524 >5 ▲ 7.7 ▲ 6.1 <1.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 11.2 10.1 13.3 Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION *ASTM D7414 <th>Molybdenum</th> <th>ppm ppm</th> <th>ASTM D5185m ASTM D5185m</th> <th>0</th> <th>0 52</th> <th><1 60 1</th> <th>0 62 <1</th>	Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0	0 52	<1 60 1	0 62 <1
Zinc ppm ASTM D5185m 1270 1167 1163 1138 Sulfur ppm ASTM D5185m 2060 3167 3218 3054 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 6 5 Sodium ppm ASTM D5185m 3 3 222 Potassium ppm ASTM D5185m >20 2 0 55 Fuel % ASTM D3524 >5 7.7 6.1 <1.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 3 2.1 5.1 Nitration Abs/cm *ASTM D7624 >20 11.2 10.1 13.3 Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION method limit/bas	Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0	0 52 <1 879	<1 60 1	0 62 <1
Sulfur ppm ASTM D5185m 2060 3167 3218 3054 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 6 5 Sodium ppm ASTM D5185m 3 3 222 Potassium ppm ASTM D5185m >20 2 0 55 Fuel % ASTM D3524 >5 7.7 6.1 <1.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 3 2.1 5.1 Nitration Abs/cm *ASTM D7624 >20 11.2 10.1 13.3 Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25	Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010	0 52 <1 879 984	<1 60 1 933 1008	0 62 <1 898
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 6 5 Sodium ppm ASTM D5185m 3 3 ≥222 Potassium ppm ASTM D5185m >20 2 0 55 Fuel % ASTM D3524 >5 ▲ 7.7 ▲ 6.1 <1.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 3 2.1 5.1 Nitration Abs/cm *ASTM D7624 >20 11.2 10.1 13.3 Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.1 21.1 19.1	Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150	0 52 <1 879 984 975	<1 60 1 933 1008 979	0 62 <1 898 1078 908
Silicon ppm ASTM D5185m >20 8 6 5 Sodium ppm ASTM D5185m 3 3 △ 222 Potassium ppm ASTM D5185m >20 2 0 △ 55 Fuel % ASTM D3524 >5 ▲ 7.7 ▲ 6.1 <1.0	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270	0 52 <1 879 984 975 1167	<1 60 1 933 1008 979 1163	0 62 <1 898 1078 908 1138
Sodium ppm ASTM D5185m 3 3 △ 222 Potassium ppm ASTM D5185m >20 2 0 △ 55 Fuel % ASTM D3524 >5 △ 7.7 △ 6.1 <1.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 3 2.1 5.1 Nitration Abs/cm *ASTM D7624 >20 11.2 10.1 13.3 Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.1 21.1 19.1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270	0 52 <1 879 984 975 1167	<1 60 1 933 1008 979 1163	0 62 <1 898 1078 908 1138
Potassium ppm ASTM D5185m >20 2 0 ▲ 55 Fuel % ASTM D3524 >5 ▲ 7.7 ▲ 6.1 <1.0	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060	0 52 <1 879 984 975 1167 3167	<1 60 1 933 1008 979 1163 3218 history1	0 62 <1 898 1078 908 1138 3054 history2
Fuel % ASTM D3524 >5 ▲ 7.7 ▲ 6.1 <1.0	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060	0 52 <1 879 984 975 1167 3167	<1 60 1 933 1008 979 1163 3218 history1	0 62 <1 898 1078 908 1138 3054 history2
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 ▲ 3 2.1 5.1 Nitration Abs/cm *ASTM D7624 >20 11.2 10.1 13.3 Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.1 21.1 19.1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 60 0 1010 1070 1150 1270 2060	0 52 <1 879 984 975 1167 3167 current	<1 60 1 933 1008 979 1163 3218 history1	0 62 <1 898 1078 908 1138 3054 history2
Soot % % *ASTM D7844 >3 ▲ 3 2.1 5.1 Nitration Abs/cm *ASTM D7624 >20 11.2 10.1 13.3 Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.1 21.1 19.1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >20	0 52 <1 879 984 975 1167 3167 current 8 3	<1 60 1 933 1008 979 1163 3218 history1 6 3	0 62 <1 898 1078 908 1138 3054 history2 5 △ 222 △ 55
Nitration Abs/cm *ASTM D7624 >20 11.2 10.1 13.3 Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.1 21.1 19.1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >20	0 52 <1 879 984 975 1167 3167 current 8 3	<1 60 1 933 1008 979 1163 3218 history1 6 3	0 62 <1 898 1078 908 1138 3054 history2 5 △ 222 △ 55
Sulfation Abs/.1mm *ASTM D7415 >30 25.8 24.8 30.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.1 21.1 19.1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >20 >20	0 52 <1 879 984 975 1167 3167 current 8 3 2 ▲ 7.7	<1 60 1 933 1008 979 1163 3218 history1 6 3 0	0 62 <1 898 1078 908 1138 3054 history2 5 ▲ 222 ▲ 55 <1.0
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.1 21.1 19.1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm	ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >20 >5	0 52 <1 879 984 975 1167 3167 current 8 3 2 ▲ 7.7 current	<1 60 1 933 1008 979 1163 3218 history1 6 3 0 ▲ 6.1 history1	0 62 <1 898 1078 908 1138 3054 history2 5 ▲ 222 ▲ 55 <1.0
Oxidation Abs/.1mm *ASTM D7414 >25 18.1 21.1 19.1	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm	ASTM D5185m ASTM D7844	0 60 0 1010 1070 1150 1270 2060 limit/base >20 >5 limit/base >3	0 52 <1 879 984 975 1167 3167 current 8 3 2 ▲ 7.7 current 3	<1 60 1 933 1008 979 1163 3218 history1 6 3 0 ▲ 6.1 history1 2.1	0 62 <1 898 1078 908 1138 3054 history2 5 ▲ 222 ▲ 55 <1.0 history2 5.1
	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m ASTM D7824	0 60 0 1010 1070 1150 1270 2060 limit/base >20 >5 limit/base >3 >20	0 52 <1 879 984 975 1167 3167	<1 60 1 933 1008 979 1163 3218 history1 6 3 0 ▲ 6.1 history1 2.1 10.1	0 62 <1 898 1078 908 1138 3054 history2 5 ▲ 222 ▲ 55 <1.0 history2 5.1 13.3
Base Number (BN) mg KOH/g ASTM D2896 9.8 6.2 5.3 △ 0.0	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624 *ASTM D7614	0 60 0 1010 1070 1150 1270 2060 limit/base >20 >5 limit/base >3 >20 >3	0 52 <1 879 984 975 1167 3167	<1 60 1 933 1008 979 1163 3218 history1 6 3 0 ▲ 6.1 history1 2.1 10.1 24.8	0 62 <1 898 1078 908 1138 3054 history2 5 ▲ 222 ▲ 55 <1.0 history2 5.1 13.3 30.6
	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m Method ASTM D5185m ASTM D75185m ASTM D7624 *ASTM D7624	0 60 0 1010 1070 1150 1270 2060 limit/base >20 >5 limit/base >3 >20 >3 limit/base	0 52 <1 879 984 975 1167 3167 current 8 3 2 ▲ 7.7 current ▲ 3 11.2 25.8 current	<1 60 1 933 1008 979 1163 3218 history1 6 3 0 ▲ 6.1 history1 2.1 10.1 24.8 history1	0 62 <1 898 1078 908 1138 3054 history2 5 ▲ 222 ▲ 55 <1.0 history2 5.1 13.3 30.6 history2



OIL ANALYSIS REPORT







Certificate 12367

Sample No.

: PCA0117394 Lab Number : 06240099

Received **Tested** Unique Number : 11128933 Diagnosed

: 18 Jul 2024 : 22 Jul 2024 Test Package : FLEET (Additional Tests: PercentFuel)

: 22 Jul 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.

US 28134 Contact: Vlad Melnichuk shop@migway.com T: (980)255-3200

 st - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: ATRPIN [WUSCAR] 06240099 (Generated: 07/22/2024 22:10:52) Rev: 3

Submitted By: Vlad Melnichuk

Pineville, NC