

OIL ANALYSIS REPORT

Sample Rating Trend





Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

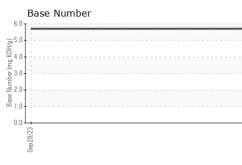
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

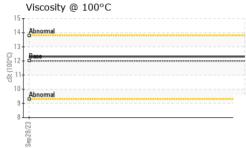
Sample Number Client Info PCA0097450 Sample Date Client Info 28 Sep 2023 Machine Age mis Client Info 571000 Oil Age mis Client Info 0 Oil Changed Client Info Changed Sample Status Image Imit/base current Nictory Fuel WC Method >3.0 <1.0 Glycol WC Method >3.0 MEAR METAM Pom ASTM 05165m >6 1 Nickel ppm ASTM 05165m >50 6 Silver ppm ASTM 05165m >50 6 Chromium ppm ASTM 05165m >50 6 <	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 28 Sep 2023 Machine Age mils Client Info 571000 Oil Age mils Client Info Ohnged Sample Status Image Client Info Changed CONTAMINATION method imit/base current history1 history2 Fuel WC Method >3.0 +1.0 Ruerent WC Method >3.0 -1.0 WEAR METALS method imit/base current history1 history2 Iron ppm ASTM 05185m >200 13 Ohromium ppm ASTM 05185m >6 1 Nickel ppm ASTM 05185m >50 6 Auminum ppm ASTM 05185m >6 <1 Lead	Sample Number		Client Info		PCA0097450		
Machtine Age mils Client Info 571000 Oil Age mils Client Info 0 Oil Changed NORMAL Sample Status 0 NORMAL CONTAMINATION method Imit/base current history1 Fuel WC Method >3.0 -1.0 Glycol 1 WC Method >3.0 WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >200 13 Mickel ppm ASTM D5185m >20 0 Silver ppm ASTM D5185m >20 0 Copper ppm ASTM D5185m >50 6 Cadmium ppm ASTM D5185m							
Oil Age mis Client Info 0 Oil Changed Client Info Changed Sample Status I Imil/base current History1 History2 Fuel WC Method >3.0 <1.0 Glycol WC Method >3.0 WEAR METALS method Imil/base current History1 History2 Iron ppm ASTM D5185m >200 13 MEAR METALS method Imil/base current History1 History2 Iron ppm ASTM D5185m >20 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >50 6 Copper ppm ASTM D5185m >50 6 Copper	•	mls			•		
Oil Changed Sample Status Client Info Changed NORMAL CONTAMINATION method limil/base current history1 history2 Fuel WC Method >3.0 +1.0 Glycol WC Method >3.0 +1.0 WEAR METALS method imil/base current history1 history2 Iron ppm ASTM D585m >200 13 Othomium ppm ASTM D585m >3 0 Nickel ppm ASTM D585m >2 0 Auminum ppm ASTM D585m >2 0 Aduminum ppm ASTM D585m >50 6 Aduminum ppm ASTM D585m 50 4 Lead ppm ASTM D585m 50 59	0						
Sample Status Imit Norma L Imit Norma L CONTAMINATION method imit /base current History1 history2 Fuel WC Method >3.0 <1.0 Glycol WC Method NEG WEAR METALS method imit /base current history1 history2 Iron ppm ASTM D5185m >200 13 Nickel ppm ASTM D5185m >3 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >50 6 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >6 <1 Vanadium ppm ASTM D5185m >6 <1 Ab	-		Client Info		-		
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >3.0 <1.0 Glycol WC Method NEG WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185m >200 13 Chromium ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >50 6 Lead ppm ASTM D5185m >50 4 Cadmium ppm ASTM D5185m >6 <1 Vanadium ppm ASTM D5185m 2 0 Admium ppm ASTM D5185m >6 <1	0				-		
Fuel WC Method >3.0 <1.0	· · · · · · · · · · · · · · · · · · ·						
Glycol WC Method NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 13 Chromium ppm ASTM D5185m >2 0 Nickel ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >2 0 Lead ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >6 <1 Vanadium ppm ASTM D5185m 0 ADDTIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 59		ION					history2
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 13 Chromium ppm ASTM D5185m >6 1 Nickel ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >2 0 Lead ppm ASTM D5185m >50 4 Copper ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Marganese ppm ASTM D5185m 0				>3.0			
Iron ppm ASTM D5185m >200 13 Chromium ppm ASTM D5185m >6 1 Nickel ppm ASTM D5185m >3 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >50 6 Lead ppm ASTM D5185m >50 4 Copper ppm ASTM D5185m >50 4 Vanadium ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m >6 <1 Manganese ppm ASTM D5185m 2 0 Magnesium ppm ASTM D5185m 50 59 Manganese ppm ASTM D5185m <th>Glycol</th> <th></th> <th>WC Method</th> <th></th> <th>NEG</th> <th></th> <th></th>	Glycol		WC Method		NEG		
Chromium ppm ASTM D5185m >6 1 Nickel ppm ASTM D5185m >3 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >2 0 Lead ppm ASTM D5185m >50 6 Copper ppm ASTM D5185m >50 4 Cadmium ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m >6 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Magnaese ppm ASTM D5185m 0 59 Magnesium ppm ASTM D5185m 0 11	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >3 0 Titanium ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >50 6 Lead ppm ASTM D5185m >50 4 Copper ppm ASTM D5185m >50 4 Tin ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m >6 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 0 11 Magnesium ppm ASTM D5185m 0 11	Iron	ppm	ASTM D5185m	>200	13		
Titanium ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >50 6 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >6 <1 Vanadium ppm ASTM D5185m >6 <1 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 Magnenium ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5	Chromium	ppm	ASTM D5185m	>6	1		
Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >50 6 Lead ppm ASTM D5185m >50 4 Copper ppm ASTM D5185m >50 4 Vanadium ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 59 Magnese ppm ASTM D5185m 50 \$93 Magnesium ppm ASTM D5185m 955 1020 Sulfur ppm ASTM D5185m	Nickel	ppm	ASTM D5185m	>3	0		
Aluminum ppm ASTM D5185m >50 6 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >50 4 Tin ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method imit/base current history1 history2 Boron ppm ASTM D5185m 2 0 Magnaese ppm ASTM D5185m 50 59 Magnesium ppm ASTM D5185m 950 1020 Calcium ppm ASTM D5185m 950 1020 Sulfur ppm ASTM D5185m	Titanium	ppm	ASTM D5185m	>2	0		
Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >50 4 Tin ppm ASTM D5185m >6 <1 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 <11 Maganese ppm ASTM D5185m 0 <11 Calcium ppm ASTM D5185m 950 893 Calcium ppm ASTM D5185m 1050 1144 Sulfur ppm ASTM D5185m 2600 3088	Silver	ppm	ASTM D5185m	>2	0		
Copper ppm ASTM D5185m >50 4 Tin ppm ASTM D5185m >6 <1 Vanadium ppm ASTM D5185m >6 <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 Molybdenum ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 893 Calcium ppm ASTM D5185m 950 1020 Sulfur ppm ASTM D5185m 2600 3088 Sulfur ppm ASTM D5185m	Aluminum	ppm	ASTM D5185m	>50	6		
Tin ppm ASTM D5185m >6 <1	Lead	ppm	ASTM D5185m	>10	0		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 59 Magnesium ppm ASTM D5185m 0 <1	Copper	ppm	ASTM D5185m	>50	4		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 59 Magnesium ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 893 Calcium ppm ASTM D5185m 950 1020 Calcium ppm ASTM D5185m 950 3088 Sulfur ppm ASTM D5185m >50 4 Sulfur ppm ASTM D5185m >20 2 Sodium ppm ASTM D5185m >20 2 <th>Tin</th> <th>ppm</th> <th>ASTM D5185m</th> <th>>6</th> <th><1</th> <th></th> <th></th>	Tin	ppm	ASTM D5185m	>6	<1		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 59 Magnesium ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 893 Calcium ppm ASTM D5185m 950 1144 Phosphorus ppm ASTM D5185m 995 1020 Sulfur ppm ASTM D5185m 2600 3088 Sulfur ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D518	Vanadium	ppm	ASTM D5185m		0		
Boron ppm ASTM D5185m 2 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 59 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 893 Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 1050 1144 Zinc ppm ASTM D5185m 995 1020 Sulfur ppm ASTM D5185m 2600 3088 Solium ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m <t< th=""><th>Cadmium</th><th>ppm</th><th>ASTM D5185m</th><th></th><th>0</th><th></th><th></th></t<>	Cadmium	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 59 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 893 Calcium ppm ASTM D5185m 950 893 Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 1050 1144 Zinc ppm ASTM D5185m 995 1020 Sulfur ppm ASTM D5185m 2600 3088 Solicon ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >20 2 INFRA-RED method limit/base	ADDITIVES		method	limit/base	current	history1	history2
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 59 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 893 Calcium ppm ASTM D5185m 1050 1144 Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 1050 1144 Zinc ppm ASTM D5185m 1050 1120 Sulfur ppm ASTM D5185m 2600 3088 Sodium ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >20 2 INFRA-RED method l							
Manganese ppm ASTM D5185m 0 <1		ppm				· · · · ·	
Manganese ppm ASTM D5185m 0 <1	Boron		ASTM D5185m	2	0		
Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 995 1020 Zinc ppm ASTM D5185m 1180 1275 Sulfur ppm ASTM D5185m 2600 3088 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >50 4 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 10.2 Nitration Abs/.m *ASTM D7415 >30 22.1 FLUID DEGRADATION method	Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	0 0		
Calcium ppm ASTM D5185m 1050 1144 Phosphorus ppm ASTM D5185m 995 1020 Zinc ppm ASTM D5185m 1180 1275 Sulfur ppm ASTM D5185m 2600 3088 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >50 4 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 10.2 Nitration Abs/.m *ASTM D744 >30 22.1 Sulfation Abs/.im	Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	0 0 59		
Zinc ppm ASTM D5185m 1180 1275 Sulfur ppm ASTM D5185m 2600 3088 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >50 4 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 10.2 Nitration Abs/cm *ASTM D7624 >20 10.2 Sulfation Abs/1mm *ASTM D7415 >30 22.1 FLUID DEGRADATION method	Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	0 0 59 <1		
Zinc ppm ASTM D5185m 1180 1275 Sulfur ppm ASTM D5185m 2600 3088 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m >50 4 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 10.2 Sulfation Abs/cm *ASTM D7624 >20 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 Cxidation Abs/.1mm *ASTM	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	0 0 59 <1 893		
SulfurppmASTM D5185m260030888CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>504SodiumppmASTM D5185m<1PotassiumppmASTM D5185m>202INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D7844>30.6NitrationAbs/cm*ASTM D7624>2010.2SulfationAbs/lmm*ASTM D7415>3022.1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.1mm*ASTM D7414>2519.0	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	0 0 59 <1 893 1144	 	
Silicon ppm ASTM D5185m >50 4 Sodium ppm ASTM D5185m <20	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	0 0 59 <1 893 1144 1020		
Sodium ppm ASTM D5185m <1	Boron Barium 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	2 0 50 0 950 1050 995 1180	0 0 59 <1 893 1144 1020 1275	 	
Sodium ppm ASTM D5185m <1	Boron Barium 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	2 0 50 0 950 1050 995 1180 2600	0 0 59 <1 893 1144 1020 1275 3088		
Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 Nitration Abs/cm *ASTM D7624 >20 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	0 0 59 <1 893 1144 1020 1275 3088 current		
Soot % % *ASTM D7844 >3 0.6 Nitration Abs/cm *ASTM D7624 >20 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	0 0 59 <1 893 1144 1020 1275 3088 current 4	 history1	 history2
Nitration Abs/cm *ASTM D7624 >20 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >50	0 0 59 <1 893 1144 1020 1275 3088 <u>current</u> 4 <	 history1	 history2
Nitration Abs/cm *ASTM D7624 >20 10.2 Sulfation Abs/.1mm *ASTM D7415 >30 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >50	0 0 59 <1 893 1144 1020 1275 3088 <u>current</u> 4 <1 2	 history1 	 history2
Sulfation Abs/.1mm *ASTM D7415 >30 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >50 >20 limit/base	0 0 59 <1 893 1144 1020 1275 3088 current 4 <1 2 2 current	 history1 history1	 history2 history2
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >50 >20 limit/base	0 0 59 <1 893 1144 1020 1275 3088 <i>current</i> 4 <1 2 <i>current</i> 0.6	 history1 history1 	 history2 history2 history2
Oxidation Abs/.1mm *ASTM D7414 >25 19.0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >50 >20 imit/base >3 >20	0 0 59 <1 893 1144 1020 1275 3088 <i>current</i> 4 <1 2 <i>current</i> 0.6 10.2	 history1 history1	history2 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30	0 0 59 <1 893 1144 1020 1275 3088 current 4 <1 2 current 0.6 10.2 22.1	 history1 history1 history1	 history2 history2
Dase Number (BN) mg Kung ASTM U2896 5.7	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	2 0 50 0 950 1050 995 1180 2600 imit/base >50 >20 >30 >30 imit/base	0 0 59 <1 893 1144 1020 1275 3088 <i>current</i> 4 <1 2 <i>current</i> 0.6 10.2 22.1 <i>current</i>	 history1 history1 history1	 history2 history2 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	2 0 50 0 950 1050 995 1180 2600 imit/base >50 >20 >30 >30 imit/base	0 0 59 <1 893 1144 1020 1275 3088 <i>current</i> 4 <1 2 <i>current</i> 0.6 10.2 22.1 <i>current</i> 19.0	 history1 history1 history1	 history2 history2 history2 history2 history2

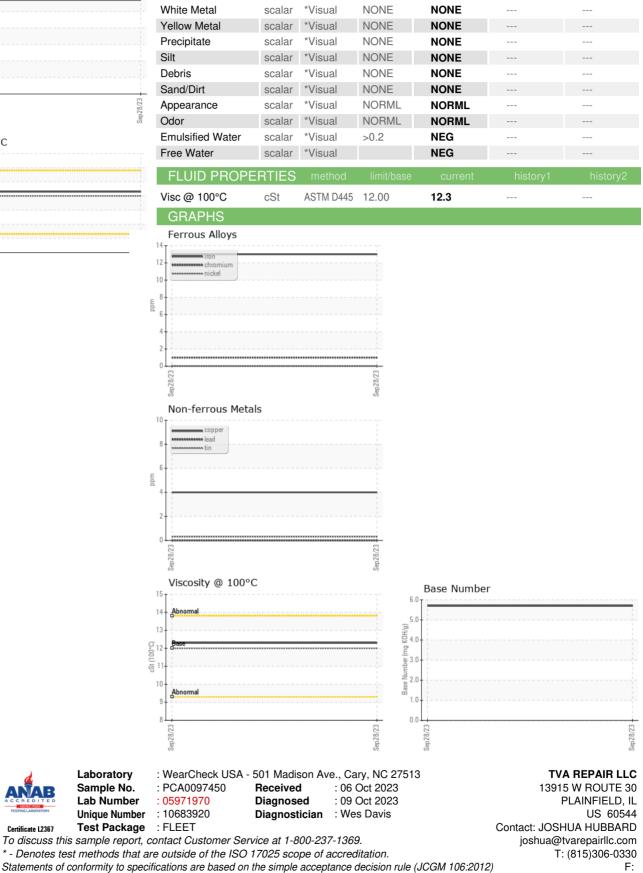


OIL ANALYSIS REPORT

VISUAL







Certificate L2367