

OIL ANALYSIS REPORT

Sample Rating Trend





Jundezz Fedezz Fedezz Aufebz Jundezz Judezz Auglezz Dezdezz Herdezz Herd



Machine Id 913145 Component Diesel Engine

Fluid PETRO CANADA DURON SHP 15W40 (--- 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.

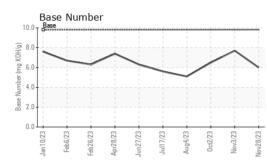
Fluid Condition

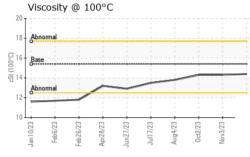
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Number Client Info 28 Nov 2023 GFL0080036 GFL0080048 Sample Date Client Info 28 Nov 2023 03 Nov 2023 02 Oc 12023 Machine Age hrs Client Info 0 153 1908 Oil Age hrs Client Info 0 0 153 Oil Changed Client Info 0 0 153 Sample Status Imit No Imit No NorRMAL NorRMAL NorRMAL CONTAMINATION method Imit No <1.0 <1.0 <1.0 Water WC Method >5 <1.0 <1.0 <1.0 Water WC Method >0.2 NEG NEG NEG Glycol WC Method >10 35 21 57 Chromium ppm ASTM 05165 >2 0 0 2 Nickel ppm ASTM 05165 >2 0 0 2 Nickel ppm ASTM 05165 >2 0	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 2288 2135 1908 Oil Ghanged Krs Client Info 0 0 153 Oil Changed Client Info Changed Not Changd Not Changd Sample Status Imit/base current History1 History2 Fuel WC Method >5 <1.0 <1.0 <1.0 Water WC Method >0.2 NEG NEG NEG Glycol WC Method >0.2 NEG NEG NEG Chromium ppm ASTM DS185m >110 35 21 57 Chromium ppm ASTM DS185m >2 0 0 <1 1 30 Silver ppm ASTM DS185m >2 0 0 <1 1 1 1 30 1 1 1 1 30 1 1 1 1 1 1 1 30 1 1 1 1<	Sample Number		Client Info		GFL0078294	GFL0080036	GFL0080048
Oil Age Inrs Client Info 0 0 153 Oil Changed Client Info Changed Not Changd Not Changd Sample Status Imit/bass current Not Changd Not Changd CONTAMINATION method Imit/bass current Not Changd Not Changd Fuel WC Method >5 <1.0 <1.0 <1.0 Water WC Method >0 NEG NEG NEG Wear WC Method >0 21 57 Chromium ppm ASTM D5185m >20 0 <1 Nickel ppm ASTM D5185m >2 0 0 <1 Silver ppm ASTM D5185m >2 0 0 <1 Copper ppm ASTM D5185m >4 0 <1 <1 Cadmium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>28 Nov 2023</th> <th>03 Nov 2023</th> <th>02 Oct 2023</th>	Sample Date		Client Info		28 Nov 2023	03 Nov 2023	02 Oct 2023
Oil Age Ins Client Info 0 0 153 Oil Changed Client Info Changed Not Changd Not Changd Sample Status Image Image Nor RMAL Nor Changd Not Changd CONTAMINATION method Imit/base current history1 history2 Fuel WC Method >5 <1.0 <1.0 <1.0 Water WC Method >0 0 <10 <1.0 Water WC Method >0 0 <11 <10 Wickel WC Method >2 0 0 <11 Nickel ppm ASTM D5185m >2 0 0 <11 Silver ppm ASTM D5185m >2 0 0 <11 <11 30 Copper ppm ASTM D5185m >4 0 <11 <11 <11 <11 <11 <11 <11 <11 <11 11 <11 <11 <11	Machine Age	hrs	Client Info		2288	2135	1908
Oil Changed Sample Status Client Info Changed NORMAL Not Changd NORMAL Not Changd NORMAL Not Changd NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5. <1.0	•	hrs	Client Info		0	0	153
Sample Status Initial method NORMAL NORMAL NORMAL NORMAL CONTAMINATION method imit/base current history1 history2 Fuel WC Method >5 <1.0 <1.0 <1.0 Water WC Method >0.2 NEG NEG NEG Glycol WC Method NEG NEG NEG NEG WEAR METALS method init/base current history1 history2 Iron ppm ASTM D585m >110 35 21 57 Chromium ppm ASTM D585m >2 0 0 <1 Silver ppm ASTM D585m >2 0 0 <1 Aduminum ppm ASTM D585m >2 0 0 <1 Copper ppm ASTM D585m >5 4 11 1 Cadmium ppm ASTM D585m 0 0 <1 2 Van	Oil Changed		Client Info		Changed	Not Changd	Not Changd
Fuel WC Method >5 <1.0	Sample Status				-		-
Water WC Method >0.2 NEG NEG NEG NEG NEG Glycol WC Method MEG NEG NEG NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >4 1 <1 2 Nickel ppm ASTM D5185m >2 0 0 <1 Titanium ppm ASTM D5185m >2 0 0 <1 Silver ppm ASTM D5185m >2 0 0 <1 Copper ppm ASTM D5185m >4 0 <1 <1 Tin ppm ASTM D5185m >4 0 <1 <1 Copper ppm ASTM D5185m >4 0 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 4 Barinom ppm ASTM D5185m 0 <1 12 <	CONTAMINAT	ION	method	limit/base	current	history1	history2
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Iron ppm ASTM D5185n >110 35 21 57 Chromium ppm ASTM D5185n >4 1 <10	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >4 1 <1	WEAR METAL	S	method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >4 1 <1	Iron	ppm	ASTM D5185m	>110	35	21	57
Nickel ppm ASTM D5185m >2 0 0 <1			ASTM D5185m	>4		<1	2
Titanium ppm ASTM D5185m <1	Nickel		ASTM D5185m	>2	0	0	
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >25 14 11 30 Lead ppm ASTM D5185m >45 0 0 <1 Copper ppm ASTM D5185m >4 0 <1 <1 Tin ppm ASTM D5185m >4 0 <1 <1 Vanadium ppm ASTM D5185m >4 0 <1 <1 Cadmium ppm ASTM D5185m 0 0 0 <1 <1 Cadmium ppm ASTM D5185m 0 3 0 12 <1 Boron ppm ASTM D5185m 0 3 0 12 <1 4 12 Marganese ppm ASTM D5185m 0 0 <1 2 2 3 2 2893 2 2 3 2 2 3 2 2 <	Titanium					<1	<1
Aluminum ppm ASTM D5185m >25 14 11 30 Lead ppm ASTM D5185m >45 0 0 <1 Copper ppm ASTM D5185m >85 5 4 11 Tin ppm ASTM D5185m >4 0 <1 1 Vanadium ppm ASTM D5185m 0 0 0 <1 Cadmium ppm ASTM D5185m 0 <1 <1 4 Cadmium ppm ASTM D5185m 0 <1 <1 4 Barium ppm ASTM D5185m 0 3 0 12 Molybdenum ppm ASTM D5185m 0 3 0 12 Magnesium ppm ASTM D5185m 0 1118 1071 937 Calcium ppm ASTM D5185m 1070 1275 1178 1180 Phosphorus ppm ASTM D5185m 1270 1440				>2			
Lead ppm ASTM D5185m >445 0 0 <1	Aluminum		ASTM D5185m	>25	14	11	30
Copper ppm ASTM D5185m >85 5 4 11 Tin ppm ASTM D5185m >4 0 <1 <1 Vanadium ppm ASTM D5185m >4 0 0 <1 <1 Cadmium ppm ASTM D5185m 0 0 0 0 <1 Cadmium ppm ASTM D5185m 0 <1 <1 4 Boron ppm ASTM D5185m 0 <1 <1 4 Barium ppm ASTM D5185m 0 3 0 12 Molybdenum ppm ASTM D5185m 0 0 <1 2 Magnesium ppm ASTM D5185m 1010 1118 1007 927 Calcium ppm ASTM D5185m 1070 1275 1178 1180 Phosphorus ppm ASTM D5185m 1070 1275 1178 1149 Sulfur ppm ASTM D5185m	Lead			>45	0	0	<1
Tin ppm ASTM D5185m >4 0 <1	Copper		ASTM D5185m	>85	5	4	11
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 <1			ASTM D5185m	>4	0	<1	<1
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 <1 <1 4 Barium ppm ASTM D5185m 0 3 0 12 Molybdenum ppm ASTM D5185m 60 73 57 43 Manganese ppm ASTM D5185m 0 0 <1 2 Magnesium ppm ASTM D5185m 0 0 <1 2 Calcium ppm ASTM D5185m 1010 1118 1007 927 Calcium ppm ASTM D5185m 1070 1275 1178 1180 Phosphorus ppm ASTM D5185m 1270 1440 1313 1149 Sulfur ppm ASTM D5185m 2060 3444 2953 2893 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30	Vanadium	ppm	ASTM D5185m		0	0	<1
Boron ppm ASTM D5185m 0 <1	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 3 0 12 Molybdenum ppm ASTM D5185m 60 73 57 43 Manganese ppm ASTM D5185m 0 0 <1 2 Magnesium ppm ASTM D5185m 1010 1118 1007 927 Calcium ppm ASTM D5185m 1070 1275 1178 1180 Phosphorus ppm ASTM D5185m 1070 1275 1178 1180 Sulfur ppm ASTM D5185m 1270 1440 1313 1149 Sulfur ppm ASTM D5185m 2060 3444 2953 2893 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >20 28 20 64 INFRA-RED method limit/base							
Molybdenum ppm ASTM D5185m 60 73 57 43 Manganese ppm ASTM D5185m 0 0 <1 2 Magnesium ppm ASTM D5185m 1010 1118 1007 927 Calcium ppm ASTM D5185m 1070 1275 1178 1180 Phosphorus ppm ASTM D5185m 1070 1275 1178 1180 Phosphorus ppm ASTM D5185m 1150 1198 1071 937 Zinc ppm ASTM D5185m 1270 1440 1313 1149 Sulfur ppm ASTM D5185m 2060 3444 2953 2893 CONTAMINANT method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >20 28 20 64 INFRA-RED method limi	ADDITIVES		method	limit/base	current	history1	history2
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Magnesium ppm ASTM D5185m 1010 1118 1007 927 Calcium ppm ASTM D5185m 1070 1275 1178 1180 Phosphorus ppm ASTM D5185m 1150 1198 1071 937 Zinc ppm ASTM D5185m 1270 1440 1313 1149 Sulfur ppm ASTM D5185m 2060 3444 2953 2893 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >20 28 20 64 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.4 0.7 Nitration Abs/.mm *ASTM D7624 >20 11.0 8.9 10.5 Sulfation Abs/.lmm *	Boron		ASTM D5185m	0	<1	<1	4
Calcium ppm ASTM D5185m 1070 1275 1178 1180 Phosphorus ppm ASTM D5185m 1150 1198 1071 937 Zinc ppm ASTM D5185m 1270 1440 1313 1149 Sulfur ppm ASTM D5185m 2060 3444 2953 2893 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >20 28 20 64 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.4 0.7 Nitration Abs/cm<*ASTM D7624 >20 11.0 8.9 10.5 Sulfation Abs/imm<*ASTM D7415 >30 22.8 21.3 24.1 FLUID DEGRADATION method limit/base <t< th=""><th>Boron Barium</th><th>ppm</th><th>ASTM D5185m ASTM D5185m</th><th>0</th><th><1 3</th><th><1 0</th><th>4 12</th></t<>	Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	<1 3	<1 0	4 12
Phosphorus ppm ASTM D5185m 1150 1198 1071 937 Zinc ppm ASTM D5185m 1270 1440 1313 1149 Sulfur ppm ASTM D5185m 2060 3444 2953 2893 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >20 28 20 64 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.4 0.7 Nitration Abs/cm *ASTM D7624 >20 11.0 8.9 10.5 Sulfation Abs/.imm *ASTM D7415 >30 22.8 21.3 24.1 FLUID DEGRADATION Method 2	Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	<1 3 73	<1 0 57	4 12 43
Zinc ppm ASTM D5185m 1270 1440 1313 1149 Sulfur ppm ASTM D5185m 2060 3444 2953 2893 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >20 28 20 64 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.4 0.7 Nitration Abs/cm *ASTM D7624 >20 11.0 8.9 10.5 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 21.3 24.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7	Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	<1 3 73 0	<1 0 57 <1	4 12 43 2
Sulfur ppm ASTM D5185m 2060 3444 2953 2893 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m >20 28 20 64 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.4 0.7 Nitration Abs/cm *ASTM D7624 >20 11.0 8.9 10.5 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 21.3 24.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 17.7 20.1	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	<1 3 73 0 1118	<1 0 57 <1 1007	4 12 43 2 927
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>307610SodiumppmASTM D5185m<1<13PotassiumppmASTM D5185m>20282064INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D7844>30.60.40.7NitrationAbs/cm*ASTM D7624>2011.08.910.5SulfationAbs/lmm*ASTM D7415>3022.821.324.1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.1mm*ASTM D7414>2519.717.720.1	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	<1 3 73 0 1118 1275	<1 0 57 <1 1007 1178	4 12 43 2 927 1180
Silicon ppm ASTM D5185m >30 7 6 10 Sodium ppm ASTM D5185m <1	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	0 0 60 0 1010 1070 1150	<1 3 73 0 1118 1275 1198	<1 0 57 <1 1007 1178 1071	4 12 43 2 927 1180 937
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	0 0 60 0 1010 1070 1150 1270	<1 3 73 0 1118 1275 1198 1440	<1 0 57 <1 1007 1178 1071 1313	4 12 43 2 927 1180 937 1149
Potassium ppm ASTM D5185m >20 28 20 64 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.6 0.4 0.7 Nitration Abs/cm *ASTM D7624 >20 11.0 8.9 10.5 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 21.3 24.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 17.7 20.1	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	0 0 60 0 1010 1070 1150 1270 2060	<1 3 73 0 1118 1275 1198 1440 3444	<1 0 57 <1 1007 1178 1071 1313 2953	4 12 43 2 927 1180 937 1149 2893
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Soot % % *ASTM D7844 >3 0.6 0.4 0.7 Nitration Abs/cm *ASTM D7624 >20 11.0 8.9 10.5 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 21.3 24.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 17.7 20.1	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	0 0 60 1010 1070 1150 1270 2060	<1 3 73 0 1118 1275 1198 1440 3444 <i>current</i> 7	<1 0 57 <1 1007 1178 1071 1313 2953 history1 6	4 12 43 2 927 1180 937 1149 2893 history2 10
Nitration Abs/cm *ASTM D7624 >20 11.0 8.9 10.5 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 21.3 24.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 17.7 20.1	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	0 0 60 1010 1070 1150 1270 2060 limit/base	<1 3 73 0 1118 1275 1198 1440 3444 <u>current</u> 7 <	<1 0 57 <1 1007 1178 1071 1313 2953 history1 6 <1	4 12 43 2 927 1180 937 1149 2893 history2 10 3
Sulfation Abs/.1mm *ASTM D7415 >30 22.8 21.3 24.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 17.7 20.1	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	0 0 0 1010 1070 1150 1270 2060 limit/base >30	<1 3 73 0 1118 1275 1198 1440 3444 current 7 <1 28	<1 0 57 <1 1007 1178 1071 1313 2953 history1 6 < 20	4 12 43 2 927 1180 937 1149 2893 history2 10 3 64
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.7 17.7 20.1	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 limit/base >30 -20	<1 3 73 0 1118 1275 1198 1440 3444 current 7 <1 28 current	<1 0 57 <1 1007 1178 1071 1313 2953 history1 6 <1 20 history1	4 12 43 2 927 1180 937 1149 2893 history2 10 3 64 history2
Oxidation Abs/.1mm *ASTM D7414 >25 19.7 17.7 20.1	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	0 0 0 1010 1070 1150 1270 2060 limit/base >30 >20 limit/base	<1 3 73 0 1118 1275 1198 1440 3444 <u>current</u> 7 <1 28 <u>current</u> 0.6	<1 0 57 <1 1007 1178 1071 1313 2953 history1 6 <1 20 history1 0.4	4 12 43 2 927 1180 937 1149 2893 history2 10 3 64 history2 0.7
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >30 <i>limit/base</i> >20	<1 3 73 0 1118 1275 1198 1440 3444 current 7 <1 28 current 0.6 11.0	<1 0 57 <1 1007 1178 1071 1313 2953 history1 6 <1 20 history1 0.4 8.9	4 12 43 2 927 1180 937 1149 2893 history2 10 3 64 history2 0.7 10.5
Base Number (BN) mg KOH/g ASTM D2896 9.8 6.0 7.7 6.5	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	0 0 0 1010 1070 1150 1270 2060 imit/base >30 imit/base >3 20	<1 3 73 0 1118 1275 1198 1440 3444 current 7 <1 28 current 0.6 11.0 22.8	<1 0 57 <1 1007 1178 1071 1313 2953 history1 6 <1 20 history1 0.4 8.9 21.3	4 12 43 2 927 1180 937 1149 2893 history2 10 3 64 history2 0.7 10.5 24.1
	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 *ASTM D7844	0 0 0 1010 1070 1150 1270 2060 2060 2060 2060 2060 2060 2060 2	<1 3 73 0 1118 1275 1198 1440 3444 Current 7 <1 28 Current 0.6 11.0 22.8 Current	<1 0 57 <1 1007 1178 1071 1313 2953 history1 6 <1 20 history1 0.4 8.9 21.3 history1	4 12 43 2 927 1180 937 1149 2893 history2 10 3 64 history2 0.7 10.5 24.1 history2

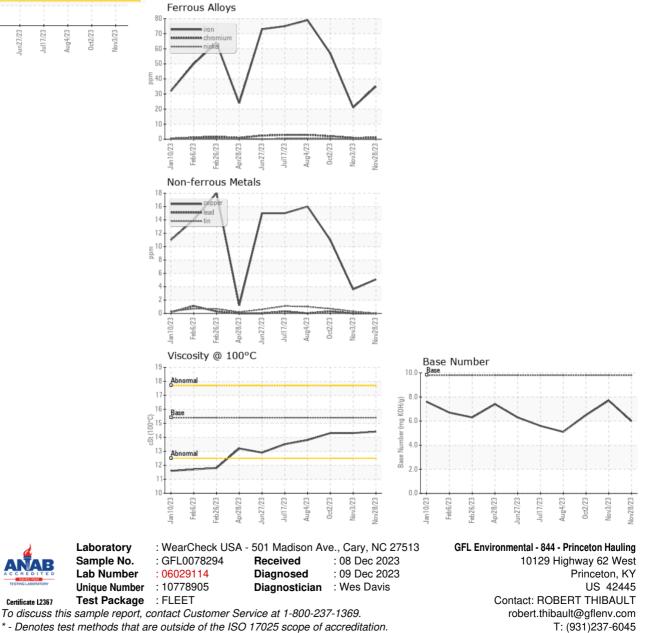


OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	14.3	14.3
GRAPHS						



Certificate L2367

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