

OIL ANALYSIS REPORT

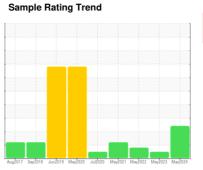


(EQ2301) N

Low Lift #2 (Edgemere) BPS (S/N 81Z10758)

Diesel Engine

PETRO CANADA DURON UHP 5W40 (25 GAL)





DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil.

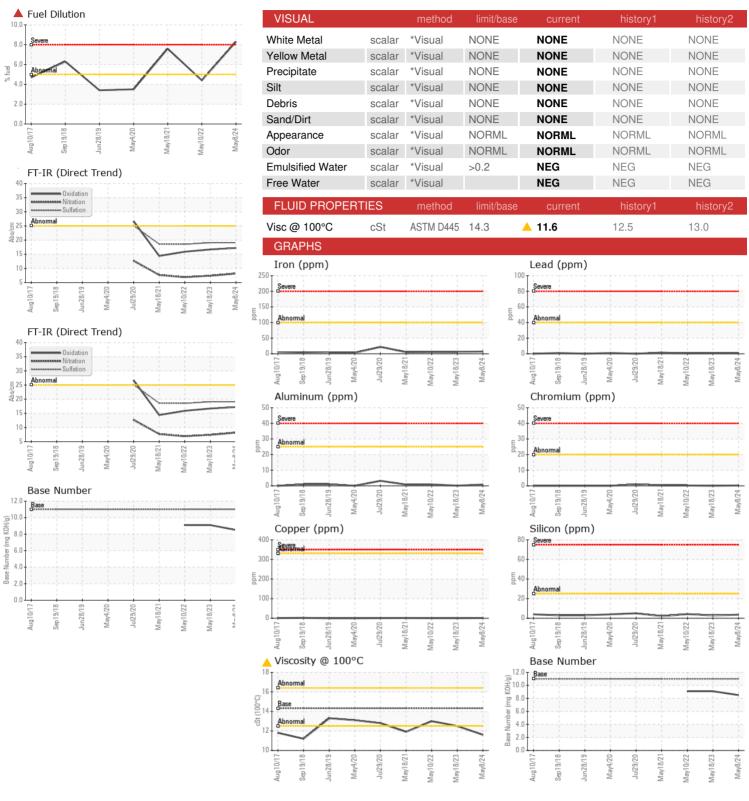
Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sample Number Client Info WC0934058 WC0810876 WC0696097							
Sample Date Client Info 08 May 2024 18 May 2023 10 May 2022 Machine Age hrs Client Info 1669 1612 1582 Oil Age hrs Client Info 87 62 1582 Oil Changed Client Info Not Changd Not Changd Changed Changed Sample Status Client Info Not Changd Not Changd Macking Changed Water WC Method Imitibase current history1 history2 Wear METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >10.0 7 5 6 Chromium ppm ASTM D5185m >20 <1	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 1669 1612 1582	Sample Number		Client Info		WC0934058	WC0810876	WC0696097
Dil Age	Sample Date		Client Info		08 May 2024	18 May 2023	10 May 2022
Contamped Client Info Severe Not Changed Changed Severe Normal Marginal Marginal	Machine Age	hrs	Client Info		1669	1612	1582
Dil Changed Client Info	Oil Age	hrs	Client Info		87	62	1582
Several Normal Marginal	-		Client Info		Not Changd	Not Changd	Changed
Water Glycol WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 7 5 6 Chromium ppm ASTM D5185m >20 <1 0 <1 Nickel ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >2 9 10 10 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >2 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1					SEVERE	NORMAL	MARGINAL
WEAR METALS	CONTAMINATION	N	method	limit/base	current	history1	history2
WEAR METALS	Water		WC Method	>0.2	NEG	NEG	NEG
Iron	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >20 <1 0 <1 Nickel ppm ASTM D5185m >2 0 0 0 Tittanium ppm ASTM D5185m >2 9 10 10 Siliver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >2 1 <1	WEAR METALS		method	limit/base	current	history1	history2
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Titanium	Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Silver	Nickel	ppm	ASTM D5185m	>2	0	0	0
Silver	Titanium		ASTM D5185m	>2	9	10	10
Aluminum	Silver	ppm	ASTM D5185m	>2	0	0	0
Lead ppm ASTM D5185m >40 <1 <1 <1 <1 Clopper ppm ASTM D5185m >330 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Aluminum		ASTM D5185m	>25	<1	<1	<1
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Phosphorus ppm ASTM D5185m 1160 1020 1011 1055 Zinc ppm ASTM D5185m 1260 1253 1343 1199 Sulfur ppm ASTM D5185m 3000 3900 3883 3029 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 3 4 Sodium ppm ASTM D5185m >20 1 2 <1 Fuel % ASTM D5185m >20 1 2 <1 Fuel % ASTM D5185m >20 1 2 <1 Fuel % ASTM D3524 >5 As.3 <1.0 △4.4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.2 7.4 6.9 Sulfation Abs/:1mm *ASTM D7415 >30							
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Silicon ppm ASTM D5185m >25 4 3 4 Sodium ppm ASTM D5185m 4 4 4 4 Potassium ppm ASTM D5185m >20 1 2 <1 Fuel % ASTM D3524 >5 ▲ 8.3 <1.0 ▲ 4.4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.4 6.9 Sulfation Abs/.1mm *ASTM D7415 >30 19.1 19.1 18.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.2 16.7 15.9	Sulfur	ppm	ASTM D5185m	3000	3900	3883	3029
Sodium ppm ASTM D5185m 4 4 4 4 4 Potassium 4<	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 1 2 <1 Fuel % ASTM D3524 >5 ▲ 8.3 <1.0 ▲ 4.4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.4 6.9 Sulfation Abs/.1mm *ASTM D7415 >30 19.1 19.1 18.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.2 16.7 15.9	Silicon	ppm	ASTM D5185m	>25	4	3	
Fuel % ASTM D3524 >5 ▲ 8.3 <1.0 ▲ 4.4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.4 6.9 Sulfation Abs/.1mm *ASTM D7415 >30 19.1 19.1 18.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.2 16.7 15.9	Sodium	ppm	ASTM D5185m		4	4	4
INFRA-RED	Potassium	ppm	ASTM D5185m	>20	1	2	<1
Soot % % *ASTM D7844 >3 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.4 6.9 Sulfation Abs/.1mm *ASTM D7415 >30 19.1 19.1 18.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.2 16.7 15.9	Fuel	%	ASTM D3524	>5	▲ 8.3	<1.0	▲ 4.4
Nitration Abs/cm *ASTM D7624 >20 8.2 7.4 6.9 Sulfation Abs/.1mm *ASTM D7415 >30 19.1 19.1 18.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.2 16.7 15.9	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 19.1 19.1 18.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.2 16.7 15.9	Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Sulfation Abs/.1mm *ASTM D7415 >30 19.1 19.1 18.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.2 16.7 15.9	Nitration	Abs/cm	*ASTM D7624	>20	8.2	7.4	6.9
Oxidation Abs/.1mm *ASTM D7414 >25 17.2 16.7 15.9		Abs/.1mm	*ASTM D7415	>30	19.1		18.5
	Sulfation						
			method	limit/base	current	history1	history2
	FLUID DEGRADA	TION					•



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: WC0934058 Lab Number : 06176878

Unique Number : 11022931

Received **Tested**

Diagnosed : 17 May 2024 - Jonathan Hester Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

: 13 May 2024

: 17 May 2024

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

 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)

MONROE COUNTY WATER AUTHORITY

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Contact: SCOTT TRAIL scott.trail@mcwa.com T: (585)775-5257

F: