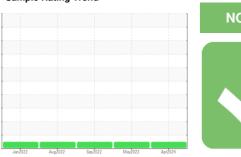


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

M129 (S/N KCB41316)

Diesel Engine

PETRO CANADA DURON HP 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

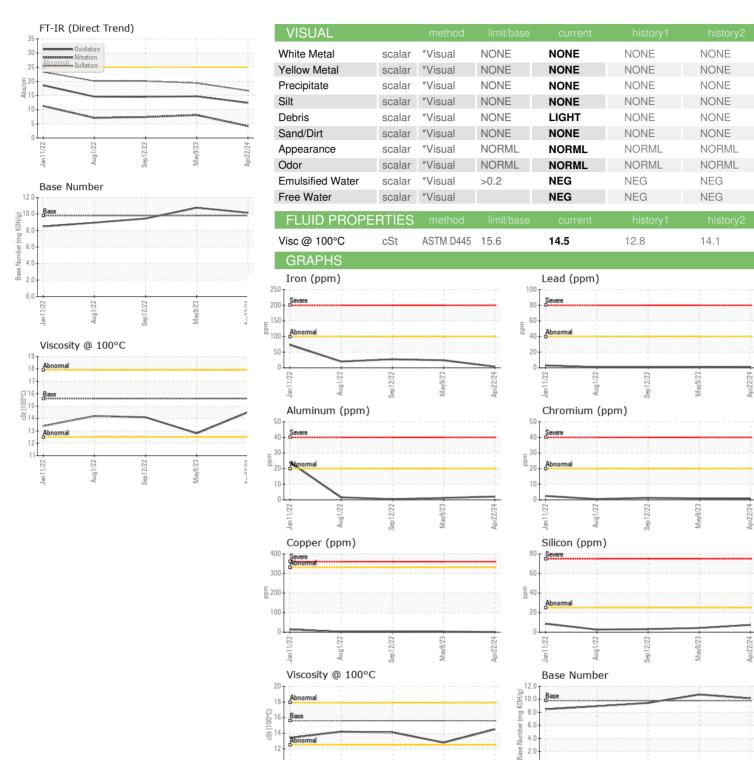
Fluid Condition

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

SAMPLE INFORMATION method limit/base current history1 history2	3)		Janzuzz	AUGZUZZ	Sep2022 May2023	Aprzuz4	
Sample Date	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age mls Client Info 24603 23258 22588 Oil Age mls Client Info 24603 23258 22588 Oil Changed Client Info Changed Changed <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>PCA0098505</th> <th>WC0721436</th> <th>WC0570771</th>	Sample Number		Client Info		PCA0098505	WC0721436	WC0570771
Oil Age mls Client Info 24603 23258 22588 Oil Changed Client Info Changed Ch	Sample Date		Client Info		22 Apr 2024	09 May 2023	12 Sep 2022
Oil Changed Sample Status Client Info MORMAL Changed NORMAL Change NEG Change NEG	Machine Age	mls	Client Info		24603	23258	22588
NORMAL NORMAL NORMAL	Oil Age	mls	Client Info		24603	23258	22588
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 <1.0 <1.0 <1.0 Water WC Method >0.2 NEG NEG NEG NEG Glycol WC Method NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 3 24 27 Chromium ppm ASTM D5185m >20 <1 <1 1 Nickel ppm ASTM D5185m >4 <1 0 0 Silver ppm ASTM D5185m >3 1 0 0 Silver ppm ASTM D5185m >3 1 0 0 Silver ppm ASTM D5185m >40 <1 1 <1 <1 Lead ppm ASTM D5185m >330	Oil Changed		Client Info		Changed	Changed	Changed
Fuel	Sample Status				NORMAL	NORMAL	NORMAL
Water Glycol WC Method >0.2 NEG NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 3 24 27 Chromium ppm ASTM D5185m >20 <1 <1 1 Nickel ppm ASTM D5185m >4 <1 0 0 Sliver ppm ASTM D5185m >4 <1 0 0 Sliver ppm ASTM D5185m >40 <1 1 <1 Sliver ppm ASTM D5185m >40 <1 1 <1 Lead ppm ASTM D5185m >40 <1 1 <1 Copper ppm ASTM D5185m >40 <1 1 <1 Vanadium ppm ASTM D5185m >15 1 <1 <1 <1 Cadmium ppm ASTM D5185m <1	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0	<1.0	<1.0
WEAR METALS	Water		WC Method	>0.2	NEG	NEG	NEG
Iron	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >20 <1	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>100	3	24	27
Titanium ppm ASTM D5185m <1	Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Silver ppm ASTM D5185m >3 1 0 0 Aluminum ppm ASTM D5185m >20 2 1 <1	Nickel	ppm	ASTM D5185m	>4	<1	0	0
Aluminum	Titanium	ppm	ASTM D5185m		<1	0	0
Lead	Silver	ppm	ASTM D5185m	>3	1	0	0
Copper ppm ASTM D5185m >330 <1	Aluminum	ppm	ASTM D5185m	>20	2	1	<1
Tin ppm ASTM D5185m >15 1 <1	Lead	ppm	ASTM D5185m	>40	<1	1	<1
Vanadium ppm ASTM D5185m <1	Copper	ppm	ASTM D5185m	>330	<1	4	2
Cadmium ppm ASTM D5185m <1	Tin	ppm	ASTM D5185m	>15	1	<1	<1
ADDITIVES	Vanadium	ppm	ASTM D5185m		<1	0	<1
Boron	Cadmium	ppm	ASTM D5185m		<1	0	0
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 61 64 52 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 918 938 883 Calcium ppm ASTM D5185m 1103 1067 1025 Phosphorus ppm ASTM D5185m 1028 1034 917 Zinc ppm ASTM D5185m 1195 1239 1153 Sulfur ppm ASTM D5185m 3557 3270 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 4 3 Sodium ppm ASTM D5185m >20 2 1 0 INFRA-RED method limit/base current history1 history2 Soot % "ASTM D7844 >3	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 61 64 52 Manganese ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m		8	10	0
Manganese ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m		0	0	0
Magnesium ppm ASTM D5185m 918 938 883 Calcium ppm ASTM D5185m 1103 1067 1025 Phosphorus ppm ASTM D5185m 1028 1034 917 Zinc ppm ASTM D5185m 1195 1239 1153 Sulfur ppm ASTM D5185m 3557 3270 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 4 3 Sodium ppm ASTM D5185m >20 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 <1	Molybdenum	ppm	ASTM D5185m		61	64	52
Calcium ppm ASTM D5185m 1103 1067 1025 Phosphorus ppm ASTM D5185m 1028 1034 917 Zinc ppm ASTM D5185m 1195 1239 1153 Sulfur ppm ASTM D5185m 3557 3270 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 4 3 Sodium ppm ASTM D5185m >20 2 1 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.4 0.8 Nitration Abs/cm *ASTM D7624 >20 4.2 8.1 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1	Manganese	ppm	ASTM D5185m		<1	<1	<1
Phosphorus ppm ASTM D5185m 1028 1034 917 Zinc ppm ASTM D5185m 1195 1239 1153 Sulfur ppm ASTM D5185m 3557 3270 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 4 3 Sodium ppm ASTM D5185m >20 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 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Magnesium	ppm	ASTM D5185m		918	938	883
Zinc ppm ASTM D5185m 1195 1239 1153 Sulfur ppm ASTM D5185m 3557 3270 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 4 3 Sodium ppm ASTM D5185m >20 2 1 <1 <1 <1 <1 <1 <1 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.4 0.8 Nitration Abs/cm *ASTM D7624 >20 4.2 8.1 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Calcium	ppm	ASTM D5185m		1103	1067	1025
Sulfur ppm ASTM D5185m 3557 3270 3018 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 4 3 Sodium ppm ASTM D5185m >20 2 1 <1 <1 Potassium ppm ASTM D5185m >20 2 1 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.4 0.8 Nitration Abs/cm *ASTM D7624 >20 4.2 8.1 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Phosphorus	ppm	ASTM D5185m		1028	1034	917
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 4 3 Sodium ppm ASTM D5185m 1 <1 <1 Potassium ppm ASTM D5185m >20 2 1 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.4 0.8 Nitration Abs/cm *ASTM D7624 >20 4.2 8.1 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Zinc	ppm	ASTM D5185m		1195	1239	1153
Silicon ppm ASTM D5185m >25 8 4 3 Sodium ppm ASTM D5185m 1 <1	Sulfur	ppm	ASTM D5185m		3557	3270	3018
Sodium ppm ASTM D5185m 1 <1	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 1 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.4 0.8 Nitration Abs/cm *ASTM D7624 >20 4.2 8.1 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Silicon	ppm	ASTM D5185m	>25	8	4	3
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.4 0.8 Nitration Abs/cm *ASTM D7624 >20 4.2 8.1 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Sodium	ppm	ASTM D5185m		1	<1	<1
Soot % % *ASTM D7844 >3 0.1 0.4 0.8 Nitration Abs/cm *ASTM D7624 >20 4.2 8.1 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Potassium	ppm	ASTM D5185m	>20	2	1	0
Nitration Abs/cm *ASTM D7624 >20 4.2 8.1 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 16.7 19.4 20.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Soot %	%	*ASTM D7844	>3	0.1	0.4	0.8
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Nitration	Abs/cm	*ASTM D7624	>20	4.2	8.1	7.4
Oxidation Abs/.1mm *ASTM D7414 >25 12.4 14.7 14.5	Sulfation	Abs/.1mm	*ASTM D7415	>30	16.7	19.4	20.1
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 9.8 10.15 10.75 9.45	Oxidation	Abs/.1mm	*ASTM D7414	>25	12.4	14.7	14.5
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	10.15	10.75	9.45



OIL ANALYSIS REPORT







Certificate 12367

Sample No.

Lab Number : 06186886 Unique Number: 11043638 Test Package : MOB 2

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: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0098505 Received : 21 May 2024 Tested : 23 May 2024

Sep12/22

Diagnosed : 23 May 2024 - Wes Davis

0.0

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)

KOBYLUCK TRUCKING

24 INDUSTRIAL DR WATERFORD, CT US 06385

Contact: GEORGE GEORGE@KOBYLUCKINC.COM

T: (860)367-2002