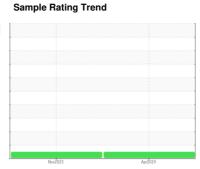


OIL ANALYSIS REPORT

^ DT



NORMAL



Machine Id **207 (S/N 74584372)**

Diesel Engine

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

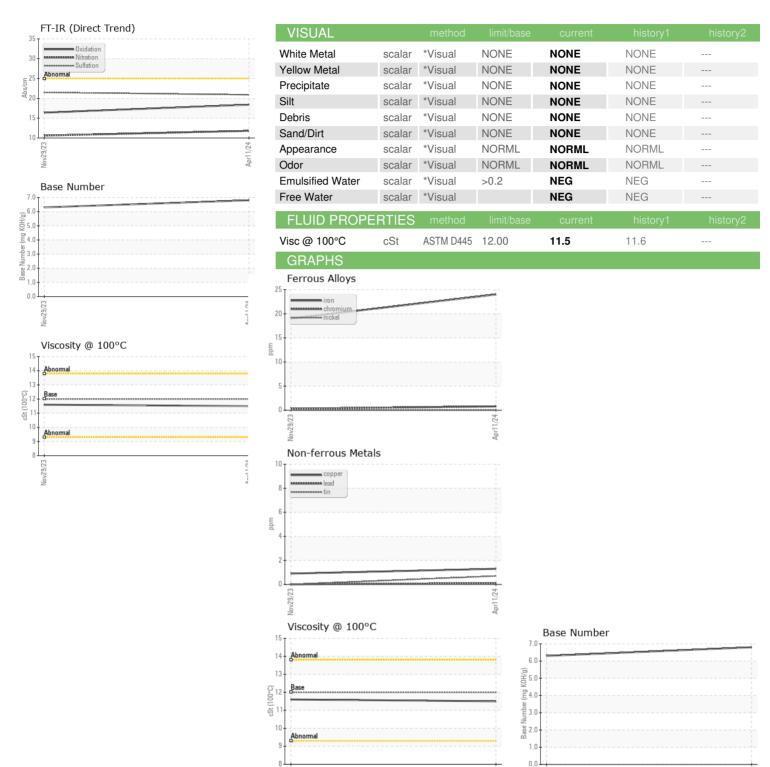
Fluid Condition

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

Machine Age mls Client Info 263195 240120	AL)			Nov2023	Apr2024		
Client Info	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 11 Apr 2024 29 Nov 2023	Sample Number		Client Info		PCA0093086	PCA0093088	
Machine Age mls Client Info 263195 240120	Sample Date		Client Info		11 Apr 2024	29 Nov 2023	
Contained Client Info Changed Changed	Machine Age	mls	Client Info		•	240120	
CONTAMINATION method milibase current history1 history2	Oil Age	mls	Client Info		23075	19986	
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0	Oil Changed		Client Info		Changed	Changed	
Fuel	Sample Status				NORMAL	NORMAL	
Water Glycol WC Method WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 24 19 Chromium ppm ASTM D5185m >20 <1 <1 Nickel ppm ASTM D5185m >4 0 0 Silver ppm ASTM D5185m >4 0 0 Aluminum ppm ASTM D5185m >40 <1 0 Aluminum ppm ASTM D5185m >20 5 4 Lead ppm ASTM D5185m >40 <1 0 Copper ppm ASTM D5185m >15 <1 0 Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0	<1.0	
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 24 19 Chromium ppm ASTM D5185m >20 <1	Water		WC Method	>0.2	NEG	NEG	
Chromium	Glycol		WC Method		NEG	NEG	
Chromium ppm ASTM D5185m >20	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	ron	ppm	ASTM D5185m	>100	24	19	
Description	Chromium	ppm	ASTM D5185m	>20		<1	
Silver	Nickel	ppm	ASTM D5185m	>4	0	0	
Aluminum	Titanium	ppm	ASTM D5185m		0	0	
Lead	Silver	ppm	ASTM D5185m	>3	0	0	
Copper	Aluminum	ppm	ASTM D5185m	>20	5	4	
Tin	_ead	ppm	ASTM D5185m	>40	<1	0	
Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 2 2 21 Barium ppm ASTM D5185m 0 0 2 Wolybdenum ppm ASTM D5185m 50 58 34 Manganese ppm ASTM D5185m 0 <1 0 Magnesium ppm ASTM D5185m 950 849 180 Calcium ppm ASTM D5185m 950 849 180 Phosphorus ppm ASTM D5185m 995 996 778 Zinc ppm ASTM D5185m 2600 3529 3518 CONTAMINANTS method limit/base current his	Copper	ppm	ASTM D5185m	>330	1	<1	
ADDITIVES	Γin	ppm	ASTM D5185m	>15	<1	0	
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	0	
Barium	Cadmium	ppm	ASTM D5185m		0	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 58 34 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	2	21	
Manganese ppm ASTM D5185m 0 <1 0 Magnesium ppm ASTM D5185m 950 849 180 Calcium ppm ASTM D5185m 1050 1196 1862 Phosphorus ppm ASTM D5185m 995 996 778 Zinc ppm ASTM D5185m 1180 1214 1004 Sulfur ppm ASTM D5185m 2600 3529 3518 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 4 Sodium ppm ASTM D5185m 2 0 Potassium ppm ASTM D5185m 2 0 Potassium ppm ASTM D5185m 20 4 7 INFRA-RED method limit/base current history1 </td <td>Barium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <td>0</td> <td>2</td> <td></td>	Barium	ppm	ASTM D5185m	0	0	2	
Magnesium ppm ASTM D5185m 950 849 180 Calcium ppm ASTM D5185m 1050 1196 1862 Phosphorus ppm ASTM D5185m 995 996 778 Zinc ppm ASTM D5185m 1180 1214 1004 Sulfur ppm ASTM D5185m 2600 3529 3518 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 4 Sodium ppm ASTM D5185m 2 0 Potassium ppm ASTM D5185m 20 4 7 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30	Molybdenum	ppm	ASTM D5185m	50	58	34	
Calcium ppm ASTM D5185m 1050 1196 1862 Phosphorus ppm ASTM D5185m 995 996 778 Zinc ppm ASTM D5185m 1180 1214 1004 Sulfur ppm ASTM D5185m 2600 3529 3518 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25 3 4 Solicon ppm ASTM D5185m 2 0 Potassium ppm ASTM D5185m >20 4 7 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.6 Nitration Abs/:1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION method	Manganese	ppm	ASTM D5185m	0	<1	0	
Phosphorus ppm ASTM D5185m 995 996 778 Zinc ppm ASTM D5185m 1180 1214 1004 Sulfur ppm ASTM D5185m 2600 3529 3518 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 4 Sodium ppm ASTM D5185m 2 0 Potassium ppm ASTM D5185m >20 4 7 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.6 Nitration Abs/cm *ASTM D7624 >20 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION *ASTM D7414 >25 <t< td=""><td>Magnesium</td><td>ppm</td><td>ASTM D5185m</td><td>950</td><td>849</td><td>180</td><td></td></t<>	Magnesium	ppm	ASTM D5185m	950	849	180	
Zinc ppm ASTM D5185m 1180 1214 1004 Sulfur ppm ASTM D5185m 2600 3529 3518 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 4 Sodium ppm ASTM D5185m 2 0 Potassium ppm ASTM D5185m >20 4 7 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.6 Nitration Abs/cm *ASTM D7624 >20 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 16.4	Calcium	ppm	ASTM D5185m	1050	1196	1862	
Sulfur ppm ASTM D5185m 2600 3529 3518 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 4 Sodium ppm ASTM D5185m 2 0 Potassium ppm ASTM D5185m >20 4 7 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.6 Nitration Abs/cm *ASTM D7624 >20 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 16.4	Phosphorus	ppm	ASTM D5185m	995	996	778	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 4 Sodium ppm ASTM D5185m 2 0 Potassium ppm ASTM D5185m >20 4 7 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.6 Nitration Abs/cm *ASTM D7624 >20 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 16.4	Zinc	ppm	ASTM D5185m	1180	1214	1004	
Solition ppm ASTM D5185m >25 3 4	Sulfur	ppm	ASTM D5185m	2600	3529	3518	
Sodium	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 4 7 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.6 Nitration Abs/cm *ASTM D7624 >20 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 16.4	Silicon	ppm	ASTM D5185m	>25	3	4	
INFRA-RED	Sodium	ppm	ASTM D5185m		2	0	
Soot % % *ASTM D7844 >3 0.7 0.6 Nitration Abs/cm *ASTM D7624 >20 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 16.4	Potassium	ppm	ASTM D5185m	>20	4	7	
Nitration Abs/cm *ASTM D7624 >20 11.8 10.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 16.4	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 20.9 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 16.4	Soot %	%	*ASTM D7844	>3	0.7	0.6	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 16.4	Nitration	Abs/cm	*ASTM D7624	>20	11.8	10.6	
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	21.5	
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 6.8 6.3	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	16.4	
	Base Number (BN)	mg KOH/g	ASTM D2896		6.8	6.3	



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

Lab Number : 06161159

Test Package : FLEET

: PCA0093086 Unique Number : 10996582

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 26 Apr 2024 Tested

: 26 Apr 2024 Diagnosed

: 26 Apr 2024 - Wes Davis

Contact: CRIS BUSH cbush@mccartneyproduce.com T: (731)642-2362

MCCARTNEY PRODUCE

459 CULLEY DR

PARIS, TN

US 38242

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - 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: MCCPAR [WUSCAR] 06161159 (Generated: 04/26/2024 16:48:34) Rev: 1

Contact/Location: CRIS BUSH - MCCPAR