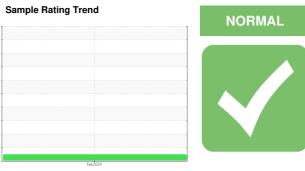


OIL ANALYSIS REPORT

Walgreens-Reefer [Walgreens-Reefer] 136C821002

Diesel Engine

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



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

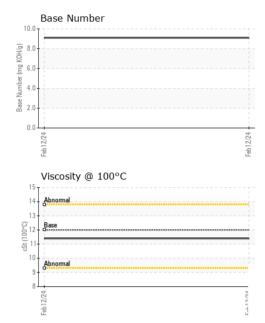
Fluid Condition

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 fimit/base current history1 history2	āAL)				Feb2024		
Sample Date	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 696	Sample Number		Client Info		PCA0112816		
Oil Age hrs Client Info 109	Sample Date		Client Info		12 Feb 2024		
Oil Changed Sample Status Client Info MoRMAL Changed NORMAL	Machine Age	hrs	Client Info		696		
Sample Status	Oil Age	hrs	Client Info		109		
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0	Oil Changed		Client Info		Changed		
Fuel WC Method S5 C1.0 C1.0	Sample Status				NORMAL		
Water Glycol WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 7 Nickel ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >4 0 Sliver ppm ASTM D5185m >4 0 Sliver ppm ASTM D5185m >40 0 Aluminum ppm ASTM D5185m >20 2 Lead ppm ASTM D5185m >40 0 Copper ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 0 </th <th>CONTAMINAT</th> <th>ION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0		
WEAR METALS	Water		WC Method	>0.2	NEG		
Iron	Glycol		WC Method		NEG		
Chromium	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>100	7		
Titanium ppm ASTM D5185m <1 Silver ppm ASTM D5185m >3 <1	Chromium	ppm	ASTM D5185m	>20	<1		
Silver	Nickel	ppm	ASTM D5185m	>4	0		
Aluminum	Titanium	ppm	ASTM D5185m		<1		
Lead ppm ASTM D5185m >40 0 Copper ppm ASTM D5185m >330 1 Tin ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 ADDITIVES Barium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Barium ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 54 Magnesium ppm ASTM D5185m 0 41 Calcium ppm ASTM D5185m 995 924	Silver	ppm	ASTM D5185m	>3	<1		
Copper ppm ASTM D5185m >330 1 Tin ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 54 Manganese ppm ASTM D5185m 0 -1 Magnesium ppm ASTM D5185m 950 343 Calcium ppm ASTM D5185m 995 924 Zinc ppm ASTM D5185m 1180 1044	Aluminum	ppm	ASTM D5185m	>20	2		
Tin	Lead	ppm	ASTM D5185m	>40	0		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 8 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 54 Manganese ppm ASTM D5185m 950 843 Magnesium ppm ASTM D5185m 950 843 Calcium ppm ASTM D5185m 1050 909 Phosphorus ppm ASTM D5185m 292 22 Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1	Copper	ppm	ASTM D5185m	>330	1		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 8 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 54 Manganese ppm ASTM D5185m 0 <1	Tin	ppm	ASTM D5185m	>15	0		
ADDITIVES	Vanadium	ppm	ASTM D5185m		0		
Boron ppm ASTM D5185m 2 8 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 54 Manganese ppm ASTM D5185m 0 <1 Manganesium ppm ASTM D5185m 950 843 Manganesium ppm ASTM D5185m 950 843 Manganesium ppm ASTM D5185m 1050 909 Manganesium ppm ASTM D5185m 995 924 Manganesium ppm ASTM D5185m 995 924 Manganesium ppm ASTM D5185m 2600 2886 Manganesium ppm ASTM D5185m 2600 2886 Manganesium ppm ASTM D5185m 2600 2886 Manganesium ppm ASTM D5185m 225 3 Manganesium ppm ASTM D5185m 225 3 Manganesium ppm ASTM D5185m 220 2 Manganesium ppm ASTM D5185m 20 2 Manganesium ppm ASTM D5185m 20 2 Manganesium ppm ASTM D5185m 20 2 Manganesium ppm ASTM D5185m 20 2 Manganesium ppm ASTM D5185m 20 2 Manganesium ppm ASTM D5185m 20 2 Manganesium ppm ASTM D5185m 20 2 Manganesium ppm ASTM D5185m 20 2 Manganesium ppm ASTM D5185m 20 2	Cadmium	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 54 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 843 Calcium ppm ASTM D5185m 1050 909 Phosphorus ppm ASTM D5185m 1180 1044 Zinc ppm ASTM D5185m 2600 2886 Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 2 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 54 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 843 Calcium ppm ASTM D5185m 1050 909 Phosphorus ppm ASTM D5185m 1050 909 Zinc ppm ASTM D5185m 995 924 Zinc ppm ASTM D5185m 2600 2886 Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 2 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D	Boron	ppm	ASTM D5185m	2	8		
Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 843 Calcium ppm ASTM D5185m 1050 909 Phosphorus ppm ASTM D5185m 995 924 Zinc ppm ASTM D5185m 1180 1044 Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624	Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 950 843 Calcium ppm ASTM D5185m 1050 909 Phosphorus ppm ASTM D5185m 995 924 Zinc ppm ASTM D5185m 1180 1044 Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7414	Molybdenum	ppm	ASTM D5185m	50	54		
Calcium ppm ASTM D5185m 1050 909 Phosphorus ppm ASTM D5185m 995 924 Zinc ppm ASTM D5185m 1180 1044 Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 5.0 Nitration Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION *as TM D7414 <td< td=""><td>Manganese</td><td>ppm</td><td>ASTM D5185m</td><td>0</td><th><1</th><td></td><td></td></td<>	Manganese	ppm	ASTM D5185m	0	<1		
Phosphorus ppm ASTM D5185m 995 924 Zinc ppm ASTM D5185m 1180 1044 Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 5.0 Nitration Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm	Magnesium	ppm		950	843		
Zinc ppm ASTM D5185m 1180 1044 Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM	Calcium	ppm	ASTM D5185m	1050	909		
Sulfur ppm ASTM D5185m 2600 2886 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5		ppm		995	924		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5		ppm	ASTM D5185m	1180	1044		
Silicon ppm ASTM D5185m >25 3 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5	Sulfur	ppm	ASTM D5185m	2600	2886		
Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5	Silicon	ppm	ASTM D5185m	>25	3		
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5	Sodium	ppm	ASTM D5185m		0		
Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5	Potassium	ppm	ASTM D5185m	>20	2		
Nitration Abs/cm *ASTM D7624 >20 5.0 Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 17.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5	Soot %	%	*ASTM D7844	>3	0.3		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.5	Nitration	Abs/cm	*ASTM D7624	>20	5.0		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7		
	FLUID DEGRAI	OITAC	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 9.1	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.5		
	Base Number (BN)	mg KOH/g	ASTM D2896		9.1		



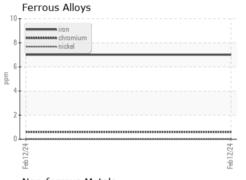
OIL ANALYSIS REPORT



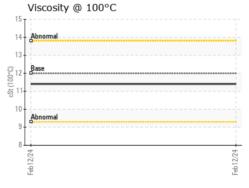
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPE	RTIES	method	limit/base	current	history1	history2

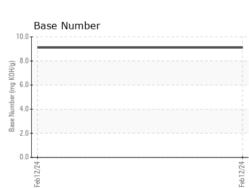
Visc @ 100°C	cSt	ASTM D445	12.00	11.4	

GRAPHS



¹⁰ T	copper						
8 -	**************************************						
	assessment IIII						
6-							
4							
2+							
		_	_	_	_	_	_
0	 						
	47/7 I GB4						1 4 2 3 3 4
	7 Q						







Certificate L2367

Laboratory Sample No.

: PCA0112816 Lab Number : 06096671 Unique Number: 10889524 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 22 Feb 2024 **Tested** : 01 Mar 2024

Diagnosed : 01 Mar 2024 - Doug Bogart

Transervice - Shop 1364 - Berkeley-Mt. Vernon 5100 Lake Terrace NE

Mt. Vernon, IL US 62864 Contact: Erien White

F: (618)244-8791

ewhite@transervice.com T: (618)244-8726

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)