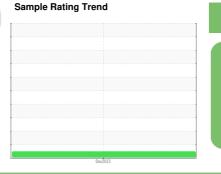


OIL ANALYSIS REPORT

(P798441) Preferred Service-Tractor [Preferred Service-Tractor] 192A01003

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

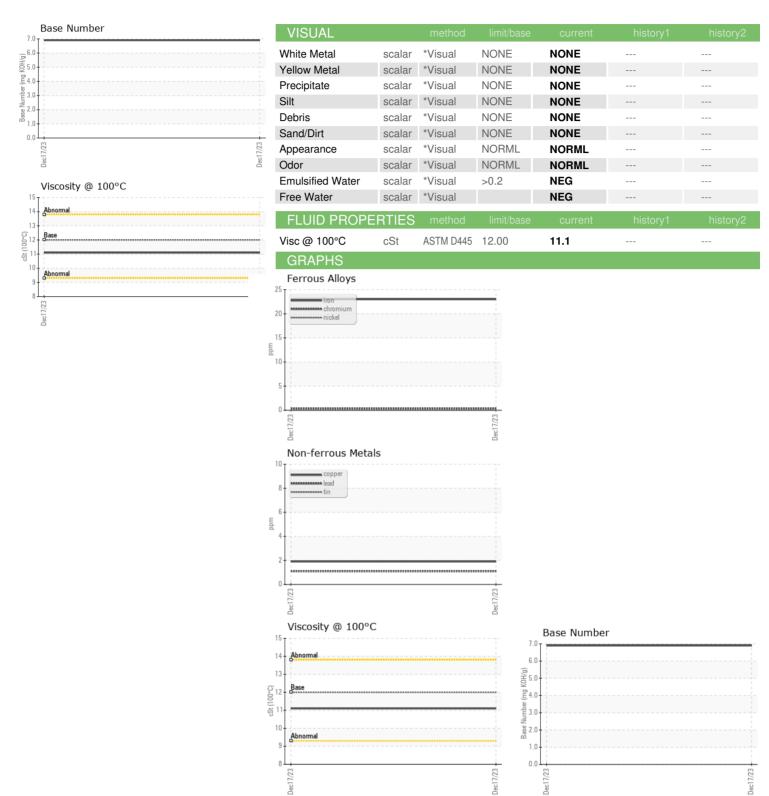
Fluid Condition

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

Sample Date Client Info 17 Dec 2023	áAL)				Dec2023		
Sample Date Client Info 17 Dec 2023	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age mis Client Info 447567 Oil Age mis Client Info 16163 Oil Changed Client Info Changed Oil Age mis Client Info Changed Or Oil Age Changed Oil Age Client Info Oil Age Client Info Changed Oil Age Client Info Oil	Sample Number		Client Info		PCA0112176		
Oil Age mls Client Info 16163	Sample Date		Client Info		17 Dec 2023		
Contamped Client Info Normal Changed Contample Status Cont	Machine Age	mls	Client Info		447567		
CONTAMINATION method milibase current history1 history2	Oil Age	mls	Client Info		16163		
CONTAMINATION method limit/base current history1 history2	Oil Changed		Client Info		Changed		
Fuel	Sample Status				NORMAL		
Water Glycol WC Method WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 23 Chromium ppm ASTM D5185m >20 <1	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>6.0	<1.0		
WEAR METALS	Water		WC Method	>0.2	NEG		
Chromium	Glycol		WC Method		NEG		
Chromium	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>100	23		
Nickel	Chromium		ASTM D5185m	>20	<1		
Silver	Nickel	ppm	ASTM D5185m	>2	0		
Aluminum	Titanium	ppm	ASTM D5185m		<1		
Lead	Silver	ppm	ASTM D5185m	>2	0		
Copper ppm ASTM D5185m >330 2 Tin ppm ASTM D5185m >15 1 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 9 Molybdenum ppm ASTM D5185m 0 -1 Manganese ppm ASTM D5185m 0 -1 Magnesium ppm ASTM D5185m 950 961 Calcium ppm ASTM D5185m 995 1057 Zinc ppm ASTM D5185m 180 1242	Aluminum	ppm	ASTM D5185m	>25	3		
Tin	Lead	ppm	ASTM D5185m	>40	1		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 <1 Barium ppm ASTM D5185m 0 9 Molybdenum ppm ASTM D5185m 50 63 Manganese ppm ASTM D5185m 95 961 Magnesium ppm ASTM D5185m 95 961 Calcium ppm ASTM D5185m 1050 1096 Phosphorus ppm ASTM D5185m 295 1057 Zinc ppm ASTM D5185m 2600 3074 Sulfur ppm ASTM D5185m >25 5 -	Copper	ppm	ASTM D5185m	>330	2		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 <1	Tin	ppm	ASTM D5185m	>15	1		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 <1	Vanadium	ppm	ASTM D5185m		0		
Boron ppm ASTM D5185m 2 <1 Barium ppm ASTM D5185m 0 9 Molybdenum ppm ASTM D5185m 50 63 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 961 Calcium ppm ASTM D5185m 1050 1096 Phosphorus ppm ASTM D5185m 995 1057 Zinc ppm ASTM D5185m 1180 1242 Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m 2 INFRA-RED method limit/base current history1 history2 Soot % % 'ASTM D7844 >3 1 Nitration Abs/cm 'ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Coxidation Abs/.1mm 'ASTM D7414 >25 16.8	Cadmium	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 0 9 Molybdenum ppm ASTM D5185m 50 63 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 961 Calcium ppm ASTM D5185m 1050 1096 Phosphorus ppm ASTM D5185m 995 1057 Zinc ppm ASTM D5185m 995 1057 Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m >20 4 Potassium ppm ASTM D7844	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 63 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 961 Calcium ppm ASTM D5185m 1050 1096 Phosphorus ppm ASTM D5185m 995 1057 Zinc ppm ASTM D5185m 1180 1242 Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 20 4 Potassium ppm ASTM D5185m 20 4 INFRA-RED method limit/base <td>Boron</td> <td>ppm</td> <td>ASTM D5185m</td> <td>2</td> <td><1</td> <td></td> <td></td>	Boron	ppm	ASTM D5185m	2	<1		
Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 950 961 Calcium ppm ASTM D5185m 1050 1096 Phosphorus ppm ASTM D5185m 995 1057 Zinc ppm ASTM D5185m 1180 1242 Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3	Barium	ppm	ASTM D5185m	0	9		
Magnesium ppm ASTM D5185m 950 961 Calcium ppm ASTM D5185m 1050 1096 Phosphorus ppm ASTM D5185m 995 1057 Zinc ppm ASTM D5185m 1180 1242 Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.	Molybdenum	ppm	ASTM D5185m	50	63		
Calcium ppm ASTM D5185m 1050 1096 Phosphorus ppm ASTM D5185m 995 1057 Zinc ppm ASTM D5185m 1180 1242 Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 22 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION *ASTM D7414 >25	Manganese	ppm	ASTM D5185m	0	<1		
Phosphorus ppm ASTM D5185m 995 1057 Zinc ppm ASTM D5185m 1180 1242 Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION *ASTM D7414 >25 16.8 Sovidation Abs/.1mm *ASTM D7414 >25	Magnesium	ppm	ASTM D5185m	950	961		
Zinc ppm ASTM D5185m 1180 1242 Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1 Nitration Abs/.1mm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm	Calcium	ppm	ASTM D5185m	1050	1096		
Sulfur ppm ASTM D5185m 2600 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1 Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	Phosphorus	ppm		995	1057		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1 Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	Zinc	ppm	ASTM D5185m	1180	1242		
Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1 Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	Sulfur	ppm	ASTM D5185m	2600	3074		
Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1 Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1 Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	Silicon	ppm	ASTM D5185m	>25	5		
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1 Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	Sodium	ppm	ASTM D5185m		2		
Soot % % *ASTM D7844 >3 1 Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	Potassium	ppm	ASTM D5185m	>20	4		
Nitration Abs/cm *ASTM D7624 >20 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 20.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	Soot %	%	*ASTM D7844	>3	1		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.8	Nitration	Abs/cm	*ASTM D7624	>20	8.8		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6		
	FLUID DEGRA	OITAC	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 6.9	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8		
	Base Number (BN)	mg KOH/g	ASTM D2896		6.9		



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number

: PCA0112176 : 06045409 : 10806017

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 26 Dec 2023 Recieved : 27 Dec 2023 Diagnosed

Diagnostician : Wes Davis

Transervice - Shop 1920 - Preferred Service 1955 W. North Avenue, Bldg K Melrose Park, IL US 60160 Contact: Tom Lindeman

tlindemann@transervice.com T: (630)376-8946

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)