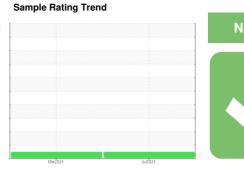


OIL ANALYSIS REPORT

(51489Z) Walgreens - Tractor [Walgreens - Tractor] 136A63342

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

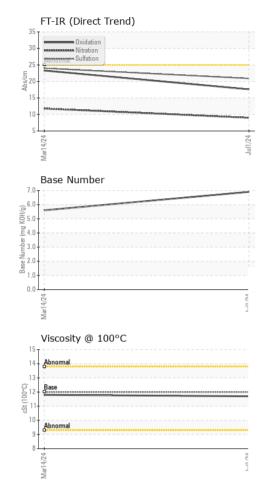
Fluid Condition

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

Cample Number Client Info PCA0121290 PCA0120858 Client Info Di Jul 2024 14 Mar 2024 Client Info Di Jul 2024 Client Info Di Jul 2024 Client Info Di Jul 2024 Changed Client Info Di Jul 2024 Changed Client Info N/A Changed Changed	GAL)		L	Mar2024	Jul2024		
Client Info	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Date	Sample Number		Client Info		PCA0121290	PCA0120858	
Machine Age mls Client Info 153728 120686 Dit Age mls Client Info 50000 600000 Dit Changed Client Info N/A Changed Sample Status NORMAL NORMAL CONTAMINATION method imit/base current history1 history2 Fuel WC Method S <1.0 <1.0 Water WC Method >0.2 NEG NEG Glycol WC Method NEG NEG WEAR METALS method imit/base current history1 history2 Fuel WC Method NEG NEG WEAR METALS method imit/base current history1 history2 Fuel WEAR METALS method imit/base current history1 history2 Fuel WC Method NEG NEG WEAR METALS method imit/base current history1 history2 Fuel Ppm ASTM D5185m >5 2 6 Fuel Ppm ASTM D5185m >5 2 6 Fuel Ppm ASTM D5185m >3 <1 0 Fuel Ppm ASTM D5185m >3 <1 0 Fuel Ppm ASTM D5185m >3 <1 0 Fuel Ppm ASTM D5185m >30 13 45 Fuel Ppm ASTM D5185m >30 13 45 Fuel Ppm ASTM D5185m >0 <1 0 Fuel Puel Ppm ASTM D5185m >0 0 Fuel Puel	·		Client Info		01 Jul 2024	14 Mar 2024	
Dil Changed Client Info N/A Changed Changed Changed Changed NORMAL NORMAL CONTAMINATION Method Solitory Contamination Contaminatio	Machine Age	mls	Client Info		153728	120686	
Dil Changed Client Info N/A Changed Changed Changed Changed NORMAL NORMAL CONTAMINATION Method Solitory Contamination Contaminatio	Oil Age	mls	Client Info		50000	60000	
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 <1.0	-		Client Info		N/A	Changed	
Water	Sample Status				NORMAL		
Water WC Method >0.2 NEG NEG	CONTAMINA	ΓΙΟΝ	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 >80 26 59 Chromium ppm ASTM D5185m >5 2 6 Nickel ppm ASTM D5185m >5 2 6 Nickel ppm ASTM D5185m >2 0 <1	Water		WC Method	>0.2	NEG	NEG	
Chromium	Glycol		WC Method		NEG	NEG	
Chromium ppm ASTM D5185m >5 2 6	WEAR METAI	LS	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>80	26	59	
Nickel	Chromium		ASTM D5185m	>5	2	6	
Description	Nickel		ASTM D5185m	>2	0	<1	
Aluminum	Titanium	ppm	ASTM D5185m		0	<1	
Lead	Silver	ppm	ASTM D5185m	>3	<1	0	
Copper	Aluminum	ppm	ASTM D5185m	>30	13	45	
Property Property	Lead	ppm	ASTM D5185m	>30	<1	0	
Vanadium ppm ASTM D5185m 0 <1 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 3 27 Barium ppm ASTM D5185m 0 0 <1 Molybdenum ppm ASTM D5185m 0 63 64 Manganese ppm ASTM D5185m 0 <1 2 Magnesium ppm ASTM D5185m 950 993 885 Calcium ppm ASTM D5185m 950 1261 1384 Phosphorus ppm ASTM D5185m 995 1040 939 Zinc ppm ASTM D5185m 2600 3064 2761 CONTAMINANTS method limit/base current history1	Copper	ppm	ASTM D5185m	>150	31	52	
ADDITIVES	Tin	ppm	ASTM D5185m	>5	0	0	
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	<1	
Boron ppm ASTM D5185m 2 3 27	Cadmium	ppm	ASTM D5185m		0	0	
Sarium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 63 64 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	3	27	
Manganese ppm ASTM D5185m 0 <1 2 Magnesium ppm ASTM D5185m 950 993 885 Calcium ppm ASTM D5185m 1050 1261 1384 Phosphorus ppm ASTM D5185m 995 1040 939 Zinc ppm ASTM D5185m 1180 1291 1249 Sulfur ppm ASTM D5185m 2600 3064 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 9 Sodium ppm ASTM D5185m >20 5 9 Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 <td>Barium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <td>0</td> <td><1</td> <td></td>	Barium	ppm	ASTM D5185m	0	0	<1	
Magnesium ppm ASTM D5185m 950 993 885 Calcium ppm ASTM D5185m 1050 1261 1384 Phosphorus ppm ASTM D5185m 995 1040 939 Zinc ppm ASTM D5185m 1180 1291 1249 Sulfur ppm ASTM D5185m 2600 3064 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 9 Sodium ppm ASTM D5185m 3 4 Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 1 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>50</td> <td>63</td> <td>64</td> <td></td>	Molybdenum	ppm	ASTM D5185m	50	63	64	
Calcium ppm ASTM D5185m 1050 1261 1384 Phosphorus ppm ASTM D5185m 995 1040 939 Zinc ppm ASTM D5185m 1180 1291 1249 Sulfur ppm ASTM D5185m 2600 3064 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 9 Sodium ppm ASTM D5185m 3 4 Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 1 Nitration Abs/cm *ASTM D7415 >30 20.9 24.0 FLUID DEGRADATION *ASTM D7414 >25 17.	Manganese	ppm	ASTM D5185m	0	<1	2	
Phosphorus ppm ASTM D5185m 995 1040 939 Zinc ppm ASTM D5185m 1180 1291 1249 Sulfur ppm ASTM D5185m 2600 3064 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 9 Sodium ppm ASTM D5185m 3 4 Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 1 Nitration Abs/cm *ASTM D7624 >20 9.0 11.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 24.0 FLUID DEGRADATION *ASTM D7414 >25 <t< td=""><td>Magnesium</td><td>ppm</td><td>ASTM D5185m</td><td>950</td><td>993</td><td>885</td><td></td></t<>	Magnesium	ppm	ASTM D5185m	950	993	885	
Zinc ppm ASTM D5185m 1180 1291 1249 Sulfur ppm ASTM D5185m 2600 3064 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 9 Sodium ppm ASTM D5185m 3 4 Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3 0.7 1 Nitration Abs/cm *ASTM D7624 >20 9.0 11.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 24.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 23.3	Calcium	ppm	ASTM D5185m	1050	1261	1384	
Sulfur ppm ASTM D5185m 2600 3064 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 9 Sodium ppm ASTM D5185m 3 4 Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 1 Nitration Abs/cm *ASTM D7624 >20 9.0 11.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 24.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 23.3	Phosphorus	ppm	ASTM D5185m	995	1040	939	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 9 Sodium ppm ASTM D5185m 3 4 Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 1 Nitration Abs/cm *ASTM D7624 >20 9.0 11.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 24.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 23.3	Zinc	ppm	ASTM D5185m	1180	1291	1249	
Solition ppm ASTM D5185m >20 5 9	Sulfur	ppm	ASTM D5185m	2600	3064	2761	
Sodium ppm ASTM D5185m 3 4 Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot %	CONTAMINA	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 24 91 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 1 Nitration Abs/cm *ASTM D7624 >20 9.0 11.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 24.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 23.3	Silicon	ppm	ASTM D5185m	>20	5	9	
INFRA-RED	Sodium	ppm	ASTM D5185m		3	4	
Soot %	Potassium	ppm	ASTM D5185m	>20	24	91	
Nitration Abs/cm *ASTM D7624 >20 9.0 11.8 Sulfation Abs/.1mm *ASTM D7415 >30 20.9 24.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 23.3	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 20.9 24.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 23.3	Soot %	%	*ASTM D7844	>3	0.7	1	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 23.3	Nitration	Abs/cm	*ASTM D7624	>20	9.0	11.8	
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	24.0	
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 6.9 5.6	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	23.3	
	Base Number (BN)	mg KOH/g	ASTM D2896		6.9	5.6	

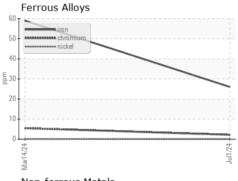


OIL ANALYSIS REPORT

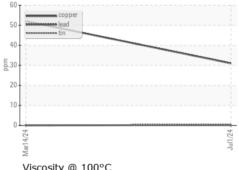


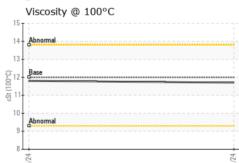
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
	DTIEC	ام مقلم مما	lineit/lenen		hinton d	histow.O

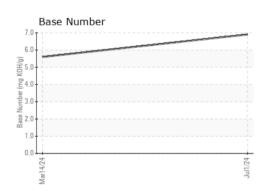
FLUID PROPI	ERITES	metnoa	ilmit/base	current	nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	12.00	11.7	11.8	



Non-	ferrous	Metals
T		











Certificate 12367

Laboratory Sample No.

Test Package : FLEET

: PCA0121290 Lab Number : 06230991 Unique Number : 11114484

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** Diagnosed

: 08 Jul 2024 : 10 Jul 2024 : 10 Jul 2024 - Wes Davis

Transervice - Shop 1369 - Berkeley-Waxahachie 710 Ovilla Road Waxahachie, TX US 75167

Contact: Robert Beal To discuss this sample report, contact Customer Service at 1-800-237-1369. rbeal@transervice.com

* - 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: TSV1369 [WUSCAR] 06230991 (Generated: 07/10/2024 00:42:26) Rev: 1

Contact/Location: Robert Beal - TSV1369

T: (972)923-9928

F: (972)923-9919