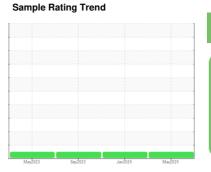


OIL ANALYSIS REPORT

(AU761S) Supermarket - Tractor FREIGHTLINER 107A8819

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

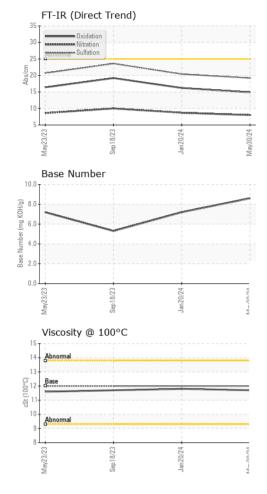
Fluid Condition

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

Sample Number Client Info PCA0124134 PCA01111008 PCA0104092 Sample Date Client Info 30 May 2024 20 Jan 2024 18 Sep 2023 20 Jan 2024 20 Jan 2024 18 Sep 2023 20 Jan 2024 20 Jan 2024 18 Sep 2023 20 Jan 2024 20 Jan 2024 21 Sep 2023 22 Jan 2014 21 Sep 2023 22 Jan 20 Jan 2024 21 Sep 2023 22 Jan 2024 22 Jan	SAMDI E INEODM	ΛΤΙΩΝ	method	limit/base	Ol tropt	history	hiotory
Sample Date		AHUN		IIIIII/Dase		history1	history2
Machine Age mls Client Info 15297 19926 19192 Oil Age mls Client Info 15297 19926 19192 Oil Changed Client Info Changed Changed Changed Changed NORMAL NORMAL NORMAL NORMAL NORMAL NORMAL CONTAMINATION method Imit/base current history1 history2 Fuel							
Dil Age	·				-		
Client Info Changed Changed Changed NORMAL NORMAL NORMAL NORMAL							
NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2	J	mls					
Fuel	-		Client Info			Ü	
Fuel	·				NORMAL	NORMAL	NORMAL
Water Glycol WC Method >0.2 NEG NEG NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 22 25 37 Chromium ppm ASTM D5185m >5 2 2 3 Nickel ppm ASTM D5185m >2 <1	CONTAMINATIO	N	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
Part	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >5 2 2 2 3 Nickel ppm ASTM D5185m >2 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>80	22	25	37
Titanium	Chromium	ppm	ASTM D5185m	>5	2	2	3
Silver	Nickel	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	Titanium	ppm	ASTM D5185m		<1	0	0
Lead ppm ASTM D5185m >30 0 0 0 Copper ppm ASTM D5185m >150 3 5 8 Tin ppm ASTM D5185m >5 <1 0 <1 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 8 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 0 ADDITIVES method limit/base current history1	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper ppm ASTM D5185m >150 3 5 8 Tin ppm ASTM D5185m >5 <1	Aluminum	ppm	ASTM D5185m	>30	16	17	31
Tin	Lead	ppm	ASTM D5185m	>30	0	0	0
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 2 12 7 Barium ppm ASTM D5185m 0 0 8 0 Molybdenum ppm ASTM D5185m 50 63 67 70 Manganese ppm ASTM D5185m 0 0 0 <1 Magnesium ppm ASTM D5185m 950 927 861 1033 Calcium ppm ASTM D5185m 950 927 861 1033 Calcium ppm ASTM D5185m 995 891 897 1100 Zinc ppm ASTM D5185m 180 1228 1165 1393 Sulfur ppm ASTM D5185m >20 5 5 7	Copper	ppm	ASTM D5185m	>150	3	5	8
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 2 12 7 Barium ppm ASTM D5185m 0 0 8 0 Molybdenum ppm ASTM D5185m 50 63 67 70 Manganese ppm ASTM D5185m 0 0 0 -1 Magnesium ppm ASTM D5185m 950 927 861 1033 Calcium ppm ASTM D5185m 995 891 897 1100 Zinc ppm ASTM D5185m 995 891 897 1100 Zinc ppm ASTM D5185m 2600 2973 2731 3320 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5	Tin	ppm	ASTM D5185m	>5	<1	0	<1
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	0	0
Boron	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 8 0 Molybdenum ppm ASTM D5185m 50 63 67 70 Manganese ppm ASTM D5185m 50 0 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 63 67 70 Manganese ppm ASTM D5185m 0 0 0 <1 Magnesium ppm ASTM D5185m 950 927 861 1033 Calcium ppm ASTM D5185m 1050 1075 1053 1265 Phosphorus ppm ASTM D5185m 995 891 897 1100 Zinc ppm ASTM D5185m 995 891 165 1393 Sulfur ppm ASTM D5185m 2600 2973 2731 3320 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7624 >20 <t< td=""><td>Boron</td><td>ppm</td><td>ASTM D5185m</td><td>2</td><th>2</th><td>12</td><td>7</td></t<>	Boron	ppm	ASTM D5185m	2	2	12	7
Manganese ppm ASTM D5185m 0 0 0 <1 Magnesium ppm ASTM D5185m 950 927 861 1033 Calcium ppm ASTM D5185m 1050 1075 1053 1265 Phosphorus ppm ASTM D5185m 995 891 897 1100 Zinc ppm ASTM D5185m 1180 1228 1165 1393 Sulfur ppm ASTM D5185m 2600 2973 2731 3320 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844	Barium	ppm	ASTM D5185m	0	0	8	0
Magnesium ppm ASTM D5185m 950 927 861 1033 Calcium ppm ASTM D5185m 1050 1075 1053 1265 Phosphorus ppm ASTM D5185m 995 891 897 1100 Zinc ppm ASTM D5185m 1180 1228 1165 1393 Sulfur ppm ASTM D5185m 2600 2973 2731 3320 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415	Molybdenum	ppm	ASTM D5185m	50	63	67	70
Calcium ppm ASTM D5185m 1050 1075 1053 1265 Phosphorus ppm ASTM D5185m 995 891 897 1100 Zinc ppm ASTM D5185m 1180 1228 1165 1393 Sulfur ppm ASTM D5185m 2600 2973 2731 3320 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.9 1.4 Nitration Abs/.1mm *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method	Manganese	ppm	ASTM D5185m	0	0	0	<1
Phosphorus ppm ASTM D5185m 995 891 897 1100 Zinc ppm ASTM D5185m 1180 1228 1165 1393 Sulfur ppm ASTM D5185m 2600 2973 2731 3320 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.9 1.4 Nitration Abs/cm *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm	Magnesium	ppm	ASTM D5185m	950	927	861	1033
Zinc ppm ASTM D5185m 1180 1228 1165 1393 Sulfur ppm ASTM D5185m 2600 2973 2731 3320 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.9 1.4 Nitration Abs/cm *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	Calcium	ppm	ASTM D5185m	1050	1075	1053	1265
Sulfur ppm ASTM D5185m 2600 2973 2731 3320 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m <1	Phosphorus	ppm	ASTM D5185m	995	891	897	1100
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m <1	Zinc	ppm	ASTM D5185m	1180	1228	1165	1393
Silicon ppm ASTM D5185m >20 5 5 7 Sodium ppm ASTM D5185m <1 0 3 Potassium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.9 1.4 Nitration Abs/cm *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	Sulfur	ppm	ASTM D5185m	2600	2973	2731	3320
Sodium ppm ASTM D5185m <1 0 3 Potassium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.9 1.4 Nitration Abs/cm *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	CONTAMINANT	S	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 18 25 48 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 0.9 1.4 Nitration Abs/cm *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	Silicon	ppm	ASTM D5185m	>20	5	5	7
INFRA-RED	Sodium	ppm	ASTM D5185m		<1	0	3
Soot % % *ASTM D7844 >3 0.7 0.9 1.4 Nitration Abs/cm *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	Potassium	ppm	ASTM D5185m	>20	18	25	48
Nitration Abs/cm *ASTM D7624 >20 8.0 8.7 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 19.2 20.4 23.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	Soot %	%	*ASTM D7844	>3	0.7	0.9	1.4
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	Nitration	Abs/cm	*ASTM D7624	>20	8.0	8.7	10.0
Oxidation Abs/.1mm *ASTM D7414 >25 14.9 16.2 19.2	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	20.4	23.6
	FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	16.2	19.2
			ASTM D2896		8.6	7.2	5.3



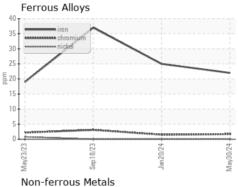
OIL ANALYSIS REPORT

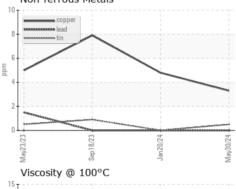


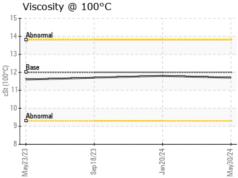
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

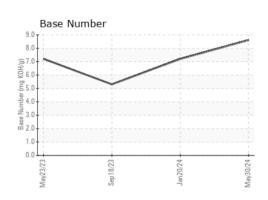
FLUID PROPI	EHILO	method			riistory i	nistoryz
Visc @ 100°C	cSt	ASTM D445	12.00	11.7	11.8	11.7

GRAPHS













Certificate 12367

Laboratory Sample No. Lab Number : 06209837

: PCA0124134 Unique Number : 11082701 Test Package : FLEET

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

: 14 Jun 2024 **Tested** : 15 Jun 2024 Diagnosed

: 15 Jun 2024 - Wes Davis

Transervice - Shop 1071 - Supermarket-Dayton 60 A Tower Road Dayton, NJ US 08810

Contact: Brian Quinn bquinn@transervice.com

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: TSV1071 [WUSCAR] 06209837 (Generated: 06/15/2024 15:38:57) Rev: 1

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