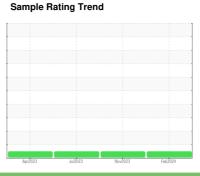


OIL ANALYSIS REPORT

(92415X) Walgreens - Tractor [Walgreens - Tractor] 136A62002

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

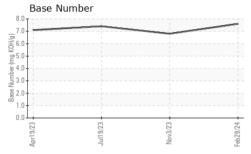
Fluid Condition

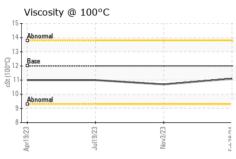
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Date Client Info 28 Feb 2024 03 Nov 2023 19 Jul 2023 Machine Age mls Client Info 377937 359474 332340 308762 30876	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age mls Client Info 377937 359474 332340 Oil Age mls Client Info 18463 359474 308762 Oil Changed Changed Changed Changed Changed Sample Status NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limitbases current history1 history1 Fuel WC Method >2.0 <1.0	Sample Number		Client Info		PCA0110601	PCA0093470	PCA0093497
Oil Age mls Client Info 18463 359474 308762 Oil Changed Chan	Sample Date		Client Info		28 Feb 2024	03 Nov 2023	19 Jul 2023
Oil Changed Sample Status Client Info Warm Changed NORMAL Changed NeG C	Machine Age	mls	Client Info		377937	359474	332340
Sample Status	Oil Age	mls	Client Info		18463	359474	308762
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >2.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 NEG	Oil Changed		Client Info		Changed	Changed	Changed
Fuel	Sample Status				NORMAL	NORMAL	NORMAL
Water Glycol WC Method Glycol VC Method NEG Ned NEG Ned NEG Ned NEG Ned NEG NEG NEG	CONTAMINATI	ON	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>2.0	<1.0	<1.0	<1.0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 18 14 16 Chromium ppm ASTM D5185m >20 <1 <1 <1 Nickel ppm ASTM D5185m >4 0 <1 0 Titanium ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >40 <1 2 1 Lead ppm ASTM D5185m >40 <1 2 1 Copper ppm ASTM D5185m >330 <1 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 <1 Cadmium ppm ASTM D5185m 2 10 1	Water		WC Method	>0.2	NEG	NEG	NEG
Iron	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >20 <1	WEAR METALS	S	method	limit/base	current	history1	history2
Nicke	Iron	ppm	ASTM D5185m	>100	18	14	16
Titanium ppm ASTM D5185m <1 6 13 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >20 3 5 4 Lead ppm ASTM D5185m >40 <1 2 1 Copper ppm ASTM D5185m >330 <1 <1 <1 Tin ppm ASTM D5185m >15 0 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 <1 Cadmium ppm ASTM D5185m 0 0 <1 <1 <1 Boron ppm ASTM D5185m 0 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 0 Barium ppm ASTM D5185m 0 0 </td <th>Chromium</th> <td>ppm</td> <td>ASTM D5185m</td> <td>>20</td> <th><1</th> <td><1</td> <td><1</td>	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Silver	Nickel	ppm	ASTM D5185m	>4	0	<1	0
Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >20 3 5 4 Lead ppm ASTM D5185m >40 <1 2 1 Copper ppm ASTM D5185m >330 <1 <1 <1 Tin ppm ASTM D5185m 0 <1 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 <1 Cadmium ppm ASTM D5185m 0 <0 <0 0 Boron ppm ASTM D5185m 0 0 0 0 0 Barium ppm ASTM D5185m 0 48 51 47 Manganese ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 950 737	Titanium	ppm	ASTM D5185m		<1	6	13
Aluminum	Silver		ASTM D5185m	>3	0	0	0
Lead ppm ASTM D5185m >40 <1 2 1 Copper ppm ASTM D5185m >330 <1 <1 <1 Tin ppm ASTM D5185m >15 0 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 Cadmium ppm ASTM D5185m 0 0 <1 <1 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 48 51 47 Mangae ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 1050 1222 1150 1345	Aluminum	ppm	ASTM D5185m	>20	3	5	4
Copper ppm ASTM D5185m >330 <1 <1 <1 Tin ppm ASTM D5185m >15 0 <1	Lead			>40	<1	2	1
Tin ppm ASTM D5185m >15 0 <1 <1 Vanadium ppm ASTM D5185m 0 <1 <1 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 10 13 10 Barium ppm ASTM D5185m 0 0 0 0 0 Molybdenum ppm ASTM D5185m 50 48 51 47 Manganese ppm ASTM D5185m 0 <1 <1 <1 <1 Magnesium ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 950 730 1001 1002 Zinc ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 1180 1063	Copper		ASTM D5185m	>330	<1	<1	<1
Vanadium ppm ASTM D5185m 0 <1 <1 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 10 13 10 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 48 51 47 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1<					0	<1	<1
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 10 13 10 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 48 51 47 Manganese ppm ASTM D5185m 50 48 51 47 Magnesium ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current his	Vanadium		ASTM D5185m			<1	<1
Boron					-		
Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 48 51 47 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 1050 1222 1150 1345 Phosphorus ppm ASTM D5185m 1050 1222 1150 1345 Phosphorus ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 1180 1063 1246 1263 Sulfur ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM	ADDITIVES		method	limit/base	current	history1	history2
Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 48 51 47 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	10	13	10
Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 1050 1222 1150 1345 Phosphorus ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 1180 1063 1246 1263 Sulfur ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/.1mm *ASTM D7	Barium		ASTM D5185m	0	0	0	0
Magnesium ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 1050 1222 1150 1345 Phosphorus ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *AST	Molybdenum	ppm	ASTM D5185m	50	48	51	47
Magnesium ppm ASTM D5185m 950 737 861 834 Calcium ppm ASTM D5185m 1050 1222 1150 1345 Phosphorus ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 1180 1063 1246 1263 Sulfur ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm	•		ASTM D5185m	0	<1	<1	<1
Calcium ppm ASTM D5185m 1050 1222 1150 1345 Phosphorus ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 1180 1063 1246 1263 Sulfur ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/:nm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/:nm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION <t< td=""><th>Magnesium</th><td></td><td>ASTM D5185m</td><td>950</td><th>737</th><td>861</td><td>834</td></t<>	Magnesium		ASTM D5185m	950	737	861	834
Phosphorus ppm ASTM D5185m 995 880 1001 1002 Zinc ppm ASTM D5185m 1180 1063 1246 1263 Sulfur ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history1 Oxidation Abs/.	-		ASTM D5185m	1050	1222	1150	1345
Zinc ppm ASTM D5185m 1180 1063 1246 1263 Sulfur ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history1 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2	Phosphorus		ASTM D5185m	995	880	1001	1002
Sulfur ppm ASTM D5185m 2600 3278 3092 3810 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2			ASTM D5185m	1180	1063	1246	1263
Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m 1 1 2 Potassium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history1 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history1 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2	Sulfur		ASTM D5185m	2600	3278	3092	3810
Sodium ppm ASTM D5185m 1 1 2 Potassium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2	CONTAMINAN	TS	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 1 1 2 Potassium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2	Silicon	ppm	ASTM D5185m	>25	4	4	4
Potassium ppm ASTM D5185m >20 4 8 6 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2		• •					
Soot % % *ASTM D7844 >3 0.2 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history1 history1 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2			ASTM D5185m	>20		8	6
Nitration Abs/cm *ASTM D7624 >20 7.9 9.2 8.8 Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2	Soot %	%	*ASTM D7844	>3	0.2	0.3	0.3
Sulfation Abs/.1mm *ASTM D7415 >30 18.2 19.9 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 14.5 16.0 15.2	Nitration	Abs/cm	*ASTM D7624	>20	7.9		8.8
Oxidation							
	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	16.0	15.2
	Base Number (BN)	mg KOH/g	ASTM D2896		7.6	6.8	7.4



OIL ANALYSIS REPORT

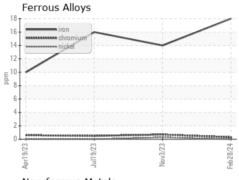


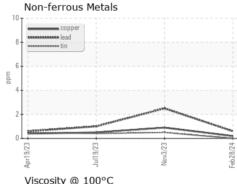


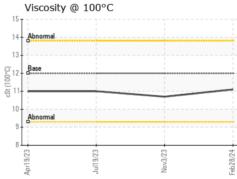
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

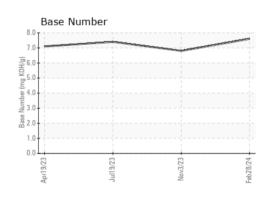
FLUID PROPE	KIIES	metnoa	ilmit/base	current	nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	10.7	11.0

GRAPHS













Laboratory Sample No. Lab Number : 06114825

Test Package : FLEET

: PCA0110601 Unique Number : 10923658

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

: 12 Mar 2024 Diagnosed : 12 Mar 2024 - Wes Davis

: 11 Mar 2024

Transervice - Shop 1376 - Berkeley-Linden

3425 Tremley Point Road Linden, NJ

US 07036 Contact: Shop 1376 Oil Analysis

shop1376@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)

T:

F: