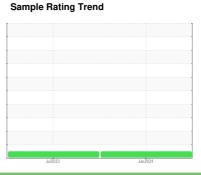


OIL ANALYSIS REPORT

(16044Z) Walgreens - Tractor [Walgreens - Tractor] 136A61252

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

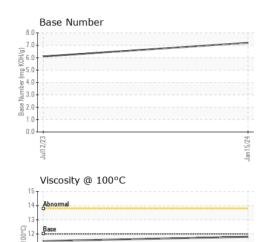
Fluid Condition

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

SAMPLE INFORMATION method limit/base current history1 history2	GAL)			Jul2023	Jan 2024			
Sample Date	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2	
Sample Date Client Info 15 Jan 2024 12 Jul 2023 Machine Age mis Client Info 24000 25000 Coli Age mis Client Info 24000 25000 Contambor Colient Info 24000 Not Changd NORMAL NORMAL Contambor C	Sample Number		Client Info		PCA0117901	PCA0093841		
Oil Age mls Client Info 24000 25000			Client Info		15 Jan 2024	12 Jul 2023		
Oil Age mls Client Info 24000 25000	•	mls	Client Info		415264	366906		
Sample Status MORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 < Water WC Method NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 12 22 Chromium ppm ASTM D5185m >80 12 22 Nickel ppm ASTM D5185m >5 2 2 2 Nickel ppm ASTM D5185m >3 4 Silver ppm ASTM D5185m >30 9 12 Lead ppm ASTM D5185m >30 9 12 Lead ppm ASTM D5185m >5 <1 0 Copper ppm ASTM D5185m >5 <		mls	Client Info		24000	25000		
Sample Status MORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 < Water WC Method NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 12 22 Chromium ppm ASTM D5185m >80 12 22 Nickel ppm ASTM D5185m >5 2 2 2 Nickel ppm ASTM D5185m >3 4 Silver ppm ASTM D5185m >30 9 12 Lead ppm ASTM D5185m >30 9 12 Lead ppm ASTM D5185m >5 <1 0 Copper ppm ASTM D5185m >5 <	Oil Changed		Client Info		Not Changd	Not Changd		
Fuel WC Method S5 <1.0 <1.0	Sample Status				NORMAL	NORMAL		
Water Glycol WC Method >0.2 NEG NEG	CONTAMINA	TION	method	limit/base	current	history1	history2	
WEAR METALS	Fuel		WC Method	>5	<1.0	<1.0		
WEAR METALS	Water		WC Method	>0.2	NEG	NEG		
Iron	Glycol		WC Method		NEG	NEG		
Chromium ppm ASTM D5185m >5 2 2 Nickel ppm ASTM D5185m >2 <1	WEAR METAI	LS	method	limit/base	current	history1	history2	
Nickel	Iron	ppm	ASTM D5185m	>80	12	22		
Titanium	Chromium	ppm	ASTM D5185m	>5	2	2		
Silver	Nickel	ppm	ASTM D5185m	>2	<1	0		
Aluminum	Titanium	ppm	ASTM D5185m		<1	0		
Lead ppm ASTM D5185m >30 <1 0 Copper ppm ASTM D5185m >150 3 4 Tin ppm ASTM D5185m >5 <1 <1 Vanadium ppm ASTM D5185m <1 0 Cadmium ppm ASTM D5185m <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 6 <1	Silver	ppm	ASTM D5185m	>3	<1	0		
Copper ppm ASTM D5185m >150 3 4	Aluminum	ppm	ASTM D5185m	>30	9	12		
Tin ppm ASTM D5185m >5 <1 <1 Vanadium ppm ASTM D5185m <1 0 Cadmium ppm ASTM D5185m <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 6 <1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 63 68 Manganese ppm ASTM D5185m 950 962 1057 Magnesium ppm ASTM D5185m 950 962 1057 Calcium ppm ASTM D5185m 995 909 1085 Zinc ppm ASTM D5185m 1180 1239 1410 Sulfur ppm ASTM D5185m >20 5 10	Lead	ppm	ASTM D5185m	>30	<1	0		
Vanadium ppm ASTM D5185m <1 0 Cadmium ppm ASTM D5185m <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 6 <1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 63 68 Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 950 962 1057 Calcium ppm ASTM D5185m 1050 1019 1194 Phosphorus ppm ASTM D5185m 995 909 1085 Zinc ppm ASTM D5185m 2600 2892 3416 Sulfur ppm ASTM D5185m >20 5 10 <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>150</td> <th>3</th> <td>4</td> <td></td>	Copper	ppm	ASTM D5185m	>150	3	4		
Cadmium ppm ASTM D5185m <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 6 <1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 63 68 Manganese ppm ASTM D5185m 0 <1	Tin	ppm	ASTM D5185m	>5	<1	<1		
ADDITIVES	Vanadium	ppm	ASTM D5185m		<1	0		
Boron ppm ASTM D5185m 2 6 <1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 63 68 Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 950 962 1057 Calcium ppm ASTM D5185m 950 962 1057 Phosphorus ppm ASTM D5185m 1050 1019 1194 Phosphorus ppm ASTM D5185m 995 909 1085 Zinc ppm ASTM D5185m 1180 1239 1410 Sulfur ppm ASTM D5185m 2600 2892 3416 CONTAMINANTS method limit/base current history1 history2 Sodium ppm ASTM D5185m	Cadmium	ppm	ASTM D5185m		<1	0		
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 63 68 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2	
Molybdenum ppm ASTM D5185m 50 63 68 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	6	<1		
Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 950 962 1057 Calcium ppm ASTM D5185m 1050 1019 1194 Phosphorus ppm ASTM D5185m 995 909 1085 Zinc ppm ASTM D5185m 1180 1239 1410 Sulfur ppm ASTM D5185m 2600 2892 3416 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m >20 5 10 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 <td colspa<="" td=""><td></td><td>ppm</td><td>ASTM D5185m</td><td>0</td><th>0</th><td>0</td><td></td></td>	<td></td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <th>0</th> <td>0</td> <td></td>		ppm	ASTM D5185m	0	0	0	
Magnesium ppm ASTM D5185m 950 962 1057 Calcium ppm ASTM D5185m 1050 1019 1194 Phosphorus ppm ASTM D5185m 995 909 1085 Zinc ppm ASTM D5185m 1180 1239 1410 Sulfur ppm ASTM D5185m 2600 2892 3416 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m >20 5 10 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/.1mm *ASTM D7415 <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>50</td> <th>63</th> <td>68</td> <td></td>	Molybdenum	ppm	ASTM D5185m	50	63	68		
Calcium ppm ASTM D5185m 1050 1019 1194 Phosphorus ppm ASTM D5185m 995 909 1085 Zinc ppm ASTM D5185m 1180 1239 1410 Sulfur ppm ASTM D5185m 2600 2892 3416 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m >20 17 2 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D74	Manganese	ppm	ASTM D5185m	0	<1	<1		
Phosphorus ppm ASTM D5185m 995 909 1085 Zinc ppm ASTM D5185m 1180 1239 1410 Sulfur ppm ASTM D5185m 2600 2892 3416 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m >20 17 2 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm	Magnesium	ppm	ASTM D5185m	950	962	1057		
Zinc ppm ASTM D5185m 1180 1239 1410 Sulfur ppm ASTM D5185m 2600 2892 3416 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m >20 17 2 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm	Calcium	ppm	ASTM D5185m	1050	1019	1194		
Sulfur ppm ASTM D5185m 2600 2892 3416 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m >20 17 2 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/.mm *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	Phosphorus	ppm	ASTM D5185m	995	909	1085		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m 0 2 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	Zinc	ppm	ASTM D5185m	1180	1239	1410		
Silicon ppm ASTM D5185m >20 5 10 Sodium ppm ASTM D5185m 0 2 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	Sulfur	ppm	ASTM D5185m	2600	2892	3416		
Sodium ppm ASTM D5185m 0 2 Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	CONTAMINA	NTS	method	limit/base	current	history1	history2	
Potassium ppm ASTM D5185m >20 17 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	Silicon	ppm	ASTM D5185m	>20	5	10		
INFRA-RED	Sodium	ppm	ASTM D5185m		0	2		
Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	Potassium	ppm	ASTM D5185m	>20	17	2		
Nitration Abs/cm *ASTM D7624 >20 8.2 9.7 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	INFRA-RED		method	limit/base	current	history1	history2	
Sulfation Abs/.1mm *ASTM D7415 >30 20.4 22.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	Soot %	%	*ASTM D7844	>3	0.5	0.6		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.6 19.0	Nitration	Abs/cm	*ASTM D7624	>20	8.2	9.7		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	22.5		
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	19.0		
	Base Number (BN)	mg KOH/g			7.2	6.1		



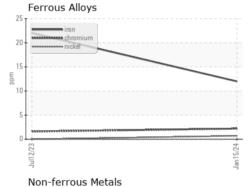
OIL ANALYSIS REPORT

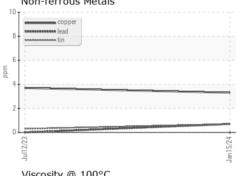


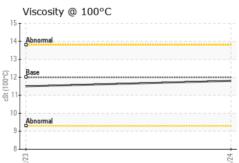
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance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

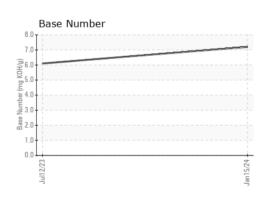
	ERITES	method			History i	History2
Visc @ 100°C	cSt	ASTM D445	12.00	11.8	11.5	

GRAPHS











Laboratory Sample No.

Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06092250

: PCA0117901 Unique Number : 10885103

Received **Tested** Diagnosed

: 16 Feb 2024 : 19 Feb 2024

: 19 Feb 2024 - Wes Davis

Transervice - Shop 1366 - Berkeley-Woodland 2370 East Main Street Woodland, CA

US 95776 Contact: Gary Mann

F: (530)406-7971

gmann@transervice.com T: (530)666-7771

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)