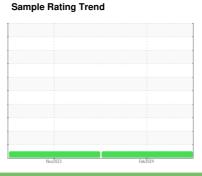


OIL ANALYSIS REPORT

(89789X) Walgreens - Tractor [Walgreens - Tractor] 136A69033

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

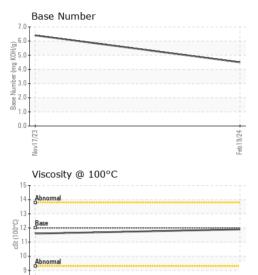
Fluid Condition

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	GAL)			Nov2023	Feb2024		
Sample Date Client Info 19 Feb 2024 17 Nov 2023	SAMPLE INFOF	RMATION	method	limit/base	current	history1	history2
Sample Date Client Info 19 Feb 2024 17 Nov 2023	Sample Number		Client Info		PCA0103561	PCA0103508	
Oil Age mls Client Info 60000 58720			Client Info		19 Feb 2024	17 Nov 2023	
Oil Age mls Client Info 60000 58720	•	mls	Client Info		729449	701358	
Sample Status		mls	Client Info		60000	58720	
Sample Status	Oil Changed		Client Info		Changed	Not Changd	
Fuel	_				NORMAL	NORMAL	
Water Glycol WC Method >0.2 NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 31 19 Chromium ppm ASTM D5185m >5 3 2 Nickel ppm ASTM D5185m >5 3 2 Sliver ppm ASTM D5185m >0 0 Sliver ppm ASTM D5185m >30 18 10 Aluminum ppm ASTM D5185m >30 2 <1	CONTAMINAT	ΓΙΟΝ	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2	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 3 2 ··· Nickel ppm ASTM D5185m >2 <1	WEAR METAL	_S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>80	31	19	
Titanium	Chromium	ppm	ASTM D5185m	>5	3	2	
Silver	Nickel	ppm	ASTM D5185m	>2	<1	<1	
Aluminum	Titanium	ppm	ASTM D5185m		0	0	
Lead ppm ASTM D5185m >30 2 <1 Copper ppm ASTM D5185m >150 5 3 Tin ppm ASTM D5185m >5 <1	Silver	ppm	ASTM D5185m	>3	0	0	
Copper ppm ASTM D5185m >150 5 3	Aluminum	ppm	ASTM D5185m	>30	18	10	
Tin ppm ASTM D5185m >5 <1 1 Vanadium ppm ASTM D5185m <1 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 66 60 Magnesium ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 950 1069 990 Calcium ppm ASTM D5185m 1050 1173 1035 Phosphorus ppm ASTM D5185m 180 1363 1292 Sulfur ppm ASTM D5185m 2600 2552	Lead	ppm	ASTM D5185m	>30	2	<1	
Vanadium ppm ASTM D5185m <1 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 66 60 Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 950 1069 990 Calcium ppm ASTM D5185m 950 11069 1043 Phosphorus ppm ASTM D5185m 995 1106 1043 Zinc ppm ASTM D5185m 995 1106 1043 Sulfur ppm ASTM D5185m 2600 2552 2779<	Copper	ppm	ASTM D5185m	>150	5	3	
Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 66 60 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 0 1	Cadmium	ppm	ASTM D5185m		0	0	
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 50 66 60 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 66 60 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	0	1	
Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 950 1069 990 Calcium ppm ASTM D5185m 1050 1173 1035 Phosphorus ppm ASTM D5185m 995 1106 1043 Zinc ppm ASTM D5185m 1180 1363 1292 Sulfur ppm ASTM D5185m 2600 2552 2779 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m >20 5 2 Potassium ppm ASTM D5185m >20 5 2 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7624 >20	Barium	ppm	ASTM D5185m	0	0	0	
Magnesium ppm ASTM D5185m 950 1069 990 Calcium ppm ASTM D5185m 1050 1173 1035 Phosphorus ppm ASTM D5185m 995 1106 1043 Zinc ppm ASTM D5185m 1180 1363 1292 Sulfur ppm ASTM D5185m 2600 2552 2779 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m >20 5 2 Potassium ppm ASTM D5185m >20 5 2 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3 <t< td=""><td>Molybdenum</td><td>ppm</td><td>ASTM D5185m</td><td>50</td><th>66</th><td>60</td><td></td></t<>	Molybdenum	ppm	ASTM D5185m	50	66	60	
Calcium ppm ASTM D5185m 1050 1173 1035 Phosphorus ppm ASTM D5185m 995 1106 1043 Zinc ppm ASTM D5185m 1180 1363 1292 Sulfur ppm ASTM D5185m 2600 2552 2779 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m >20 5 2 Potassium ppm ASTM D5185m >20 5 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7414	Manganese	ppm	ASTM D5185m	0	<1	<1	
Phosphorus ppm ASTM D5185m 995 1106 1043 Zinc ppm ASTM D5185m 1180 1363 1292 Sulfur ppm ASTM D5185m 2600 2552 2779 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m >20 5 2 Potassium ppm ASTM D5185m >20 5 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D	Magnesium	ppm	ASTM D5185m	950	1069	990	
Zinc ppm ASTM D5185m 1180 1363 1292 Sulfur ppm ASTM D5185m 2600 2552 2779 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m 3 <1 Potassium ppm ASTM D5185m >20 5 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.2 0.8 Nitration Abs/cm *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 <th< td=""><td>Calcium</td><td>ppm</td><td>ASTM D5185m</td><td>1050</td><th>1173</th><td>1035</td><td></td></th<>	Calcium	ppm	ASTM D5185m	1050	1173	1035	
Sulfur ppm ASTM D5185m 2600 2552 2779 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m 3 <1	Phosphorus	ppm	ASTM D5185m	995	1106	1043	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m 3 <1	Zinc	ppm	ASTM D5185m	1180	1363	1292	
Silicon ppm ASTM D5185m >20 8 5 Sodium ppm ASTM D5185m 3 <1 Potassium ppm ASTM D5185m >20 5 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.2 0.8 Nitration Abs/cm *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.3 18.8			ASTM D5185m	2600	2552	2779	
Sodium ppm ASTM D5185m 3 <1 Potassium ppm ASTM D5185m >20 5 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.2 0.8 Nitration Abs/cm *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.3 18.8	CONTAMINAN	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 5 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.2 0.8 Nitration Abs/cm *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.3 18.8		ppm	ASTM D5185m	>20	8	5	
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.2 0.8 Nitration Abs/cm *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.3 18.8	Sodium	ppm	ASTM D5185m		3	<1	
Soot % % *ASTM D7844 >3 1.2 0.8 Nitration Abs/cm *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.3 18.8	Potassium	ppm	ASTM D5185m	>20	5	2	
Nitration Abs/cm *ASTM D7624 >20 11.9 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.3 18.8	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 25.7 22.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.3 18.8	Soot %	%	*ASTM D7844	>3	1.2	0.8	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.3 18.8	Nitration	Abs/cm	*ASTM D7624	>20	11.9	9.6	
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	25.7	22.1	
	FLUID DEGRA	NOITAD.	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 4.5 6.4	Oxidation	Abs/.1mm	*ASTM D7414	>25	23.3	18.8	
	Base Number (BN)	mg KOH/g	ASTM D2896		4.5	6.4	



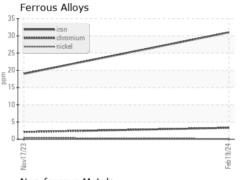
OIL ANALYSIS REPORT

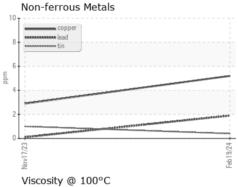


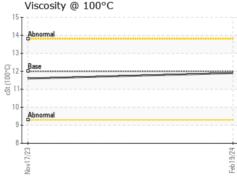
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	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	
	DTIEO	and the section of	12		la fact a consider	la la La ma O

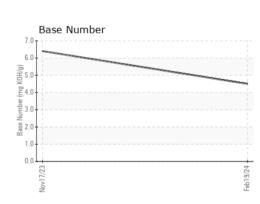
FLUID PROP	EULIES	memod			HISTOLAL	HISTOLYZ
Visc @ 100°C	cSt	ASTM D445	12.00	11.9	11.6	

GRAPHS











Laboratory Sample No. Lab Number : 06100712

Unique Number : 10898942

Test Package : FLEET

: PCA0103561

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

Tested Diagnosed

: 26 Feb 2024 : 27 Feb 2024 : 27 Feb 2024 - Wes Davis

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

US 75167 Contact: Robert Beal rbeal@transervice.com

T: (972)923-9928

F: (972)923-9919

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)

Contact/Location: Robert Beal - TSV1369