

OIL ANALYSIS REPORT

Sample Rating Trend



Area (33697Z) Walgreens Machine Id [Walgreens] 136A62571 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

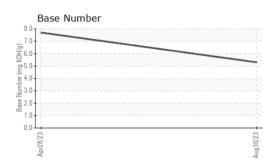
Fluid Condition

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

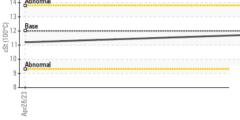
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0093533	PCA0096553	
Sample Date		Client Info		30 Aug 2023	28 Apr 2023	
Machine Age	mls	Client Info		316490	264484	
Oil Age	mls	Client Info		52006	264484	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
		and the set	11.0011/000000		In the transmission	h lata m O
WEAR METAL	5	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	23	8	
Chromium	ppm	ASTM D5185m	>5	1	0	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m		22	34	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>30	5	<1	
Lead	ppm	ASTM D5185m	>30	0	0	
Copper	ppm	ASTM D5185m	>150	5	0	
Tin	ppm	ASTM D5185m	>5	<1	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		limit/base	current 4	history1 55	history2
	ppm ppm	ASTM D5185m				history2
Boron		ASTM D5185m	2	4	55	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0 50	4 0	55 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	4 0 45	55 0 26	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	4 0 45 <1	55 0 26 0	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	4 0 45 <1 819	55 0 26 0 567	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	4 0 45 <1 819 1468	55 0 26 0 567 1510	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	4 0 45 <1 819 1468 1000	55 0 26 0 567 1510 941	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	4 0 45 <1 819 1468 1000 1262	55 0 26 0 567 1510 941 1152	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	4 0 45 <1 819 1468 1000 1262 3600	55 0 26 0 567 1510 941 1152 3837	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	4 0 45 <1 819 1468 1000 1262 3600 current	55 0 26 0 567 1510 941 1152 3837 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	4 0 45 <1 819 1468 1000 1262 3600 current 6	55 0 26 0 567 1510 941 1152 3837 history1 4	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 Limit/base	4 0 45 <1 819 1468 1000 1262 3600 current 6 1	55 0 26 0 567 1510 941 1152 3837 history1 4 2	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20	4 0 45 <1 819 1468 1000 1262 3600 current 6 1 15	55 0 26 0 567 1510 941 1152 3837 history1 4 2 2	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >20 imit/base >3	4 0 45 <1 819 1468 1000 1262 3600 current 6 1 1 15 current	55 0 26 0 567 1510 941 1152 3837 history1 4 2 2 2 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >20 imit/base >3	4 0 45 <1 819 1468 1000 1262 3600 current 6 1 15 current 1.1	55 0 26 0 567 1510 941 1152 3837 history1 4 2 2 2 history1 0.3	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm t ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20 limit/base >20	4 0 45 <1 819 1468 1000 1262 3600 <i>current</i> 6 1 15 <i>current</i> 1.1 9.8	55 0 26 0 567 1510 941 1152 3837 history1 4 2 2 2 history1 0.3 7.8	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm t ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >3	4 0 45 <1 819 1468 1000 1262 3600 current 6 1 15 current 1.1 9.8 22.8	55 0 26 0 567 1510 941 1152 3837 history1 4 2 2 2 history1 0.3 7.8 18.6	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30 >30	4 0 45 <1 819 1468 1000 1262 3600 <i>current</i> 6 1 15 <i>current</i> 1.1 9.8 22.8 <i>current</i>	55 0 26 0 567 1510 941 1152 3837 history1 4 2 2 history1 0.3 7.8 18.6 history1	 history2 history2 history2 history2



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	
FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.7	11.2	
GRAPHS						
Ferrous Alloys						
iron						
20 - chromium		- Contraction of the local division of the l				
15		and the second se				
10						
5-						
5						
Apr28/23			Aug30/23			
₹ Non-ferrous Meta	als		Au			
¹⁰ T						
8 - copper						
sesses tin						
6-						
4						
2						
0						
Apr28/23			Aug30/23			
Apri			Aug3			
Viscosity @ 100°	С			Base Number		
15 _T				Dase Number		

8.0

7.

(B/HOX Bw) J

u) 4.0 Mumber 3.0 ase 2.0 1.0 0.0

Apr28/23

Aug30/23 -

: 13 Sep 2023



Lab Number : 05949781 Diagnosed : 15 Sep 2023 Unique Number : 10645740 Diagnostician : Wes Davis Test Package : FLEET Contact: Shop 1376 Oil Analysis Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. shop1376@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)

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

Received

14

13

8

Laboratory Sample No. Apr28/23

: PCA0093533

cSt (100°C)

3425 Tremley Point Road

Transervice - Shop 1376 - Berkeley-Linden

Aug30/23

T:

F:

Linden, NJ

US 07036