

OIL ANALYSIS REPORT

(3333009) Dairy Farms of America-Tractor [Dairy Farms of America-Tractor] 268A723065

Componen **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Eluid

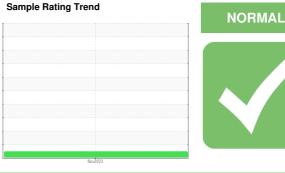
All component wear rates are normal.

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 acceptable for the time in service.



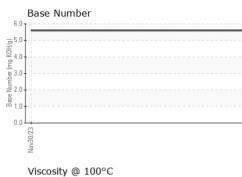


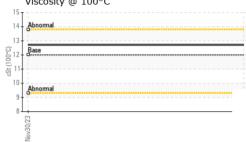
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108285		
Sample Date		Client Info		30 Nov 2023		
Machine Age	mls	Client Info		75929		
Oil Age	mls	Client Info		40000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	41		
Chromium	ppm	ASTM D5185m	>5	3		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m	~_	۰ <1		
Silver	ppm	ASTM D5185m	>3	< 1 0		
Aluminum	ppm	ASTM D5185m	>30	19		
Lead		ASTM D5185m	>30	۱۶ <1		
Copper	ppm	ASTM D5185m	>150	31		
Tin	ppm	ASTM D5185m	>5	3		
Vanadium	ppm	ASTM D5185m	>0	0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES	ppm	method	limit/base	-		history2
				current	history1	Thistory2
Boron	ppm	ASTM D5185m	2	61		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	100		
Manganese	ppm	ASTM D5185m	0	1		
Magnesium	ppm	ASTM D5185m	950	558		
Calcium	ppm	ASTM D5185m	1050	1503		
Phosphorus	ppm	ASTM D5185m	995	750		
Zinc	ppm	ASTM D5185m	1180	892		
Sulfur	ppm	ASTM D5185m	2600	2191		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon		AOTH DELOF				
	ppm		>20	9		
Sodium	ppm ppm	ASTM D5185m		9 4		
Sodium Potassium						
	ppm	ASTM D5185m		4		
Potassium	ppm	ASTM D5185m ASTM D5185m	>20	4 45		
Potassium INFRA-RED	ppm ppm	ASTM D5185m ASTM D5185m method	>20 limit/base >3	4 45 current	 history1	 history2
Potassium INFRA-RED Soot %	ppm ppm	ASTM D5185m ASTM D5185m method *ASTM D7844	>20 limit/base >3	4 45 current 1	 history1 	 history2
Potassium INFRA-RED Soot % Nitration	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624	>20 limit/base >3 >20	4 45 current 1 10.8	 history1 	 history2
Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	>20 limit/base >3 >20 >30	4 45 current 1 10.8 25.6	 history1 	 history2



OIL ANALYSIS REPORT

VISUAL





White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Precipitate scalar *Visual NONE Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2			
Precipitate scalar *Visual NONE Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2	ASS CONTRACTOR	DNE DNE DNE DNE DRML DRML EG EG	
Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2	ANC NC NC NC NC NC NC NC NC NC NC NC NC N	DNE DNE DRE DRML EG EG	
Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual >0.2	NC NC NC NC NC NE NE	DNE DNE DRML EG EG	
Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual >0.2	NC NC NC NC NC NE NE	DNE DNE DRML EG EG	
Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2	L NC L NC NE NE	DRML DRML EG EG	
Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual Init/ba Visc @ 100°C cSt ASTM D445 12.00 GRAPHS Ferrous Alloys	L NC L NC NE NE	DRML DRML EG EG	
Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual FLUID PROPERTIES method limit/ba Visc @ 100°C cSt ASTM D445 12.00 GRAPHS Ferrous Alloys 45 45 45 45 45 45 45 45 45 45	L NC NE NE ase (DRML EG EG	
Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual FLUID PROPERTIES method limit/ba Visc @ 100°C cSt ASTM D445 12.00 GRAPHS Ferrous Alloys 45 45 45 45 45 45 45 45 45 45	NE NE ase (EG EG	
Free Water scalar *Visual FLUID PROPERTIES method limit/ba Visc @ 100°C cSt ASTM D445 12.00 GRAPHS Ferrous Alloys	NE ase o	EG	
FLUID PROPERTIES method limit/ba	ase (
Visc @ 100°C cSt ASTM D445 12.00 GRAPHS Ferrous Alloys		current histor	
GRAPHS Ferrous Alloys	12		ry1 history2
Ferrous Alloys		.7	
45 40			
40 - iron - iron			
sesses chromium			
30			
톺 ²⁵			
15-			
5			
)/23 -			
Nov30/23 20/23 22/23			
Non-ferrous Metals			
30 + copper i			
second se			
25			
₹ ²⁰ 15			
1 5-			
10-			
5+			
0			
Nov30/23			
Z Viscosity @ 100°C	_		
¹⁵ 1,	Bas 6.0	e Number	
14 Abnormal			
13	5.0		
	9.0		
Base 5 12 5 11	je 13.0		
kg 11-	nmb		
10	(B) 4.0 - 3.0 - 2.0 -		
Anormal 9+			
8	0.0		
/23			
Nov30/23	Nov30/23		
Z Z Z		Transmiss	Shop 2680 - LeMa
	7513	i ranservice - S	
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27 Sample No. : PCA0108285 Recieved : 01 Feb 2024		i ranservice - S	
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27 Sample No. : PCA0108285 Recieved : 01 Feb 2024 Lab Number : 06077511 Diagnosed : 04 Feb 2024	1 1	i ranservice - S	1330 12th Ave S LeMars,
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27 Sample No. : PCA0108285 Recieved : 01 Feb 2024 Lab Number : 06077511 Diagnosed : 04 Feb 2024 Unique Number : 10859602 Diagnostician : Don Baldridg	1 1		1330 12th Ave S LeMars, US 510
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27 Sample No. : PCA0108285 Recieved : 01 Feb 2024 Lab Number : 06077511 Diagnosed : 04 Feb 2024	1 1	Co	1330 12th Ave S LeMars, US 510 ontact: Stacey Rab

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: