

OIL ANALYSIS REPORT

Area (16047Z) Walgreens - Tractor Machine Id [Walgreens - Tractor] 136A61266

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

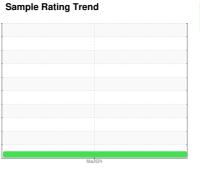
All component wear rates are normal.

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.





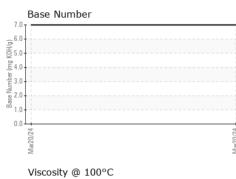
NORMAL

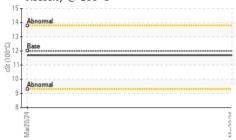
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0119343		
Sample Date		Client Info		20 Mar 2024		
Machine Age	mls	Client Info		441337		
Oil Age	mls	Client Info		25000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ION	method	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		ASTM D5185m	>80	27		
Chromium	ppm ppm	ASTM D5185m	>ou >5	2/		
Nickel		ASTM D5185m	>0	2 <1		
Titanium	ppm	ASTM D5185m	>C	<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>3	11		
Lead	ppm	ASTM D5185m	>30	<1		
	ppm			<1 8		
Copper Tin	ppm	ASTM D5185m	>150	-		
Vanadium	ppm	ASTM D5185m ASTM D5185m	>5	<1 <1		
vanadium	ppm	ASTIN DO 160111		<1		
Codmium	0.00	ACTM DE10Em		.4		
Cadmium	ppm	ASTM D5185m		<1		
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	<1 current	 history1	 history2
	ppm ppm		2	current 4		
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	2 0 50	current 4	history1 	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0	current 4 <1	history1 	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 4 <1 65	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 4 <1 65 <1	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 4 <1 65 <1 947	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 4 <1 65 <1 947 1090	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	current 4 <1 65 <1 947 1090 1010	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	current 4 <1 65 <1 947 1090 1010 1204	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method 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	current 4 <1 65 <1 947 1090 1010 1204 2874 current 5	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method 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	current 4 <1 65 <1 947 1090 1010 1204 2874 current	history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method 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	current 4 <1 65 <1 947 1090 1010 1204 2874 current 5	history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20	current 4 <1 65 <1 947 1090 1010 1204 2874 current 5 2	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20	current 4 <1 65 <1 947 1090 1010 1204 2874 current 5 2 4	history1 history1	history2 history2 history2
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >20 S20	current 4 <1 65 <1 947 1090 1010 1204 2874 Current 5 2 4 Current	history1 history1 history1 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >20 20 Imit/base >20	current 4 <1 65 <1 947 1090 1010 1204 2874 current 5 2 4 current 0.6	history1 history1 history1 history1	history2 history2 history2 history2
ADDITIVES 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 ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <i>imit/base</i> >20 <i>imit/base</i> >3 >20	current 4 <1 65 <1 947 1090 1010 1204 2874 current 5 2 4 0.6 8.9	history1 history1 history1 history1	history2 history2 history2 history2 history2
ADDITIVES 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 ppm ppm	method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30	current 4 <1 65 <1 947 1090 1010 1204 2874 current 5 2 4 current 0.6 8.9 19.7	history1 history1 history1 history1 history1 </th <th>history2 history2 history2 history2 </th>	history2 history2 history2 history2



OIL ANALYSIS REPORT

VISUAL





		VISUAL		method	iimii/base	current	riistory i	riistory2
		White Metal	scalar	*Visual	NONE	NONE		
		Yellow Metal	scalar	*Visual	NONE	NONE		
		Precipitate	scalar	*Visual	NONE	NONE		
		Silt	scalar	*Visual	NONE	NONE		
		Debris	scalar	*Visual	NONE	NONE		
		Sand/Dirt		*Visual	NONE	NONE		
			scalar					
	Mar20/24	Appearance	scalar	*Visual	NORML	NORML		
	M	Odor	scalar	*Visual	NORML	NORML		
		Emulsified Water	scalar	*Visual	>0.2	NEG		
		Free Water	scalar	*Visual		NEG		
		FLUID PROPE	RTIES	method	limit/base	current	history1	history2
*****		Visc @ 100°C	cSt	ASTM D445	12.00	11.7		
		GRAPHS						
		Ferrous Alloys						
		³⁰ I						
	100	25 - chromium						
	6~- M	nickel						
		20						
		틆 15 -						
		10						
		5						
		0						
		Mar20/24			Mar20/24			
		Marź			Marí			
		Non-ferrous Metals	5					
		10 T						
		8 - Copper						
		0 + tin			-			
		6						
		ш d						
		4						
		2						
		2						
		0						
		0/24			0/24			
		Mar20/24			Mar20/24			
		Viscosity @ 100°C				De la Nuella		
	15			7.	Base Number			
		14 Abnormal			6.			
		13						
					(b)(HO) HO) Bud aumin Seg Seg Seg Seg Seg Seg Seg Seg Seg Seg	0-		
		60 12 - Base 53 11-			<u>ڦ</u> 4.	0		
		रहु 11-			⁴ 3.1	0-		
		10			² 8 2.	0		
		Abnormal						
		24 + + - 8			.0			
		Mar20/24			Mar20/24	Mar20/24		
		5			Z	W		
		-						
J.	Laboratorv		1 Madiso	n Ave., Carv	, NC 27513	Transervi	e - Shop 1374 -	Berkelev-Hartfo
	Laboratory Sample No.	: WearCheck USA - 501 : PCA0119343	1 Madiso Recei		, NC 27513 Mar 2024	Transervio	ce - Shop 1374 - 80 Inte	
NAR	Sample No.	: WearCheck USA - 501		ived : 29		Transervio		ernational Dri Windsor, (
	Sample No. Lab Number Unique Number	: WearCheck USA - 501 : PCA0119343 · : 06133864 r : 10953329	Recei	ived : 29 ed : 01) Mar 2024		80 Inte	ernational Dri Windsor, (US 060
TING LABORATORY	Sample No. Lab Number Unique Number Test Package	: WearCheck USA - 501 : PCA0119343 • : 06133864 • : 10953329 • : FLEET	Recei Teste Diagn	ived : 29 ed : 01 nosed : 01	Mar 2024 Apr 2024 Apr 2024 - W	Ves Davis	80 Inte	ernational Dri Windsor, (US 060 Paul Santane
tificate L2367 discuss this s	Sample No. Lab Number Unique Number Test Package sample report	: WearCheck USA - 501 : PCA0119343 · : 06133864 r : 10953329	Recei Teste Diagn	ived : 29 ed : 01 nosed : 01 800-237-1369) Mar 2024 Apr 2024 Apr 2024 - W 9.	Ves Davis	80 Inte Contact: psantanella@t	ernational Dri Windsor, (US 060 Paul Santane