

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id JOHN DEERE 770GP - ADAMS 32163 (S/N 1DW770GPPLF707393) Component Diesel Engine Fluid

PETRO CANADA DURON SHP 10W30 (--- 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

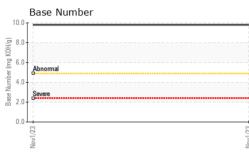
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

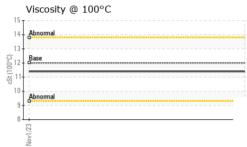
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0005812		
Sample Date		Client Info		01 Nov 2023		
Machine Age	hrs	Client Info		2316		
Oil Age	hrs	Client Info		265		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>2.1	<1.0		
Water		WC Method	>0.21	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	9		
Chromium	ppm	ASTM D5185m	>11	<1		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>31	2		
Lead	ppm	ASTM D5185m	>26	0		
Copper	ppm	ASTM D5185m	>26	1		
Tin	ppm	ASTM D5185m	>4	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium						
Caumium	ppm	ASTM D5185m		0		
ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	 history1	history2
	ppm		limit/base	-		
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	2	current 9	history1	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0	current 9 0	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 9 0 56	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 9 0 56 <1 906 1201	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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 9 0 56 <1 906 1201 1015	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180	current 9 0 56 <1 906 1201 1015 1243	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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 9 0 56 <1 906 1201 1015	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180	current 9 0 56 <1 906 1201 1015 1243	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600	current 9 0 56 <1 906 1201 1015 1243 3056	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	2 0 50 950 1050 995 1180 2600	current 9 0 56 <1 906 1201 1015 1243 3056 current	history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base	current 9 0 56 <1 906 1201 1015 1243 3056 current 3	history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >22 >31	current 9 0 56 <1 906 1201 1015 1243 3056 current 3 2 0 current	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm i ppm i	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >22 >31 >20 limit/base >3	current 9 0 56 <1 906 1201 1015 1243 3056 current 3 2 0 current 0.2	history1 history1 history1	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 0 50 950 1050 995 1180 2600 imit/base >22 >31 >20 imit/base >3 20	current 9 0 56 <1 906 1201 1015 1243 3056 current 3 2 0 current 0.2 5.8	history1 history1 history1 history1 history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm i ppm i	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >22 >31 >20 limit/base >3	current 9 0 56 <1 906 1201 1015 1243 3056 current 3 2 0 current 0.2	history1 history1 history1 history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 0 50 950 1050 995 1180 2600 imit/base >22 >31 >20 imit/base >3 20	current 9 0 56 <1 906 1201 1015 1243 3056 current 3 2 0 current 0.2 5.8	history1 history1 history1 history1	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS 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 50 950 1050 995 1180 2600 imit/base >22 >31 >20 imit/base >3 >20	current 9 0 56 <1 906 1201 1015 1243 3056 current 3 2 0 current 0.2 5.8 19.3	history1 history1 history1 history1	history2 history2



OIL ANALYSIS REPORT

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VISUAL		method	limit/base	current	history1	history2
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	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.21	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.4		
GRAPHS						
Ferrous Alloys						
iron						
8 - nickel						
6						
4-						
2						
2						
			Nov1/23			
Nov1/23						
0						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Metal						
Non-ferrous Metal						
Non-ferrous Metal						
Non-ferrous Metal						
Non-ferrous Meta						
Non-ferrous Metal	ls		Nov1/23			
Non-ferrous Meta	ls		Nov1/23			
Non-ferrous Metal	ls		Nov1/23			
Non-ferrous Metal	ls		Nov1/23			
Non-ferrous Metal	ls		Nov1/23 ANV1/23	Base Number		
Non-ferrous Metal	ls		Nov1/23			
Non-ferrous Metal	ls		Nov1/23			
Non-ferrous Metal	ls		Nov1/23			
Non-ferrous Metal	ls		Nov1/23			
Non-ferrous Metal	ls		Nov1/23	Abnormal		
Non-ferrous Metal	ls		Nov1/23	Abnormal		
Non-ferrous Metal	ls		0.0 Pps (mg KOH(0) 0.0 Pps (mg K	Abnormal Severe		
Non-ferrous Metal	ls		EZ/I/VeV EZ/I/VeV (0/HOX Bul) EZ/I/VeV 10.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Abnormal Severe		
Non-ferrous Metal	ls		EZ/I/VON (0)HOX BW 8.0 (0)HOX	Abnormal Severe		2
Non-ferrous Metal	ls		EZ/I/VeV EZ/I/VeV (0/HOX Bul) EZ/I/VeV 10.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Abnormal Severe		



Unique Number : 10754846 Diagnostician : Wes Davis Test Package : FLEET Contact: MARK KUHNKE Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. mkuhnke@gagecountyne.gov * - 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)

Diagnosed

: 26 Nov 2023

: 06015702

Laboratory Sample No.

Lab Number

Submitted By: MARK KUHNKE

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