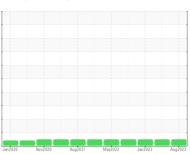


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



600HP Machine Id 217422 [600HP]

Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (38 QTS)

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

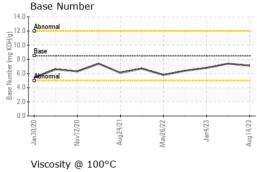
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

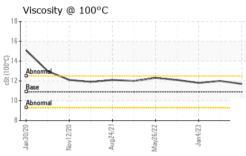
		Jan 2020	Nov2020 Aug2021	May2022 Jan2023	Aug2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101250	PCA0073108	PCA0067767
Sample Date		Client Info		14 Aug 2023	02 May 2023	04 Jan 2023
Machine Age	mls	Client Info		606508	574432	527523
Oil Age	mls	Client Info		30000	30000	30000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	22	24	22
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	7	8	16
Lead	ppm	ASTM D5185m	>30	0	0	<1
Copper	ppm	ASTM D5185m	>30	10	11	10
Tin	ppm	ASTM D5185m	>15	<1	1	2
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm					
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	250	0	<1	2
Boron Barium	ppm	ASTM D5185m ASTM D5185m	250 10	0 0	<1	2
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	250 10	0 0 69	<1 0 63	2 0 62
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	0 0 69 <1	<1 0 63 <1	2 0 62 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	0 0 69 <1 1220	<1 0 63 <1 1012	2 0 62 <1 966
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000	0 0 69 <1 1220	<1 0 63 <1 1012 1228	2 0 62 <1 966 1154
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	250 10 100 450 3000 1150	0 0 69 <1 1220 1340 1170	<1 0 63 <1 1012 1228 1045	2 0 62 <1 966 1154 1002
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350	0 0 69 <1 1220 1340 1170	<1 0 63 <1 1012 1228 1045 1383	2 0 62 <1 966 1154 1002
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250	0 0 69 <1 1220 1340 1170 1515	<1 0 63 <1 1012 1228 1045 1383 3230	2 0 62 <1 966 1154 1002 1302 2901
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base	0 0 69 <1 1220 1340 1170 1515 3574 current 13	<1 0 63 <1 1012 1228 1045 1383 3230 history1 9 2	2 0 62 <1 966 1154 1002 1302 2901 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base	0 0 69 <1 1220 1340 1170 1515 3574 current	<1 0 63 <1 1012 1228 1045 1383 3230 history1	2 0 62 <1 966 1154 1002 1302 2901 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >30	0 0 69 <1 1220 1340 1170 1515 3574 current 13	<1 0 63 <1 1012 1228 1045 1383 3230 history1 9 2	2 0 62 <1 966 1154 1002 1302 2901 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >30	0 0 69 <1 1220 1340 1170 1515 3574 current 13 2	<1 0 63 <1 1012 1228 1045 1383 3230 history1 9 2 4	2 0 62 <1 966 1154 1002 1302 2901 history2 10 3 5
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	250 10 100 450 3000 1150 1350 4250 limit/base >30 >20 limit/base >3	0 0 69 <1 1220 1340 1170 1515 3574 current 13 2 2	<1 0 63 <1 1012 1228 1045 1383 3230 history1 9 2 4 history1	2 0 62 <1 966 1154 1002 1302 2901 history2 10 3 5
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	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >30 >20 limit/base >3	0 0 69 <1 1220 1340 1170 1515 3574 current 13 2 2 current	<1 0 63 <1 1012 1228 1045 1383 3230 history1 9 2 4 history1 0.8	2 0 62 <1 966 1154 1002 1302 2901 history2 10 3 5 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 ppm ppm	ASTM D5185m method *ASTM D5185m *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D76145	250 10 100 450 3000 1150 1350 4250 limit/base >30 >20 limit/base	0 0 69 <1 1220 1340 1170 1515 3574 current 13 2 2 current 0.6 8.7	<1 0 63 <1 1012 1228 1045 1383 3230 history1 9 2 4 history1 0.8 9.5	2 0 62 <1 966 1154 1002 1302 2901 history2 10 3 5 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 ppm ppm	ASTM D5185m method *ASTM D5185m *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D76145	250 10 100 450 3000 1150 1350 4250 limit/base >30 >20 limit/base >3 >20 >30	0 0 69 <1 1220 1340 1170 1515 3574 current 13 2 2 2 current 0.6 8.7 19.8	<1 0 63 <1 1012 1228 1045 1383 3230 history1 9 2 4 history1 0.8 9.5 21.9	2 0 62 <1 966 1154 1002 1302 2901 history2 10 3 5 history2 0.7 9.2 21.2

Contact/Location: RITA GARCIA - MCLLUB



OIL ANALYSIS REPORT

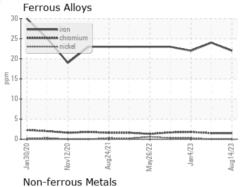


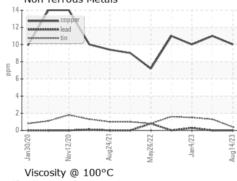


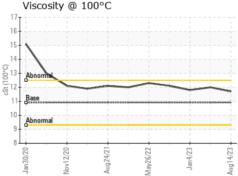
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

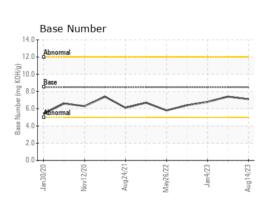
FLUID PROP	ERIIES	metnoa	ilmit/base	current	nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	10.9	11.7	12.0	11.8

GRAPHS













Certificate L2367

Test Package : FLEET

Laboratory Sample No. Lab Number

: PCA0101250 : 05946311 Unique Number : 10642270

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 08 Sep 2023 Diagnosed : 12 Sep 2023 Diagnostician : Don Baldridge

McLane Company - High Plains - 600HP

1717 East Loop 289 LUBBOCK, TX US 79403

Contact: RITA GARCIA rita.garcia@mclaneco.com

T: (806)766-2902

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)