

OIL ANALYSIS REPORT

Sample Rating Trend

Fad700 Dec600 Andr00 Dec600 Andr00 Section 1

NORMAL



600HP Machine Id 217425 [600HP]

Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (38 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

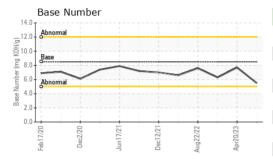
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

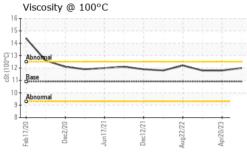
		Feb2020	Dec2020 Jun2021	Dec2021 Aug2022 A	or2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101271	PCA0073132	PCA0067765
Sample Date		Client Info		10 Oct 2023	20 Apr 2023	02 Jan 2023
Machine Age	mls	Client Info		580722	530107	490588
Oil Age	mls	Client Info		30000	40000	30000
Oil Changed		Client Info		Changed	N/A	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	>65	24	19	23
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>3	<1	0	<1
Titanium	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>35	4	8	12
Lead	ppm	ASTM D5185m	>10	0	0	1
Copper	ppm	ASTM D5185m	>180	32	42	96
Tin	ppm	ASTM D5185m	>8	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 2	history1	history2
	ppm					
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	250	2	4	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	250 10	2 4	4	0
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	250 10	2 4 67	4 0 65	0 0 60
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	2 4 67 <1	4 0 65 <1	0 0 60 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	2 4 67 <1 972	4 0 65 <1 1043	0 0 60 <1 926
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	2 4 67 <1 972 1138	4 0 65 <1 1043 1185	0 0 60 <1 926 1123
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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	2 4 67 <1 972 1138 923	4 0 65 <1 1043 1185 1078	0 0 60 <1 926 1123 902
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 ASTM D5185m	250 10 100 450 3000 1150	2 4 67 <1 972 1138 923 1256	4 0 65 <1 1043 1185 1078 1405	0 0 60 <1 926 1123 902 1228
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	2 4 67 <1 972 1138 923 1256 2342	4 0 65 <1 1043 1185 1078 1405 2997	0 0 60 <1 926 1123 902 1228 2137
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	2 4 67 <1 972 1138 923 1256 2342 current	4 0 65 <1 1043 1185 1078 1405 2997 history1	0 0 60 <1 926 1123 902 1228 2137 history2 8
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	2 4 67 <1 972 1138 923 1256 2342 current	4 0 65 <1 1043 1185 1078 1405 2997 history1	0 0 60 <1 926 1123 902 1228 2137 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 Iimit/base >15	2 4 67 <1 972 1138 923 1256 2342 current 6	4 0 65 <1 1043 1185 1078 1405 2997 history1 8	0 0 60 <1 926 1123 902 1228 2137 history2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >15 >20	2 4 67 <1 972 1138 923 1256 2342 current 6 0 3	4 0 65 <1 1043 1185 1078 1405 2997 history1 8 2	0 0 60 <1 926 1123 902 1228 2137 history2 8 2
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 >15 >20 limit/base >3	2 4 67 <1 972 1138 923 1256 2342 current 6 0 3 current	4 0 65 <1 1043 1185 1078 1405 2997 history1 8 2 2	0 0 60 <1 926 1123 902 1228 2137 history2 8 2
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 >15 >20 limit/base >3	2 4 67 <1 972 1138 923 1256 2342 current 6 0 3 current 1.2	4 0 65 <1 1043 1185 1078 1405 2997 history1 8 2 2 history1 0.7	0 0 60 <1 926 1123 902 1228 2137 history2 8 2 2
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	250 10 100 450 3000 1150 1350 4250 limit/base >15 >20 limit/base	2 4 67 <1 972 1138 923 1256 2342 current 6 0 3 current 1.2 10.5	4 0 65 <1 1043 1185 1078 1405 2997 history1 8 2 2 history1 0.7 8.8	0 0 60 <1 926 1123 902 1228 2137 history2 8 2 2 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 D7844 *ASTM D7624 *ASTM D76145	250 10 100 450 3000 1150 1350 4250 limit/base >15 >20 limit/base >3 >20 >30	2 4 67 <1 972 1138 923 1256 2342 current 6 0 3 current 1.2 10.5 22.5	4 0 65 <1 1043 1185 1078 1405 2997 history1 8 2 2 history1 0.7 8.8 20.9	0 0 60 <1 926 1123 902 1228 2137 history2 8 2 2 history2 0.9 9.7 21.6

Contact/Location: RITA GARCIA - MCLLUB



OIL ANALYSIS REPORT

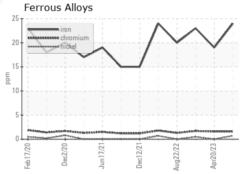


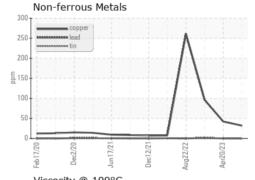


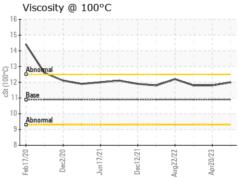
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

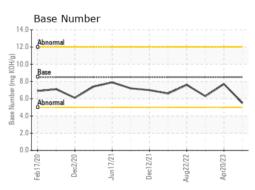
FLUID PROPE	RHES	metnoa	ilmit/base	current	nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	10.9	12.0	11.8	11.8

GRAPHS













Certificate L2367

Report Id: MCLLUB [WUSCAR] 05997689 (Generated: 11/06/2023 09:39:11) Rev: 1

Laboratory Sample No. Lab Number Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Unique Number : 10726049

: PCA0101271 : 05997689

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received Diagnosed Diagnostician : Wes Davis

: 03 Nov 2023 : 06 Nov 2023

McLane Company - High Plains - 600HP 1717 East Loop 289

LUBBOCK, TX US 79403

Contact: RITA GARCIA rita.garcia@mclaneco.com T: (806)766-2902

* - 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)

Contact/Location: RITA GARCIA - MCLLUB

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