

OIL ANALYSIS REPORT

Sample Rating Trend



Area **600HP** 216028 [600HP] Component

Diesel Engine DIESEL ENGINE OIL SAE 10W30 (34 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

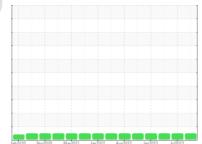
All component wear rates are normal.

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.





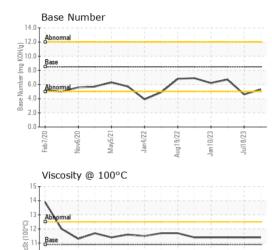
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101277	PCA0073121	PCA0073129
Sample Date		Client Info		02 Nov 2023	18 Jul 2023	17 Apr 2023
Machine Age	mls	Client Info		762027	729372	700846
Oil Age	mls	Client Info		30000	30000	30000
Oil Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron		ASTM D5185m	>100	15	16	15
-	ppm			15 <1		0
Chromium Nickel	ppm	ASTM D5185m	>20	<1	<1 0	0
Titanium	ppm	ASTM D5185m ASTM D5185m	>2	0		0 <1
Silver	ppm	ASTM D5185m	>2		<1 0	<1
	ppm	ASTM D5185m		0 3	4	<1
Aluminum	ppm		>25	-		
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330 >15	2		_
Tin	ppm	ASTM D5185m	>15	0	0	<1 0
Vanadium	ppm	ASTM D5185m		U	<1	0
		ACTM DE10Em		•	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	history1	history2
	ppm ppm	method ASTM D5185m	250	current 0	-	-
ADDITIVES Boron Barium		method ASTM D5185m	250 10	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	250	current 0	history1 0 0 65	history2 0 0 61
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	250 10 100	current 0 0	history1 0 0	history2 0 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	250 10	current 0 0 58	history1 0 0 65	history2 0 0 61
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	current 0 0 58 <1	history1 0 0 65 <1	history2 0 0 61 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	Current 0 0 58 <1 961	history1 0 0 65 <1 1045	history2 0 0 61 <1 1015
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000	current 0 58 <1 961 1040	history1 0 0 65 <1 1045 1147	history2 0 0 61 <1 1015 1185
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	250 10 100 450 3000 1150	current 0 58 <1 961 1040 1058	history1 0 0 65 <1 1045 1147 1076	history2 0 0 61 <1 1015 1185 1052 1353 3458
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350	current 0 0 58 <1 961 1040 1058 1290	history1 0 0 65 <1 1045 1147 1076 1292	history2 0 0 61 <1 1015 1185 1052 1353
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	250 10 100 450 3000 1150 1350 4250 limit/base	Current 0 0 58 <1 961 1040 1058 1290 2987	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4	history2 0 0 61 <1 1015 1185 1052 1353 3458 history2 4
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	250 10 100 450 3000 1150 1350 4250 limit/base >25	Current 0 0 58 <1 961 1040 1058 1290 2987 Current	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4 5	history2 0 0 61 <1 1015 1185 1052 1353 3458 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	250 10 100 450 3000 1150 1350 4250 limit/base >25	current 0 0 58 <1 961 1040 1058 1290 2987 current 4	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4	history2 0 0 61 <1 1015 1185 1052 1353 3458 history2 4
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	250 10 100 450 3000 1150 1350 4250 limit/base	current 0 0 58 <1 961 1040 1058 1290 2987 current 4 4	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4 5	history2 0 0 61 <1 1015 1185 1052 1353 3458 history2 4 2
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	250 10 100 450 3000 1150 1350 4250 limit/base >25	current 0 0 58 <1 961 1040 1058 1290 2987 current 4 4 2	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4 5 <1	history2 0 0 61 <1 1015 1185 1052 1353 3458 history2 4 2 2
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	250 10 100 450 3000 1150 1350 4250 limit/base >25 >20 limit/base	current 0 0 58 <1 961 1040 1058 1290 2987 current 4 2 current	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4 5 <1 history1	history2 0 0 61 <1 1015 1185 1052 1353 3458 history2 4 2 2 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	250 10 100 450 3000 1150 1350 4250 imit/base >25 >20 imit/base	current 0 0 58 <1 961 1040 1058 1290 2987 current 4 2 current 0 0 0	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4 5 <1 history1 0 0.8	history2 0 0 61 <1 1015 1185 1052 1353 3458 history2 4 2 2 history2 0 0.7
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	250 10 100 450 3000 1150 1350 4250 limit/base >25 limit/base >3 >20	current 0 0 58 <1 961 1040 1058 1290 2987 current 4 2 current 0 0.9 9.7	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4 5 <1 0.8 9.4	history2 0 0 61 <1 1015 1185 1052 1353 3458 history2 4 2 history2 0 0 0.7 9.5
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	250 10 100 450 3000 1150 1350 4250 imit/base >25 imit/base >3 >20 >30	current 0 0 58 <1 961 1040 1058 1290 2987 current 4 2 current 0.9 9.7 21.1	history1 0 0 65 <1 1045 1147 1076 1292 3350 history1 4 5 <1 0.8 9.4 21.3	history2 0 0 61 <1 1015 1185 1052 1353 3458 history2 4 2 history2 0.7 9.5 21.9



Bas Abnorm

Feb7/20

OIL ANALYSIS REPORT



Mav5/71

Jan 4/77

Aug19/22 -

Jan 10/23

Jul18/23

15

14

cSt (100°C) 12

10

8 Feb7/20 -

Ba

Abnorma

Nov6/20 -

Mav5/21

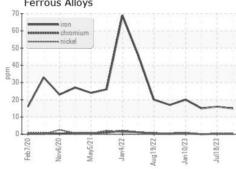
Jan4/22

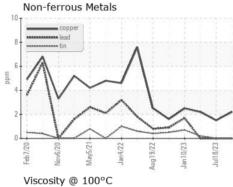
Received

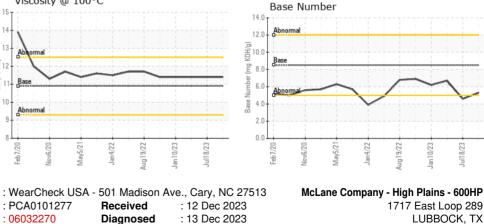
Aug 19/22

Diagnostician : Wes Davis

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	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.9	11.4	11.4	11.4
GRAPHS						
Ferrous Alloys						











Contact/Location: RITA GARCIA - MCLLUB