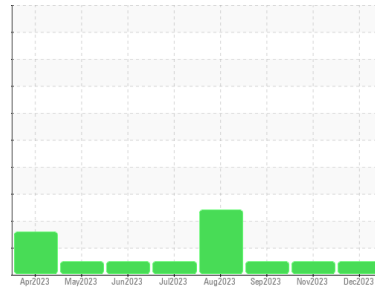




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
HOBBS CRUSHER 2
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. 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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KL0013258	KL0013233	KL0013254
Sample Date	Client Info			27 Dec 2023	06 Nov 2023	27 Sep 2023
Machine Age	hrs	Client Info		0	45160	0
Oil Age	hrs	Client Info		3680	45160	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	23	13	9
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>40	2	0	0
Copper	ppm	ASTM D5185m	>330	4	2	2
Tin	ppm	ASTM D5185m	>15	1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	293	333	373
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	93	89	96
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	450	488	453	454
Calcium	ppm	ASTM D5185m	3000	1490	1411	1392
Phosphorus	ppm	ASTM D5185m	1150	982	901	850
Zinc	ppm	ASTM D5185m	1350	1223	1090	1102
Sulfur	ppm	ASTM D5185m	4250	3279	2868	3255

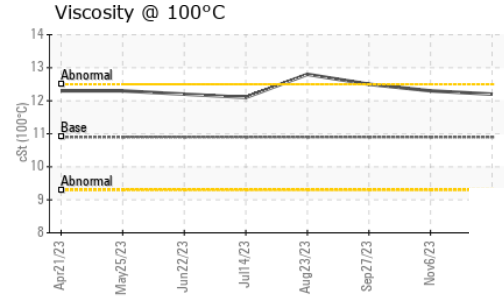
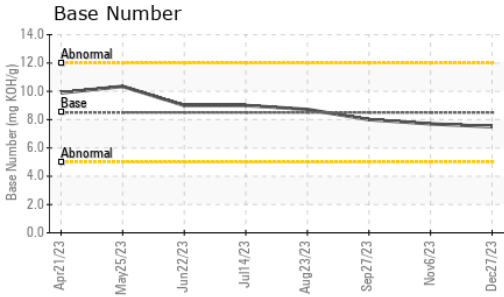
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	5	6
Sodium	ppm	ASTM D5185m	>75	1	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.3	7.7	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	22.5	21.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	17.5	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.5	7.7	8.0



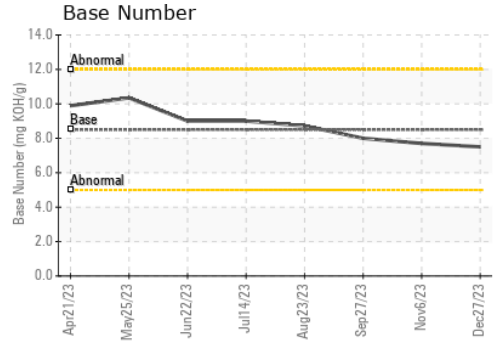
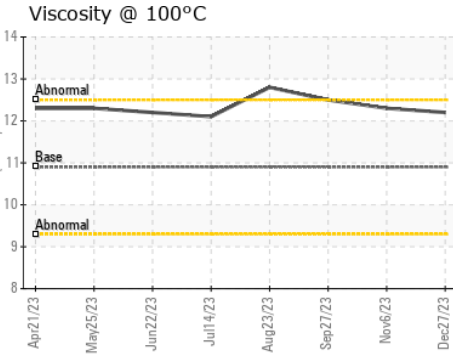
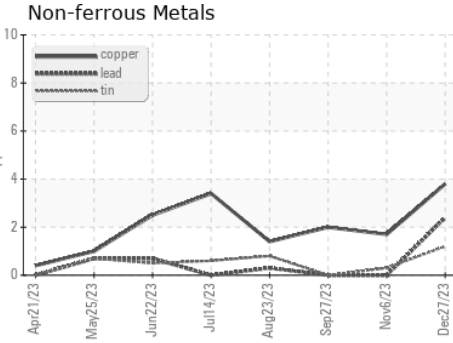
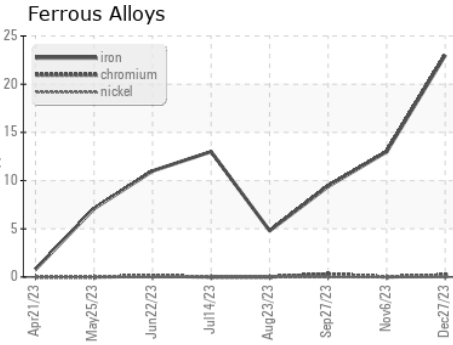
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	10.9	12.2	12.3	12.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013258
Lab Number : 06054736
Unique Number : 10820685
Test Package : FLEET

Received : 08 Jan 2024
Diagnosed : 09 Jan 2024
Diagnostician : Wes Davis

RAMIREZ & SONS
 3404 N ENTERPRISE DR
 HOBBS, NM
 US 88240
 Contact: Rick Davidson
 rickdavidson.rs@gmail.com
 T:
 F:

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)