



LEAHY-WOLF
Lubricating specialists since 1946



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
K5 CONSTRUCTION CORPORATION - HODGKINS IL
Machine Id
1123
Component
Diesel Engine
Fluid
LEAHY WOLF PREMIUM 15W40 (10 hrs)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LW0009219	PCA0122042	PCA0122082
Sample Date		Client Info		27 Jun 2024	13 May 2024	28 Mar 2024
Machine Age	hrs	Client Info		12365	11420	11420
Oil Age	hrs	Client Info		945	11420	373
Filter Age	hrs	Client Info		0	0	373
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		Not Chngd	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	14	13	6
Chromium	ppm	ASTM D5185m	>4	<1	0	0
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>54	3	2	1
Lead	ppm	ASTM D5185m	>20	<1	0	0
Copper	ppm	ASTM D5185m	>240	4	4	2
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

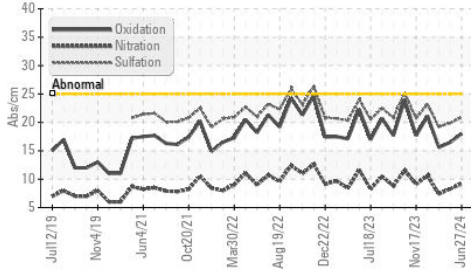
Silicon	ppm	ASTM D5185m	>35	4	5	3
Potassium	ppm	ASTM D5185m	>20	6	9	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.2	8.3	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	19.9	19.2
Silt	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

FLUID CONDITION

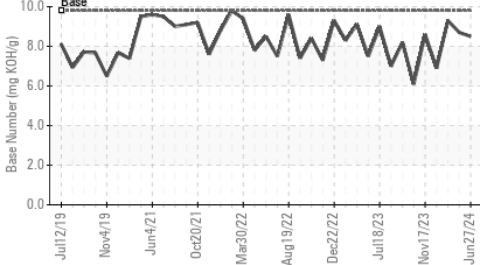
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	12	2
Boron	ppm	ASTM D5185m		1	0	4
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		72	63	56
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		1110	980	950
Calcium	ppm	ASTM D5185m		1236	1079	1045
Phosphorus	ppm	ASTM D5185m		1181	1050	1077
Zinc	ppm	ASTM D5185m		1474	1277	1250
Sulfur	ppm	ASTM D5185m		3327	3634	3569
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	16.5	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.5	8.7	9.3
Visc @ 100°C	cSt	ASTM D445	15.6	14.3	13.8	14.0

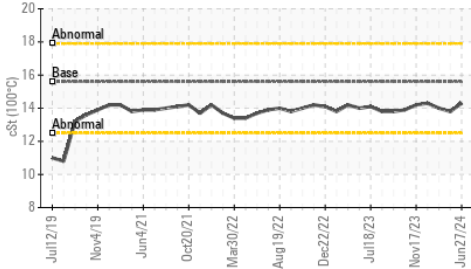
FT-IR (Direct Trend)



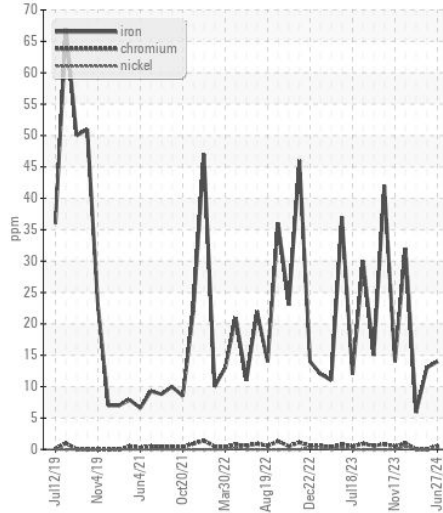
Base Number



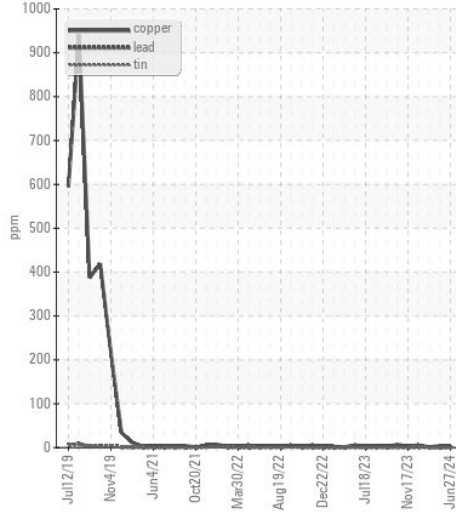
Viscosity @ 100°C



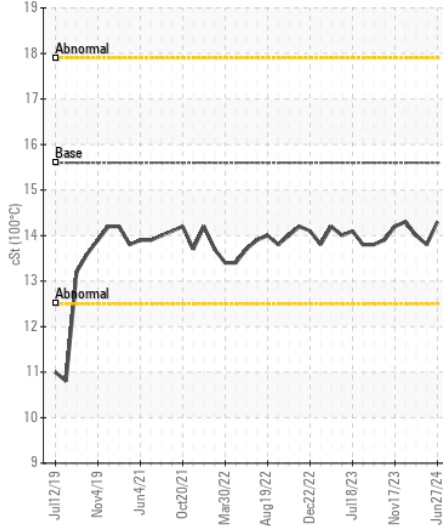
Ferrous Alloys



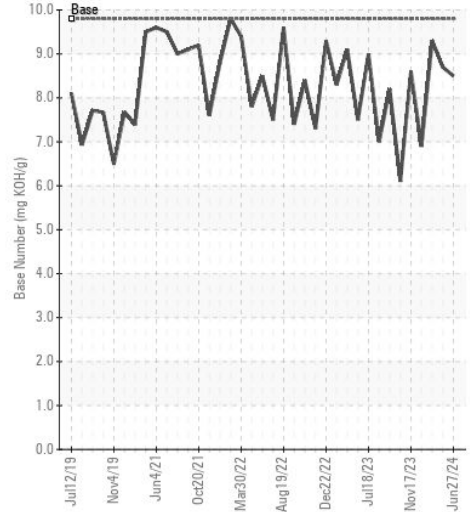
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : LW0009219

Lab Number : 06225797

Unique Number : 11109290

Test Package : FLEET

Received : 02 Jul 2024

Tested : 03 Jul 2024

Diagnosed : 03 Jul 2024 - Wes Davis

K5 CONSTRUCTION CORPORATION

6301 S EAST AVENUE

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US 60525

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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)