



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Area
K5 CONSTRUCTION CORPORATION - HODGKINS IL

Machine Id

1752

Component

Diesel Engine

Fluid

LEAHY WOLF PREMIUM 15W40 (2 hrs)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LW0009471	LW0008909	LW0004330
Sample Date		Client Info		27 Jun 2024	15 Feb 2024	28 Feb 2022
Machine Age	hrs	Client Info		4385	4384	4195
Oil Age	hrs	Client Info		1	189	255
Filter Age	hrs	Client Info		1	189	255
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	32	87	27
Chromium	ppm	ASTM D5185m	>20	2	4	2
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	9	12	7
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	2	1	1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

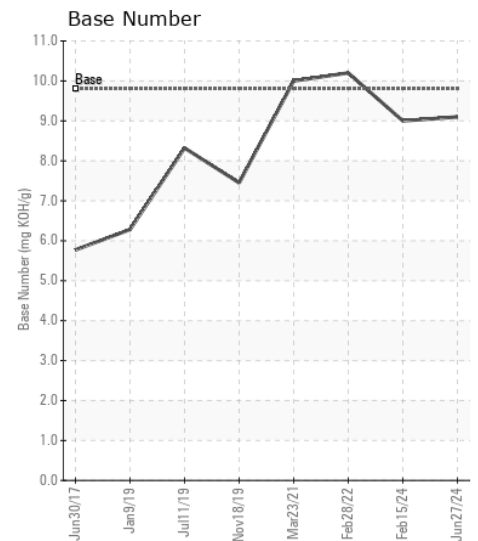
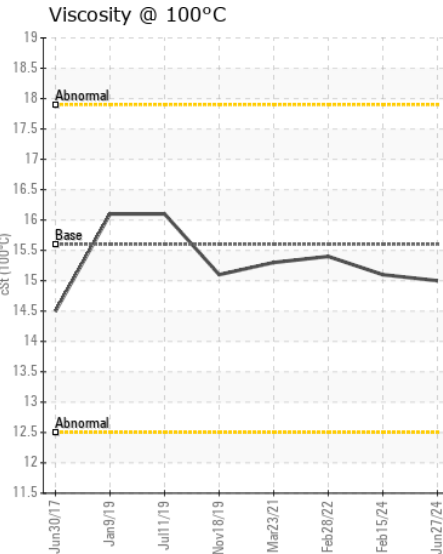
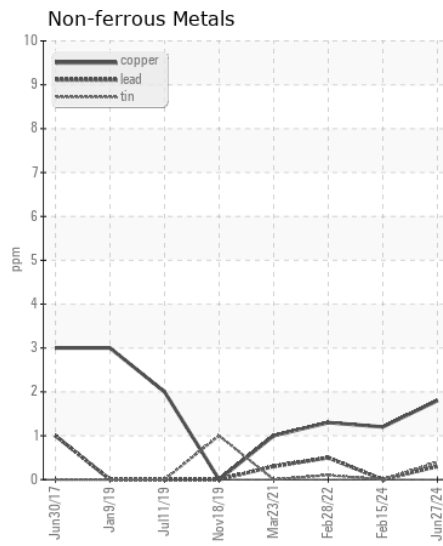
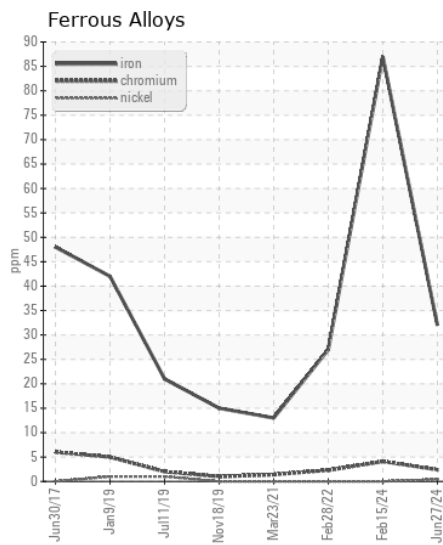
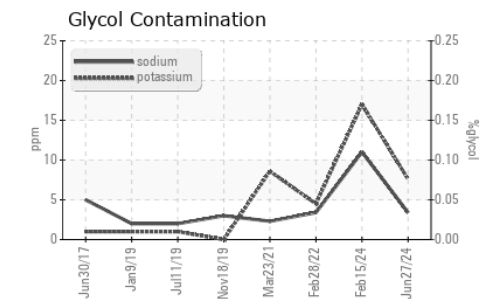
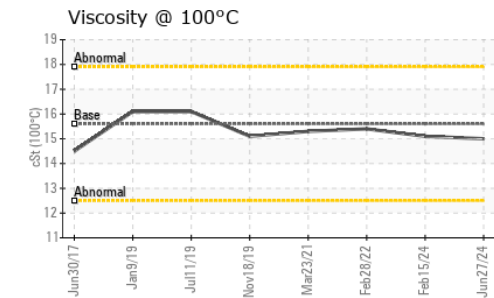
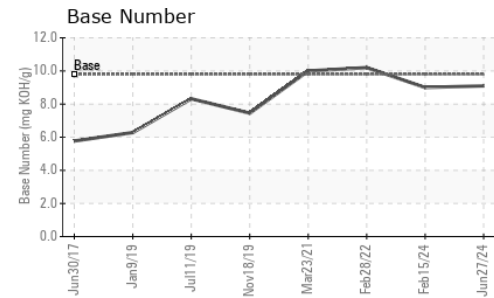
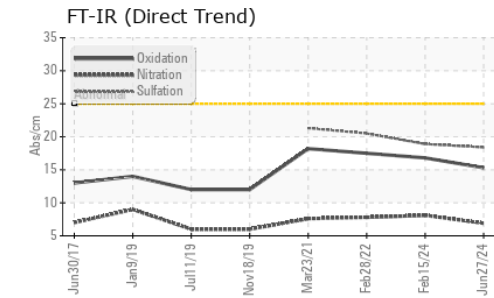
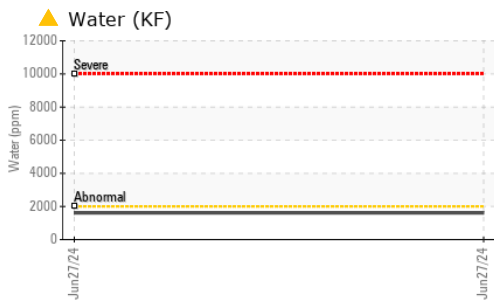
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>25	18	15	8
Potassium	ppm	ASTM D5185m	>20	8	17	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water	%	ASTM D6304	>0.2	▲ 0.161	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 1610	---	---
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.9	8.1	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	18.9	20.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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	▲ 0.2%	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		3	11	3
Boron	ppm	ASTM D5185m		6	2	4
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		62	60	60
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		945	987	966
Calcium	ppm	ASTM D5185m		1120	1113	1096
Phosphorus	ppm	ASTM D5185m		949	993	973
Zinc	ppm	ASTM D5185m		1214	1276	1277
Sulfur	ppm	ASTM D5185m		2663	2646	2526
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	16.8	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.1	9.0	10.2
Visc @ 100°C	cSt	ASTM D445	15.6	15.0	15.1	15.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LW0009471 **Received** : 02 Jul 2024
Lab Number : 06225792 **Tested** : 03 Jul 2024
Unique Number : 11109285 **Diagnosed** : 03 Jul 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol, KF)

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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)