



OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**K5 CONSTRUCTION CORPORATION - HODGKINS IL**

Machine Id  
**4547**

Component  
**Diesel Engine**

Fluid  
**GASOLINE ENGINE OIL SAE 5W40 (4 hrs)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LW0008544</b>	LW0006413	LW0005032
Sample Date		Client Info		<b>05 Feb 2024</b>	27 Jan 2023	12 Aug 2022
Machine Age	hrs	Client Info		<b>3760</b>	3374	3178
Oil Age	hrs	Client Info		<b>386</b>	196	248
Filter Age	hrs	Client Info		<b>386</b>	196	248
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>45</b>	24	28
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>100</b>	99	89
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	3	5
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	5
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

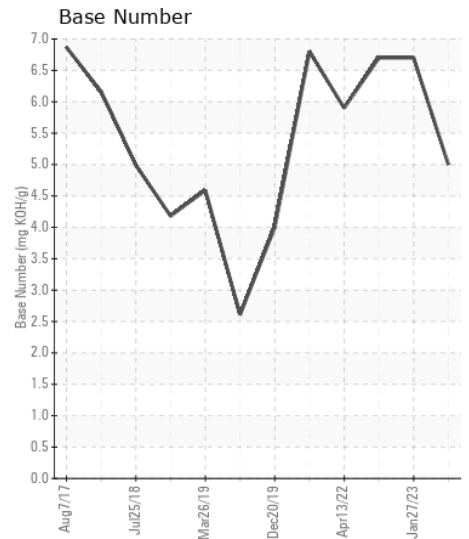
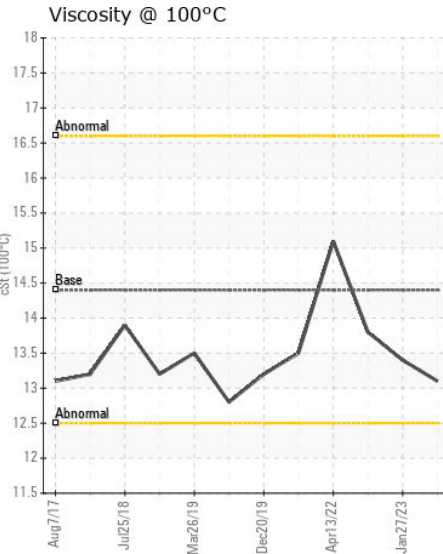
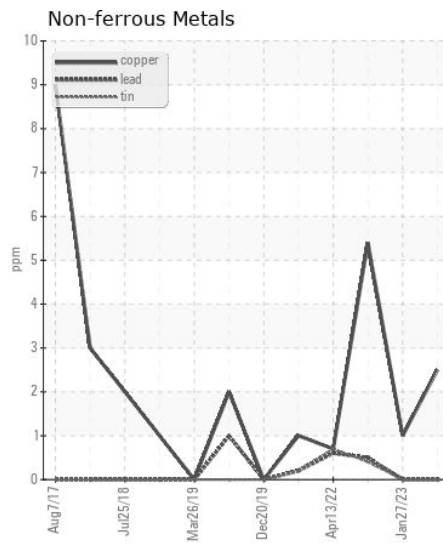
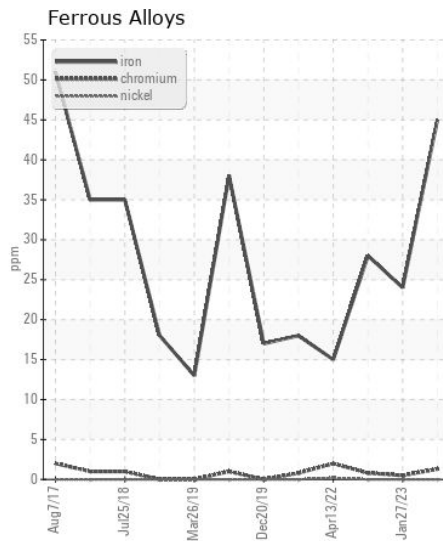
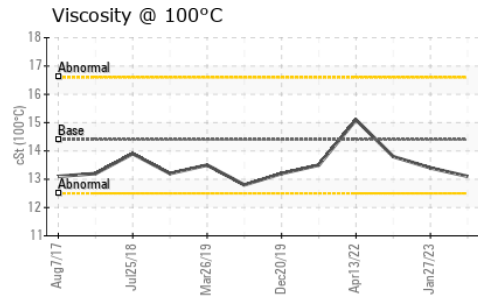
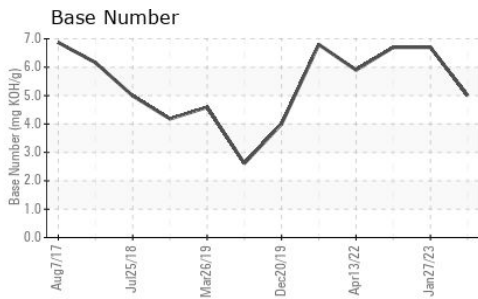
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>23</b>	11	16
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	4	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.7</b>	10.6	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.9</b>	21.9	25.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>3</b>	2	5
Boron	ppm	ASTM D5185m	75	<b>39</b>	87	86
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>6</b>	18	2
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	12	<b>683</b>	605	634
Calcium	ppm	ASTM D5185m	2100	<b>1230</b>	1247	1251
Phosphorus	ppm	ASTM D5185m	650	<b>957</b>	957	946
Zinc	ppm	ASTM D5185m	850	<b>1135</b>	1095	1092
Sulfur	ppm	ASTM D5185m	2500	<b>3440</b>	3331	3376
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>25.5</b>	18.7	22.9
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.0</b>	6.7	6.7
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.1</b>	13.4	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LW0008544  
**Lab Number** : 06087043  
**Unique Number** : 10874488  
**Test Package** : FLEET  
**Received** : 13 Feb 2024  
**Tested** : 14 Feb 2024  
**Diagnosed** : 14 Feb 2024 - Don Baldrige

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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)