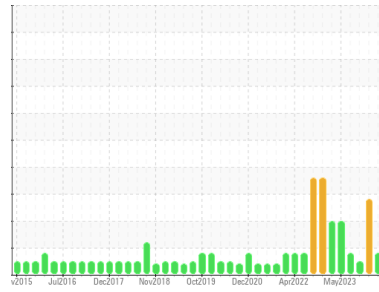




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
Hydraulic System in Plant [413823599]
 Machine Id
Hock Cutter #5 - Maximo #6144 (S/N 1000029280)
 Component
Hydraulic System
 Fluid
KEYSTONE NEVASTANE AW ISO 46 (10 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0944037	WC0918449	WC0881688
Sample Date	Client Info			07 Jun 2024	11 Mar 2024	02 Dec 2023
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ATTENTION	SEVERE	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	12	12	11
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	0	<1
Copper	ppm	ASTM D5185(m)	>20	2	2	2
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

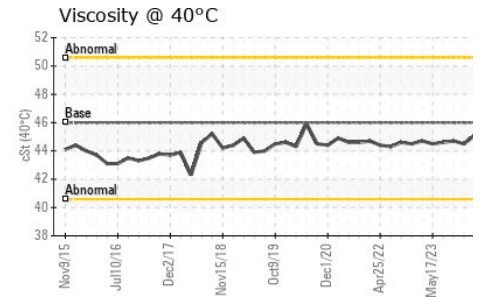
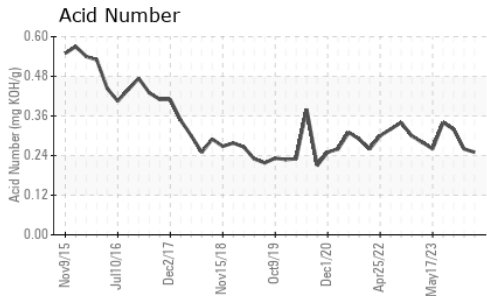
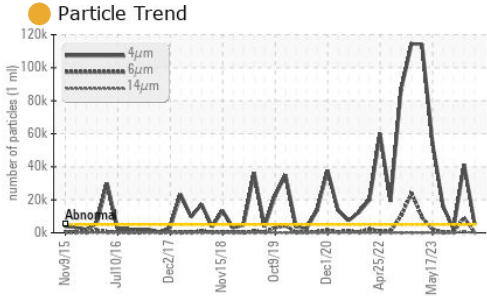
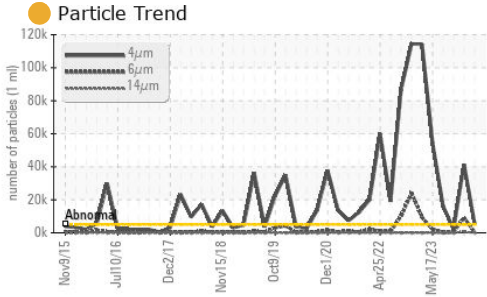
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		0	0	<1
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)		0	<1	0
Calcium	ppm	ASTM D5185(m)		2	<1	<1
Phosphorus	ppm	ASTM D5185(m)		201	222	198
Zinc	ppm	ASTM D5185(m)		76	74	77
Sulfur	ppm	ASTM D5185(m)		691	710	713
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	1	1	4
Sodium	ppm	ASTM D5185(m)		3	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	5820	▲ 41347	2243
Particles >6µm		ASTM D7647	>1300	393	▲ 9097	489
Particles >14µm		ASTM D7647	>160	22	▲ 557	37
Particles >21µm		ASTM D7647	>40	6	▲ 137	9
Particles >38µm		ASTM D7647	>10	1	11	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/16/12	▲ 23/20/16	18/16/12



OIL ANALYSIS REPORT

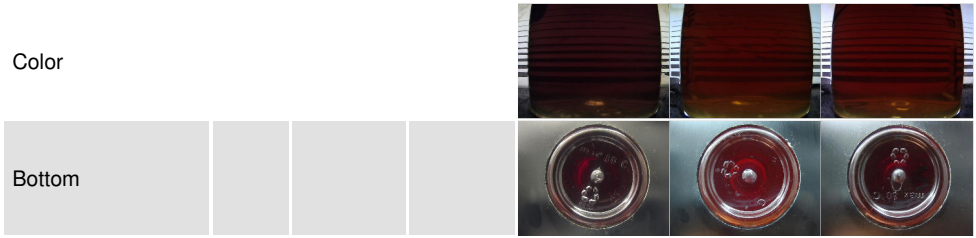


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.25	0.26	0.32

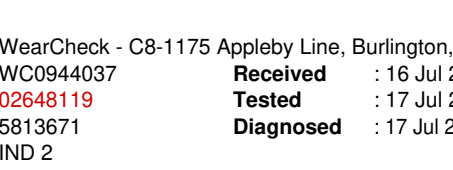
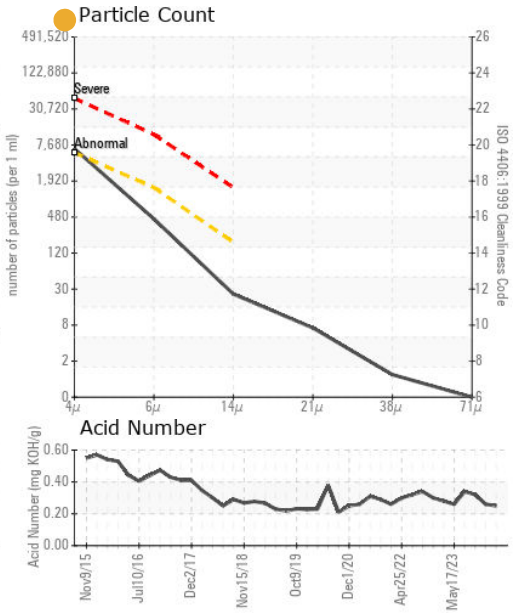
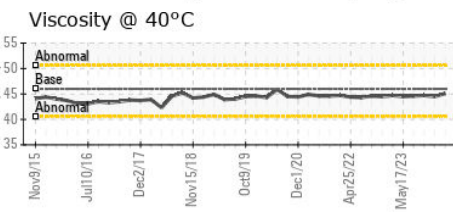
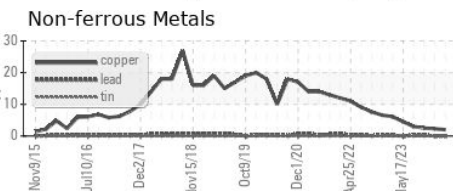
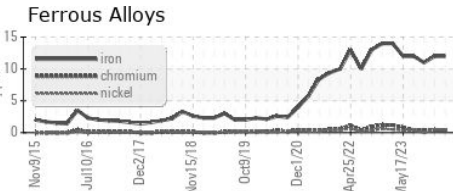
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	45.1	44.5	44.7

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0944037 **Received** : 16 Jul 2024
Lab Number : **02648119** **Tested** : 17 Jul 2024
Unique Number : 5813671 **Diagnosed** : 17 Jul 2024 - Wes Davis
Test Package : IND 2

Cargill Meat Solutions
 165 Dunlop Drive
 Guelph, ON
 CA N1L 1P4
 Contact: Jakub Posluszny
 jakub_posluszny@cargill.com
 T: (519)823-5200
 F: (519)823-5893