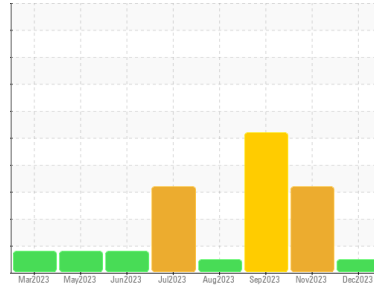




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**HOBBS CRUSHER 1**

Component  
**Hydraulic System**

Fluid  
**TDH FLUID SAE 75W80 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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			<b>KL0014055</b>	KL0013133	KL0012928
Sample Date	Client Info			<b>27 Dec 2023</b>	06 Nov 2023	27 Sep 2023
Machine Age	hrs	Client Info		<b>4942</b>	45160	7435
Oil Age	hrs	Client Info		<b>0</b>	45160	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>0</b>	6	7
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	<b>0</b>	<1	0
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	10	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	100	<b>56</b>	72	73
Calcium	ppm	ASTM D5185m	3500	<b>3107</b>	3356	3293
Phosphorus	ppm	ASTM D5185m	1150	<b>1003</b>	1094	1098
Zinc	ppm	ASTM D5185m	1150	<b>1085</b>	1271	1289
Sulfur	ppm	ASTM D5185m	5000	<b>3187</b>	3677	3793

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>2</b>	7	6
Sodium	ppm	ASTM D5185m		<b>2</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0

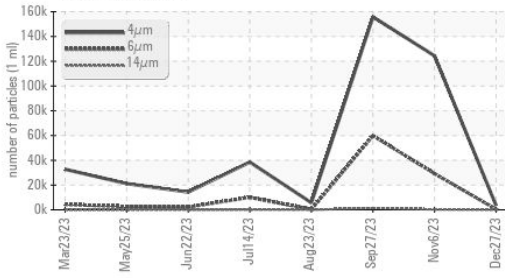
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>3510</b>	124380	155797
Particles >6µm		ASTM D7647	>1300	<b>561</b>	29261	59948
Particles >14µm		ASTM D7647	>160	<b>22</b>	308	1317
Particles >21µm		ASTM D7647	>40	<b>4</b>	45	190
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	2
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>17/14	<b>16/12</b>	22/15	23/18

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.25	<b>1.57</b>	1.45	1.83

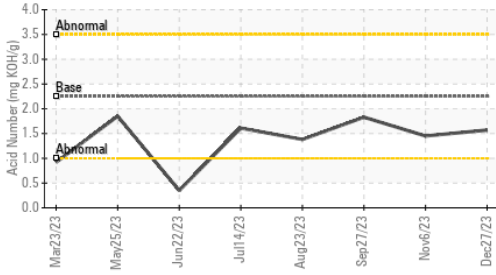


# OIL ANALYSIS REPORT

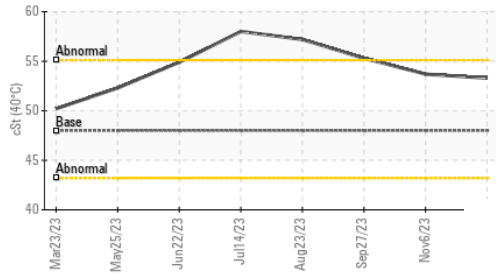
Particle Trend



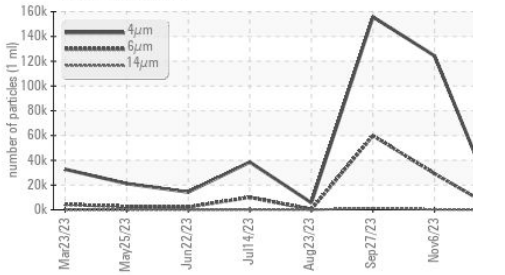
Acid Number



Viscosity @ 40°C



Particle Trend



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 48	53.3	53.7	55.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

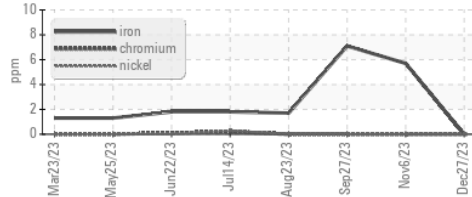


Bottom

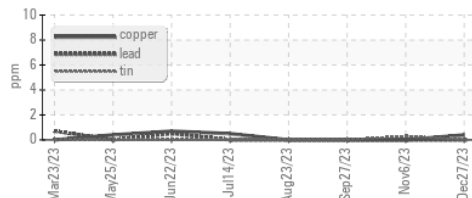


## GRAPHS

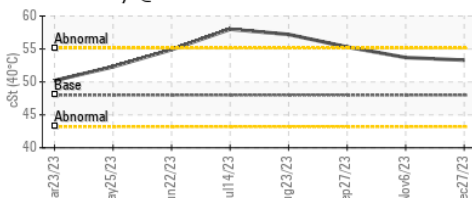
Ferrous Alloys



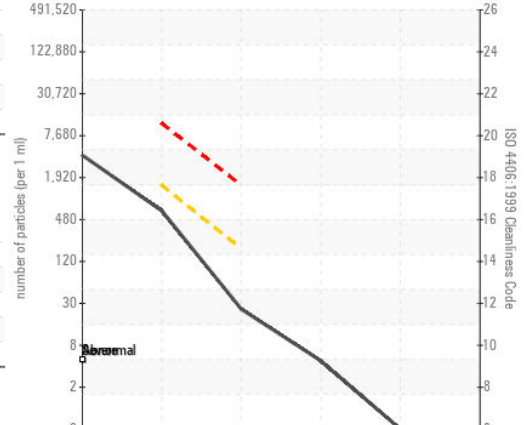
Non-ferrous Metals



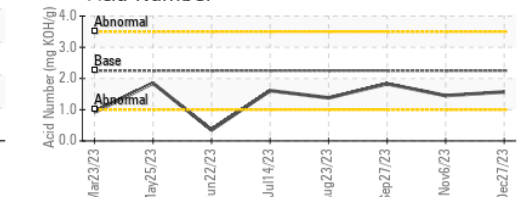
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KL0014055  
 Lab Number : 06054761  
 Unique Number : 10820710  
 Test Package : MOB 2

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

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)

T:  
F: