MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
RIG 3
Machine Id
HYUNDAI HL757-9A R3-LOADER-NKL
Component
Diesel Engine
Fluid
CHEVRON 15W40 (--- GAL)

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.

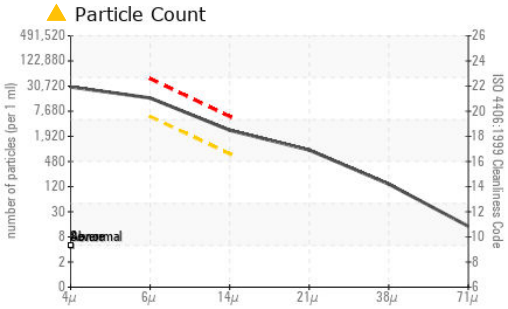
CONTAMINATION

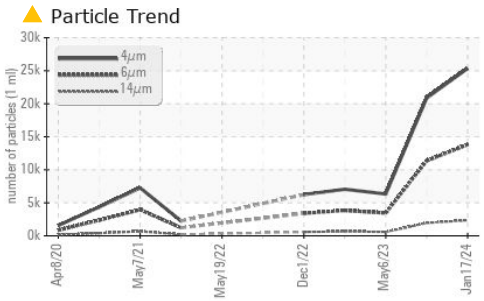
There is a high amount of particulates present in the oil.

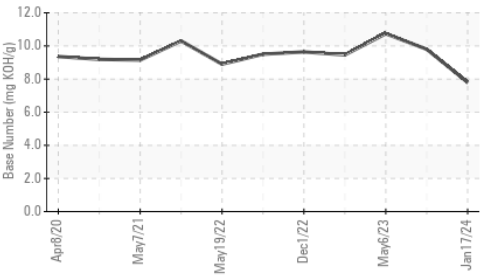
FLUID CONDITION

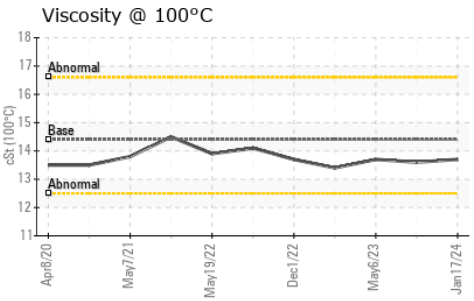
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

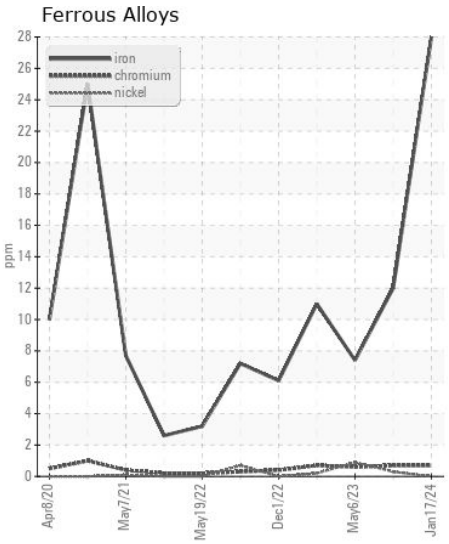
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014008	KL0012550	KL0012160
Sample Date		Client Info		17 Jan 2024	27 Jul 2023	06 May 2023
Machine Age	days	Client Info		43803	45133	45049
Oil Age	days	Client Info		0	0	0
Filter Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	28	12	7
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	8	6
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	4	3	<1
Tin	ppm	ASTM D5185m	>15	0	0	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	9	7	7
Potassium	ppm	ASTM D5185m	>20	4	4	3
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	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.9	8.1	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	23.7	23.3
Particles >4µm		ASTM D7647		25351	20870	6340
Particles >6µm		ASTM D7647	>5000	▲ 13810	▲ 11369	3454
Particles >14µm		ASTM D7647	>640	▲ 2350	▲ 1935	588
Particles >21µm		ASTM D7647	>160	▲ 792	▲ 652	198
Particles >38µm		ASTM D7647	>40	▲ 122	▲ 101	31
Particles >71µm		ASTM D7647	>10	12	10	3
Oil Cleanliness		ISO 4406 (c)	>19/16	▲ 21/18	▲ 21/18	19/16
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
Sodium	ppm	ASTM D5185m	>50	10	4	2
Boron	ppm	ASTM D5185m		324	312	372
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		128	137	126
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		684	664	679
Calcium	ppm	ASTM D5185m		1513	1589	1533
Phosphorus	ppm	ASTM D5185m		724	714	729
Zinc	ppm	ASTM D5185m		846	906	891
Sulfur	ppm	ASTM D5185m		2894	2733	3110
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	17.8	16.4
Base Number (BN)	mg KOH/g	ASTM D2896		7.80	9.80	10.74
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	13.6	13.7

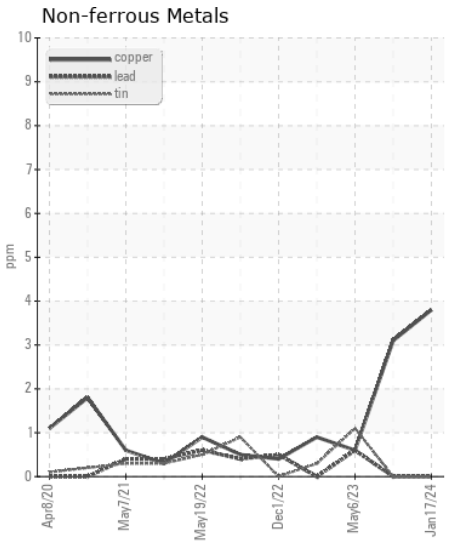


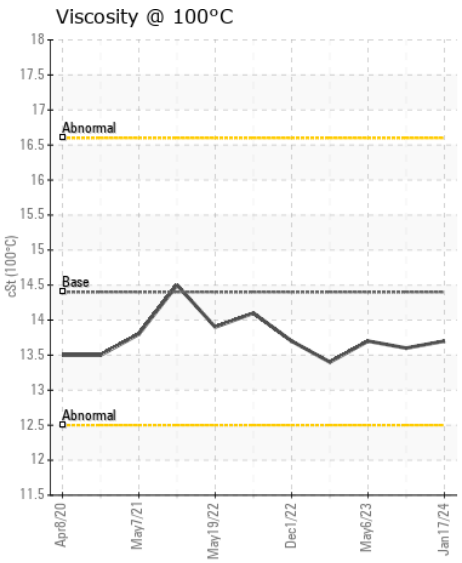


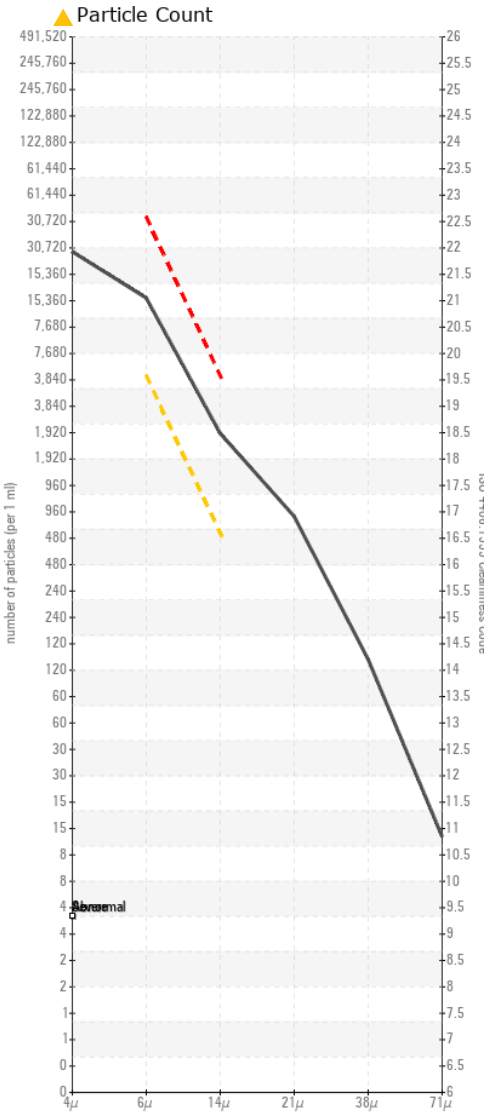


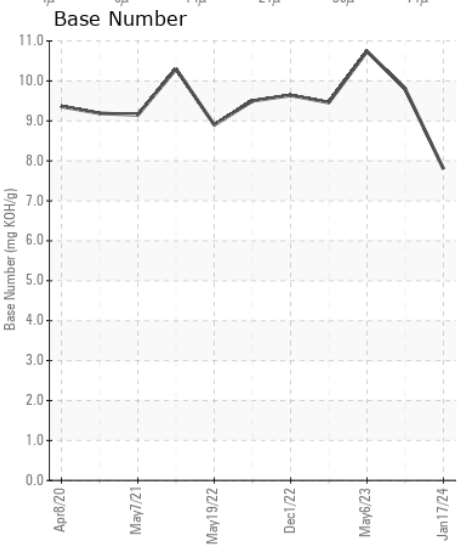


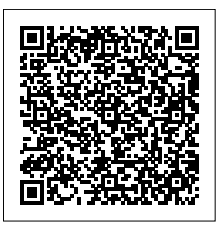












ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: KL0014008	**Received**	: 07 Feb 2024
Lab Number	: 06083137	**Tested**	: 08 Feb 2024
Unique Number	: 10870582	**Diagnosed**	: 09 Feb 2024 - Sean Felton
Test Package	: MOB 2 (Additional Tests: PrtCount)		

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)

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