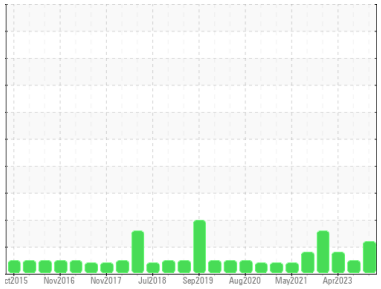
OIL ANALYSIS REPORT

Area
OKLAHOMA/3/EG - EXCAVATOR
Machine Id
20.69L [OKLAHOMA^3^EG - EXCAVATOR]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

Sample Rating Trend



ISO

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high 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		**WC0886946**	WC0834146	WC0808045
Sample Date		Client Info		**31 Jan 2024**	05 Aug 2023	28 Apr 2023
Machine Age	hrs	Client Info		**12603**	12061	11496
Oil Age	hrs	Client Info		**11082**	11082	11082
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	ABNORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**13**	6	8
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>10	**<1**	0	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>10	**<1**	3	<1
Lead	ppm	ASTM D5185m	>10	**<1**	<1	<1
Copper	ppm	ASTM D5185m	>75	**2**	2	<1
Tin	ppm	ASTM D5185m	>10	**<1**	<1	2
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**<1**	0	0

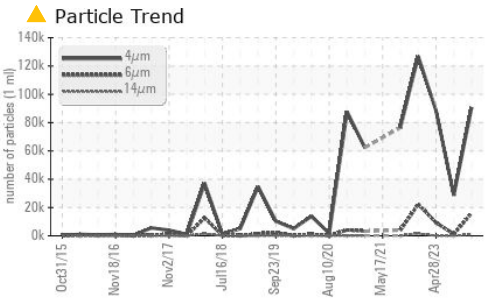
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**97**	106	82
Barium	ppm	ASTM D5185m		**5**	1	0
Molybdenum	ppm	ASTM D5185m		**2**	1	2
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**20**	28	26
Calcium	ppm	ASTM D5185m		**3266**	3195	3305
Phosphorus	ppm	ASTM D5185m		**1014**	1022	1113
Zinc	ppm	ASTM D5185m		**1290**	1263	1414
Sulfur	ppm	ASTM D5185m		**4989**	4764	5664

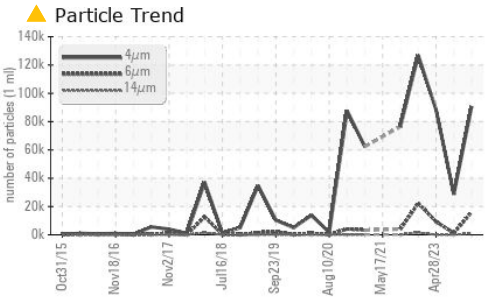
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**17**	12	10
Sodium	ppm	ASTM D5185m		**0**	3	4
Potassium	ppm	ASTM D5185m	>20	**2**	<1	2

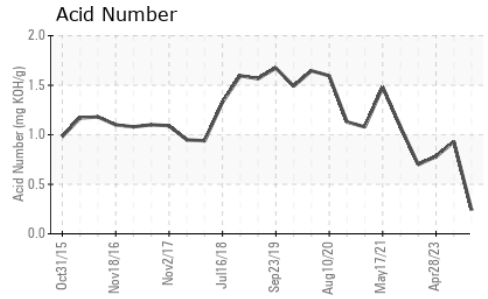
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**90628**	28704	88486
Particles >6µm		ASTM D7647	>2500	▲ **15979**	1230	▲ 9350
Particles >14µm		ASTM D7647	>640	▲ **884**	77	54
Particles >21µm		ASTM D7647	>160	**128**	18	10
Particles >38µm		ASTM D7647	>40	**1**	0	1
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/18/16	▲ **24/21/17**	22/17/13	▲ 24/20/13

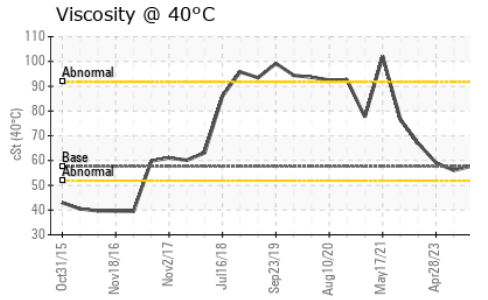
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.24**	0.93	0.78

OIL ANALYSIS REPORT



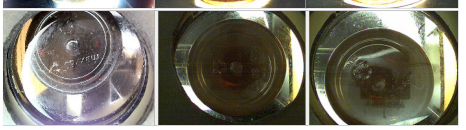




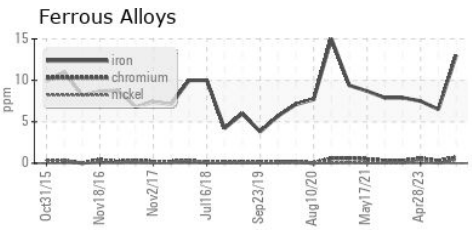


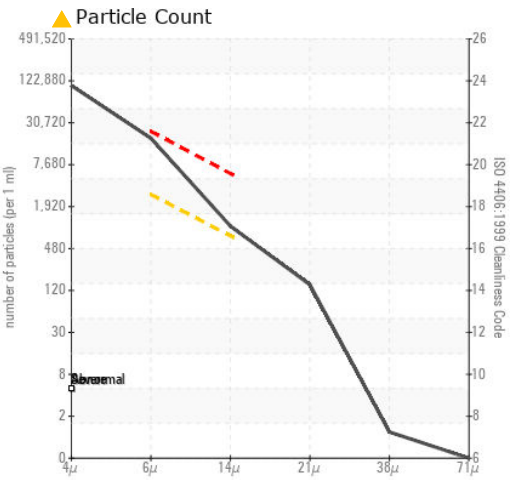
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

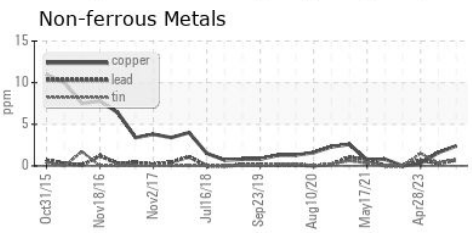
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	**57.8**	56.0	59.1

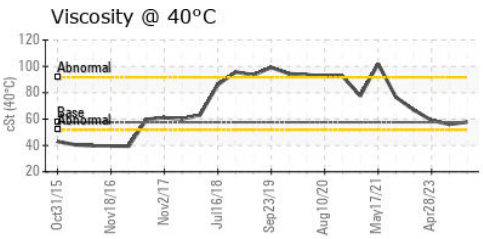
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

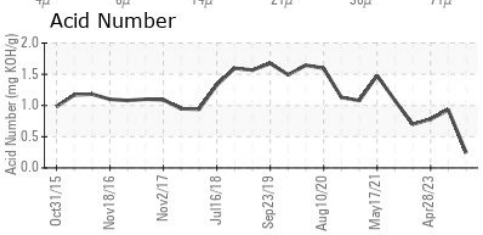
GRAPHS











Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886946
Lab Number : 06098317
Unique Number : 10896547
Test Package : CONST

Received : 23 Feb 2024
Tested : 26 Feb 2024
Diagnosed : 26 Feb 2024 - Don Baldridge

Certificate L2367

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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Report Id: SHEWIC [WUSCAR] 06098317 (Generated: 02/26/2024 13:28:40) Rev: 1

Submitted By: GARRETT ADAMS