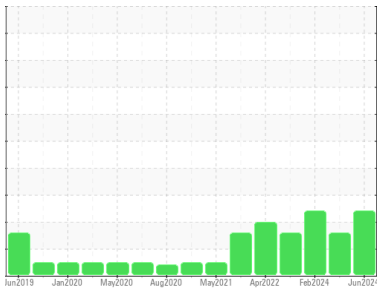
OIL ANALYSIS REPORT

Area
OKLAHOMA/3/EG - TRUCK-OFF-HWY-HEAVY HAUL
Machine Id
69.11 [OKLAHOMA^3^EG - TRUCK-OFF-HWY-HEAVY HAUL]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

Sample Rating Trend



DIRT

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0935120**	WC0935191	WC0886876
Sample Date		Client Info		**05 Jun 2024**	12 May 2024	20 Feb 2024
Machine Age	hrs	Client Info		**11090**	108421	10382
Oil Age	hrs	Client Info		**0**	5673	5673
Oil Changed		Client Info		**N/A**	Changed	N/A
Sample Status				**ABNORMAL**	ABNORMAL	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	**8**	9	7
Chromium	ppm	ASTM D5185m	>10	**<1**	1	<1
Nickel	ppm	ASTM D5185m	>10	**0**	8	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**14**	3	14
Lead	ppm	ASTM D5185m	>10	**<1**	0	<1
Copper	ppm	ASTM D5185m	>75	**2**	2	1
Tin	ppm	ASTM D5185m	>10	**<1**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**60**	62	39
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	<1	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**19**	18	23
Calcium	ppm	ASTM D5185m		**3146**	3198	2878
Phosphorus	ppm	ASTM D5185m		**986**	1062	1014
Zinc	ppm	ASTM D5185m		**1276**	1262	1225
Sulfur	ppm	ASTM D5185m		**5111**	5291	4685

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**33**	24	30
Sodium	ppm	ASTM D5185m		**3**	2	5
Potassium	ppm	ASTM D5185m	>20	**7**	<1	6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1079**	8841	1832
Particles >6µm		ASTM D7647	>2500	**248**	1053	381
Particles >14µm		ASTM D7647	>640	**11**	18	12
Particles >21µm		ASTM D7647	>160	**2**	4	3
Particles >38µm		ASTM D7647	>40	**0**	1	0
Particles >71µm		ASTM D7647	>10	**0**	1	0
Oil Cleanliness		ISO 4406 (c)	>--/18/16	**17/15/11**	20/17/11	18/16/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.29**	1.16	1.93

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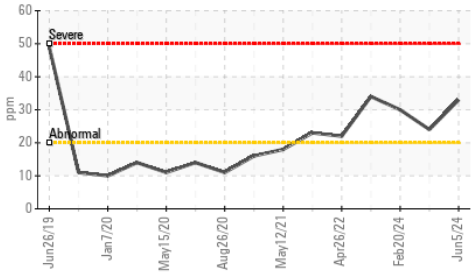
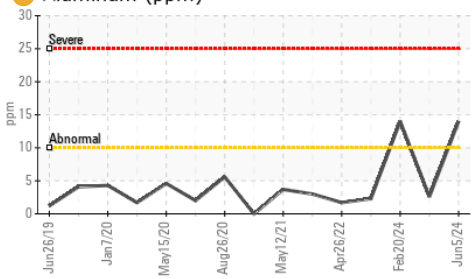
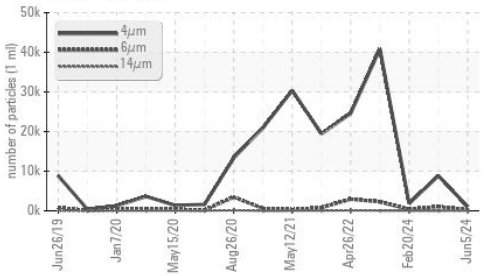
Silicon (ppm)



Aluminum (ppm)

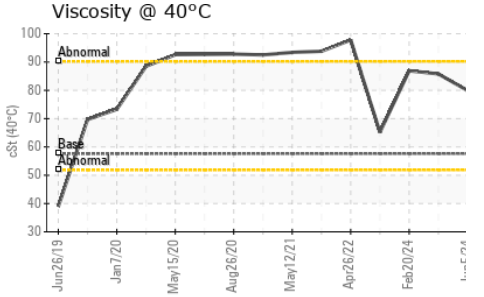


Particle Trend



Acid Number

Viscosity @ 40°C



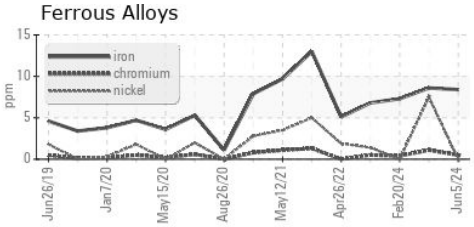
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**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	**79.9**	85.8	86.9

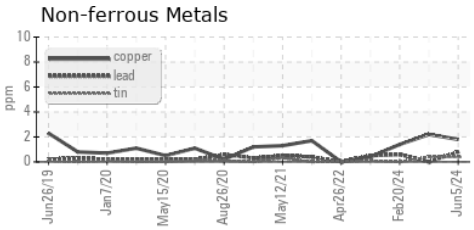
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

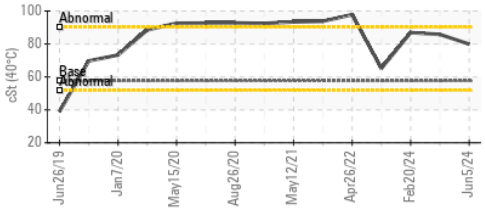
Ferrous Alloys



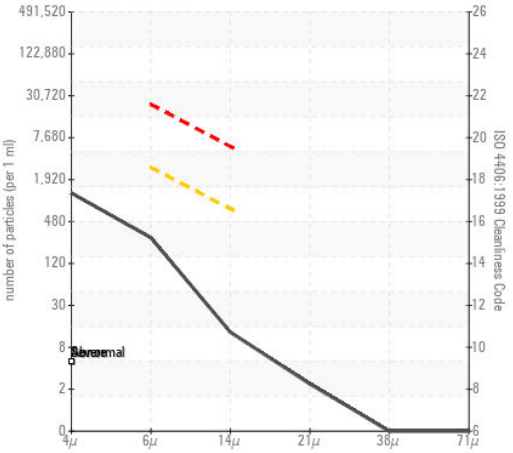
Non-ferrous Metals



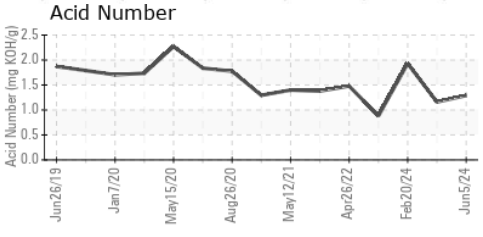
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0935120
Lab Number : 06207712
Unique Number : 11075173
Test Package : CONST

Received : 12 Jun 2024
Tested : 13 Jun 2024
Diagnosed : 15 Jun 2024 - Don Baldridge

SHERWOOD CONSTRUCTION CO INC
3219 WEST MAY ST
WICHITA, KS
US 67213
Contact: DOUG KING
doug.king@sherwood.net
T: (316)617-3161
F: x:

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)