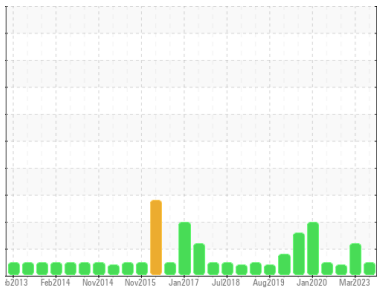
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
361.XX030 HYDRAULIC TRUCK DUMP (S/N 361-030-29)
Component
Hydraulic System
Fluid
MOBIL DTE 10 EXCEL 32 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. Please submit a sample of the new (unused) oil to confirm baseline.

Wear
All component wear rates are normal.

Contamination
MPC (Membrane Patch Colorimetry) test indicates acceptable levels of varnish present. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition
Linear Sweep Voltammetry (RULER – ASTM D6971) testing indicates normal levels of anti-oxidants present in the oil. 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		**RP0043343**	WC0799238	RP0001022
Sample Date		Client Info		**28 Mar 2024**	31 Mar 2023	14 Jan 2022
Machine Age	wks	Client Info		**0**	0	0
Oil Age	wks	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**2**	2	13
Chromium	ppm	ASTM D5185m	>20	**3**	3	37
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	0	1
Lead	ppm	ASTM D5185m	>20	**5**	7	6
Copper	ppm	ASTM D5185m	>20	**29**	34	33
Tin	ppm	ASTM D5185m	>20	**0**	<1	2
Antimony	ppm	ASTM D5185m		**---**	---	1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

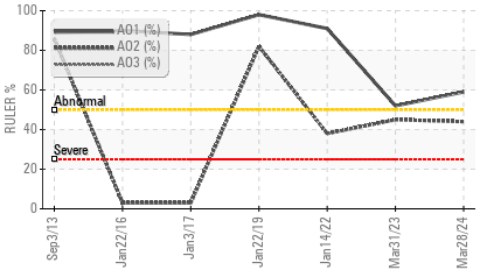
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**0**	4	<1
Calcium	ppm	ASTM D5185m	120	**106**	114	121
Phosphorus	ppm	ASTM D5185m	475	**386**	419	453
Zinc	ppm	ASTM D5185m		**58**	71	686

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	1	10
Sodium	ppm	ASTM D5185m		**2**	2	4
Potassium	ppm	ASTM D5185m	>20	**0**	<1	0
Water	%	ASTM D6304	>0.05	**0.007**	0.005	0.017
ppm Water	ppm	ASTM D6304	>500	**76**	55.9	179.5

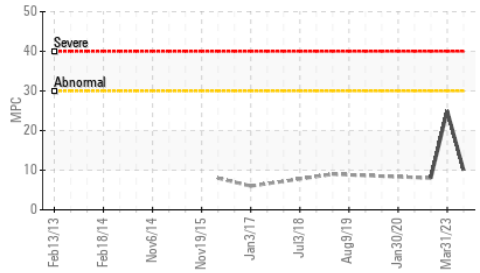
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	**1639**	▲ 16589	● 8443
Particles >6µm	ASTM D7647	>1300	**286**	655	199
Particles >14µm	ASTM D7647	>160	**20**	39	18
Particles >21µm	ASTM D7647	>40	**7**	13	4
Particles >38µm	ASTM D7647	>10	**1**	2	0
Particles >71µm	ASTM D7647	>3	**0**	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	**18/15/11**	▲ 21/17/12	● 20/15/11

OIL ANALYSIS REPORT

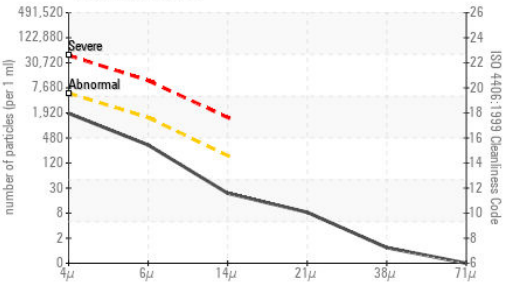
Remaining Life (RULER)



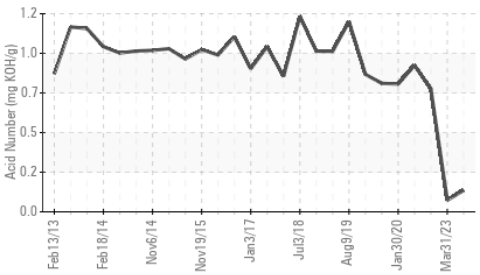
Varnish Potential



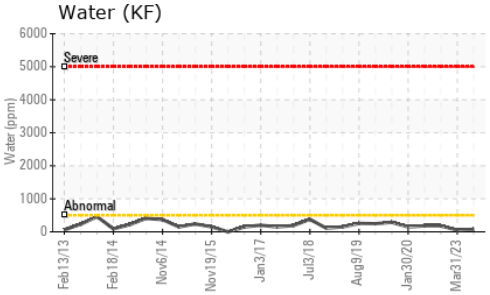
Particle Count



Acid Number



Water (KF)

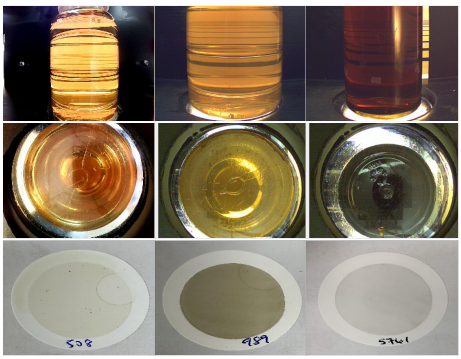


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.13**	0.07	0.745
Anti-Oxidant 1	%	ASTM D6971	<25	**59**	52	91
Anti-Oxidant 2	%	ASTM D6971	<25	**44**	45	38
MPC Varnish Potential	Scale	ASTM D7843	>15	**10**	▲ 25	8

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 D445	32	**33.07**	36.4	34.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
MPC					



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0043343
Lab Number : 06137508
Unique Number : 10956973
Test Package : AOM 1 (Additional Tests: KF)

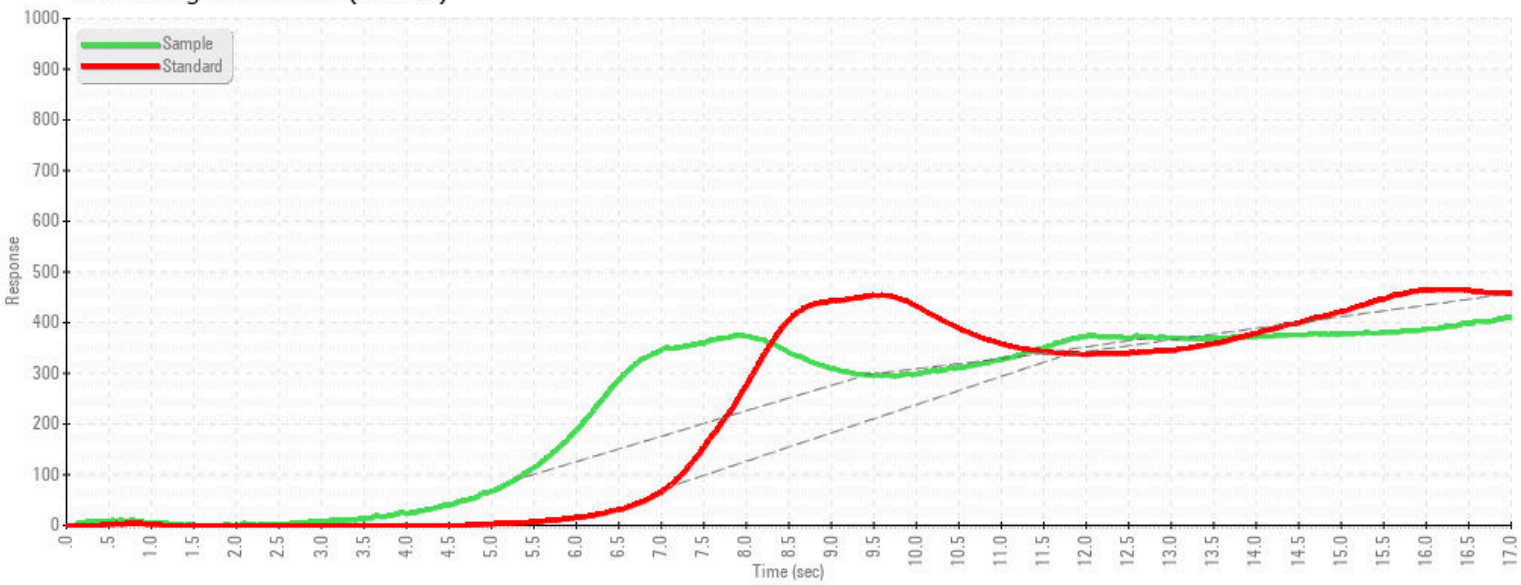
Received : 03 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 16 Apr 2024 - Doug Bogart

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)

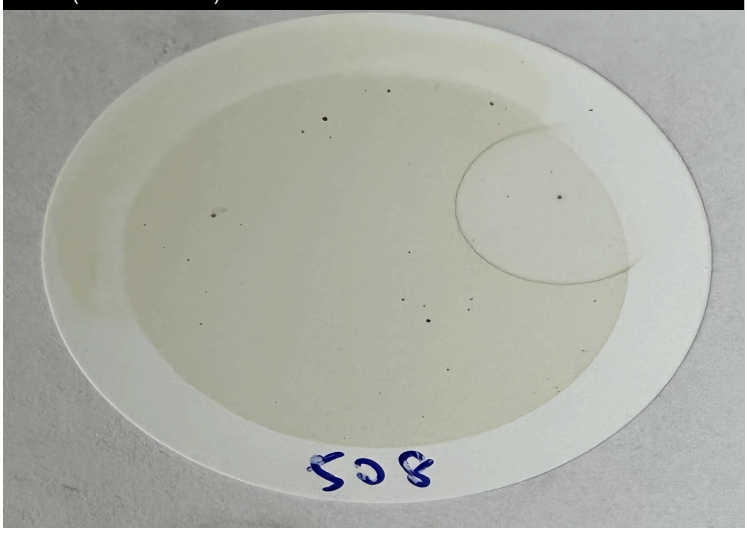
INTERNATIONAL PAPER
1785 Weyerhaeuser Road
VANCEBORO, NC
US 28586
Contact: DOUG WEIR
Doug.Weir@ipaper.com;jon.fazenbaker@wearcheck.com
T: (252)633-7350
F: (252)633-7761

Report Id: WEYNEW [WUSCAR] 06137508 (Generated: 04/16/2024 17:50:33) Rev: 1
Contact/Location: DOUG WEIR - WEYNEW

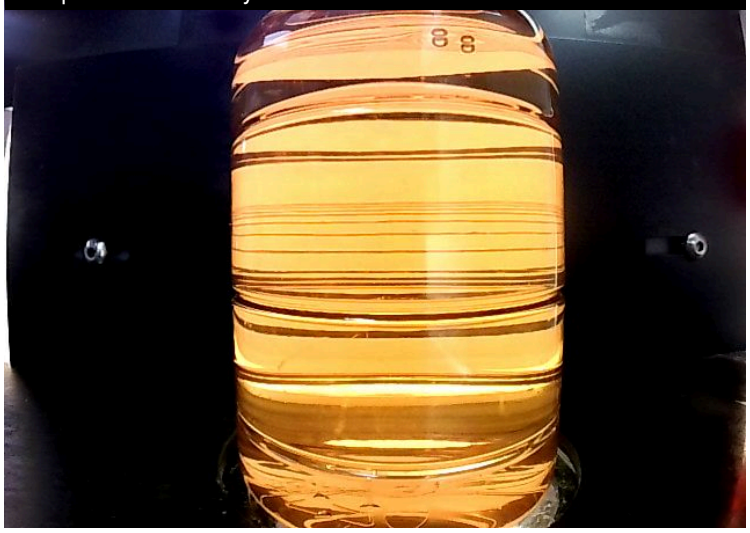
Remaining Useful Life (RULER)



MPC (Varnish Test)



Sample Color & Clarity



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