TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
LULL 844C-42 1011 (S/N 99W20P22-2196)
Component
Hydraulic System
Fluid
TRC HYDRAULIC OIL ISO 32- SAE10W (65 GAL)

RECOMMENDATION

Oil and 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.

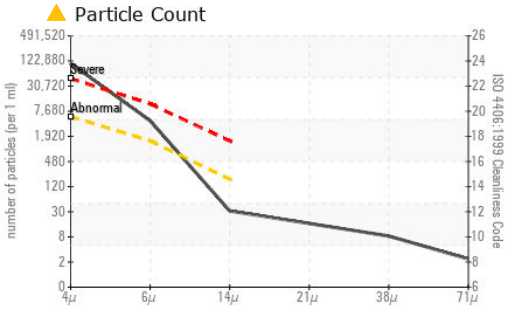
CONTAMINATION

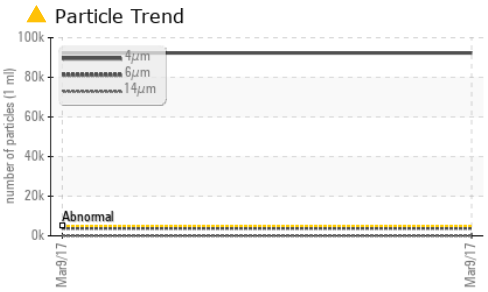
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

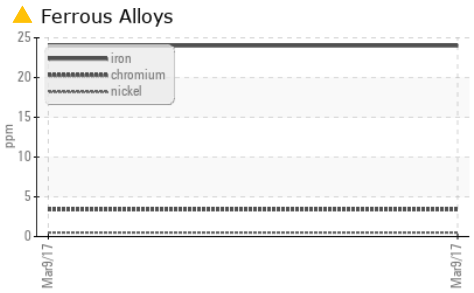
FLUID CONDITION

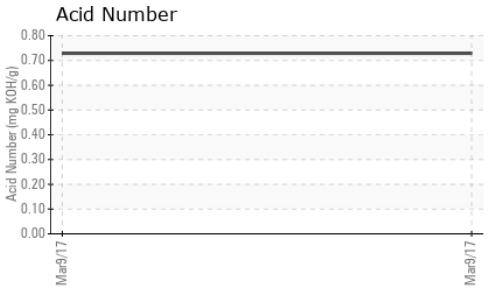
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

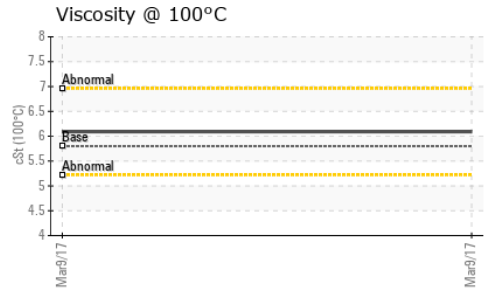
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR04186027	---	---
Sample Date		Client Info		09 Mar 2017	---	---
Machine Age	hrs	Client Info		11388	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		3434	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>20	▲ 24	---	---
Chromium	ppm	ASTM D5185m	>10	3	---	---
Nickel	ppm	ASTM D5185m		<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>10	2	---	---
Lead	ppm	ASTM D5185m	>10	0	---	---
Copper	ppm	ASTM D5185m	>75	2	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>20	5	---	---
Potassium	ppm	ASTM D5185m	>20	9	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 92295	---	---
Particles >6µm		ASTM D7647	>1300	▲ 3963	---	---
Particles >14µm		ASTM D7647	>160	28	---	---
Particles >21µm		ASTM D7647	>40	14	---	---
Particles >38µm		ASTM D7647	>10	7	---	---
Particles >71µm		ASTM D7647	>3	2	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 24/19/12	---	---
Particles 5-15µm	count	*NAS 1638	>1300	390041	---	---
Particles 15-25µm	count	*NAS 1638	>160	-745	---	---
Particles 25-50µm	count	*NAS 1638	>40	-684	---	---
Particles 50-100µm	count	*NAS 1638	>10	151	---	---
Particles >100µm	count	*NAS 1638	>3	975	---	---
NAS Code		*NAS 1638	>19/17/14	12	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Sodium	ppm	ASTM D5185m		<1	---	---
Boron	ppm	ASTM D5185m		<1	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		<1	---	---
Calcium	ppm	ASTM D5185m		63	---	---
Phosphorus	ppm	ASTM D5185m		544	---	---
Zinc	ppm	ASTM D5185m	1000	674	---	---
Sulfur	ppm	ASTM D5185m		1455	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.729	---	---
Visc @ 40°C	cSt	ASTM D445	32	30.12	---	---
Visc @ 100°C	cSt	ASTM D445	5.8	6.09	---	---
Viscosity Index (VI)	Scale	ASTM D2270	95	155	---	---

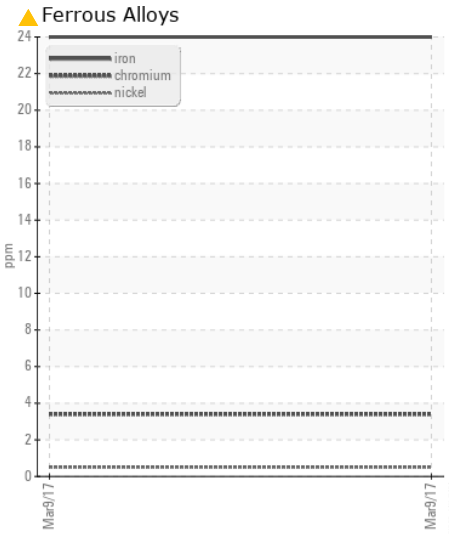


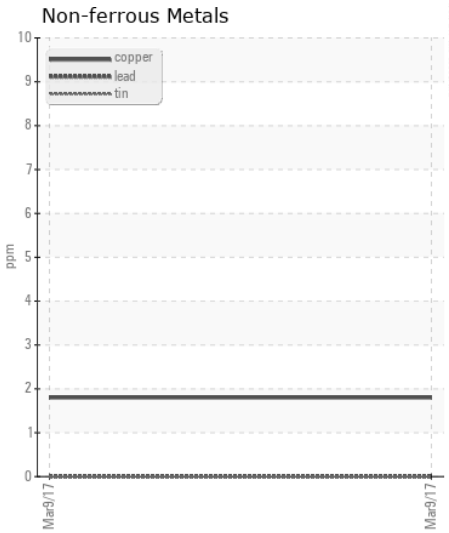


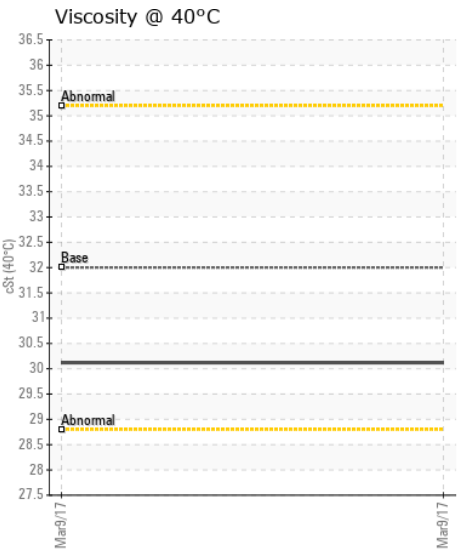


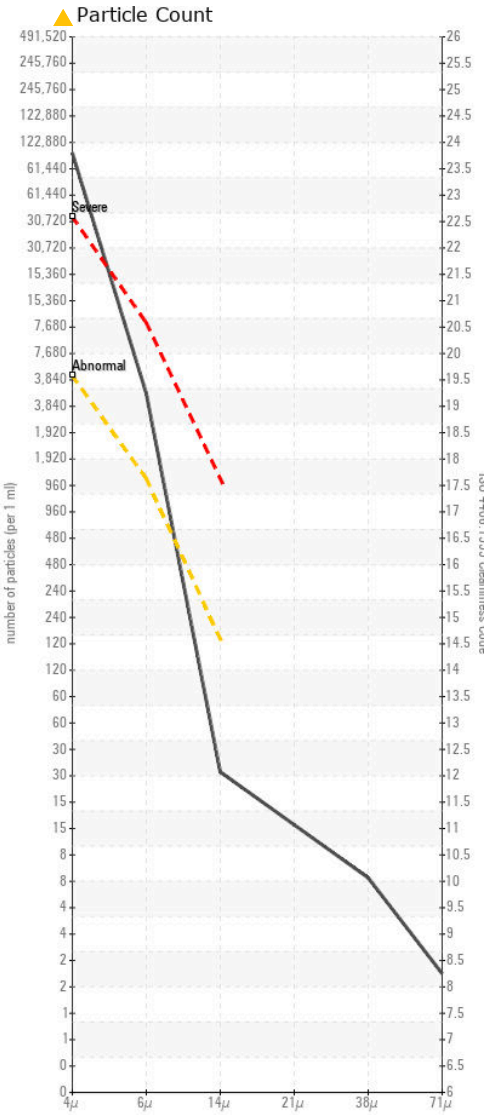


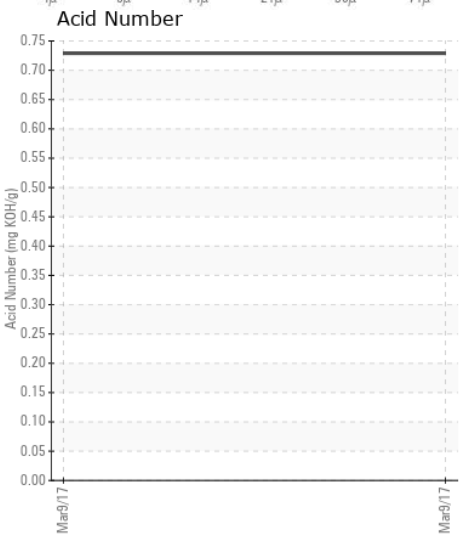












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR04186027
Lab Number : 04186027
Unique Number : 7739447
Test Package : MOB 2 (Additional Tests: KV100, PQ, PrtCountNAS, VI)

Received : 21 Mar 2017
Tested : 23 Mar 2017
Diagnosed : 23 Mar 2017 - Doug Bogart

CONNECTICUT MASON CONTRACTORS
75 BYSIEWICZ DR
MIDDLETOWN, CT
US 06457
Contact: PATRICK KELLY

To discuss this sample report, contact Customer Service at 1-800-827-0711.
** - 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: