



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id  
**WEILER 0033**  
 Component  
**Hydraulic System**  
 Fluid  
**TRC SPECIAL 303 (34 GAL)**

## RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06062606	TR05444416	TR05010398
Sample Date		Client Info		08 Nov 2023	25 Oct 2021	03 Jun 2020
Machine Age	hrs	Client Info		400	204	64
Oil Age	hrs	Client Info		196	164	64
Filter Age	hrs	Client Info		196	164	64
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	3	2	0
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	2
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	<1	1
Aluminum	ppm	ASTM D5185m	>10	1	2	0
Lead	ppm	ASTM D5185m	>10	1	1	0
Copper	ppm	ASTM D5185m	>75	8	5	<1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

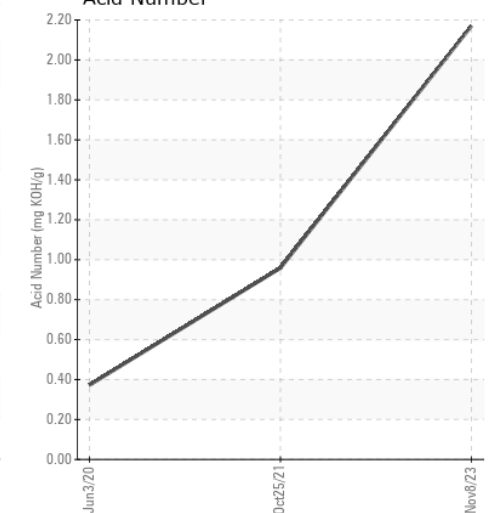
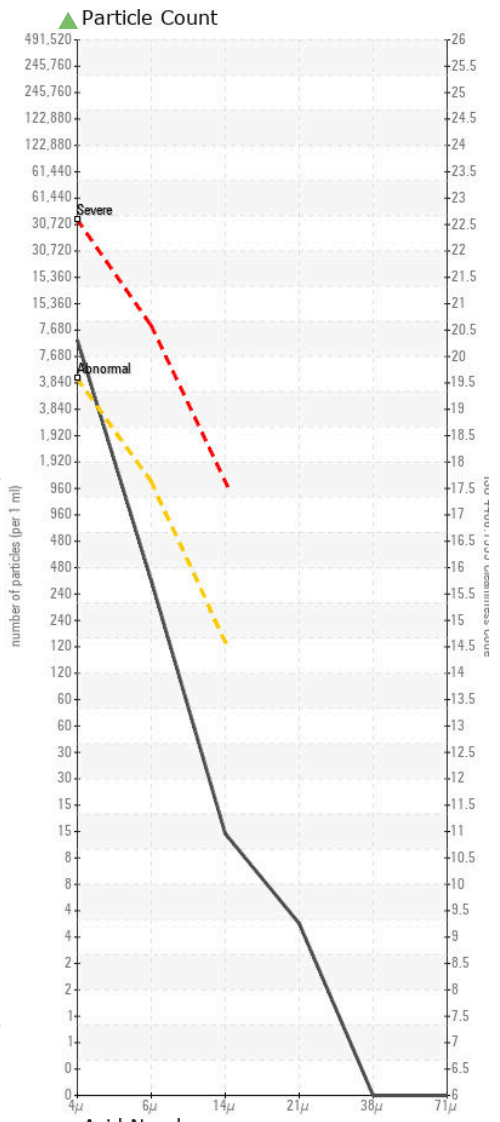
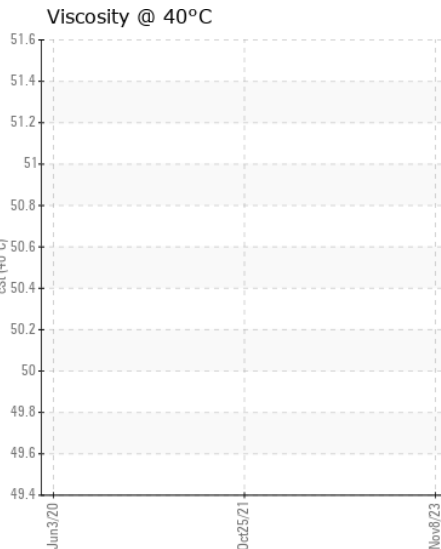
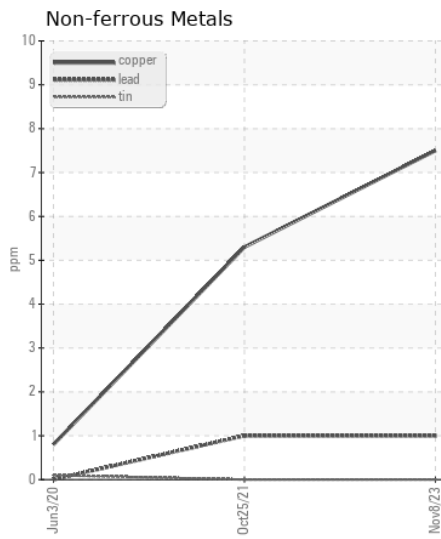
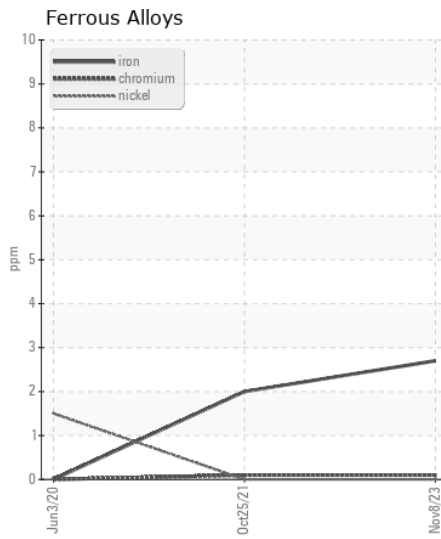
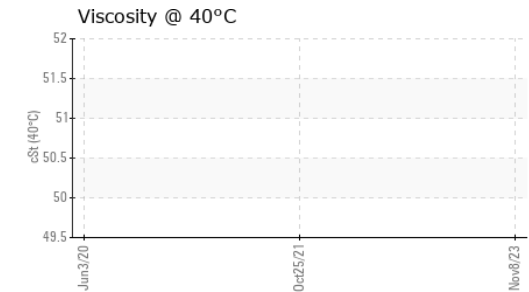
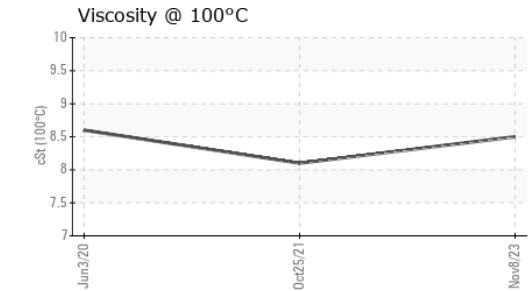
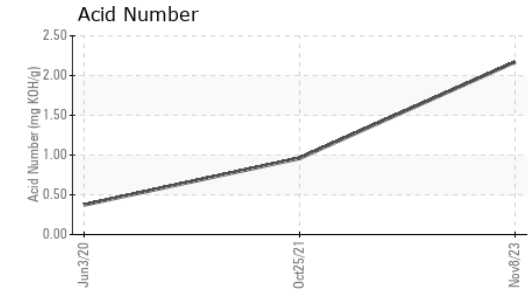
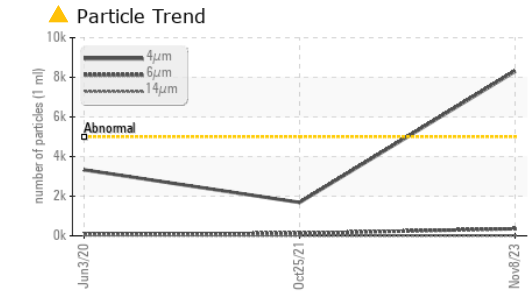
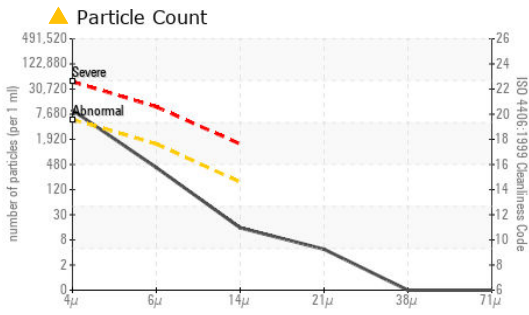
There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	15	14	0
Potassium	ppm	ASTM D5185m	>20	3	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 8303	1684	3330
Particles >6µm		ASTM D7647	>1300	356	124	95
Particles >14µm		ASTM D7647	>160	13	8	22
Particles >21µm		ASTM D7647	>40	4	3	5
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 20/16/11	18/14/10	19/14/12
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	>0.1	NEG	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		8	2	25
Boron	ppm	ASTM D5185m		140	119	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		13	11	2
Calcium	ppm	ASTM D5185m		4946	3872	10
Phosphorus	ppm	ASTM D5185m		1384	1266	40
Zinc	ppm	ASTM D5185m		1756	1544	9
Sulfur	ppm	ASTM D5185m		4802	4283	224
Acid Number (AN)	mg KOH/g	ASTM D8045		2.17	0.958	0.372
Visc @ 40°C	cSt	ASTM D445		50.5	---	---
Visc @ 100°C	cSt	ASTM D445		8.5	8.1	8.6
Viscosity Index (VI)	Scale	ASTM D2270		144	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06062606 **Received** : 17 Jan 2024  
**Lab Number** : 06062606 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10833988 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**RANDALL COUNTY ROAD DEPT.**  
 301 WEST HIGHWAY 60  
 CANYON, TX  
 US 79015  
 Contact: MIKE LEWIS

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: