



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**NOT GIVEN TR02938691**

Component  
**Hydraulic System**

Fluid  
**TRC HYDRAULIC OIL ISO 32- SAE10W (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02938691	---	---
Sample Date		Client Info		05 Oct 2011	---	---
Machine Age	hrs	Client Info		7401	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m		8	---	---
Chromium	ppm	ASTM D5185m		1	---	---
Nickel	ppm	ASTM D5185m		0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m		<1	---	---
Lead	ppm	ASTM D5185m		4	---	---
Copper	ppm	ASTM D5185m		1	---	---
Tin	ppm	ASTM D5185m		0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	LIGHT	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

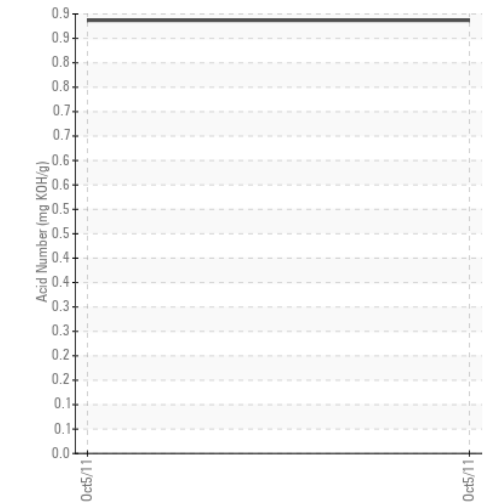
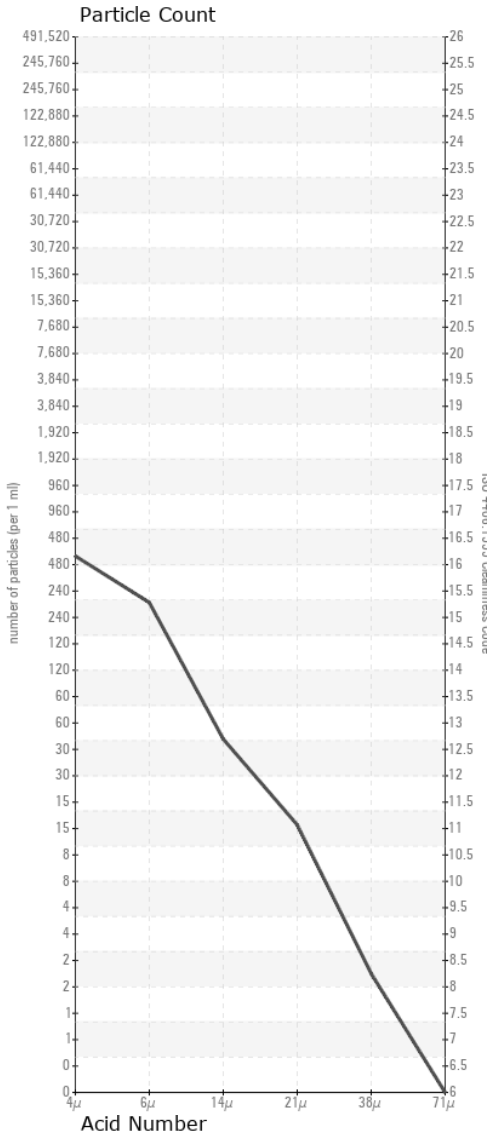
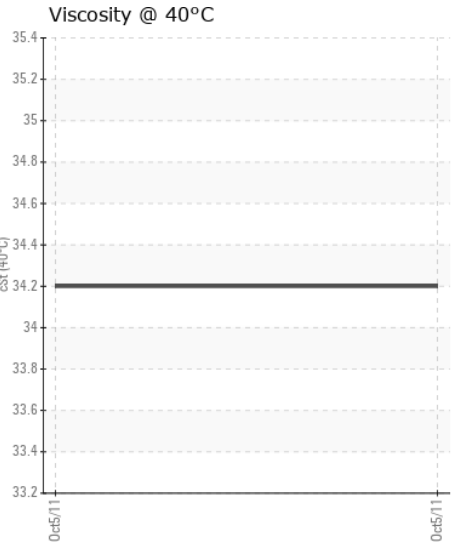
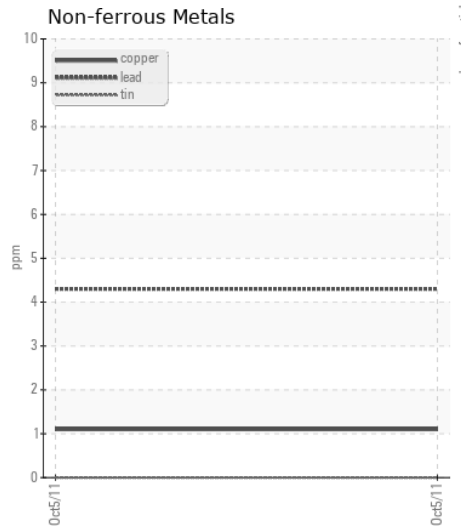
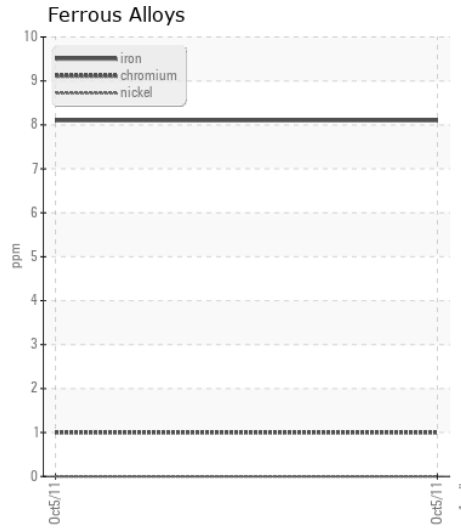
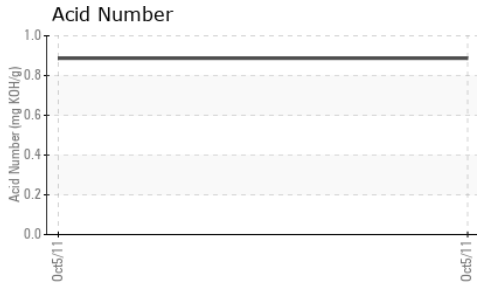
There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

Silicon	ppm	ASTM D5185m		2	---	---
Potassium	ppm	ASTM D5185m		0	---	---
Water		WC Method		NEG	---	---
Particles >4µm		ASTM D7647		472	---	---
Particles >6µm		ASTM D7647		257	---	---
Particles >14µm		ASTM D7647		43	---	---
Particles >21µm		ASTM D7647		14	---	---
Particles >38µm		ASTM D7647		2	---	---
Particles >71µm		ASTM D7647		0	---	---
Oil Cleanliness		ISO 4406 (c)		16/15/13	---	---
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		NEG	---	---

## FLUID CONDITION

The condition of oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		6	---	---
Calcium	ppm	ASTM D5185m		103	---	---
Phosphorus	ppm	ASTM D5185m		356	---	---
Zinc	ppm	ASTM D5185m		474	---	---
Sulfur	ppm	ASTM D5185m		2269	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.887	---	---
Visc @ 40°C	cSt	ASTM D445		34.2	---	---
Visc @ 100°C	cSt	ASTM D445		5.98	---	---
Viscosity Index (VI)	Scale	ASTM D2270		120	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR02938691 **Received** : 06 Oct 2011  
**Lab Number** : 02938691 **Tested** : 08 Oct 2011  
**Unique Number** : 5700249 **Diagnosed** : 10 Oct 2011 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: Bottom, KV100, VI )

**QUALITY WOODS**  
 504 E ROCK ST  
 ROCKLAND, WI  
 US 54653  
 Contact: SERVICE MANAGER

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: