



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION

Machine Id  
**NOT GIVEN TR01908851**

Component  
**Hydraulic System**

Fluid  
**TRC HYDRAULIC OIL ISO 32- SAE10W (160 GAL)**

**RECOMMENDATION**

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and service the filters on this component. Resample at the next service interval to monitor. Please note that there was too much water present in the oil to perform an accurate viscosity test.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR01908851	---	---
Sample Date		Client Info		30 Jan 2007	---	---
Machine Age	hrs	Client Info		5000	---	---
Oil Age	hrs	Client Info		1500	---	---
Filter Age	hrs	Client Info		500	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m		39	---	---
Chromium	ppm	ASTM D5185m		2	---	---
Nickel	ppm	ASTM D5185m		<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		2	---	---
Aluminum	ppm	ASTM D5185m		<1	---	---
Lead	ppm	ASTM D5185m		<1	---	---
Copper	ppm	ASTM D5185m		8	---	---
Tin	ppm	ASTM D5185m		0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

**CONTAMINATION**

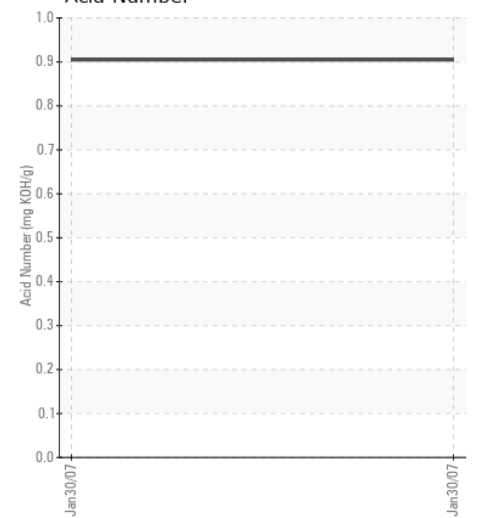
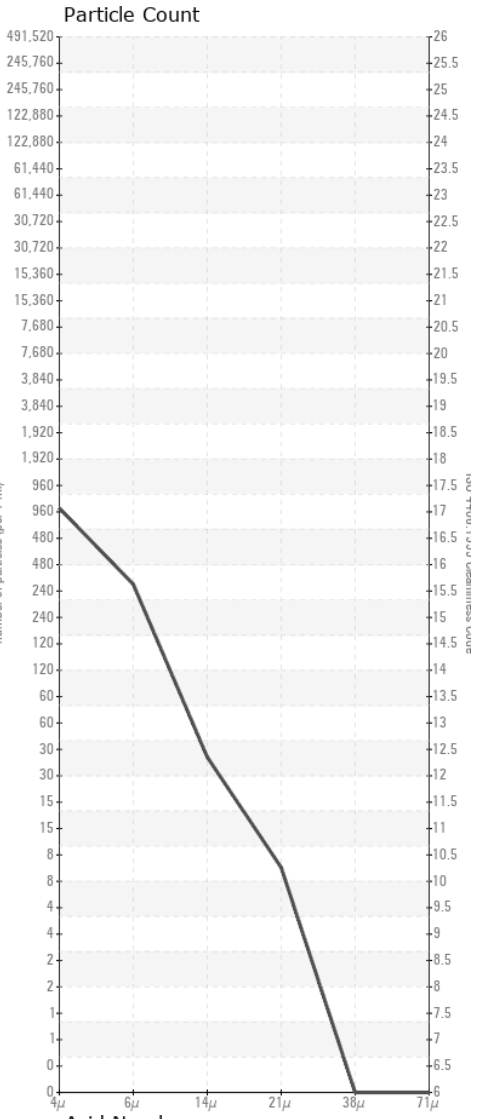
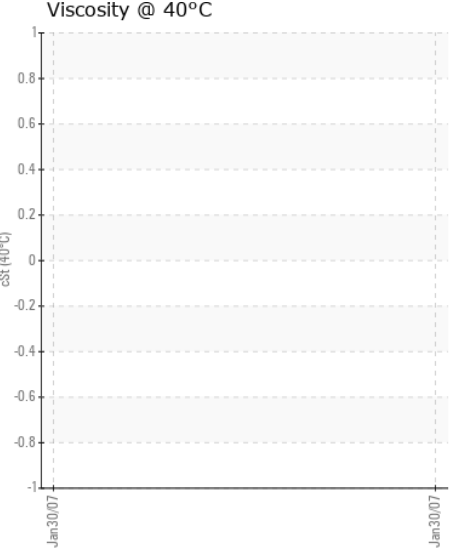
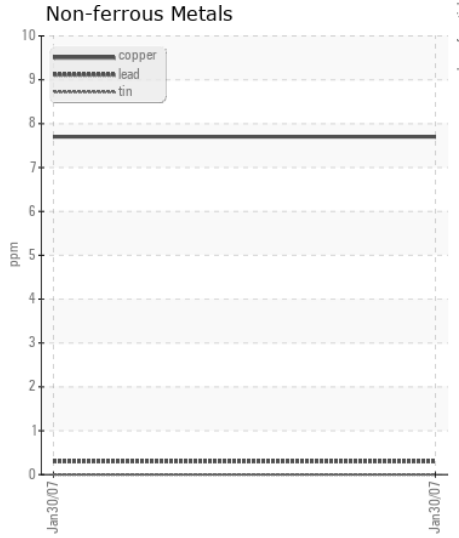
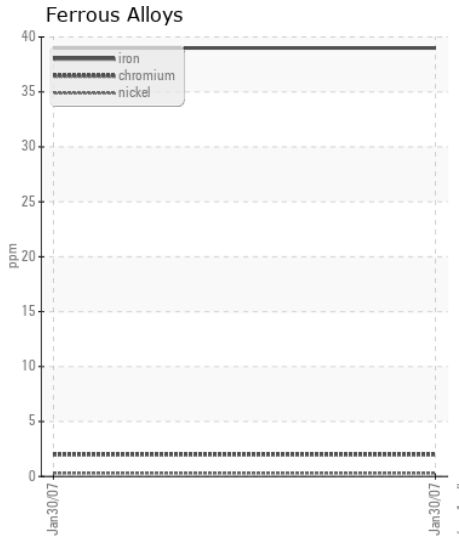
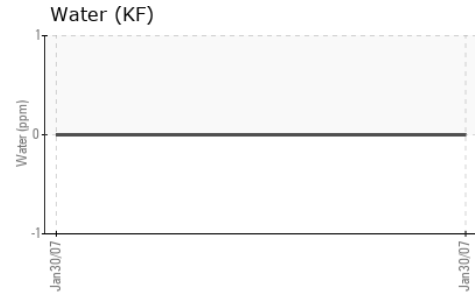
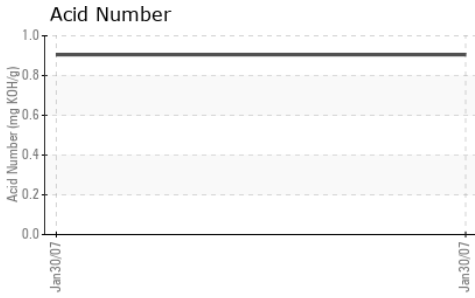
There is a high concentration of water present in the oil. Free water present.

Silicon	ppm	ASTM D5185m		5	---	---
Potassium	ppm	ASTM D5185m		0	---	---
Water	%	ASTM D6304		▲ 0.263	---	---
Particles >4µm		ASTM D7647		883	---	---
Particles >6µm		ASTM D7647		326	---	---
Particles >14µm		ASTM D7647		34	---	---
Particles >21µm		ASTM D7647		8	---	---
Particles >38µm		ASTM D7647		0	---	---
Particles >71µm		ASTM D7647		0	---	---
Oil Cleanliness		ISO 4406 (c)		17/16/12	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	● HAZY	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual		▲ 0.2%	---	---

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		0	---	---
Calcium	ppm	ASTM D5185m		28	---	---
Phosphorus	ppm	ASTM D5185m		732	---	---
Zinc	ppm	ASTM D5185m		865	---	---
Sulfur	ppm	ASTM D5185m		5656	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.905	---	---
Visc @ 100°C	cSt	ASTM D445		● 3.78	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR01908851 **Received** : 14 Feb 2007  
**Lab Number** : 01908851 **Tested** : 14 Feb 2007  
**Unique Number** : 4022525 **Diagnosed** :  
**Test Package** : MOB 2 ( Additional Tests: KF, KV100 )

**CANTON WELL DRILLING**  
 PO BOX 557  
 PLEASANT VALLEY, CT  
 US 06063  
 Contact: PAT KELLEY

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: (860)379-2460  
 F: