



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**GROVE C-17**  
 Component  
**Transmission**  
 Fluid  
**ATF (--- GAL)**

## RECOMMENDATION

We suspect abnormal metal contamination may be due to sampling method. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## WEAR

Moderate concentration of visible metal present. All component wear rates are normal.

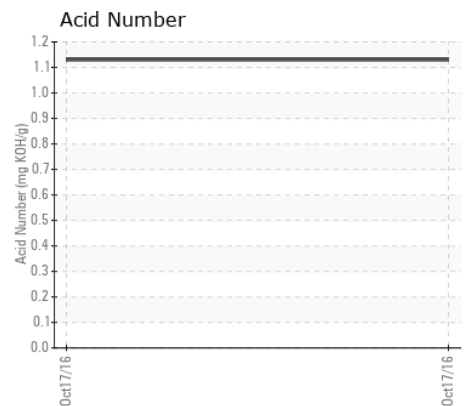
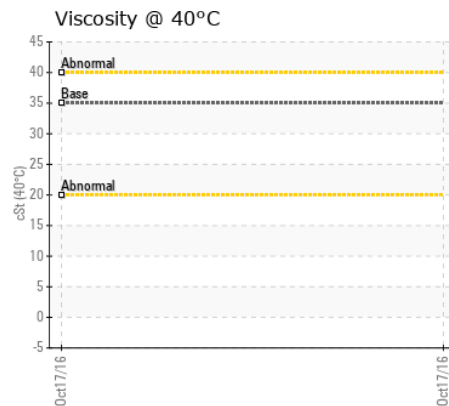
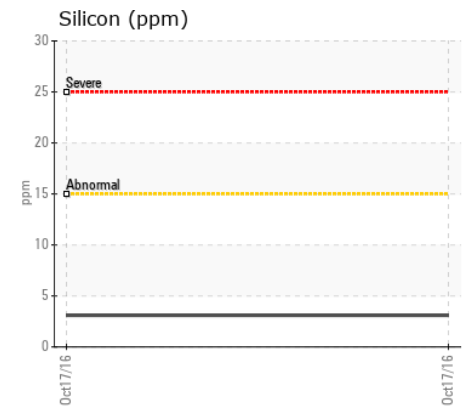
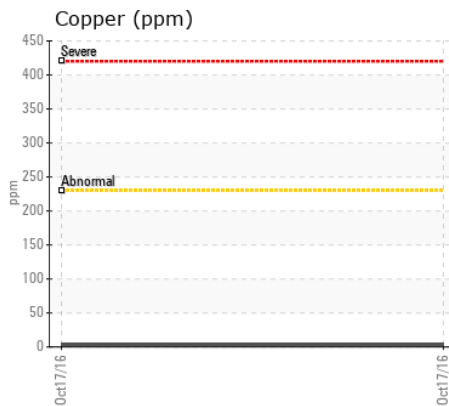
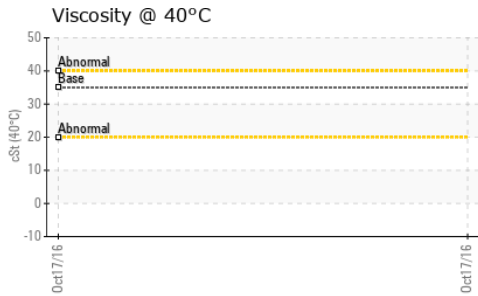
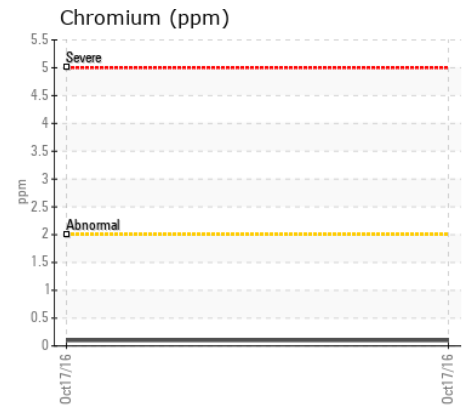
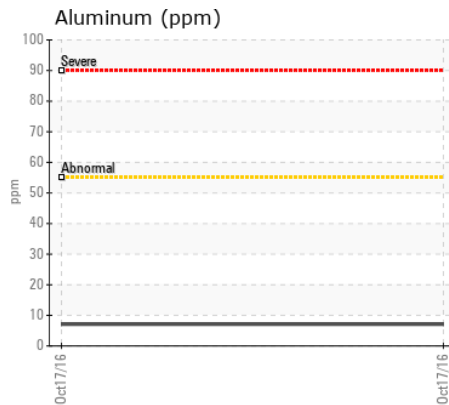
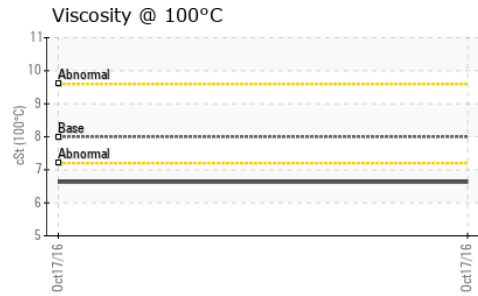
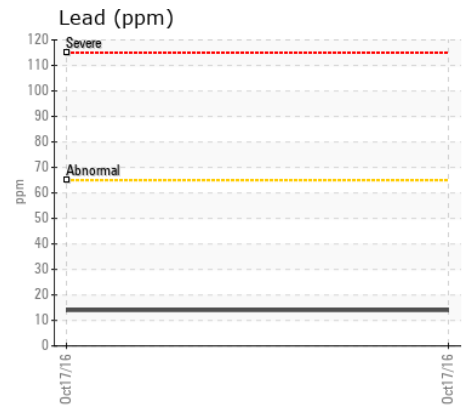
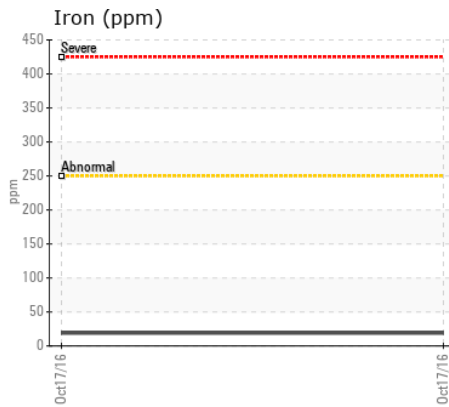
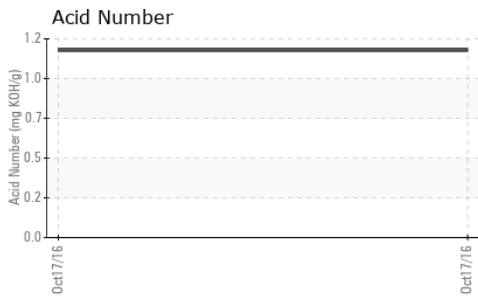
## CONTAMINATION

There is no indication of any contamination in the component.

## 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		TR04151747	---	---
Sample Date		Client Info		17 Oct 2016	---	---
Machine Age	hrs	Client Info		2066	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>250	19	---	---
Chromium	ppm	ASTM D5185m	>2	<1	---	---
Nickel	ppm	ASTM D5185m	>2	<1	---	---
Titanium	ppm	ASTM D5185m	>2	<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>55	7	---	---
Lead	ppm	ASTM D5185m	>65	14	---	---
Copper	ppm	ASTM D5185m	>230	4	---	---
Tin	ppm	ASTM D5185m	>6	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	▲ MODER	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>15	3	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water		WC Method	>0.1	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
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		4	---	---
Boron	ppm	ASTM D5185m		111	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		1	---	---
Calcium	ppm	ASTM D5185m		92	---	---
Phosphorus	ppm	ASTM D5185m		276	---	---
Zinc	ppm	ASTM D5185m		16	---	---
Sulfur	ppm	ASTM D5185m		1000	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.13	---	---
Visc @ 100°C	cSt	ASTM D445	8.0	6.63	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR04151747  
**Lab Number** : 04151747  
**Unique Number** : 7680150  
**Test Package** : MOB 2 ( Additional Tests: KV100 )

**Received** : 30 Jan 2017  
**Tested** : 01 Feb 2017  
**Diagnosed** : 01 Feb 2017 - Jonathan Hester

**CCS CONSTRUCTORS**  
 138 MUNSON AVE  
 MORRISVILLE, VT  
 US 05661  
 Contact: SCOTT BURRELL

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: