



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**LIFT TRUCK - MITSUBISHI - MA BAKER**

Component  
**Hydraulic System**

Fluid  
**{not provided} (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

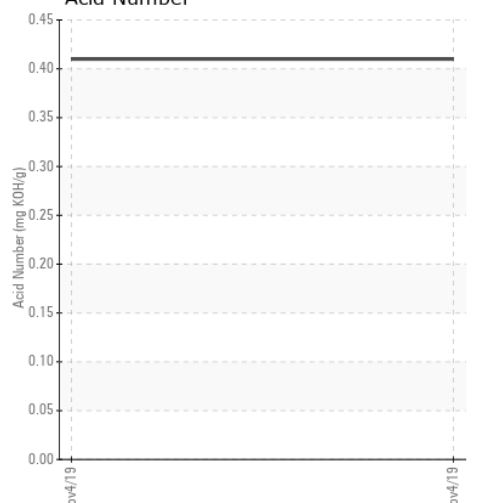
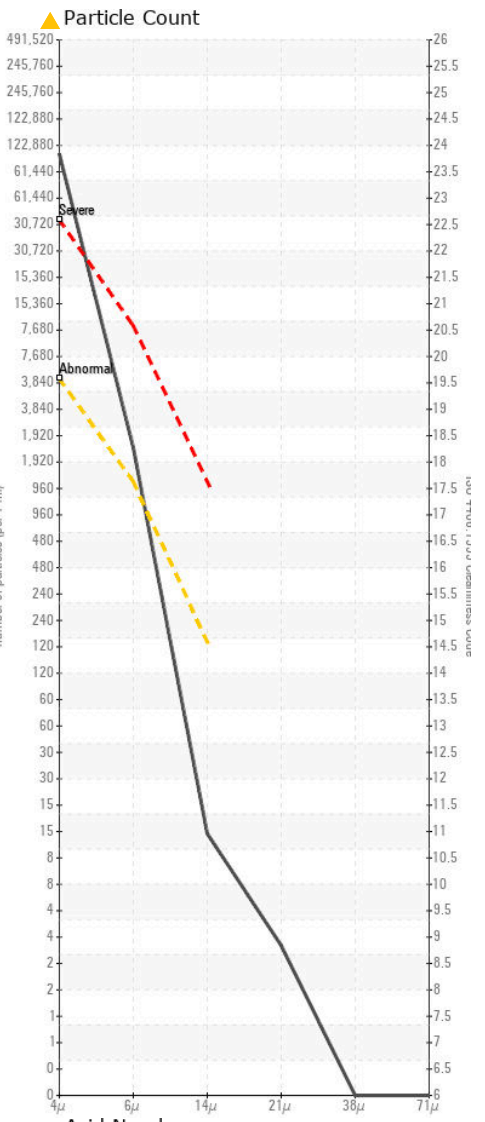
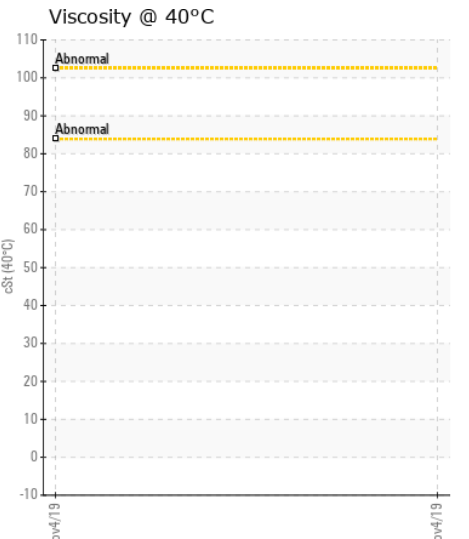
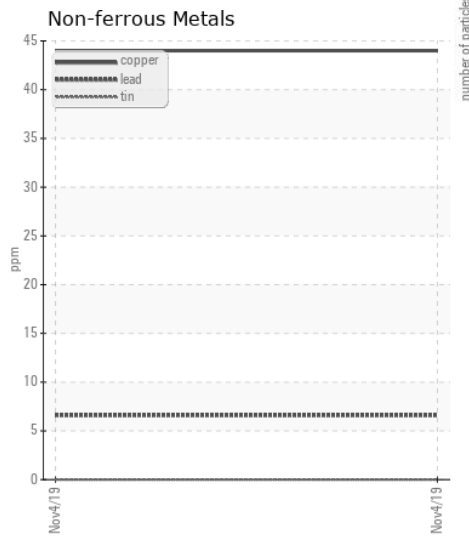
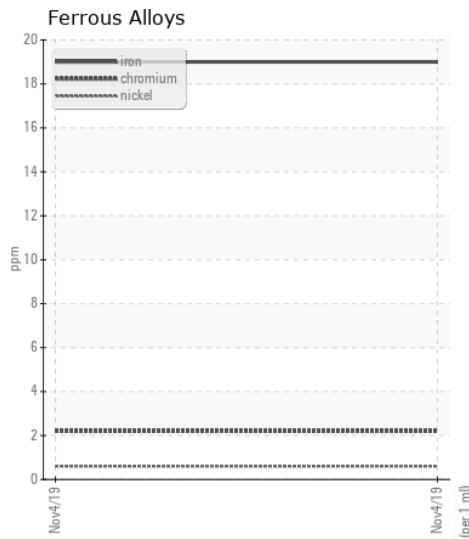
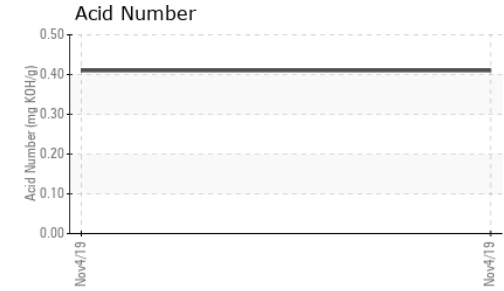
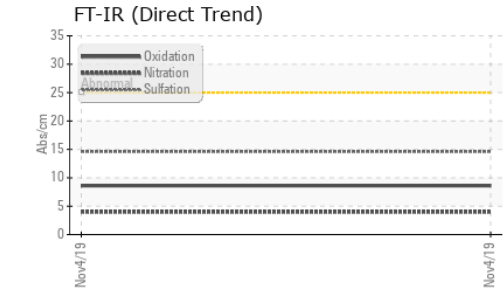
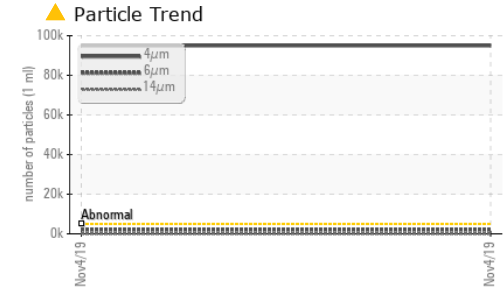
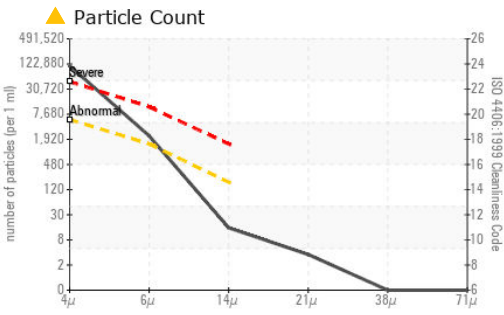
## CONTAMINATION

There is a high amount of silt (particulates < 6 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		TR04843742	---	---
Sample Date		Client Info		04 Nov 2019	---	---
Machine Age	mths	Client Info		0	---	---
Oil Age	mths	Client Info		0	---	---
Filter Age	mths	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>20	19	---	---
Chromium	ppm	ASTM D5185m	>10	2	---	---
Nickel	ppm	ASTM D5185m		<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>10	19	---	---
Lead	ppm	ASTM D5185m	>10	7	---	---
Copper	ppm	ASTM D5185m	>75	44	---	---
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	9	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.1	NEG	---	---
Soot %	%	*ASTM D7844		0	---	---
Nitration	Abs/cm	*ASTM D7624		4	---	---
Sulfation	Abs/.1mm	*ASTM D7415		14.6	---	---
Particles >4µm		ASTM D7647	>5000	▲ 94970	---	---
Particles >6µm		ASTM D7647	>1300	2034	---	---
Particles >14µm		ASTM D7647	>160	13	---	---
Particles >21µm		ASTM D7647	>40	3	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	<19/17/14	▲ 24/18/11	---	---
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		6	---	---
Boron	ppm	ASTM D5185m		40	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		2	---	---
Calcium	ppm	ASTM D5185m		125	---	---
Phosphorus	ppm	ASTM D5185m		184	---	---
Zinc	ppm	ASTM D5185m		109	---	---
Sulfur	ppm	ASTM D5185m		2850	---	---
Oxidation	Abs/.1mm	*ASTM D7414		8.6	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.410	---	---
Visc @ 100°C	cSt	ASTM D445		5.8	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR04843742 **Received** : 11 Nov 2019  
**Lab Number** : 04843742 **Tested** : 13 Nov 2019  
**Unique Number** : 8813682 **Diagnosed** : 13 Nov 2019 - Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, FuelDilution, KV100, TBN )

**TEXAS REFINERY - MEXICO**

FORT WORTH, TX  
 US 76106

Contact: JOSE PEPE GARCIA

pedidos@texasrefinery.com.mx; josepegarcia@texasrefinery.com.mx

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: (817)336-6103