

# OIL ANALYSIS REPORT

Sample Rating Trend

**WATER**



Machine Id  
**HAITIAN GROUP CO. LT HTF 530X INV-530X (S/N 0605053016616EX311)**  
 Component  
**Rear Hydraulic System**  
 Fluid  
**ISO 68 (330 GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a moderate amount of particulates present in the oil. Free water present. There is a trace of moisture present in the oil.

### Fluid Condition

The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>RP76380</b>	---	---
Sample Date	Client Info	<b>28 Sep 2012</b>	---	---
Machine Age	hrs Client Info	<b>64920</b>	---	---
Oil Age	hrs Client Info	<b>13200</b>	---	---
Oil Changed	Client Info	<b>Not Chngd</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m		<b>&lt;1</b>	---	---
Chromium ppm ASTM D5185m		<b>&lt;1</b>	---	---
Nickel ppm ASTM D5185m		<b>0</b>	---	---
Titanium ppm ASTM D5185m		<b>0</b>	---	---
Silver ppm ASTM D5185m		<b>0</b>	---	---
Aluminum ppm ASTM D5185m		<b>0</b>	---	---
Lead ppm ASTM D5185m		<b>&lt;1</b>	---	---
Copper ppm ASTM D5185m		<b>20</b>	---	---
Tin ppm ASTM D5185m		<b>0</b>	---	---
Antimony ppm ASTM D5185m		<b>0</b>	---	---
Vanadium ppm ASTM D5185m		<b>0</b>	---	---
Cadmium ppm ASTM D5185m		<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m		<b>0</b>	---	---
Barium ppm ASTM D5185m		<b>0</b>	---	---
Molybdenum ppm ASTM D5185m		<b>0</b>	---	---
Manganese ppm ASTM D5185m		<b>0</b>	---	---
Magnesium ppm ASTM D5185m		<b>0</b>	---	---
Calcium ppm ASTM D5185m		<b>15</b>	---	---
Phosphorus ppm ASTM D5185m		<b>282</b>	---	---
Zinc ppm ASTM D5185m		<b>266</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m		<b>&lt;1</b>	---	---
Sodium ppm ASTM D5185m		<b>0</b>	---	---
Potassium ppm ASTM D5185m		<b>0</b>	---	---
Water % ASTM D6304		<b>▲ 0.054</b>	---	---
ppm Water ppm ASTM D6304		<b>▲ 540</b>	---	---

## FLUID CLEANLINESS

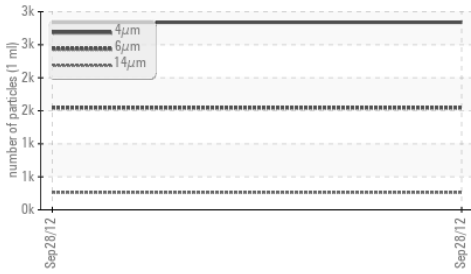
method	limit/base	current	history1	history2
Particles >4µm ASTM D7647		<b>2839</b>	---	---
Particles >6µm ASTM D7647		<b>▲ 1546</b>	---	---
Particles >14µm ASTM D7647		<b>▲ 263</b>	---	---
Particles >21µm ASTM D7647		<b>▲ 88</b>	---	---
Particles >38µm ASTM D7647		<b>▲ 13</b>	---	---
Particles >71µm ASTM D7647		<b>▲ 1</b>	---	---
Oil Cleanliness ISO 4406 (c)		<b>▲ 19/18/15</b>	---	---

## FLUID DEGRADATION

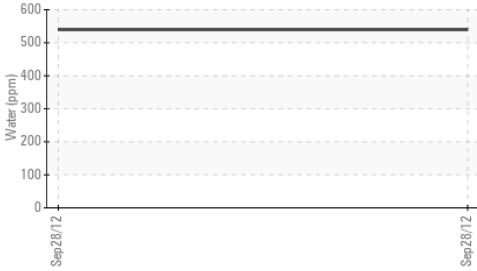
method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045		<b>0.352</b>	---	---

# OIL ANALYSIS REPORT

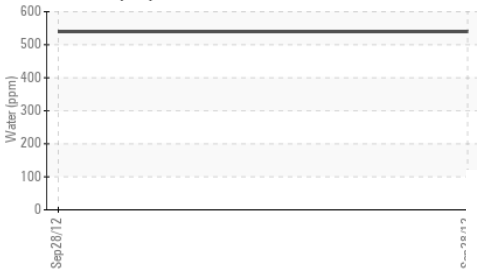
**▲ Particle Trend**



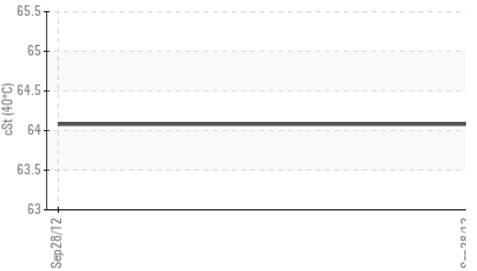
**Water (KF)**



**Water (KF)**



**Viscosity @ 40°C**



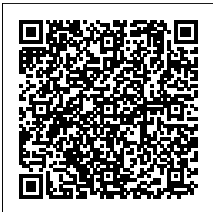
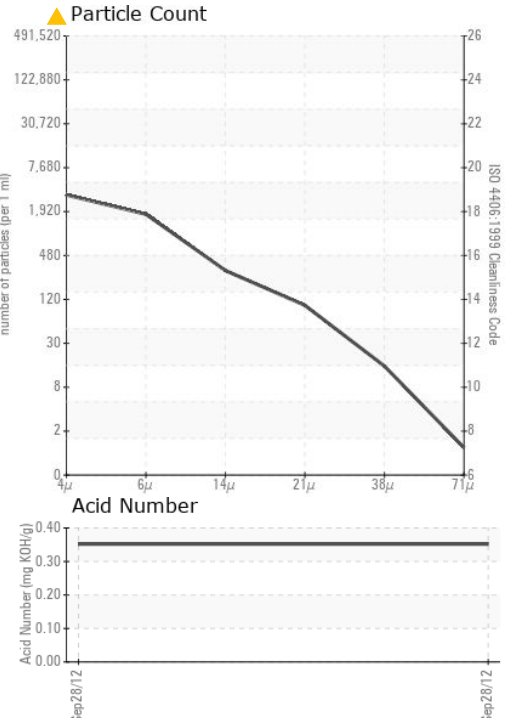
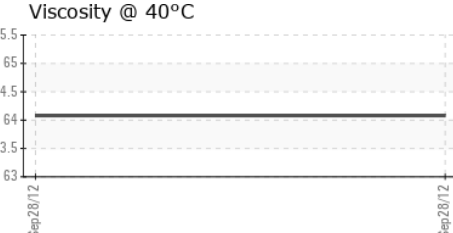
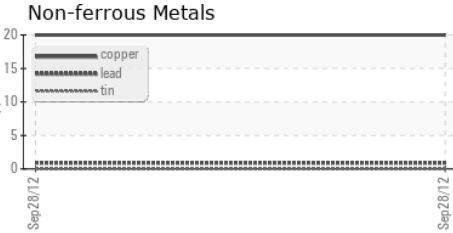
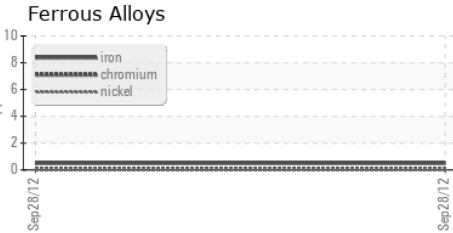
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	● LAYRD	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	▲ 0.1%	---	---
Free Water	scalar	*Visual	▲ 2.0	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	64.08	---	---
Fluid Type		*In-house	ISO_HYD_AW_LO	---	---

**SAMPLE IMAGES**

method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

**GRAPHS**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP76380 **Received** : 01 Oct 2012  
**Lab Number** : 03149950 **Tested** : 04 Oct 2012  
**Unique Number** : 6042436 **Diagnosed** : 04 Oct 2012 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: FluidDetermination )

**OILMAX S.A.S.**  
 AV 6 DICIEMBRE Y GASPAR CANTERO  
 QUITO-ECUADOR,

Contact: DANNY BARREIRO  
 oilmax.ec@gmail.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - 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)

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F: x: