



PROBLEM SUMMARY

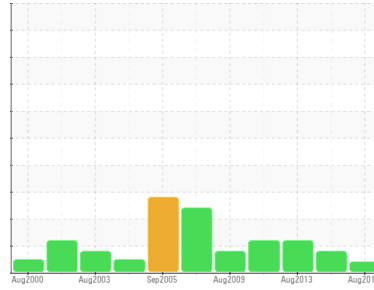
Area
[1003666]

Machine Id
0052

Component
Hydraulic System

Fluid
MOBIL VACUOLINE OIL 1405 (25 GAL)

Sample Rating Trend



VIS DEBRIS



COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Debris	scalar	*Visual	NONE	▲ HEAVY	VLITE	▲ MODER

Customer Id: THESYL
Sample No.: WCI2282238
Lab Number: 03806631
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	MISSED	Sep 12 2016	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

19 Aug 2014 Diag: Jonathan Hester

WEAR



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. The iron level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



19 Aug 2013 Diag: Jonathan Hester

WEAR



We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. The iron level has decreased, but is still abnormal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



26 Aug 2010 Diag: Don Baldrige

WEAR



We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend you service the filters on this component. Resample at the next service interval to monitor. The iron level is abnormal. High concentration of visible dirt/debris present in the oil. The condition of oil is suitable for further service.

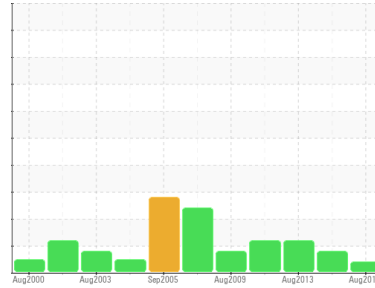
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Area
[1003666]

Machine Id
0052

Component
Hydraulic System

Fluid
MOBIL VACUOLINE OIL 1405 (25 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

High concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WCI2282238	WCI2270810	WCI2239751
Sample Date	Client Info	17 Aug 2015	19 Aug 2014	19 Aug 2013
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >20	26	▲ 96	▲ 58
Chromium ppm	ASTM D5185m >20	<1	<1	<1
Nickel ppm	ASTM D5185m >20	<1	<1	<1
Titanium ppm	ASTM D5185m	0	0	0
Silver ppm	ASTM D5185m	<1	0	0
Aluminum ppm	ASTM D5185m >20	<1	1	<1
Lead ppm	ASTM D5185m >20	2	5	4
Copper ppm	ASTM D5185m >20	4	8	5
Tin ppm	ASTM D5185m >20	0	0	0
Antimony ppm	ASTM D5185m	0	0	0
Vanadium ppm	ASTM D5185m	0	0	0
Cadmium ppm	ASTM D5185m	2	5	3

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m	<1	<1	<1
Barium ppm	ASTM D5185m	203	122	84
Molybdenum ppm	ASTM D5185m	<1	<1	<1
Manganese ppm	ASTM D5185m	1	4	3
Magnesium ppm	ASTM D5185m	<1	4	4
Calcium ppm	ASTM D5185m	14	39	25
Phosphorus ppm	ASTM D5185m	604	502	296
Zinc ppm	ASTM D5185m	20	64	42
Sulfur ppm	ASTM D5185m	3801	4971	3221

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >15	2	4	2
Sodium ppm	ASTM D5185m	2	4	3
Potassium ppm	ASTM D5185m >20	5	11	0

FLUID CLEANLINESS

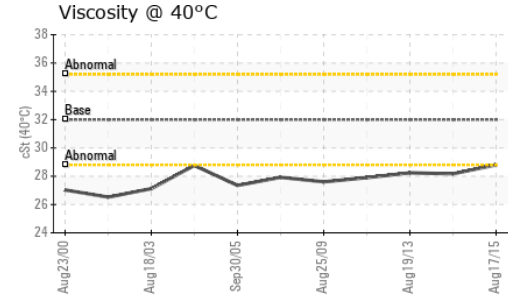
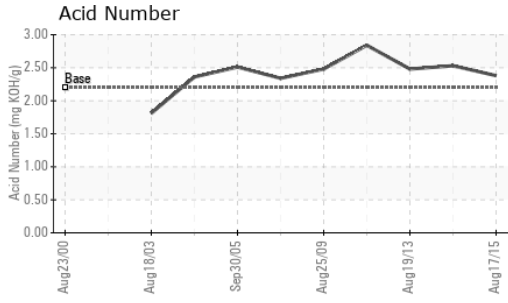
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	---	1087	---
Particles >6µm	ASTM D7647 >1300	---	592	---
Particles >14µm	ASTM D7647 >160	---	100	---
Particles >21µm	ASTM D7647 >40	---	34	---
Particles >38µm	ASTM D7647 >10	---	5	---
Particles >71µm	ASTM D7647 >3	---	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	---	17/16/14	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045 2.2	2.38	2.53	2.48



OIL ANALYSIS REPORT



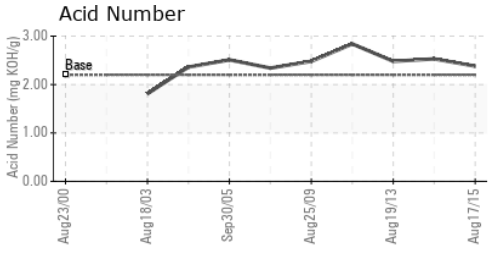
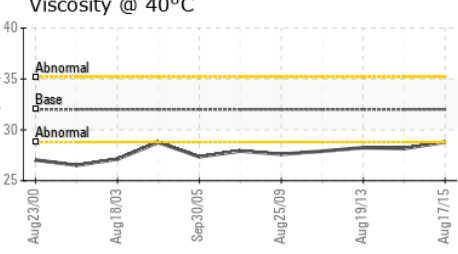
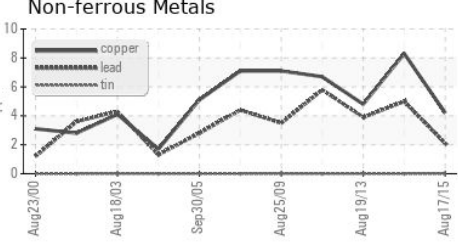
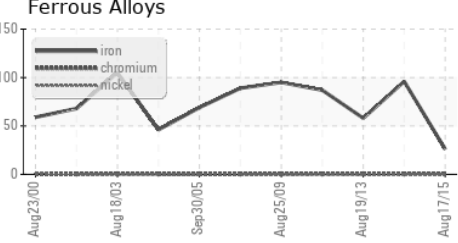
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ HEAVY	VLITE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	32	28.8	28.17	28.24

SAMPLE IMAGES

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC12282238 **Received** : 20 Aug 2015
Lab Number : 03806631 **Diagnosed** : 21 Aug 2015
Unique Number : 7109663 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: PQ)

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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)