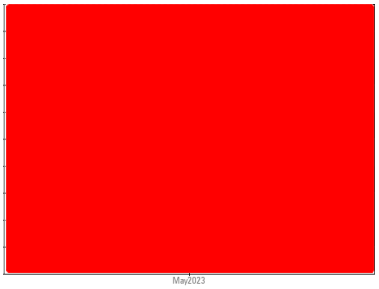
# PROBLEM SUMMARY

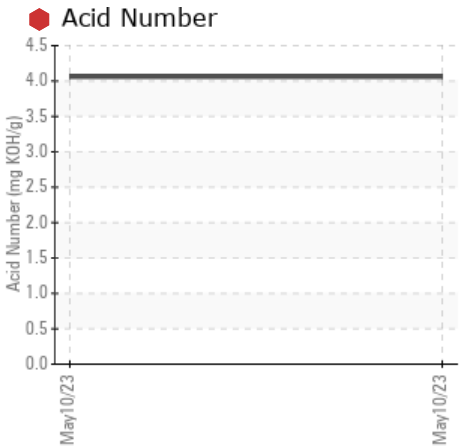
Sample Rating Trend

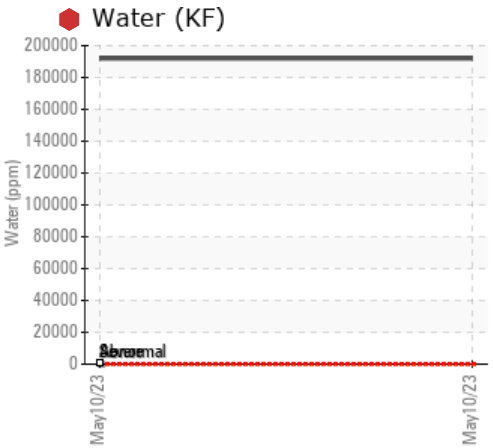


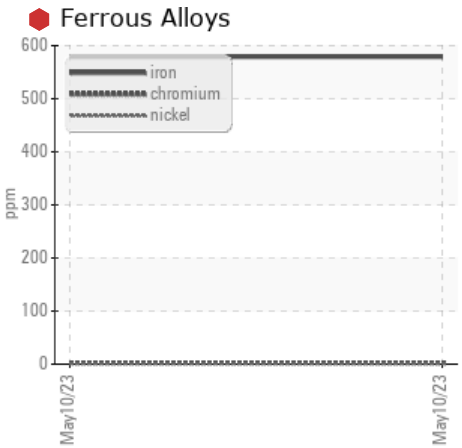
WEAR

Machine Id
## SCHLIENGER RS
Component
**Vacuum Pump**
Fluid
**CHEVRON RANDO HD 150 (13 GAL)**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample Status | | | | SEVERE | --- | --- |
| Iron | ppm | ASTM D5185m | >20 | 579 | --- | --- |
| Water | % | ASTM D6304 | | 19.2 | --- | --- |
| ppm Water | ppm | ASTM D6304 | >.1 | 192000 | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 4.06 | --- | --- |
| Silt | scalar | *Visual | NONE | MODER | --- | --- |
| Debris | scalar | *Visual | NONE | MODER | --- | --- |
| Emulsified Water | scalar | *Visual | | 0.2% | --- | --- |
| Free Water | scalar | *Visual | | 1.0 | --- | --- |

**Customer Id:** ATIMONNC
**Sample No.:** WC0749057
**Lab Number:** 05844499
**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

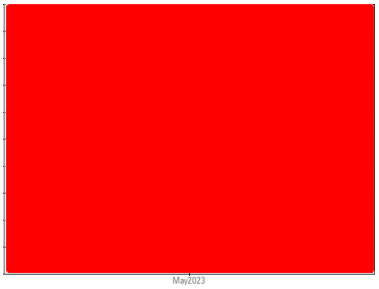
## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Inspect Wear Source | --- | --- | ? | We advise that you inspect for the source(s) of wear. |
| Change Fluid | --- | --- | ? | We recommend that you drain the oil and perform a filter service on this component if not already done. |
| Change Filter | --- | --- | ? | We recommend that you drain the oil and perform a filter service on this component if not already done. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |

## HISTORICAL DIAGNOSIS

# OIL ANALYSIS REPORT

Sample Rating Trend




WEAR

Machine Id
## SCHLIENGER RS
Component
**Vacuum Pump**
Fluid
**CHEVRON RANDO HD 150 (13 GAL)**

## DIAGNOSIS

**Recommendation**
We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

**Wear**
The iron level is severe.

**Contamination**
Appearance is milky. Free water present. There is a high concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample.

**Fluid Condition**
The AN level is above the recommended limit. The oil is no longer serviceable due to the presence of contaminants.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0749057** | --- | --- |
| Sample Date | | Client Info | | **10 May 2023** | --- | --- |
| Machine Age | hrs | Client Info | | **0** | --- | --- |
| Oil Age | hrs | Client Info | | **80** | --- | --- |
| Oil Changed | | Client Info | | **Not Changd** | --- | --- |
| Sample Status | | | | **SEVERE** | --- | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >20 | **579** | --- | --- |
| Chromium | ppm | ASTM D5185m | >20 | **2** | --- | --- |
| Nickel | ppm | ASTM D5185m | >20 | **1** | --- | --- |
| Titanium | ppm | ASTM D5185m | | **<1** | --- | --- |
| Silver | ppm | ASTM D5185m | | **0** | --- | --- |
| Aluminum | ppm | ASTM D5185m | >20 | **9** | --- | --- |
| Lead | ppm | ASTM D5185m | >20 | **<1** | --- | --- |
| Copper | ppm | ASTM D5185m | >20 | **2** | --- | --- |
| Tin | ppm | ASTM D5185m | >20 | **0** | --- | --- |
| Vanadium | ppm | ASTM D5185m | | **<1** | --- | --- |
| Cadmium | ppm | ASTM D5185m | | **1** | --- | --- |

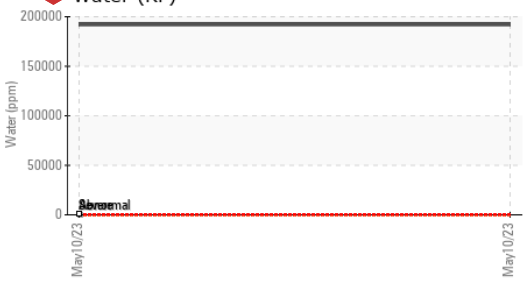
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **86** | --- | --- |
| Barium | ppm | ASTM D5185m | | **0** | --- | --- |
| Molybdenum | ppm | ASTM D5185m | | **22** | --- | --- |
| Manganese | ppm | ASTM D5185m | | **4** | --- | --- |
| Magnesium | ppm | ASTM D5185m | | **336** | --- | --- |
| Calcium | ppm | ASTM D5185m | | **368** | --- | --- |
| Phosphorus | ppm | ASTM D5185m | | **468** | --- | --- |
| Zinc | ppm | ASTM D5185m | | **459** | --- | --- |
| Sulfur | ppm | ASTM D5185m | | **1905** | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >15 | **10** | --- | --- |
| Sodium | ppm | ASTM D5185m | | **5** | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | **2** | --- | --- |
| Water | % | ASTM D6304 | | **19.2** | --- | --- |
| ppm Water | ppm | ASTM D6304 | >.1 | **192000** | --- | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **4.06** | --- | --- |

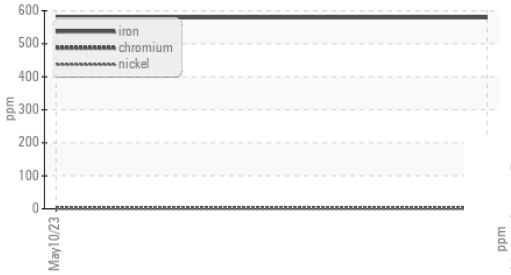
# OIL ANALYSIS REPORT

Water (KF)

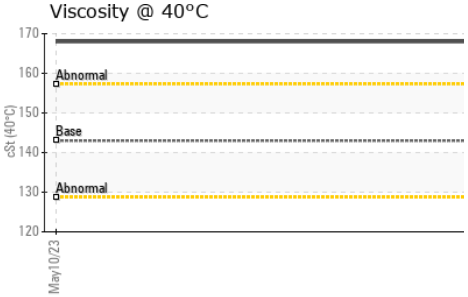



Water (KF)


Ferrous Alloys

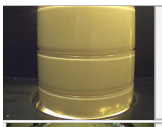



Viscosity @ 40°C



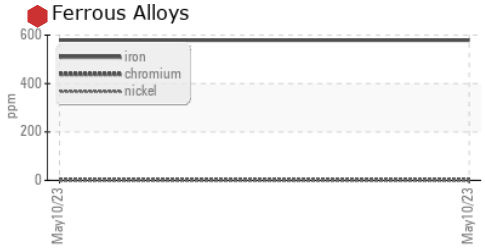

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | --- | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | --- | --- |
| Silt | scalar | *Visual | NONE | ▲ **MODER** | --- | --- |
| Debris | scalar | *Visual | NONE | ▲ **MODER** | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | --- | --- |
| Appearance | scalar | *Visual | NORML | ▲ **MILKY** | --- | --- |
| Odor | scalar | *Visual | NORML | **NORML** | --- | --- |
| Emulsified Water | scalar | *Visual | | ⬢ **0.2%** | --- | --- |
| Free Water | scalar | *Visual | | ⬢ **1.0** | --- | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 143 | **168** | --- | --- |

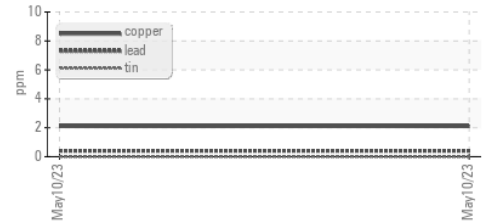
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | *no image* | *no image* |
| Bottom | | |  | *no image* | *no image* |

## GRAPHS

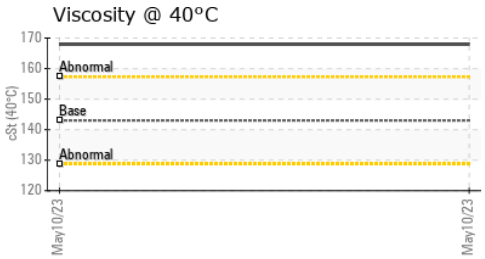
Ferrous Alloys



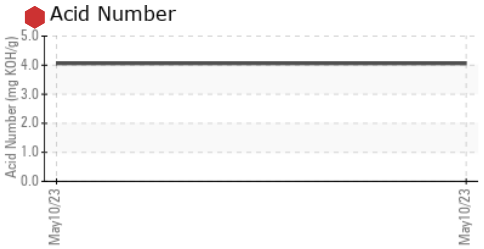

Non-ferrous Metals




Viscosity @ 40°C




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0749057 **Recieved** : 11 May 2023
**Lab Number** : 05844499 **Diagnosed** : 15 May 2023
**Unique Number** : 10468606 **Diagnostician** : Jonathan Hester
**Test Package** : IND 2 ( Additional Tests: KF )

*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)*

**ATI METALS - BAKERS - BNO**
6400 ALLOY WAY
MONROE, NC
US 28111
Contact: JODEY BIRCHMORE
jodey.birchmore@atimetals.com
T:
F: