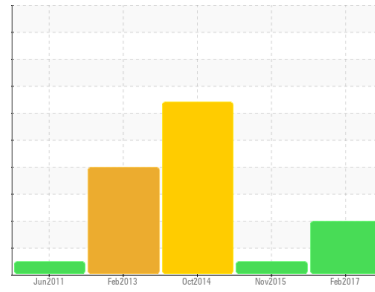




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**SIAD 2 HYDROGEN COMPRESSOR (S/N M18001)**  
 Component  
**Compressor**  
 Fluid  
**MEGFLOW AW 100 (6 GAL)**

## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of particulates 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		<b>WCI2305189</b>	WCI2258365	WCI2258311
Sample Date	Client Info		<b>24 Feb 2017</b>	27 Nov 2015	07 Oct 2014
Machine Age	hrs	Client Info	<b>1486</b>	85	8238
Oil Age	hrs	Client Info	<b>599</b>	85	489
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	SEVERE

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>5</b>	2	37
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	2
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	0	2
Lead	ppm	ASTM D5185m >25	<b>9</b>	15	<b>▲ 344</b>
Copper	ppm	ASTM D5185m >50	<b>3</b>	2	39
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

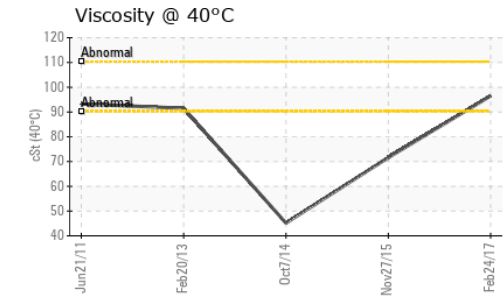
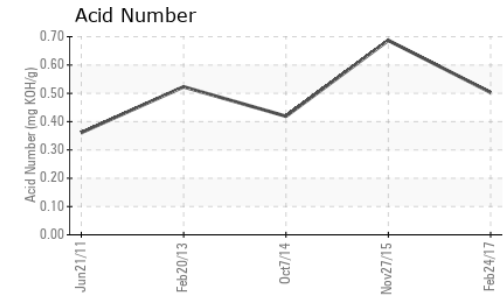
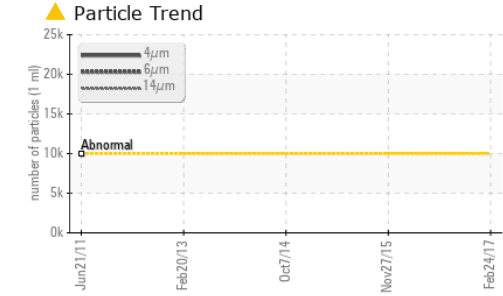
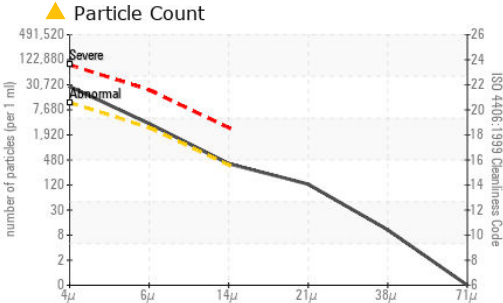
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	1
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	20
Calcium	ppm	ASTM D5185m	<b>42</b>	76	194
Phosphorus	ppm	ASTM D5185m	<b>321</b>	386	326
Zinc	ppm	ASTM D5185m	<b>399</b>	502	378
Sulfur	ppm	ASTM D5185m	<b>766</b>	914	955

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	6	11
Sodium	ppm	ASTM D5185m	<b>2</b>	2	1
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	15



# OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 24250	---	---
Particles >6µm	ASTM D7647	>2500	▲ 3133	---	---
Particles >14µm	ASTM D7647	>320	▲ 343	---	---
Particles >21µm	ASTM D7647	>80	▲ 111	---	---
Particles >38µm	ASTM D7647	>20	9	---	---
Particles >71µm	ASTM D7647	>4	0	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 22/19/16	---	---
Particles 5-15µm	count *NAS 1638	>2500	267035	---	---
Particles 15-25µm	count *NAS 1638	>320	22248	---	---
Particles 25-50µm	count *NAS 1638	>80	10265	---	---
Particles 50-100µm	count *NAS 1638	>20	877	---	---
Particles >100µm	count *NAS 1638	>4	0	---	---
NAS Code	*NAS 1638	>20/18/15	11	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045		0.503	0.687	0.419

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar *Visual	NONE	VLITE	NONE	LIGHT
Yellow Metal	scalar *Visual	NONE	NONE	NONE	NONE
Precipitate	scalar *Visual	NONE	NONE	NONE	NONE
Silt	scalar *Visual	NONE	NONE	NONE	NONE
Debris	scalar *Visual	NONE	LIGHT	NONE	LIGHT
Sand/Dirt	scalar *Visual	NONE	NONE	NONE	NONE
Appearance	scalar *Visual	NORML	NORML	NORML	NORML
Odor	scalar *Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar *Visual	>0.1	NEG	NEG	NEG
Free Water	scalar *Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445		96.51	71.6	● 45.16

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC12305189      **Received** : 02 Mar 2017  
**Lab Number** : 04173922      **Tested** : 06 Mar 2017  
**Unique Number** : 7717332      **Diagnosed** : 06 Mar 2017 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: PrtCount, PrtCountNAS )

**UNITED HYDROGEN OF TENNESSEE**  
 1186 LOWER RIVER RD  
 CHARLESTON, TN  
 US 37310  
 Contact: WILLIAM HERRON  
 wherron@unitedhydrogengroup.com  
 T: (423)503-9820  
 F:

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)