



PROBLEM SUMMARY

Sample Rating Trend



WATER

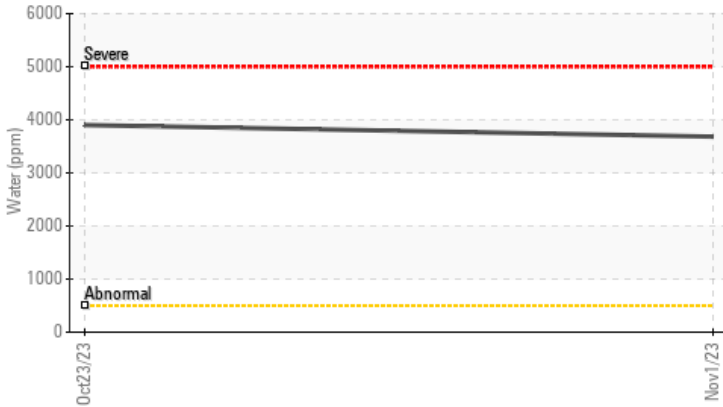


Area
RRHP Intake Structure
 Machine Id
029-000-310 RRHP Intake

Component
Hydraulic System
 Fluid
UCON TRIDENT AW HYDRAULIC FLUID 32 (300 GAL)

COMPONENT CONDITION SUMMARY

▲ Water (KF)



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.
 Please note that this is a corrected copy for laboratory data update for water content.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	---
Water	%	ASTM D6304	>0.05	▲ 0.368	▲ 0.390	---
ppm Water	ppm	ASTM D6304	>500	▲ 3683	▲ 3902	---

Customer Id: MISPEL
 Sample No.: WC0879255
 Lab Number: 06012364
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

23 Oct 2023 Diag: Doug Bogart

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data update for water content. All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report





OIL ANALYSIS REPORT

Sample Rating Trend

WATER



Area
RRHP Intake Structure
 Machine Id
029-000-310 RRHP Intake
 Component
Hydraulic System
 Fluid
UCON TRIDENT AW HYDRAULIC FLUID 32 (300 GAL)



DIAGNOSIS

Recommendation
 No corrective action is recommended at this time. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data update for water content.

Wear
 All component wear rates are normal.

Contamination
 There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

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		WC0879255	WC0879254	---
Sample Date	Client Info		01 Nov 2023	23 Oct 2023	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Filtered	Filtered	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m	0	0	0	---
Magnesium	ppm	ASTM D5185m	0	0	0	---
Calcium	ppm	ASTM D5185m	0	0	0	---
Phosphorus	ppm	ASTM D5185m	150	199	194	---
Zinc	ppm	ASTM D5185m	0	0	0	---
Sulfur	ppm	ASTM D5185m	0	0	0	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	2	2	---
Sodium	ppm	ASTM D5185m		0	0	---
Potassium	ppm	ASTM D5185m	>20	1	1	---
Water	%	ASTM D6304	>0.05	▲ 0.368	▲ 0.390	---
ppm Water	ppm	ASTM D6304	>500	▲ 3683	▲ 3902	---

FLUID CLEANLINESS

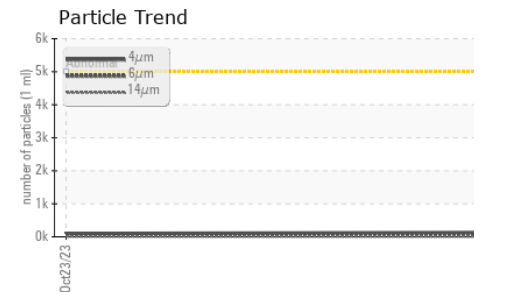
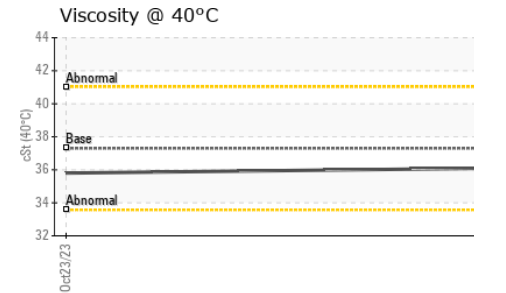
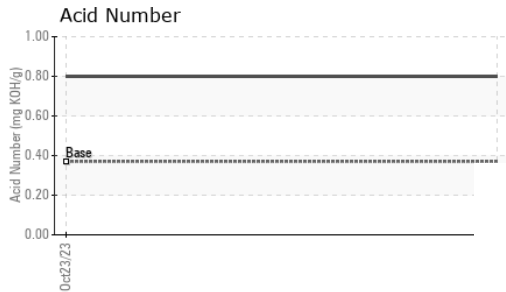
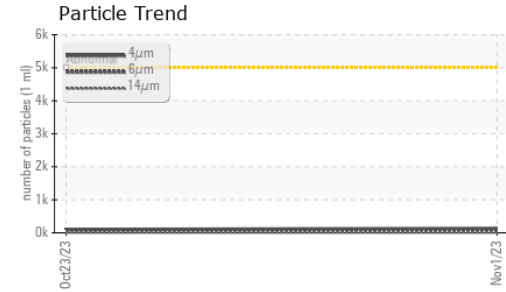
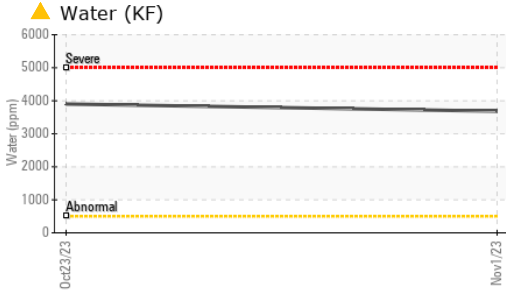
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	132	102	---
Particles >6µm	ASTM D7647	>1300	57	49	---
Particles >14µm	ASTM D7647	>160	8	8	---
Particles >21µm	ASTM D7647	>40	3	2	---
Particles >38µm	ASTM D7647	>10	1	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	14/13/10	14/13/10	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.37	0.80	0.80	---



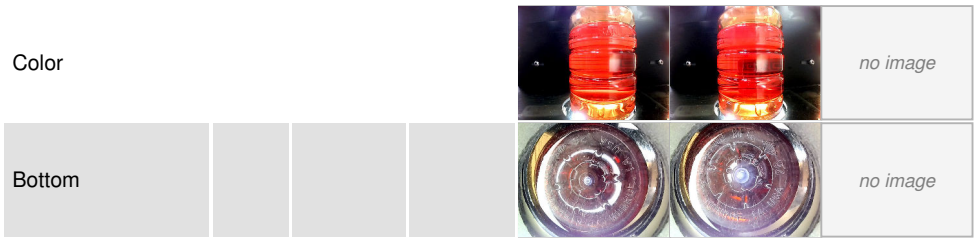
OIL ANALYSIS REPORT



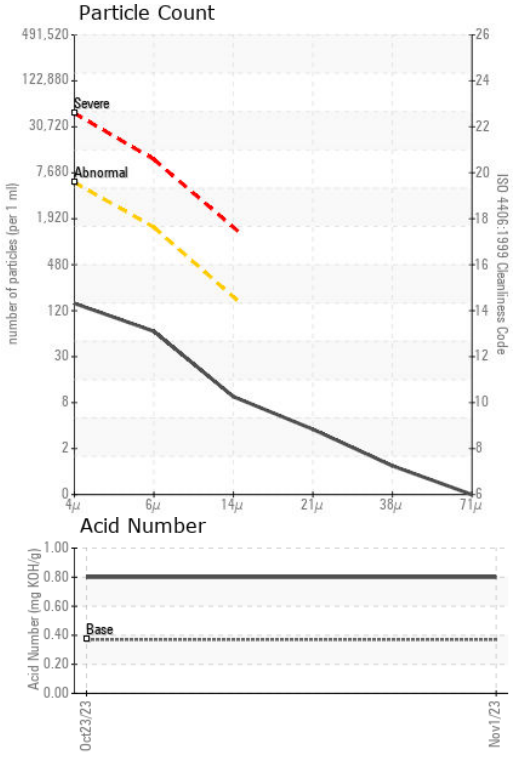
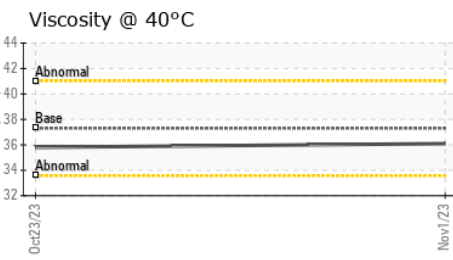
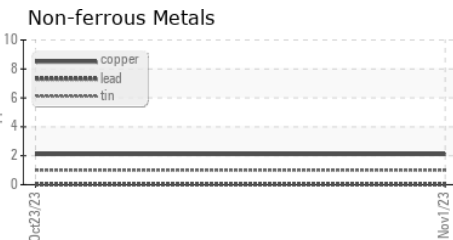
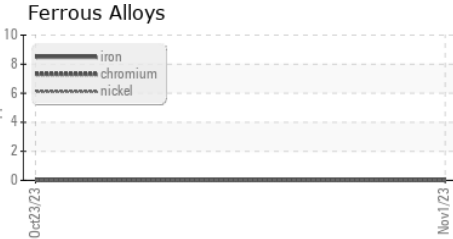
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	37.3	36.1	35.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0879255 **Received** : 20 Nov 2023
Lab Number : 06012364 **Diagnosed** : 29 Nov 2023
Unique Number : 10751508 **Diagnostician** : Doug Bogart
Test Package : PLANT

Missouri River Energy Services - Red Rock Hydro
 1004 216th Place
 Pella, IA
 CA 50219
 Contact: Vern Cochran
 vern.cochran@mrenergy.com
 T: (605)357-6920
 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)