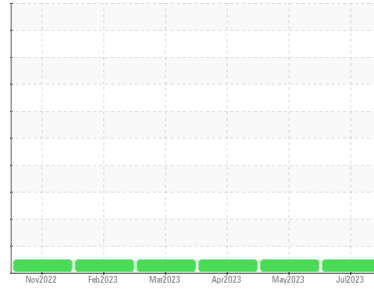




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**NIAGARA WATER BRIGHAM CITY UT**  
 Machine Id  
**H3 HYPET**  
 Component  
**Hydraulic System**  
 Fluid  
**NOT GIVEN (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination 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		<b>PTK0004342</b>	PTK0004340	PTK0004344
Sample Date	Client Info		<b>27 Jul 2023</b>	24 May 2023	26 Apr 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>10</b>	5	5
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >75	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m >10	<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>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m	<b>113</b>	115	116
Phosphorus	ppm	ASTM D5185m	<b>100</b>	106	102
Zinc	ppm	ASTM D5185m	<b>17</b>	6	12
Sulfur	ppm	ASTM D5185m	<b>687</b>	728	599

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>2</b>	1	2
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1

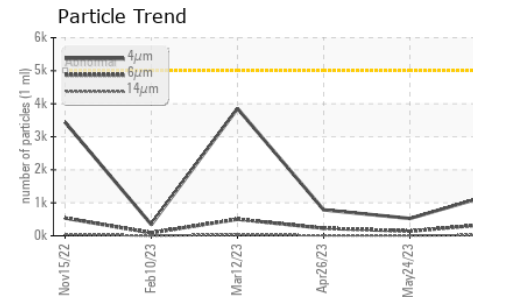
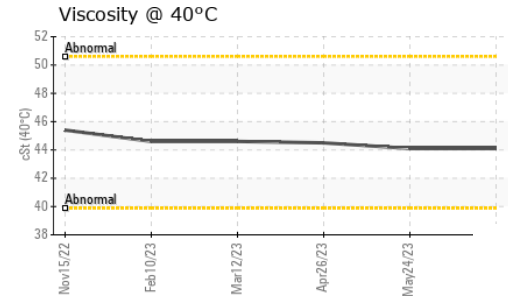
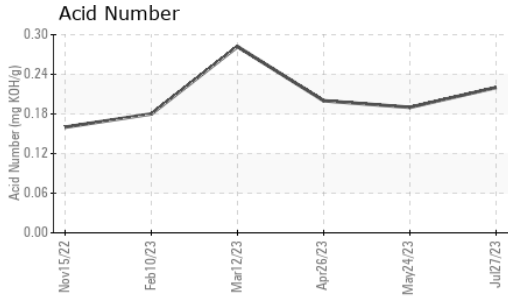
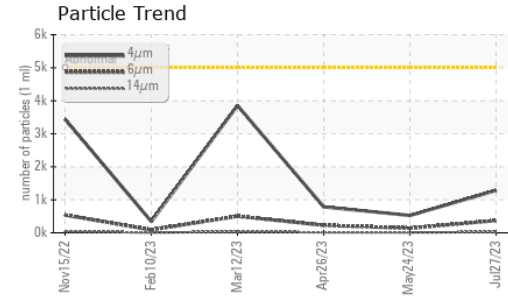
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1283</b>	525	787
Particles >6µm	ASTM D7647	>1300	<b>369</b>	139	228
Particles >14µm	ASTM D7647	>160	<b>23</b>	11	13
Particles >21µm	ASTM D7647	>40	<b>5</b>	4	3
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/16/12</b>	16/14/11	17/15/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.22</b>	0.19	0.20

# 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	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44.1	44.1	44.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

### GRAPHS

Date	Iron (ppm)	Chromium (ppm)	Nickel (ppm)
Nov 15/22	1	0	0
Feb 10/23	4	0	0
Mar 12/23	4	0	0
Apr 26/23	4	0	0
May 24/23	4	0	0
Jul 27/23	9	0	0

Date	4µm	6µm	14µm
Nov 15/22	3500	500	200
Feb 10/23	500	200	100
Mar 12/23	3800	500	200
Apr 26/23	800	200	100
May 24/23	600	200	100
Jul 27/23	1200	300	100

Date	Copper (ppm)	Lead (ppm)	Tin (ppm)
Nov 15/22	0	0	0
Feb 10/23	0	0	0
Mar 12/23	0	0	0
Apr 26/23	0	0	0
May 24/23	0	0	0
Jul 27/23	0	0	0

Date	Acid Number (mg KOH/g)
Nov 15/22	0.15
Feb 10/23	0.18
Mar 12/23	0.28
Apr 26/23	0.19
May 24/23	0.18
Jul 27/23	0.22



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PTK0004342 **Received** : 22 Aug 2023  
**Lab Number** : 05931502 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 10616773 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 2

**NIAGARA BOTTLING - BRIGHAM CITY**  
 77 N INDUSTRIAL WAY  
 BRIGHAM CITY, UT  
 US 84302  
 Contact: REX COLLEDGE  
 rcolledge@niagarawater.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)