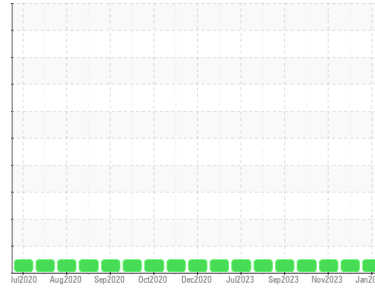




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
W20
Component
Hydraulic System
Fluid
MIL-PRF-5606H (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Discrete particle counts [100 ml] 5-15µm = 22100, 15-25µm = 2000, 25-50µm = 700, 50-100µm = 0, >100µm = 0. The water content is negligible. The amount and size of particulates present in the system are acceptable. Chlorine value is 18.8.

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	WC0874948	WC0874941	WC0874932
Sample Date	Client Info	09 Jan 2024	06 Dec 2023	10 Nov 2023
Machine Age	hrs	Client Info	0	134
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	Not Chngd	N/A
Sample Status		NORMAL	NORMAL	NORMAL

WEAR METALS

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

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	11	0
Molybdenum	ppm	ASTM D5185m	0	1	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	1	0	0
Calcium	ppm	ASTM D5185m	1	<1	0
Phosphorus	ppm	ASTM D5185m	424	428	450
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m	130	28	94

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	10	9	9
Sodium	ppm	ASTM D5185m	0	0	2
Potassium	ppm	ASTM D5185m >20	0	<1	0
Chlorine Content	ppm	ASTM D5185m	18.8	12.3	11.0
Water	%	ASTM D6304 >0.05	0.003	0.004	0.004
ppm Water	ppm	ASTM D6304 >500	29	45	47

FLUID CLEANLINESS

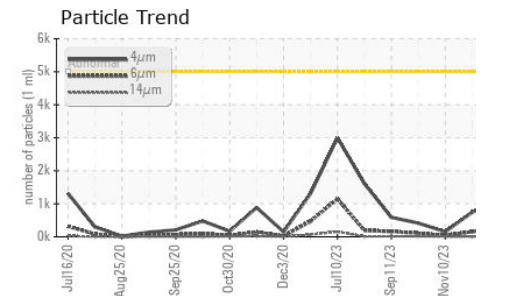
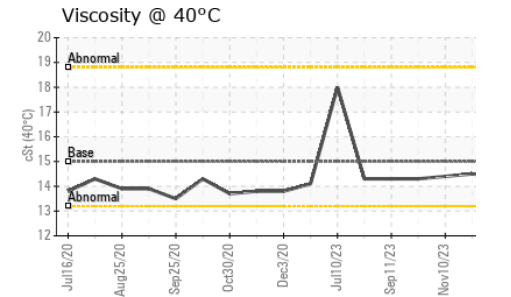
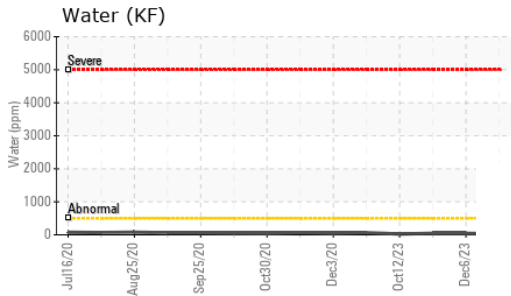
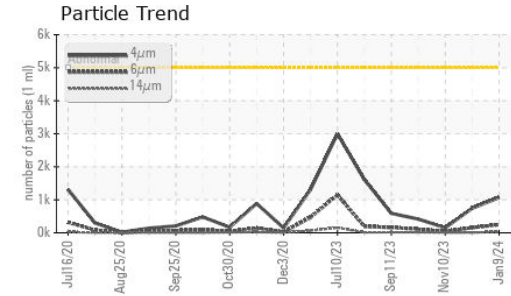
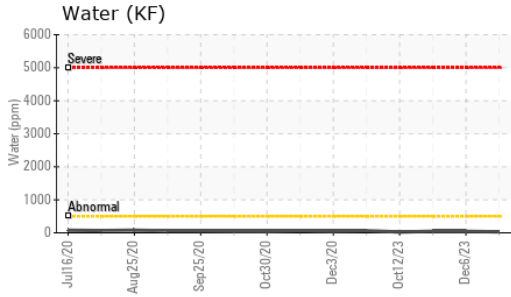
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	1067	744	150
Particles >6µm	ASTM D7647 >1300	248	156	45
Particles >14µm	ASTM D7647 >160	27	8	6
Particles >21µm	ASTM D7647 >40	7	2	2
Particles >38µm	ASTM D7647 >10	0	0	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	17/15/12	17/14/10	14/13/10

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.1	0.064	0.047	0.09



OIL ANALYSIS REPORT

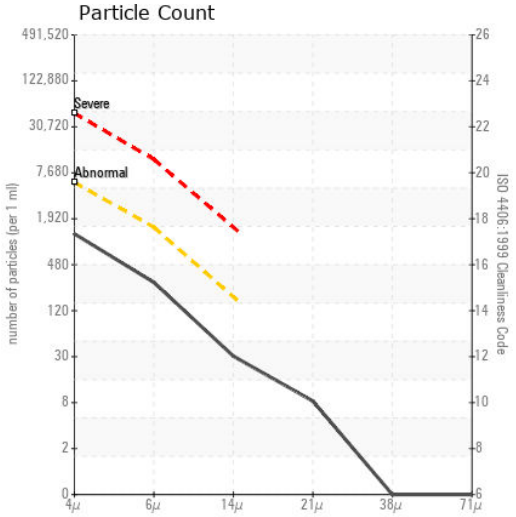
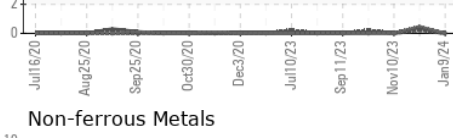


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	15.0	14.4	14.5	14.4

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0874948 **Received** : 18 Jan 2024
Lab Number : **06064334** **Diagnosed** : 22 Jan 2024
Unique Number : 10835716 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: CHLORINEXRF, KF)

NORTHLAND-WILLETTE INC
 12 HIGH ST
 PLAINVILLE, MA
 US 02762
 Contact: JIM ALLEN
 JALLEN@NWHYDINC.COM
 T:
 F: (508)699-4017

Certificate L2367
 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)