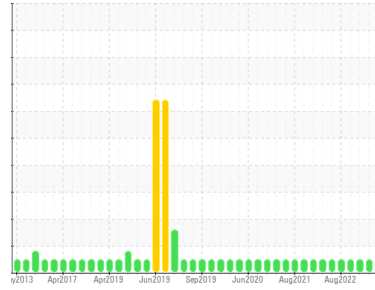




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area Site Services

Machine Id
Allis Chalmers N/A [TM-465-315-501] #2 Allis Chalmers Compressor Hydraulic Unit

Component
Tank Air Compressor

Fluid
ESSO NUTO H ISO 32 (1000 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is 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	WC	WC	WC0754491
Sample Date	Client Info	03 Oct 2023	28 Mar 2023	19 Nov 2022
Machine Age	hrs Client Info	0	0	0
Oil Age	hrs Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>50	<1	<1	<1
Chromium ppm ASTM D5185(m)	>4	0	0	0
Nickel ppm ASTM D5185(m)	>4	0	<1	<1
Titanium ppm ASTM D5185(m)		0	0	0
Silver ppm ASTM D5185(m)		<1	0	0
Aluminum ppm ASTM D5185(m)	>10	0	<1	0
Lead ppm ASTM D5185(m)	>20	4	2	2
Copper ppm ASTM D5185(m)	>40	12	4	4
Tin ppm ASTM D5185(m)	>5	0	0	0
Antimony ppm ASTM D5185(m)		0	0	<1
Vanadium ppm ASTM D5185(m)		0	0	0
Beryllium ppm ASTM D5185(m)		0	0	0
Cadmium ppm ASTM D5185(m)		0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185(m)	0	<1	0	0
Barium ppm ASTM D5185(m)	0	<1	0	0
Molybdenum ppm ASTM D5185(m)	0	0	0	0
Manganese ppm ASTM D5185(m)		0	0	0
Magnesium ppm ASTM D5185(m)	5	0	<1	<1
Calcium ppm ASTM D5185(m)	50	39	40	39
Phosphorus ppm ASTM D5185(m)	330	351	367	368
Zinc ppm ASTM D5185(m)	420	409	421	410
Sulfur ppm ASTM D5185(m)	2700	4677	4827	4708
Lithium ppm ASTM D5185(m)		<1	<1	<1

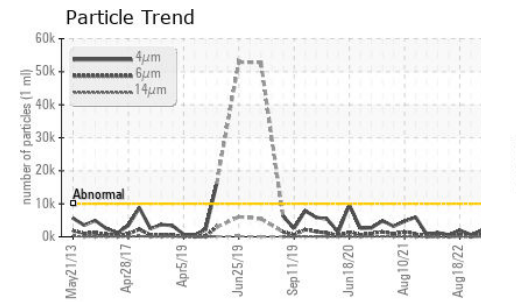
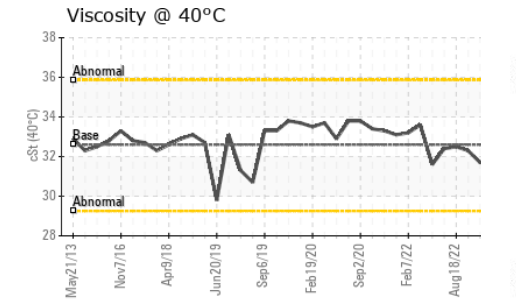
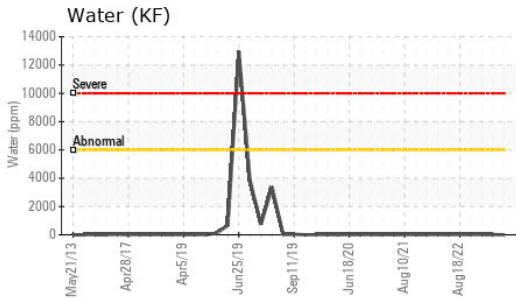
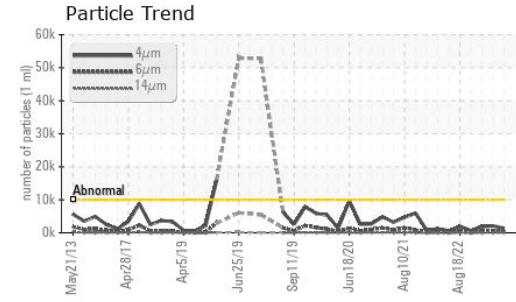
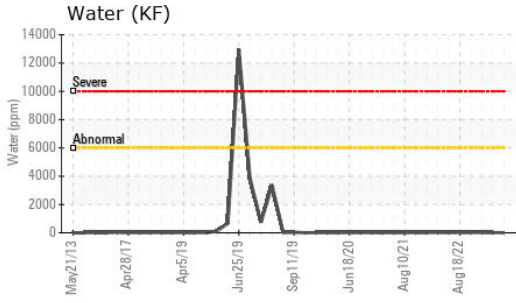
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>25	<1	0	0
Sodium ppm ASTM D5185(m)		<1	0	0
Potassium ppm ASTM D5185(m)	>20	0	<1	0
Water % ASTM D6304*	>0.6	0.00	0.001	0.002
ppm Water ppm ASTM D6304*	>6000	0.00	12.3	19.9

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>10000	1397	2095	1852
Particles >6µm ASTM D7647	>2500	405	617	550
Particles >14µm ASTM D7647	>320	27	42	34
Particles >21µm ASTM D7647	>80	5	9	7
Particles >38µm ASTM D7647	>20	0	0	0
Particles >71µm ASTM D7647	>4	0	0	0
Oil Cleanliness ISO 4406 (c)	>20/18/15	18/16/12	18/16/13	18/16/12

OIL ANALYSIS REPORT

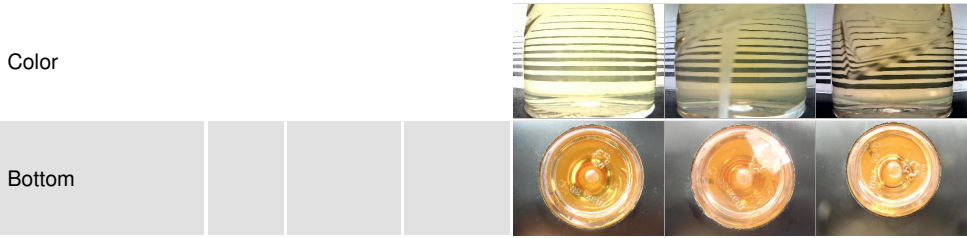


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.47	0.49	0.48

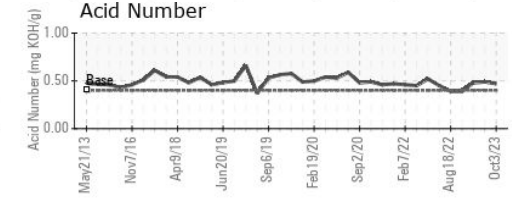
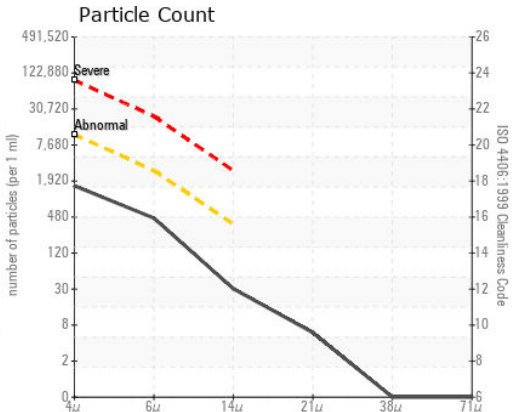
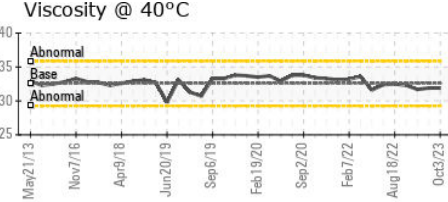
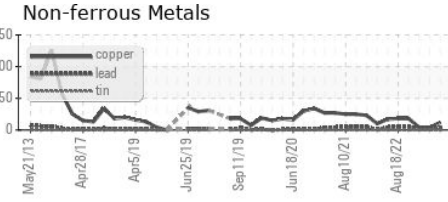
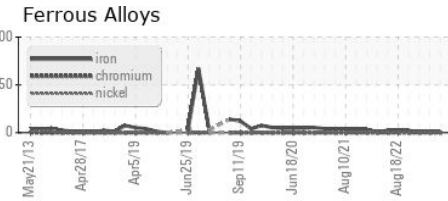
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.6	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32.6	31.9	31.9	31.7

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02587621
Unique Number : 5656687
Test Package : IND 2 (Additional Tests: KF)
Received : 06 Oct 2023
Diagnosed : 10 Oct 2023
Diagnostician : Wes Davis

Rayonier Advanced Materials
 P.O.Box 6000, 33 Kipawa Road
 Temiscaming, QC
 CA J0Z 3R0
 Contact: Dean Violette
 dean.violette@ryam.com
 T: (819)627-6891
 F: (819)627-1507

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.