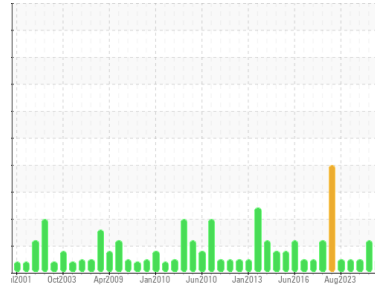




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
46 BROWN STOCK
 Machine Id
CBF WASHER HYDRAULIC UNIT PUMP (S/N 462198)
 Component
Pump
 Fluid
ESSO NUTO H ISO 100 (90 GAL)

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

Sample Number	Client Info	WC	WC	WC
Sample Date	Client Info	19 Dec 2023	07 Sep 2023	30 Aug 2023
Machine Age	Client Info	0	0	0
Oil Age	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	ATTENTION	NORMAL

WEAR METALS

Element	Method	Limit/Base	Current	History1	History2	
Iron	ppm	ASTM D5185(m)	>500	<1	2	2
Chromium	ppm	ASTM D5185(m)	>7	0	0	0
Nickel	ppm	ASTM D5185(m)		0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>35	<1	1	1
Copper	ppm	ASTM D5185(m)	>50	9	29	28
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
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

Element	Method	Limit/Base	Current	History1	History2	
Boron	ppm	ASTM D5185(m)		0	0	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	<1	<1
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	3	3
Calcium	ppm	ASTM D5185(m)		39	25	25
Phosphorus	ppm	ASTM D5185(m)		325	361	355
Zinc	ppm	ASTM D5185(m)		389	364	363
Sulfur	ppm	ASTM D5185(m)		6619	5681	5656
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

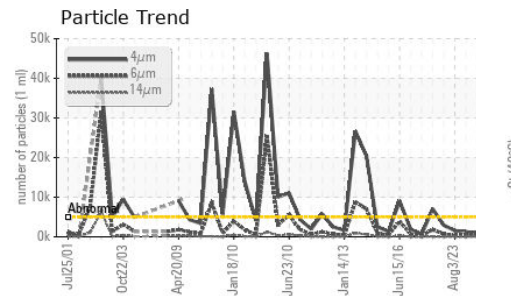
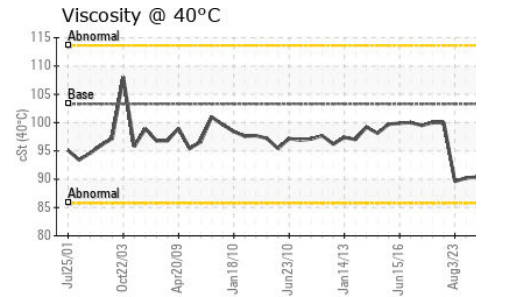
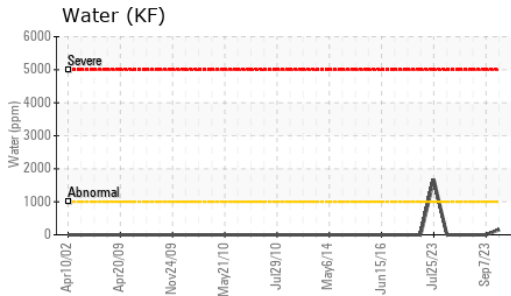
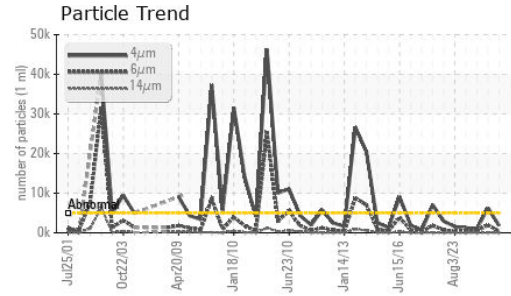
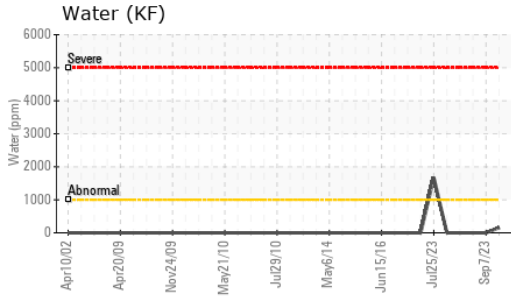
Element	Method	Limit/Base	Current	History1	History2	
Silicon	ppm	ASTM D5185(m)	>50	<1	<1	<1
Sodium	ppm	ASTM D5185(m)		1	2	2
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Water	%	ASTM D6304*	>.1	0.015	---	---
ppm Water	ppm	ASTM D6304*	>1000	159	---	---

FLUID CLEANLINESS

Particle Size	Method	Limit/Base	Current	History1	History2
Particles >4µm	ASTM D7647	>5000	1828	▲ 6241	1057
Particles >6µm	ASTM D7647	>1300	386	▲ 1960	356
Particles >14µm	ASTM D7647	>160	25	88	44
Particles >21µm	ASTM D7647	>40	9	24	15
Particles >38µm	ASTM D7647	>10	1	2	1
Particles >71µm	ASTM D7647	>3	1	1	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	18/16/12	▲ 20/18/14	17/16/13



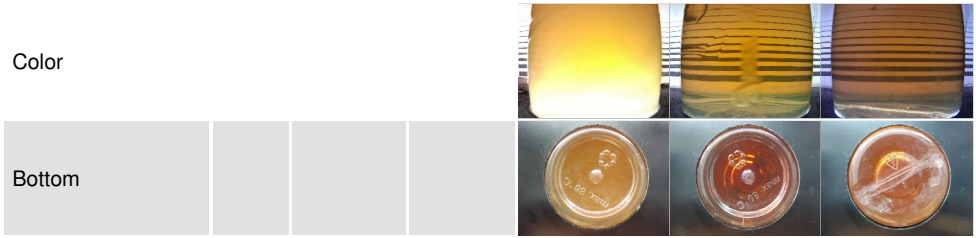
OIL ANALYSIS REPORT



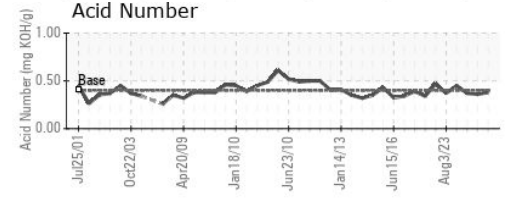
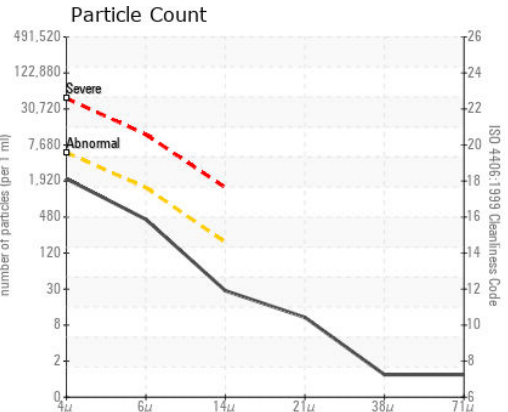
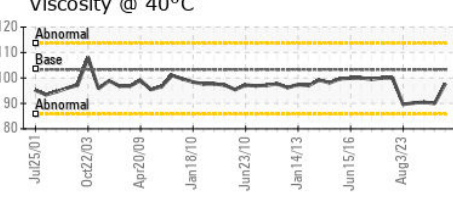
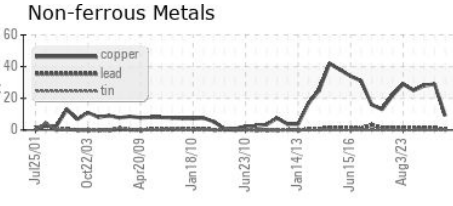
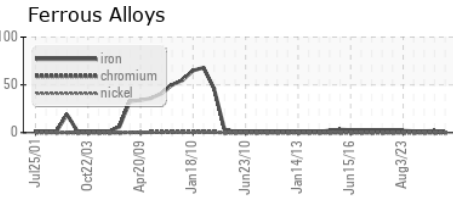
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.38	0.36	0.37
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	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	HAZY	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>.1	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)	103.3	97.7	90.0	90.4

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02605457
Unique Number : 5698542
Test Package : IND 2 (Additional Tests: KF)
Received : 27 Dec 2023
Diagnosed : 02 Jan 2024
Diagnostician : Kevin Marson

AV GROUP NB INC.
 103 PINDER ROAD,, NACKAWIC MILL
 NACKAWIC, NB
 CA E6G 1W4
 Contact: Basil Fadulalla
 basil.fadulalla@adityabirla.com
 T:
 F:

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.