

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id **ARBURG D-02 (S/N 221113)** Component

Hydraulic System AW HYDRAULIC OIL ISO 46 (44 GAL)

Recommendation

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

Wear

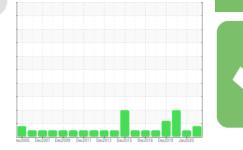
All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

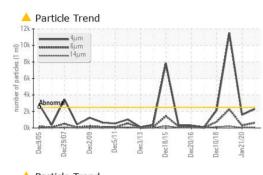


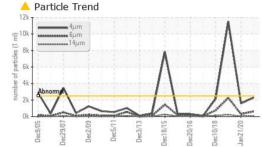
tec2005 Dec2007 Dec2009 Dec2011 Dec2013 Dec2015 Dec2018 Jan2020						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0883585	WC0385725	WC0385736
Sample Date		Client Info		17 Jan 2024	21 Jan 2020	11 Dec 2019
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	ABNORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	4	3
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	0	<1	0
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>20	0	3	2
Tin	ppm	ASTM D5185m	>20	0	<1	0
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	<1
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	25	32	0	1
Calcium	ppm	ASTM D5185m	200	31	27	30

Maonine Age	yio			0	0	0
Oil Age	yrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	ABNORMAL
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	4	3
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	0	<1	0
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>20	0	3	2
Tin	ppm	ASTM D5185m	>20	0	<1	0
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	<1
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	25	32	0	1
Calcium	ppm	ASTM D5185m	200	31	27	30
Phosphorus	ppm	ASTM D5185m	300	322	244	230
Zinc	ppm	ASTM D5185m	370	251	200	182
Sulfur	ppm	ASTM D5185m	2500	1076	1265	1274
CONTAMINANTS	S	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	0
Sodium	ppm	ASTM D5185m		<1	3	3
Potassium	ppm	ASTM D5185m	>20	0	<1	2
FLUID CLEANLI	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	2296	1584	1 1507
Particles >6µm		ASTM D7647	>320	625	297	<u> </u>
Particles >14µm		ASTM D7647	>80	52	39	<u> </u>
Particles >21µm		ASTM D7647	>20	12	17	A 74
		ASTM D7647	>4	1	2	<u> </u>
Particles >38µm		ASTIVI D7047	~7			
Particles >38µm Particles >71µm		ASTM D7647 ASTM D7647		0	0	0



OIL ANALYSIS REPORT





Acid Num	nber							-
(B/HO) Base	\sim	7						
(B)0.6 Base Base Base Base Base Base Base Base						Г		
0.0					~			
Dec9/05	Dec2/09	Dec5/11	Dec3/13	Dec18/15	Dec20/16	Dec10/18	Jan21/20	
Viscosity	@ 40	0°C						
50-								

Dec3/13 Jec18/15

48

()-0+) ts 44

42

38

-1

Dec9/05

Abnorma 40

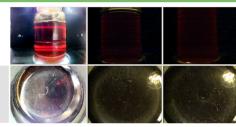
Dec29/07

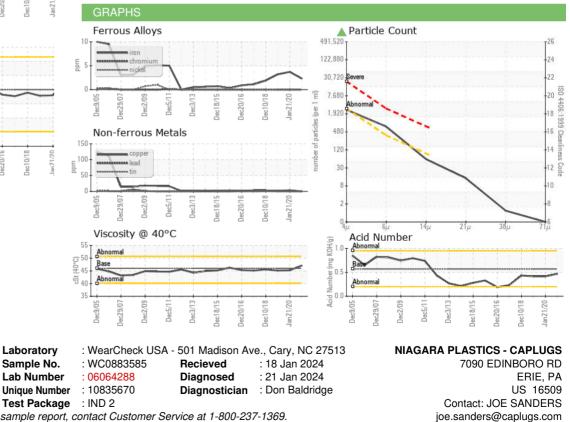
Per 2/00 ec5/1

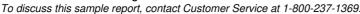
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.47	0.414	0.416
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	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	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	47.1	45.2	45.1
SAMPLE IMAGES		method	limit/base	current	history1	history2



Bottom







* - 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)

T: (814)868-3671 x:5131

F: (814)868-9875

Certificate L2367

Dec20/16

Page 2 of 2