

Sample Rating Trend ISO

COMPONENT CONDITION SUMMARY

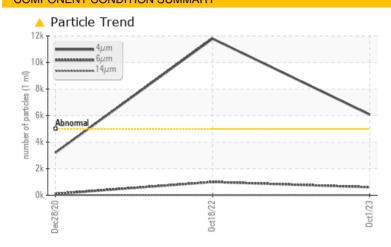
COMMERCIAL OIL LUBRIKO AW 46 (1000 LTR)

PLANT 5

Component

BAY 16 SLT

Main Hydraulic System



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

PROBLEMATIC TEST R	ESULTS				
Sample Status			ATTENTION	ABNORMAL	NORMAL
Particles >4µm	ASTM D7647	>5000	6076	🔺 11788	3208
Oil Cleanliness	ISO 4406 (c)	>19/17/14	 20/16/11	🔺 21/17/11	19/14/10

Customer Id: TAYSTO Sample No.: WC0754615 Lab Number: 02590020 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>

RECOMMENDED AC	CTIONS			
Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.
Information Required			?	Please specify the component make and model with your next sample.

HISTORICAL DIAGNOSIS



18 Oct 2022 Diag: Kevin Marson

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. Particles >4µm and oil cleanliness are abnormally high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



28 Dec 2020 Diag: Wes Davis



Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 46. Please confirm.

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





PLANT 5

OIL ANALYSIS REPORT

Sample Rating Trend



BAY 16 SLT Component

Main Hydraulic System Fluic

COMMERCIAL OIL LUBRIKO AW 46 (1000 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

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

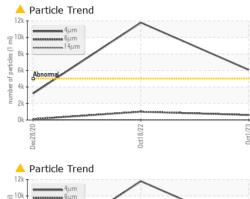
Fluid Condition

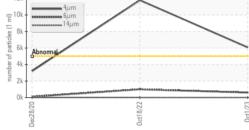
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

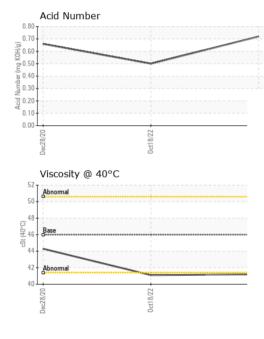
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info Not Changd N/A N/A Sample Status Client Info Not Changd N/A N/A Sample Status ro Imit/base current history1 history2 Iron ppm ASTM DS185(m) >20 2 2 2 Chromium ppm ASTM DS185(m) >10 <1 0 <1 Nickel ppm ASTM DS185(m) >10 <1 0 <1 Silver ppm ASTM DS185(m) >10 <1 0 <1 Copper ppm ASTM DS185(m) >10 0 <1 0 Antimony ppm ASTM DS185(m) >10 0 <1 0 Antimony ppm ASTM DS185(m) >10 0 <1 0 Antimony ppm ASTM DS185(m) 0 0 0 0	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info Not Changd N/A N/A Sample Status Client Info Not Changd N/A N/A N/A Sample Status Image Client Info Not Changd N/A N/A WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 2 2 2 Iron ppm ASTM D5185(m) >10 <1	Sample Number		Client Info		WC0754615	WC117946	WC
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info Not Changed N/A N/A Sample Status Client Info Not Changed N/A N/A WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185(m) >20 2 2 2 Chromium ppm ASTM 05185(m) >10 <1	Sample Date		Client Info		01 Oct 2023	18 Oct 2022	28 Dec 2020
Oil Changed Client Info Not Changd N/A N/A Sample Status Image of the status method limit/base current ABNORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM05185(m) >10 <1 0 <1 Nickel ppm ASTM05185(m) >10 <1 0 <1 Nickel ppm ASTM05185(m) >10 <1 0 <1 Bilver ppm ASTM05185(m) >10 <1 0 <1 Capper ppm ASTM05185(m) >10 0 0 <1 0 Antimony ppm ASTM05185(m) >10 0 0 0 0 Antimony ppm ASTM05185(m) >10 0 0 0 Capper ppm ASTM05185(m) 0 0 0 0 Antimony ppm ASTM05185(m) </td <td>Machine Age</td> <td>hrs</td> <td>Client Info</td> <td></td> <th>0</th> <td>0</td> <td>0</td>	Machine Age	hrs	Client Info		0	0	0
Sample Status Image ATTENTION ABNORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185(m) >20 2 2 2 Chromium ppm ASTM 05185(m) >10 <1	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 2 2 2 Chromium ppm ASTM D5185(m) >10 <1	Oil Changed		Client Info		Not Changd	N/A	N/A
Iron ppm ASTM D5185(m) >20 2 2 2 Chromium ppm ASTM D5185(m) >10 <1	Sample Status				ATTENTION	ABNORMAL	NORMAL
Chromium ppm ASTM D5185(m) >10 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185(m) >10 <1 0 <1 Titanium ppm ASTM D5185(m) <1	Iron	ppm	ASTM D5185(m)	>20	2	2	2
Titanium ppm ASTM D5185(m) 0 0 <1 Silver ppm ASTM D5185(m) <1	Chromium	ppm	ASTM D5185(m)	>10	<1	0	<1
Silver ppm ASTM D5185(m) <1 0 <1 Aluminum ppm ASTM D5185(m) >10 0 0 <1	Nickel	ppm	ASTM D5185(m)	>10	<1	0	<1
Atuminum ppm ASTM D5185(m) >10 0 0 <1 Lead ppm ASTM D5185(m) >10 <1	Titanium	ppm	ASTM D5185(m)		0	0	<1
Lead ppm ASTM D5185(m) >10 <1 0 <1 Copper ppm ASTM D5185(m) >75 4 3 6 Tin ppm ASTM D5185(m) >10 0 0 <1	Silver	ppm	ASTM D5185(m)		<1	0	<1
Copper ppm ASTM 05185(m) >75 4 3 6 Tin ppm ASTM 05185(m) >10 0 0 <1	Aluminum	ppm	ASTM D5185(m)	>10	0	0	<1
Tin ppm ASTM D5185(m) >10 0 <1 <1 Antimony ppm ASTM D5185(m) 0 0 0 0 0 Vanadium ppm ASTM D5185(m) 0 0 0 0 0 Beryllium ppm ASTM D5185(m) 0 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 7 7 2 2 Molybdenum ppm ASTM D5185(m) 26 27 7 Calcium ppm ASTM D5185(m) 263 328 340 Zinc ppm ASTM D5185(m) 283 328 340 Zinc ppm ASTM D5185(m) 363 375 452 Sulfur ppm ASTM D5185(m) 283 328 340 Zinc ppm ASTM D5185(m) 20 <1	Lead		ASTM D5185(m)	>10	<1	0	<1
Antimony ppm ASTM D5185(m) 0 <1 0 Vanadium ppm ASTM D5185(m) 0 0 0 0 Beryllium ppm ASTM D5185(m) 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 7 7 2 Barium ppm ASTM D5185(m) 2 2 <1	Copper	ppm	ASTM D5185(m)	>75	4	3	6
Vanadium ppm ASTM D5185(m) 0 0 0 0 Beryllium ppm ASTM D5185(m) 0 0 0 0 Cadmium ppm ASTM D5185(m) 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 7 7 2 2 Barium ppm ASTM D5185(m) 3 4 1 Magnesse ppm ASTM D5185(m) 26 27 7 Calcium ppm ASTM D5185(m) 92 96 85 Phosphorus ppm ASTM D5185(m) 283 328 340 2 Sulfur ppm ASTM D5185(m) 283 328 340 2 Sulfur ppm ASTM D5185(m) 22 1331 2353 2 Sulfur ppm ASTM D5185(m) >20 <1	Tin	ppm	ASTM D5185(m)	>10	0	0	<1
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Cadmium ppm ASTM D5185(m) 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 7 7 2 2 Barium ppm ASTM D5185(m) 2 2 1 Molybdenum ppm ASTM D5185(m) 3 4 1 Manganese ppm ASTM D5185(m) 0 0 <1 Magnesium ppm ASTM D5185(m) 266 27 7 Calcium ppm ASTM D5185(m) 283 328 340 Zinc ppm ASTM D5185(m) 283 328 340 Zinc ppm ASTM D5185(m) 283 331 2353 Lithium ppm ASTM D5185(m) 283 328 340 Soliton ppm ASTM D5185(m) 20 <1 1 21 Soliton ppm ASTM D5185(m) 2	Vanadium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 7 7 2 Barium ppm ASTM D5185(m) 2 2 <1	Beryllium	ppm	ASTM D5185(m)		0	0	0
Boron ppm ASTM D5185(m) 7 7 2 Barium ppm ASTM D5185(m) 3 4 1 Molybdenum ppm ASTM D5185(m) 3 4 1 Manganese ppm ASTM D5185(m) 0 0 <1	Cadmium	ppm	ASTM D5185(m)		0	0	0
Barium ppm ASTM D5185(m) 2 2 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 3 4 1 Manganese ppm ASTM D5185(m) 0 0 <1	Boron	ppm	ASTM D5185(m)		7	7	2
Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 26 27 7 Calcium ppm ASTM D5185(m) 92 96 85 Phosphorus ppm ASTM D5185(m) 283 328 340 Zinc ppm ASTM D5185(m) 363 375 452 Sulfur ppm ASTM D5185(m) 1252 1331 2353 Lithium ppm ASTM D5185(m) <1	Barium	ppm	ASTM D5185(m)		2	2	<1
Magnesium ppm ASTM D5185(m) 26 27 7 Calcium ppm ASTM D5185(m) 92 96 85 Phosphorus ppm ASTM D5185(m) 283 328 340 Zinc ppm ASTM D5185(m) 363 375 452 Sulfur ppm ASTM D5185(m) 1252 1331 2353 Lithium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)		3	4	1
Calcium ppm ASTM D5185(m) 92 96 85 Phosphorus ppm ASTM D5185(m) 283 328 340 Zinc ppm ASTM D5185(m) 363 375 452 Sulfur ppm ASTM D5185(m) 1252 1331 2353 Lithium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		0	0	<1
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Zinc ppm ASTM D5185(m) 363 375 452 Sulfur ppm ASTM D5185(m) 1252 1331 2353 Lithium ppm ASTM D5185(m) <1	Calcium	ppm	ASTM D5185(m)		92	96	85
Sulfur ppm ASTM D5185(m) 1252 1331 2353 Lithium ppm ASTM D5185(m) < <	Phosphorus	ppm	ASTM D5185(m)		283	328	340
Lithium ppm ASTM D5185(m) <1 <1 <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 <1 1 2 Sodium ppm ASTM D5185(m) >20 <1 1 2 Sodium ppm ASTM D5185(m) >20 0 <1 5 Potassium ppm ASTM D5185(m) >20 0 <11 5 Potassium ppm ASTM D5185(m) >20 0 <1 1 2 Paticles >4µm ASTM D5647 >5000 6076 11788 3208 Particles >6µm ASTM D7647 >1300 605 1000 109 Particles >14µm ASTM D7647 >160 11 1 9 Particles >38µm ASTM D7647 >10 1 0 1 Particles >71µm ASTM D7647 >3 0 0	Zinc	ppm	ASTM D5185(m)		363	375	452
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185(m)>20<1	Sulfur	ppm	ASTM D5185(m)		1252	1331	2353
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FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 ▲ 6076 ▲ 11788 3208 Particles >6µm ASTM D7647 >1300 605 1000 109 Particles >6µm ASTM D7647 >160 11 11 9 Particles >14µm ASTM D7647 >160 11 11 9 Particles >21µm ASTM D7647 >40 5 5 4 Particles >21µm ASTM D7647 >10 1 0 1 Particles >38µm ASTM D7647 >10 1 0 1 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 20/16/11 21/17/11 19/14/10 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOHg ASTM D974* 0.72 0.50 0.66	Sodium	ppm	ASTM D5185(m)		2	1	5
Particles >4μm ASTM D7647 >5000 ▲ 6076 ▲ 11788 3208 Particles >6μm ASTM D7647 >1300 605 1000 109 Particles >14μm ASTM D7647 >160 11 11 9 Particles >21μm ASTM D7647 >160 11 11 9 Particles >21μm ASTM D7647 >40 5 5 4 Particles >38μm ASTM D7647 >10 1 0 1 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 20/16/11 21/17/11 19/14/10 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg K0H/g ASTM D974* 0.72 0.50 0.66	Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
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Particles >14µm ASTM D7647 >160 11 11 9 Particles >21µm ASTM D7647 >40 5 5 4 Particles >21µm ASTM D7647 >40 5 5 4 Particles >38µm ASTM D7647 >10 1 0 1 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 20/16/11 21/17/11 19/14/10 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D974* 0.72 0.50 0.66	Particles >4µm		ASTM D7647	>5000			3208
Particles >21μm ASTM D7647 >40 5 5 4 Particles >38μm ASTM D7647 >10 1 0 1 Particles >38μm ASTM D7647 >10 1 0 1 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 20/16/11 21/17/11 19/14/10 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D974* 0.72 0.50 0.66						1000	109
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Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 20/16/11 ≥ 21/17/11 19/14/10 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D974* 0.72 0.50 0.66	•			>40	5	5	4
Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 20/16/11 ▲ 21/17/11 19/14/10 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D974* 0.72 0.50 0.66	•						1
FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D974* 0.72 0.50 0.66							
Acid Number (AN) mg KOH/g ASTM D974* 0.72 0.50 0.66	Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u> </u>	<u> </u>	19/14/10
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
:18:02) Rev: 1 Submitted By: Matthew Fisch	()	mg KOH/g	ASTM D974*		0.72		

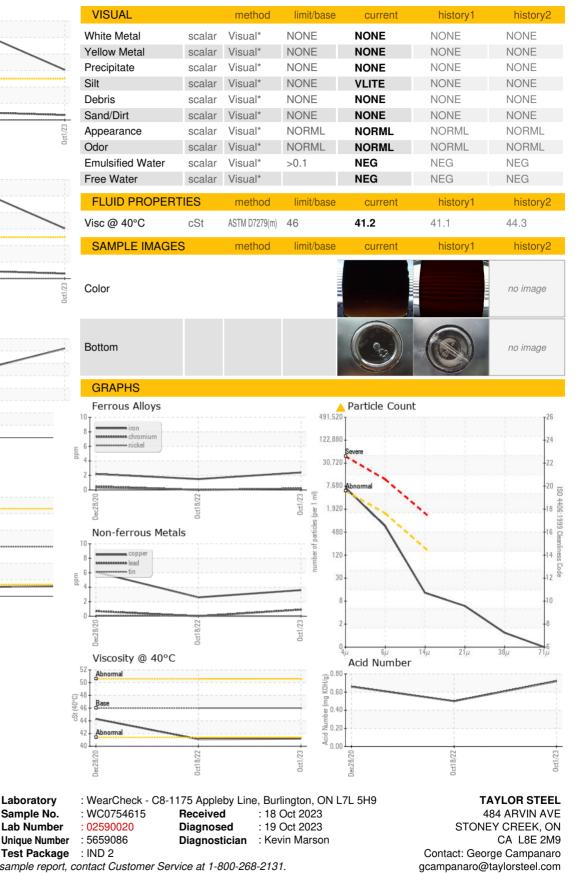


OIL ANALYSIS REPORT









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.

CALA

ISO 17025:2017 Accredited

Laboratory

Laboratory

Sample No.

Lab Number

Submitted By: Matthew Fischer

Page 4 of 4

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