

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

EAST BAILER Component

Hydraulic System AW HYDRAULIC OIL ISO 32 (--- GAL)

Recommendation

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

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

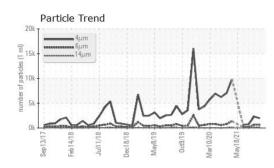
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

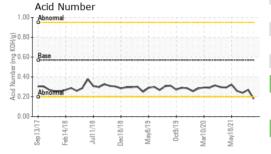


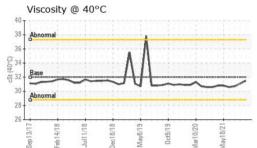
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PTK0000391	PTK0001307	PTK0001282
Sample Date		Client Info		09 Nov 2023	13 Jun 2023	23 Nov 2022
Machine Age	wks	Client Info		0	0	0
Oil Age	wks	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	<1	0
Chromium	ppm	ASTM D5185m	>10	<1	1	1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	5	5	5
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 0	history2 0
	ppm ppm					
Boron		ASTM D5185m	5	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	5 5	0 0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5 5	0 0 0	0 2 <1	0 0 <1
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5	0 0 0 0	0 2 <1 0	0 0 <1 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25	0 0 0 0 1	0 2 <1 0 2	0 0 <1 0 1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300	0 0 0 1 51	0 2 <1 0 2 57	0 0 <1 0 1 57
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370	0 0 0 1 51 311	0 2 <1 0 2 57 321	0 0 <1 0 1 57 349
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370	0 0 0 1 51 311 429	0 2 <1 0 2 57 321 430	0 0 <1 0 1 57 349 428
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 limit/base	0 0 0 1 51 311 429 1130	0 2 <1 0 2 57 321 430 1215	0 0 <1 0 1 57 349 428 1356
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 limit/base	0 0 0 1 51 311 429 1130 current	0 2 <1 0 2 57 321 430 1215 history1	0 0 <1 0 1 57 349 428 1356 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	5 5 5 25 200 300 370 2500 <i>limit/base</i> >20	0 0 0 1 51 311 429 1130 current <1	0 2 <1 0 2 57 321 430 1215 history1 0	0 0 <1 0 1 57 349 428 1356 history2 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 <i>limit/base</i> >20	0 0 0 1 51 311 429 1130 current <1 1	0 2 <1 0 2 57 321 430 1215 history1 0 0	0 0 <1 0 1 57 349 428 1356 history2 1 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 <i>limit/base</i> >20	0 0 0 1 51 311 429 1130 current <1 1 0	0 2 <1 0 2 57 321 430 1215 history1 0 0 1	0 0 <1 0 1 57 349 428 1356 history2 1 1 1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >20 	0 0 0 1 51 311 429 1130 current <1 1 0 0	0 2 <1 0 2 57 321 430 1215 history1 0 0 1 history1	0 0 <1 0 1 57 349 428 1356 history2 1 1 1 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >20 	0 0 0 1 51 311 429 1130 current <1 1 0 current 1 9	0 2 <1 0 2 57 321 430 1215 history1 0 0 1 1 history1 2302	0 0 <1 0 1 57 349 428 1356 history2 1 1 1 0 history2 740
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 5 200 300 370 2500 limit/base >20 limit/base >20 s20	0 0 0 1 51 311 429 1130 current <1 1 0 current 1973 636	0 2 <1 0 2 57 321 430 1215 history1 0 0 1 1 <u>history1</u> 2302 671	0 0 <1 0 1 57 349 428 1356 history2 1 1 1 0 history2 740 166
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 5 200 300 370 2500 limit/base >20 limit/base >20 s20	0 0 0 1 51 311 429 1130 current <1 1 0 current 1 9 7 3 636 108	0 2 <1 0 2 57 321 430 1215 history1 0 0 0 1 1 2302 671 95	0 0 <1 0 1 57 349 428 1356 history2 1 1 1 0 history2 740 166 18
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >20 limit/base >20 limit/base >20 limit/base	0 0 0 1 51 311 429 1130 current <1 1 0 current 1973 636 108 36	0 2 <1 0 2 57 321 430 1215 history1 0 0 0 1 1 2302 671 95 36	0 0 <1 0 1 57 349 428 1356 history2 1 1 1 0 <i>history2</i> 740 166 18 5



OIL ANALYSIS REPORT







Der 18/1

Particle Trend

Feb 14/1

20

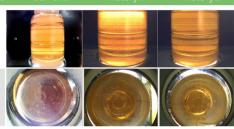
umber of particles (1 ml) 10k 2k

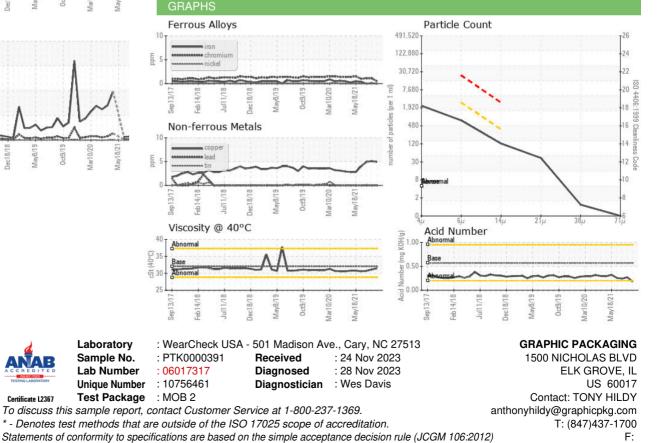
Sep 13/1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.18	0.27	0.24
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	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	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	31.5	31.1	30.7
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color

Bottom





Contact/Location: TONY HILDY - GRAELK