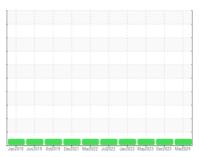


# **OIL ANALYSIS REPORT**

Sample Rating Trend



**NORMAL** 



Machine Id **FEED MASTER 325** 

Hydraulic System

**AW HYDRAULIC OIL ISO 46 (--- GAL)** 

### Recommendation

Resample at the next service interval to monitor.

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.

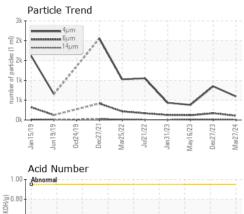
## **Fluid Condition**

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

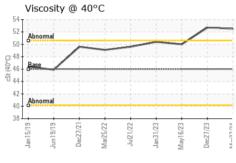
		Jan2019 Jun2	019 Oct2019 Dec2021 Mar2	022 Jul2022 Jan2023 May2023 Deca	023 Mar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PTK0005684	PTK0004690	PTK0003991
Sample Date		Client Info		27 Mar 2024	27 Dec 2023	16 May 2023
Machine Age	hrs	Client Info		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
CONTAMINATION	V	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	1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	5	5	5
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES						
ADDITIVES		method	IIIIII/Dase	current	history1	history2
Boron	ppm	ASTM D5185m	5	o current	0	0
	ppm					·
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	5	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	5	0 0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 0 0	0 0 0	0 0 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5	0 0 0 <1	0 0 0 0	0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25	0 0 0 <1 0	0 0 0 0	0 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200	0 0 0 <1 0 29	0 0 0 0 0 0 25	0 0 0 0 0 0
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 ASTM D5185m	5 5 5 25 200 300	0 0 0 <1 0 29 412	0 0 0 0 0 0 25 351	0 0 0 0 0 0 28 440
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 ASTM D5185m	5 5 5 25 200 300 370	0 0 0 <1 0 29 412 237	0 0 0 0 0 0 25 351 206	0 0 0 0 0 0 28 440 200
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 ASTM D5185m	5 5 5 25 200 300 370 2500	0 0 0 <1 0 29 412 237 1640	0 0 0 0 0 25 351 206 1215 history1	0 0 0 0 0 0 28 440 200 1841
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 5 25 200 300 370 2500	0 0 0 <1 0 29 412 237 1640	0 0 0 0 0 0 25 351 206 1215	0 0 0 0 0 0 28 440 200 1841 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500	0 0 0 <1 0 29 412 237 1640 current	0 0 0 0 0 25 351 206 1215 history1	0 0 0 0 0 0 28 440 200 1841 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >20	0 0 0 <1 0 29 412 237 1640 current <1	0 0 0 0 0 0 25 351 206 1215 history1 <1	0 0 0 0 0 0 28 440 200 1841 history2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >20	0 0 0 <1 0 29 412 237 1640 current <1 3	0 0 0 0 0 25 351 206 1215 history1 <1 2 0	0 0 0 0 0 28 440 200 1841 history2 0 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >20	0 0 0 -<1 0 29 412 237 1640 current <1 3 2	0 0 0 0 0 25 351 206 1215 history1 <1 2 0	0 0 0 0 0 28 440 200 1841 history2 0 2 0
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 ppm	ASTM D5185m  Method ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >20 >20	0 0 0 -<1 0 29 412 237 1640 current <1 3 2 current	0 0 0 0 0 25 351 206 1215 history1 <1 2 0	0 0 0 0 0 28 440 200 1841 history2 0 2 0 history2
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 ppm	ASTM D5185m  method ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >20 >20	0 0 0 -<1 0 29 412 237 1640 current <1 3 2 current 593 107	0 0 0 0 0 25 351 206 1215 history1 <1 2 0 history1 850 171	0 0 0 0 0 28 440 200 1841 history2 0 2 0 history2 381 119
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >20 >20 limit/base	0 0 0 -<1 0 29 412 237 1640 current <1 3 2 current 593 107	0 0 0 0 0 25 351 206 1215 history1 <1 2 0 history1 850 171	0 0 0 0 0 28 440 200 1841 history2 0 2 0 history2 381 119 17
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 ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >20 >20 limit/base >20 >320 >320 >320 >80	0 0 0 -<1 0 29 412 237 1640 current <1 3 2 current 593 107 7	0 0 0 0 0 0 25 351 206 1215 history1 <1 2 0 history1 850 171 14	0 0 0 0 0 0 28 440 200 1841 history2 0 2 0 history2 381 119 17
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >20   >20	0 0 0 0 <1 0 29 412 237 1640 current <1 3 2 current 593 107 7 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 28 440 200 1841 history2 0 2 0 history2 381 119 17 7

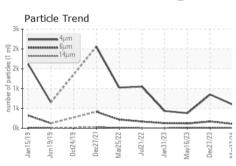


# **OIL ANALYSIS REPORT**



Ac	id Nun	nber						
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₹0.80								
공								
Bo co Rac								
E 0.60 - Bas	H H H H H H HOLDON							
e e								
Acid Number (mg KOH/g)								
- Ab.	normal	-	-	_	_	_		_
₽ 0.20 - A	ioiiiiai							-
0.00						-		-
13	13	71	22	22	23	23	23	24
		-	LO	-	-	9	-	-
12/	07	23	6	2	(7)	-	C	0
Jan15/19	Jun19/19	Dec27/21	Mar25/22	Jul	Jan31/23	May16/23	Dec27/2	Mar27/24

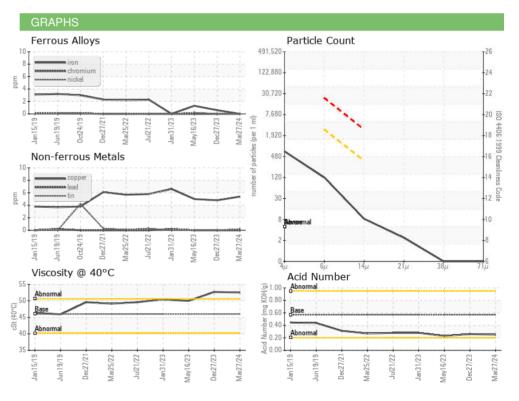




VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID DDODEDT	150		11 11 /		111	1:
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	52.5	52.7	50.0

SAMPLE IMAGES	method		history2
Color			

Bottom		







Certificate 12367

Laboratory

Sample No. Lab Number : 06218198 Unique Number : 11096395

Test Package : MOB 2

: PTK0005684

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received **Tested** Diagnosed

: 24 Jun 2024 : 25 Jun 2024 : 25 Jun 2024 - Wes Davis

1821 MARSHALL ST NE MINNEAPOLIS, MN US 55418

Contact: DAVE GOURLEY davidgourley@packagingcorp.com

PCA - PACKAGING CORP OF AMERICA

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - 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)

Report Id: PCAMIN [WUSCAR] 06218198 (Generated: 06/25/2024 11:57:34) Rev: 1

Contact/Location: DAVE GOURLEY - PCAMIN

T:

F: