

# **OIL ANALYSIS REPORT**





Sample Rating Trend



## Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment:

Top Up Amount: 30 GAL)

All component wear rates are normal.

## Contamination

There is no indication of any contamination in the oil.

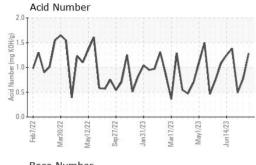
## **Fluid Condition**

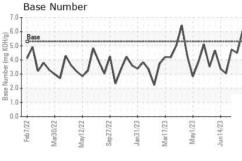
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

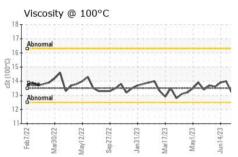
6 ( GAL)		2022 Mar20	22 May2022 Sep2022	Jan2023 Mar2023 May2023	Jun2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0775342	WC0775324	WC0775317
Sample Date		Client Info		13 Jul 2023	06 Jul 2023	27 Jun 2023
Machine Age	hrs	Client Info		103804	103651	103430
Oil Age	hrs	Client Info		508	200	134
Oil Changed		Client Info		Oil Added	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	V	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>15	5	4	2
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>5	0	0	<1
Aluminum	ppm	ASTM D5185m	>6	4	3	3
Lead	ppm	ASTM D5185m	>9	1	0	0
Copper	ppm	ASTM D5185m	>6	1	<1	1
Tin	ppm	ASTM D5185m	>4	4	2	1
Vanadium	ppm	ASTM D5185m		<1	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 3	history1	history2 4
	ppm		limit/base			
Boron	• • •	ASTM D5185m	limit/base	3	3	4
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	3 0	3	4 0
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 8	3 0 8	4 0 8
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 8 <1 28 1677	3 0 8 0 29 1455	4 0 8 <1 26 1494
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 8 <1 28	3 0 8 0 29 1455 322	4 0 8 <1 26 1494 322
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 8 <1 28 1677 352 441	3 0 8 0 29 1455 322 389	4 0 8 <1 26 1494 322 406
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 8 <1 28 1677 352	3 0 8 0 29 1455 322	4 0 8 <1 26 1494 322
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 ASTM D5185m		3 0 8 <1 28 1677 352 441	3 0 8 0 29 1455 322 389	4 0 8 <1 26 1494 322 406
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 ASTM D5185m	300	3 0 8 <1 28 1677 352 441 3802	3 0 8 0 29 1455 322 389 3371	4 0 8 <1 26 1494 322 406 3630
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	300 limit/base	3 0 8 <1 28 1677 352 441 3802	3 0 8 0 29 1455 322 389 3371 history1	4 0 8 <1 26 1494 322 406 3630 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	300 limit/base >181	3 0 8 <1 28 1677 352 441 3802 current	3 0 8 0 29 1455 322 389 3371 history1	4 0 8 <1 26 1494 322 406 3630 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	300 limit/base >181	3 0 8 <1 28 1677 352 441 3802 current 174	3 0 8 0 29 1455 322 389 3371 history1 112	4 0 8 <1 26 1494 322 406 3630 history2 72 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	300 limit/base >181 >20	3 0 8 <1 28 1677 352 441 3802 current 174 0	3 0 8 0 29 1455 322 389 3371 history1 112 <1 0	4 0 8 <1 26 1494 322 406 3630 history2 72 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	300 limit/base >181 >20 limit/base	3 0 8 <1 28 1677 352 441 3802 current 174 0 0	3 0 8 0 29 1455 322 389 3371 history1 112 <1 0	4 0 8 <1 26 1494 322 406 3630 history2 72 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm 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 D5185m  ASTM D5185m  *ASTM D5185m	300 limit/base >181 >20 limit/base	3 0 8 <1 28 1677 352 441 3802 current 174 0 0	3 0 8 0 29 1455 322 389 3371 history1 112 <1 0 history1 0.1	4 0 8 <1 26 1494 322 406 3630 history2 72 <1 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  *ASTM D5185m ASTM D5185m	300 limit/base >181 >20 limit/base >20	3 0 8 <1 28 1677 352 441 3802 current 174 0 0 current 0.1 5.7	3 0 8 0 29 1455 322 389 3371 history1 112 <1 0 history1 0.1 4.9	4 0 8 <1 26 1494 322 406 3630 history2 72 <1 <1 history2 0.1 4.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method  *ASTM D5185m ASTM D7844  *ASTM D7624  *ASTM D7415	300 limit/base >181 >20 limit/base >20 >30	3 0 8 <1 28 1677 352 441 3802 current 174 0 0 current 0.1 5.7 22.1	3 0 8 0 29 1455 322 389 3371 history1 112 <1 0 history1 0.1 4.9 20.4	4 0 8 <1 26 1494 322 406 3630 history2 72 <1 <1 history2 0.1 4.3 18.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm	ASTM D5185m  Method  ASTM D5185m  Method  *ASTM D7844  *ASTM D7624  *ASTM D7415  Method	300 limit/base >181 >20 limit/base >20 >30 limit/base	3 0 8 <1 28 1677 352 441 3802 current 174 0 0 current 0.1 5.7 22.1	3 0 8 0 29 1455 322 389 3371 history1 112 <1 0 history1 0.1 4.9 20.4 history1	4 0 8 <1 26 1494 322 406 3630 history2 72 <1 <1 history2 0.1 4.3 18.6 history2



# **OIL ANALYSIS REPORT**



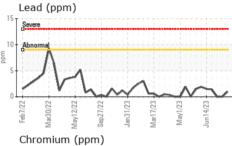


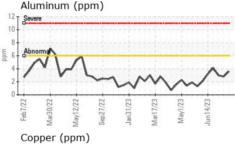


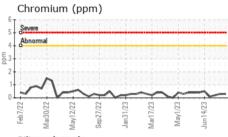
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	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

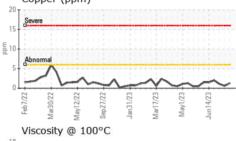
FLUID PROPER	TILO	memod			riistory i	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	13.5	13.6	13.4	13.2

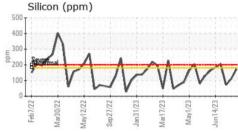
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Feb7/22	Mar30/22	May12/22	Sep27/22	Jan31/23	Mar17/23	May1/23	Jun14/23

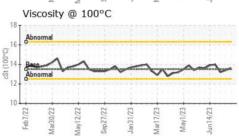


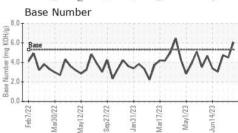
















Certificate L2367

Laboratory Sample No. Lab Number

**Unique Number** Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0775342 : 05900135 : 10561491

Received : 17 Jul 2023 Diagnosed : 19 Jul 2023 Diagnostician : Don Baldridge **EDL NA Recips-Honeybrook** 

Honey Brook Powerstation, 481 S. Churchtown Road Narvon, PA US 17555-9574

Contact: Christian Adames Christian.Adames@edlenergy.com T:

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)

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