

OIL ANALYSIS REPORT

Sample Rating Trend





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. 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.

Wear

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 condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0783975	WC0758905	
Sample Date		Client Info		09 Aug 2023	28 Dec 2022	
Machine Age	hrs	Client Info		9847	9292	
Oil Age	hrs	Client Info		522	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	13	10	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>4	1	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	<1	0	
Aluminum	ppm	ASTM D5185m	>20	3	6	
Lead	ppm	ASTM D5185m	>40	1	0	
Copper	ppm	ASTM D5185m	>330	6	<1	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 250	current 12	history1 14	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base 250 10	current 12 0	history1 14 1	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100	current 12 0 49	history1 14 1 54	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100	current 12 0 49 <1	history1 14 1 54 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450	current 12 0 49 <1 100	history1 14 1 54 <1 104	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000	current 12 0 49 <1 100 2102	history1 14 1 54 <1 104 2135	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000 1150	Current 12 0 49 <1 100 2102 863	history1 14 1 54 <1 104 2135 880	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350	Current 12 0 49 <1 100 2102 863 1135	history1 14 1 54 <1 104 2135 880 1073	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250	current 12 0 49 <1 100 2102 863 1135 3715	history1 14 1 54 <1 104 2135 880 1073 3170	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base	Current 12 0 49 <1 100 2102 863 1135 3715 Current	history1 14 1 54 <1 104 2135 880 1073 3170 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25	current 12 0 49 <1 100 2102 863 1135 3715 current 8	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158	current 12 0 49 <1 100 2102 863 1135 3715 current 8 4	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6 3	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	current 12 0 49 <1 100 2102 863 1135 3715 current 8 4 8 4 8 4 8	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6 3 12	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base	current 12 0 49 <1 100 2102 863 1135 3715 current 8 4 8 4 8 current	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6 3 12	history2 history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base	current 12 0 49 <1 100 2102 863 1135 3715 current 8 4 8 current 0.4	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6 3 12 history1 0.5	history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3 >20	current 12 0 49 <1 100 2102 863 1135 3715 current 8 4 8 0.4 8.5	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6 3 12 history1 0.5 9.4	history2 history2 history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3 >20	current 12 0 49 <1 100 2102 863 1135 3715 current 8 4 8 4 8 0.4 8.5 19.6	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6 3 12 history1 0.5 9.4 20.7	history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m ASTM D7844 *ASTM D7415 Method	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3 >20 >30	current 12 0 49 <1 100 2102 863 1135 3715 current 8 4 8 0.4 8.5 19.6	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6 3 12 history1 0.5 9.4 20.7 history1	history2 history2 history2 history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7414	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >30 >30 limit/base	current 12 0 49 <1 100 2102 863 1135 3715 current 8 4 8 4 8 0.4 8.5 19.6 current 13.0	history1 14 1 54 <1 104 2135 880 1073 3170 history1 6 3 12 history1 0.5 9.4 20.7 history1 13.2	history2 history2 history2 history2 history2 history2 history2 history2 history2 <tr< th=""></tr<>



OIL ANALYSIS REPORT





	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
9/23 -	Appearance	scalar	*Visual	NORML	NORML	NORML	
Aug	Odor	scalar	*Visual	NORML	NORML	NORML	
C	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
ر 	Free Water	scalar	*Visual		NEG	NEG	
			mathad	limit/booo	ourropt	biotonut	bioton/2
		.01			Current		TIIStoryz
		cSt	ASTM D445	14.4	13.1	13.0	
	¹⁴ T						
	12						
	10 - nickel						
	8						
	E C						
	4						
	2		**************************************				
	5			123			
	Jec28.			Aug9,			
	 Non-ferrous Metal	s					
	¹⁰						
	copper						
	assesses tin						
	6-						
	2			AT THE OWNER.			
		****************	And an Annaly descent to the second				
	8/22			19/23			
	Dec2			Aug			
	Viscosity @ 100°C	2			Base Number		
	18			14.0			
	17- Abnormal			12.0	Abnormal		
	16-			(^B H10.0-	5		
	0 15 Base			¥ ٤.0-	Base		
	tg 14			e 6.0-	Abnormal		
	13 Abnormal			2 4.0			
	12-			2.0-			
	11			0.0-			
	28/22			g9/23	28/22		₁ 9/23
	Dec			Au	Dec		Aug
Laboratory	: WearCheck USA - P	501 Madis	son Ave Ca	rv. NC 27513	Apple V	allev Waste - F	HT Location
Sample No.	: WC0783975	Received	i : 16 /	Aug 2023		6626	Delilah Road
Lab Number	: 05925800	Diagnose	ed : 16 /	Aug 2023		Egg Harbor 1	Fownship, NJ
Unique Number	: 10605747 : CONST (Additional		Ician : Wes	s Davis		Contact: San	US 08234
To discuss this sample report.	contact Customer Serv	ice at 1-8	ואנ <i>)</i> 00-237-1369).		Contact: Serv	nce manager
* - Denotes test methods that a	are outside of the ISO 1	7025 sco	pe of accred	itation.			T:



Report Id: AVWEHT [WUSCAR] 05925800 (Generated: 08/16/2023 14:47:39) Rev: 1

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: Service Manager - AVWEHT

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