

OIL ANALYSIS REPORT

Sample Rating Trend





DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

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 acceptable for the time in service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		WC0926830			
Sample Date		Client Info		15 Apr 2024			
Machine Age	hrs	Client Info		7869			
Oil Age	hrs	Client Info		0			
Oil Changed		Client Info		Changed			
Sample Status				NORMAL			
CONTAMINATION	٧	method	limit/base	current	history1	history2	
Fuel		WC Method	>5	<1.0			
Water		WC Method	>0.2	NEG			
Glycol		WC Method		NEG			
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	68			
Chromium	ppm	ASTM D5185m	>20	1			
Nickel	ppm	ASTM D5185m	>4	0			
Titanium	ppm	ASTM D5185m		0			
Silver	ppm	ASTM D5185m	>3	0			
Aluminum	ppm	ASTM D5185m	>20	3			
Lead	ppm	ASTM D5185m	>40	0			
Copper	ppm	ASTM D5185m	>330	1			
Tin	ppm	ASTM D5185m	>15	0			
Vanadium	ppm	ASTM D5185m		<1			
Cadmium	ppm	ASTM D5185m		0			
ADDITIVES		method	limit/base	current	history1	history2	
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 24	history1	history2	
	ppm ppm		limit/base				
Boron		ASTM D5185m	limit/base	24			
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	24 <1			
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	24 <1 75			
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	24 <1 75 <1			
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	24 <1 75 <1 358			
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	24 <1 75 <1 358 1665	 		
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	limit/base	24 <1 75 <1 358 1665 929	 		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	24 <1 75 <1 358 1665 929 1147			
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm 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		24 <1 75 <1 358 1665 929 1147 3419			
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	limit/base	24 <1 75 <1 358 1665 929 1147 3419 current	 history1	 history2	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	24 <1 75 <1 358 1665 929 1147 3419 current 7	 history1 	 history2	
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	limit/base	24 <1 75 <1 358 1665 929 1147 3419 current 7 2	 history1	 history2	
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	limit/base >25 >20	24 <1 75 <1 358 1665 929 1147 3419 current 7 2 2 2	 history1 	 history2	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base	24 <1 75 <1 358 1665 929 1147 3419 current 7 2 2 2 2	 history1 history1	 history2 history2	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	24 <1 75 <1 358 1665 929 1147 3419 <i>current</i> 7 2 2 2 <i>current</i> 1.6	 history1 history1 	 history2 history2 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 ASTM D5185m	limit/base >25 >20 limit/base >3 >20	24 <1 75 <1 358 1665 929 1147 3419 <i>current</i> 7 2 2 2 <i>current</i> 1.6 13.1	 history1 history1 history1	 history2 history2	
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 ASTM D5185m	Imit/base >25 >20 Imit/base >3 >20 >30	24 <1 75 <1 358 1665 929 1147 3419 <u>current</u> 7 2 2 2 <u>current</u> 1.6 13.1 30.0	 history1 history1 history1	 history2 history2 history2	



4.0 T

8ase Number (mg KOH/g) 2.5 1.5 1.0 1.5 1.0

0.5 0.0 Apr15/24

18 т 17-Abnormal

OIL ANALYSIS REPORT

FT-IR (Di	rect Trend)	VISUAL		method	limit/base	current	history1	history2
0xi	idation	White Metal	scalar	*Visual	NONE	NONE		
	lfation	Yellow Metal	scalar	*Visual	NONE	NONE		
Abnormal		Precipitate	scalar	*Visual	NONE	NONE		
0		Silt	scalar	*Visual	NONE	NONE		
5		Debris	scalar	*Visual	NONE	NONE		
0		Sand/Dirt	scalar	*Visual	NONE	NONE		
Apr15/24	Apr15/24	Appearance	scalar	*Visual	NORML	NORML		
Apri	Apri	Odor	scalar	*Visual	NORML	NORML		
Base Nur	mber	Emulsified Water	scalar	*Visual	>0.2	NEG		
.0 T		Free Water	scalar	*Visual		NEG		
.5		FLUID PROPER	TIES	method	limit/base	current	history1	history2
5		Visc @ 100°C	cSt	ASTM D445		12.6		
5-		GRAPHS						
0-		Ferrous Alloys						
0		70 iron						
Apr15/24		60 - chromium						
A	-	50-						
Viscosity @ 100°C		e ⁴⁰						
7- Abnormal		20-						
6 -		10						
5								
4								
Abnormal		Apr15/24			Apr15/24			
		Non-ferrous Meta	ls					
Apr15/24		10 copper						
Ap	AA.	8 - timestante lead						
		6						
		u dd						
		4						
		2-						
		5/24	*************	*******	15/24			
		Apr1			Apr1			
		Viscosity @ 100°C	2			Base Number		
		18 T			4.0			-
		17- Abnormal			3.5	1		
		16				+		
		() 15 001 tg 14			() HOX 82.5 bag und 2.0 hag und 1.5	1		
		tz 14			a 2.0 	I		
		13 Abnormal			2 1.3 es 1.0			
		12			0.5	-		
		11			0.0			4
		Apr15/24			Apr15/24	Apr15/24		Apr15/24
		A			A	4		Aı
	Laboratory	: WearCheck USA - 50	1 Madisc	on Ave Carv	NC 27513		FLORIDA PO	VER & LIGHT
	Sample No.	: WC0926830		3 Apr 2024		2457 PORT WEST BLVD		
	Lab Number	: 06157513	Teste	ed : 24	Apr 2024		RIVIEF	A BEACH, FL
		r : 10992936	Diagr	nosed : 25	Apr 2024 - Ange	ela Borella	Contact: A	US 33407
2.950	Certificate L2367 Test Package To discuss this sample repor		vice at 1-8			LEX MECKEL eckel@fpl.com		
	 Polascuss this sample report * - Denotes test methods that 						aloxing	T:
477 K (C) 43	Statements of conformity to s					rule (JCGM 106:	2012)	F:
	I INUISCADI 06157513 (Concreted: 04/25/20	24 17-24-16) Pov: 1				Contact/Location		

Contact/Location: ALEX MECKEL - FLORIVFL