

# **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id FSP144407 Component Diesel Engine Fluid {not provided} (--- QTS)

#### 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

Metal levels are typical for a new component breaking in.

#### 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.

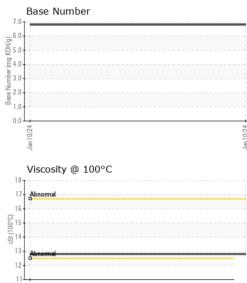
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		WC0875739			
Sample Date		Client Info		10 Jan 2024			
Machine Age	mls	Client Info		11312			
Oil Age	mls	Client Info		0			
Oil Changed		Client Info		Changed			
Sample Status				NORMAL			
CONTAMINATIO	N	method	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	20			
Chromium	ppm	ASTM D5185m	>20	<1			
Nickel	ppm	ASTM D5185m	>4	0			
Titanium	ppm	ASTM D5185m	- 1	0			
Silver	ppm	ASTM D5185m	>3	0			
Aluminum	ppm	ASTM D5185m	>20	5			
Lead	ppm	ASTM D5185m	>40	0			
Copper	ppm	ASTM D5185m	>330	3			
Tin	ppm	ASTM D5185m	>15	ء <1			
Vanadium	ppm	ASTM D5185m		<1			
Cadmium	ppm	ASTM D5185m		0			
ADDITIVES		method	limit/base	current	history1	history2	
	nnm		limit/base		history1	history2	
Boron	ppm	ASTM D5185m	limit/base	302		· · · · ·	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	302 0			
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	302 0 89			
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	302 0 89 <1			
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	302 0 89 <1 459			
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	302 0 89 <1 459 1378			
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	302 0 89 <1 459 1378 1067	  		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	302 0 89 <1 459 1378	  		
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	limit/base	302 0 89 <1 459 1378 1067 1225	   		
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	302 0 89 <1 459 1378 1067 1225 3112 current			
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 <b>method</b>		302 0 89 <1 459 1378 1067 1225 3112 current 7	     history1	     history2	
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 ASTM D5185m	limit/base	302 0 89 <1 459 1378 1067 1225 3112 current	     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 ASTM D5185m ASTM D5185m	limit/base	302 0 89 <1 459 1378 1067 1225 3112 current 7 1	      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	302 0 89 <1 459 1378 1067 1225 3112 current 7 1 9 9	     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	302 0 89 <1 459 1378 1067 1225 3112 <i>current</i> 7 1 9 <i>current</i> 0.4	     history1   history1	    history2   history2	
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 ASTM D5185m	limit/base >25 >20 limit/base >3	302 0 89 <1 459 1378 1067 1225 3112 current 7 1 9 9	     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	limit/base >25 >20 limit/base >3 >20	302 0 89 <1 459 1378 1067 1225 3112 <b>current</b> 7 1 9 <b>current</b> 0.4 8.5 22.7	      history1  history1  history1	     history2  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 D7844 *ASTM D7624 *ASTM D7415	limit/base >25 >20 limit/base >3 >20 >30	302 0 89 <1 459 1378 1067 1225 3112 <i>current</i> 7 1 9 <i>current</i> 0.4 8.5 22.7 <i>current</i>	      history1   history1  	    history2  history2  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	limit/base >25 >20 limit/base >3 >20 >30	302 0 89 <1 459 1378 1067 1225 3112 <b>current</b> 7 1 9 <b>current</b> 0.4 8.5 22.7	      history1  history1  history1	     history2  history2  history2	



Jan10/24

J.

# **OIL ANALYSIS REPORT**



	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
Jan 10/24	Odor	scalar	*Visual	NORML	NORML		
)°C	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445		12.8		
	GRAPHS						
	Ferrous Alloys						
	Non-ferrous Metal	ls		Jan 10/24			
	Viscosity @ 100°C			7.0 6.0 (b)HOX bu) Ja quarter Bu 2.0 1.0 +20			124
Laboratory Sample No. Lab Number Unique Number Test Package To discuss this sample report, * - Denotes test methods that a Statements of conformity to spec	: 06061792 : 10833174 : FLEET contact Customer Serv are outside of the ISO 1	Recieved Diagnose Diagnose ice at 1-8 7025 sco	d : 16 . ed : 18 . ician : We 200-237-1369 pe of accrea	Jan 2024 Jan 2024 s Davis 9. <i>litation.</i>	Si	Contact: TR dney.shingler@ T:	FRESHPOINT HANGE DRVIE ORLANDO, FL US 32809 ES SHINGLER freshpoint.com (615)917-2594 F:

Contact/Location: TRES SHINGLER - FREORL