

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id 6312280 Component Diesel Engine Fluid NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. 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		IL05924098		
Sample Date		Client Info		17 Jul 2023		
Machine Age	mls	Client Info		49745		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	J	method	limit/base	current	history1	history2
	N		IIIII/Dasc		, in the second s	
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	73		
Chromium	ppm	ASTM D5185m	>20	5		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	15		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	13		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		27		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		48		
Manganese	ppm	ASTM D5185m		2		
Magnesium	ppm	ASTM D5185m		616		
Calcium	ppm	ASTM D5185m		1007		
Phosphorus				1837		
	ppm	ASTM D5185m		781		
Zinc	ppm ppm	ASTM D5185m ASTM D5185m				
				781		
Zinc	ppm ppm	ASTM D5185m	limit/base	781 1005		
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	781 1005 2727		
Zinc Sulfur CONTAMINANTS	ppm ppm ppm	ASTM D5185m ASTM D5185m method		781 1005 2727 current	 history1	 history2
Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m method ASTM D5185m		781 1005 2727 current 16	 history1	 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm	ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	>25	781 1005 2727 current 16 4	 history1 	 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20 >5	781 1005 2727 current 16 4 28 <1.0	 history1 	 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 MEthod	>25 >20 >5 limit/base	781 1005 2727 current 16 4 28 <1.0 current	 history1 	 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844	>25 >20 >5 limit/base >3	781 1005 2727 current 16 4 28 <1.0 current 0.8	 history1 history1 	 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624	>25 >20 >5 limit/base >3 >20	781 1005 2727 current 16 4 28 <1.0 current 0.8 15.5	 history1 history1	 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 •ASTM D7844 *ASTM D7844 *ASTM D7624	>25 >20 >5 limit/base >3 >20 >30	781 1005 2727 current 16 4 28 <1.0 current 0.8 15.5 27.5	 history1 history1 history1 	 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm % % Abs/cm Abs/cm Abs/1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 ASTM D3524 ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7615	>25 >20 >5 limit/base >3 >20 >30 limit/base	781 1005 2727 current 16 4 28 <1.0 current 0.8 15.5 27.5 current	 history1 history1 history1	 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation	ppm ppm ppm ppm % % Abs/cm Abs/cm Abs/1mm XTION	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 ASTM D3524 *ASTM D7844 *ASTM D7624 *ASTM D7615 method *ASTM D7414	>25 >20 >5 limit/base >3 >20 >30	781 1005 2727 current 16 4 28 <1.0 current 0.8 15.5 27.5 current 31.6	 history1 history1 history1 	 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm % % Abs/cm Abs/cm Abs/1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 ASTM D3524 ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7615	>25 >20 >5 limit/base >3 >20 >30 limit/base	781 1005 2727 current 16 4 28 <1.0 current 0.8 15.5 27.5 current	 history1 history1 history1	 history2 history2 history2



Viscosity @ 100°C

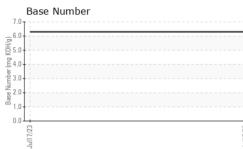
18 17 - Ab 16 -()-001) 14 13 - Ab

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Abnormal 12 -11 -10 -EZ/LIInf

OIL ANALYSIS REPORT

VISUAL



	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt		*Visual	NONE	NONE		
		scalar					
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
C (/ L 11	Appearance Odor	scalar	*Visual	NORML	NORML		
3	³ Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPER		method	limit/base		history1	history
	Visc @ 100°C GRAPHS	cSt	ASTM D445		11.9		
	Ferrous Alloys						
	70- iron						
	60 - nickel						
	50						
	튭 40 -						
	30-						
	20-						
	10						
	0		********				
	Jul17/23			Jul17/23			
	Ju			٦L			
	Non-ferrous Met	als					
	14 conner						
	12 - Leader lead						
	10-						
	8						
	mdd d						
	6						
	4 -						
	2 -						
			*******	******			
	0			/23			
	7/23						
	Juli 7/23			Jul17/23			
	Viscosity @ 100	°C		Jul 7	Raco Number		
	-	°C			Base Number		
	Viscosity @ 100	°C		7			
	Viscosity @ 1009	°C		7	.0.		
	Viscosity @ 100 ⁴	°C		7	.0.		
	Viscosity @ 100 ⁴	°C		7	.0.		
	Viscosity @ 100 ⁴ Abnormal 16 315 16 315	°C		7	.0.		
	Viscosity @ 100 ⁴ Abnormal	°C		7	.0.		
	Viscosity @ 100 ⁴ Abnomal 16 50014 14 313 12	°C		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
	Viscosity @ 100 ⁴ 18 17 Abnormal 16 16 16 16 16 16 16 4 Abnormal 12 11 11 11 11 11 11 11 11 11	°C		7 6 (b) FO HO) bul) security security security 1			
	Viscosity @ 100 ⁴ Abnormal 16 50014 12 11 10	°C		7 6 (0)(HO) Bud Hoy Base Muny Base 1 1 0			
	Viscosity @ 100 ⁴ Abnormal 16 50014 12 11 10	°C		7 6 (0)(HO) Bud Hoy Base Muny Base 1 1 0			
	Viscosity @ 100 ⁴ 18 17 Abnormal 16 16 16 16 16 16 16 4 Abnormal 12 11 11 11 11 11 11 11 11 11	°C		7 6 (b) FO HO) bul) security security security 1			
	Viscosity @ 1004			1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
Laboratory	Viscosity @ 1004	- 501 Madis		1 cz/L1Inf ry, NC 2751		ASE OF ATLA	
Sample No.	Viscosity @ 1004	- 501 Madis Received	d :14/	ry, NC 2751 Aug 2023			FERRY RO
B Sample No. Lab Number	Viscosity @ 100 Abnomal Abnomal Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant Constant C	- 501 Madis Received Diagnose	d : 147 ed : 157	ry, NC 2751 Aug 2023 Aug 2023		ASE OF ATLA	FERRY RO. ATLANTA, (
Sample No. Lab Number Unique Numbe	Viscosity @ 100 Abnormal Abnormal Abnormal Control of the second sec	- 501 Madia Received Diagnost Diagnost	d : 147 ed : 157 tician : Sea	ry, NC 2751 Aug 2023		EASE OF ATLA 4675 BAKERS	FERRY RO ATLANTA, 0 US 303
Sample No. Lab Number Unique Numbe Test Package	Viscosity @ 1004	- 501 Madis Received Diagnost Diagnost al Tests: Fu	d: 147 ed: 157 tician: Sea uelDilution)	ry, NC 2751 Aug 2023 Ang 2023 in Felton		EASE OF ATLA 4675 BAKERS Contact:	FERRY RO ATLANTA, US 303 DAVID JOH
Sample No. Lab Number Unique Number Test Package ss this sample report	Viscosity @ 100 Abnormal Abnormal Abnormal Control of the second sec	- 501 Madia Received Diagnose Diagnost al Tests: Fu rvice at 1-8	d : 147 ed : 157 tician : Sea uelDilution) 800-237-1369	ry, NC 2751 Aug 2023 an Felton		EASE OF ATLA 4675 BAKERS Contact: davidjohns@	FERRY RO ATLANTA, US 303 DAVID JOH

Contact/Location: DAVID JOHNS - IDEATLGA