

OIL ANALYSIS REPORT

CONSTRUCTORS, INC 050152 Component

Diesel Engine

MOBIL DELVAC 1300 SUPER 10W30 (--- GAL)

DIAGNOSIS

Recommendation

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 suitable for further service.



Sample Rating Trend



SAMPLE INFORMATION method SBP0005720 SBP73460050 SBP61352014 Sample Number **Client Info** Sample Date Client Info 04 Jan 2024 18 Sep 2019 14 Sep 2018 Machine Age hrs **Client Info** 1773 1468 1091 Oil Age hrs Client Info 305 377 272 Oil Changed **Client Info** Changed Changed Changed NORMAL Sample Status NORMAL NORMAL CONTAMINATION Fuel >2.1 <1.0 <1.0 WC Method <1.0 Water WC Method >0.21 NEG NEG NEG Glycol WC Method NEG 0.0 0.0 WEAR METALS 30 34 20 Iron ppm ASTM D5185m >51 Chromium ASTM D5185m >11 <1 1 0 ppm Nickel ASTM D5185m >5 1 1 ppm 1 Titanium ppm ASTM D5185m <1 0 0 Silver ASTM D5185m >3 0 0 <1 ppm 3 Aluminum >31 3 2 ppm ASTM D5185m 0 Lead ASTM D5185m >26 <1 0 ppm ASTM D5185m >26 2 2 Copper ppm 1 0 0 Tin ppm ASTM D5185m >4 <1 Vanadium ppm ASTM D5185m 0 0 0 Cadmium 0 0 0 ASTM D5185m ppm Boron mag ASTM D5185m 63 41 36 Barium ASTM D5185m 0 0 0 ppm 46 Molybdenum ASTM D5185m 36 43 ppm 0 ASTM D5185m 0 Manganese ppm <1 Magnesium ppm ASTM D5185m 492 576 706 Calcium ppm ASTM D5185m 1789 1606 1241 Phosphorus ASTM D5185m 841 891 803 ppm 870 957 Zinc ppm ASTM D5185m 1056 Sulfur ASTM D5185m ppm 2775 >22 Silicon ASTM D5185m 16 11 13 ppm Sodium ASTM D5185m >31 9 15 ppm 7 5 Potassium ASTM D5185m >20 4 6 ppm Chlorine ASTM D5185m 0 0 ppm ---**INFRA-RED** Soot % % *ASTM D7844 >3 0.4 0.22 0.27 8.3 Nitration Abs/cm *ASTM D7624 >20 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION

>25

19.9

8.1

*ASTM D7414

Abs/.1mm

Base Number (BN) mg KOH/g ASTM D2896 10.5

Report Id: CONLINNE [WUSCAR] 06054725 (Generated: 01/09/2024 15:45:51) Re	
BODORT ID CONTINUE IW/UNCART 00054 / 25 (GODORATOD UT/09/2024 15:45:51) RO	r 1

Oxidation

Submitted By: Loren Michael

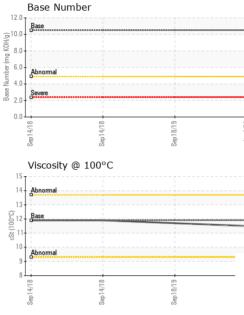
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OIL ANALYSIS REPORT

VISUAL



	White Metal Yellow Metal		*Visual *Visual	NONE NONE	NONE NONE		
	Precipitate		*Visual	NONE	NONE		
<u>1</u>	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
Sep 14/15 Sep 18/19	Appearance	scalar	*Visual	NORML	NORML		
Sep 1	Odor	scalar	*Visual	NORML	NORML		
٥C	Emulsified Water	scalar	*Visual	>0.21	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPER	RTIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	11.9	11.5	11.7	11.9
	GRAPHS						
	Ferrous Alloys		-				
Sep 18/19 +	30- iron chromium	/		_			
	25 - nickel	/					
	E 20-						
	ä 15-						
	10-						
	5						
	0 L <u>.</u>		- 				
	Sep 14/18 Sep 14/18		Sep18/19	Jan4/24			
	•••		⁸	7			
	Non-ferrous Met	als					
	copper						
	8 - tin						
	6 -						
	шdd						
	4						
	2-						
			and the second se	Statutes.			
	19 19 19		6	/24			
	Sep 14/18 Sep 14/18		Sep18/19	Jan4/24			
	Viscosity @ 100°				Page Nurshar		
	15 T			12.0	Base Number		
	14 - Abnormal			10.0	Base	 	
	13 -						
	0 12 Base			9.8.0 E			
	0.12 - Base 0012 - 300 -			0.8 Minuber (mg KOH/g)	Abnormal	J	
	10-			4.0	-		
	Abnormal 9		1	2.0	Severe		
	8						
	Sep14/18		Sep18/19 -	Jan4/24	Sep14/18 -	Sen18/19 -	Jan 4/24 -
	Sep1		Sep1	Jan	Sept	Seo	Jan
Laboratory	: WearCheck USA -	- 501 Madiso	on Ave Ca	rv. NC 27513		Constructor	s Inc 603659
Certificate 12367 Sample No. Lab Number Unique Number Test Package	: SBP0005720 : 06054725 : 10820674 : FLEET	:08, d:09, cian:We	Jan 2024 Jan 2024 s Davis		1815 Y Street Lincoln, NE US 68508 Contact: Loren Michael		
To discuss this sample report, of * - Denotes test methods that a Statements of conformity to spec					Lore		torslincoln.com (402)434-2157