

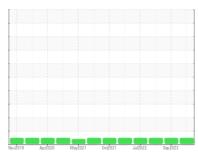
OIL ANALYSIS REPORT

COLORADO/443/EG - SKID STEER

289D3

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)



Sample Rating Trend



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

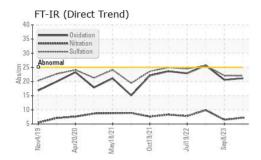
Fluid Condition

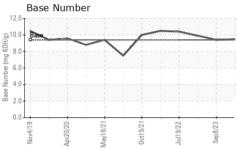
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

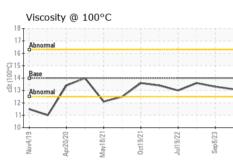
CAMPLE INFORM	4ATION		12 24 /1		la balancia di	history O
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0928740	WC0823072	WC0718273
Sample Date		Client Info		22 May 2024	08 Sep 2023	22 Nov 2022
Machine Age	hrs	Client Info		3641	3375	2891
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	9	10	9
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m		2	0	3
Lead	ppm	ASTM D5185m	>40		0	<1
Copper	ppm	ASTM D5185m		1	0	2
Tin	ppm		>15	<1	0	<1
Vanadium	ppm	ASTM D5185m	>10	0	0	0
				0	0	0
Cadmium	ppm	ASTM D5185m				
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm		0	53	59	54
Barium	ppm	ASTM D5185m	0	0	0	0
Martinlandana						
iviolybaenum	ppm	ASTM D5185m	0	40	41	42
•	ppm ppm	ASTM D5185m ASTM D5185m	0	40 <1	41 <1	42 <1
Manganese			0	-		
Manganese	ppm	ASTM D5185m		<1	<1	<1
Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m		<1 497	<1 537	<1 544
Manganese Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 497 1697	<1 537 1737	<1 544 1876
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 497 1697 748	<1 537 1737 675	<1 544 1876 756
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 497 1697 748 868	<1 537 1737 675 912	<1 544 1876 756 956
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m MSTM D5185m	0	<1 497 1697 748 868 2622	<1 537 1737 675 912 2853	<1 544 1876 756 956 2768
Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m MSTM D5185m	0 limit/base	<1 497 1697 748 868 2622	<1 537 1737 675 912 2853 history1	<1 544 1876 756 956 2768 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 limit/base	<1 497 1697 748 868 2622 current	<1 537 1737 675 912 2853 history1	<1 544 1876 756 956 2768 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 limit/base >25	<1 497 1697 748 868 2622 current 5	<1 537 1737 675 912 2853 history1 8 3	<1 544 1876 756 956 2768 history2 6 3
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 limit/base >25 >20 limit/base	<1 497 1697 748 868 2622 current 5 3 <1	<1 537 1737 675 912 2853 history1 8 3 0 history1	<1 544 1876 756 956 2768 history2 6 3 0 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *ASTM D7844	0 limit/base >25 >20 limit/base >3	<1 497 1697 748 868 2622 current 5 3 <1 current 0.1	<1 537 1737 675 912 2853 history1 8 3 0 history1 0.2	<1 544 1876 756 956 2768 history2 6 3 0 history2 0.1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 limit/base >25 >20 limit/base	<1 497 1697 748 868 2622 current 5 3 <1	<1 537 1737 675 912 2853 history1 8 3 0 history1	<1 544 1876 756 956 2768 history2 6 3 0 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm Abs/.1mm	ASTM D5185m Method ASTM D5185m	limit/base >25 >20 limit/base >3 >20	<1 497 1697 748 868 2622 current 5 3 <1 current 0.1 7.2	<1 537 1737 675 912 2853 history1 8 3 0 history1 0.2 6.5	<1 544 1876 756 956 2768 history2 6 3 0 history2 0.1 9.9
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 Method	limit/base >25 >20 limit/base >3 >20 >30 limit/base	<1 497 1697 748 868 2622 current 5 3 <1 current 0.1 7.2 22.0 current	<1 537 1737 675 912 2853 history1 8 3 0 history1 0.2 6.5 22.1 history1	<1 544 1876 756 956 2768 history2 6 3 0 history2 0.1 9.9 25.6 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm Abs/.1mm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415	0 limit/base >25 >20 limit/base >3 >20 >30	<1 497 1697 748 868 2622 current 5 3 <1 current 0.1 7.2 22.0	<1 537 1737 675 912 2853 history1 8 3 0 history1 0.2 6.5 22.1	<1 544 1876 756 956 2768 history2 6 3 0 history2 0.1 9.9 25.6



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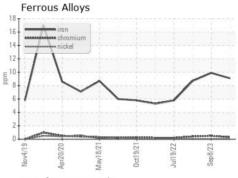


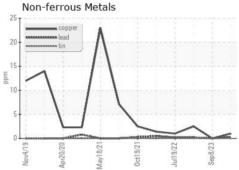


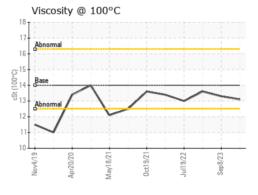


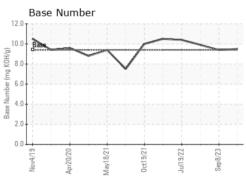
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	14	13.1	13.3	13.6













Certificate 12367

Laboratory Sample No.

: WC0928740 Lab Number : 06196137 Unique Number : 11058260

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

: 30 May 2024 **Tested** : 31 May 2024 Diagnosed

: 31 May 2024 - Wes Davis

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST WICHITA, KS US 67213

Contact: DOUG KING doug.king@sherwood.net T: (316)617-3161

Test Package : CONST (Additional Tests: TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

F: x: