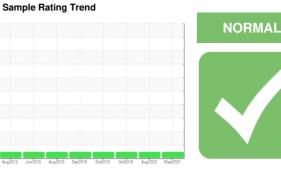


OIL ANALYSIS REPORT

Area OKLAHOMA/102/EG - SCRAPER 76.31L [OKLAHOMA^102^EG - SCRAPER] Component Front Differential

SAMPLE INFORMATION method

Fluid MOBIL MOBILUBE HD PLUS 85W140 (--- 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.

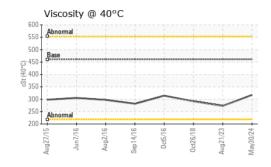
Fluid Condition

The condition of the oil is acceptable for the time in service.

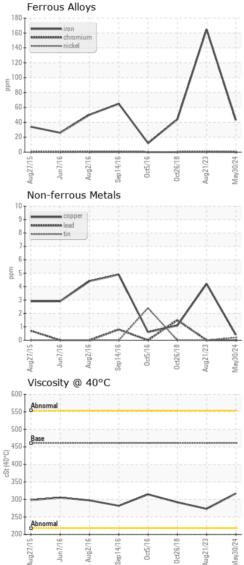
Sample Number		method	limit/base	current	history i	nistory2
oumpio Humboi		Client Info		WC0918083	WC0833968	WCCF8817
Sample Date		Client Info		30 May 2024	21 Aug 2023	26 Oct 2018
Machine Age	hrs	Client Info		15147	1885	13051
Oil Age	hrs	Client Info		2096	1000	500
Oil Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	43	165	44
Chromium	ppm	ASTM D5185m	>3	0	<1	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	<1	4	<1
Lead	ppm	ASTM D5185m	>13	0	0	2
Copper	ppm	ASTM D5185m	>103	<1	4	1
Tin	ppm	ASTM D5185m	>5	<1	0	0
Antimony	ppm	ASTM D5185m	>5			0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		215	179	125
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	7
Manganese	ppm	ASTM D5185m		<1	1	2
Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m		<1 8	1 9	2 30
-						
Magnesium Calcium Phosphorus	ppm	ASTM D5185m		8 225 1011	9	30
Magnesium Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m		8 225	9 537 1060 226	30 161 832 94
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		8 225 1011	9 537 1060	30 161 832
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 225 1011 90	9 537 1060 226	30 161 832 94
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base >100	8 225 1011 90 34146	9 537 1060 226 30092	30 161 832 94 22810
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method		8 225 1011 90 34146 current	9 537 1060 226 30092 history1	30 161 832 94 22810 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>100	8 225 1011 90 34146 current 4	9 537 1060 226 30092 history1 9	30 161 832 94 22810 history2 2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100	8 225 1011 90 34146 current 4 2	9 537 1060 226 30092 history1 9 8	30 161 832 94 22810 history2 2 2 2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20	8 225 1011 90 34146 current 4 2 <1	9 537 1060 226 30092 history1 9 8 0	30 161 832 94 22810 history2 2 2 2 3
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	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	>100 >20 limit/base	8 225 1011 90 34146 <u>current</u> 4 2 <1 current	9 537 1060 226 30092 history1 9 8 0 0 history1	30 161 832 94 22810 history2 2 2 2 3 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 limit/base NONE	8 225 1011 90 34146 <u>current</u> 4 2 <1 current NONE	9 537 1060 226 30092 history1 9 8 0 0 history1 NONE	30 161 832 94 22810 history2 2 2 2 3 history2 LIGHT
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XASTM D5185m *Visual	>100 >20 limit/base NONE NONE	8 225 1011 90 34146 current 4 2 <1 current NONE NONE	9 537 1060 226 30092 history1 9 8 0 history1 NONE NONE	30 161 832 94 22810 history2 2 2 2 3 history2 LIGHT NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	>100 >20 limit/base NONE NONE NONE	8 225 1011 90 34146 <i>current</i> 4 2 <1 <i>current</i> NONE NONE NONE	9 537 1060 226 30092 history1 9 8 0 8 0 <u>history1</u> NONE NONE NONE	30 161 832 94 22810 history2 2 2 2 2 3 history2 LIGHT NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XaSTM D5185m *Visual *Visual *Visual *Visual	>100 >20 limit/base NONE NONE NONE NONE	8 225 1011 90 34146 Current 4 2 <1 2 <1 Current NONE NONE NONE NONE	9 537 1060 226 30092 history1 9 8 0 8 0 history1 NONE NONE NONE NONE NONE	30 161 832 94 22810 history2 2 2 2 3 history2 LIGHT NONE NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XaSTM D5185m *Visual *Visual *Visual *Visual *Visual	>100 >20 limit/base NONE NONE NONE NONE NONE	8 225 1011 90 34146 Current 4 2 <1 2 <1 Current NONE NONE NONE NONE NONE NONE	9 537 1060 226 30092 history1 9 8 0 0 history1 NONE NONE NONE NONE NONE NONE	30 161 832 94 22810 history2 2 2 3 3 history2 LIGHT NONE NONE NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>100 >20 Iimit/base NONE NONE NONE NONE NONE	8 225 1011 90 34146 current 4 2 <1 current NONE NONE NONE NONE NONE NONE NONE	9 537 1060 226 30092 history1 9 8 0 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	30 161 832 94 22810 history2 2 2 2 3 history2 LIGHT NONE NONE NONE NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>100 >20 Iimit/base NONE NONE NONE NONE NONE NONE NONE NON	8 225 1011 90 34146 current 4 2 <1 current NONE NONE NONE NONE NONE NONE NONE NON	9 537 1060 226 30092 history1 9 8 0 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	30 161 832 94 22810 history2 2 2 2 2 3 history2 LIGHT NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NORML NORML NEG

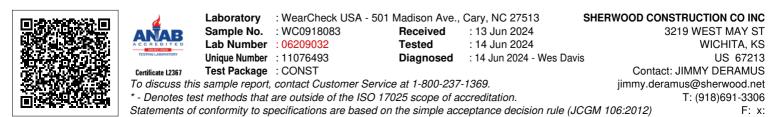


OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	461	317	273	291.8
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS						





Submitted By: JASON GORGES Page 2 of 2