

OIL ANALYSIS REPORT

Sample Rating Trend



OKLAHOMA/3/EG - TRUCK-OFF-HWY-HEAVY HAUL 69.11 [OKLAHOMA^3^EG - TRUCK-OFF-HWY-HEAVY HAUL] Component Hydraulic System Fluid MOBIL MOBILTRANS AST 30 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal. The amount and size of particulates present in the system are acceptable.

Fluid Condition

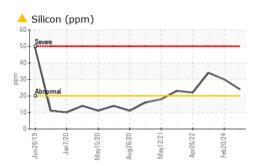
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

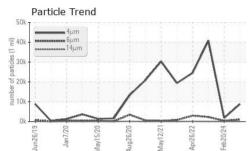
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0935191	WC0886876	WC0746239
Sample Date		Client Info		12 May 2024	20 Feb 2024	11 Nov 2022
Machine Age	hrs	Client Info		108421	10382	7993
Oil Age	hrs	Client Info		5673	5673	5673
Oil Changed	1115	Client Info		Changed	N/A	N/A
Sample Status		Cilent Inio		ABNORMAL	ABNORMAL	ABNORMAL
·					-	-
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	9	7	7
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	8	0	1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	1 4	2
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>75	2	1	<1
Tin	ppm	ASTM D5185m		<1	0	<1
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		62	39	86
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
-	ppm ppm	ASTM D5185m ASTM D5185m		<1 <1	0 <1	<1 <1
Manganese						
Manganese Magnesium	ppm	ASTM D5185m		<1	<1	<1
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m		<1 18	<1 23	<1 17
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 18 3198	<1 23 2878	<1 17 3583
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 18 3198 1062	<1 23 2878 1014	<1 17 3583 1094
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 18 3198 1062 1262	<1 23 2878 1014 1225	<1 17 3583 1094 1381
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 18 3198 1062 1262 5291	<1 23 2878 1014 1225 4685	<1 17 3583 1094 1381 5234
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method		<1 18 3198 1062 1262 5291 current	<1 23 2878 1014 1225 4685 history1	<1 17 3583 1094 1381 5234 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>20	<1 18 3198 1062 1262 5291 current 24	<1 23 2878 1014 1225 4685 history1 30	<1 17 3583 1094 1381 5234 history2 34
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 method ASTM D5185m ASTM D5185m	>20	<1 18 3198 1062 1262 5291 current 24 2	<1 23 2878 1014 1225 4685 history1 30 5	<1 17 3583 1094 1381 5234 history2 34 1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	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	>20 >20	<1 18 3198 1062 1262 5291 current 24 2 <1	<1 23 2878 1014 1225 4685 history1 ▲ 30 5 6	<1 17 3583 1094 1381 5234 history2 ▲ 34 1 0
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	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	>20 >20 limit/base	<1 18 3198 1062 1262 5291 current 24 2 <1 current current	<1 23 2878 1014 1225 4685 history1 30 5 6 history1	<1 17 3583 1094 1381 5234 history2 34 1 0 bistory2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>20 >20 limit/base	<1 18 3198 1062 1262 5291 current 2 2 <1 current 8841	<1 23 2878 1014 1225 4685 history1 30 5 6 history1 1832	<1 17 3583 1094 1381 5234 history2 ▲ 34 1 0 history2 40848
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647	>20 >20 limit/base >2500 >640	<1 18 3198 1062 1262 5291 current 24 2 <1 current 8841 1053	<1 23 2878 1014 1225 4685 history1 30 5 6 history1 1832 381	<1 17 3583 1094 1381 5234 history2 ▲ 34 1 0 history2 40848 2275
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	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 D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >2500 >640	<1 18 3198 1062 1262 5291 current 24 2 <1 current 8841 1053 18	<1 23 2878 1014 1225 4685 history1 30 5 6 history1 1832 381 12	<1 17 3583 1094 1381 5234 istory2 34 1 0 istory2 40848 2275 50
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	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 D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >2500 >640 >160 >40	<1 18 3198 1062 1262 5291 current 24 2 24 24 24 8841 1053 18 4 	<1 23 2878 1014 1225 4685 history1 30 5 6 history1 1832 381 12 3	<1 17 3583 1094 1381 5234 istory2 34 1 0 istory2 40848 2275 50 9
Sulfur CONTAMINANTS Silicon Sodium Potassium	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 D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >2500 >640 >160 >40	<1 18 3198 1062 1262 5291	<1 23 2878 1014 1225 4685 history1 30 5 6 history1 1832 381 12 3 0 0	<1 17 3583 1094 1381 5234
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ESS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >2500 >640 >160 >40 >10	<1 18 3198 1062 1262 5291 current 24 2 <1 current 8841 1053 18 4 1053 18 4 11 1053 18 4 1053 18 4 1053 18 4 1053 18 4 1053 18 4 1053 18 4 105 10 10 10 10 10 10 10 10 10 10 10 10 10	<1 23 2878 1014 1225 4685 history1 30 5 6 history1 1832 381 12 3 0 0 0	<1 17 3583 1094 1381 5234 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >4µm Particles >14µm Particles >21µm Particles >38µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ppm ppm ppm ppm ESS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >2500 >640 >160 >40 >10 >10 >/18/16	<1 18 3198 1062 1262 5291 current 24 2 24 24 21 current 8841 1053 18 4 1 20/17/11 	<1 23 2878 1014 1225 4685 history1 30 5 6 history1 1832 381 12 3 0 0 0 18/16/11	<1 17 3583 1094 1381 5234 bistory2 ▲ 34 1 0 bistory2 40848 2275 50 9 1 0 23/18/13

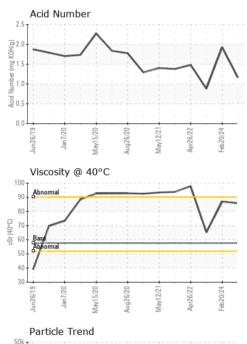
Submitted By: GARRETT ADAMS Page 1 of 2

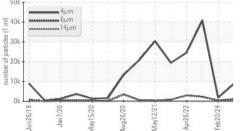


OIL ANALYSIS REPORT







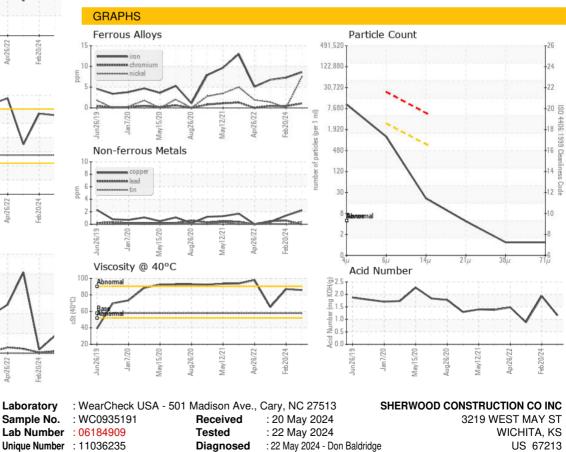


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	85.8	86.9	65.2
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Orlan						

Color



Bottom



Test Package : CONST

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)

Report Id: SHEWIC [WUSCAR] 06184909 (Generated: 05/22/2024 17:37:26) Rev: 1

Certificate 12367

Submitted By: GARRETT ADAMS

Contact: DOUG KING

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

F: x: