

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 13404 Component Transmission (Manual) Fluid TDTO FLUID SAE 30 (--- GAL)

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) TDTO FLUID SAE 30. Please confirm.

Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

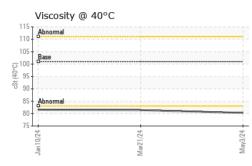
The condition of the fluid is acceptable for the time in service.

Sample NumberClient InfoWC0913151WC09831451WC0831182Sample DateClient Info03 May 202421 Mar 202410 Jan 2024Machine AgehrsClient Info5821250570Oil AgehrsClient Info5821250570Oil ChangedClient Info5821250570Oil ChangedClient Info5821250570Oil ChangedClient Info5821250570CONTAMINATIONmethodinnit/basecurrenthistoryWaterWC0 Method>0.1NEGNEGNEGWearWC0 Method>0.0141218ChromiumppmASTM 051555>5<1<1<1NickelppmASTM 051555>7000ItaniumppmASTM 051555>7000AluminumppmASTM 051555>7000AdminumppmASTM 051555>7000AdminumppmASTM 051555>22654TinppmASTM 051555>22634AdminumppmASTM 0515557000AdminumppmASTM 0515557003MolybdenumppmASTM 051555710120May assiumppmASTM 0515557688Marin	SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Machine AgehrsClient Info18321250570Oil AgehrsClient Info5821250570Oil ChangedClient InfoChangedNoRMALNORMALSample StatusImelhodImit/basecurrenthistory1history2WaterWC Method>0.1NEGNEGNEGWEAR METALSmethodImit/basecurrenthistory1history2IronppmASTM 05185m>5<	Sample Number		Client Info		WC0913151	WC0888145	WC0831185
Oil AgehrsClient Info5821250570Oil ChangedClient InfoChangedNor ChangedNor ChangedNor ChangedSample StatusClient InfoNoRMALNORMALNoRMALNoRMALCONTAMINATIONmethodlimi/basecurrenthistory2WaterWC Method>0.1NEGNEGNEGWEAR METALSmethodlimi/basecurrenthistory2IronppmASTM 05165n>5<1<1<1NickelppmASTM 05165n>5<1<10<1SilverppmASTM 05165n>5<10<1<1SilverppmASTM 05165n>222222LeadppmASTM 05165n>25<1111CopperppmASTM 05165n>25<1110<1VanadiumppmASTM 05165n>25<10<110<1VanadiumppmASTM 05165n>10<1<10<110<110<110<1110<1110<1110<110<1110<1110<1110<1110<1110<11110<1111 <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>03 May 2024</th> <th>21 Mar 2024</th> <th>10 Jan 2024</th>	Sample Date		Client Info		03 May 2024	21 Mar 2024	10 Jan 2024
Oil Changed Sample StatusClient InfoChanged NORMALNot Changed NORMALNot Changed NORMALNot Changed NORMALCONTAMINATIONmethodlimit/basecurrentHistory1History2WaterWC Method>0.1NEGNEGNEGWEAR METALSmethodimit/basecurrentHistory1History2IronppmASTM D5185m>200141218ChromiumppmASTM D5185m>5o<1<1NickelppmASTM D5185m>50<10TitaniumppmASTM D5185m>7000AluminumppmASTM D5185m>22222LeadppmASTM D5185m>25222LeadppmASTM D5185m>25654TinppmASTM D5185m>10<12<1VanadiumppmASTM D5185m>10<12<1VanadiumppmASTM D5185m7003BariumppmASTM D5185m581620MolybdenumppmASTM D5185m581620MangaenseppmASTM D5185m1050106210441027SuffaceppmASTM D5185m1050106210441027SuffaceppmASTM D5185m525667Sodumppm <th>Machine Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>1832</th> <th>1250</th> <th>570</th>	Machine Age	hrs	Client Info		1832	1250	570
Sample Status NORMAL NORMAL <tht< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>582</th><th>1250</th><th>570</th></tht<>	Oil Age	hrs	Client Info		582	1250	570
CONTAMINATION 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 >5 <1 <1 <1 Nickel ppm ASTM D5185m >5 0 <1 0 Silver ppm ASTM D5185m >5 0 <1 0 Gopper ppm ASTM D5185m >25 2 2 2 Lead ppm ASTM D5185m >25 2 2 2 Lead ppm ASTM D5185m >25 6 5 4 Tin ppm ASTM D5185m >10 <1 2 <1 Vanadium ppm ASTM D5185m 7 0 0 3 Roron ppm ASTM D5185m 7 0 0 3	Oil Changed		Client Info		Changed	Changed	Not Changd
Water WC Method >0.1 NEG NEG NEG Wears method limi/base current history1 history2 Iron ppm ASTM D5185m >200 14 12 18 Chromium ppm ASTM D5185m >5 <1 <1 0 Nickel ppm ASTM D5185m >5 0 <1 0 Silver ppm ASTM D5185m >25 2 2 2 Lead ppm ASTM D5185m >25 6 5 4 Tin ppm ASTM D5185m >25 6 5 4 Vanadium ppm ASTM D5185m >225 6 5 4 Vanadium ppm ASTM D5185m >225 6 5 4 Vanadium ppm ASTM D5185m <4 0 <1 2 Vanadium ppm ASTM D5185m 7 0 0 3	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >200 14 12 18 Chromium ppm ASTM D5185m >5 0 <1 0 Nickel ppm ASTM D5185m >5 0 <1 0 Silver ppm ASTM D5185m >7 0 0 0 Aluminum ppm ASTM D5185m >25 2 2 2 Lead ppm ASTM D5185m >45 <1 1 1 Copper ppm ASTM D5185m >45 <1 1 0 Vanadium ppm ASTM D5185m <1 2 <1 0 Acadmium ppm ASTM D5185m <1 0 <1 2 <1 Vanadium ppm ASTM D5185m <1 0 <1 <1 0 <1 ADDTTVES method imit/base	CONTAMINATION	١	method	limit/base	current	history1	history2
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Chromium ppm ASTM D5185m >5 <1	WEAR METALS		method	limit/base	current	history1	history2
NickelppmASTM D5185m>50<10<1TitaniumppmASTM D5185m>70000SliverppmASTM D5185m>70000AluminumppmASTM D5185m>252222LeadppmASTM D5185m>22565411CopperppmASTM D5185m>22565411CopperppmASTM D5185m>10<1	Iron	ppm	ASTM D5185m	>200	14	12	18
Titanium ppm ASTM D5185m <1 0 <1 Silver ppm ASTM D5185m >7 0 0 0 Aluminum ppm ASTM D5185m >25 2 2 2 Lead ppm ASTM D5185m >225 6 5 4 Tin ppm ASTM D5185m >225 6 5 4 Vanadium ppm ASTM D5185m >10 <1	Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Silver ppm ASTM D5185m >7 0 0 0 Aluminum ppm ASTM D5185m >25 2 2 2 Lead ppm ASTM D5185m >45 <1	Nickel	ppm	ASTM D5185m	>5	0	<1	0
AluminumppmASTM D5185m>252222LeadppmASTM D5185m>45<1	Titanium	ppm	ASTM D5185m		<1	0	<1
LeadppmASTM D5185m>45<111CopperppmASTM D5185m>225654TinppmASTM D5185m>10<1	Silver	ppm	ASTM D5185m	>7	0	0	0
Copper ppm ASTM D5185m >225 6 5 4 Tin ppm ASTM D5185m >10 <1	Aluminum	ppm	ASTM D5185m	>25	2	2	2
TinppmASTM D5185m>10<12<1VanadiumppmASTM D5185m<1	Lead	ppm	ASTM D5185m	>45	<1	1	1
TinppmASTM D5185m>10<12<1VanadiumppmASTM D5185m<1	Copper	ppm	ASTM D5185m	>225	6	5	4
CadmiumppmASTM D5185m<10<1ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m37568BariumppmASTM D5185m7003MolybdenumppmASTM D5185m7003ManganeseppmASTM D5185m0<1	Tin	ppm	ASTM D5185m	>10	<1	2	<1
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m37568BariumppmASTM D5185m7003MolybdenumppmASTM D5185m581620ManganeseppmASTM D5185m0<1	Vanadium	ppm	ASTM D5185m		<1	<1	0
BoronppmASTM D5185m37568BariumppmASTM D5185m7003MolybdenumppmASTM D5185m581620ManganeseppmASTM D5185m0<1	Cadmium	ppm	ASTM D5185m		<1	0	<1
BariumppmASTM D5185m7003MolybdenumppmASTM D5185m581620ManganeseppmASTM D5185m0<1<1MagnesiumppmASTM D5185m40604440CalciumppmASTM D5185m2650293230983211PhosphorusppmASTM D5185m1050106210441027ZincppmASTM D5185m1075117112161309SulfurppmASTM D5185m5750484072366464CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>125667SodiumppmASTM D5185m>202<12VISUALmethodlimit/basecurrenthistory1history2Vhite Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEGoroscalar*VisualNORMLNORMLNORML <td< th=""><th>ADDITIVES</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td<>	ADDITIVES		method	limit/base	current	history1	history2
MolybdenumppmASTM D5185m581620ManganeseppmASTM D5185m406041<1	Boron	ppm	ASTM D5185m	37	5	6	8
ManganeseppmASTM D5185m0<1<1MagnesiumppmASTM D5185m40604440CalciumppmASTM D5185m2650293230983211PhosphorusppmASTM D5185m1050106210441027ZincppmASTM D5185m1075117112161309SulfurppmASTM D5185m5750484072366464CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>125667SodiumppmASTM D5185m>202<1	Barium	ppm	ASTM D5185m	7	0	0	3
MagnesiumppmASTM D5185m40604440CalciumppmASTM D5185m2650293230983211PhosphorusppmASTM D5185m1050106210441027ZincppmASTM D5185m1075117112161309SulfurppmASTM D5185m5750484072366464CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>125667SodiumppmASTM D5185m>202<1	Molybdenum	ppm	ASTM D5185m	5	8	16	20
CalciumppmASTM D5185m2650293230983211PhosphorusppmASTM D5185m1050106210441027ZincppmASTM D5185m1075117112161309SulfurppmASTM D5185m5750484072366464CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>125667SodiumppmASTM D5185m>202<1	Manganese	ppm	ASTM D5185m		0	<1	<1
PhosphorusppmASTM D5185m1050106210441027ZincppmASTM D5185m1075117112161309SulfurppmASTM D5185m5750484072366464CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>125667SodiumppmASTM D5185m>125667PotassiumppmASTM D5185m>202<12VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEOebrisscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLNORMLNORMLNEGNEG	Magnesium	ppm	ASTM D5185m		60	44	40
ZincppmASTM D5185m1075117112161309SulfurppmASTM D5185m5750484072366464CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>125667SodiumppmASTM D5185m>202<1	Calcium	ppm	ASTM D5185m	2650	2932	3098	3211
SulfurppmASTM D5185m5750484072366464CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>125667SodiumppmASTM D5185m>125667SodiumppmASTM D5185m>202<1	Phosphorus	ppm	ASTM D5185m	1050	1062	1044	1027
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>125667SodiumppmASTM D5185m<1	Zinc	ppm	ASTM D5185m	1075	1171	1216	1309
SiliconppmASTM D5185m>125667SodiumppmASTM D5185m<1	Sulfur	ppm	ASTM D5185m	5750	4840	7236	6464
SodiumppmASTM D5185m<1	CONTAMINANTS		method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>202<12VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Silicon	ppm	ASTM D5185m	>125	6	6	7
VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGNEG	Sodium	ppm	ASTM D5185m		<1	3	0
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Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGFree Waterscalar*VisualNEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGFree Waterscalar*VisualNEGNEGNEG		scalar	*Visual	NONE		NONE	NONE
Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGNEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.1 NEG NEG Free Water scalar *Visual NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Odor	scalar		NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
I:53:54) Rev: 1 Contact/Location: MIKE WYATT - TRANEW	Free Water 1:53:54) Rev: 1	scalar	*Visual				

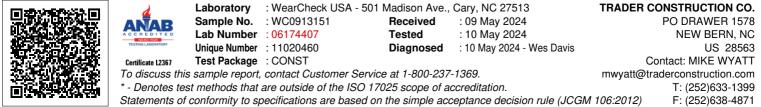
Report Id: TRANEW [WUSCAR] 06174407 (Generated: 05/11/2024 21:53:54) Rev: 1



OIL ANALYSIS REPORT



Visc @ 40°C	cSt	ASTM D445	101	80.3	81.4	81.6
SAMPLE IMAGE	5	method	limit/base	current	history1	history
Color				no image	no image	no image
Bottom			-	no image	no image	no image
GRAPHS						
Ferrous Alloys	Part Part Part Part Part Part Part Part		May3/24			
Viscosity @ 40°C Abnormal	Mar21/24		May324			
Jan 10/24	Mar21/24		May3/24			



Contact/Location: MIKE WYATT - TRANEW