

OIL ANALYSIS REPORT

Area **ENGINE ROOM** [1035573] **RC01** Component

Fluid CAMCO 717 HT (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

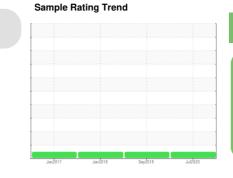
All component wear rates are normal.

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.



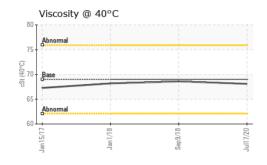


NORMAL

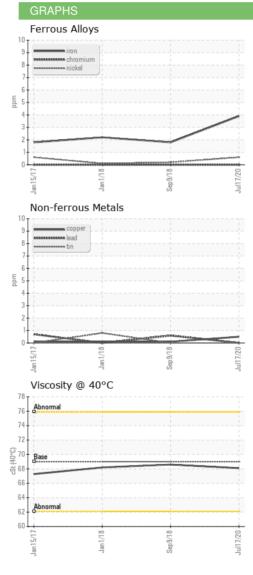
Sample Date Client Info 17 Jul 2020 09 Sep 2018 01 Jan 2018 Wachine Age Client Info 15722 15625 15591 Dil Age Client Info 0 0 0 0 Dil Changed Client Info N/A N/A N/A Sample Status Client Info N/A N/A N/A CONTAMINATION method imit/base current history1 history2 Water WC Method >0.01 NEG NEG NEG VEAR METALS method imit/base current history1 history2 ron ppm ASTM D5185m >10 0 0 0 Silver ppm ASTM D5185m >10 0 0 0 Silver ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >10 0 0 0 Cadmium ppm ASTM D5185m >10	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age Client Info 15722 15625 15591 Di Age Client Info 0 0 0 0 Di Age Client Info N/A N/A N/A N/A Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.01 NEG NEG NEG Water WC Method >0.01 0 0 0 Sitvor ASTM D5185m >50 4 2 2 Chromium ppm ASTM D5185m >10 0 0 0 Silver ppm ASTM D5185m >10 <1 <1 <1 Lead ppm ASTM D5185m >10 0 <1 <1 Copper ppm ASTM D5185m >10 0 <1 <1 Antmony ppm ASTM D5185m 0 <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>WC0459742</th> <th>WCI1107568</th> <th>WCI1101632</th>	Sample Number		Client Info		WC0459742	WCI1107568	WCI1101632
Machine Age Client Info 15722 15625 15591 Dil Age Client Info 0 0 0 Dil Changed Client Info N/A N/A N/A Sample Status Client Info N/A NORMAL NORMAL CONTAMINATION method Imit/base current Normal Normal Water WC Method >0.01 NEG NEG NEG Water WC Method >0.01 NEG NEG VEAR METALS method Imit/base current history1 history2 ron ppm ASTM D5185m >10 0 0 0 Silver ppm ASTM D5185m >10 0 0 0 Rotiminum ppm ASTM D5185m >10 0 0 0 0 Silver ppm ASTM D5185m >10 0 0 0 0 ASTM D5185m >10 0 0 0	Sample Date		Client Info		17 Jul 2020	09 Sep 2018	01 Jan 2018
Dil Changed Client Info N/A N/A N/A N/A Sample Status Imit/base current history1 history2 Water WC Method >0.01 NEG NEG NEG WEAR METALS method imit/base current history1 history2 ron ppm ASTM D5165m >50 4 2 2 Chromium ppm ASTM D5165m >50 4 2 2 Chromium ppm ASTM D5165m >10 0 0 0 Nikel ppm ASTM D5165m 0 0 0 0 Silver ppm ASTM D5165m >10 0 <1 <1 ead ppm ASTM D5165m >10 0 <1 <1 ead ppm ASTM D5165m >10 0 <1 <1 Antimony ppm ASTM D5165m >10 0 <1 <1 Antimony ppm ASTM D5165m 0 0 <1 <1 Antimony ppm ASTM D5165m 0 0 <1 <1 Antimony ppm ASTM D5165m 0 <1	Machine Age		Client Info		15722		15591
Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.01 NEG NEG NEG WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >50 4 2 2 Chromium ppm ASTM D5185m >10 0 0 0 Nikkel ppm ASTM D5185m >10 <1	Oil Age		Client Info		0	0	0
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.01 NEG NEG NEG Wear METALS method limit/base current history1 history2 ron ppm ASTM D5185m >50 4 2 2 Chromium ppm ASTM D5185m >10 0 0 0 Vickel ppm ASTM D5185m 0 0 0 0 Vickel ppm ASTM D5185m 10 <1 <1 <1 <1 Vickel ppm ASTM D5185m 10 0 0 0 0 Vickel ppm ASTM D5185m >10 0 0 0 0 ead ppm ASTM D5185m >10 0 0 0 0 Autimony ppm ASTM D5185m 0 0 <1 0 0 Admaium ppm ASTM D	Oil Changed		Client Info		N/A	N/A	N/A
WaterWC Method>0.01NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history2ronppmASTM D5185m>50422DromiumppmASTM D5185m<1<1<1<1ItaniumppmASTM D5185m<1<1<1<1ItaniumppmASTM D5185m0000SilverppmASTM D5185m100<1<1LeadppmASTM D5185m>100<1<1LeadppmASTM D5185m>50<1<1<1LeadppmASTM D5185m>50<1<1<1AntimonyppmASTM D5185m>50<1<1<1VanadiumppmASTM D5185m0000AdminonyppmASTM D5185m0000AdminonyppmASTM D5185m00<11AntimonyppmASTM D5185m0<1<11AntimonyppmASTM D5185m0<1<1<1AntimonyppmASTM D5185m0<1<1<1AntimonyppmASTM D5185m0<1<1<1AntimonyppmASTM D5185m0<1<1<1AntimonyppmASTM D5185m0<1<1<1AntimonyppmASTM	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5165m >50 4 2 2 Chromium ppm ASTM D5165m >10 0 0 0 Vickel ppm ASTM D5165m <1 <1 <1 <1 Fitanium ppm ASTM D5165m 0 0 0 0 Silver ppm ASTM D5165m >10 <1 <1 <1 Lead ppm ASTM D5165m >10 0 <1 <1 <1 Copper ppm ASTM D5165m >10 0 <1 <1 <1 <1 Antimony ppm ASTM D5165m 0 <1 <1 <1 <1 Antimony ppm ASTM D5165m 0 0 <0 <1 <1 <1 Antimony ppm ASTM D5165m 0 0 <1 0 <1 0 </th <th>CONTAMINATION</th> <th>J</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINATION	J	method	limit/base	current	history1	history2
ron ppm ASTM D5185m >50 4 2 2 Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m 1 <1 <1 Fitanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Lead ppm ASTM D5185m >10 0 <1 <1 Lead ppm ASTM D5185m >50 <1 <1 <1 <1 Lead ppm ASTM D5185m >50 <1 <1 <1 <1 Lead ppm ASTM D5185m >10 0 0 0 0 Capper ppm ASTM D5185m <1 0	Water		WC Method	>0.01	NEG	NEG	NEG
Dromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m <1 <1 <1 <1 Ittanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Lead ppm ASTM D5185m >10 0 <1 <1 <1 Copper ppm ASTM D5185m >10 0 0 <1 <1 Christian ppm ASTM D5185m >10 0 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <td< th=""><th>WEAR METALS</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td<>	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m <1	Iron	ppm	ASTM D5185m	>50	4	2	2
Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >10 <1 <1 <1 ead ppm ASTM D5185m >10 0 <1 0 Copper ppm ASTM D5185m >50 <1 <1 <1 Fin ppm ASTM D5185m >50 <1 <1 <1 Antimony ppm ASTM D5185m >10 0 0 0 Anadium ppm ASTM D5185m <1 0 0 0 Cadmium ppm ASTM D5185m 0 0 <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1 0 Malganesium ppm ASTM D5185m <1 0 2 2 <	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver ppm ASTM D5185m 0 <1	Nickel	ppm	ASTM D5185m		<1	<1	<1
Auminum ppm ASTM D5185m >10 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >10 0 <1	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >50 <1	Aluminum	ppm	ASTM D5185m	>10	<1	<1	<1
Tin ppm ASTM D5185m >10 0 0 <1	Lead	ppm	ASTM D5185m	>10	0	<1	0
AntimonyppmASTM D5185m0000VanadiumppmASTM D5185m<1000CadmiumppmASTM D5185m0000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0<1<1<1BariumppmASTM D5185m0<1<10MolybdenumppmASTM D5185m0<100MaganeseppmASTM D5185m0<100CalciumppmASTM D5185m0000CalciumppmASTM D5185m<1022PhosphorusppmASTM D5185m<1022SulfurppmASTM D5185m21507777CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>15122SodiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2Mhite Metalscalar*VisualNONENONENONENONEVisualNONENONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESilitscalar*VisualNONENONENONENONE	Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Vanadium ppm ASTM D5185m <1	Tin	ppm	ASTM D5185m	>10	0	0	<1
CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0<1<1BariumppmASTM D5185m00<1MolybdenumppmASTM D5185m00<1MolybdenumppmASTM D5185m<100MaganeseppmASTM D5185m0<10MagnesiumppmASTM D5185m000CalciumppmASTM D5185m<102PhosphorusppmASTM D5185m<102ZincppmASTM D5185m215077CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>15122SodiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESilitscalar*VisualNONENONENONENONE	Antimony	ppm	ASTM D5185m		0	0	0
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0<1<1BariumppmASTM D5185m00<1MolybdenumppmASTM D5185m<100ManganeseppmASTM D5185m0<10MagnesiumppmASTM D5185m000CalciumppmASTM D5185m<100CalciumppmASTM D5185m<102PhosphorusppmASTM D5185m<102ZincppmASTM D5185m215077CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>122SodiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESilitscalar*VisualNONENONENONENONENONE	Vanadium	ppm	ASTM D5185m		<1	0	0
BoronppmASTM D5185m0<1	Cadmium	ppm	ASTM D5185m		0	0	0
BariumppmASTM D5185m00<1	ADDITIVES		method	limit/base	current	history1	history2
MolybdenumppmASTM D5185m<1	Boron	ppm	ASTM D5185m		0	<1	<1
ManganeseppmASTM D5185m0<1	Barium	ppm	ASTM D5185m		0	0	<1
MagnesiumppmASTM D5185m000CalciumppmASTM D5185m<1<1<1PhosphorusppmASTM D5185m<102ZincppmASTM D5185m434SulfurppmASTM D5185m215077CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>15122SodiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONE	Molybdenum	ppm	ASTM D5185m		<1	0	0
CalciumppmASTM D5185m<1	Manganese	ppm	ASTM D5185m		0	<1	0
PhosphorusppmASTM D5185m<1	Magnesium	ppm	ASTM D5185m		0	0	0
ZincppmASTM D5185m434SulfurppmASTM D5185m215077CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>15122SodiumppmASTM D5185m>151<1<1PotassiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	Calcium	ppm	ASTM D5185m		<1	<1	<1
SulfurppmASTM D5185m215077CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>15122SodiumppmASTM D5185m>151<1<1PotassiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	Phosphorus	ppm	ASTM D5185m		<1	0	2
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<>15122SodiumppmASTM D5185m<1<1<1PotassiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	Zinc	ppm	ASTM D5185m		4	3	4
SiliconppmASTM D5185m>15122SodiumppmASTM D5185m<1<1<1<1PotassiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	Sulfur	ppm	ASTM D5185m		21	50	77
SodiumppmASTM D5185mIIIIPotassiumppmASTM D5185m<1<1<1<1PotassiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	CONTAMINANTS		method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>20004VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	Silicon	ppm	ASTM D5185m	>15	1	2	2
VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	Sodium	ppm	ASTM D5185m		<1	<1	<1
White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	Potassium	ppm	ASTM D5185m	>20	0	0	4
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	VISUAL		method	limit/base	current	history1	history2
Precipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silt 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
Jebris scalar "Visual NONE NONE NONE NONE	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt scalar *Visual NONE NONE NONE NONE	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance scalar *Visual NORML NORML NORML NORML	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor scalar *Visual NORML NORML NORML NORML	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.01	NEG		
Free Water scalar *Visual NEG CationEGRIC KLINE	Free Water	scalar	*Visual		NEG	catione FIC K	INENE PGRE

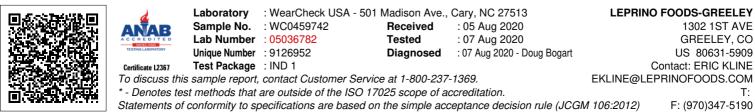


OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	69	68.1	68.59	68.19
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				d		
Bottom						





Contact/Location: ERIC KLINE - LEPGRE Page 2 of 2