

# **OIL ANALYSIS REPORT**

# Sample Rating Trend



Area WALPOLE Machine Id 944 - WALPOLE Component Front Differential Fluid {not provided} (--- GAL)

### DIAGNOSIS

# Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. We were unable to perform a particle count due to a high concentration of particles present in this sample.

#### Wear

All component wear rates are normal.

# Contamination

High concentration of visible dirt/debris present in the oil.

# **Fluid Condition**

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

Sample Number Client Info 22 Feb 204 18 Dec 2023 0.0 Cot 2023   Machine Age mis Client Info 22 Feb 204 18 Dec 2023 107668 117268   Oil Age mis Client Info N/A N/A N/A   Sample Status Client Info N/A N/A N/A   WEAR METALS method Into ABNORMAL ABNORMAL ABNORMAL   WEAR METALS method Into 406 348 331   Chromium ppm ASTM05185 >10 <1 2 2   Nickel ppm ASTM05185 >10 <1 310 <1   Silver ppm ASTM05185 >10 <1 <1 <1   Silver ppm ASTM05185 >10 <1 <1 <1   Copper ppm ASTM05185 >10 <1 <1 <1   Vanadium ppm ASTM05185 >10 <1 <1 <1   Silver ppm ASTM05185 >10 <1 <1 <1   Cadmium ppm ASTM05185 >10 <1 <1 <1   Silver ppm ASTM05185 >10	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age mis Client Info 155858 137668 117268   Oil Age mis Client Info 0 0 0   Oil Changed Client Info N/A N/A N/A ABNORMAL   Sample Status Im Im RBNORMAL ABNORMAL ABNORMAL ABNORMAL   WEAR METALS method Imit/base current history1 history2   Iron ppm ASTM DS185m >10 <1 2 2   Nickel ppm ASTM DS185m >10 <1 <1 <1   Silver ppm ASTM DS185m >25 4 4 2   Copper ppm ASTM DS185m >25 2 6 4   Cadmium ppm ASTM DS185m >10 4 5 4   Vanadium ppm ASTM DS185m >10 4 5 4   Adminum ppm ASTM DS185m >10 4 1 3   Cadmium ppm ASTM DS185m >10 1 9   Magaenese ppm ASTM DS185m <1 1 1   Magaenesium ppm ASTM DS185m <10 1	Sample Number		Client Info		WC0900858	WC0900926	WC0876081
Machine Age mis Client Info 155858 137668 117268   Oil Age mis Client Info 0 0 0   Oil Changed Client Info N/A N/A N/A ABNORMAL   Sample Status Im Im RBNORMAL ABNORMAL ABNORMAL ABNORMAL   WEAR METALS method Imit/base current history1 history2   Iron ppm ASTM DS185m >10 <1 2 2   Nickel ppm ASTM DS185m >10 <1 <1 <1   Silver ppm ASTM DS185m >25 4 4 2   Copper ppm ASTM DS185m >25 2 6 4   Cadmium ppm ASTM DS185m >10 4 5 4   Vanadium ppm ASTM DS185m >10 4 5 4   Adminum ppm ASTM DS185m >10 4 1 3   Cadmium ppm ASTM DS185m >10 1 9   Magaenese ppm ASTM DS185m <1 1 1   Magaenesium ppm ASTM DS185m <10 1	Sample Date		Client Info		22 Feb 2024	18 Dec 2023	02 Oct 2023
Oil Changed Client Info NA NA NA   Sample Status Image Image Current ABNORMAL ABNORMAL ABNORMAL   WEAR METALS method limit/base current history1 history2   Iron ppm ASTM D5185n >500 406 348 331   Chromium ppm ASTM D5185n >10 <1 2 2   Titanium ppm ASTM D5185n >25 4 <1 <1   Silver ppm ASTM D5185n >25 4 <2 2   Lead ppm ASTM D5185n >25 4 <2 2   Copper ppm ASTM D5185n >25 4 <2 4   Cadmium ppm ASTM D5185n >25 4 <2 4   Cadmium ppm ASTM D5185n >25 2 6 4   Cadmium ppm ASTM D5185n >10 4 5 4   Cadmium ppm ASTM D5185n <63 63 65   Barum ppm ASTM D5185n <11 <1 <1   Magnasium ppm ASTM D5185n <12 <		mls			155858	137668	117268
Sample Status     Image     ABNORMAL     ABNORMAL     ABNORMAL     ABNORMAL       WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >500     406     348     331       Chromium     ppm     ASTM D5185m     >10     <1     2     2       Nickel     ppm     ASTM D5185m     >10     <1     <1     <1       Silver     ppm     ASTM D5185m     >25     4     44     2       Lead     ppm     ASTM D5185m     >25     2     6     4       Copper     ppm     ASTM D5185m     >10     41     38     39       Tin     ppm     ASTM D5185m     510     41     38     39       Tin     ppm     ASTM D5185m     10     41     38     39       Tin     ppm     ASTM D5185m     10     1     1       ASTM D5185m     100     1     9     1     1	Oil Age	mls	Client Info		0	0	0
Sample Status     Image     ABNORMAL     ABNORMAL     ABNORMAL     ABNORMAL       WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >500     406     348     331       Chromium     ppm     ASTM D5185m     >10     <1     2     2       Nickel     ppm     ASTM D5185m     >10     <1     <1     <1       Silver     ppm     ASTM D5185m     >25     4     44     2       Lead     ppm     ASTM D5185m     >25     2     6     4       Copper     ppm     ASTM D5185m     >10     41     38     39       Tin     ppm     ASTM D5185m     510     41     38     39       Tin     ppm     ASTM D5185m     10     41     38     39       Tin     ppm     ASTM D5185m     10     1     1       ASTM D5185m     100     1     9     1     1	Oil Changed		Client Info		N/A	N/A	N/A
Iron     ppm     ASTM D5185m     >500     406     348     331       Chromium     ppm     ASTM D5185m     >10     5     5     4       Nickel     ppm     ASTM D5185m     <1     2     2       Titanium     ppm     ASTM D5185m     0     0     0       Silver     ppm     ASTM D5185m     >25     4     4     2       Lead     ppm     ASTM D5185m     >25     2     6     4       Copper     ppm     ASTM D5185m     >100     41     38     39       Tin     ppm     ASTM D5185m     100     4     5     4       Vanadium     ppm     ASTM D5185m     0     <1     10       Cadimium     ppm     ASTM D5185m     0     11     9       Molybdenum     ppm     ASTM D5185m     10     18     8       Magnaese     ppm     ASTM D5185m     10     8     2       Magnaesium     ppm     ASTM D5185m					ABNORMAL	ABNORMAL	ABNORMAL
Dromium     ppm     ASTM D5185m     >10     5     5     4       Nickel     ppm     ASTM D5185m     >10     <1     2     2       Titanium     ppm     ASTM D5185m     <0     0     0     0       Silver     ppm     ASTM D5185m     >25     4     4     2       Lead     ppm     ASTM D5185m     >25     2     6     4       Copper     ppm     ASTM D5185m     >10     4     5     4       Vanadium     ppm     ASTM D5185m     >10     4     5     4       Vanadium     ppm     ASTM D5185m     0     <1     0       Cadmium     ppm     ASTM D5185m     0     11     9       Molybdenum     ppm     ASTM D5185m     0     10     8       Magnesium     ppm     ASTM D5185m     100     18     100       Magnesium     ppm     ASTM D5185m     1754     1687     1741       Zinc     ppm <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
Chromium     ppm     ASTM D5185m     >10     5     5     4       Nickel     ppm     ASTM D5185m     >10     <1     2     2       Titanium     ppm     ASTM D5185m     >10     <1     2     2       Silver     ppm     ASTM D5185m     >25     4     44     2       Lead     ppm     ASTM D5185m     >25     2     6     4       Copper     ppm     ASTM D5185m     >10     41     38     39       Tin     ppm     ASTM D5185m     >10     4     5     4       Vanadium     pm     ASTM D5185m     0     <1     0       Cadmium     pm     ASTM D5185m     0     11     9       Molybdenum     pm     ASTM D5185m     100     10     8       Magnesium     pm     ASTM D5185m     192     197     201       Calcium     pm     ASTM D5185m     1754     1687     1741       Zinc     pm     AS	Iron	ppm	ASTM D5185m	>500	406	348	331
Nickel     ppm     ASTM D5185m     >10     <1	Chromium		ASTM D5185m	>10	5	5	4
Titanium     ppm     ASTM D5185m     <1     <1     <1     <1     <1       Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >25     4     4     2       Lead     ppm     ASTM D5185m     >215     2     6     4       Copper     ppm     ASTM D5185m     >100     41     38     39       Tin     ppm     ASTM D5185m     >100     4     5     4       Vanadium     ppm     ASTM D5185m     0     <1	Nickel		ASTM D5185m	>10	<1		2
Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >25     4     4     2       Lead     ppm     ASTM D5185m     >25     2     6     4       Copper     ppm     ASTM D5185m     >10     4     5     4       Vanadium     ppm     ASTM D5185m     10     4     5     4       Vanadium     ppm     ASTM D5185m     0     <1	Titanium		ASTM D5185m		<1		
Aluminum     ppm     ASTM D5185m     >25     4     4     2       Lead     ppm     ASTM D5185m     >25     2     6     4       Copper     ppm     ASTM D5185m     >100     41     38     39       Tin     ppm     ASTM D5185m     >10     4     5     4       Vanadium     ppm     ASTM D5185m     >10     4     5     4       Cadmium     ppm     ASTM D5185m     0     <1	Silver		ASTM D5185m		0		0
Lead     ppm     ASTM D5185m     >25     2     6     4       Copper     ppm     ASTM D5185m     >100     41     38     39       Tin     ppm     ASTM D5185m     >10     4     5     4       Vanadium     ppm     ASTM D5185m     >10     4     5     4       Cadmium     ppm     ASTM D5185m     0     <1	Aluminum		ASTM D5185m	>25		4	2
Copper     ppm     ASTM D5185m     >100     41     38     39       Tin     ppm     ASTM D5185m     >10     4     5     4       Vanadium     ppm     ASTM D5185m     0     <10	Lead		ASTM D5185m	>25	2	6	4
Tin     ppm     ASTM D5185m     >10     4     5     4       Vanadium     ppm     ASTM D5185m     0     <1	Copper		ASTM D5185m	>100	41	38	39
Vanadium     ppm     ASTM D5185m     0     <1					4		
Cadmium     ppm     ASTM D5185m     0     <1     <1       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     63     63     65       Barium     ppm     ASTM D5185m     0     1     9       Molybdenum     ppm     ASTM D5185m     <1     <1     <1     <1       Manganese     ppm     ASTM D5185m     100     10     8       Magnesium     ppm     ASTM D5185m     192     197     201       Calcium     ppm     ASTM D5185m     9     10     8       Phosphorus     ppm     ASTM D5185m     77     9     2       Sulfur     ppm     ASTM D5185m     75     50     46     47       Sodium     ppm     ASTM D5185m     >20     0     41     1       Vater     %     ASTM D5185m     >20     0.032     0.043     0.034       ppm Water     ppm     ASTM D5185m	Vanadium		ASTM D5185m		0	<1	0
Boron     ppm     ASTM D5185m     63     63     65       Barium     ppm     ASTM D5185m     0     1     9       Molybdenum     ppm     ASTM D5185m     <1	Cadmium		ASTM D5185m		0	<1	<1
Barium     ppm     ASTM D5185m     0     1     9       Molybdenum     ppm     ASTM D5185m     <1     <1     <1     <1       Manganese     ppm     ASTM D5185m     100     10     8       Magnesium     ppm     ASTM D5185m     192     197     201       Calcium     ppm     ASTM D5185m     192     197     201       Calcium     ppm     ASTM D5185m     9     10     8       Phosphorus     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     75     50     46     47       Sodium     ppm     ASTM D5185m     >20     0     4     1       Vater     %     ASTM D5185m     >20     0     430     342       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >2000 </th <th>ADDITIVES</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185m     <1	Boron	ppm	ASTM D5185m		63	63	65
Maganese     ppm     ASTM D5185m     10     10     8       Magnesium     ppm     ASTM D5185m     192     197     201       Calcium     ppm     ASTM D5185m     9     10     8       Phosphorus     ppm     ASTM D5185m     1754     1687     1741       Zinc     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     28096     23306     27847       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >75     50     46     47       Sodium     ppm     ASTM D5185m     >20     0     4     1       Water     %     ASTM D6304     >.2     0.032     0.043     0.034       pm Water     ppm     ASTM D7647     >20000      4     249971     4     132291       Parti	Barium	ppm	ASTM D5185m		0	1	9
Magnesium     ppm     ASTM D5185m     192     197     201       Calcium     ppm     ASTM D5185m     9     10     8       Phosphorus     ppm     ASTM D5185m     1754     1687     1741       Zinc     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     75     50     46     47       Sodium     ppm     ASTM D5185m     >75     50     46     47       Sodium     ppm     ASTM D5185m     >75     50     46     47       Sodium     ppm     ASTM D5185m     >20     0     4     1       Water     %     ASTM D6304     >2     0.032     0.043     0.034       ppm Water     ppm     ASTM D7647     >20000      ▲ 249971< ▲ 132291	Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Calcium     ppm     ASTM D5185m     9     10     8       Phosphorus     ppm     ASTM D5185m     1754     1687     1741       Zinc     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     28096     23306     27847       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >75     50     46     47       Sodium     ppm     ASTM D5185m     >75     50     46     47       Sodium     ppm     ASTM D5185m     >20     0     4     1       Water     %     ASTM D5185m     >20     0.043     0.034       ppm Water     ppm     ASTM D6304     >.2     0.032     0.043     342       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >2000      127136     20842       Parti	Manganese	ppm	ASTM D5185m		10	10	8
Phosphorus     ppm     ASTM D5185m     1754     1687     1741       Zinc     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     28096     23306     27847       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >75     50     46     47       Sodium     ppm     ASTM D5185m     >75     50     46     47       Sodium     ppm     ASTM D5185m     >20     0     4     1       Water     %     ASTM D6304     >.2     0.032     0.043     0.034       ppm Water     ppm     ASTM D6304     >.2000     323     430     342       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >20000      4     249971     132291       Particles >1µm     ASTM D7647     5000      3	Magnesium	ppm	ASTM D5185m		192	197	201
Zinc     ppm     ASTM D5185m     7     9     2       Sulfur     ppm     ASTM D5185m     28096     23306     27847       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >75     50     46     47       Sodium     ppm     ASTM D5185m     >75     50     4     0       Potassium     ppm     ASTM D5185m     >20     0     4     1       Water     %     ASTM D6304     >.2     0.032     0.043     0.034       ppm Water     ppm     ASTM D6304     >.2     0.032     0.043     342       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >20000      4     249971     4     132291       Particles >6µm     ASTM D7647     >20000      4     7875     426       Particles >14µm     ASTM D7647     >640	Calcium	ppm	ASTM D5185m		9	10	8
SulfurppmASTM D5185m280962330627847CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75504647SodiumppmASTM D5185m>20041PotassiumppmASTM D6304>.20.0320.0430.034ppm Water%ASTM D6304>2000323430342FLUID CLEANLINESSmethodlimit/basecurrenthistory1history2Particles >4µmASTM D7647>2000042499714132291Particles >6µmIASTM D7647>5000420842Particles >14µmASTM D7647>6404120992Particles >21µmASTM D7647>1603139Particles >38µmASTM D7647>10300Oil CleanlinessISO 4406 (c)>21/19/16425/24/204/24/27/16FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Phosphorus	ppm	ASTM D5185m		1754	1687	1741
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75504647SodiumppmASTM D5185m>75504647PotassiumppmASTM D5185m>20041Water%ASTM D5185m>200.0320.0430.034ppm WaterppmASTM D6304>.20.0320.043342FLUID CLEANLINESSmethodlimit/basecurrenthistory1history2Particles >4µmASTM D7647>20000▲ 2499711132291Particles >6µmASTM D7647>5000▲ 127136▲ 20842Particles >14µmASTM D7647>640▲ 7875426Particles >21µmASTM D7647>160313Particles >38µmASTM D7647>10313Particles >71µmASTM D7647>104 25/24/2024/22/16FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Zinc	ppm	ASTM D5185m		7	9	2
Silicon   ppm   ASTM D5185m   >75   50   46   47     Sodium   ppm   ASTM D5185m   >20   0   4   5   0     Potassium   ppm   ASTM D5185m   >20   0   4   1     Water   %   ASTM D6304   >.2   0.032   0.043   0.034     ppm Water   ppm   ASTM D6304   >.2000   323   430   342     FLUID CLEANLINESS   method   limit/base   current   history1   history2     Particles >4µm   ASTM D7647   >20000    ▲ 2499711   ▲ 132291     Particles >6µm   ASTM D7647   >5000    ▲ 127136   ▲ 20842     Particles >6µm   ASTM D7647   >640    ▲ 127136   ▲ 20842     Particles >14µm   ASTM D7647   >640    ▲ 1209   92     Particles >21µm   ASTM D7647   >10    ③ 1209   92     Particles >38µm   ASTM D7647   >10    ③ 1209   24/22/16     Oil Cleanliness   ISO 4406 (c) <th< th=""><th>Sulfur</th><th>ppm</th><th>ASTM D5185m</th><th></th><th>28096</th><th>23306</th><th>27847</th></th<>	Sulfur	ppm	ASTM D5185m		28096	23306	27847
Sodium     ppm     ASTM D5185m     4     5     0       Potassium     ppm     ASTM D5185m     >20     0     4     1       Water     %     ASTM D6304     >.2     0.032     0.043     0.034       ppm Water     ppm     ASTM D6304     >.2     0.032     0.043     0.034       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >20000      ▲ 2499711     132291       Particles >6µm     ASTM D7647     >5000      ▲ 127136     20842       Particles >6µm     ASTM D7647     >640      ▲ 7875     426       Particles >14µm     ASTM D7647     >640      ▲ 1209     92       Particles >38µm     ASTM D7647     >100      31     3       Particles >71µm     ASTM D7647     >10      ▲ 25/24/20     24/22/16       FLUID DEGRADATION     method     limit/base     current     history1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium     ppm     ASTM D5185m     >20     0     4     1       Water     %     ASTM D6304     >.2     0.032     0.043     0.034       ppm Water     ppm     ASTM D6304     >.2000     323     430     342       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >20000      ▲ 249971     ▲ 132291       Particles >6µm     ASTM D7647     >5000      ▲ 127136     ▲ 20842       Particles >14µm     ASTM D7647     >640      ▲ 7875     426       Particles >14µm     ASTM D7647     >160      ▲ 1209     92       Particles >21µm     ASTM D7647     >40      ③ 1209     92       Particles >38µm     ASTM D7647     >10      ③ 1209     92       Particles >71µm     ASTM D7647     >10      ③ 120     24/22/16       FLUID DEGRADATION     method     limit/base     current     hist		ppm		>75			
Water   %   ASTM D6304   >.2   0.032   0.043   0.034     ppm Water   ppm   ASTM D6304   >.2000   323   430   342     FLUID CLEANLINESS   method   limit/base   current   history1   history2     Particles >4µm   ASTM D7647   >20000    ▲ 249971   ▲ 132291     Particles >6µm   ASTM D7647   >5000    ▲ 127136   ▲ 20842     Particles >14µm   ASTM D7647   >640    ▲ 7875   426     Particles >21µm   ASTM D7647   >160    ▲ 1209   92     Particles >38µm   ASTM D7647   >40    ③ 1209   92     Particles >71µm   ASTM D7647   >10    ④ 1209   92     Oil Cleanliness   ISO 4406 (c)   >21/19/16    ④ 25/24/20   △ 24/22/16     FLUID DEGRADATION   method   limit/base   current   history1   history2	Sodium	ppm			4	5	
ppm Water     ppm     ASTM D6304     >2000 <b>323</b> 430     342       FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >20000      A 249971     132291       Particles >6µm     ASTM D7647     >5000      A 249971     132291       Particles >6µm     ASTM D7647     >5000      A 249971     132291       Particles >14µm     ASTM D7647     >640      A 7875     426       Particles >21µm     ASTM D7647     >160      A 1209     92       Particles >38µm     ASTM D7647     >40      31     3       Particles >71µm     ASTM D7647     >10      32/2/2/20     24/22/16       Oil Cleanliness     ISO 4406 (c)     >21/19/16      425/24/20     24/22/16       FLUID DEGRADATION     method     limit/base     current     history1     history2					-		
FLUID CLEANLINESS   method   limit/base   current   history1   history2     Particles >4µm   ASTM D7647   >20000    ▲ 249971   ▲ 132291     Particles >6µm   ASTM D7647   >5000    ▲ 127136   ▲ 20842     Particles >14µm   ASTM D7647   >640    ▲ 7875   426     Particles >21µm   ASTM D7647   >160    ▲ 1209   92     Particles >38µm   ASTM D7647   >40    31   3     Particles >71µm   ASTM D7647   >10    3   0     Oil Cleanliness   ISO 4406 (c)   >21/19/16    ▲ 25/24/20   ▲ 24/22/16     FLUID DEGRADATION   method   limit/base   current   history1   history2		%					
Particles >4µm   ASTM D7647   >20000    ▲ 249971   ▲ 132291     Particles >6µm   ASTM D7647   >5000    ▲ 127136   ▲ 20842     Particles >14µm   ASTM D7647   >640    ▲ 7875   426     Particles >21µm   ASTM D7647   >160    ▲ 1209   92     Particles >38µm   ASTM D7647   >40    31   3     Particles >71µm   ASTM D7647   >10    3   0     Oil Cleanliness   ISO 4406 (c)   >21/19/16    ▲ 25/24/20   ▲ 24/22/16	ppm Water	ppm	ASTM D6304	>2000	323	430	342
Particles >6µm   ASTM D7647   >5000    ▲ 127136   ▲ 20842     Particles >14µm   ASTM D7647   >640    ▲ 7875   426     Particles >21µm   ASTM D7647   >160    ▲ 1209   92     Particles >38µm   ASTM D7647   >40    31   3     Particles >38µm   ASTM D7647   >10    3   0     Oil Cleanliness   ISO 4406 (c)   >21/19/16    ▲ 25/24/20   ▲ 24/22/16     FLUID DEGRADATION   method   limit/base   current   history1   history2	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >14µm   ASTM D7647   >640    ▲ 7875   426     Particles >21µm   ASTM D7647   >160    ▲ 1209   92     Particles >38µm   ASTM D7647   >40    31   3     Particles >71µm   ASTM D7647   >10    3   0     Oil Cleanliness   ISO 4406 (c)   >21/19/16    ▲ 25/24/20   ▲ 24/22/16     FLUID DEGRADATION   method   limit/base   current   history1   history2	•						
Particles >21µm     ASTM D7647     >160      1209     92       Particles >38µm     ASTM D7647     >40      31     3       Particles >71µm     ASTM D7647     >10      3     0       Oil Cleanliness     ISO 4406 (c)     >21/19/16      25/24/20     24/22/16       FLUID DEGRADATION     method     limit/base     current     history1     history2							
Particles >38μm     ASTM D7647     >40      31     3       Particles >71μm     ASTM D7647     >10      3     0       Oil Cleanliness     ISO 4406 (c)     >21/19/16      ▲ 25/24/20     ▲ 24/22/16       FLUID DEGRADATION     method     limit/base     current     history1     history2							
Particles >71μm     ASTM D7647     >10      3     0       Oil Cleanliness     ISO 4406 (c)     >21/19/16      ▲ 25/24/20     ▲ 24/22/16       FLUID DEGRADATION     method     limit/base     current     history1     history2							
Oil Cleanliness   ISO 4406 (c) >21/19/16							
FLUID DEGRADATION method limit/base current history1 history2							
	Oil Cleanliness		ISO 4406 (c)	>21/19/16		▲ 25/24/20	▲ 24/22/16
Acid Number (AN)     mg KOH/g     ASTM D8045     1.01     0.35     0.65	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		1.01	0.35	0.65



00 <sup>cSt</sup> (40°C) 08 <sup>cSt</sup> (40°C)

7( 60 50 Oct18/22

18

16

cSt (100°C)

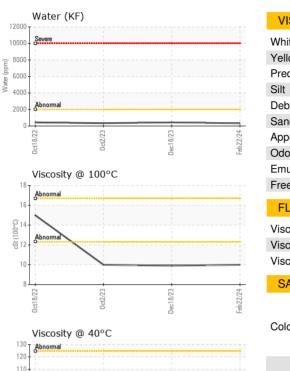
10

8

0ct18/22

0ct2/23

# **OIL ANALYSIS REPORT**



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	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	🔺 HEAVY	NONE	LIGHT
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	>.2	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		54.4	54.1	54.3
Visc @ 100°C	cSt	ASTM D445		10.0	9.9	10.0
Viscosity Index (VI)	Scale	ASTM D2270		173	171	173
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Calar					Free	
Color					Unit Coord	a



Bottom

