

## **OIL ANALYSIS REPORT**

## PONCA CITY Unit 03 DB130103E Component

**Natural Gas Engine** 

PETRO CANADA DURON MONOGRADE HD 40W (350 GAL)

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

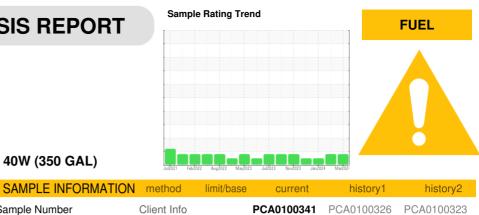
All component wear rates are normal.

#### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

#### Fluid Condition

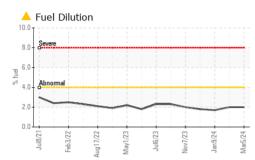
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

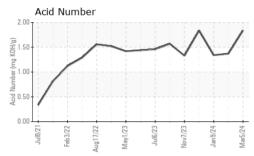


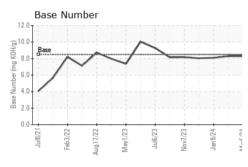
Machine Age     hrs     Client Info     1330     1275     1256       Oil Age     hrs     Client Info     1330     1275     1256       Oil Changed     Client Info     N/A     N/A     Not Changd       Sample Status     Imat/Data     MARGINAL     NORMAL     NORMAL       CONTAMINATION     method     Imit/base     current     history1     history2       Water     WC Method     >0.1     NEG     NEG     NEG       Wetar     WC Method     >0.1     NEG     NEG     6       Chromium     ppm     ASTM D5185m     >2     0     0     0       Nickel     ppm     ASTM D5185m     >3     0     0     0       Silver     ppm     ASTM D5185m     >30     1     2     1       Copper     ppm     ASTM D5185m     >30     1     2     1       Tin     ppm     ASTM D5185m     >4     <1     <1     1       Copper     ppm     ASTM D5185m	Sample Number		Client Info		PCA0100341	PCA0100326	PCA0100323
Oil Age     hrs     Client Info     1330     1275     1256       Oil Changed     Client Info     N/A     N/A     Not Changed       Sample Status     Image     Image     Image     N/A     NARGINAL     Not Changed       CONTAMINATION     method     Imit/base     current     history1     history2       Water     WC Method     >0.1     NEG     NEG     NEG       WEAR METALS     method     Imit/base     current     history1     history2       Korn     ppm     ASTM DS185m     >50     7     6     6     6       Chromium     ppm     ASTM DS185m     >4     <1     <1     0     0     0       Silver     ppm     ASTM DS185m     >3     0 <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>05 Mar 2024</th> <th>05 Feb 2024</th> <th>09 Jan 2024</th>	Sample Date		Client Info		05 Mar 2024	05 Feb 2024	09 Jan 2024
Oil Changed Sample Status Client Info N/A N/A N/A Not Changd MARGINAL   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 >50 7 6 6   Chromium ppm ASTM D5185m >2 0 0 0   Nickel ppm ASTM D5185m >3 0 <1 0   Silver ppm ASTM D5185m >3 0 0 0   Titanium ppm ASTM D5185m >3 1 2 1   Copper ppm ASTM D5185m >3 1 2 1   Cadmium ppm ASTM D5185m >4 <1 <1 2   Cadmium ppm ASTM D5185m >2 1 2 1   Rangense ppm ASTM D5185m 2 1 2 2   Boron ppm ASTM D5185m 2 2 2 2   Mangensum ppm ASTM D5185m<	Machine Age	hrs	Client Info		1330	1275	1256
Sample Status     method     Imit/base     current     NARGINAL     NORMAL       CONTAMINATION     method     Imit/base     current     history1     history2       Water     WC Method     >0.1     NEG     NEG     NEG       WEAR METALS     method     imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >4     <1     <1     <1       Nickel     ppm     ASTM D5185m     >2     0     0     0       Silver     ppm     ASTM D5185m     >3     0     0     0       Silver     ppm     ASTM D5185m     >30     1     1     1     1       Copper     ppm     ASTM D5185m     >30     1     <1     <1     <1       Cadmium     ppm     ASTM D5185m     >4     <1     <1     <1     <1       Cadenium     ppm     ASTM D5185m     0     0     0     0     0       Baron     ppm     ASTM D5185m	Oil Age	hrs	Client Info		1330	1275	1256
CONTAMINATION     method     limit/base     current     history1     history2       Water     WC Method     >0.1     NEG     NEG     NEG       Water     WC Method     >0.1     NEG     NEG     NEG       Water     ppm     ASTM D5185m     >50     7     6     6       Chromium     ppm     ASTM D5185m     >2     0     0     0       Titanium     ppm     ASTM D5185m     >2     0     0     0       Aluminum     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >3     1     2     1       Copper     ppm     ASTM D5185m     >30     1     1     1       Vanadium     ppm     ASTM D5185m     >35     1     2     1     2       Readium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     2     2     2     2 <	Oil Changed		Client Info		N/A	N/A	Not Changd
Water     WC Method<>0.1     NEG     NEG     NEG       WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >50     7     6     6       Chromium     ppm     ASTM D5185m     >2     0     0     0       Nickel     ppm     ASTM D5185m     >2     0     0     0       Aluminum     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >3     1     2     1       Copper     ppm     ASTM D5185m     >35     1     2     1       Vanadium     ppm     ASTM D5185m     >35     1     2     1       Vanadium     ppm     ASTM D5185m     0     0     0     1       Cadmium     ppm     ASTM D5185m     2     1     2     1       Barium     ppm     ASTM D5185m     2     2     2     2 <td< th=""><th>Sample Status</th><th></th><th></th><th></th><th>MARGINAL</th><th>MARGINAL</th><th>NORMAL</th></td<>	Sample Status				MARGINAL	MARGINAL	NORMAL
WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >50     7     6     6       Chromium     ppm     ASTM D5185m     >2     0     0     0       Nickel     ppm     ASTM D5185m     >2     0     0     0       Silver     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >30     1     1     1       Lead     ppm     ASTM D5185m     >30     1     1     1       Cadmium     ppm     ASTM D5185m     >30     1     1     1       Cadmium     ppm     ASTM D5185m     0     0     0     1       Cadmium     ppm     ASTM D5185m     2     1     2     2       Boron     ppm     ASTM D5185m     0     0     0     1       Magneseur     ppm     ASTM D5185m     1166     1074     1084	CONTAMINAT	ION	method	limit/base	current	history1	history2
Iron     ppm     ASTM D5185m     >50     7     6     6       Chromium     ppm     ASTM D5185m     >4     <1     <1     <1       Nickel     ppm     ASTM D5185m     >2     0     0     0       Silver     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >3     1     2     1       Lead     ppm     ASTM D5185m     >30     1     1     1     1       Copper     ppm     ASTM D5185m     >4     <1     <1     <1     1       Cadmium     ppm     ASTM D5185m     0     0     0     0       ASTM D5185m     2     1     2     2     2     2       Boron     ppm     ASTM D5185m     2     2     2     2       Magnesium     ppm     ASTM D5185m     895     902	Water		WC Method	>0.1	NEG	NEG	NEG
Chromium     ppm     ASTM D5185m     >4     <1	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel     ppm     ASTM D5185m     >2     0     0     0       Titanium     ppm     ASTM D5185m     >3     0     0     0       Sliver     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >9     3     1     2       Lead     ppm     ASTM D5185m     >30     1     1     1       Copper     ppm     ASTM D5185m     >35     1     2     1       Tin     ppm     ASTM D5185m     >4     <1     <1     1       Copper     ppm     ASTM D5185m     0     0     0     1       Vanadium     ppm     ASTM D5185m     2     1     2     2       Boron     ppm     ASTM D5185m     0     0     0     1       Magnaese     ppm     ASTM D5185m     895     902     885       Calcium     ppm     ASTM D5185m     1226     983     972       Zinc<	Iron	ppm	ASTM D5185m	>50	7	6	6
Titanium     ppm     ASTM D5185m     0     <1	Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Silver     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >9     3     1     2       Lead     ppm     ASTM D5185m     >30     1     1     1       Copper     ppm     ASTM D5185m     >35     1     2     1       Vanadium     ppm     ASTM D5185m     >4     <1	Nickel	ppm	ASTM D5185m	>2	0	0	0
Aluminum     pm     ASTM D5185m     >9     3     1     2       Lead     ppm     ASTM D5185m     >30     1     1     1       Copper     ppm     ASTM D5185m     >35     1     2     1       Tin     ppm     ASTM D5185m     >4     <1     <1     <1       Vanadium     ppm     ASTM D5185m     >4     <1     <1     <1       Cadmium     ppm     ASTM D5185m     0     0     0     <1       Cadmium     ppm     ASTM D5185m     2     1     2     2       Boron     ppm     ASTM D5185m     2     2     2     2       Manganese     ppm     ASTM D5185m     895     902     885       Calcium     ppm     ASTM D5185m     1226     983     972       Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     >20     1     2     0       CONTAMINANTS	Titanium	ppm	ASTM D5185m		0	<1	0
Lead     ppm     ASTM D5185m     >30     1     1     1       Copper     ppm     ASTM D5185m     >35     1     2     1       Tin     ppm     ASTM D5185m     >4     <1     <1     <1       Vanadium     ppm     ASTM D5185m     >4     <1     <1     <1       Vanadium     ppm     ASTM D5185m     >4     <1     <1     <1       Cadmium     ppm     ASTM D5185m     0     0     <1     2       Boron     ppm     ASTM D5185m     2     1     2     2       Barium     ppm     ASTM D5185m     0     0     0     <1       Magnese     ppm     ASTM D5185m     2     2     2     2       Magnesium     ppm     ASTM D5185m     1166     1074     1084       Phosphorus     ppm     ASTM D5185m     1226     983     972       Sulfur     ppm     ASTM D5185m     >4100     13     4     4 <tr< th=""><th>Silver</th><th>ppm</th><th>ASTM D5185m</th><th>&gt;3</th><th>0</th><th>0</th><th>0</th></tr<>	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper     ppm     ASTM D5185m     >55     1     2     1       Tin     ppm     ASTM D5185m     >4     <1     <1     <1       Vanadium     ppm     ASTM D5185m     0     0     <1     <1       Cadmium     ppm     ASTM D5185m     0     0     0     <1       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     2     1     2       Magnesium     ppm     ASTM D5185m     2     2     2       Magnesium     ppm     ASTM D5185m     895     902     885       Calcium     ppm     ASTM D5185m     11226     983     972       Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     >10     0     <11       Sodium     ppm     ASTM D5185m	Aluminum	ppm	ASTM D5185m	>9	3	1	2
Tin     ppm     ASTM D5185m     >4     <1	Lead	ppm	ASTM D5185m	>30	1	1	1
Vanadium     ppm     ASTM D5185m     0     0     <1	Copper	ppm	ASTM D5185m	>35	1	2	1
Cadmium     ppm     ASTM D5185m     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     2     1     2       Barium     ppm     ASTM D5185m     2     1     2       Barium     ppm     ASTM D5185m     0     0     0     0       Molybdenum     ppm     ASTM D5185m     2     2     2     2       Manganese     ppm     ASTM D5185m     895     902     885       Calcium     ppm     ASTM D5185m     1166     1074     1084       Phosphorus     ppm     ASTM D5185m     1226     983     972       Sulfur     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     > 4100     13     4     4       Sodium     ppm     ASTM D5185m     >20     1     2     0       Fuel     %     ASTM D5185m	Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Cadmium     ppm     ASTM D5185m     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     2     1     2       Barium     ppm     ASTM D5185m     0     0     0     0       Molybdenum     ppm     ASTM D5185m     2     2     2     2       Manganese     ppm     ASTM D5185m     0     0     0     <1	Vanadium	ppm	ASTM D5185m		0	0	<1
Boron     ppm     ASTM D5185m     2     1     2       Barium     ppm     ASTM D5185m     0     0     0       Molybdenum     ppm     ASTM D5185m     2     2     2       Manganese     ppm     ASTM D5185m     0     0     <1       Magnesium     ppm     ASTM D5185m     895     902     885       Calcium     ppm     ASTM D5185m     1166     1074     1084       Phosphorus     ppm     ASTM D5185m     1226     983     972       Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >20     1     2     0       Fuel     %     ASTM D5185m     >20     1     2     0     1.7       INFRA-RED     method     limit/base	Cadmium		ASTM D5185m		0	0	0
Barium     ppm     ASTM D5185m     0     0     0       Molybdenum     ppm     ASTM D5185m     2     2     2       Manganese     ppm     ASTM D5185m     0     0     <1       Magnesium     ppm     ASTM D5185m     895     902     885       Calcium     ppm     ASTM D5185m     1166     1074     1084       Phosphorus     ppm     ASTM D5185m     1226     983     972       Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     3468     2921     2940       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >10     0     <11     1       Potassium     ppm     ASTM D5185m     >20     1     2     0       Fuel     %     ASTM D5185m     >20     1     0     1.7       Nistory2     Soot %     %     'AST	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185m     2     2     2       Manganese     ppm     ASTM D5185m     0     0     <1       Magnesium     ppm     ASTM D5185m     895     902     885       Calcium     ppm     ASTM D5185m     1166     1074     1084       Phosphorus     ppm     ASTM D5185m     1226     983     972       Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     3468     2921     2940       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >20     1     2     0       Fuel     %     ASTM D5185m     >20     1     2     0       Sodium     ppm     ASTM D5185m     >20     1     2     0       Fuel     %     ASTM D5185m <th>Boron</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>2</th> <th>1</th> <th>2</th>	Boron	ppm	ASTM D5185m		2	1	2
Manganese     ppm     ASTM D5185m     0     0     <1	Barium	ppm	ASTM D5185m		0	0	0
Magnesium     ppm     ASTM D5185m     895     902     885       Calcium     ppm     ASTM D5185m     1166     1074     1084       Phosphorus     ppm     ASTM D5185m     1226     983     972       Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     3468     2921     2940       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >20     1     2     0       Fuel     %     ASTM D5185m     >20     1     2.0     1.7       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7624     >20     4.3     4.2     4.1       Sulfation     Abs/cm     *ASTM D7624     >20     4.3     4.2     4.1 <t< th=""><th>Molybdenum</th><th>ppm</th><th>ASTM D5185m</th><th></th><th>2</th><th>2</th><th>2</th></t<>	Molybdenum	ppm	ASTM D5185m		2	2	2
Calcium     ppm     ASTM D5185m     1166     1074     1084       Phosphorus     ppm     ASTM D5185m     1226     983     972       Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     3468     2921     2940       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >20     1     2     0       Potassium     ppm     ASTM D3524     >4.0     2.0     1.7     1.7       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     0.1     0.1     0       Nitration     Abs/cm     *ASTM D7415     >30     13.0     13.1     13.2	Manganese	ppm	ASTM D5185m		0	0	<1
Phosphorus     ppm     ASTM D5185m     1226     983     972       Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     3468     2921     2940       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >20     1     2     0       Ptuel     %     ASTM D5324     >4.0     2.0     1.7     1       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7624     >20     4.3     4.2     4.1       Sulfation     Abs/.1mm     *ASTM D7644     >20     13.0     13.1     13.2	Magnesium	ppm	ASTM D5185m		895	902	885
Zinc     ppm     ASTM D5185m     1306     1289     1252       Sulfur     ppm     ASTM D5185m     3468     2921     2940       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >+100     13     4     4       Sodium     ppm     ASTM D5185m     >+00     0     0     <1       Potassium     ppm     ASTM D5185m     >20     1     2     0       Fuel     %     ASTM D5185m     >20     1     2     0       Soot %     %     ASTM D5824     >4.0     2.0     1.7     1       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7624     >20     4.3     4.2     4.1       Sulfation     Abs/.1mm     *ASTM D7415     >30     13.0     13.1	Calcium	ppm	ASTM D5185m		1166	1074	1084
SulfurppmASTM D5185m346829212940CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>+1001344SodiumppmASTM D5185m>+1001344PotassiumppmASTM D5185m>20120Fuel%ASTM D5185m>20120Fuel%ASTM D5185m>2012.01.7INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D78440.10.10NitrationAbs/cm*ASTM D7624>204.34.24.1SulfationAbs/lim*ASTM D7615>3013.013.113.2FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/lim*ASTM D7414>257.47.17.1Acid Number (AN)mg KOHgASTM D80451.841.371.34	Phosphorus	ppm	ASTM D5185m		1226	983	972
SulfurppmASTM D5185m346829212940CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>+1001344SodiumppmASTM D5185m>>00<1PotassiumppmASTM D5185m>20120Fuel%ASTM D5185m>20120Fuel%ASTM D5185m>2012.01.7INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D78440.10.10NitrationAbs/cm*ASTM D7624>204.34.24.1SulfationAbs/lim*ASTM D7615>3013.013.113.2FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/lim*ASTM D7414>257.47.17.1Acid Number (AN)mg KOHgASTM D80451.841.371.34	Zinc		ASTM D5185m		1306	1289	1252
Silicon   ppm   ASTM D5185m   >+100   13   4   4     Sodium   ppm   ASTM D5185m   >+100   0   0   <1	Sulfur		ASTM D5185m		3468	2921	2940
Sodium     ppm     ASTM D5185m     0     0     <1	CONTAMINAN	TS	method	limit/base	current	history1	history2
Sodium     ppm     ASTM D5185m     0     0     <1	Silicon	ppm	ASTM D5185m	>+100	13	4	4
Potassium     ppm     ASTM D5185m     >20     1     2     0       Fuel     %     ASTM D3524     >4.0     ▲ 2.0     ▲ 2.0     1.7       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     0.1     0.1     0       Nitration     Abs/cm     *ASTM D7624     >20     4.3     4.2     4.1       Sulfation     Abs/.1mm     *ASTM D7415     >30     13.0     13.1     13.2       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     7.4     7.1     7.1       Acid Number (AN)     mg KOH/g     ASTM D8045     1.84     1.37     1.34	Sodium		ASTM D5185m		0	0	<1
Fuel   %   ASTM D3524   >4.0   2.0   1.7     INFRA-RED   method   limit/base   current   history1   history2     Soot %   %   *ASTM D7844   0.1   0.1   0     Nitration   Abs/cm   *ASTM D7624   >20   4.3   4.2   4.1     Sulfation   Abs/.1mm   *ASTM D7415   >30   13.0   13.1   13.2     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   7.4   7.1   7.1     Acid Number (AN)   mg KOH/g   ASTM D8045   1.84   1.37   1.34	Potassium			>20			
Soot %     %     *ASTM D7844     0.1     0.1     0       Nitration     Abs/cm     *ASTM D7624     >20     4.3     4.2     4.1       Sulfation     Abs/.1mm     *ASTM D7415     >30     13.0     13.1     13.2       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     7.4     7.1     7.1       Acid Number (AN)     mg KOH/g     ASTM D8045     1.84     1.37     1.34	Fuel		ASTM D3524	>4.0	<mark>/</mark> 2.0	<b>2</b> .0	
Nitration     Abs/cm     *ASTM D7624     >20     4.3     4.2     4.1       Sulfation     Abs/.1mm     *ASTM D7615     >30     13.0     13.1     13.2       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     7.4     7.1     7.1       Acid Number (AN)     mg KOH/g     ASTM D8045     1.84     1.37     1.34	INFRA-RED		method	limit/base	current	history1	history2
Sulfation     Abs/.1mm     *ASTM D7415     >30     13.0     13.1     13.2       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     7.4     7.1     7.1       Acid Number (AN)     mg KOH/g     ASTM D8045     1.84     1.37     1.34	Soot %	%	*ASTM D7844		0.1	0.1	0
Sulfation     Abs/.1mm     *ASTM D7415     >30     13.0     13.1     13.2       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     7.4     7.1     7.1       Acid Number (AN)     mg KOH/g     ASTM D8045     1.84     1.37     1.34	Nitration	Abs/cm	*ASTM D7624	>20	4.3	4.2	4.1
Oxidation     Abs/.1mm     *ASTM D7414     >25     7.4     7.1     7.1       Acid Number (AN)     mg KOH/g     ASTM D8045     1.84     1.37     1.34	Sulfation						13.2
Acid Number (AN)     mg KOH/g     ASTM D8045     1.84     1.37     1.34	FLUID DEGRA		method	limit/base	current	history1	history2
Acid Number (AN)     mg KOH/g     ASTM D8045     1.84     1.37     1.34	Oxidation	Abs/.1mm	*ASTM D7414	>25	7.4	7.1	7.1
	Acid Number (AN)	mg KOH/a					
	( )	0 0					

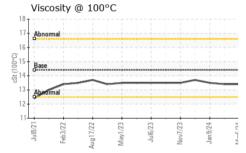


# **OIL ANALYSIS REPORT**









	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
Jan 9/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Jan Mar	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
	Free Water	scalar	*Visual	20.1	NEG	NEG	NEG
$\wedge$ /	FLUID PROPE		method	limit/base	current	history1	history2
10	Visc @ 100°C	cSt	ASTM D445	14.4	13.4	13.4	13.5
	GRAPHS						
	Iron (ppm)				Lead (ppm)		
	100 Severe	1			Severe		
Jan9/24 Mar5/24	80 - 7				50		
Ja Mi	Abnormal			u dd			
	<sup>6</sup> 40				20		
	20-				10		
	22 + 0	23-	23 -	24	22	23	24
	Jul8/21 Feb3/22 Aug17/22	May1/23 Jul6/23	Nov7/23 Jan9/24	Mar5/24	Jul8/21 Feb3/22 Aug17/22	May1/23 Jul6/23	Nov7/23 Jan9/24 Mar5/24
		2		_			
	Aluminum (ppm)				Chromium (p	pm)	
	15 - Severe				6 - Severe		
				_			
Jan9/24 -	E 10 - Abnormal				4- Abnormal		
Jan	5				2		
					0		
	Jul8/21	May1/23 Jul6/23	Nov7/23 Jan9/24	Mar5/24	Jul8/21 Feb3/22	May1/23 Jul6/23	Nov7/23 Jan9/24 Mar5/24
	Ju Feb Aug <sup>1</sup>	May	Nov	Ma	Ju Fet	Mar	Nov Jar
	Copper (ppm) Silicon (ppm)						
	80 Severe			20	00 Severe		
	60				50		
	a 40 - Abnormal			<u>الم</u>	0 - Abnormal		
	T I I I I I I I I I I I I I I I I I I I	1 1 1			50 -		
24-	20-				50-		
Jan 9/24	22 23	2 2	23	24	22	23	24
	Jul8/21 Feb3/22 Aug17/22	May1/23 Jul6/23	Nov7/23 Jan9/24	Mar5/24	Jul8/21 Feb3/22	May1/23 Jul6/23	Nov7/23 Jan9/24 Mar5/24
	₹ Viscosity @ 100°C		_	_	A		
	<sup>18</sup> T			12	Base Number		
	Abnormal	<u>.</u>		Base Number (mg KOH/g) 8 8 9 8	.0 Base	$\sim$	
	Base Base Abpermal			B B B			
	214 zi				.0		
	12-			N 4 ase 2			
	10			0	.0		
	Jul8/21 Feb3/22 Aug17/22	May1/23	Nov7/23 Jan9/24	Mar5/24	Jul8/21 Feb3/22	May1/23 Jul6/23	Nov7/23 Jan9/24 Mar5/24
	Fe	Jr Jr	Na Va	N	Fei J	Ma	Ne Ja Ma
1 - h - u - i					<b></b>		
Laboratory Sample No.	: WearCheck USA - 50 : PCA0100341	1 Madiso Recei		, NC 27513 8 Mar 2024	Magella		LP - Ponca City uth Union Street
Sample No. Lab Number		Teste		3 Mar 2024 3 Mar 2024		2220 20	Ponca City, OK
Unique Number		Diagr		Mar 2024 - Jona	athan Hester		US 74601
	: MOB 2 ( Additional Te						act: Jake Daniel
	contact Customer Serv					Jacob.Daniel@	magellanlp.com

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)

Certificate L2367

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F: