

# **OIL ANALYSIS REPORT**

#### Area Irvington Machine Id Unit 02 DB060102E

Component Natural Gas Engine

## PETRO CANADA DURON MONOGRADE HD 40W (250 GAL)

### DIAGNOSIS

#### Recommendation

We advise that you check the fuel injection system. Resample at the next service interval to monitor. ( Customer Sample Comment: Top Up Amount: 14 GAL )

#### Wear

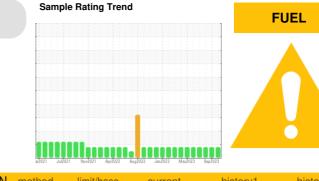
All component wear rates are normal.

#### Contamination

There is a moderate amount of fuel present in the oil.

#### Fluid Condition

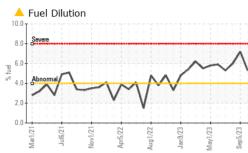
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The AN level is acceptable for this fluid.

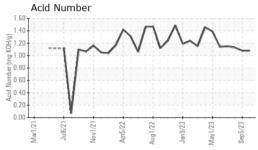


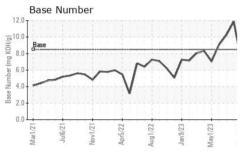
Sample Date     Cilent Info     03 Oct 2023     05 Sep 2023     14 Aug 2023       Machine Age     hrs     Cilent Info     25292     24941     24249       Oil Age     hrs     Cilent Info     16864     16513     15821       Oil Changed     Cilent Info     Oil Added     Oil Added     Oil Added     Oil Added       Sample Status     Client Info     Oil Added     Oil Added     Oil Added     Oil Added     ABNORMAL     ABNOB	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age     hrs     Client Info     25292     24941     24249       Oil Age     hrs     Client Info     18864     16513     15134     0il Added     0il Added </th <td>Sample Number</td> <td></td> <td>Client Info</td> <td></td> <th>PCA0105170</th> <td>PCA0105172</td> <td>PCA0082298</td>	Sample Number		Client Info		PCA0105170	PCA0105172	PCA0082298
Oil Age     hrs     Client Info     16864     16513     15821       Oil Changed     Client Info     Oil Added     Oil Added     Oil Added     ABNORMAL     ABNORMAL       WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >5     13     13     12       Chromium     ppm     ASTM D5185m     >2     0     0     0       Tatanium     ppm     ASTM D5185m     >2     0     0     0       Aluminum     ppm     ASTM D5185m     >3     0     0     0       Lead     ppm     ASTM D5185m     >30     12     12     9       Copper     ppm     ASTM D5185m     >30     10     0     0       Cadmium     ppm     ASTM D5185m     >4     2     2     2       Cadmium     ppm     ASTM D5185m     0     <11     0     0       Admadium     ppm     ASTM D5185m     5     4 <td>Sample Date</td> <td></td> <td>Client Info</td> <td></td> <th>03 Oct 2023</th> <td>05 Sep 2023</td> <td>14 Aug 2023</td>	Sample Date		Client Info		03 Oct 2023	05 Sep 2023	14 Aug 2023
Oil Adaged Sample Status     Client Info     Oil Added ABNORMAL     Oil Added ABNORMAL     Oil Added ABNORMAL     Oil Added ABNORMAL       WEAR METALS     method     limitbase     current     history1     history2       Iron     ppm     ASTM D5185m     >50     13     13     12       Chromium     ppm     ASTM D5185m     >4     <1	Machine Age	hrs	Client Info		25292	24941	24249
Sample Status     Image Status     ABNORMAL     ABNORMAL     ABNORMAL     ABNORMAL     ABNORMAL     ABNORMAL     ABNORMAL     ABNORMAL     ABNORMAL     Mathor       WEAR METALS     method     limit/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       Aluminum     ppm     ASTM D5185m     >30     12     12     9       Copper     ppm     ASTM D5185m     >35     12     11     11     11       Tin     ppm     ASTM D5185m     >4     2     2     2     2       Vanadium     ppm     ASTM D5185m     >4     2     2     2     2       Vanadium     ppm     ASTM D5185m     >4     2     2     2       Vanadium     ppm     ASTM D5185m <t< th=""><td>Oil Age</td><td>hrs</td><td>Client Info</td><td></td><th>16864</th><td>16513</td><td>15821</td></t<>	Oil Age	hrs	Client Info		16864	16513	15821
WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >50     13     13     12       Chromium     ppm     ASTM D5185m     >2     0     0     0       Nickel     ppm     ASTM D5185m     >2     0     0     0       Silver     ppm     ASTM D5185m     >3     0     0     0       Auminum     ppm     ASTM D5185m     >3     0     <1     0       Lead     ppm     ASTM D5185m     >3     12     11     11       Tin     ppm     ASTM D5185m     >3     12     11     11       Tin     ppm     ASTM D5185m     >4     2     2     2       Vanadium     ppm     ASTM D5185m     >4     2     2     2       Vanadium     ppm     ASTM D5185m      15     16     17       Barium     ppm     ASTM D5185m     5     4     3 <tr< th=""><td>Oil Changed</td><td></td><td>Client Info</td><td></td><th>Oil Added</th><td>Oil Added</td><td>Oil Added</td></tr<>	Oil Changed		Client Info		Oil Added	Oil Added	Oil Added
Iron     ppm     ASTM D5185m     >50     13     13     12       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     >30     12     12     9       Copper     ppm     ASTM D5185m     >30     12     11     11       Tin     ppm     ASTM D5185m     >35     12     11     0       Cadmium     ppm     ASTM D5185m     >4     2     2     2       Vanadium     ppm     ASTM D5185m     0     <1     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     15     16     17       Barium     ppm     ASTM D5185m     5     4     3	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
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       Silver     ppm     ASTM D5185m     >3     0     0     0       Auminum     ppm     ASTM D5185m     >30     12     12     9       Copper     ppm     ASTM D5185m     >35     12     11     11     11       Tin     ppm     ASTM D5185m     >4     2     2     2       Vanadium     ppm     ASTM D5185m     0     <10     0     10       Cadmium     ppm     ASTM D5185m     0     <11     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     5     4     3       Manganese     ppm     ASTM D5185m     <1     <1     <1       Magnases     ppm     ASTM D5185m     <112     10     100	Iron	ppm	ASTM D5185m	>50	13	13	12
Titanium     ppm     ASTM D5185m     <1	Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Silver     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >9     0     <1	Nickel	ppm	ASTM D5185m	>2	0	0	0
Atuminum     ppm     ASTM D5185m     >9     0     <1	Titanium	ppm	ASTM D5185m		<1	<1	0
Lead     ppm     ASTM D5185m     >30     12     12     12     9       Copper     ppm     ASTM D5185m     >35     12     11     11       Tin     ppm     ASTM D5185m     >4     2     2     2       Vanadium     ppm     ASTM D5185m     0     <1     0       Cadmium     ppm     ASTM D5185m     0     <1     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     15     16     17       Barium     ppm     ASTM D5185m     5     4     3       Manganese     ppm     ASTM D5185m     5     4     3       Manganese     ppm     ASTM D5185m     712     754     729       Calcium     ppm     ASTM D5185m     869     828     815       Zinc     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper     ppm     ASTM D5185m     >35     12     11     11       Tin     ppm     ASTM D5185m     >4     2     2     2       Vanadium     ppm     ASTM D5185m     0     <1     0       Cadmium     ppm     ASTM D5185m     0     <1     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     15     16     17       Barium     ppm     ASTM D5185m     5     4     3       Manganese     ppm     ASTM D5185m     5     4     3       Magnesium     ppm     ASTM D5185m     712     754     729       Calcium     ppm     ASTM D5185m     869     828     815       Zinc     ppm     ASTM D5185m     869     828     815       Sulfur     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1 </th <td>Aluminum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;9</td> <th>0</th> <td>&lt;1</td> <td>0</td>	Aluminum	ppm	ASTM D5185m	>9	0	<1	0
Tin     ppm     ASTM D5185m     >4     2     2     2       Vanadium     ppm     ASTM D5185m     0     <1     0       Cadmium     ppm     ASTM D5185m     0     <1     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     15     16     17       Barium     ppm     ASTM D5185m     5     4     3       Manganese     ppm     ASTM D5185m     5     4     3       Magnesium     ppm     ASTM D5185m     712     754     729       Calcium     ppm     ASTM D5185m     1093     1162     1107       Phosphorus     ppm     ASTM D5185m     869     828     815       Zinc     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >20     2	Lead	ppm	ASTM D5185m	>30	12	12	9
Vanadium     ppm     ASTM D5185m     0     <1	Copper	ppm	ASTM D5185m	>35	12	11	11
Cadmium     ppm     ASTM D5185m     0     <1	Tin	ppm	ASTM D5185m	>4	2	2	2
ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     15     16     17       Barium     ppm     ASTM D5185m     4     3       Manganese     ppm     ASTM D5185m     5     4     3       Manganesium     ppm     ASTM D5185m     712     754     729       Calcium     ppm     ASTM D5185m     869     828     815       Zinc     ppm     ASTM D5185m     869     828     815       Sulfur     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >20     2     4     6.0	Vanadium	ppm	ASTM D5185m		0	<1	0
Boron     ppm     ASTM D5185m     15     16     17       Barium     ppm     ASTM D5185m     <1     0     0       Molybdenum     ppm     ASTM D5185m     5     4     3       Manganese     ppm     ASTM D5185m     5     4     3       Magnesium     ppm     ASTM D5185m     712     754     729       Calcium     ppm     ASTM D5185m     712     754     729       Calcium     ppm     ASTM D5185m     712     754     729       Calcium     ppm     ASTM D5185m     1093     1162     1107       Phosphorus     ppm     ASTM D5185m     869     828     815       Zinc     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D5185m     >20     2.33 <t< th=""><td>Cadmium</td><td>ppm</td><td>ASTM D5185m</td><td></td><th>0</th><td>&lt;1</td><td>0</td></t<>	Cadmium	ppm	ASTM D5185m		0	<1	0
Barium     pm     ASTM D5185m     <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185m     5     4     3       Manganese     ppm     ASTM D5185m     <1	Boron	ppm			15	16	17
Manganese     ppm     ASTM D5185m     <1	Barium	ppm	ASTM D5185m		<1	0	0
Magnesium     ppm     ASTM D5185m     712     754     729       Calcium     ppm     ASTM D5185m     1093     1162     1107       Phosphorus     ppm     ASTM D5185m     869     828     815       Zinc     ppm     ASTM D5185m     1125     1106     1040       Sulfur     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     2     2     2       Sodium     ppm     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D5185m     >20     2     <1     0       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     0.1     0.1     0.1       Nitration     Abs/cm	Molybdenum	ppm	ASTM D5185m		5	4	3
Calcium     ppm     ASTM D5185m     1093     1162     1107       Phosphorus     ppm     ASTM D5185m     869     828     815       Zinc     ppm     ASTM D5185m     1125     1106     1040       Sulfur     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     2     2     2       Sodium     ppm     ASTM D5185m     >+100     2     2     2       Sodium     ppm     ASTM D5185m     >+100     2     2     2       Sodium     ppm     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D5324     >4.0     5.3     7.2     6.0       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     0.1     0.1     0.1       Nitration	Manganese	ppm	ASTM D5185m		<1	<1	<1
Phosphorus     ppm     ASTM D5185m     869     828     815       Zinc     ppm     ASTM D5185m     1125     1106     1040       Sulfur     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     2     2     2       Sodium     ppm     ASTM D5185m     >+100     2     2     2       Sodium     ppm     ASTM D5185m     >+20     2     <1     0       Fuel     %     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D5185m     >20     2     <1     0       Soot %     %     ASTM D5185m     >20     5.3     7.2     6.60       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7624     >20     6.8     7.0     6.6 <tr< th=""><td>Magnesium</td><td>ppm</td><td>ASTM D5185m</td><td></td><th>712</th><td>754</td><td>729</td></tr<>	Magnesium	ppm	ASTM D5185m		712	754	729
Zinc     ppm     ASTM D5185m     1125     1106     1040       Sulfur     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     2     2     2     2       Sodium     ppm     ASTM D5185m     >+100     2     2     6     6       Potassium     ppm     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D524     >4.0     5.3     7.2     6.0       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     0.1     0.1     0.1       Nitration     Abs/cm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25	Calcium	ppm	ASTM D5185m		1093	1162	1107
Sulfur     ppm     ASTM D5185m     2249     2360     2258       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     2     2     2       Sodium     ppm     ASTM D5185m     >+100     2     6     6       Potassium     ppm     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D524     >4.0     5.3     7.2     6.0       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     0.1     0.1     0.1       Nitration     Abs/cm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current	Phosphorus	ppm	ASTM D5185m		869	828	815
CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >+100     2     2     2     2       Sodium     ppm     ASTM D5185m     >+100     2     6     6     6       Potassium     ppm     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D5185m     >20     2     <1     0       Soots %     %     ASTM D7844     0.1     0.1     0.1     0.1       Nitration     Abs/cm     *ASTM D7624     >20     6.8     7.0     6.6       Sulfation     Abs/.1mm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     10.7     10.8     10.2       Acid Number (AN)     <	Zinc	ppm	ASTM D5185m		1125	1106	1040
Silicon   ppm   ASTM D5185m   >+100   2   2   2     Sodium   ppm   ASTM D5185m   20   2   6   6     Potassium   ppm   ASTM D5185m   >20   2   <1	Sulfur	ppm	ASTM D5185m		2249	2360	2258
Sodium     ppm     ASTM D5185m     2     6     6       Potassium     ppm     ASTM D5185m     >20     2     <1     0       Fuel     %     ASTM D5185m     >20     2     <1	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium     ppm     ASTM D5185m     >20     2     <1	Silicon	ppm	ASTM D5185m	>+100	2	2	
Fuel     %     ASTM D3524     >4.0     5.3     7.2     6.0       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     0.1     0.1     0.1       Nitration     Abs/cm     *ASTM D7624     >20     6.8     7.0     6.6       Sulfation     Abs/.1mm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     10.7     10.8     10.2       Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.08     1.13	Sodium	ppm	ASTM D5185m		2	6	6
INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     0.1     0.1     0.1     0.1       Nitration     Abs/cm     *ASTM D7624     >20     6.8     7.0     6.6       Sulfation     Abs/.1mm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     10.7     10.8     10.2       Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.08     1.13	Potassium	ppm	ASTM D5185m	>20			
Soot %     %     *ASTM D7844     0.1     0.1     0.1       Nitration     Abs/cm     *ASTM D7624     >20     6.8     7.0     6.6       Sulfation     Abs/.1mm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     10.7     10.8     10.2       Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.08     1.13	Fuel	%	ASTM D3524	>4.0	<b>▲</b> 5.3	▲ 7.2	<b>6</b> .0
Nitration     Abs/cm     *ASTM D7624     >20     6.8     7.0     6.6       Sulfation     Abs/.1mm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     10.7     10.8     10.2       Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.08     1.13	INFRA-RED		method	limit/base	current	history1	history2
Sulfation     Abs/.1mm     *ASTM D7415     >30     16.7     16.9     16.1       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     10.7     10.8     10.2       Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.08     1.13	Soot %	%	*ASTM D7844		0.1	0.1	0.1
FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     10.7     10.8     10.2       Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.08     1.13	Nitration	Abs/cm	*ASTM D7624	>20	6.8	7.0	6.6
Oxidation     Abs/.1mm     *ASTM D7414     >25     10.7     10.8     10.2       Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.08     1.13	Sulfation	Abs/.1mm	*ASTM D7415	>30	16.7	16.9	16.1
Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.13	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Acid Number (AN)     mg KOH/g     ASTM D8045     1.08     1.13	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.7	10.8	10.2
	Acid Number (AN)	mg KOH/g	ASTM D8045			1.08	
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5			

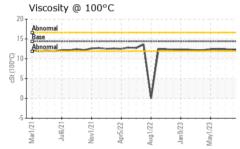


# **OIL ANALYSIS REPORT**









	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Δ	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
$\sim$	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 9/23 - May 1/23 - Sep 5/23 -	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Jan <sup>5</sup> May <sup>1</sup> Sep <sup>6</sup>	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG
wh	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	14.4	12.6	12.3	12.3
	GRAPHS						
	Iron (ppm)			6	Lead (ppm)		
	80 Severe				0 Severe		
Jan 9/23 May 1/23 Sep 5/23	co.				10		
~ ~ ~	40			E 3			
	20 -				0		
Λ	0	$\sim -$					~~~
/		Apr3/22 - Aug 1/22 -	Jan 9/23 - May 1/23 -	Sep 5/23	Mar1/21- Jul6/21-	Apr5/22 - Aug1/22 -	Jan 9/23 - May 1/23 - Sep 5/23 -
$\sim$	Mai Nov	Aug	May	Sep	Mai Nov	Apr	Jan May Sep
	Aluminum (ppm)				Chromium (p	opm)	
	20				8		
	15 - Severe				6 - Severe		
	a 10 - Abnormal			ud d	4 Abnormal		
Jan 9/23							
	5		~ /		2		$\sim$
		22	23	23		22	23
	Mar1/21 Jul6/21 Nov1/21	Apr3/22 - Aug1/22 -	Jan 9/23 May 1/23	Sep 5/23	Mar1/21 Jul6/21 Nov1/21	Apr5/22 Aug1/22	Jan 9/23 . May 1/23 . Sep 5/23 .
	Copper (ppm)				Silicon (ppm)		
	80 Severe			20	10 Severe		
	60 -			15	0		
	40 - Abnormal			틆10	0 - Abnormal		
	20-			5	i <b>0 -</b>		
Jan9/23 - May1/23 -		~~					
May		22	/23		Jul6/21	/22	/23
	Mar1/21 Jul6/21 Nov1/21	Aug 1/22	Jan9/23 May1/23	Sep5/23	Mar1/21 Jul6/21 Nov1/21	Apr5/22 Aug1/22	Jan9/23 May1/23 Sep5/23
	Viscosity @ 100°C	2			Base Numbe	r	
	20			12			Λ
	15 Abnormal Abnormal			(b)HOX HOX Bm) Jaquini 4 2	Base		$\Lambda$
54 /1000-02	3 10			.8 .6	.0+	. ~	~ v v
11 to	5	V		aq 4.		$\sim$	V
	0	Y.		2 88 2			
	-54	5		0		22	
	Mar1/21 Jul6/21 Nov1/21	Apr3/22 - Aug 1/22 -	Jan 9/23 May 1/23	Sep5/23	Mar1/21 Jul6/21 Nov1/21	Apr5/22 Aug1/22	Jan 9/23 . May 1/23 . Sep 5/23 .
					<b>a</b> -		
Laboratory	: WearCheck USA -				3 <b>Ma</b>		eam LP - Omaha
Sample No. Lab Number		Receive Diagnos		Oct 2023 Oct 2023		9405	Bennington Road Omaha, NE
Unique Number		Diagnos		n Baldridge			US 68122
Test Package	: MOB 2 ( Additional					Cor	ntact: Zach Jones
	contact Customer Serv					zach.jones@	@magellanlp.com

To discuss this sample re \* - 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

T:

F: