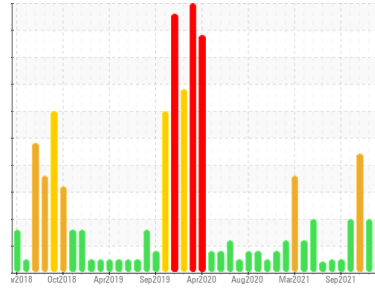


FUEL REPORT

Sample Rating Trend



NORMAL



Machine Id
Crane - Mid Ship Fuel Sample (S/N Sample Tag: MA-04002)
Component
Diesel Fuel
Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation

Laboratory test indicate that this fuel is suitable for use and meets all test requirements. Resample at the next service interval to monitor.

Corrosion

{not applicable}

Contaminants

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. There is no indication of any contamination in the diesel fuel.

Fuel Condition

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel (US EPA/CGSB-3.517-3 type B).

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC	PC0052005	PC
Sample Date	Client Info	15 Aug 2023	02 May 2023	28 Mar 2023
Machine Age	hrs	0	0	0
Sample Status		NORMAL	ABNORMAL	SEVERE

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2		
Specific Gravity	ASTM D1298*	0.839	0.843	0.842	0.851	
Fuel Color	text	Visual Screen*	Yellow	Orang	Pink	
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.8	3	3.5
Pensky-Martens Flash Point	°C	ASTM D7215*	52	61.9	63.3	66.1

SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185(m)	10	15	156	313

DISTILLATION

method	limit/base	current	history1	history2		
Initial Boiling Point	°C	ASTM D2887*	165	172	174	176
5% Distillation Point	°C	ASTM D2887*		196	196	200
10% Distill Point	°C	ASTM D2887*	201	209	208	213
15% Distillation Point	°C	ASTM D2887*		218	217	223
20% Distill Point	°C	ASTM D2887*	216	227	226	234
30% Distill Point	°C	ASTM D2887*	230	242	243	252
40% Distill Point	°C	ASTM D2887*	243	255	257	268
50% Distill Point	°C	ASTM D2887*	255	268	271	284
60% Distill Point	°C	ASTM D2887*	267	281	287	302
70% Distill Point	°C	ASTM D2887*	280	295	303	320
80% Distill Point	°C	ASTM D2887*	295	310	321	342
85% Distillation Point	°C	ASTM D2887*		321	334	358
90% Distill Point	°C	ASTM D2887*	310	331	347	373
95% Distillation Point	°C	ASTM D2887*		350	370	400
Final Boiling Point	°C	ASTM D2887*	341	365	391	420

IGNITION QUALITY

method	limit/base	current	history1	history2	
API Gravity	ASTM D1298*	37.7	36	36	34
Cetane Index	ASTM D4737*	<40.0	49	50	49

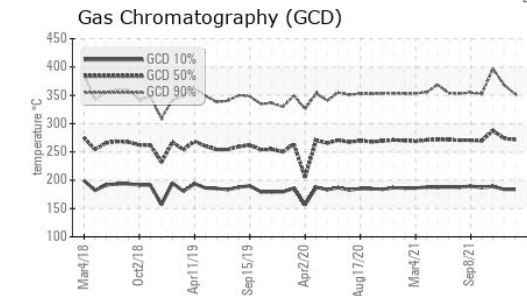
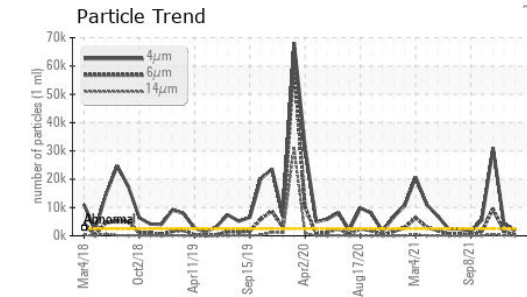
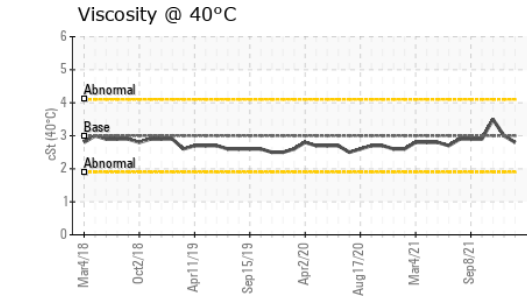
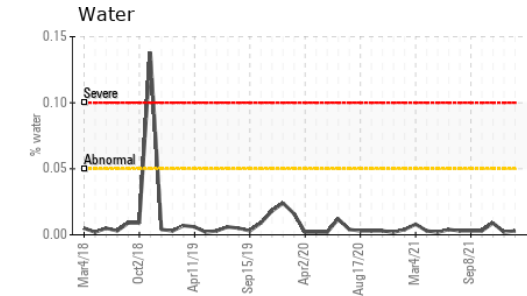
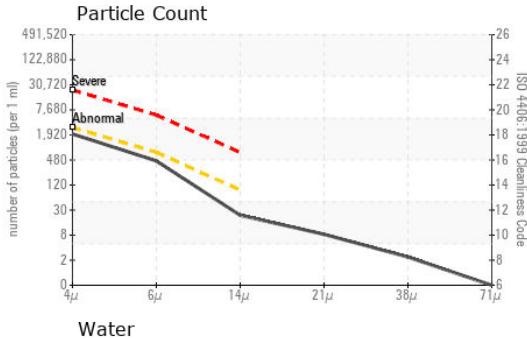
CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	<1.0	0	0	0
Sodium	ppm	ASTM D5185(m)	<0.1	0	<1	<1
Potassium	ppm	ASTM D5185(m)	<0.1	<1	0	0
Water	%	ASTM D6304*	<0.05	0.003	0.002	0.009
ppm Water	ppm	ASTM D6304*	<500	35.7	15.8	98.3

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	1774	▲ 4179	● 31148
Particles >6µm	ASTM D7647	>640	401	▲ 1515	● 9505
Particles >14µm	ASTM D7647	>80	20	▲ 165	▲ 373
Particles >21µm	ASTM D7647	>20	7	▲ 41	▲ 40
Particles >38µm	ASTM D7647	>4	2	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	18/16/11	▲ 19/18/15	● 22/20/16

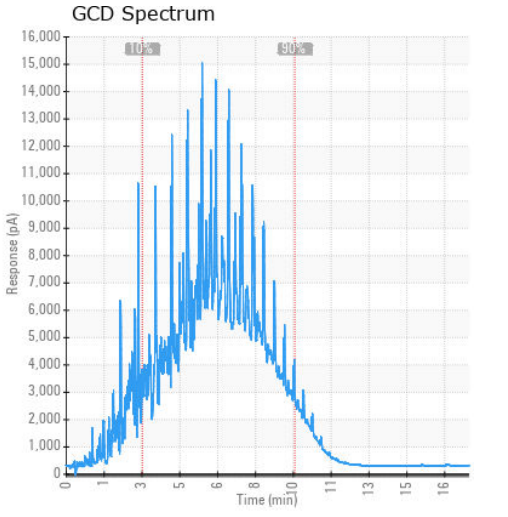
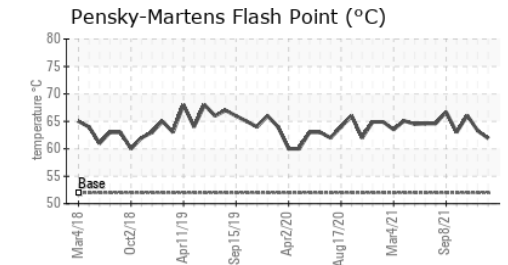
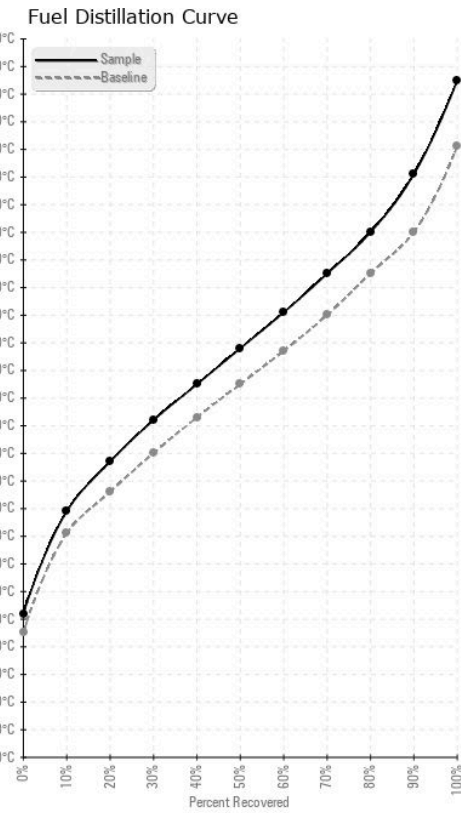
FUEL REPORT



HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	0	0	0
Nickel	ppm	ASTM D5185(m)	<0.1	0	0	0
Lead	ppm	ASTM D5185(m)	<0.1	0	0	0
Vanadium	ppm	ASTM D5185(m)	<0.1	0	0	0
Iron	ppm	ASTM D5185(m)	<0.1	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	<0.1	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	<0.1	0	<1	<1
Phosphorus	ppm	ASTM D5185(m)	<0.1	0	<1	<1
Zinc	ppm	ASTM D5185(m)	<0.1	0	<1	<1

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02576303
Unique Number : 5629363
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount)

Suncor - Terra Nova Projects
 Scotia Centre, 235 Water Street
 St. John's, NL
 CA A1C 1B6
 Contact: Josh Hynes
 joshhynes@suncor.com
 T: (709)778-3575
 F: (709)724-2835

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.