

FUEL TANK 225 GAL

EQUIP NUM: [REDACTED]

SERIAL NUMBER: [REDACTED]

CAT C4.4

COMP SERIAL NUM: [REDACTED]

No Action Required

Interp By: Sheeba Ibrahimkutty

Interpreted On: 22-Sep-23

D500-53251-0503

SHOP JOB NUM : [REDACTED]

SAMPLE SHIP TIME (days) : 11

Caterpillar BCP - Athens

Facility

RECEIVED DATE: 18-Sep-23

SULFUR LEVEL OF THIS FUEL IS WITHIN THE ULTRA LOW SULFUR DIESEL RANGE. PARTICLE COUNT IS WITHIN ACCEPTABLE GUIDELINES. BACTERIA AND FUNGUS ARE LESS THAN THE LOWER DETECTABLE LIMITS. OTHER ANALYSIS READINGS APPEAR TO BE ACCEPTABLE FOR DIESEL FUEL. FUEL CLEANLINESS IS WITHIN ACCEPTABLE SPECIFICATION. RESAMPLE IN 1 YEAR TO MONITOR. TESTING PERFORMED IN ACCORDANCE TO THE FOLLOWING STANDARDS: ASTM D 6304, D5453, D7346, D7689, D6371; EN 14078; ISO 4406.

SAMPLE INFORMATION

	28-Aug-23	27-Dec-19	26-Dec-18
Sample Date	28-Aug-23	27-Dec-19	26-Dec-18
Sample Id	D500-53251-0503	D500-50003-0511	D500-48362-0518
Lab Date	08-Sep-23	03-Jan-20	28-Dec-18
Meter [Hr]	262.9	165	136
Comp Meter [Hr]			136
Meter On Fluid	262.9	165	
Fluid Brand			
Fluid Weight			
Fluid Type			DMF2
Fluid Change	U	U	U
Filter Change	U		
	0		

ELEMENTAL ANALYSIS

	28-Aug-23	27-Dec-19	26-Dec-18
ELEMENTAL ANALYSIS (PPM) ASTM D5185 [OIL] / ASTM D6130 [COOLANT]			
Cu Copper	0	0	0
Fe Iron	0	1	0
Cr Chromium	0	0	0
Al Aluminum	0	0	0
Pb Lead	0	0	0
Sn Tin	0	0	0
Si Silicon	0	2	0
Na Sodium	0		0
K Potassium	0		2
Mo Molybdenum	0	3	0
Ni Nickel	0	1	0
Ag Silver	0		0
Ti Titanium	0		0
V Vanadium	0		
Mn Manganese	0		
Cd Cadmium	0		
Ca Calcium	2	10	9
P Phosphorus	2	8	0
Zn Zinc	1	6	7
Mg Magnesium	0	3	3
Ba Barium	0		
B Boron	0	1	0

PREVIOUS SAMPLE

Some fibers and a small amount of black oxides found on the filter patch. Test results are acceptable. Fuel is clear and bright. Fuel meets CAT ISO cleanliness standard of 18/16/13. Resample at the normal interval.

For additional sample history, go to: my.cat.com

PROPERTIES / PHYSICALS

	28-Aug-23	27-Dec-19	26-Dec-18
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SULFUR (PPM) ASTM D5453

SULFU SULFUR	11		
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DISTILLATION (°C) ASTM D7345

BP i Initial BP	168.3		
10% 10%	205.0		
50% 50%	265.4		
90% 90%	331.1		
BP f Final BP	352.8		
Recov % Recovery	97.8		

BIODIESEL (%) EN 14078

Biodi Biodiesel	0.70	0.00	1.31
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CETANE INDEX - ASTM D4737

CI Cetane index	49		
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DENSITY - ASTM D4052

Densi Density	0.84110		
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VISCOSITY (CENTISTOKES) ASTM D445

V40 Viscosity at 40 C	2.542		
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FLASH POINT (°C) ASTM D93

FL Pt Flash Point	67.0		
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COLOR - ASTM D6045

Color Color	Red	Red	Red
Clari Clarity	clear	clear	clear

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Fluid Type			DMF2
Fluid Change	U	U	U
Filter Change	U		
	0		

PHYSICAL

App	Appearance		RED	RED
Odor	Fuel Odor		norm	norm
PAMt	Precip Amount	none	trace	none
PApp	Precip Appearance		fine	N/A
PColo	Precipitate Color/ty		Fibers	N/A
Clear	Clear and Bright	CLEAR AND BRIG	CLEAR AND BRIG	CLEAR AND BRIG
Color	Color_Results		B2	

CLEANLINESS / CONTAMINATION

		28-Aug-23	27-Dec-19	26-Dec-18
PARTICLE COUNT - ISO 11171:1999 reported per ISO 4406				
ISO	ISO Code Rating	19/17/15	17/15/10	14/13
4µ	4µ	3286	700	
6µ	6µ	992	261	153
10µ	10µ	383		
14µ	14µ	186	8	79
18µ	18µ	142		
21µ	21µ	102	2	54
38µ	38µ	10	0	44
50µ	50µ	2		

WATER CONTENT (%) ASTM D7546 [OIL] / ASTM D6304 [FUEL]

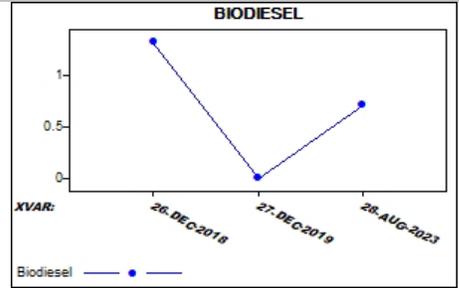
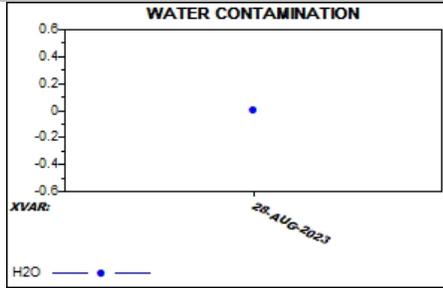
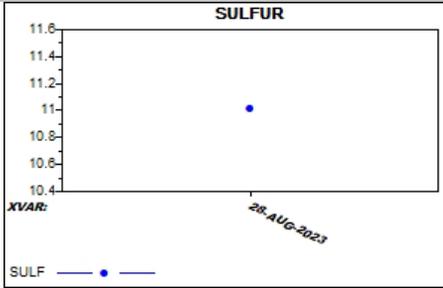
H2O	Water	0.0008
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MICROBIOLOGY

Bact	Bacteria	<LDL	<LDL	<LDL
Fung	Fungus	<LDL	<LDL	<LDL

OXIDATION STABILITY - EN 14112

OXID_	OXID_STAB	08H 41M	
Part	Part Cont	0.01	7.00
Haze	Haze	1	1
Filte	Filter_Assess	B2-B	



Report Comment

Our sample reports has been updated! For more information on the new report, go to - <https://www.youtube.com/watch?v=4h8bREJVUrs>. Thank you for choosing the Yancey Brothers SOS Lab. Please click the link below for a brief survey to let us know how we can better serve you. We appreciate your feedback! https://www.surveymonkey.com/create/preview/?sm=qYMuYxeFgWlbaq2SBIQNFPjxGTO0Zvw36l_2F7Jb4m5o_3D&tab_clicked=

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