

Area TM 11 Machine Id

PROBLEM SUMMARY

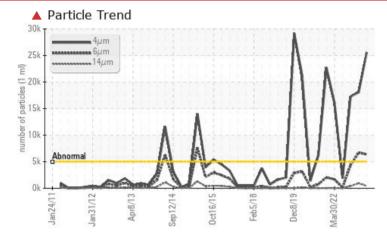
Sample Rating Trend ISO



Lube System Fluid AW HYDRAULIC OIL ISO 68 (--- GAL)

TM 11 YANKEE HOOD FANS

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status			SEVERE	ABNORMAL	ABNORMAL		
Particles >4µm	ASTM D7647	>5000	4 25568	<u> </u>	🔺 17271		
Particles >6µm	ASTM D7647	>1300	6377	6698	4 339		
Particles >14µm	ASTM D7647	>160	423	4 942	4 06		
Particles >21µm	ASTM D7647	>40	6 3	🔺 254	1 10		
Oil Cleanliness	ISO 4406 (c)	>19/17/14	22/20/16	<u> </u>	🔺 21/19/16		

Customer Id: KIMMOBTM11 Sample No.: RP0038097 Lab Number: 06237786 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDE	D ACTIONS			
Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

ISO M le

30 Jan 2024 Diag: Don Baldridge We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





09 Aug 2023 Diag: Don Baldridge

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Area TM 11 Machine Id TM 11 YANKEE HOOD FANS

Lube System

AW HYDRAULIC OIL ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

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

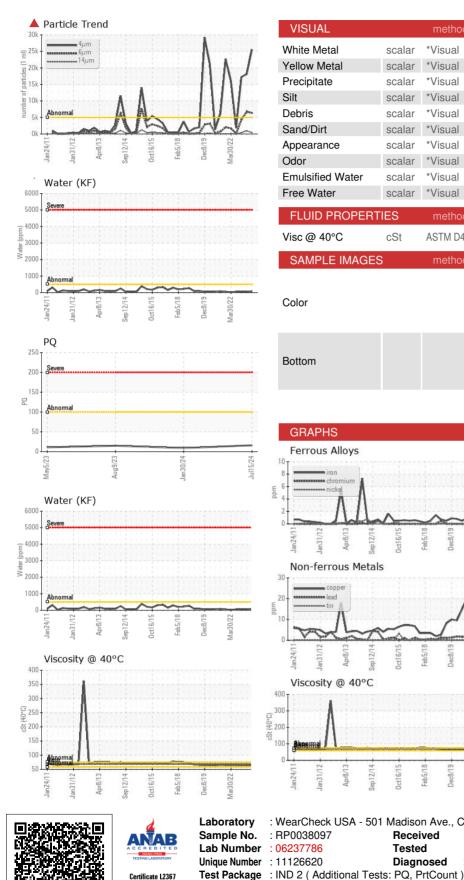
Sample Number Client Info RP0038097 RP0037972 RP0034373 Sample Date Client Info 0 0 0 0 Machine Age hrs Client Info 0 0 0 0 Oil Age Client Info 0 0 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status method Imit/base current history1 history2 PQ ASTM 05185m >20 1 2 2 Chromium ppm ASTM 05185m >20 0 0 -1 Trainium ppm ASTM 05185m >20 0 -1 -1 Silver ppm ASTM 05185m >20 0 -1 -1 -2 2 2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2			n2011 Jan20	12 Apr2013 Sep2014	0ct2015 Feb2018 Dec2019	Mar2022	
Sample Date Client Info 15 Jul 2024 30 Jan 2024 09 Aug 202 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A ABNORMAL Sample Status SEVERE ABNORMAL ABNORMAL ABNORMAL WEAR METALS method Imit/base current history1 history1 PQ ASTM D5185m >20 0 0 <1 <1 Chromium ppm ASTM D5185m >20 0 0 <1 Nickel ppm ASTM D5185m >20 0 0 <1 Lead ppm ASTM D5185m >20 0 <1 0 Vanadium ppm ASTM D5185m 20 0 <1 0 Cadmium ppm ASTM D5185m 20 0 <1 <1 Bariu ppm	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Date Client Info 15 Jul 2024 30 Jan 2024 09 Aug 202 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Sample Status Client Info N/A N/A N/A ABNORMAL WEAR METALS method Imit/base current history1 history1 PQ ASTM D5185m >20 0 0 -1 Chromium ppm ASTM 05185m >20 0 0 -1 Nickel ppm ASTM 05185m >20 0 0 -1 -1 Nickel ppm ASTM 05185m >20 0 0 -1 </td <td>Sample Number</td> <td></td> <td>Client Info</td> <td></td> <td>RP0038097</td> <td>RP0037972</td> <td>RP0034373</td>	Sample Number		Client Info		RP0038097	RP0037972	RP0034373
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A WEAR METALS method Imit/base current history1 history2 PQ ASTM D5185m >20 1 2 2 Chromium ppm ASTM D5185m >20 0 0 0 Titanium ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 <1	Sample Date		Client Info		15 Jul 2024	30 Jan 2024	09 Aug 2023
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A SEVERE ABNORMAL ABNORMAL WEAR METALS method Imit/base current history1 history1 PQ ASTM 05185m >20 1 2 2 Chromium ppm ASTM 05185m >20 0 0 0 Titanium ppm ASTM 05185m >20 0 0 0 0 Aluminum ppm ASTM 05185m >20 0 0 0 0 Aluminum ppm ASTM 05185m >20 0 <1	•	hrs	Client Info		0	0	0
Oil Changed Client Info N/A N/A N/A N/A Sample Status method Imit/base current history1 ABNORMAL WEAR METALS method Imit/base current history1 history2 PQ ASTM D0184 16 9 15 Iron ppm ASTM D0185m >20 0 0 <1	U	hrs	Client Info		0	0	0
Sample Status method Imit/base current history1 ABNORMAL VEAR METALS method limit/base current history1 history2 PQ ASTM D8184 16 9 15 cromium ppm ASTM D5185m >20 0 0 <1	-		Client Info			N/A	N/A
PQ ASTM D8184 16 9 15 Iron ppm ASTM D5185m >20 0 0 <1	Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron ppm ASTM D5185m >20 1 2 2 Chromium ppm ASTM D5185m >20 0 0 <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >20 0 0 <1 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Auminum ppm ASTM D5185m >20 0 0 0 Lead ppm ASTM D5185m >20 21 2 2 Copper ppm ASTM D5185m >20 22 27 30 Tin ppm ASTM D5185m >20 0 <1	PQ		ASTM D8184		16	9	15
Nickel ppm ASTM D5185m >20 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 20 0 0 0 Aluminum ppm ASTM D5185m >20 c1 2 2 Copper ppm ASTM D5185m >20 c1 2 2 Copper ppm ASTM D5185m >20 0 <1	Iron	ppm	ASTM D5185m	>20	1	2	2
Titanium ppm ASTM D5185m 0 <1 <1 Silver ppm ASTM D5185m >20 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 <1	Chromium	ppm	ASTM D5185m	>20	0	0	<1
Titanium ppm ASTM D5185m 0 <1 <1 Silver ppm ASTM D5185m >20 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 <1	Nickel		ASTM D5185m	>20	0	0	0
Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 <1	Titanium				0	<1	<1
Aluminum ppm ASTM D5185m >20 0 0 <1 Lead ppm ASTM D5185m >20 <1	Silver				-	0	
Lead ppm ASTM D5185m >20 <1 2 2 Copper ppm ASTM D5185m >20 22 27 30 Tin ppm ASTM D5185m >20 0 <1				>20	-		
Copper ppm ASTM D5185m >20 22 27 30 Tin ppm ASTM D5185m >20 0 <1					-		
Tin ppm ASTM D5185m >20 0 <1 0 Vanadium ppm ASTM D5185m 0 <1							_
Vanadium ppm ASTM D5185m 0 <1 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 5 0 <1							
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 5 0 0 20 Magnese ppm ASTM D5185m 5 0 <1 <1 Magnesium ppm ASTM D5185m 25 48 36 33 Calcium ppm ASTM D5185m 25 48 36 33 Calcium ppm ASTM D5185m 200 49 32 34 Phosphorus ppm ASTM D5185m 370 334 281 318 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 1 <1 <1 Sodium ppm ASTM D5185m >20 0				>20			
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 5 0 0 20 Molybdenum ppm ASTM D5185m 5 0 <1							
Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 5 0 0 20 Molybdenum ppm ASTM D5185m 5 0 <1	Cadmium	ррпі	ASTIVI DOTODIII		U	0	0
Barium ppm ASTM D5185m 5 0 0 20 Molybdenum ppm ASTM D5185m 5 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 5 0 <1 <1 Manganese ppm ASTM D5185m 25 48 36 33 Calcium ppm ASTM D5185m 200 49 32 34 Phosphorus ppm ASTM D5185m 200 49 32 34 Phosphorus ppm ASTM D5185m 300 297 264 297 Zinc ppm ASTM D5185m 370 334 281 318 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Boron	ppm	ASTM D5185m	5	0		
Marganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 25 48 36 33 Calcium ppm ASTM D5185m 200 49 32 34 Phosphorus ppm ASTM D5185m 300 297 264 297 Zinc ppm ASTM D5185m 370 334 281 318 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Barium	ppm	ASTM D5185m	5	0	0	20
Magnesium ppm ASTM D5185m 25 48 36 33 Calcium ppm ASTM D5185m 200 49 32 34 Phosphorus ppm ASTM D5185m 300 297 264 297 Zinc ppm ASTM D5185m 370 334 281 318 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Molybdenum	ppm	ASTM D5185m	5	0	<1	<1
Calcium ppm ASTM D5185m 200 49 32 34 Phosphorus ppm ASTM D5185m 300 297 264 297 Zinc ppm ASTM D5185m 370 334 281 318 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Manganese	ppm	ASTM D5185m		0	<1	<1
Phosphorus ppm ASTM D5185m 300 297 264 297 Zinc ppm ASTM D5185m 370 334 281 318 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Magnesium	ppm	ASTM D5185m	25	48	36	33
Zinc ppm ASTM D5185m 370 334 281 318 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Calcium	ppm	ASTM D5185m	200	49	32	34
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Phosphorus	ppm	ASTM D5185m	300	297	264	297
Silicon ppm ASTM D5185m >15 <1 1 <1 Sodium ppm ASTM D5185m 1 <1 <1 3 Potassium ppm ASTM D5185m >20 0 0 0 Water % ASTM D6304 >0.05 0.007 0.006 0.006 ppm Water ppm ASTM D6304 >500 72 68 68.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 25568 18092 17271 Particles >6µm ASTM D7647 >100 6377 6698 4339 Particles >14µm ASTM D7647 >160 423 942 406 Particles >21µm ASTM D7647 >10 5 7 5 Particles >38µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 21/20/17 21/19/16	Zinc	ppm	ASTM D5185m	370	334	281	318
Sodium ppm ASTM D5185m 1 <1 3 Potassium ppm ASTM D5185m >20 0 0 0 Water % ASTM D6304 >0.05 0.007 0.006 0.006 ppm Water ppm ASTM D6304 >500 72 68 68.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 25568 18092 17271 Particles >6µm ASTM D7647 >1300 6377 6698 4339 Particles >14µm ASTM D7647 >160 423 942 406 Particles >21µm ASTM D7647 >10 5 7 5 Particles >38µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 21/20/17 21/19/16 FLUID DEGRADATION method limit/base current history1	CONTAMINANTS	i	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 1 <1 3 Potassium ppm ASTM D5185m >20 0 0 0 Water % ASTM D6304 >0.05 0.0007 0.006 0.006 ppm Water ppm ASTM D6304 >500 72 68 68.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 ▲ 25568 ▲ 18092 ▲ 17271 Particles >6µm ASTM D7647 >1300 ▲ 6377 ▲ 6698 ▲ 4339 Particles >6µm ASTM D7647 >160 ▲ 423 ▲ 942 ▲ 406 Particles >14µm ASTM D7647 >10 5 7 5 Particles >38µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 ▲ 21/20/17 21/19/16 FLUID DEGRADATION method limit/base current history1	Silicon	ppm	ASTM D5185m	>15	<1	1	<1
Water % ASTM D6304 >0.05 0.007 0.006 0.006 ppm Water ppm ASTM D6304 >500 72 68 68.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 ▲ 25568 ▲ 18092 ▲ 17271 Particles >6µm ASTM D7647 >1300 ▲ 6377 ▲ 6698 ▲ 4339 Particles >14µm ASTM D7647 >160 ▲ 423 ▲ 942 ▲ 406 Particles >21µm ASTM D7647 >40 ▲ 63 ▲ 254 ▲ 110 Particles >38µm ASTM D7647 >10 5 7 5 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 ▲ 21/20/17 ▲ 21/19/16 FLUID DEGRADATION method limit/base current history1 history2	Sodium		ASTM D5185m		1	<1	3
Water % ASTM D6304 >0.05 0.007 0.006 0.006 ppm Water ppm ASTM D6304 >500 72 68 68.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 25568 18092 17271 Particles >6µm ASTM D7647 >1300 6377 6698 4339 Particles >6µm ASTM D7647 >160 423 942 406 Particles >14µm ASTM D7647 >40 633 254 110 Particles >21µm ASTM D7647 >10 5 7 5 Particles >38µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 21/20/17 21/19/16 FLUID DEGRADATION method Imit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	0	0	0
ppm Water ppm ASTM D6304 >500 72 68 68.5 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 25568 18092 17271 Particles >6µm ASTM D7647 >1300 6377 6698 4339 Particles >6µm ASTM D7647 >160 423 942 406 Particles >14µm ASTM D7647 >160 423 942 406 Particles >21µm ASTM D7647 >10 5 7 5 Particles >38µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 21/20/17 21/19/16 FLUID DEGRADATION method limit/base current history1 history2	Water		ASTM D6304	>0.05	0.007	0.006	0.006
Particles >4µm ASTM D7647 >5000 ▲ 25568 ▲ 18092 ▲ 17271 Particles >6µm ASTM D7647 >1300 ▲ 6377 ▲ 6698 ▲ 4339 Particles >14µm ASTM D7647 >160 ▲ 423 ▲ 942 ▲ 406 Particles >21µm ASTM D7647 >40 ▲ 63 ▲ 254 ▲ 110 Particles >38µm ASTM D7647 >10 5 7 5 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 22/20/16 ▲ 21/20/17 ▲ 21/19/16	ppm Water						
Particles >6µm ASTM D7647 >1300 ▲ 6377 ▲ 6698 ▲ 4339 Particles >14µm ASTM D7647 >160 ▲ 423 ▲ 942 ▲ 406 Particles >21µm ASTM D7647 >40 ▲ 63 ▲ 254 ▲ 110 Particles >38µm ASTM D7647 >10 5 7 5 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 ▲ 21/20/17 ▲ 21/19/16 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14µm ASTM D7647 >160 ▲ 423 ▲ 942 ▲ 406 Particles >21µm ASTM D7647 >40 ▲ 63 ▲ 254 ▲ 110 Particles >38µm ASTM D7647 >10 5 7 5 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 22/20/16 ▲ 21/20/17 ▲ 21/19/16 FLUID DEGRADATION method limit/base current history1 history2	Particles >4µm		ASTM D7647	>5000	2 5568	▲ 18092	▲ 17271
Particles >21μm ASTM D7647 >40 63 254 110 Particles >38μm ASTM D7647 >10 5 7 5 Particles >37μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 ≥1/20/17 ≥1/19/16 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300	6377	▲ 6698	4 339
Particles >38μm ASTM D7647 >10 5 7 5 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 21/20/17 21/19/16 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>160	423	9 42	4 06
Particles >38μm ASTM D7647 >10 5 7 5 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 21/20/17 21/19/16 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>40	6 3	A 254	<u> </u>
Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/20/16 21/20/17 21/19/16 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm						
Oil CleanlinessISO 4406 (c) >19/17/1422/20/1621/20/1721/19/16FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2							
	Oil Cleanliness						
Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.39 0.49 0.42	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.39	0.49	0.42

Sample Rating Trend

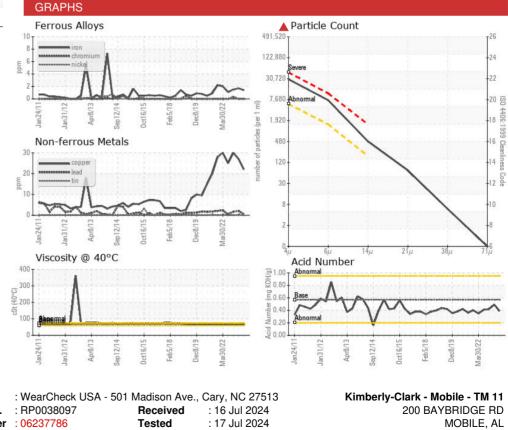
ISO



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
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	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	68	64.4	64.8	63.5
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color						
Bottom						



: 18 Jul 2024 - Don Baldridge

Diagnosed

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.

Contact/Location: LARRY WEAVER - KIMMOBTM11

F: (251)452-6335

US 36610

T:

Contact: LARRY WEAVER

Larry.D.Weaver@kcc.com