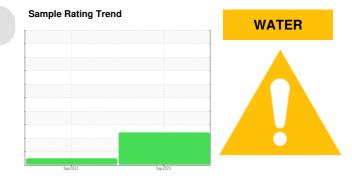


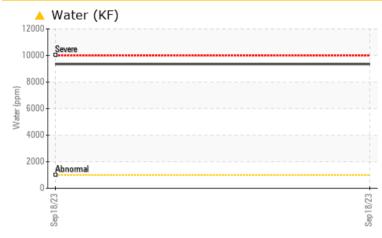
PROBLEM SUMMARY



SMI SMI 212-A (S/N 9806619)

Main Winch Fluid CHEVRON MEROPA 220 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL	NORMAL		
Water	%	ASTM D6304	>0.1	A 0.935			
ppm Water	ppm	ASTM D6304	>1000	A 9350			
Appearance	scalar	*Visual	NORML	🔺 MILKY	NORML		

Customer Id: SEALAF Sample No.: WC0825779 Lab Number: 05964750 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Resample			?	We recommend an early resample to monitor this condition.		
Check Water Access			?	We advise that you check for the source of water entry.		

HISTORICAL DIAGNOSIS



24 Sep 2022 Diag: Doug Bogart

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service. Insufficient sample was received to conduct all the routine laboratory tests.





OIL ANALYSIS REPORT

Sample Rating Trend

WATER

SMI SMI 212-A (S/N 9806619)

Main Winch Fluid CHEVRON MEROPA 220 (--- GAL)

DIAGNOSIS

A Recommendation

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Appearance is milky. There is a high concentration of water present in the oil.

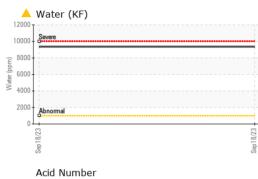
Fluid Condition

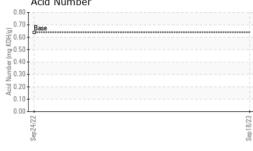
The AN level is acceptable for this fluid.

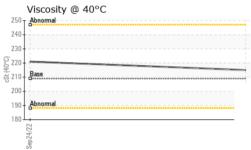
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0825779	WC0675742	
Sample Date		Client Info		18 Sep 2023	24 Sep 2022	
Machine Age	yrs	Client Info		0	0	
Oil Age	yrs	Client Info		0	1	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	29	6	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m		1	0	
Aluminum	ppm	ASTM D5185m	>25	2	<1	
Lead	ppm	ASTM D5185m	>100	0	0	
Copper	ppm	ASTM D5185m	>50	3	2	
Tin	ppm	ASTM D5185m	>10	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 52	history1 9	history2
	ppm ppm					
Boron		ASTM D5185m		52	9	
Boron Barium	ppm	ASTM D5185m ASTM D5185m		52 0	9 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		52 0 0	9 0 0	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		52 0 0 <1	9 0 0 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		52 0 0 <1 1	9 0 0 <1 1	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	40	52 0 0 <1 1 1	9 0 0 <1 1 7	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	40	52 0 <1 1 11 234	9 0 <1 1 7 250	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	40 270	52 0 2 <1 1 1 11 234 6	9 0 <1 1 7 250 <1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	40 270 8600	52 0 2 3 4 1 1 1 2 34 6 7206	9 0 <1 1 7 250 <1 10731	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	40 270 8600 limit/base	52 0 2 3 3 4 1 1 1 1 2 34 6 7206 7206 current	9 0 2 3 1 7 250 3 3 1 10731 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	40 270 8600 limit/base	52 0 0 <1 1 1 234 6 7206 7206 current 2 5 5 15	9 0 2 3 1 7 250 3 3 1 0731 history1 1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	40 270 8600 Iimit/base >50	52 0 0 <1 1 1 234 6 7206 7206 current 2 5	9 0 2 3 1 7 250 3 3 1 0731 history1 1 0	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	40 270 8600 Iimit/base >50 >20	52 0 0 <1 1 1 234 6 7206 7206 current 2 5 5 15	9 0 2 3 1 7 250 3 1 10731 history1 1 0 0	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	40 270 8600 limit/base >50 >20 >0.1	52 0 0 <1 1 1 234 6 7206 current 2 5 15 0.935	9 0 0 <1 1 7 250 <1 10731 history1 1 0 0 0 	 history2



OIL ANALYSIS REPORT







	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	LIGHT	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	LIGHT	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML		NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	0.2%	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
		RTIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	209	215	221	
	SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
	EZZI Color						no image
	Bottom						no image
	GRAPHS Ferrous Alloys						
	0 ZZZ/HZ Mon-ferrous Meta	als		Sep18/23			
	10 8 6 4 2						
	Viscosity @ 40°C	2		8.0 KoH/g)	Acid Number		
	200 Abnormal 180			3.0 3.0 (KH 4.0 cm 5.0 Ver 9.0	10		
	Sep 24/22			Sep 18/23	Sep 24/22		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Laboratory Sample No. Lab Number Unique Number Unique Number Test Packag discuss this sample repor Denotes test methods tha	er : 10671301 je : IND 2 (Additional)	Received Diagnose Diagnose Tests: KF vice at 1-8	d : 29 8 ed : 03 0 tician : Jon) 800-237-1368	Sep 2023 Oct 2023 athan Heste 9.		308 GA LA Contact: TC tvallery	SEATRAX IN LBERT ROAL AFAYETTE, L/ US 70500 DNY VALLER @seatrax.cor (337)706-790

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (337)706-7901