



## Analysis Report

Lab Number	22J52633	Test Pkg	HYT1	Sampled	11/01/2022
Equipment	PSS Atlantis, Thruster No. 5, Hydraulic MP21			Received	11/15/2022
Identification	ATLN-AT5-HYD1 /			Completed	11/22/2022

### Customer Information

Lab Account: VACOTEAN  
Cotemar S.A. de C.V - Atlantis  
Hernandez Reyes Juan Francisco  
Carreterra Carmen- Puerto Real  
km 10S - Nave De Omma

24179 Carmen Campeche  
MEXICO

### Online results

<https://sofia.sgs.com>

### Equipment Information

Registration Number	01844633/BHY	Equip. Time ( )	63323
Equipment Type	Hydraulic	Oil Time ( )	63323
Lubricant	MOBIL DTE 10 EXCEL 46	Sampling/Oil change	Sampling
Work Order			
PO Number	22241559	Sample Ref	



Attention

Comments ISO 9001:2015 Certified and ISO/IEC 17025:2017 Accredited

Zinc may indicate additive material and/or wear debris. Other test results are acceptable. Resample at your regular sampling interval.

Lab Number	Minimum	Maximum	Ref. Oil	22I02215	22I29039	22I64280	22I89591	22J22435	22J52633
Sample date				06/01/2022	07/01/2022	08/01/2022	09/01/2022	10/01/2022	11/01/2022
Equipment life ( )				59777	60447	61185	61861	62602	63323
Oil life ( )				59788	60447	61185	61861	62602	63323
Top up (L)				-	-	-	-	-	-
<b>Oil Analysis</b>									
Viscosity 40 °C cSt				42.58	42.71	42.47	42.41	43.85	42.63
Total Acid Number mg KOH/g				0.21	0.22	0.20	0.23	0.28	0.59
Water content ppm				150	71	116	111	127	89
Size 4-6 µm counts/100ml				14100	61100	273900	18300	19200	40300
Size 6-10 µm counts/100ml				4100	20500	50900	11000	10000	18600
Size 10-14 µm counts/100ml				700	3800	4700	2800	2700	4200
Size 14-25 µm counts/100ml				200	1600	1300	1500	1100	2500
25-50 µm counts/100ml				0	100	200	200	300	200
50-100 µm counts/100ml				0	0	200	0	0	0
>100 µm counts/100ml				0	0	39	0	0	0
Particles Count ISO4406				15/13/8	17/15/11	19/16/13	16/14/11	16/14/11	17/15/12
>4µm counts/mL				194	873	3353	340	334	659
>6µm counts/mL				52	262	614	157	142	256
>14µm counts/mL				2	18	57	18	14	28
<b>Metals and Contaminants by ICP</b>									
Silver ppm				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aluminium ppm				<1	<1	<1	<1	<1	<1
Boron ppm				<1	1	<1	<1	<1	<1
Barium ppm				<1	<1	<1	<1	<1	<1
Calcium ppm				146	99	101	128	89	71
Cadmium ppm				<1	<1	<1	<1	<1	<1
Chromium ppm				<1	<1	<1	<1	<1	<1
Copper ppm				3	2	2	3	<1	1
Iron ppm				9	6	6	9	6	6
Magnesium ppm				1	1	1	1	1	1
Molybdenum ppm				<1	<1	<1	<1	<1	<1
Sodium ppm				3	<3	3	3	3	<3
Nickel ppm				<1	<1	<1	<1	<1	<1
Phosphorus ppm				671	357	431	573	350	423

### Evaluated by:

Bobby Licu

For questions about this report, please call 707-554-4611 between 8:00 am and 5:00 pm CST. A technical support representative will be glad to help you.

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Analysis Report									
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Sample date				06/01/2022	07/01/2022	08/01/2022	09/01/2022	10/01/2022	11/01/2022
Lead ppm				5	2	4	3	1	4
Silicon ppm				<1	<1	1	1	<1	<1
Tin ppm				<1	2	<1	<1	<1	<1
Vanadium ppm				<1	<1	<1	<1	<1	<1
Zinc ppm				53	29	32	42	26	29
Antimony ppm				<1	<1	<1	<1	3	1
Potassium ppm				<4	<4	<4	<4	<4	<4
Manganese ppm				1	1	1	1	<1	1
Titanium ppm				<1	<1	<1	<1	<1	<1
Sulphur ppm				3018	1202	1526	1902	1144	1549

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