

HORIZON® develops and validates modifications to ASTM standard methods. Reasons for modification include: minimization of required sample and supplies, use of modern automated equipment, and less variation in sample preparation and testing. The modifications reduce costs and in most cases improve throughput, which results in lower sample pricing and faster turnaround time for our customers.

METALWORKING – Oil Based										
TEST	METHOD	UNITS OF MEASURE	SAMPLE REQD	RUSH AVAILABILITY ¹						NOTES
				IND	HOU	SLC	EDM	GUA	POZ	
Acid Number	mod. ASTM D664	mg KOH/g	5 mL							
Bacteria, Fungi, Mold	Manufacturer	counts	60 mL							
Elemental Metals Analysis (24 by ICP)	mod. ASTM D5185	ppm	2 mL							
Fat %	Internal Method	%	20 mL							
Sulfur in Oil	ASTM D4951	%	10 mL							
Viscosity @ 40° or 100° C	mod. ASTM D445	cSt	2 mL							
Water by Karl Fischer - Coulometric	mod. ASTM D6304C	% or ppm	10 mL							
Appearance	Internal Method	-	-							
Iron Alloy Corrosion	Mod. DIN 51360	counts	4 mL							

1. Rush Availability Key:

Key	Rush Type	Time Frame
	Same-Day Service	Received by 2pm local time – completed by 5pm local time Received after 2pm local time – completed by noon local time the next business day
	Next Day Service	Completed by 5pm local time the next business day
	Expedited Exception	Sample will be moved next in line for testing, but no time guarantee for results
	Testing performed at a different POLARIS location.	Same as Expedited Service
	Outsourced Test	Rush Service Unavailable

METALWORKING – Water Based										
TEST	METHOD	UNITS OF MEASURE	SAMPLE REQD	RUSH AVAILABILITY ¹						NOTES
				IND	HOU	SLC	EDM	GUA	POZ	
Acid Split	DIN 51368	%	200 mL	Red	Grey	Grey	Grey	Grey	Red	
Acid Number	mod. ASTM D664	mg KOH/g	5 mL	Green	Green	Green	Green	Green	Green	
Bacteria, Fungi, Mold	Manufacturer	counts	60 mL	Red	Red	Red	Red	Grey	Red	
Concentration %	Internal Method	%	10 mL	Green	Green	Green	Green	Grey	Grey	
Elemental Metals Analysis (24 by ICP)	ASTM D6130	ppm	8 mL	Green	Green	Green	Green	Green	Green	
Fat %	Internal Method	%	20 mL	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
Total Hardness	Internal Method	ppm	8 mL	Green	Green	Green	Green	Grey	Grey	
pH Waters	ASTM D1287	pH	20 mL	Green	Green	Green	Green	Grey	Green	
Tramp Oil Percent	Internal Method	%	200 mL	Yellow	Grey	Grey	Grey	Grey	Grey	
Viscosity @ 40°	mod. ASTM D445	cSt	2 mL	Green	Green	Green	Green	Green	Green	
Water by Karl Fischer - Coulometric	mod. ASTM D6304C	% or ppm	10 mL	Green	Green	Green	Green	Green	Green	
Nitrites	Internal Method	ppm	2 mL	Green	Green	Green	Green	Grey	Green	
Nitrates	Internal Method	ppm	2 mL	Green	Green	Green	Green	Green	Green	
Appearance	Internal Method	-	-	Green	Green	Green	Green	Green	Green	
Reserve Alkalinity	ASTM D1121	mL	20 mL	Green	Grey	Grey	Grey	Grey	Green	
Iron Alloy Corrosion	Mod. DIN 51360	counts	4 mL	Green	Green	Green	Green	Green	Green	
Water Concentration Percent by RI	Internal Method	%	2 mL	Green	Green	Green	Green	Green	Green	
Conductivity	Manufacturer	µS/cm	60 mL	Green	Green	Green	Green	Green	Green	

1. Rush Availability Key:

Key	Rush Type	Time Frame
Green	Same-Day Service	Received by 2pm local time – completed by 5pm local time Received after 2pm local time – completed by noon local time the next business day
Yellow	Next Day Service	Completed by 5pm local time the next business day
Red	Expedited Exception	Sample will be moved next in line for testing, but no time guarantee for results
Grey	Testing performed at a different POLARIS location.	Same as Expedited Service
Blue	Outsourced Test	Rush Service Unavailable