

WEARNORMALCONTAMINATIONNORMALFLUID CONDITIONNORMAL

BENSON GROUP

ELEMENT X 80W90

New (Unused) Oil

ELEMENT X 80W90 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
This is the baseline readout on this new (unused) oil. The fluid is suitable for service.	Sample Number		Client Info		ASF0000463		
	Sample Date		Client Info		17 Jun 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
	lron				•		
WEAR	Iron	ppm	ASTM D5185(m)		0		
{not applicable}	Chromium Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)		<1 0		
	Silver	ppm	ASTM D5185(m) ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		0		
	Lead	ppm	ASTM D5185(m) ASTM D5185(m)		0		
	Copper	ppm ppm	ASTM D5185(m)		0		
	Tin	ppm	ASTM D5185(m)		۰ <1		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
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CONTAMINATION	Silicon	ppm	ASTM D5185(m)		3		
	Potassium	ppm	ASTM D5185(m)	>20	<1		
There is no indication of any contamination in the new (unused) oil.	Water		WC Method		NEG		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*		4.2		
	Sulfation	Abs/.1mm	ASTM D7415*		18.9		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*		NEG		
FLUID CONDITION	Codium					[
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		<1		
The condition of the oil is suitable for service.	Boron	ppm	ASTM D5185(m)		7		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		0		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		2		
	Calcium	ppm	ASTM D5185(m)		11		
	Phosphorus	ppm	ASTM D5185(m)		410		
	Zinc	ppm	ASTM D5185(m)		8		
	Sulfur	ppm	ASTM D5185(m)		15910		
	Oxidation	Abs/.1mm	ASTM D7414*		8.0		

Visc @ 40°C cSt ASTM D7279(m)

Viscosity Index (VI) Scale ASTM D2270*

ASTM D7279(m)

Visc @ 100°C cSt

144

14.6

99



