



Blythe & Zachary JV CSA - 185 SC Wachine Id VOLVO L35G 3105626 (S/N L35GS3424213)

VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

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.

V	V	Α	R

All component wear rates are normal.

CONTAMINATION

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

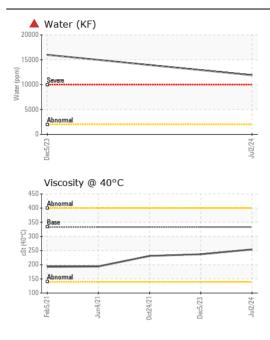
FLUID CONDITION

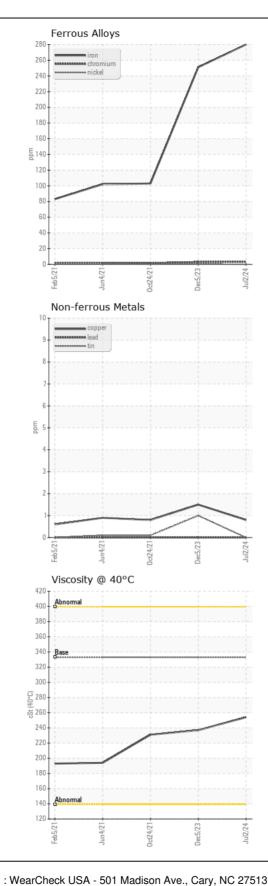
The oil is no longer serviceable due to the presence of contaminants.

Sample DateClient IntoQ Jul 202405 Dec 202324 Oct 202Machine AgehrsClient Into455940031995Oil AgehrsClient Into45594840Filter AgehrsClient IntoCAagedChangedOil ChangedClient IntoNANANat ChangedFilter ChangedClient IntoNASEVERESEVERESample StatusClient IntoNASEVERENorthangeSample StatusSTM D5185>500260251103IronpmASTM D5185>100<			<u> ~~</u> _)																																																																																																																																																																																																																				
Sample DateClient IntoQ Jul 202405 Dec 202324 Oct 202Machine AgehrsClient Into455940031995Oil AgehrsClient Into45594840Filter AgehrsClient IntoCAagedChangedOil ChangedClient IntoNANANat ChangedFilter ChangedClient IntoNASEVERESEVERESample StatusClient IntoNASEVERENorthangeSample StatusSTM D5185>500260251103IronpmASTM D5185>100<	Test	UOM	Method	Limit/Abn	Current	History1	History2																																																																																																																																																																																																																
Machine AgehrsClient Info455940031995Oil AgehrsClient Info45594840Filter AgehrsClient InfoChangedChangedChangedOil ChangedClient InfoIVAN/AN/ANot ChangedFilter ChangedClient InfoIVAN/AN/ANot ChangedSample StatusClient InfoIVAN/AN/ANot ChangedChromiumppmASTM D5185>500280251103ChromiumppmASTM D5185>100<11<11TitaniumppmASTM D5185>100<11<11SilverppmASTM D5185>3022<11AuminumppmASTM D5185>20000<11LeadppmASTM D5185>20000<11VanadiumppmASTM D5185>20000<11<11VanadiumppmASTM D5185>20000<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11<11 </th <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>ASC0003292</th> <th>ASC0003486</th> <th>VCP308033</th>	Sample Number		Client Info		ASC0003292	ASC0003486	VCP308033																																																																																																																																																																																																																
Oil Age Oil Age Filter AgeInsClient Info45594840Filter Age Oil ChangedInsClient InfoChangedChangedChangedChangedFilter Changed Sample StatusClient InfoNAN/ANot ChangedIronppmASTM D518s5002802511103ChromiumppmASTM D518s500332NickelppmASTM D518s500332NickelppmASTM D518s50061<1<1SilverppmASTM D518s5006121<1AluminumppmASTM D518s500600<1QangatippmASTM D518s500100<1VanadiumppmASTM D518s500100<1VanadiumppmASTM D518s500100<1VanadiumppmASTM D518s500141714PotassiumppmASTM D518s5001417714PotassiumppmASTM D518s500141600SiliconppmASTM D518s500141600SiliconppmASTM D518s500141600SiliconppmASTM D518s500141600SiliconppmASTM D518s500141600Siliconppm	Sample Date		Client Info		02 Jul 2024	05 Dec 2023	24 Oct 2021																																																																																																																																																																																																																
Filter AgehrsClient Info04840Oil ChangedClient InfoKhangedChangedChangedChangedFilter ChangedQClient InfoN/AN/AN/ASample StatusSEVERESEVERESEVERENORMALLIronppmASTM D5185>500280251103ChromiumppmASTM D5185>5003032NickelppmASTM D5185>5003034NickelppmASTM D5185<	Machine Age	hrs	Client Info		4559	4003	1995																																																																																																																																																																																																																
Oli ChangedClient InfoKhangedChangedChangedChangedChangedChangedChangedChangedFilter ChangedClient InfoN/A <t< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>4559</th><th>484</th><th>0</th></t<>	Oil Age	hrs	Client Info		4559	484	0																																																																																																																																																																																																																
Filter Changed Sample StatusClient IntoN/AN	Filter Age	hrs	Client Info		0	484	0																																																																																																																																																																																																																
Sample StatusSEVERESEVERESEVERENORMALIronppmASTM D5185>50028002511103ChromiumppmASTM D5185>100<1<1NickelppmASTM D5185>100<1<1TitaniumppmASTM D5185>100<1<1SilverppmASTM D5185>100<1<1AluminumppmASTM D5185>50000CopperppmASTM D5185>20000CopperppmASTM D5185>20000VanadiumppmASTM D5185>20000Vinte Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185>50141714PotassiumppmASTM D5185>203220Water%ASTM D5185>203220SiliconppmASTM D5185>501417014PotassiumppmASTM D5185>203220Silitonscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESiltscalar*VisualNORENONENONENONEAppearancescalar*VisualNORENORENORENORE	Oil Changed		Client Info		Changed	Changed	Changed																																																																																																																																																																																																																
IronppmASTM D5185m>5002802511103ChromiumppmASTM D5185m>20332NickelppmASTM D5185m>100<1<1TitaniumppmASTM D5185m<100<1<1SilverppmASTM D5185m<110.0<1<1AluminumppmASTM D5185m>3022<1LeadppmASTM D5185m>3022<1CopperppmASTM D5185m>20000VanadiumppmASTM D5185m>20000White Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>50141714PotassiumppmASTM D5185m>20320Water%ASTM D5185m>50141.60SiliconppmASTM D5185m>20320Water%ASTM D5185m>20320SilitonppmASTM D5185m>20316000SilitonppmASTM D5185m>20316000SilitonppmASTM D5185m>20A11900A16000Codoutscalar*VisualNONENONENONENONEDebrisscalar*VisualNORENONENONE <th>Filter Changed</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th>N/A</th> <th>Not Chango</th>	Filter Changed		Client Info		N/A	N/A	Not Chango																																																																																																																																																																																																																
ChromiumpmASTM D5186m>20332NickelppmASTM D5185m>100<1<1TitaniumppmASTM D5185m<	Sample Status				SEVERE	SEVERE	NORMAL																																																																																																																																																																																																																
NickelppmASTM D5185m>100<1	Iron	ppm	ASTM D5185m	>500	280	251	103																																																																																																																																																																																																																
TitaniumppmASTM D5185m<1	Chromium	ppm	ASTM D5185m	>20	3	3	2																																																																																																																																																																																																																
SilverppmASTM D5185m<	Nickel	ppm	ASTM D5185m	>10	0	<1	<1																																																																																																																																																																																																																
Aluminum ppm ASTM D5185m >30 2 2 <1 Lead ppm ASTM D5185m >50 0 0 0 0 Copper ppm ASTM D5185m >120 <1	Titanium	ppm	ASTM D5185m		<1	<1	<1																																																																																																																																																																																																																
LeadppmASTM D5185m>50000CopperppmASTM D5185m>120<12<1TinppmASTM D5185m>2001<1VanadiumppmASTM D5185m>20000White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>501417714PotassiumppmASTM D5185m>20320Water%ASTM D5185m>2031.60ppm WaterppmASTM D5185m>20A1.600Silitscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORENORENORENOREGodiumppmASTM D5185m1117044491BariumppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.020.00MaganeseppmASTM D5185m0.020.00MagnesiumppmASTM D5185m0.020.00MolybdenumppmASTM D5185m0.020.00MagneseppmASTM D51	Silver	ppm	ASTM D5185m		<1	0	<1																																																																																																																																																																																																																
Copper ppm ASTM D5185m >120 <1	Aluminum	ppm	ASTM D5185m	>30	2	2	<1																																																																																																																																																																																																																
TinppmASTM D5185m>2001<1	Lead	ppm	ASTM D5185m	>50	0	0	0	VanadiumppmASTM D5185mCOOOWhite Metalscalar*VisualNONENONENONENONEVLITEYellow Metalscalar*VisualNONENONENONENONENONENONESiliconppmASTM D5185m>501417714PotassiumppmASTM D5185m>20320Water%ASTM D6304>2000411900416000ppm WaterppmASTM D6304>2000411900A16000Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNOREMILKYNORMLNORMIAppearancescalar*VisualNORHNORMLNORMINORMIOdorscalar*VisualNORENORMENORMINORMIEmulsified Waterscalar*VisualNOR242BoronppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.9<1190.137CalciumppmASTM D5185m3919418231947PhosphorusppmASTM D5185m920174218231947ZincppmASTM D5185m920174218231947 <th>Copper</th> <th>ppm</th> <th>ASTM D5185m</th> <th>>120</th> <th><1</th> <th>2</th> <th><1</th>	Copper	ppm	ASTM D5185m	>120	<1	2	<1	White Metal Yellow Metalscalar*VisualNONENONENONENONENONEVLITEYellow Metalscalar*VisualNONENONENONENONENONENONENONESiliconppmASTM D5185m>501141771414PotassiumppmASTM D6304>0.241.1941.60Water%ASTM D6304>2000411900416000Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONEMONENONENONENONEAppearancescalar*VisualNORMMILKYNORMNORMNORMOdorscalar*VisualNORNORENORMNORMNORMGodinscalar*VisualNORMILKYNORMNORMBariumppmASTM D5185m0.0240.20MolybdenumppmASTM D5185m0.9<11913.37GalciumppmASTM D5185m935871.134PhosphorusppmASTM D5185m935871.134PhosphorusppmASTM D5185m104626.335SulfurppmASTM D5185m104626.335Phosph	Tin	ppm	ASTM D5185m	>20	0	1	<1	Yellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m>50141714PotassiumppmASTM D5185m>20320Water%ASTM D6304>0.2▲ 1.19▲ 1.600ppm WaterppmASTM D6304>2000▲ 11900▲ 16000Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORMMILKYNORMNORMIAppearancescalar*VisualNORMMORMINORMINORMIOdorscalar*VisualNORMMORMINORMINORMIGodrscalar*VisualNORMIMORMINORMINORMIBariumppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.0896MaganeseppmASTM D5185m0.0896MagnesiumppmASTM D5185m935871134PhosphorusppmASTM D5185m104626335SulfurppmASTM D5185m104626335SulfurppmASTM D5185m104626335	Vanadium	ppm	ASTM D5185m		0	0	0	SiliconppmASTM D5185m>50141714PotassiumppmASTM D5185m>20320Water%ASTM D6304>0.2▲ 1.19▲ 1.60ppm WaterppmASTM D6304>2000▲ 11900▲ 16000Siliscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONEMILKYNORMNORMAppearancescalar*VisualNORMMILKYNORMLNORMIOdorscalar*VisualNORMMORMNORMNORMINORMIBarlumppmASTM D5185m1117044<	White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE	Potassium ppm ASTM D5185m >20 3 2 0 Water % ASTM D6304 >0.2 A 1.19 A 1.60 ppm Water ppm ASTM D6304 >2000 A 11900 A 16000 Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NOR MILKY NORM	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	Potassium ppm ASTM D5185m >20 3 2 0 Water % ASTM D6304 >0.2 A 1.19 A 1.60 ppm Water ppm ASTM D6304 >2000 A 11900 A 16000 Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NOR MILKY NORM	Silicon	nom	ASTM D5185m	>50	14	17	14	Water % ASTM D6304 >0.2 ▲ 1.19 ▲ 1.60 ppm Water ppm ASTM D6304 >2000 ▲ 11900 ▲ 16000 Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NOR MONE NONE NONE NONE Appearance scalar *Visual NORM MILKY NORML NORM								ppm Water ppm ASTM D6304 >2000 ▲ 11900 ▲ 16000 Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORM MILKY NORML NORML NORML NORML Odor scalar *Visual NORM MORML NORML Sot					-			Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMMILKYNORMLNORMLNORMLOdorscalar*VisualNORMMORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2▲ 0.2%▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m0.02000BariumppmASTM D5185m0.02000MolybdenumppmASTM D5185m0.08960MagnesiumppmASTM D5185m0.08960PhosphorusppmASTM D5185m93587134PhosphorusppmASTM D5185m104626335SulfurppmASTM D5185m2017378193007025056								Debrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNORNORNONENONENONEAppearancescalar*VisualNORMMILKYNORMLNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m11170444914BariumppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.0896MagnesiumppmASTM D5185m39191337CalciumppmASTM D5185m935871344PhosphorusppmASTM D5185m104626335SulfurppmASTM D5185m104623007025056							NONE	Sand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLMILKYNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Watescalar*Visual>0.2▲ 0.2%▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m1117044491BariumppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.0896MaganeseppmASTM D5185m0.0896MagnesiumppmASTM D5185m93587134PhosphorusppmASTM D5185m920174218231947ZincppmASTM D5185m104626335SulfurppmASTM D5185m104626335		scalar	*Visual	NONE			NONE	Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m110 2 42BoronppmASTM D5185m111 70 44491BariumppmASTM D5185m0.0 2 00MolybdenumppmASTM D5185m0.9<10<1ManganeseppmASTM D5185m0.0 8 96MagnesiumppmASTM D5185m93 58 7134PhosphorusppmASTM D5185m920 1742 18231947ZincppmASTM D5185m104 62 6335SulfurppmASTM D5185m20179 37819 3007025056								Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m11 2 42BoronppmASTM D5185m111 70 44491BariumppmASTM D5185m0.0 2 00MolybdenumppmASTM D5185m0.9<10<1ManganeseppmASTM D5185m0.0 8 96MagnesiumppmASTM D5185m93 58 7134PhosphorusppmASTM D5185m920 1742 18231947ZincppmASTM D5185m104 62 6335SulfurppmASTM D5185m20179 37819 3007025056	Appearance	scalar	*Visual	NORML		NORML	NORML	Sodium ppm ASTM D5185m 2 4 2 Boron ppm ASTM D5185m 111 70 444 91 Barium ppm ASTM D5185m 0.0 2 0 0 Molybdenum ppm ASTM D5185m 0.0 2 0 0 Manganese ppm ASTM D5185m 0.0 8 9 6 Magnesium ppm ASTM D5185m 0.0 8 9 6 Phosphorus ppm ASTM D5185m 9.0 8 9 6 Phosphorus ppm ASTM D5185m 9.0 8 9 6 Phosphorus ppm ASTM D5185m 9.0 13.0 7 Calcium ppm ASTM D5185m 9.0 1742 182.3 1947 Zinc ppm ASTM D5185m 10.4 62 6.3 35 Sulfur ppm ASTM D5185m 20179 37819 30070 <				NORML	-		NORML	Boron ppm ASTM D5185m 111 70 444 91 Barium ppm ASTM D5185m 0.0 2 0 0 Molybdenum ppm ASTM D5185m 0.0 2 0 0 Manganese ppm ASTM D5185m 0.9 <1 0 <1 Magnesium ppm ASTM D5185m 0.0 8 9 6 Magnesium ppm ASTM D5185m 39 19 13 7 Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	Emulsified Water	scalar	*Visual	>0.2	0.2%	▲ 0.2%	NEG	Boron ppm ASTM D5185m 111 70 444 91 Barium ppm ASTM D5185m 0.0 2 0 0 Molybdenum ppm ASTM D5185m 0.0 2 0 0 Manganese ppm ASTM D5185m 0.9 <1 0 <1 Magnesium ppm ASTM D5185m 0.0 8 9 6 Magnesium ppm ASTM D5185m 39 19 13 7 Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	Sodium	 maa	ASTM D5185m		2	4	2	Barium ppm ASTM D5185m 0.0 2 0 0 Molybdenum ppm ASTM D5185m 0.9 <1				111				Molybdenum ppm ASTM D5185m 0.9 <1								Manganese ppm ASTM D5185m 0.0 8 9 6 Magnesium ppm ASTM D5185m 39 19 13 7 Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	Molybdenum						<1	Magnesium ppm ASTM D5185m 39 19 13 7 Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056			ASTM D5185m			9		Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	•		ASTM D5185m	39		13	7	Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	•						34	Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056			ASTM D5185m				1947	Sulfur ppm ASTM D5185m 20179 37819 30070 25056	•				62				Sulfur		ASTM D5185m				25056		Visc @ 40°C	cSt	ASTM D445	333	254	237	231
Lead	ppm	ASTM D5185m	>50	0	0	0																																																																																																																																																																																																																	
VanadiumppmASTM D5185mCOOOWhite Metalscalar*VisualNONENONENONENONEVLITEYellow Metalscalar*VisualNONENONENONENONENONENONESiliconppmASTM D5185m>501417714PotassiumppmASTM D5185m>20320Water%ASTM D6304>2000411900416000ppm WaterppmASTM D6304>2000411900A16000Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNOREMILKYNORMLNORMIAppearancescalar*VisualNORHNORMLNORMINORMIOdorscalar*VisualNORENORMENORMINORMIEmulsified Waterscalar*VisualNOR242BoronppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.9<1190.137CalciumppmASTM D5185m3919418231947PhosphorusppmASTM D5185m920174218231947ZincppmASTM D5185m920174218231947 <th>Copper</th> <th>ppm</th> <th>ASTM D5185m</th> <th>>120</th> <th><1</th> <th>2</th> <th><1</th>	Copper	ppm	ASTM D5185m	>120	<1	2	<1																																																																																																																																																																																																																
White Metal Yellow Metalscalar*VisualNONENONENONENONENONEVLITEYellow Metalscalar*VisualNONENONENONENONENONENONENONESiliconppmASTM D5185m>501141771414PotassiumppmASTM D6304>0.241.1941.60Water%ASTM D6304>2000411900416000Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONEMONENONENONENONEAppearancescalar*VisualNORMMILKYNORMNORMNORMOdorscalar*VisualNORNORENORMNORMNORMGodinscalar*VisualNORMILKYNORMNORMBariumppmASTM D5185m0.0240.20MolybdenumppmASTM D5185m0.9<11913.37GalciumppmASTM D5185m935871.134PhosphorusppmASTM D5185m935871.134PhosphorusppmASTM D5185m104626.335SulfurppmASTM D5185m104626.335Phosph	Tin	ppm	ASTM D5185m	>20	0	1	<1																																																																																																																																																																																																																
Yellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m>50141714PotassiumppmASTM D5185m>20320Water%ASTM D6304>0.2▲ 1.19▲ 1.600ppm WaterppmASTM D6304>2000▲ 11900▲ 16000Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORMMILKYNORMNORMIAppearancescalar*VisualNORMMORMINORMINORMIOdorscalar*VisualNORMMORMINORMINORMIGodrscalar*VisualNORMIMORMINORMINORMIBariumppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.0896MaganeseppmASTM D5185m0.0896MagnesiumppmASTM D5185m935871134PhosphorusppmASTM D5185m104626335SulfurppmASTM D5185m104626335SulfurppmASTM D5185m104626335	Vanadium	ppm	ASTM D5185m		0	0	0																																																																																																																																																																																																																
SiliconppmASTM D5185m>50141714PotassiumppmASTM D5185m>20320Water%ASTM D6304>0.2▲ 1.19▲ 1.60ppm WaterppmASTM D6304>2000▲ 11900▲ 16000Siliscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONEMILKYNORMNORMAppearancescalar*VisualNORMMILKYNORMLNORMIOdorscalar*VisualNORMMORMNORMNORMINORMIBarlumppmASTM D5185m1117044<	White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE																																																																																																																																																																																																																
Potassium ppm ASTM D5185m >20 3 2 0 Water % ASTM D6304 >0.2 A 1.19 A 1.60 ppm Water ppm ASTM D6304 >2000 A 11900 A 16000 Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NOR MILKY NORM	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE																																																																																																																																																																																																																
Potassium ppm ASTM D5185m >20 3 2 0 Water % ASTM D6304 >0.2 A 1.19 A 1.60 ppm Water ppm ASTM D6304 >2000 A 11900 A 16000 Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NOR MILKY NORM	Silicon	nom	ASTM D5185m	>50	14	17	14																																																																																																																																																																																																																
Water % ASTM D6304 >0.2 ▲ 1.19 ▲ 1.60 ppm Water ppm ASTM D6304 >2000 ▲ 11900 ▲ 16000 Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NOR MONE NONE NONE NONE Appearance scalar *Visual NORM MILKY NORML NORM																																																																																																																																																																																																																							
ppm Water ppm ASTM D6304 >2000 ▲ 11900 ▲ 16000 Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORM MILKY NORML NORML NORML NORML Odor scalar *Visual NORM MORML NORML Sot					-																																																																																																																																																																																																																		
Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMMILKYNORMLNORMLNORMLOdorscalar*VisualNORMMORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2▲ 0.2%▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m0.02000BariumppmASTM D5185m0.02000MolybdenumppmASTM D5185m0.08960MagnesiumppmASTM D5185m0.08960PhosphorusppmASTM D5185m93587134PhosphorusppmASTM D5185m104626335SulfurppmASTM D5185m2017378193007025056																																																																																																																																																																																																																							
Debrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNORNORNONENONENONEAppearancescalar*VisualNORMMILKYNORMLNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m11170444914BariumppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.0896MagnesiumppmASTM D5185m39191337CalciumppmASTM D5185m935871344PhosphorusppmASTM D5185m104626335SulfurppmASTM D5185m104623007025056							NONE																																																																																																																																																																																																																
Sand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLMILKYNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Watescalar*Visual>0.2▲ 0.2%▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m1117044491BariumppmASTM D5185m0.0200MolybdenumppmASTM D5185m0.0896MaganeseppmASTM D5185m0.0896MagnesiumppmASTM D5185m93587134PhosphorusppmASTM D5185m920174218231947ZincppmASTM D5185m104626335SulfurppmASTM D5185m104626335		scalar	*Visual	NONE			NONE																																																																																																																																																																																																																
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m110 2 42BoronppmASTM D5185m111 70 44491BariumppmASTM D5185m0.0 2 00MolybdenumppmASTM D5185m0.9<10<1ManganeseppmASTM D5185m0.0 8 96MagnesiumppmASTM D5185m93 58 7134PhosphorusppmASTM D5185m920 1742 18231947ZincppmASTM D5185m104 62 6335SulfurppmASTM D5185m20179 37819 3007025056																																																																																																																																																																																																																							
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2▲ 0.2%▲ 0.2%NEGSodiumppmASTM D5185m11 2 42BoronppmASTM D5185m111 70 44491BariumppmASTM D5185m0.0 2 00MolybdenumppmASTM D5185m0.9<10<1ManganeseppmASTM D5185m0.0 8 96MagnesiumppmASTM D5185m93 58 7134PhosphorusppmASTM D5185m920 1742 18231947ZincppmASTM D5185m104 62 6335SulfurppmASTM D5185m20179 37819 3007025056	Appearance	scalar	*Visual	NORML		NORML	NORML																																																																																																																																																																																																																
Sodium ppm ASTM D5185m 2 4 2 Boron ppm ASTM D5185m 111 70 444 91 Barium ppm ASTM D5185m 0.0 2 0 0 Molybdenum ppm ASTM D5185m 0.0 2 0 0 Manganese ppm ASTM D5185m 0.0 8 9 6 Magnesium ppm ASTM D5185m 0.0 8 9 6 Phosphorus ppm ASTM D5185m 9.0 8 9 6 Phosphorus ppm ASTM D5185m 9.0 8 9 6 Phosphorus ppm ASTM D5185m 9.0 13.0 7 Calcium ppm ASTM D5185m 9.0 1742 182.3 1947 Zinc ppm ASTM D5185m 10.4 62 6.3 35 Sulfur ppm ASTM D5185m 20179 37819 30070 <				NORML	-		NORML																																																																																																																																																																																																																
Boron ppm ASTM D5185m 111 70 444 91 Barium ppm ASTM D5185m 0.0 2 0 0 Molybdenum ppm ASTM D5185m 0.0 2 0 0 Manganese ppm ASTM D5185m 0.9 <1 0 <1 Magnesium ppm ASTM D5185m 0.0 8 9 6 Magnesium ppm ASTM D5185m 39 19 13 7 Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	Emulsified Water	scalar	*Visual	>0.2	0.2%	▲ 0.2%	NEG																																																																																																																																																																																																																
Boron ppm ASTM D5185m 111 70 444 91 Barium ppm ASTM D5185m 0.0 2 0 0 Molybdenum ppm ASTM D5185m 0.0 2 0 0 Manganese ppm ASTM D5185m 0.9 <1 0 <1 Magnesium ppm ASTM D5185m 0.0 8 9 6 Magnesium ppm ASTM D5185m 39 19 13 7 Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	Sodium	 maa	ASTM D5185m		2	4	2																																																																																																																																																																																																																
Barium ppm ASTM D5185m 0.0 2 0 0 Molybdenum ppm ASTM D5185m 0.9 <1				111																																																																																																																																																																																																																			
Molybdenum ppm ASTM D5185m 0.9 <1																																																																																																																																																																																																																							
Manganese ppm ASTM D5185m 0.0 8 9 6 Magnesium ppm ASTM D5185m 39 19 13 7 Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	Molybdenum						<1																																																																																																																																																																																																																
Magnesium ppm ASTM D5185m 39 19 13 7 Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056			ASTM D5185m			9																																																																																																																																																																																																																	
Calcium ppm ASTM D5185m 93 58 71 34 Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	•		ASTM D5185m	39		13	7																																																																																																																																																																																																																
Phosphorus ppm ASTM D5185m 920 1742 1823 1947 Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056	•						34																																																																																																																																																																																																																
Zinc ppm ASTM D5185m 104 62 63 35 Sulfur ppm ASTM D5185m 20179 37819 30070 25056			ASTM D5185m				1947																																																																																																																																																																																																																
Sulfur ppm ASTM D5185m 20179 37819 30070 25056	•				62																																																																																																																																																																																																																		
	Sulfur		ASTM D5185m				25056																																																																																																																																																																																																																
	Visc @ 40°C	cSt	ASTM D445	333	254	237	231																																																																																																																																																																																																																

Report Id: BLYCHANC [WUSCAR] 06227876 (Generated: 07/08/2024 14:24:52) Rev: 1

Submitted By: Kendall Rhodes





BLYTHE CONSTRUCTION INC

2911 N GRAHAM STREET CHARLOTTE, NC US 28231 Contact: Service Manager



Diagnosed Unique Number : 11111369 : 07 Jul 2024 - Don Baldridge Test Package : CONST (Additional Tests: KF) Certificate L2367 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (704)373-2960

Received

Tested

: 03 Jul 2024

: 07 Jul 2024

Report Id: BLYCHANC [WUSCAR] 06227876 (Generated: 07/08/2024 14:24:55) Rev: 1

Laboratory

Sample No.

Lab Number : 06227876

: ASC0003292

Submitted By: Kendall Rhodes

Page 2 of 2

T: