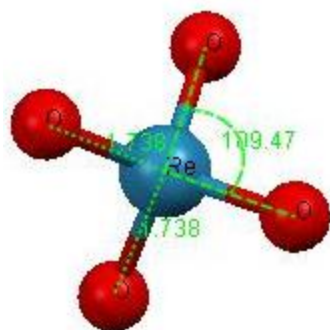
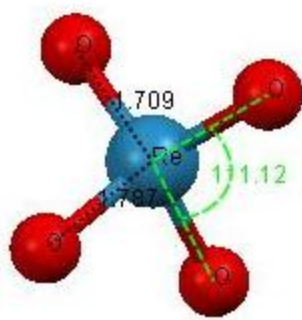
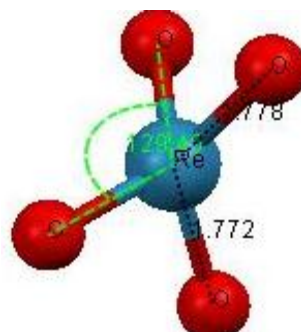




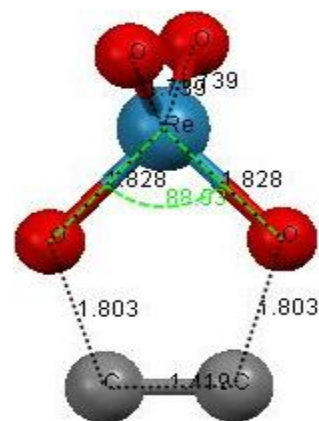
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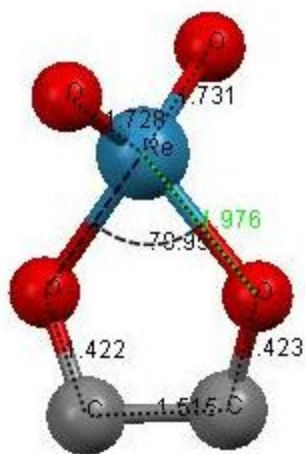
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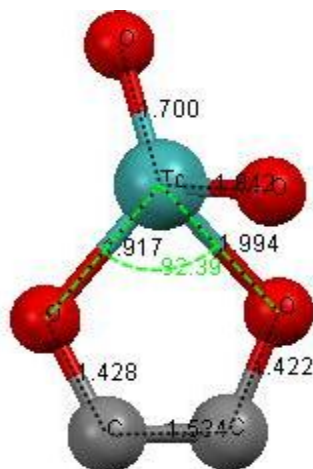
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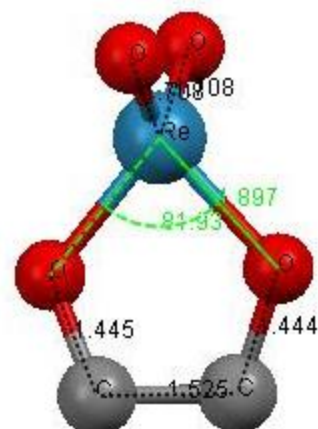
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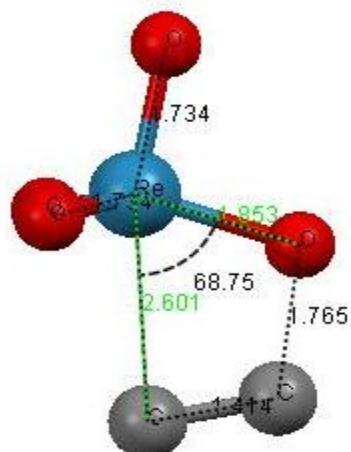
C2/s



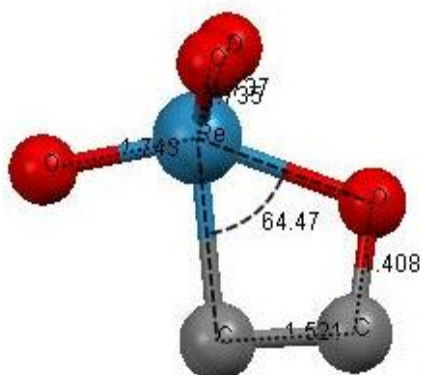
C2/d



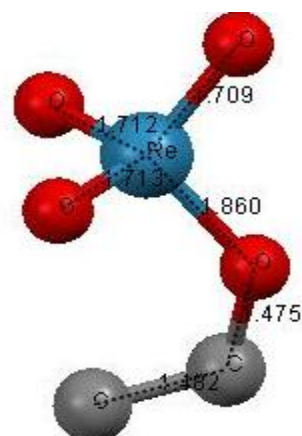
C2/q



TS-[C1-C3]/s



C3/s



C3/d

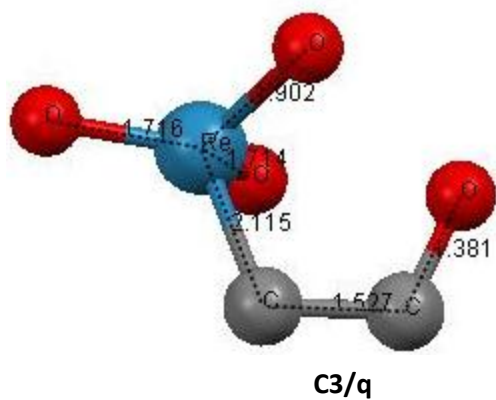
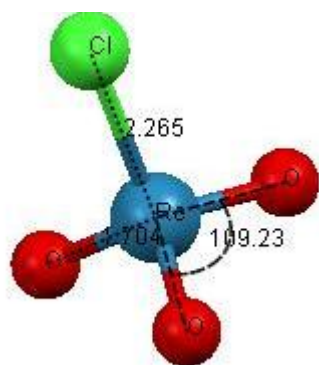
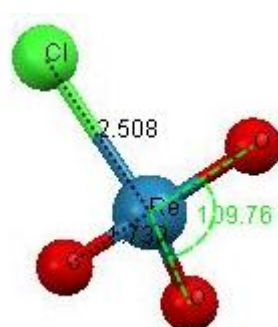


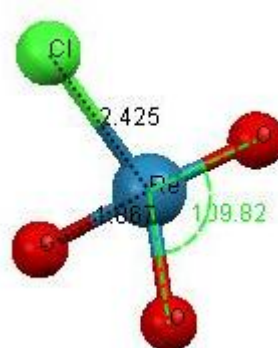
Fig S1: Optimized geometrical parameters of reaction of ReO_4^- with ethylene. Bond distance in Å and angles in degrees.



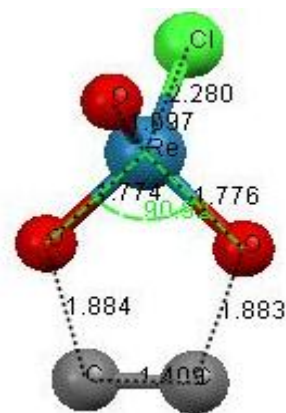
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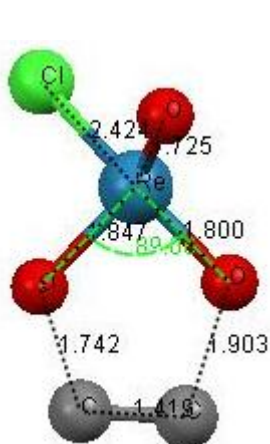
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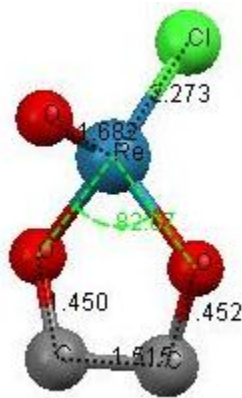
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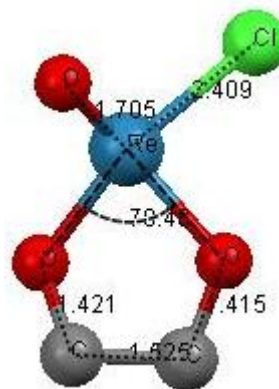
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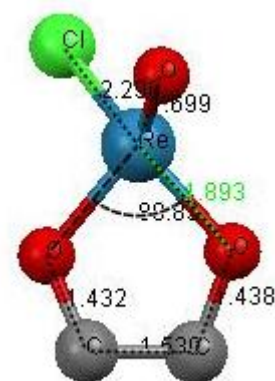
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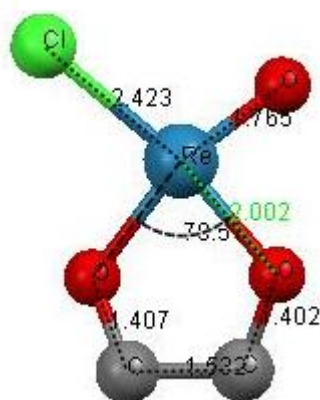
C5/s



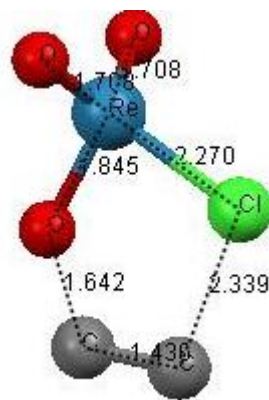
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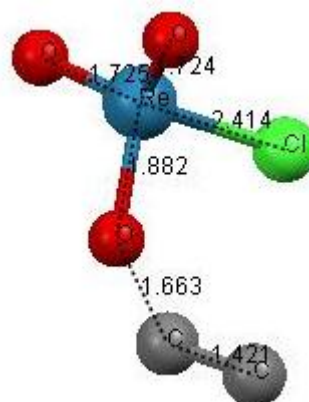
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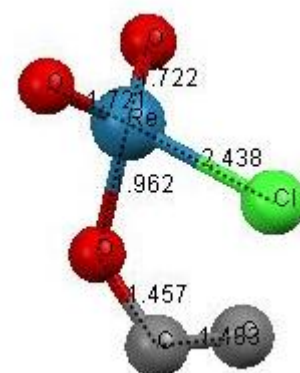
C5/q



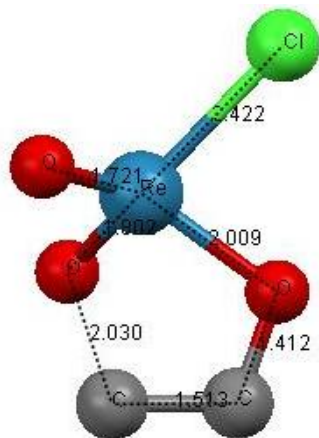
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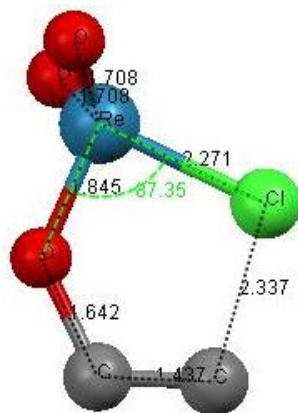
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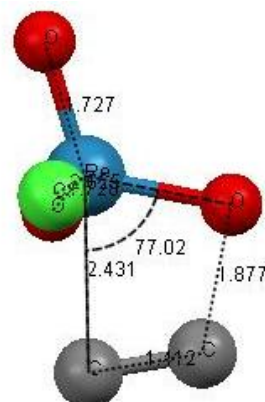
X/d



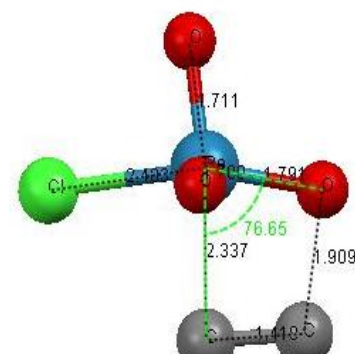
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TS-[X-C6]/d



TS-[X-C7]/d



TS-[C4-C7]/s

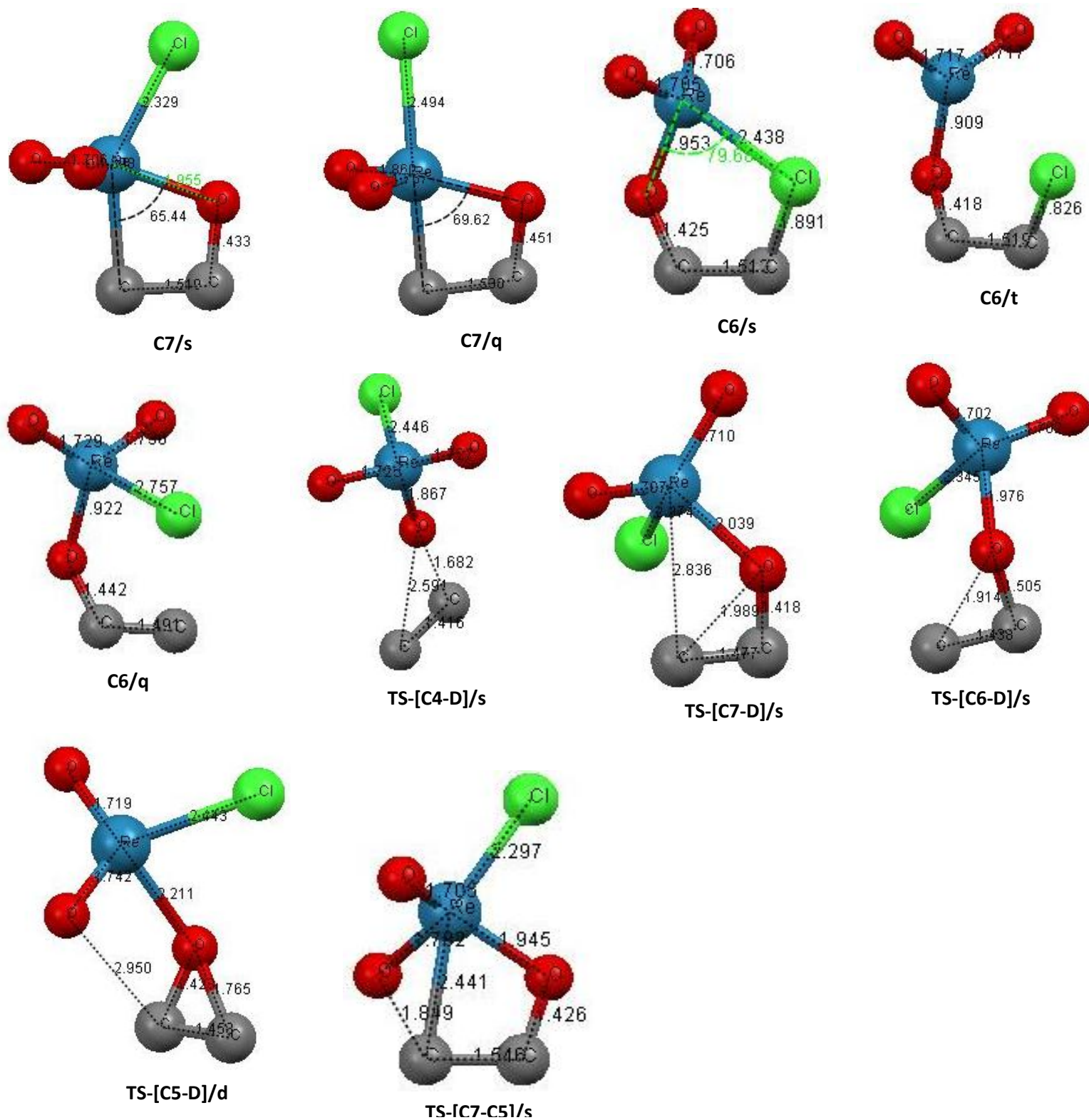
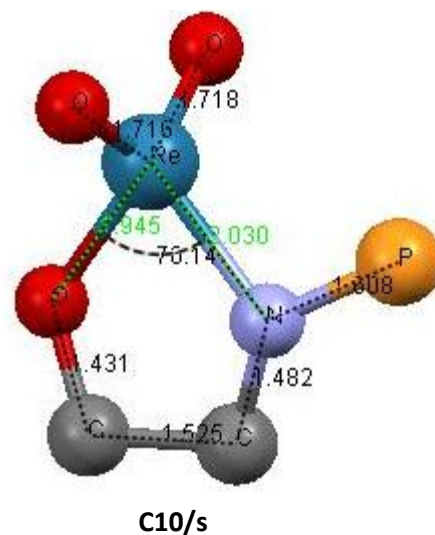
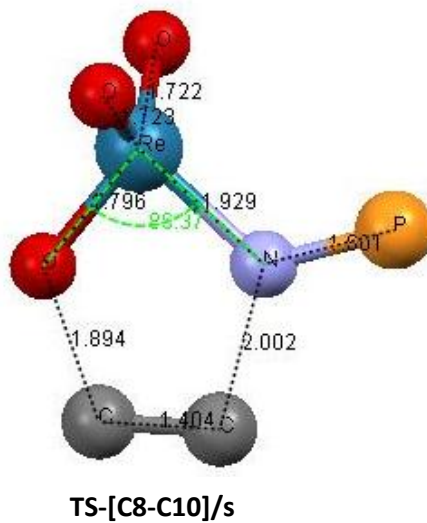
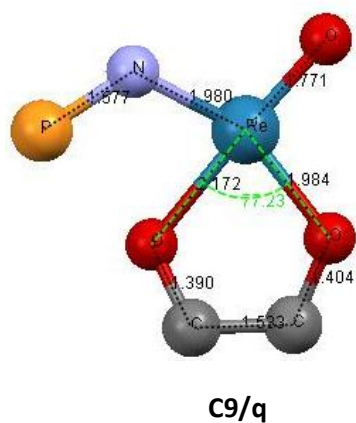
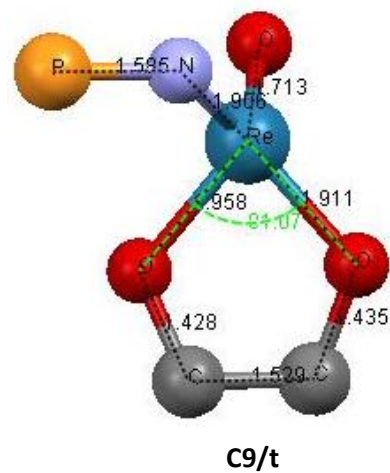
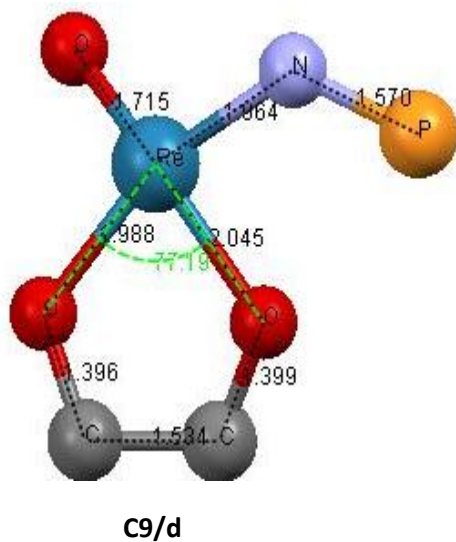
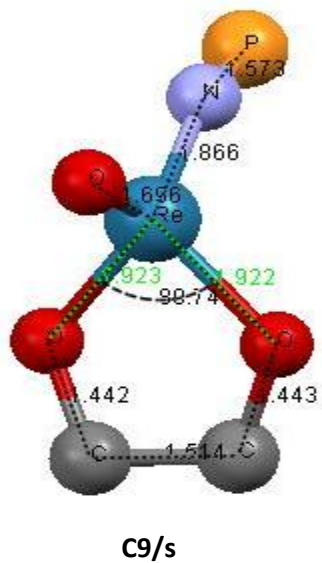
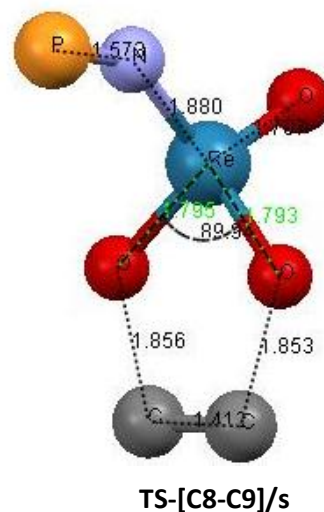
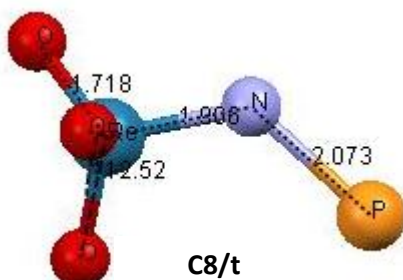
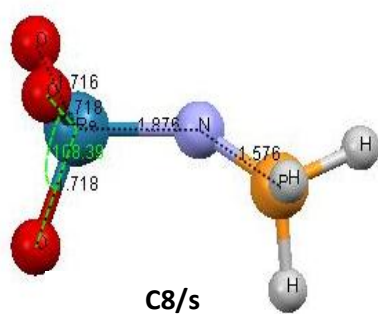
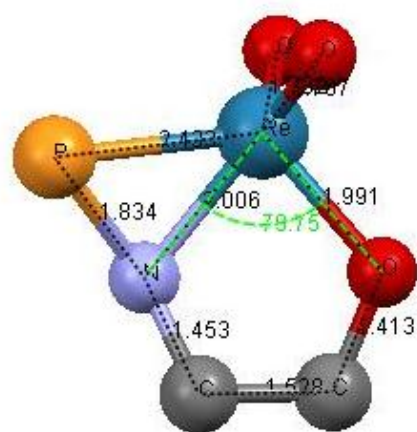
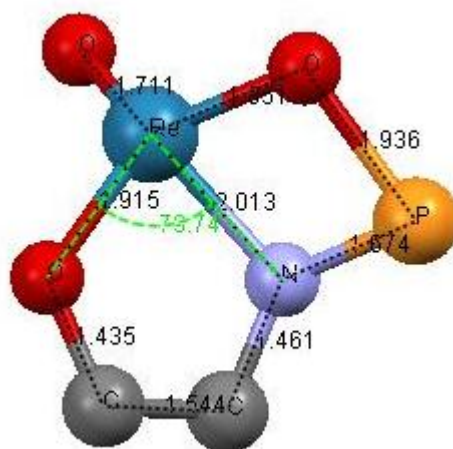


Fig S2: Optimized geometrical parameters of reaction of ReO_3Cl with ethylene. Bond distance in Å and angles in degrees.

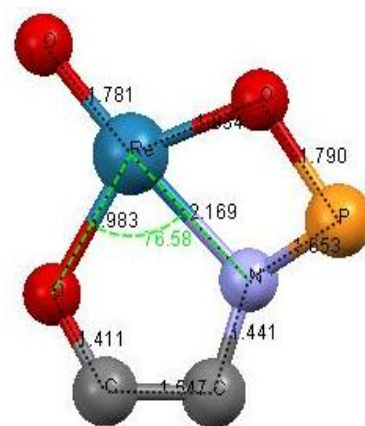




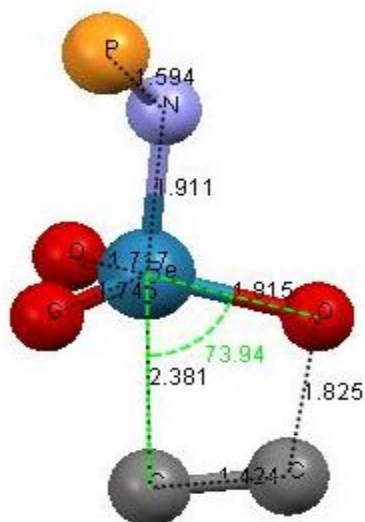
C10/d



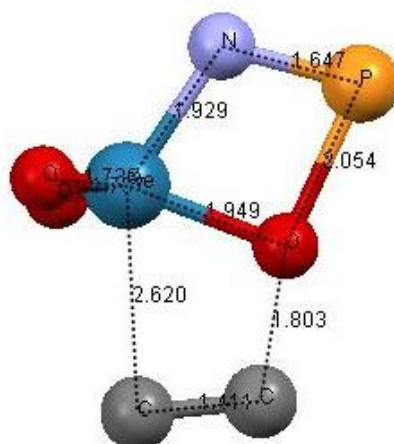
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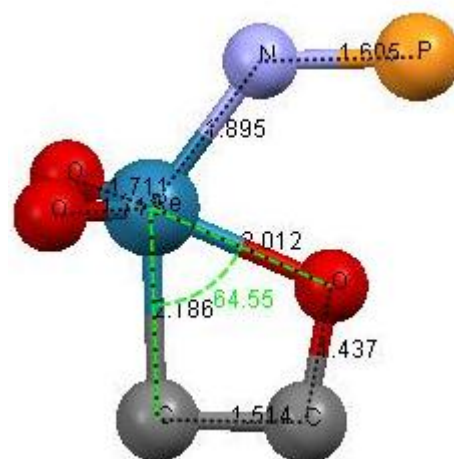
C10/q



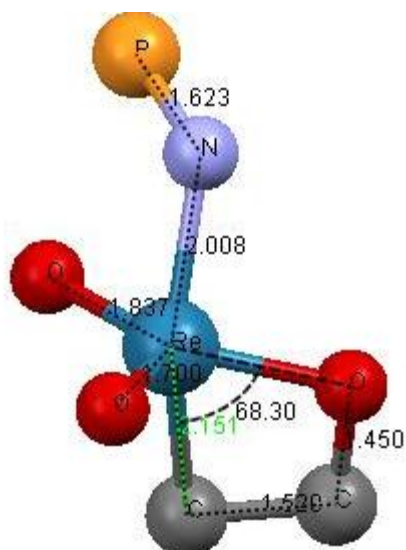
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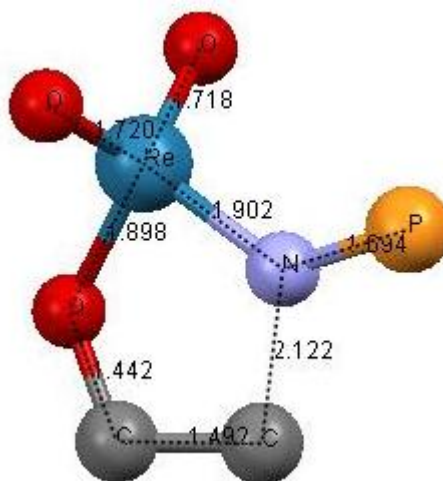
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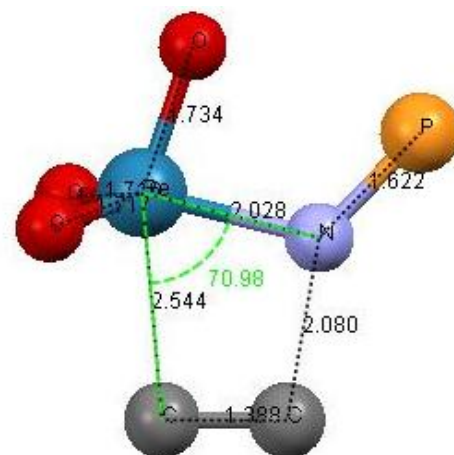
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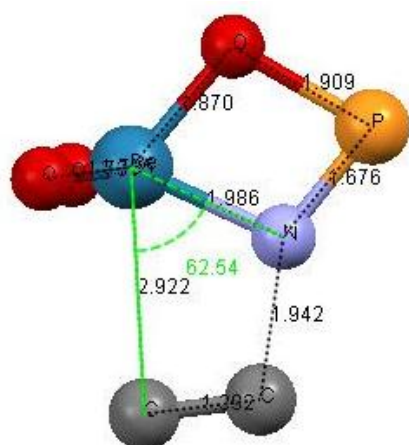
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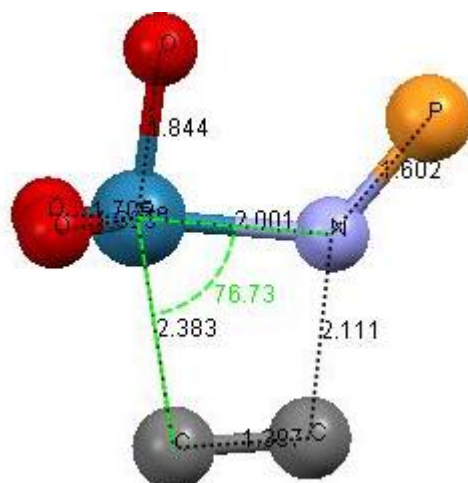
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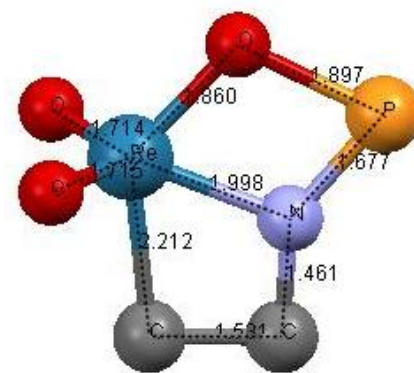
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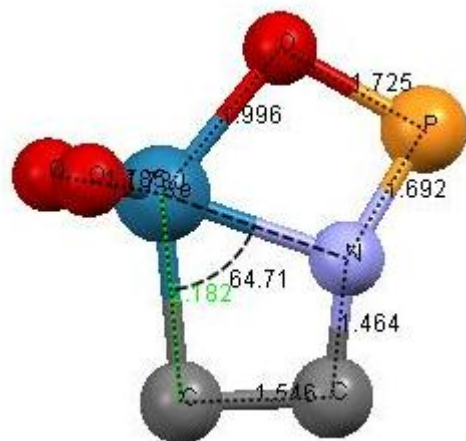
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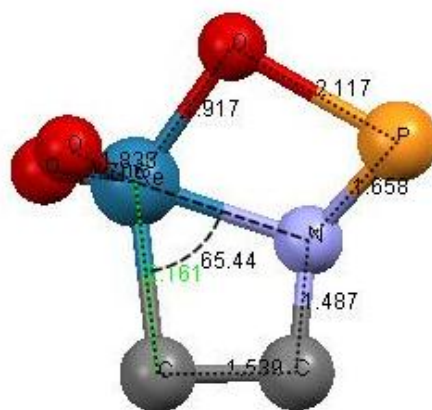
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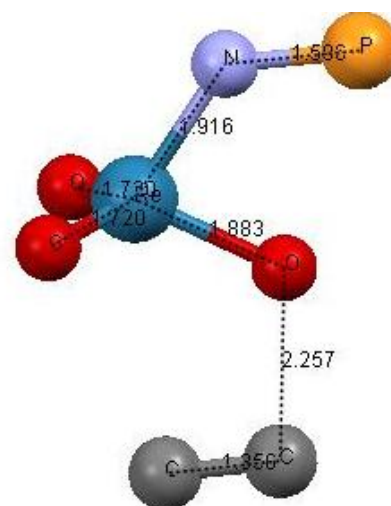
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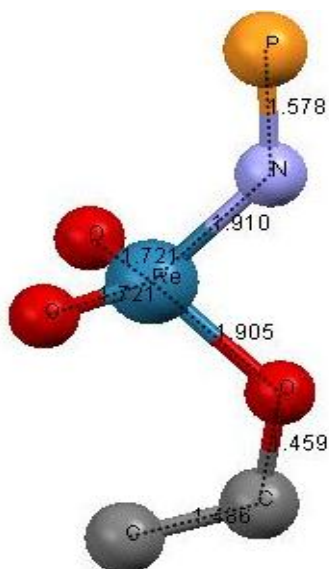
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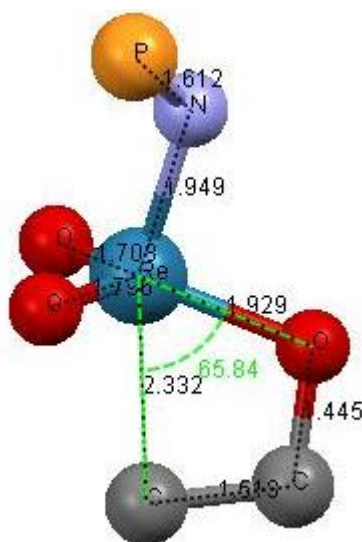
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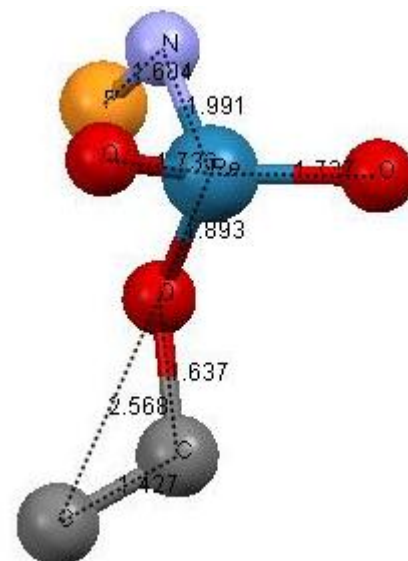
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B/t



TS-[B-C11]/t



TS-[C8-K]/s

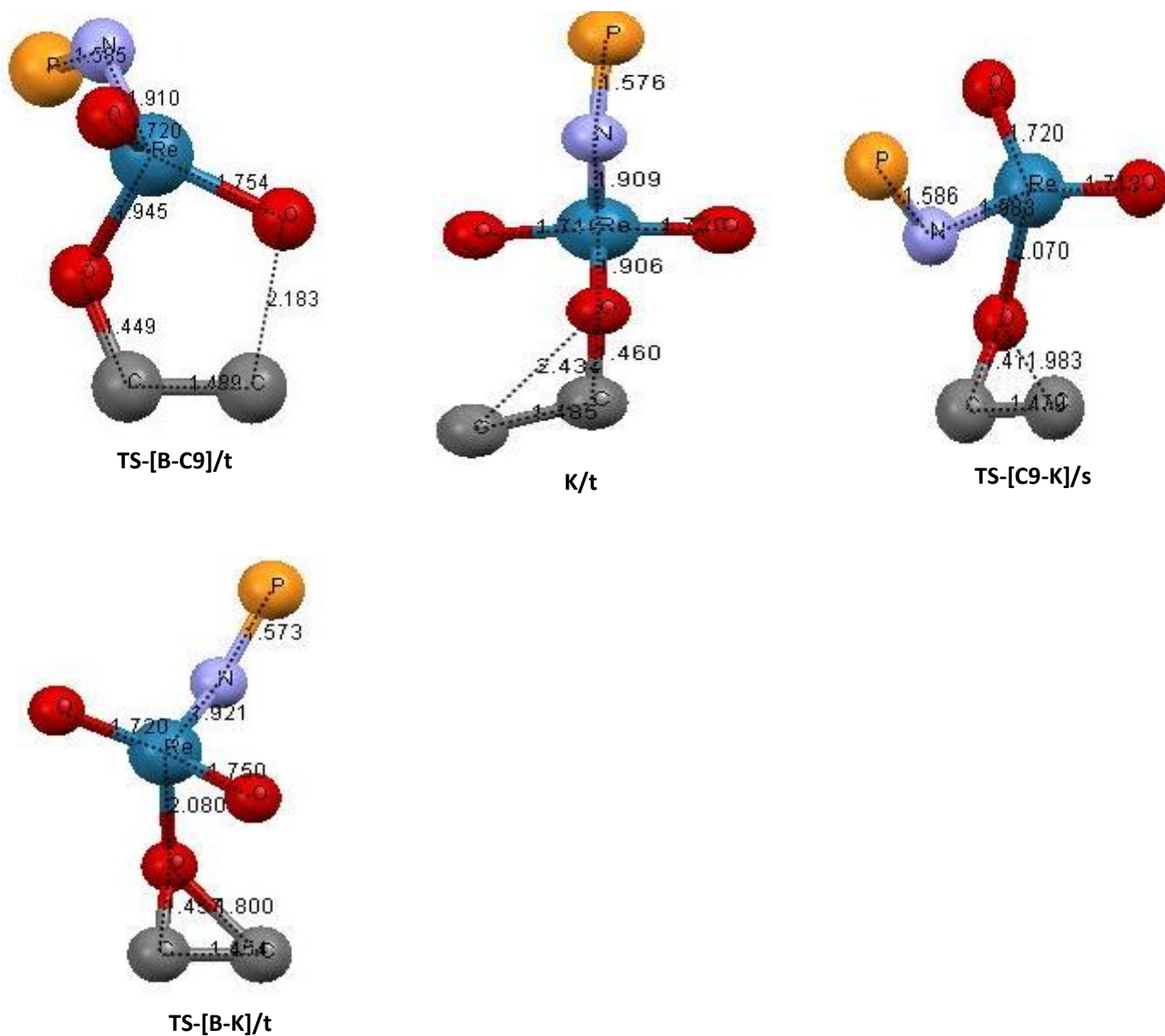
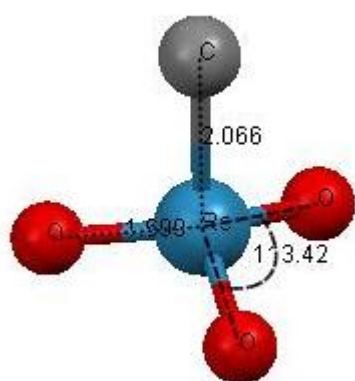
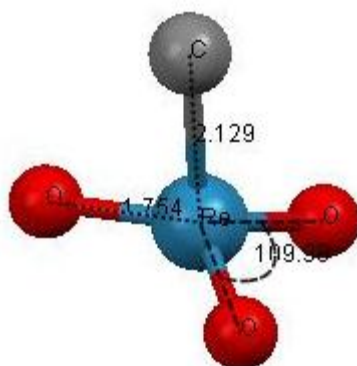


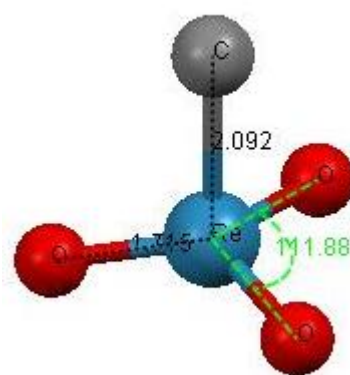
Fig S3: Optimized geometrical parameters of reaction of ReO_3NPH_3 with ethylene. Bond distance in Å and angles in degrees



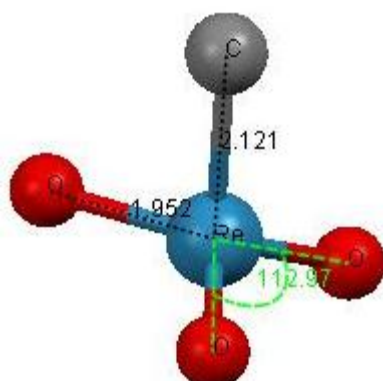
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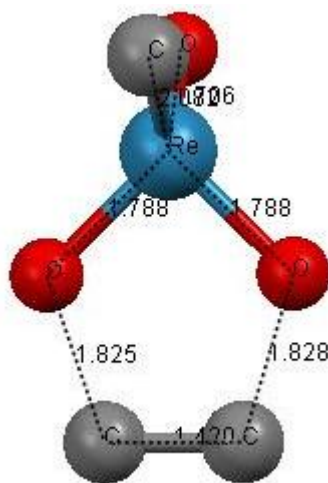
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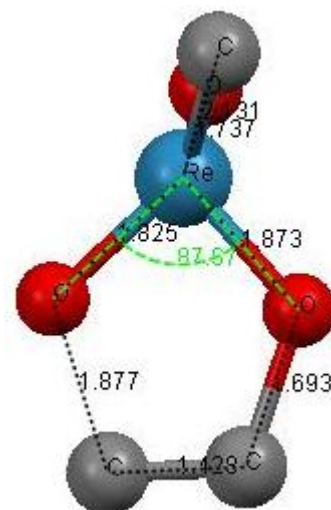
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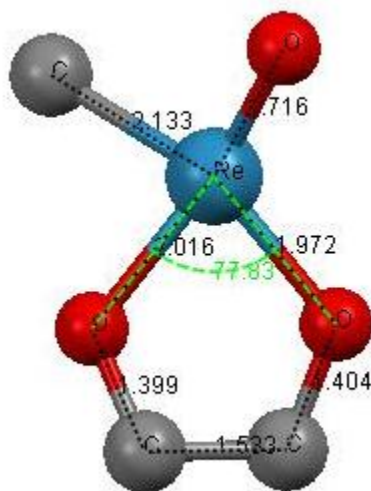
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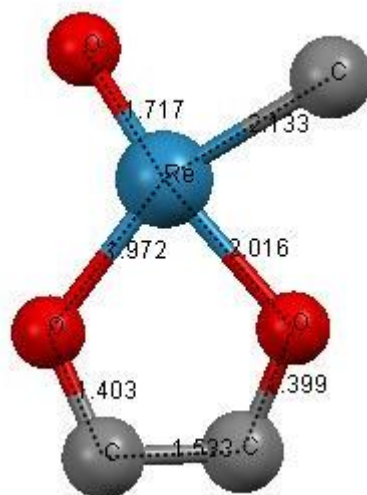
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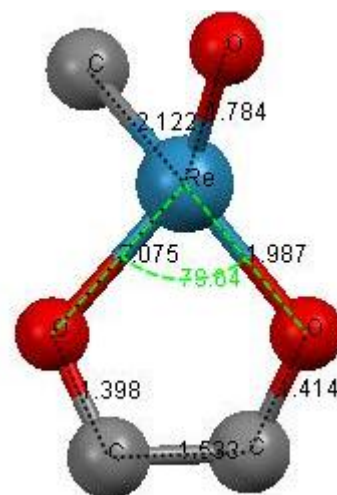
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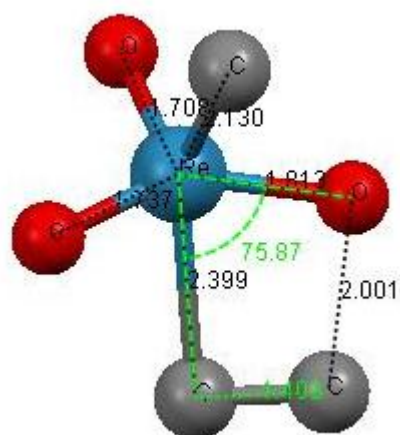
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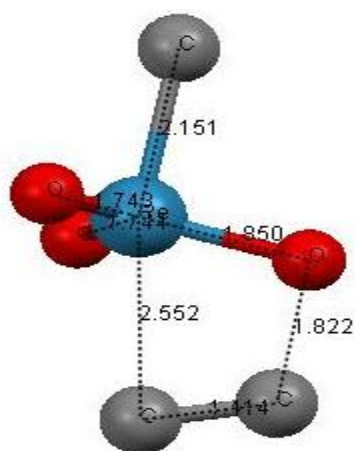
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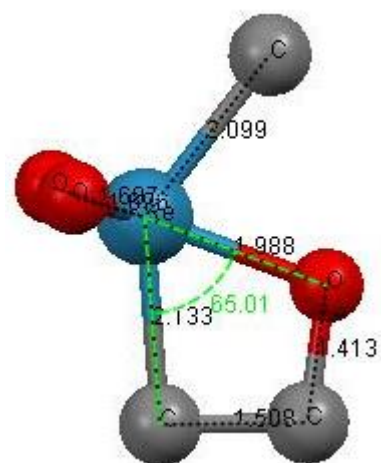
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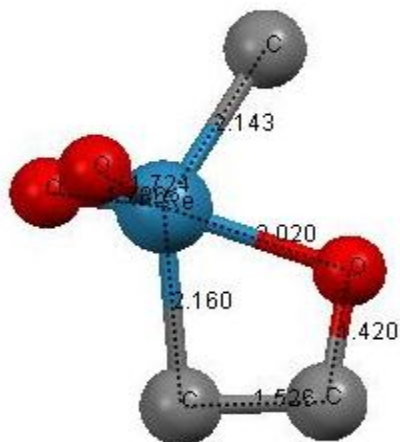
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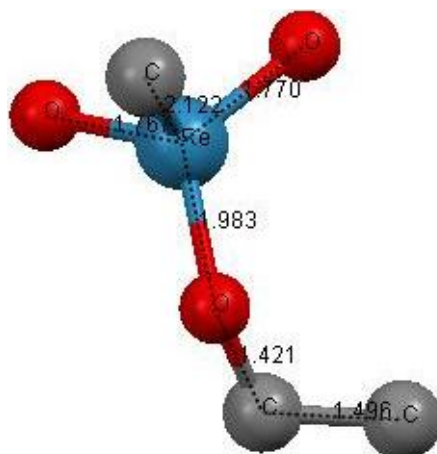
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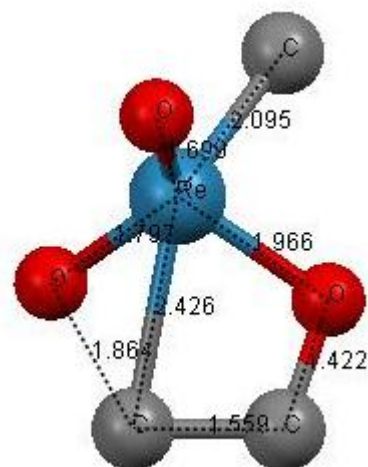
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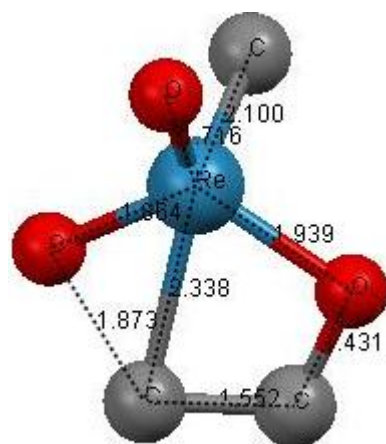
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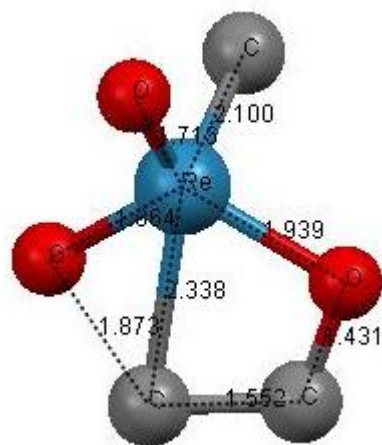
C15/q



TS-[C15-C14]/s



TS-[C15-C14]/d



TS-[C15-C14]/t

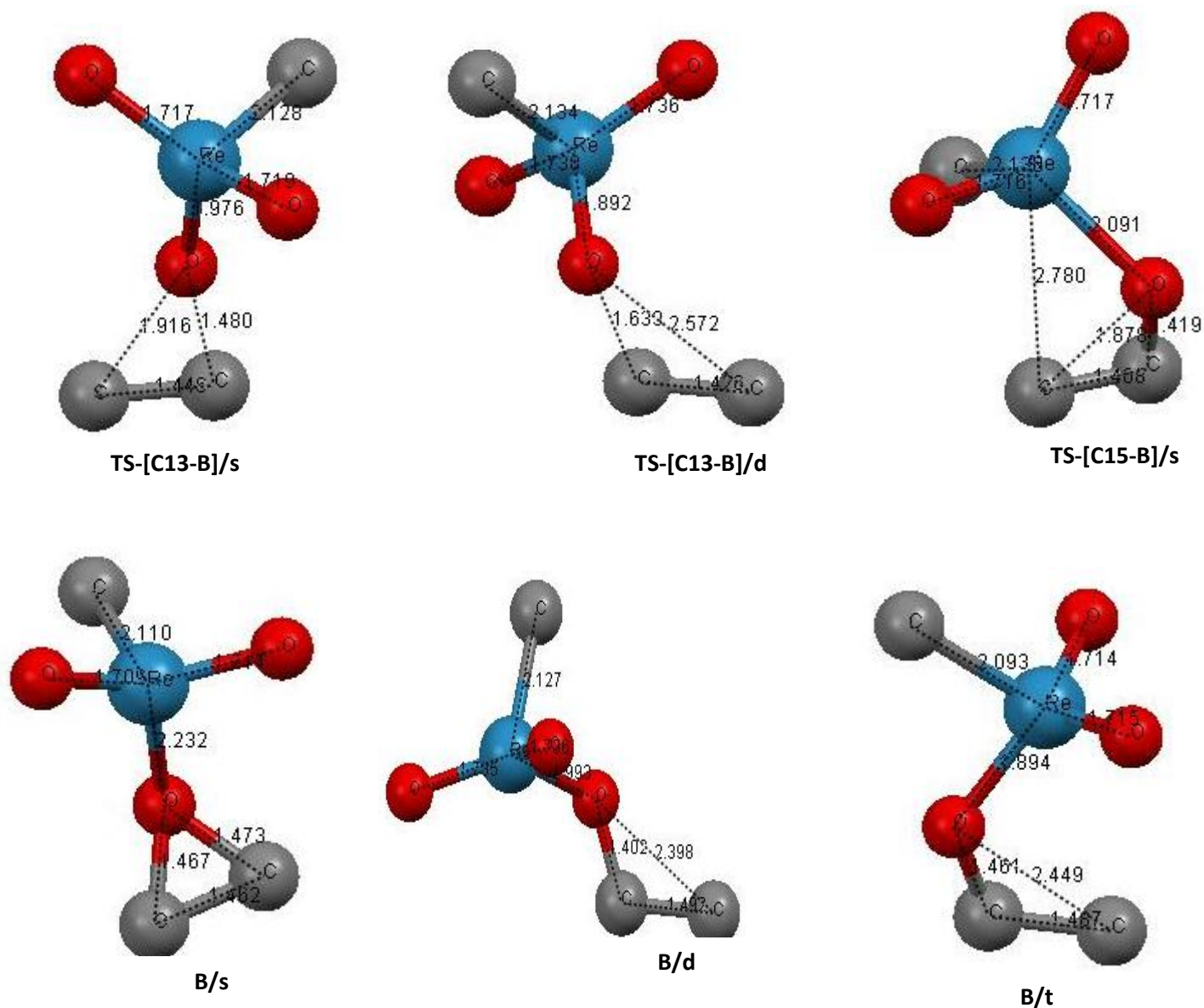
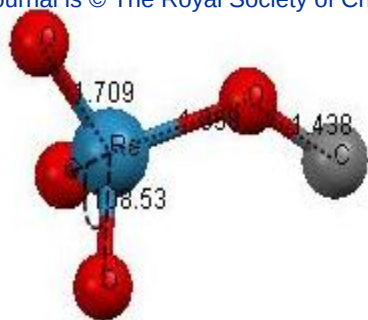
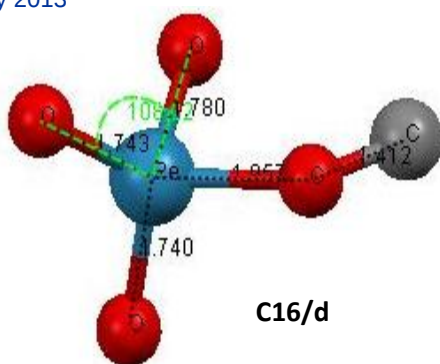


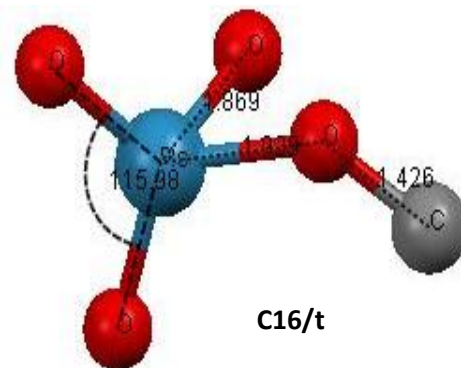
Fig S4: Optimized geometrical parameters of reaction of ReO_3CH_3 with ethylene. Bond distance in Å and angles in degrees



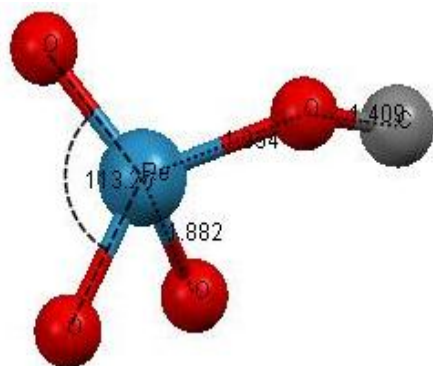
C16/s



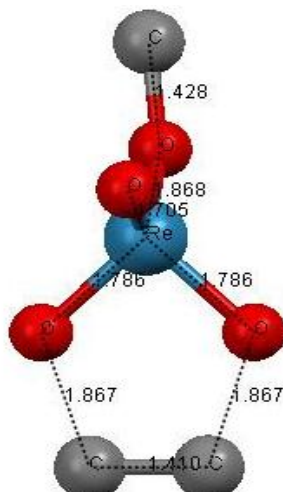
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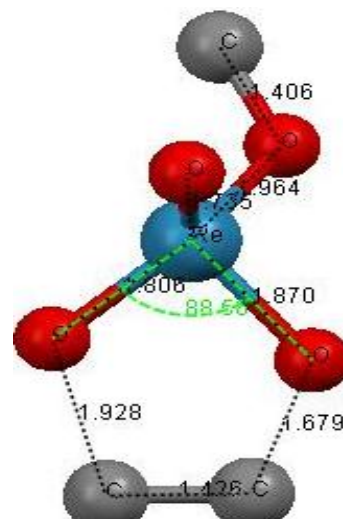
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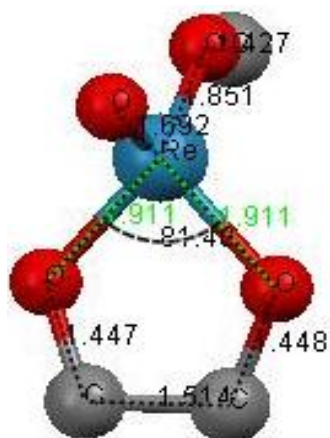
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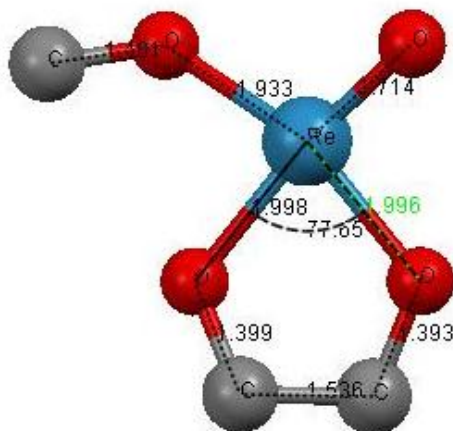
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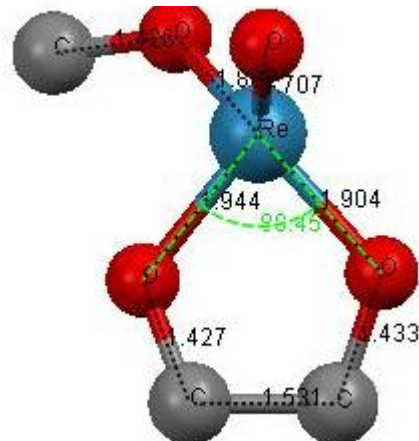
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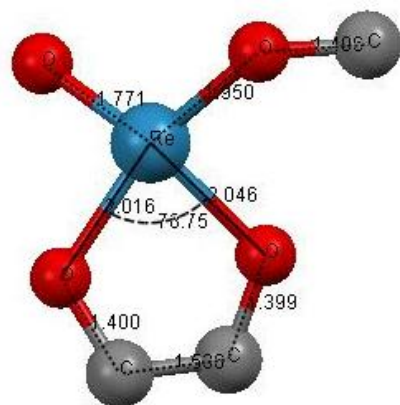
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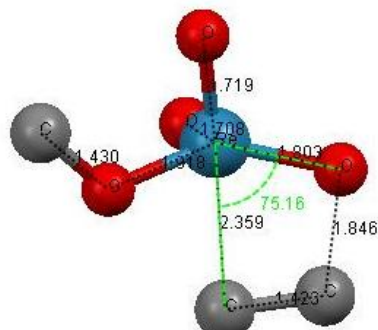
C17/d



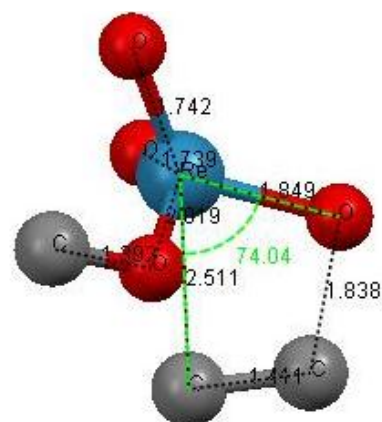
C17/t



C17/q



TS-[C16-C18]/s



TS-[C16-C18]/d

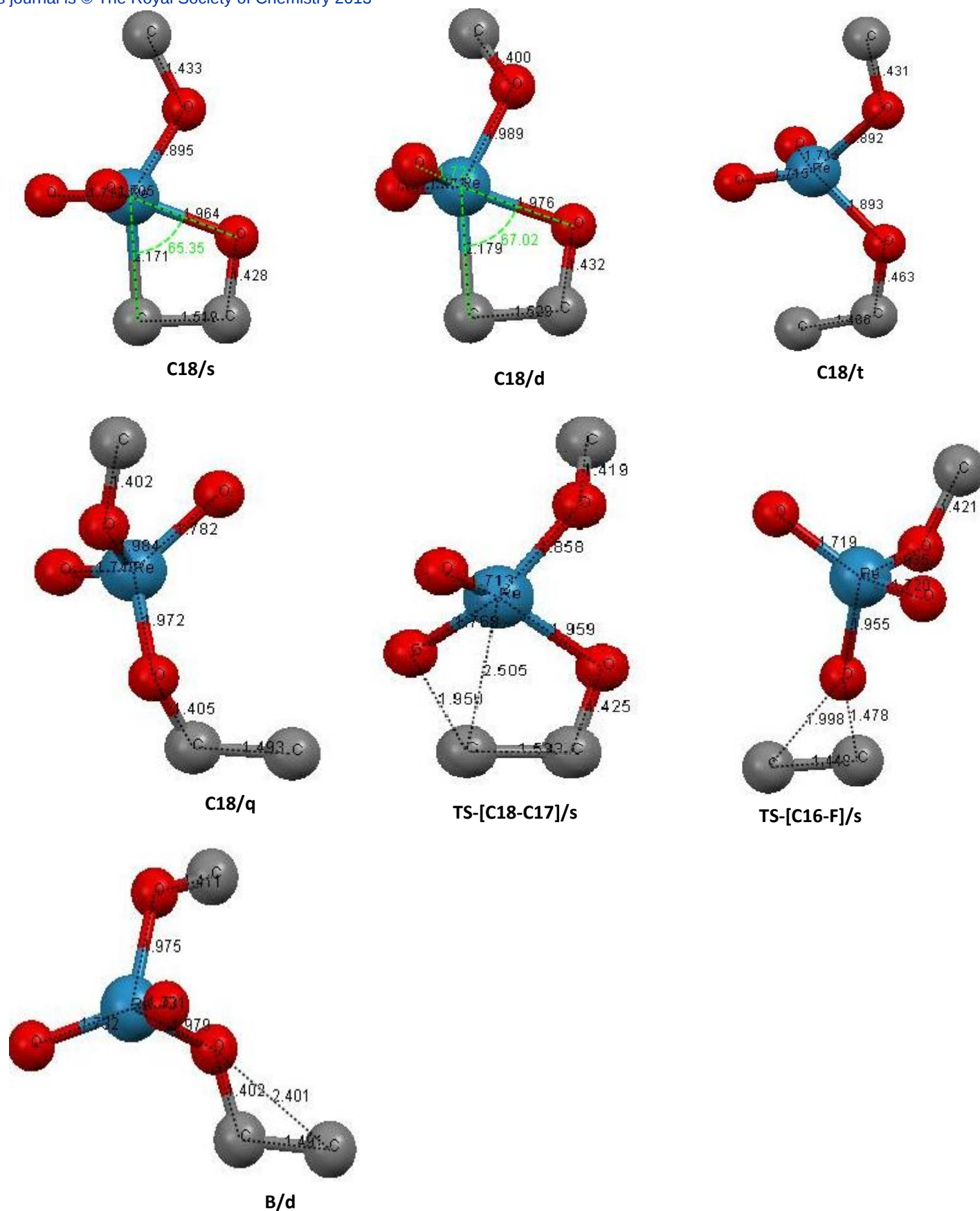


Fig S5: Optimized geometrical parameters of reaction of TcO_3OCH_3 with ethylene. Bond distance in Å and angles in degrees

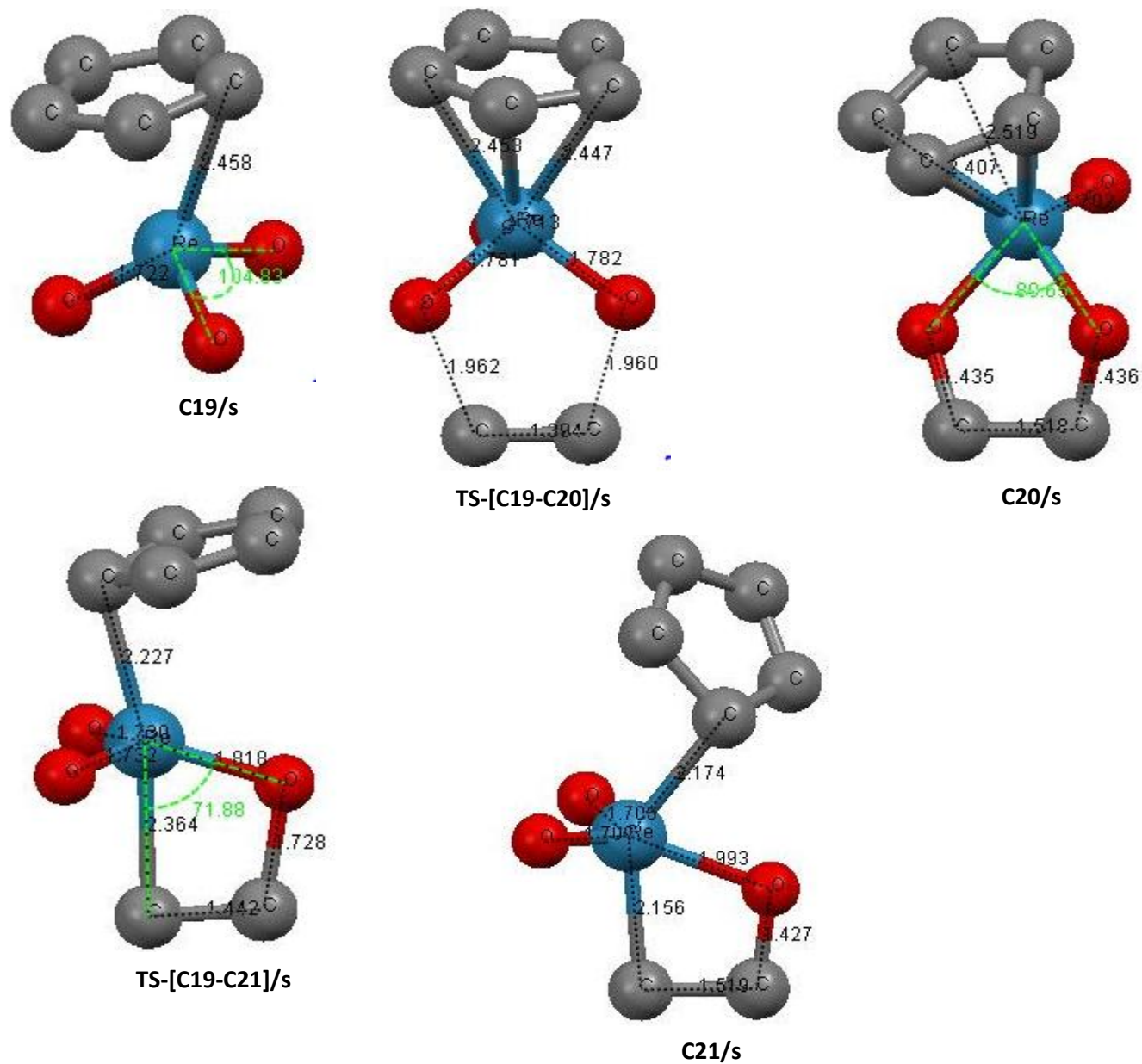


Fig S6: Optimized geometrical parameters of reaction of ReO_3Cp with ethylene. Bond distance in Å and angles in degrees