In[100]:=
```
$Assumptions = e > 0 && r > 0 && μ > 0 && ν ≥ 0 && ν ≤ 0.5 &&
    t > 0 && r ∈ Reals && e ∈ Reals && μ ∈ Reals && ν ∈ Reals && t ∈ Reals;
```

In[101]:=
```
re[r_] := Sqrt[r^2 + e^2];
```

In[102]:=
```
β := Sqrt[μ];
```

In[103]:=
```
α := β * Sqrt[1 + 1 / (1 - 2 * ν)];
```

In[104]:=
```
(*Pseudo-Potentials*)
```

In[105]:=
```
Q[r_, s_, w_] :=
  2 * r^3 / re[r] - s * w * (s / re[s] + w / re[w]) + e^2 * (s - r) * (1 / re[s] - 1 / re[w]);
```

In[106]:=
```
U[r_, t_, c_] := Q[r, r + c * t, r - c * t] / (16 * Pi * c^2 * r^3);
```

In[107]:=
```
dQ[r_, s_, w_] := 2 * r^2 * (3 / re[r] - r^2 / re[r]^3) -
    2 * r * (s / re[s] + w / re[w]) - e^2 * r * (s / re[s]^3 + w / re[w]^3);
```

In[108]:=
```
dU[r_, t_, c_] :=
  (dQ[r, r + c * t, r - c * t] - (3 / r) * Q[r, r + c * t, r - c * t]) / (16 * Pi * c^2 * r^3);
```

In[109]:=
```
(*Push Dynamic Kelvinlet*)
```

In[110]:=
```
A[r_, t_] := U[r, t, α] + 2 * U[r, t, β] + r * dU[r, t, β];
```

In[111]:=
```
B[r_, t_] := (dU[r, t, α] - dU[r, t, β]) / r;
```

In[112]:=
```
(*Regularized Kelvinlet*)
a := 1 / (4 * Pi * μ);
```

In[113]:=
```
b := a / (4 * (1 - ν));
```

In[114]:=
```
AA[r_] := (a - b) / re[r] + (a / 2) * (e^2 / re[r]^3);
```

In[115]:=
```
BB[r_] := b / re[r]^3;
```

In[116]:=
```
(*Verification*)
```

In[117]:=
```
FullSimplify[Limit[A[r, t], t → Infinity] - AA[r]]
```

Out[117]=
```
0
```

In[118]:=
```
FullSimplify[Limit[B[r, t], t → Infinity] - BB[r]]
```

Out[118]=
```
0
```