```
nd_compute_list_wf  THM

⊢  ∀Alph,St:Type, NDA:NDA(Alph;St), l:Alph*, q:St. NDA(l)⊢q ∈ Prop
| by Analyze 0 THEN Analyze 0 THEN Analyze 0 THEN Analyze 0
|
1. Alph : Type
2. St : Type
3. NDA : NDA(Alph;St)
4. l : Alph*
⊢  ∀q:St. NDA(l)⊢q ∈ Prop  by ListInd 4
|
|\
| ⊢  ∀q:St. NDA(nil)⊢q ∈ Prop  by Analyze 0
| |
| 5. q : St
| ⊢  NDA(nil)⊢q ∈ Prop
|   by RecCaseSplit ‘nd_compute_list‘ THEN Analyze 6 THEN Reduce 0
|
.\
. 5. u : Alph
. 6. v : Alph*
. 7. ∀q:St. NDA(v)⊢q ∈ Prop
. ⊢  ∀q:St. NDA(u.v)⊢q ∈ Prop  by Analyze 0
. |
. 8. q : St
. ⊢  NDA(u.v)⊢q ∈ Prop  by RecUnfold ‘nd_compute_list‘ 0
. |
. ⊢  if null(u.v)→ q = I(NDA)
. |  else ∃t:St. NDA(tl((u.v)))⊢t & δNDA(t,hd((u.v)),q) fi
. |  ∈ Prop  by Reduce 0
. |
. ⊢  (∃t:St. NDA(v)⊢t & δNDA(t,u,q)) ∈ Prop  by Auto
. |
. 9. t : St
. ⊢  NDA(v)⊢t ∈ Prop  by Witness7 t
END
```