

Cec_High_Rule: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 15) ^ swrlb:lessThanOrEqual(?ctc, 30) → (Level_of_CEC, ?c, "High")
 Cec_Low_Rule: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(?ctc, 7.5) → (Level_of_CEC, ?c, "Low")
 Cec_Medium_Rule: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 7.5) ^ swrlb:lessThanOrEqual(?ctc, 15) → (Level_of_CEC, ?c, "Medium")
 Cec_VeryHigh_Rule: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 30) → (Level_of_CEC, ?c, "Very High")
 Clay_Rule1: (ClayTexture, ?ct) ^ (clayConcentration, ?ct) ^ (?clay) ^ swrlb:greaterThan(?clay, 60) → (Class_of_Clay, ?ct, "Class1")
 Clay_Rule2: (ClayTexture, ?ct) ^ (clayConcentration, ?ct) ^ (?clay) ^ swrlb:greaterThan(?clay, 40) ^ swrlb:lessThanOrEqual(?clay, 60) → (Class_of_Clay, ?ct, "Class2")
 Clay_Rule3: (ClayTexture, ?ct) ^ (clayConcentration, ?ct) ^ (?clay) ^ swrlb:greaterThan(?clay, 20) ^ swrlb:lessThanOrEqual(?clay, 40) → (Class_of_Clay, ?ct, "Class3")
 Clay_Rule4: (ClayTexture, ?ct) ^ (clayConcentration, ?ct) ^ (?clay) ^ swrlb:lessThanOrEqual(?clay, 20) → (Class_of_Clay, ?ct, "Class4")
 K_High_Rule1: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(?ctc, 7.5) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 45) ^ swrlb:lessThanOrEqual(?kc, 90) → (Level_of_Potassium, ?k, "High")
 K_High_Rule2: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 7.5) ^ swrlb:lessThanOrEqual(?ctc, 15) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 60) ^ swrlb:lessThanOrEqual(?kc, 120) → (Level_of_Potassium, ?k, "High")
 K_High_Rule3: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 15) ^ swrlb:lessThanOrEqual(?ctc, 30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 90) ^ swrlb:lessThanOrEqual(?kc, 180) → (Level_of_Potassium, ?k, "High")
 K_High_Rule4: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 105) ^ swrlb:lessThanOrEqual(?kc, 210) → (Level_of_Potassium, ?k, "High")
 K_Low_Rule1: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(?ctc, 7.5) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 15) ^ swrlb:lessThanOrEqual(?kc, 30) → (Level_of_Potassium, ?k, "Low")
 K_Low_Rule2: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 7.5) ^ swrlb:lessThanOrEqual(?ctc, 15) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 20) ^ swrlb:lessThanOrEqual(?kc, 40) → (Level_of_Potassium, ?k, "Low")
 K_Low_Rule3: swrlb:greaterThan(?ctc, 15) ^ (potassiumConcentration, ?k, ?kc) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(?ctc, 30) ^ (SoilPotassium, ?k) ^ (SoilCEC, ?c) ^ swrlb:greaterThan(?kc, 30) ^ swrlb:lessThanOrEqual(?kc, 60) → (Level_of_Potassium, ?k, "Low")
 K_Low_Rule4: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 35) ^ swrlb:lessThanOrEqual(?kc, 70) → (Level_of_Potassium, ?k, "Low")
 K_Medium_Rule1: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(?ctc, 7.5) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^


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?k, ?kc) ^ swrlb:greaterThan(?kc, 40) ^ swrlb:lessThanOrEqual( ?kc, 60) →
(Recommendation_of_Potassium, ?k, "140")
K_Recomm_Rule11: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
15) ^ swrlb:lessThanOrEqual( ?ctc, 30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k,
?kc) ^ swrlb:greaterThan(?kc, 60) ^ swrlb:lessThanOrEqual( ?kc, 90) →
(Recommendation_of_Potassium, ?k, "140")
K_Recomm_Rule12: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 70) ^
swrlb:lessThanOrEqual(?kc, 105) → (Recommendation_of_Potassium, ?k, "140")
K_Recomm_Rule13: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(
?ctc, 7.5) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^
swrlb:greaterThan(?kc, 45) ^ swrlb:lessThanOrEqual( ?kc, 90) →
(Recommendation_of_Potassium, ?k, "120")
K_Recomm_Rule14: (cecConcentration, ?c, ?ctc) ^ (SoilPotassium, ?k) ^
swrlb:greaterThan(?ctc, 7.5) ^ swrlb:greaterThan(?ctc, 15) ^ (potassiumConcentration, ?k,
?kc) ^ swrlb:greaterThan(?kc, 60) ^ swrlb:lessThanOrEqual( ?kc, 120) ^ (SoilCEC, ?c) →
(Recommendation_of_Potassium, ?k, "120")
K_Recomm_Rule15: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
15) ^ swrlb:lessThanOrEqual( ?ctc, 30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k,
?kc) ^ swrlb:greaterThan(?kc, 90) ^ swrlb:lessThanOrEqual( ?kc, 180) →
(Recommendation_of_Potassium, ?k, "120")
K_Recomm_Rule16: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 105)
^ swrlb:lessThanOrEqual( ?kc, 210) → (Recommendation_of_Potassium, ?k, "120")
K_Recomm_Rule17: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(
?ctc, 7.5) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^
swrlb:greaterThan(?kc, 90) → (Recommendation_of_Potassium, ?k, "$le$ 105")
K_Recomm_Rule18: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
7.5) ^ swrlb:lessThanOrEqual( ?ctc, 15) ^ (SoilPotassium, ?k) ^ (potassiumConcentration,
?k, ?kc) ^ swrlb:greaterThan(?kc, 120) → (Recommendation_of_Potassium, ?k, "$le$ 105")
K_Recomm_Rule19: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
15) ^ swrlb:lessThanOrEqual( ?ctc, 30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k,
?kc) ^ swrlb:greaterThan(?kc, 180) → (Recommendation_of_Potassium, ?k, "$le$ 105")
K_Recomm_Rule20: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 210)
→ (Recommendation_of_Potassium, ?k, "$le$ 105")
K_VeryHigh_Rule1: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(
?ctc, 7.5) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^
swrlb:greaterThan(?kc, 90) → (Level_of_Potassium, ?k, "Very High")
K_VeryHigh_Rule2: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
7.5) ^ swrlb:lessThanOrEqual( ?ctc, 15) ^ (SoilPotassium, ?k) ^ (potassiumConcentration,
?k, ?kc) ^ swrlb:greaterThan(?kc, 120) → (Level_of_Potassium, ?k, "Very High")
K_VeryHigh_Rule3: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
15) ^ swrlb:lessThanOrEqual( ?ctc, 30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k,
?kc) ^ swrlb:greaterThan(?kc, 180) → (Level_of_Potassium, ?k, "Very High")
K_VeryHigh_Rule4: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc,
30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:greaterThan(?kc, 210)
→ (Level of Potassium, ?k, "Very High")

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K_VeryLow_Rule1: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(?ctc, 7.5) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:lessThanOrEqual(?kc, 15) → (Level_of_Potassium, ?k, "Very Low")
 K_VeryLow_Rule2: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 7.5) ^ swrlb:lessThanOrEqual(?ctc, 15) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:lessThanOrEqual(?kc, 20) → (Level_of_Potassium, ?k, "Very Low")
 K_VeryLow_Rule3: swrlb:greaterThan(?ctc, 15) ^ (potassiumConcentration, ?k, ?kc) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:lessThanOrEqual(?ctc, 30) ^ swrlb:lessThanOrEqual(?kc, 30) ^ (SoilPotassium, ?k) ^ (SoilCEC, ?c) → (Level_of_Potassium, ?k, "Very Low")
 K_VeryLow_Rule4: (SoilCEC, ?c) ^ (cecConcentration, ?c, ?ctc) ^ swrlb:greaterThan(?ctc, 30) ^ (SoilPotassium, ?k) ^ (potassiumConcentration, ?k, ?kc) ^ swrlb:lessThanOrEqual(?kc, 35) → (Level_of_Potassium, ?k, "Very Low")
 Liming_Rule01: (Liming, ?l) ^ swrlb:lessThanOrEqual(?smp, 4.4) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "21.0")
 Liming_Rule02: (Liming, ?l) ^ swrlb:Equal(?smp, 4.5) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "17.3")
 Liming_Rule03: (Liming, ?l) ^ swrlb:Equal(?smp, 4.6) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "15.1")
 Liming_Rule04: (Liming, ?l) ^ swrlb:Equal(?smp, 4.7) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "13.3")
 Liming_Rule05: (Liming, ?l) ^ swrlb:Equal(?smp, 4.8) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "11.9")
 Liming_Rule06: (Liming, ?l) ^ swrlb:Equal(?smp, 4.9) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "10.7")
 Liming_Rule07: (Liming, ?l) ^ swrlb:Equal(?smp, 5) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "9.9")
 Liming_Rule08: (Liming, ?l) ^ swrlb:Equal(?smp, 5.1) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "9.1")
 Liming_Rule09: (Liming, ?l) ^ swrlb:Equal(?smp, 5.2) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "8.3")
 Liming_Rule10: (Liming, ?l) ^ swrlb:Equal(?smp, 5.3) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "7.5")
 Liming_Rule11: (Liming, ?l) ^ swrlb:Equal(?smp, 5.4) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "6.8")
 Liming_Rule12: (Liming, ?l) ^ swrlb:Equal(?smp, 5.5) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "6.1")
 Liming_Rule13: (Liming, ?l) ^ swrlb:Equal(?smp, 5.6) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "5.4")
 Liming_Rule14: (Liming, ?l) ^ swrlb:Equal(?smp, 5.7) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "4.8")
 Liming_Rule15: (Liming, ?l) ^ swrlb:Equal(?smp, 5.8) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "4.2")
 Liming_Rule16: (Liming, ?l) ^ swrlb:Equal(?smp, 5.9) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "3.7")
 Liming_Rule17: (Liming, ?l) ^ swrlb:Equal(?smp, 6) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "3.2")
 Liming_Rule18: (Liming, ?l) ^ swrlb:Equal(?smp, 6.1) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "2.7")

Liming_Rule19: (Liming, ?l) ^ swrlb:Equal(?smp, 6.2) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "2.2")

Liming_Rule20: (Liming, ?l) ^ swrlb:Equal(?smp, 6.3) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "1.8")

Liming_Rule21: (Liming, ?l) ^ swrlb:Equal(?smp, 6.4) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "1.4")

Liming_Rule22: (Liming, ?l) ^ swrlb:Equal(?smp, 6.5) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "1.1")

Liming_Rule23: (Liming, ?l) ^ swrlb:Equal(?smp, 6.6) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "0.8")

Liming_Rule24: (Liming, ?l) ^ swrlb:Equal(?smp, 6.7) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "0.5")

Liming_Rule25: (Liming, ?l) ^ swrlb:Equal(?smp, 6.8) ^ (smpConcentration, ?l, ?smp) → (Recommendation_of_Liming, ?l, "0.3")

Liming_Rule26: (Liming, ?l) ^ (smpConcentration, ?l, ?smp) ^ swrlb:Equal(?smp, 6.9) → (Recommendation_of_Liming, ?l, "0.2")

Liming_Rule27: swrlb:greaterThanOrEqual(?smp, 7) ^ (smpConcentration, ?l, ?smp) ^ (Liming, ?l) → (Recommendation_of_Liming, ?l, "0")

N_Recomm_Rule1: swrlb:lessThanOrEqual(?om, 1) ^ (organicMatterConcentration, ?n, ?om) ^ (Nitrogen, ?n) → (Recommendation_of_Nitrogen, ?n, "160-180")

N_Recomm_Rule2: swrlb:greaterThan(?om, 1) ^ (organicMatterConcentration, ?n, ?om) ^ swrlb:lessThanOrEqual(?om, 2) ^ (Nitrogen, ?n) → (Recommendation_of_Nitrogen, ?n, "140-160")

N_Recomm_Rule3: (organicMatterConcentration, ?n, ?om) ^ swrlb:greaterThan(?om, 2) ^ swrlb:lessThanOrEqual(?om, 3) ^ (Nitrogen, ?n) → (Recommendation_of_Nitrogen, ?n, "120-140")

N_Recomm_Rule4: (organicMatterConcentration, ?n, ?om) ^ swrlb:greaterThan(?om, 3) ^ (Nitrogen, ?n) ^ swrlb:lessThanOrEqual(?om, 4) → (Recommendation_of_Nitrogen, ?n, "110-120")

N_Recomm_Rule5: (organicMatterConcentration, ?n, ?om) ^ swrlb:greaterThan(?om, 4) ^ swrlb:lessThanOrEqual(?om, 5) ^ (Nitrogen, ?n) → (Recommendation_of_Nitrogen, ?n, "100-110")

N_Recomm_Rule6: swrlb:greaterThan(?om, 5) ^ (organicMatterConcentration, ?n, ?om) ^ (Nitrogen, ?n) → (Recommendation_of_Nitrogen, ?n, "\$le\$ 100")

OM_High_Rule: (SoilOrganicMatter, ?o) ^ swrlb:greaterThan(?om, 5) ^ (organicMatterConcentration, ?o, ?om) → (Level_of_OrganicMatter, ?o, "High")

OM_Low_Rule: swrlb:lessThanOrEqual(?om, 2.5) ^ (organicMatterConcentration, ?o) ^ (?om) ^ (SoilOrganicMatter, ?o) → (Level_of_OrganicMatter, ?o, "Low")

OM_Medium_Rule: swrlb:greaterThan(?om, 2.5) ^ (organicMatterConcentration, ?o) ^ (?om) ^ (SoilOrganicMatter, ?o) ^ swrlb:lessThanOrEqual(?om, 5) → (Level_of_OrganicMatter, ?o, "Medium")

P_High_Rule1: (ClayTexture, ?c) ^ swrlb:lessThanOrEqual(?pc, 9) ^ (SoilPhosphorus, ?p) ^ swrlb:greaterThan(?clay, 60) ^ (clayConcentration, ?c, ?clay) ^ swrlb:greaterThan(?pc, 4.5) ^ (phosphorusConcentration, ?p) ^ (?pc) → (Level_of_Phosphorus, ?p, "High")

P_High_Rule2: (ClayTexture, ?c) ^ swrlb:greaterThan(?clay, 40) ^ swrlb:greaterThan(?pc, 6) ^ (SoilPhosphorus, ?p) ^ swrlb:lessThanOrEqual(?pc, 12) ^ (clayConcentration, ?c, ?clay) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:lessThanOrEqual(?clay, 60) → (Level_of_Phosphorus, ?p, "High")

P_High_Rule3: (ClayTexture, ?c) ^ swrlb:greaterThan(?pc, 9) ^ swrlb:lessThanOrEqualTo(?clay, 40) ^ (SoilPhosphorus, ?p) ^ (clayConcentration, ?c, ?clay) ^ swrlb:lessThanOrEqualTo(?pc, 18) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:greaterThan(?clay, 20) → (Level_of_Phosphorus, ?p, "High")

P_High_Rule4: (ClayTexture, ?c) ^ swrlb:lessThanOrEqualTo(?pc, 30) ^ (SoilPhosphorus, ?p) ^ swrlb:lessThanOrEqualTo(?clay, 20) ^ (clayConcentration, ?c, ?clay) ^ swrlb:greaterThan(?pc, 15) ^ (phosphorusConcentration, ?p) ^ (?pc) → (Level_of_Phosphorus, ?p, "High")

P_Low_Rule1: (ClayTexture, ?c) ^ (SoilPhosphorus, ?p) ^ swrlb:greaterThan(?clay, 60) ^ (clayConcentration, ?c, ?clay) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:greaterThan(?pc, 1.5) ^ swrlb:lessThanOrEqualTo(?pc, 3) → (Level_of_Phosphorus, ?p, "Low")

P_Low_Rule2: (ClayTexture, ?c) ^ swrlb:greaterThan(?clay, 40) ^ (SoilPhosphorus, ?p) ^ (clayConcentration, ?c, ?clay) ^ swrlb:greaterThan(?pc, 2) ^ swrlb:lessThanOrEqualTo(?pc, 4) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:lessThanOrEqualTo(?clay, 60) → (Level_of_Phosphorus, ?p, "Low")

P_Low_Rule3: (ClayTexture, ?c) ^ swrlb:lessThanOrEqualTo(?clay, 40) ^ (SoilPhosphorus, ?p) ^ swrlb:greaterThan(?pc, 3) ^ (clayConcentration, ?c, ?clay) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:lessThanOrEqualTo(?pc, 6) ^ swrlb:greaterThan(?clay, 20) → (Level_of_Phosphorus, ?p, "Low")

P_Low_Rule4: (ClayTexture, ?c) ^ swrlb:lessThanOrEqualTo(?pc, 10) ^ swrlb:greaterThan(?pc, 5) ^ (SoilPhosphorus, ?p) ^ swrlb:lessThanOrEqualTo(?clay, 20) ^ (clayConcentration, ?c, ?clay) ^ (phosphorusConcentration, ?p) ^ (?pc) → (Level_of_Phosphorus, ?p, "Low")

P_Medium_Rule1: (ClayTexture, ?c) ^ (SoilPhosphorus, ?p) ^ swrlb:greaterThan(?clay, 60) ^ swrlb:greaterThan(?pc, 3) ^ (clayConcentration, ?c, ?clay) ^ swrlb:lessThanOrEqualTo(?pc, 4.5) ^ (phosphorusConcentration, ?p) ^ (?pc) → (Level_of_Phosphorus, ?p, "Medium")

P_Medium_Rule2: (ClayTexture, ?c) ^ swrlb:greaterThan(?clay, 40) ^ (SoilPhosphorus, ?p) ^ swrlb:lessThanOrEqualTo(?pc, 6) ^ (clayConcentration, ?c, ?clay) ^ swrlb:greaterThan(?pc, 4) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:lessThanOrEqualTo(?clay, 60) → (Level_of_Phosphorus, ?p, "Medium")

P_Medium_Rule3: (ClayTexture, ?c) ^ swrlb:lessThanOrEqualTo(?pc, 9) ^ swrlb:lessThanOrEqualTo(?clay, 40) ^ swrlb:greaterThan(?pc, 6) ^ (SoilPhosphorus, ?p) ^ (clayConcentration, ?c, ?clay) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:greaterThan(?clay, 20) → (Level_of_Phosphorus, ?p, "Medium")

P_Medium_Rule4: (ClayTexture, ?c) ^ swrlb:greaterThan(?pc, 10) ^ (SoilPhosphorus, ?p) ^ swrlb:lessThanOrEqualTo(?clay, 20) ^ (clayConcentration, ?c, ?clay) ^ swrlb:lessThanOrEqualTo(?pc, 15) ^ (phosphorusConcentration, ?p) ^ (?pc) → (Level_of_Phosphorus, ?p, "Medium")

P_Recomm_Rule01: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^ swrlb:greaterThan(?clay, 60) ^ (SoilPhosphorus, ?p) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:lessThanOrEqualTo(?pc, 1.5) → (Recommendation_of_Phosphorus, ?p, "120")

P_Recomm_Rule02: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^ swrlb:greaterThan(?clay, 40) ^ swrlb:lessThanOrEqualTo(?clay, 60) ^ (SoilPhosphorus, ?p) ^ (phosphorusConcentration, ?p, ?pc) ^ swrlb:lessThanOrEqualTo(?pc, 2) → (Recommendation_of_Phosphorus, ?p, "120")

P_Recomm_Rule03: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^ swrlb:greaterThan(?clay, 20) ^ swrlb:lessThanOrEqualTo(?clay, 40) ^ (SoilPhosphorus, ?p) ^

(phosphorusConcentration, ?p, ?pc) ^ swrlb:lessThanOrEqual(?pc, 3) →
 (Recommendation_of_Phosphorus, ?p, "120")
 P_Recomm_Rule04: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:lessThanOrEqual(?clay, 20) ^ (SoilPhosphorus, ?p) ^ (phosphorusConcentration, ?p,
 ?pc) ^ swrlb:lessThanOrEqual(?pc, 5) → (Recommendation_of_Phosphorus, ?p, "120")
 P_Recomm_Rule05: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 60) ^ (SoilPhosphorus, ?p) ^ (phosphorusConcentration, ?p, ?pc) ^
 swrlb:greaterThan(?pc, 1.5) ^ swrlb:lessThanOrEqual(?pc, 3) →
 (Recommendation_of_Phosphorus, ?p, "80")
 P_Recomm_Rule06: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 40) ^ swrlb:lessThanOrEqual(?clay, 60) ^ (SoilPhosphorus, ?p) ^
 (phosphorusConcentration, ?p, ?pc) ^ swrlb:greaterThan(?pc, 2) ^ swrlb:lessThanOrEqual(
 ?pc, 4) → (Recommendation_of_Phosphorus, ?p, "80")
 P_Recomm_Rule07: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 20) ^ swrlb:lessThanOrEqual(?clay, 40) ^ (SoilPhosphorus, ?p) ^
 (phosphorusConcentration, ?p, ?pc) ^ swrlb:greaterThan(?pc, 3) ^ swrlb:lessThanOrEqual(
 ?pc, 6) → (Recommendation_of_Phosphorus, ?p, "80")
 P_Recomm_Rule08: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:lessThanOrEqual(?clay, 20) ^ (SoilPhosphorus, ?p) ^ (phosphorusConcentration, ?p,
 ?pc) ^ swrlb:greaterThan(?pc, 5) ^ swrlb:lessThanOrEqual(?pc, 10) →
 (Recommendation_of_Phosphorus, ?p, "80")
 P_Recomm_Rule09: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 60) ^ (SoilPhosphorus, ?p) ^ (phosphorusConcentration, ?p, ?pc) ^
 swrlb:greaterThan(?pc, 3) ^ swrlb:lessThanOrEqual(?pc, 4.5) →
 (Recommendation_of_Phosphorus, ?p, "60")
 P_Recomm_Rule10: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 40) ^ swrlb:lessThanOrEqual(?clay, 60) ^ (SoilPhosphorus, ?p) ^
 (phosphorusConcentration, ?p, ?pc) ^ swrlb:greaterThan(?pc, 4) ^ swrlb:lessThanOrEqual(
 ?pc, 6) → (Recommendation_of_Phosphorus, ?p, "60")
 P_Recomm_Rule11: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 20) ^ swrlb:lessThanOrEqual(?clay, 40) ^ (SoilPhosphorus, ?p) ^
 (phosphorusConcentration, ?p, ?pc) ^ swrlb:greaterThan(?pc, 6) ^ swrlb:lessThanOrEqual(
 ?pc, 9) → (Recommendation_of_Phosphorus, ?p, "60")
 P_Recomm_Rule12: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:lessThanOrEqual(?clay, 20) ^ (SoilPhosphorus, ?p) ^ (phosphorusConcentration, ?p,
 ?pc) ^ swrlb:greaterThan(?pc, 10) ^ swrlb:lessThanOrEqual(?pc, 15) →
 (Recommendation_of_Phosphorus, ?p, "60")
 P_Recomm_Rule13: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 60) ^ (SoilPhosphorus, ?p) ^ (phosphorusConcentration, ?p, ?pc) ^
 swrlb:greaterThan(?pc, 4.5) ^ swrlb:lessThanOrEqual(?pc, 9) →
 (Recommendation_of_Phosphorus, ?p, "40")
 P_Recomm_Rule14: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 40) ^ swrlb:lessThanOrEqual(?clay, 60) ^ (SoilPhosphorus, ?p) ^
 (phosphorusConcentration, ?p, ?pc) ^ swrlb:greaterThan(?pc, 6) ^ swrlb:lessThanOrEqual(
 ?pc, 12) → (Recommendation_of_Phosphorus, ?p, "40")
 P_Recomm_Rule15: (ClayTexture, ?c) ^ (clayConcentration, ?c, ?clay) ^
 swrlb:greaterThan(?clay, 20) ^ swrlb:lessThanOrEqual(?clay, 40) ^ (SoilPhosphorus, ?p) ^

$(\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?pc, 9) \wedge \text{swrlb:lessThanOrEqual}(?pc, 18) \rightarrow (\text{Recommendation_of_Phosphorus}, ?p, "40")$
 P_Recomm_Rule16: $(\text{ClayTexture}, ?c) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge \text{swrlb:lessThanOrEqual}(?clay, 20) \wedge (\text{SoilPhosphorus}, ?p) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?pc, 15) \wedge \text{swrlb:lessThanOrEqual}(?pc, 30) \rightarrow (\text{Recommendation_of_Phosphorus}, ?p, "40")$
 P_Recomm_Rule17: $(\text{ClayTexture}, ?c) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge \text{swrlb:greaterThan}(?clay, 60) \wedge (\text{SoilPhosphorus}, ?p) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?pc, 9) \rightarrow (\text{Recommendation_of_Phosphorus}, ?p, "\$le\$ 20")$
 P_Recomm_Rule18: $(\text{ClayTexture}, ?c) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge \text{swrlb:greaterThan}(?clay, 40) \wedge \text{swrlb:lessThanOrEqual}(?clay, 60) \wedge (\text{SoilPhosphorus}, ?p) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?pc, 12) \rightarrow (\text{Recommendation_of_Phosphorus}, ?p, "\$le\$ 20")$
 P_Recomm_Rule19: $(\text{ClayTexture}, ?c) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge \text{swrlb:greaterThan}(?clay, 20) \wedge \text{swrlb:lessThanOrEqual}(?clay, 40) \wedge (\text{SoilPhosphorus}, ?p) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?pc, 18) \rightarrow (\text{Recommendation_of_Phosphorus}, ?p, "\$le\$ 20")$
 P_Recomm_Rule20: $(\text{ClayTexture}, ?c) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge \text{swrlb:lessThanOrEqual}(?clay, 20) \wedge (\text{SoilPhosphorus}, ?p) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?pc, 30) \rightarrow (\text{Recommendation_of_Phosphorus}, ?p, "\$le\$20")$
 P_VeryHigh_Rule1: $(\text{ClayTexture}, ?c) \wedge \text{swrlb:greaterThan}(?pc, 9) \wedge (\text{SoilPhosphorus}, ?p) \wedge \text{swrlb:greaterThan}(?clay, 60) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge (\text{phosphorusConcentration}, ?p) \wedge (?pc) \rightarrow (\text{Level_of_Phosphorus}, ?p, "Very High")$
 P_VeryHigh_Rule2: $(\text{ClayTexture}, ?c) \wedge \text{swrlb:greaterThan}(?clay, 40) \wedge (\text{SoilPhosphorus}, ?p) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:lessThanOrEqual}(?clay, 60) \wedge \text{swrlb:greaterThan}(?pc, 12) \rightarrow (\text{Level_of_Phosphorus}, ?p, "Very High")$
 P_VeryHigh_Rule3: $(\text{ClayTexture}, ?c) \wedge \text{swrlb:lessThanOrEqual}(?clay, 40) \wedge (\text{SoilPhosphorus}, ?p) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge \text{swrlb:greaterThan}(?pc, 18) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?clay, 20) \rightarrow (\text{Level_of_Phosphorus}, ?p, "Very High")$
 P_VeryHigh_Rule4: $(\text{ClayTexture}, ?c) \wedge (\text{SoilPhosphorus}, ?p) \wedge \text{swrlb:lessThanOrEqual}(?clay, 20) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?pc, 30) \rightarrow (\text{Level_of_Phosphorus}, ?p, "Very High")$
 P_VeryLow_Rule1: $(\text{ClayTexture}, ?c) \wedge \text{swrlb:lessThanOrEqual}(?pc, 1.5) \wedge (\text{SoilPhosphorus}, ?p) \wedge \text{swrlb:greaterThan}(?clay, 60) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge (\text{phosphorusConcentration}, ?p) \wedge (?pc) \rightarrow (\text{Level_of_Phosphorus}, ?p, "Very Low")$
 P_VeryLow_Rule2: $(\text{ClayTexture}, ?c) \wedge \text{swrlb:greaterThan}(?clay, 40) \wedge (\text{SoilPhosphorus}, ?p) \wedge \text{swrlb:lessThanOrEqual}(?clay, 60) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge \text{swrlb:lessThanOrEqual}(?pc, 2) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \rightarrow (\text{Level_of_Phosphorus}, ?p, "Very Low")$
 P_VeryLow_Rule3: $(\text{ClayTexture}, ?c) \wedge \text{swrlb:lessThanOrEqual}(?clay, 40) \wedge (\text{SoilPhosphorus}, ?p) \wedge \text{swrlb:lessThanOrEqual}(?pc, 3) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \wedge \text{swrlb:greaterThan}(?clay, 20) \rightarrow (\text{Level_of_Phosphorus}, ?p, "Very Low")$
 P_VeryLow_Rule4: $(\text{ClayTexture}, ?c) \wedge (\text{SoilPhosphorus}, ?p) \wedge \text{swrlb:lessThanOrEqual}(?clay, 20) \wedge \text{swrlb:lessThanOrEqual}(?pc, 5) \wedge (\text{clayConcentration}, ?c, ?clay) \wedge (\text{phosphorusConcentration}, ?p, ?pc) \rightarrow (\text{Level_of_Phosphorus}, ?p, "Very Low")$

Rule_Clay: swrlb:lessThanOrEqual(?sand, 45) ^ swrlb:lessThan(?silt, 40) ^
 (siltConcentration, ?t, ?silt) ^ swrlb:greaterThanOrEqual(?clay, 40) ^ (clayConcentration, ?t,
 ?clay) ^ (SoilTexture, ?t) ^ (sandConcentration, ?t, ?sand) ^ swrlb:lessThanOrEqual(?clay,
 60) → (Category_of_BrazilianSoil, ?t, "Clay")

Rule_ClayLoam: swrlb:lessThanOrEqual(?sand, 45) ^ swrlb:greaterThanOrEqual(?clay, 27)
 ^ swrlb:greaterThan(?sand, 20) ^ (clayConcentration, ?t, ?clay) ^ swrlb:lessThan(?clay, 40) ^
 (SoilTexture, ?t) ^ (sandConcentration, ?t, ?sand) → (Category_of_BrazilianSoil, ?t,
 "ClayLoam")

Rule_HeavyClay: swrlb:lessThanOrEqual(?sand, 40) ^ (SoilTexture, ?t) ^ (siltConcentration,
 ?t, ?silt) ^ swrlb:greaterThan(?clay, 60) ^ (clayConcentration, ?t, ?clay) ^
 swrlb:lessThanOrEqual(?silt, 40) ^ (sandConcentration, ?t, ?sand) →
 (Category_of_BrazilianSoil, ?t, "HeavyClay")

Rule_Loam: swrlb:greaterThanOrEqual(?silt, 28) ^ (siltConcentration, ?t, ?silt) ^
 (clayConcentration, ?t, ?clay) ^ swrlb:lessThanOrEqual(?sand, 52) ^
 swrlb:greaterThanOrEqual(?clay, 7) ^ swrlb:lessThan(?silt, 50) ^ (SoilTexture, ?t) ^
 swrlb:lessThan(?clay, 27) ^ (sandConcentration, ?t, ?sand) → (Category_of_BrazilianSoil,
 ?t, "Loam")

Rule_LoamySand: (siltConcentration, ?t, ?silt) ^ (SoilTexture, ?t) ^
 swrlb:greaterThanOrEqual(?resultOne, "15) ^ swrlb:lessThan(?resultTwo, 30) ^ swrlb:add,
 ?resultOne) ^ (?silt) ^ (?mOne) ^ swrlb:multiply, ?mTwo) ^ (?clay, 2) ^ (clayConcentration, ?t,
 ?clay) ^ swrlb:multiply, ?mOne) ^ (?clay, 1.5) ^ swrlb:add(?resultTwo, ?silt, ?mTwo) →
 (Category_of_BrazilianSoil, ?t, "LoamySand")

Rule_Sand: (siltConcentration, ?t, ?silt) ^ swrlb:lessThan(?result, "15) ^ (clayConcentration,
 ?t, ?clay) ^ swrlb:multiply, ?m, ?clay, 1.5) ^ swrlb:add, ?result, ?silt, ?m) ^ (SoilTexture, ?t) →
 (Category_of_BrazilianSoil, ?t, "Sand")

Rule_SandyClay: swrlb:greaterThan(?sand, 45) ^ (clayConcentration, ?t, ?clay) ^
 (SoilTexture, ?t) ^ swrlb:greaterThanOrEqual(?clay, 35) ^ (sandConcentration, ?t, ?sand) →
 (Category_of_BrazilianSoil, ?t, "SandyClay")

Rule_SandyClayLoam: swrlb:lessThan(?silt, 28) ^ swrlb:lessThan(?clay, 35) ^
 (siltConcentration, ?t, ?silt) ^ swrlb:greaterThan(?sand, 45) ^ swrlb:greaterThanOrEqual(
 ?clay, 20) ^ (clayConcentration, ?t, ?clay) ^ (SoilTexture, ?t) ^ (sandConcentration, ?t, ?sand)
 → (Category_of_BrazilianSoil, ?t, "SandyClayLoam")

Rule_SandyLoam: swrlb:add, ?result, ?silt, ?m) ^ (siltConcentration, ?t, ?silt) ^
 (sandConcentration, ?t, ?sand) ^ swrlb:lessThan(?clay, 20) ^ (clayConcentration, ?t, ?clay) ^
 (SoilTexture, ?t) ^ swrlb:multiply, ?m, ?clay, 2) ^ swrlb:greaterThanOrEqual(?clay, 7) ^
 swrlb:greaterThan(?sand, 52) ^ swrlb:greaterThanOrEqual(?result, "30) →
 (Category_of_BrazilianSoil, ?t, "SandyLoam")

Rule_SandyLoam2: swrlb:add, ?result, ?silt, ?m) ^ (siltConcentration, ?t, ?silt) ^
 (clayConcentration, ?t, ?clay) ^ swrlb:lessThan(?clay, 7) ^ (SoilTexture, ?t) ^ swrlb:multiply,
 ?m, ?clay, 2) ^ (sandConcentration, ?t, ?sand) ^ swrlb:lessThan(?silt, 50) ^
 swrlb:greaterThanOrEqual(?result, "30) → (Category_of_BrazilianSoil, ?t, "SandyLoam")

Rule_Silt: (siltConcentration, ?t, ?silt) ^ swrlb:greaterThanOrEqual(?silt, 80) ^
 (clayConcentration, ?t, ?clay) ^ (SoilTexture, ?t) ^ swrlb:lessThan(?clay, 12) →
 (Category_of_BrazilianSoil, ?t, "Silt")

Rule_SiltLoam: swrlb:greaterThanOrEqual(?clay, 12) ^ (siltConcentration, ?t, ?silt) ^
 (clayConcentration, ?t, ?clay) ^ swrlb:lessThan(?clay, 27) ^ swrlb:greaterThanOrEqual(?silt,
 50) ^ (SoilTexture, ?t) → (Category_of_BrazilianSoil, ?t, "SiltLoam")

Rule_SiltLoam2: (siltConcentration, ?t, ?silt) ^ swrlb:greaterThanOrEqualTo(?silt, 50) ^
 (clayConcentration, ?t, ?clay) ^ (SoilTexture, ?t) ^ swrlb:lessThan(?silt, 80) ^
 swrlb:lessThan(?clay, 12) → (Category_of_BrazilianSoil, ?t, "SiltLoam")
 Rule_SiltyClay: (siltConcentration, ?t, ?silt) ^ swrlb:greaterThanOrEqualTo(?clay, 40) ^
 (clayConcentration, ?t, ?clay) ^ (SoilTexture, ?t) ^ swrlb:greaterThanOrEqualTo(?silt, 40) →
 (Category_of_BrazilianSoil, ?t, "SiltyClay")
 Rule_SiltyClayLoam: swrlb:greaterThanOrEqualTo(?clay, 27) ^ swrlb:lessThanOrEqualTo(
 ?sand, 20) ^ (clayConcentration, ?t, ?clay) ^ swrlb:lessThan(?clay, 40) ^ (SoilTexture, ?t) ^
 (sandConcentration, ?t, ?sand) → (Category_of_BrazilianSoil, ?t, "SiltyClayLoam")
 Type1_Rule1: (SoilTexture, ?t) ^ (clayConcentration, ?t, ?clay) ^ swrlb:lessThan(?clay, 15) ^
 swrlb:greaterThanOrEqualTo(?clay, 10) → (Type_of_BrazilianSoil, ?t, "Type 1")
 Type1_Rule2: swrlb:greaterThanOrEqualTo(?sand, 60) ^ (clayConcentration, ?t, ?clay) ^
 (sandConcentration, ?t, ?sand) ^ swrlb:lessThan(?clay, 10) ^ (SoilTexture, ?t) →
 (Type_of_BrazilianSoil, ?t, "Type 1")
 Type1_Rule3: (SoilTexture, ?t) ^ (clayConcentration, ?t, ?clay) ^ (sandConcentration, ?t,
 ?sand) ^ swrlb:greaterThanOrEqualTo(?clay, 15) ^ swrlb:subtract, ?result) ^ (?sand) ^ (?clay) ^
 swrlb:greaterThanOrEqualTo(?result, "50) → (Type_of_BrazilianSoil, ?t, "Type 1")
 Type1_Rule4: (SoilTexture, ?t) ^ (sandConcentration, ?t, ?sand) ^
 swrlb:greaterThanOrEqualTo(?sand, 90) → (Type_of_BrazilianSoil, ?t, "Type 1")
 Type2_Rule: (SoilTexture, ?t) ^ (clayConcentration, ?t, ?clay) ^ (sandConcentration, ?t,
 ?sand) ^ swrlb:greaterThanOrEqualTo(?clay, 15) ^ swrlb:lessThan(?clay, 35) ^ swrlb:subtract,
 ?result) ^ (?sand) ^ (?clay) ^ swrlb:lessThan(?result, "50) → (Type_of_BrazilianSoil, ?t, "Type
 2")
 Type3_Rule: (SoilTexture, ?t) ^ (clayConcentration, ?t, ?clay) ^ swrlb:greaterThanOrEqualTo(
 ?clay, 35) → (Type_of_BrazilianSoil, ?t, "Type 3")