ABSTRACT

SHELINGOSKI, SUSAN. Wells Savannah, an Example of a Unique Fire-Dependent Ecosystem in the North Carolina Coastal Plain. (Under the direction of Jon M. Stucky and Thomas R. Wentworth.)

Wells Savannah is a unique wet pine savanna located in the Lower Coastal Plain of North Carolina. The 47-hectare tract was discovered in 1997 during a North Carolina Natural Heritage Program Natural Areas Inventory of Pender County and subsequently purchased by the North Carolina Coastal Land Trust in April of 2002. It consists of two utility rights-of-way and a fire-suppressed pond pine woodland. Poorly drained, hydric soils with unusually high silt content occur throughout the site. The combination of soil characteristics and plant species composition have not been identified in previous studies of savannas in the region (LeGrand and Sorrie, 1997; Taggart, 1990). The purpose of this study consisted of two main objectives. The first objective was to characterize the soils and to conduct an inventory of the vascular flora at Wells Savannah. The second objective was to locate and gather vegetation and soil data on reference sites in order to perform an ordination of Wells Savannah among similar savanna communities in the Lower Coastal Plain. Reference savannas were located within Holly Shelter Game Land. In addition, one hundred twenty plots were extracted from the Carolina Vegetation Survey (CVS) database to be used in our ordinations. The reference savannas located within Holly Shelter Game Land were inventoried during this study in order to facilitate their use as a basis of comparison for the soil and flora inventory, as well as in the ordinations.

Soil drainage, texture, and presence of redoximorphic indicators were examined at both Wells Savannah and Holly Shelter Game Land in order to accomplish our first objective. Weighted averaging was then used to formulate a wetland index for Wells Savannah and

Holly Shelter Game Land. We identified 209 species in 107 genera and 48 families at Wells Savannah. Five of the species are listed by the North Carolina Natural Heritage Program as endangered, rare, or of special concern. One is federally listed. Eight community types were identified within Wells Savannah. We found species composition, soil moisture, and soil texture at Wells Savannah to be unique relative to those features of other savannas in the region. Seventy-one percent of the species found at Wells Savannah were obligate or facultative wetland species. Wells Savannah lacked wiregrass (*Aristida stricta*), a common species found in most savannas in the region, but does support unusually high numbers of *Rhynchospora* species.

As a means of conducting the second portion of our study, we compared plant cover classes with soil chemistry, particle size and geographic location in ten plots at Wells Savannah, six reference plots established in Holly Shelter Game Land, and one hundred twenty plots extracted from the Carolina Vegetation Survey (CVS) database. Multivariate analyses were used to evaluate the data. The resulting ordination has provided a visual interpretation of the proximity of Wells Savannah's plant community to the most similar savanna communities occurring within this geographic region. We determined the soil variables and plant species which acted as indicators at several points in the ordination and used the information to identify the savanna community type most like what we found at Wells Savannah. We identified only one CVS plot that ordinated among our plots at Wells Savannah. The most important environmental variables correlated to plant species composition at Wells Savannah are high levels of iron, silt and clay in the surface layers of the soil. The species composition and soils at Wells Savannah may represent a savanna community thought to be extirpated in the region.

WELLS SAVANNAH, AN EXAMPLE OF A UNIQUE FIRE-DEPENDENT ECOSYSTEM IN THE NORTH CAROLINA COASTAL PLAIN

by
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APPROVED BY

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BIOGRAPHY

I am currently working in the field of environmental consulting at Stantec Consulting, Inc. in Raleigh, North Carolina. I moved to Raleigh in 2001 to attend graduate school at North Carolina State University in order to pursue an MS in Botany.

I was raised in Pennington, New Jersey. I moved on to acquire my BS in Wildlife Management from the University of New Hampshire in 1999. While in New Hampshire, I worked on white tailed deer behavioral studies. Upon graduating, I worked as an intern with the US Fish and Wildlife Service on the Karner Blue Butterfly Refuge. In the fall of 1999, I moved to Klamath Falls, Oregon to work for the US Forest Service in southern Oregon and northern California. While there, I was able to gain valuable field experience in the studies of both wildlife and botany. After nearly two years, I decided that I wanted to further my education and expand my knowledge base.

ACKNOWLEDGEMENTS

The authors would like to thank first and foremost Richard J. LeBlond, the discoverer of the site. He has worked closely with us throughout the project, and dedicated countless hours of field work to make the success of this study possible. We also owe great thanks to Mr. And Mrs. Robert McGowan, the previous landowners of Wells Savannah. They have been extremely helpful in the gathering of historical information, and take great pride in what the site will soon become. Janice Allen, and others at the North Carolina Coastal Land Trust, has worked diligently to acquire and preserve the site. Without their efforts, this study would not have been possible. Marilyn Stowell of the Pender County NRCS office generously provided all of the old aerial photography for both Wells Savannah and the Big Savannah. Right-of-way owners Progress Energy and Four County Electric Membership Corporation have worked extensively with both the NC Natural Heritage Program and the NC Coastal Land Trust to preserve the plant communities existing within the rights-of-way, and to manage them accordingly. The authors would like to thank the managers of Holly Shelter Game Land for permission to use their savannas in order to conduct this study. We thank all of the volunteers who participated in the plot inventories of Wells Savannah and Holly Shelter Game Land. They were intrinsic in gathering a tremendous amount of data in a short period of time. We also thank the Soil Science Department of North Carolina State University for use of their facilities, Barrett Richards, Justin Ewing and Dr. Michael Vepraskas for their help with soil profiling and the particle size analysis. We thank the CVS for use of their data. All data from the CVS database was extracted by Dr. Robert Peet, who also lent advice and expertise in the data management. We thank Donna Wright, Michael Schafale and numerous others who contributed both time and ideas to the development of

this study. The study was partially funded by The North Carolina Agricultural Research Service, The North Carolina Wildflower Preservation Society, and The North Carolina Academy of Science.

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INTRODUCTION

The Wells Savannah (WS) was discovered in 1997 during a North Carolina Natural Heritage Program (NCNHP) Natural Areas Inventory. It is located on Pelham Road (SR 1319) in Pender County, North Carolina, approximately eight kilometers northwest of the historically significant Big Savannah (Fig. 1). WS currently consists of a fire-suppressed woodland bordered on either side by a transmission line right-of-way. The North Carolina Coastal Land Trust purchased the site in April of 2002, at which time management plans were developed to both preserve and enhance the extraordinary plant community that the site supports. The savanna's resemblance to the now extirpated Big Savannah presents an opportunity to examine and document a savanna community type known to exist only in Pender County, and currently, only at WS.

Both savannas were located within a continuous band of the rare Liddell soil series. 1938 aerial photos suggest that prior to the fragmentation of the savannas by development, the two sites were connected by continuous savanna habitat that no longer exists. It appears that the natural corridor that included both savannas consisted of an herbaceous plant community with scattered trees (pines). WS shares a high water table and unique soil with Big Savannah, and preliminary inventories have revealed strong similarities in plant species composition between WS and that previously reported for Big Savannah. Wells and Shunk (1928) identified three distinct community associations occurring within Big Savannah, all of which occur in small patches within the rights-of-way at WS. This study consisted of two main objectives. The first objective was to examine the soils and conduct a complete floristic and vegetation inventory at WS. The second objective was to determine what plant community might be expected at WS

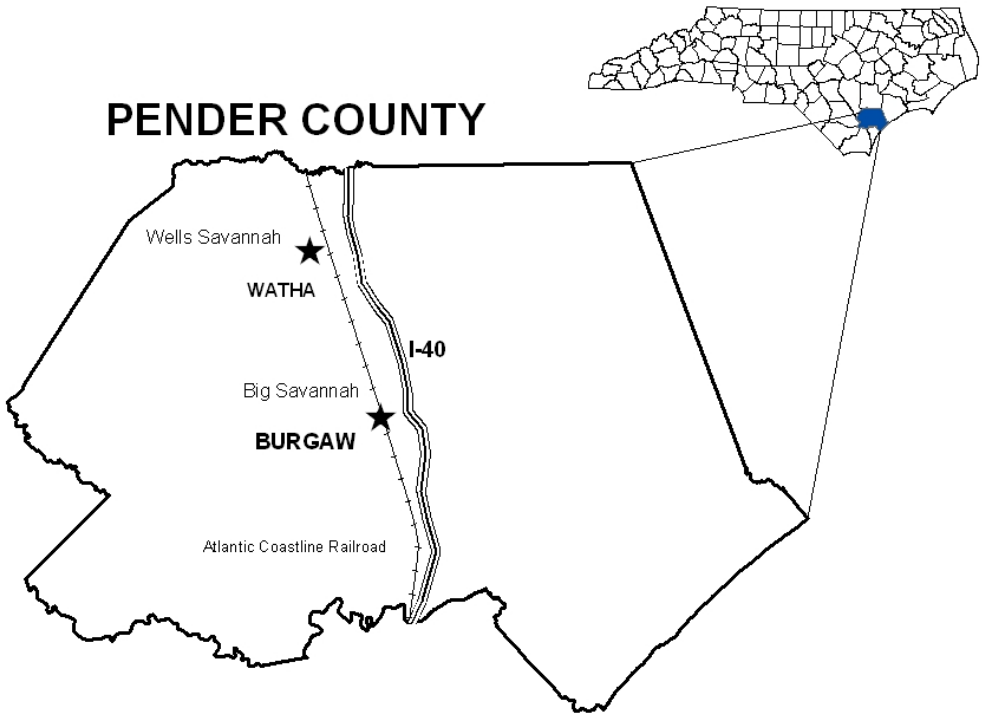

Figure 1. Location of Wells Savannah and the former Big Savannah in Pender County, North Carolina. Wells Savannah and the former Big Savannah are located near the towns of Watha and Burgaw, respectively. The stars represent the two savannas. The Atlantic Coastline Railroad once bisected the 1 500-acre Big Savannah.

given a historically typical fire pattern, through comparisons with fire-maintained savannas on similar hydric soils throughout the Lower Coastal Plain of North Carolina.

The inventory was conducted during 2002 and 2003, at which time reference savannas were also selected and sampled. Methodology was adapted from Carolina Vegetation Survey (CVS) guidelines. A total of thirteen permanent plots were installed and inventoried at WS. Ten 10x10 meter plots were placed in the transmission line rights-of-way, six of these in the larger Progress Energy ROW, and four in the Four County Electric Membership Corporation ROW. Three 10x20 meter plots were dispersed within the woodland area. Six 10x10 meter plots within Holly Shelter Game Land (HSGL) were chosen as reference sites. The six plots were scattered within the four types of savanna variants occurring in HSGL that most closely matched the soil characteristics found at WS. UTM coordinates for plots are located in Appendix 1. In addition, 124 plots were extracted from the Carolina Vegetation Survey (CVS) database based upon geographic location (Lower Coastal Plain), soil characteristics, and, to a small degree, species composition. An ordination of these data has provided a visual interpretation of the proximity of WS's plant community to other savanna communities occurring within this geographic region. This chapter and the following two chapters will address the two main objectives and discuss our findings. Chapter one contains brief histories of Big Savannah, WS and the HSGL sites. Chapter one also provides an overview of the study and an outline of the importance and need for such work. Chapter two is a detailed discussion of the methodology used during, and the species list resulting from, the inventory of WS. Chapter three uses multivariate analyses (ordinations) to compare data from permanent plots at WS, the reference plots at HSGL, and the reference plots extracted from the CVS database. These ordinations enabled us to examine not only species presence

and richness, but also the relationship of vegetation pattern to soil chemical and texture data and geographic and community classification data. Raw data for the ordinations are located in Appendices 2 and 3.

BACKGROUND

Savannas, or savannahs in the pre-1956 spelling, generally defined as communities with a continuous graminoid layer and scattered trees or shrubs, were once prevalent in the southeastern United States (McPherson, 1997). Prior to European settlement, savannas occurred naturally in the southeast from Virginia, south to Florida, and west to Texas (Taggart, 1990). Most of the species occurring in the graminoid-forb layer are shade intolerant and may disappear within a few years of fire exclusion (Frost *et al.*, 1986). These species-rich, fire-maintained grasslands with scattered pines once covered millions of hectares. However, the area of extant savanna is now a fraction of its original range as alternative land uses and fire suppression have reduced this ecosystem type to a series of small and scattered islands within a highly managed and manipulated landscape (Johnson and Tothill, 1984).

It is widely accepted that fire has played a major role in the development and maintenance of savannas on the Coastal Plain of North Carolina (Taggart, 1990). Relatively frequent (recurring every 1-6 years), low intensity fires often caused by either lightning or humans maintain savannas by removing herbaceous litter and woody growth that may compete with the savanna species. Proactive efforts to suppress most naturally occurring fires began in the early 1920's. Human population increase and landscape development nearly ended the occurrence of natural fires in much of the United States by the 1950's. The

rapid conversion of the Coastal Plain lands of North Carolina for human use, intentional fire suppression, and the invasion of exotic, non-flammable plant species over the last several decades has greatly reduced the number of fires that will burn following lightning strikes (Taggart, 1990). All of the aforementioned factors have led to a rapid decline in naturally occurring savannas in the North Carolina Coastal Plain. The very limited and fragmented remnants of savanna vegetation are continually being lost to agriculture, landscape development and woody plant invasion.

Savannas typically have the highest plant diversity of all natural communities in North Carolina and are often rich in rare species as well (LeGrand *et al.*, 1997). Scientists have been drawn to the natural beauty of these ecosystems for decades. The first inventory of Coastal Plain savannas was conducted by B.W. Wells and his colleague I.V. Shunk in 1928. Although numerous inventories and classifications have followed, there has yet to be a study that has identified a savanna community similar to what Wells and Shunk first identified in 1928. WS may add to this classification a new and seemingly rare type.

STUDY OVERVIEW

Study Area

All plots established and inventoried during this study are located within Pender County, North Carolina. Pender County is located in the southeastern portion of the state, approximately 140 kilometers southeast of Raleigh. The county was established in 1875, after its separation from New Hanover County. Upon its establishment, naval stores were the primary source of income. By 1940, much of the land within the county had been converted to pine plantations. Now, the county relies largely on pulpwood and sawtimber production.

Currently, 82% (185, 866 hectares) of the county is forested (Barnhill, 1990). Most of this land is privately owned, with the remaining 25, 404 hectares owned by the state. A small portion of the county (approx. 10%) is agricultural, with the primary crops being tobacco, soybeans and corn. The county is located on the Lower Coastal Plain, and elevation ranges from 0 to 35 meters. The temperature regime is thermic, and precipitation averages 135cm per year.

Purpose, Objectives and Importance

The purpose of this study was to document the unique attributes of WS in order to compare them with savanna types typically found in the region and determine their placement in the current classification system. In order to accomplish this goal, we proposed a study consisting of two main objectives. The first objective was to classify the soils and complete a floristic inventory of WS. The second objective was to determine what plant community might be expected at WS, given a historically typical fire pattern, through comparisons with fire-maintained savannas on similar hydric soils throughout the Lower Coastal Plain of North Carolina. In order to accomplish this, we first selected reference sites using factors such as current type of management, hydrology and soil characteristics. Identification of potential sites was concentrated within the HSGL. HSGL was chosen primarily for its proximity to WS, soil characteristics, and current management. Savannas within HSGL are currently burned every other year, both during the winter and the growing season.

Soil characteristics played a major role in this study due to previous findings that soil often plays the most important role in the ability of plant communities to exist in a given area. In 1928, B.W. Wells determined that the basic key to the communities of the Coastal

Plain is found in the size of sand particles and moisture level associated with soil type. Vegetation will vary with respect to the distribution of soil types and hydrology. We found this to be extremely important in the case of WS in that we were unable to locate other savannas in the region that shared the particle size that dominates the soils at WS. Reference sites chosen were those that most closely resembled the soil moisture and texture at WS.

There are very few pond pine savannas such as WS remaining in North Carolina. Species-rich, moist savannas with endemic insectivorous species are the most threatened of southeastern grasslands (Frost *et al*., 1986). The environmental gradients that determine the natural grassland vegetation on the Lower Coastal Plain are fire frequency and depth to seasonal high water table (Frost *et al.,* 1986). The most serious problem facing the remaining high quality savanna ecosystems in these areas is the maintenance of something approximating a normal fire regime. When fire frequency decreases to once every five or more years, the landscape experiences a rapid takeover by thick shrub layers or loblolly, slash and pond pines. Both 'Pine Savannas' and 'Wet Pine Flatwoods' are listed by the NCNHP as natural communities in need of protection. Pine Savannas have a S2 state rank, making the type imperiled in North Carolina because of rarity or otherwise vulnerable to extirpation in the state. Wet Pine Flatwoods have a S3 state rank, indicating they are rare or uncommon in the state.

There are currently no representatives of this kind of savanna ecosystem under protection, making this preliminary study extremely important in that it may reveal additional rare species and identify previously undescribed community types. The knowledge gained from this work will aid in the future management of WS. This research will also provide better tools for managers seeking to identify appropriate target communities for similar

restoration sites. The project will also greatly contribute to the restoration of WS, returning to Pender County a rare ecosystem of unparalleled natural beauty.

BIG SAVANNAH

The Big Savannah, or Burgaw Savannah was an ecologically significant ecosystem located approximately five miles north of Burgaw in Pender County, North Carolina. North Carolina State University plant ecologist Dr. Bertram W. Wells first documented it in 1928. The first vegetation studies done on savannas of the Carolinas were led by Dr. Wells and his colleague I.V. Shunk (Taggart, 1990). During his career at NCSU, Wells completed a number of vegetation studies on lands throughout the coastal plain region of North Carolina. Big Savannah consisted of 1500 acres of treeless grassland unlike any others in the state. This savanna was unique in that it was completely treeless, was burned annually, and occurred on the rare, very poorly drained Liddell soil series. Wells described the savanna in his 1932 book, *The Natural Gardens of North Carolina*, as "pristine with an extraordinarily rich herbaceous plant community". By the 1940's, Big Savannah was a well-known natural area, renowned for its remarkable attributes. Wells refers to the "annual fires applied by man" throughout his 1928 study as the factor that created the fully matured and stabilized fire-maintained sub-climax communities of Big Savannah. He states that the "grass-sedge complex under the annual fires will persist indefinitely."

Wells used the savanna as a teaching tool well into the 1950's, at which time efforts began to save this unique ecosystem from encroaching development in the area. Wells worked extensively with Richard Pough, a founder of The Nature Conservancy, and others to preserve the savanna. They proposed the creation of a state park, and Big Savannah was

listed in the TNC original preliminary inventory of natural areas under preservation in the US as a state park. Miscommunication and the hesitance of the state to fund the annual fires prevented the establishment of the park. Bills were written to the Legislature urging the state to acquire the land for use as a park, but suggestions were rejected by the Park Commission due to the costs associated with the annual fires necessary to maintain the existing plant communities (Garden Club of NC, 1941). The vigilance of Wells and Pough was hindered by the opinion that the savanna was nothing more than a wasteland consisting of heavy clay and bad drainage, and thus would not be an area threatened by development. Despite their efforts, the savanna was ultimately lost to agricultural conversion in the late 1950's.

Although the fire frequency of Big Savannah has been established, it is still unclear who conducted the burns, why it was burned annually, and what methods were used. The point at which Big Savannah became treeless is also unknown, as is what existed on the 1500 acres before it became Big Savannah.

WELLS SAVANNAH

WS consists of two mowed transmission line rights-of-way extending northeastward from Pelham Road, approximately 2.7 kilometers northwest of the intersection with Watha Road (SR 1313), and an adjacent 43-hectare fire-suppressed pond pine woodland (Fig. 2). Brisson *et al.* (1997) found that the vegetation located at the edge of a right-of-way has a significant influence on the adjacent habitat and vice versa. This is evident at WS. Although the land adjacent to the transmission line is overgrown, a number of typical 'savanna' species still inhabit open areas within the wooded tract. This suggests that our target plant community for the wooded area of WS may be extrapolated partially from what currently exists in the

transmission line corridors. The number and abundance of invasive exotic species is expected to be higher in mowed areas, but a specific comparison of the impact of rights-of-way on community composition, or the impacts the rights-of-way have on adjacent compositions, has yet to be done. All of the above information will be extremely important to restoration efforts for WS.

Approximately 4 hectares of open savanna habitat currently exist within the two rights-of-way corridors at WS. Both corridors contain a diverse assemblage of native plants associated

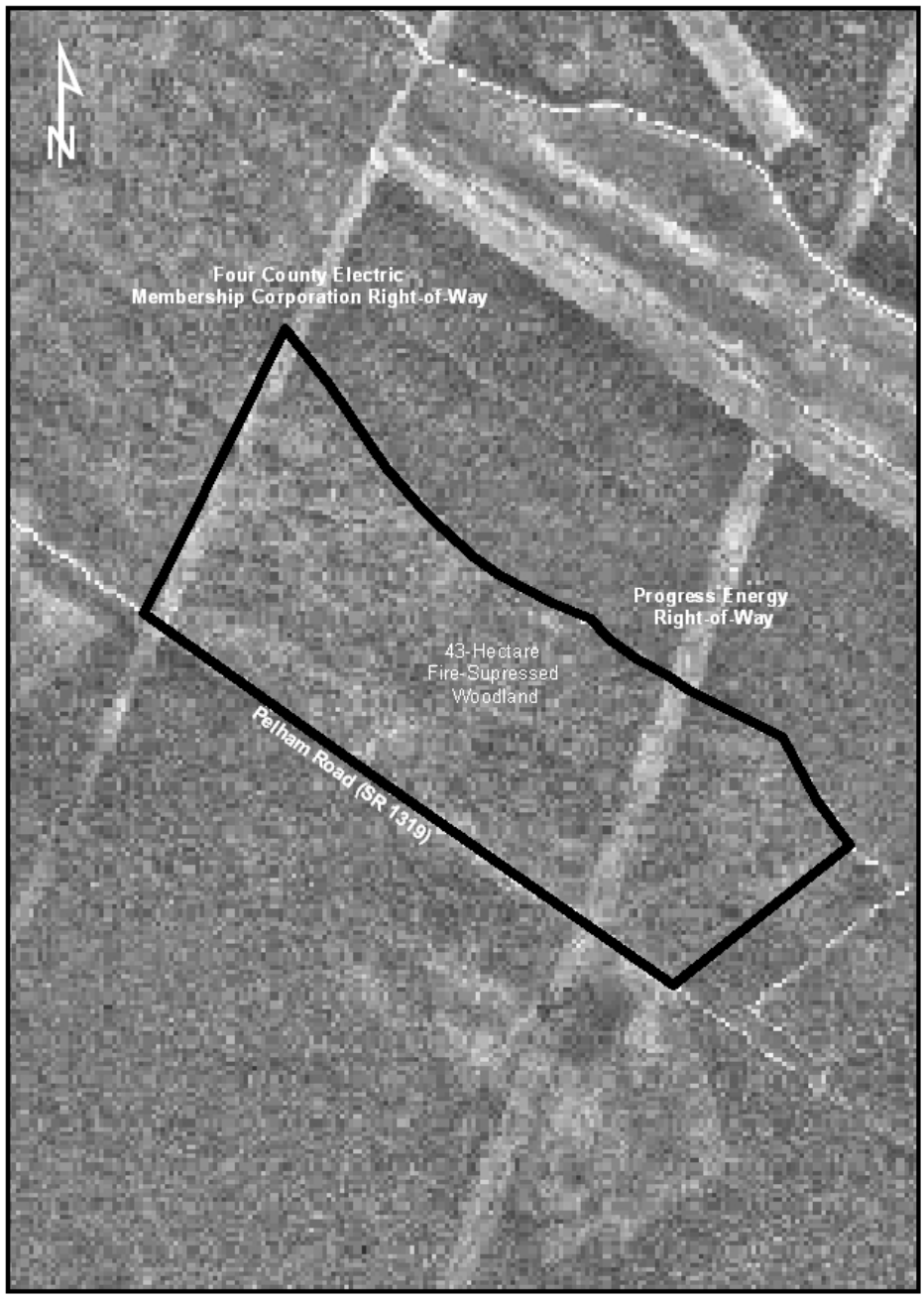

Figure 2. 1993 Aerial photograph of Wells Savannah. Wells Savannah is bordered to the south by Pelham Road. The Four County Electric Membership Corporation forms the boundary to the west. It is bordered to the east by habitat much like what exists within the woodland area.

with wet pine savanna communities, suggesting that, historically, this site could have very closely resembled Big Savannah. The corridors have been maintained by mowing since their installations. The smaller right-of-way, west of the wooded area is owned by Four County Electric Membership Corporation. The transmission line was erected in 1952. The larger right-of-way, located east of the woodland is owned by Progress Energy. The two transmission lines within the right-of-way were erected in 1972. Both rights-of-way are currently on a 3-year mowing rotation. The Four County Electric Membership Corporation line was last mowed in January of 2003 (personal communication, Lawrence Mills). The Progress Energy line was last mowed in April of 2002 (personal communication, David Smith). Herbicides have never been used to manage the larger right-of-way, but were in use until 1999 within the Four County Electric Membership Corporation right-of-way. The NCNHP has signed a MOU with utility owners (Progress Energy and Four County Electric Membership Corporation) to stop the use of all herbicides, and to continue the current mowing regime. The North Carolina Coastal Land Trust is currently working with the utilities to develop and implement a controlled burn plan. It is believed that the adjacent woodland is the result of fire suppression, and that it would resemble a savanna with scattered pond, loblolly and longleaf pines under a natural or 3-yr prescribed fire regime.

Savannas occurring within transmission line rights-of-way are gaining importance as both preservation and restoration sites as the number of natural savanna habitats declines. Transmission line rights-of-way in the southeastern Coastal Plain are noted as supporting a large number of rare and endangered species endemic to fire-dependent communities. Although most lack the required fire component, maintenance practices such as mowing act as disturbance factors and help to prevent the invasion of woody growth. Although

unconventional in nature, as good examples of intact savannas become fewer, there has become a need to consider such sites for restoration.

The 47-hectare tract was purchased by the North Carolina Coastal Land Trust in April of 2002. The landowner, Robert McGowan, inherited the land from his grandfather who purchased it in 1916. The land was initially sold as a land grant as part of the Penderlea project in the 1800's. While the land has never been used for agricultural practices, it has been logged since the early 1900's. McGowan has stated that selection cutting was conducted in 1943 and 1958. In 1988, portions of the tract were clearcut. The majority of the surrounding area is in agriculture, loblolly pine plantation, or self-regenerated cutover habitat. The fact that WS has experienced only local soil disturbing events makes the area an excellent candidate for restoration. The soils at WS have not been impacted by activities such as drainage for agriculture, and have been able to maintain characteristics typical of the Liddell series, even in those areas that have been logged.

The Liddell soil series, shared by WS and Big Savannah, is rare on the Lower Coastal Plain. It occurs in a continuous band that includes 907 hectares in the northwestern portion of Pender County. A total of 950 hectares of the series occur within the county, with the remaining 43 occurring in small patches throughout. The series does not occur in any of the surrounding counties, including Brunswick, Columbus, Onslow, Bladen, Duplin, and Jones. Liddell silt loam is characterized as a coarse-silty, very deep, poorly drained, moderately permeable soil found on upland areas of the Coastal Plain. It is classified as a Coarse-silty, siliceous, subactive, acid, thermic Typic Endoaquept (Barnhill, 1990). Its high content of silt and very fine sand is unique in this typically sandy-textured region of the state. The compact

structure of the subsoil and flat topography act to severely retard drainage, lending the soils to pond water.

Although the habitat in the wooded area of WS has the appearance of a pond pine woodland pocosin community, the unique soil type coupled with the composition of the existing shrub and herb layer indicates that the land was likely savanna rather than pocosin when maintained by natural processes [fire] (LeBlond, 2000). Both transmission line corridors contain a diverse assemblage of native plants associated with wet pine savanna communities, suggesting that, historically, this site could have very closely resembled Big Savannah.

The 1938 aerial photo of WS shows that the plant community was a relatively open pine savanna with a minimal shrub layer. Such a community could have developed in response to frequent fire. Although the historic fire frequency for this site is unknown, the circumstantial evidence from the 1938 aerial photos in conjunction with charcoal found in the soil at a depth of about 20 cm suggest that fire was not infrequent. Aerial photos during 1944, 1955, 1965 and 1972 show that, subsequent to 1938, the plant community became a woodland with denser tree and shrub growth, most likely as a response to fire suppression.

With the proper management techniques executed at WS, the plant species diversity, and possibly the number and size of rare species populations, should increase. At present, a number of rare species have been documented at WS. The savanna supports some of the largest populations of rare species in the state and one of the four populations in the eastern United States of the broad-winged sedge grasshopper (*Stethophyma celatum*), historically known from Big Savannah. Populations of State Candidate bog bluestem (*Andropogon mohrii*), white-seeded beak sedge (*Rhynchospora divergens*), and the State Rare savanna

Indian plantain (*Arnoglossum ovatum*) are some of the largest documented. The State Endangered Carolina Goldenrod (*Solidago pulchra*), and feather bristle beak sedge (*Rhynchospora oligantha*), State Rare scaleleaf false foxglove (*Agalinis aphylla*), and 12 watch list species including 1 of 3 North Carolina populations of southern winged loosestrife (*Lythrium lanceolatum*) also occur at WS (LeBlond, 2000).

HOLLY SHELTER GAME LAND

Six reference plots were inventoried within HSGL during this study to provide the closest possible basis for comparison to those within WS. These plots represent the fire-managed savannas with both the closest proximity and soil variables most similar to those of WS.

HSGL is located in southeast Pender County. The 123, 796 hectare tract is owned and managed by the North Carolina Wildlife Resources Commission. Eighty percent of the area is dominated by a shrub-covered peat bog with inclusions of sand believed to be remnants of Carolina Bays (Wells, 1946). The remaining twenty percent, located primarily in the southeast corner, is occupied by flat, upland savanna communities. These savannas are managed primarily for quail by prescribed burning on a three-year rotation. Fires occur both during the growing and dormant seasons. Several savanna variants have been identified, most occurring on low, flat portions of sand ridges, oftentimes grading into pond pine woodlands (LeGrand *et al.*, 1997). Due to the proximity of HSGL to the Suffolk Scarp, the soils underlying these communities are a great deal sandier than those found at WS. This was found to be the most severely limiting factor in the selection of reference sites. We selected two savanna variants identified in the 1997 *Biological Inventory of Holly Shelter Game Land* (LeGrand *et al.*, 1997) from which to select reference plots. These were the

'Wet Spodosol' and 'Wet Ultisol' variants. The Spodosol variants are typically sandier with better drainage than the Ultisol variants. Spodosol communities are often dominated by wiregrass (*Aristida stricta*). Ultisol communities tend to have less wiregrass and a more diverse herbaceous layer.

All reference plots chosen for this study occurred on one of the following soil series: Leon fine sand, 0-2% slopes, Woodington fine sandy loam, and Foreston loamy fine sand. Their classifications are as follows: Leon- Sandy, siliceous, thermic Aeric Alaquods, Woodington- Coarse-loamy, siliceous, semiactive, thermic Typic Paleaquults, Foreston- Coarse-loamy, siliceous, semiactive, thermic, Aquic Paleuduults. Based on its taxonomic classification, the Woodington series appears to have characteristics most like soil6 found at WS. Each series is assigned a general soil map unit based on general characteristics. Woodington and Liddell soils are found within the unit Woodington-Liddell-Rains, while Leon and Foreston soils are assigned different units, Leon-Mandarin and Foreston-Autryville-Baymeade, respectively.

The six reference plots are located within four savannas previously identified during the biological inventory conducted by the NCNHP in 1994-1996. Site SF-1, 'Parnassia Savanna and Flatwoods' is located on the south side of Trumpeter Road, 0.2 km north of Trumpeter Swamp. It contains plot 13. This plot was last burned during the growing season of 2001-2002. Soils are Foreston. Site SF-2, 'Scenic Savanna' is located along the inside bend of Trumpeter Road, 1.6 km west of the intersection with Shingleton Road spur on the north side of the road. It contains plots 11 and 12. These plots were last burned during the dormant season of 2002-2003. Soils are Leon. Site SF-5, 'Ctenium Savanna' is located on the west side of the intersection of Trumpeter Road and Shingleton Road spur, on the north side of

Trumpeter Road. It contains plots 14 and 15. These plots were last burned in January of 2002. Soils are Foreston with a number of Woodington inclusions. Site SF-6, 'Sloping Savanna' is located on the west side of Old Lodge Road, 1.1 km north of the intersection with Tram Road. It contains plot 16. This plot was last burned during the growing season of 2002-2003. Soils are Leon.

CHAPTER TWO

Flora and Soils of Wells Savannah, an Example of a Unique Savanna Type

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For submission to:
CASTANEA

ABSTRACT

Wells Savannah is a unique wet pine savanna located in the Lower Coastal Plain of North Carolina. It consists of two utility rights-of-way and a fire-suppressed pond pine (*Pinus serotina*) woodland. The objectives of this study of Wells Savannah were to characterize its soils, inventory its vascular flora, and compare its soils and flora with those of reference sites. Soil drainage, texture, and redoximorphic features were described at all locations. Wetland indices were calculated to represent the degree to which the plant communities were adapted to wet substrates. We identified 206 species in 107 genera and 48 families at Wells Savannah. Eight community associations were recognized. Wetland indices for Wells Savannah were significantly lower than those for the reference savannas. The unique combination of fine textured, very wet soil and plant species composition present at Wells Savannah has not been identified in previous studies of savannas in the region.

INTRODUCTION

Savannas are communities with widely scattered trees or shrubs and a continuous graminoid layer that includes shade intolerant, poorly competitive species that begin to disappear if fire is excluded for only a few years (Frost *et al.*, 1986; McPherson, 1997). Prior to European settlement, species-rich savannas were maintained by naturally occurring, relatively frequent (recurring every 1-6 years), low intensity fires throughout millions of hectares in the Southeast from Virginia to Florida and west to Texas (Taggart, 1990). Proactive efforts to suppress fires began in the early 1920's and nearly eliminated natural fires in much of the United States by the 1950's (Taggart, 1990). As a result of this fire suppression and landscape development, extant savanna is now a mere fraction of its original range. Remaining savannas are islands within a highly managed and manipulated landscape (Johnson and Tothill, 1984).

The small scale (i.e., less than 1000 square meters) species richness of North Carolina savannas is greater than that of most other community types in North America (Walker and Peet, 1984), so it is not surprising that scientists have been drawn to this remarkably diverse ecosystem for decades. B.W. Wells and I.V. Shunk's (1928b) floristic inventory and community descriptions for the 1,500-acre Big Savannah in Pender County constituted the first reported study of a North Carolina savanna. Wells and Shunk indicated that Big Savannah was completely treeless and supported an unusually dense and rich herbaceous flora. It has been the belief that this unique community existed because of annual burning and fine-textured soil that remained saturated to the surface for ten months or more in most years. Strenuous efforts were expended to conserve Big Savannah but, unfortunately, this botanical treasure had completely succumbed to the plow and bulldozer by the 1950's.

Wells Savannah (WS), a site discovered in 1997 in Pender County, supports a plant community similar to that of Big Savannah. This similarity is not surprising given that the two savannah sites are only 8 km apart and both reside within a continuous band of the rare Liddell soil series (Barnhill, 1990), a wet Inceptisol. WS may represent the only remnant of this uncommon community type in North Carolina.

Although at least three savanna inventories and classifications have followed the pioneering study on Big Savannah (Taggart 1990; Schafale, 1994; LeGrand and Sorrie, 1997), no savanna community yet identified matches that described by Wells and Shunk. Taggart found that soil moisture and texture were the factors most highly correlated with species composition in savannas. Accordingly, he classified the wet savanna communities as Ultisol and Spodosol types. Schafale recognized 'very wet clay' and 'wet Pleea flat' variants, as well as Ultisol and Spodosol savanna community types. Although 'very wet clay' and 'wet Pleea flat' variants might seem suitable names for the communities of WS, further investigation into the specific soil features for such sites revealed that WS does not fit into either variant. The 'very wet clay' and 'wet Pleea flat' variants typically occur on basic soils, oftentimes over limestone. Although soil moisture and texture of such variants resemble those of WS, their high pH and high nutrient levels do not match the acidic, nutrient poor soils of WS. Finally, LeGrand and Sorrie concluded that plant communities in wet, fire-maintained savannas and flatwoods of Holly Shelter Game Land (HSGL) (Pender County) were best classified as Spodosol and Ultisol types. The wet Inceptisol soil and rich plant community at WS are not accommodated by any of the three previous savanna classification systems.

The three specific objectives of this study were to (1) inventory the flora, (2) describe the plant communities, (3) describe soil drainage class, texture and redoximorphic indicators at WS. We also used the flora and soil information to evaluate the uniqueness of WS relative to other savannas on the Lower Coastal Plain of North Carolina.

STUDY AREA

WS is located approximately 140 km southeast of Raleigh in Pender County, North Carolina (Fig. 1). Throughout the 19th Century, naval stores were the primary source of income for Pender County residents. By 1940, much of the land had been converted to pine plantations and now the county relies largely on pulpwood and sawtimber production. Currently, 82% (185,866 ha) of the county is forested (Barnhill, 1990). The temperature regime is thermic and precipitation averages 135 cm per year.

WS is located on the north side of Pelham Road (SR 1319) at a point 2.7 kilometers northwest of the intersection of Pelham Road and Watha Road (SR 1313; Wallace East USGS 7.5 minute topographic quadrangle). This location is only eight kilometers northwest of the historic Big Savannah. WS and the Big Savannah site occur within a continuous band of Liddell soil, which is rare on the Lower Coastal Plain (Barnhill, 1990). This occurrence of Liddell soil covers 9,762 hectares of northwest Pender Co. Only 464 additional hectares of Liddell soil occur, as small patches, in other parts of the county. None occurs in any of the surrounding counties. Liddell silt loam is classified as a coarse-silty, siliceous, subactive, acid, thermic typic endoaquept (Barnhill, 1990). Its high content of silt and very fine sand is unusual in this predominately

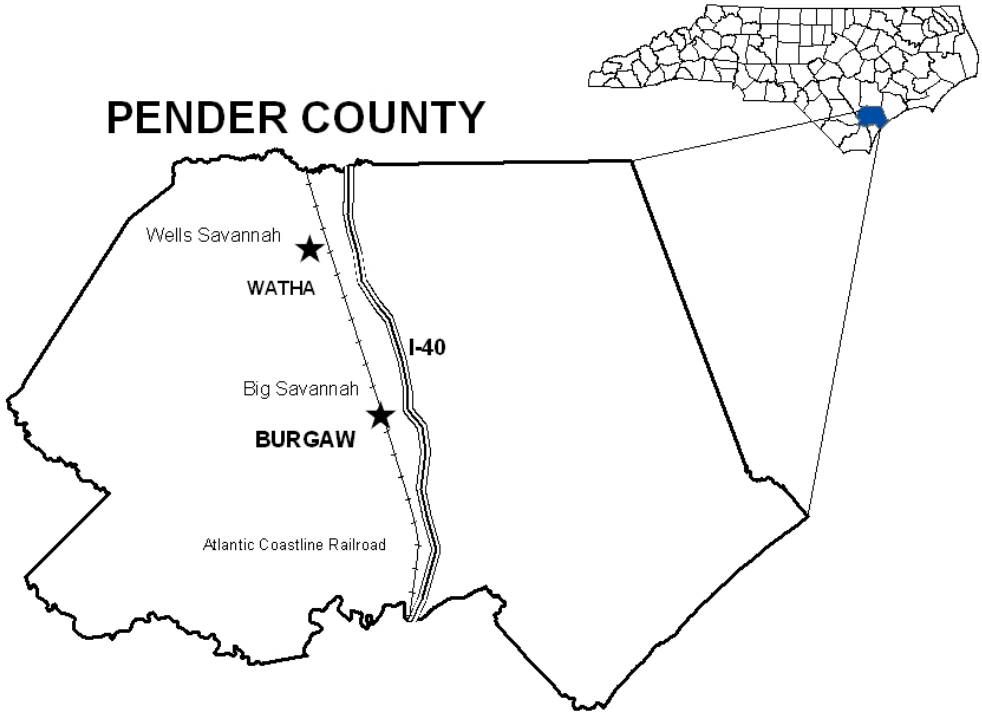

Figure 1. Location of Wells Savannah and the former Big Savannah in Pender County, North Carolina. Wells Savannah and the former Big Savannah are located near the towns of Watha and Burgaw, respectively. The stars represent the two savannas. The Atlantic Coastline Railroad once bisected the 1 500-acre Big Savannah.

sandy-textured region of the state. The fine soil texture and flat topography severely retard drainage at WS.

1938 aerial photos show that, prior to habitat fragmentation, the Liddell soil band connecting the two savanna sites supported a continuous corridor of open vegetation with widely spaced trees, likely pines, and minimal shrub cover. Such an open community could have developed in response to frequent fire. Although the historic fire frequency for this corridor is unknown, the circumstantial evidence from the 1938 aerial photos, in conjunction with charcoal found in the WS soil at a depth of about 20 cm, suggest that fire was frequent. Aerial photos taken during 1944, 1955, 1965, and 1972 show that the open plant community at WS gradually became a woodland with denser tree and shrub growth, most likely as a response to fire suppression.

WS currently consists of two mowed transmission line rights-of-way extending northeastward from Pelham Road and a 43-hectare fire-suppressed woodland located between the two rights-of-way (Fig. 2). Approximately 4 hectares of open savanna exist within the two rights-of-way and support a diverse assemblage of native plants that typically occur in wet pine savanna communities. The smaller and northwestern-most right-of-way, owned by Four County Electric Membership Corporation, was established in 1952. The larger and southeastern right-of-way was established in 1972 by Progress Energy. The corridors have been maintained by mowing since their installations and are currently on a 3-year mowing rotation. The Four County Electric Membership Corporation right-of-way was last mowed in January of 2003; the Progress Energy right-of-way was last mowed in April of 2002. Herbicides have never been used to manage the Progress Energy right-of-way, but

were in use until 1999 within the Four County Electric Membership Corporation right-of-way. The North Carolina Natural Heritage Program and the two utilities recently

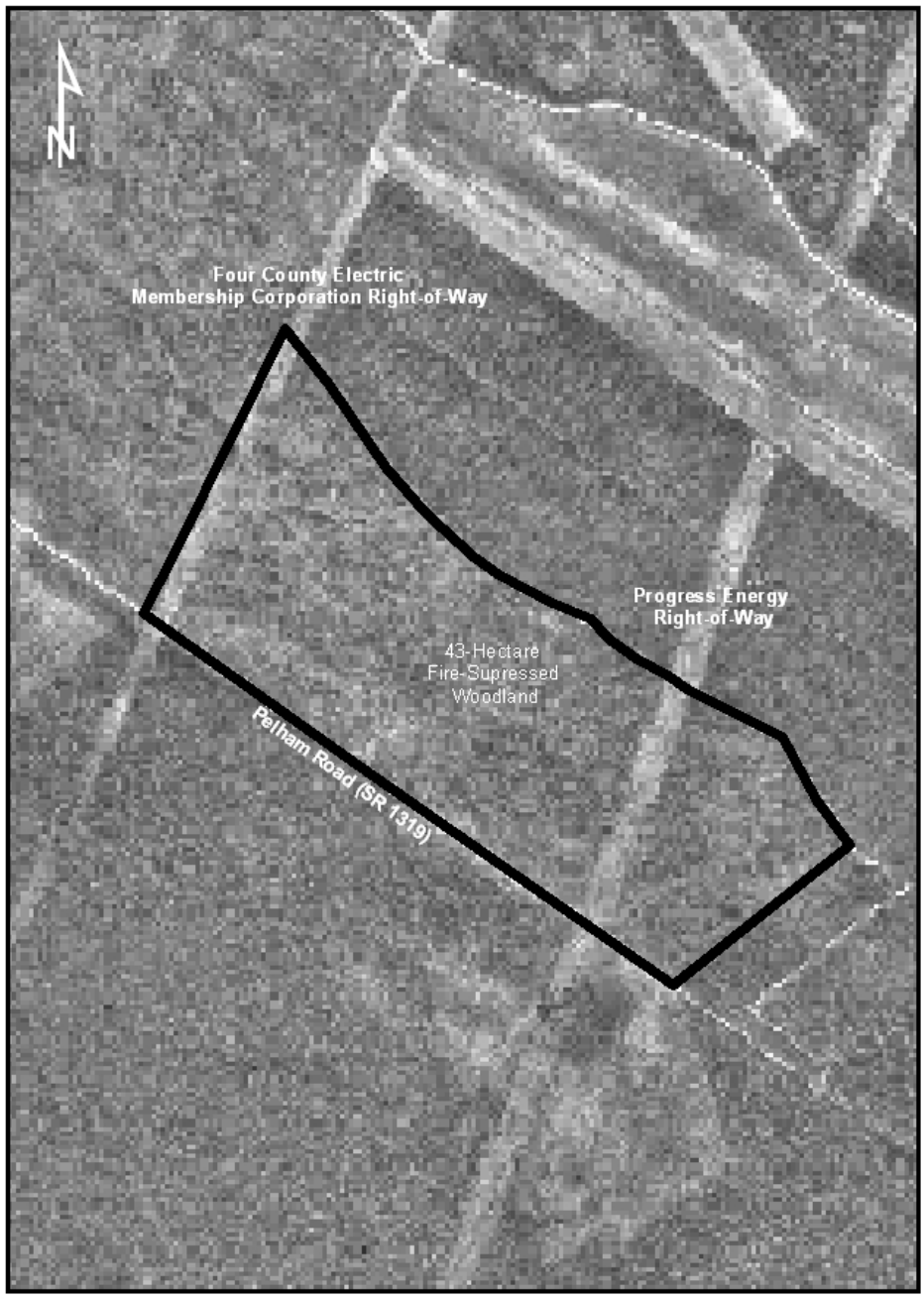

Figure 2. 1993 Aerial photograph of Wells Savannah. Wells Savannah is bordered to the south by Pelham Road. The Four County Electric Membership Corporation forms the boundary to the west. It is bordered to the east by habitat much like what exists within the woodland area.

signed a Memorandum of Understanding to not use herbicides and to continue the current mowing regime.

Although WS has been logged since the early 1900's, its soils have not been tilled or drained so they still exhibit characteristics typical of the Liddell series. Since the site has not been influenced by disturbance that can cause unnatural soil and plant community conditions for years to come, it is an excellent candidate for restoration. Accordingly, the 47-hectare tract was purchased by the North Carolina Coastal Land Trust in April of 2002. The North Carolina Coastal Land Trust is currently working with the utilities to develop and implement a controlled burn plan. It is believed that the woodland habitat will be restored to savanna with scattered pond, loblolly, and longleaf pines under a 3-yr prescribed fire regime.

Savannas located in HSGL were used for comparison to that of WS. These savannas were selected because HSGL is close to WS, has soils that are similar to those of WS, and is maintained with frequent fire. *Biological Inventory of Holly Shelter Game Land* (LeGrand and Sorrie, 1997) and soil profile samples were used to identify savanna communities within HSGL that most closely matched the soils and vegetation at WS.

MATERIALS AND METHODS

Floristic Inventory

The flora was inventoried during the growing seasons of 2001 – 2003. Plants were collected throughout WS from areas exhibiting different topographies, surface hydrology, and indicators of different disturbance histories. In addition, ten permanent plots were established and extensively inventoried within the rights-of-way at WS, and six within savannas at HSGL, following CVS guidelines (Peet *et al.*, 1998). Voucher specimens were deposited in the North Carolina State University Herbarium (NCSC). Nomenclature

followed Kartesz (1999). Endangered, Threatened, and Rare species status was determined through the NCNHP *County Status List for Pender County* (NCNHP, 2003).

Community Association Descriptions

While two general plant communities, savanna in the rights-of-ways and pine woodland in adjacent habitat, were recognized at WS, topographic, hydrologic, and plant species variation throughout each general community facilitated description of more specific associations. The associations occurred throughout WS, each with restricted distribution. Descriptions of each specific association include indications of dominant species, aerial extent, location, and topographic or hydrologic features.

Soil Description

We described ten soil profiles from the rights-of-way and four from the woodland at WS. The 14 profile locations collectively represented the range of topography and disturbance indicators at the site. We also evaluated six profiles from four of the wettest savannas identified in *Biological Inventory of Holly Shelter Game Land*. Two of these savannas were classified as 'wet Ultisol' variants, the other two as 'wet Spodosol' variants. We described the soil redoximorphic features (Vepraskas, 1992) of each profile and determined which soils were hydric based on these descriptions (Hurt *et al.*, 1998). Soil samples were taken from each horizon of each soil profile. A particle size analysis (Gee and Bauder, 1986) was performed on each sample at the North Carolina State University Soil Laboratory in August of 2002.

Wetland Indices

Ten permanent 10 X 10 m plots were established in the rights – of – way at WS and six in the HSGL reference savannas. Aerial cover class (trace, 0-1%, 1-2%, 2-5%, 5-10%, 10-25%,

25-50%, 50-75%, 75-95%, 95-100%) (Peet *et al.*, 1998) of each species in each of these plots was determined during June of 2002. A wetland index that expresses the degree to which the plant community in each plot was adapted to wet soil conditions was calculated by applying weighted averaging methods (Wentworth *et al.*, 1988) to the species' cover classes and the Region 2 wetland fidelity indicators for each species (USFWS, 1988).

RESULTS

Flora and Associations

Two hundred nine species in 107 genera and 48 families were found at WS. Families including the most species were Poaceae (41), Cyperaceae (32), and Asteraceae (28), and *Rhynchospora* was represented by more species (20) than any other individual genus. Thirty-two percent of the species were OBL (Obligate Wetland) and 39% were FACW (Facultative Wetland). Seven plant species listed as Endangered, Threatened, or Rare in the state of North Carolina were identified within the rights-of-way at WS (Table 1). The state rare broad-winged sedge grasshopper (*Stethophyma celatum* (Otte)), previously reported from Big Savannah, was also observed at WS. Twelve North Carolina Natural Heritage Program Watch List species, including southern winged loosestrife (*Lythrium alatum* var. *lanceolatum*) previously known from only three other locations in North Carolina, also were found at WS (LeBlond, 2001).

TABLE 1. Rare, Threatened, and Endangered Species Present at Wells Savannah

SPECIES	STATUS	DATE OBSERVED/ NUMBER OBSERVED	OBSERVED REPRODUCTION
Agalinis aphylla	Significantly Rare	2003 / 1	flower
Andropogon mohrii	Significantly Rare	1999, 2002, 2003 / 50+	fruit
Arnoglossum ovatum	Significantly Rare	1999 / 9	flower
Rhynchospora divergens	Significantly Rare	1999, 2002	fruit / flower
Solidago pulchra	State Endangered, Federal Species of Concern	1997, 1999 / 100+	flower, bud
Xyris difformis var. *floridana*	Significantly Rare	2003 / 1	fruit
Xyris stricta	Significantly Rare	2003 / 1	fruit

The amount or kind of landscape disturbance appeared to be a major factor determining the distribution of three woodland plant associations. The most extensive association is a dense woodland with a dominant shrub layer. Areas supporting this association lack evidence of soil disturbance. Overstory species include *Pinus serotina*, *Pinus taeda*,

Symplocos tinctoria, and *Nyssa sylvatica.* Long-term (over 60 years) fire suppression has allowed a dense understory to develop. This shrub layer is composed primarily of *Lyonia lucida, Magnolia virginiana, Persea palustris,* and *Cyrilla racemiflora.* Although the herbaceous stratum is sparse, *Zigadenus densus, Ctenium aromaticum, Pteridium aquilinum* var. *pseudocaudatum,* and *Sarracenia flava* occur, evidence that this community had formerly been a savanna.

The second association is scattered throughout the woodland. It occurs in areas where disturbance resulting from timber harvesting has opened the canopy and compacted the soils so much that shrub growth is limited. Old timber harvest landings, drag trails, and harvested areas support an association with a species composition similar to that of the dense woodland but with the addition of *Acer rubrum* var. *trilobum* in the overstory and *Arundinaria gigantea* ssp. *tecta, Morella caroliniensis, Morella cerifera, and Gaylussacia frondosa* in the shrub stratum. Areas closer to the rights-of-way have a richer herbaceous stratum than those embedded in the woodland at greater distances from the rights-of-way. Species typically found in all areas include *Carex glaucescens, Rhynchospora cephalantha* var. *cephalantha, Rhynchospora chalarocephala, Rhexia lutea,* and *Polygala lutea.*

The third woodland association is a 'red maple drain' that has, apparently, been left undisturbed by timber activity due to its wet soils and hardwood-dominated overstory. This drain is located in the southwest corner of the woodland, approximately 30 meters north of Pelham Road. Overstory species include *Acer rubrum* var. *trilobum, Liquidambar styraciflua, Quercus nigra* and *Nyssa sylvatica.* The shrub stratum is sparse, composed mainly of saplings of overstory species. The herbaceous stratum is mostly *Pteridium*

aquilinum var. *pseudocaudatum* and *Osmunda cinnamomea.* Other species include *Ilex coriacea, Ilex opaca,* and *Smilax glauca.*

In the WS rights-of-way, plant species composition varies along microtopographic and moisture gradients. All five of the recognized associations are predominantly herbaceous and devoid of trees. A sparse shrub layer (cover less than 20%) is present in the higher areas. Although a number of species are found in all five associations, a given species is dominant in only one or two of these.

The most extensive right-of-way association occurs on the higher sites and is dominated by *Arundinaria gigantea* ssp. *tecta, Muhlenbergia capillaris* var. *trichopodes, Ilex glabra, Andropogon virginicus* var. *virginicus,* and *Schizachyrium scoparium.* Vegetation is extremely dense and varies only slightly within the association.

The second most extensive association is dominated by *Dichanthelium scabriusculum, Dichanthelium scoparium, Aristida purpurascens* var. *virgata,* and *Scleria minor.* This association occurs along the woodland edge of the southeastern boundary of the larger right-of-way and in small pockets along the northwestern edge of the woodland in the western right-of-way. The association is found on the grade between high areas and low areas within the rights-of-way.

The third association occurs in low-lying areas that remain saturated to the surface throughout most of the growing season but rarely pond. It is dominated by *Sarracenia flava, Sarracenia purpurea, Ctenium aromaticum, Calopogon pallidus, Lachnanthes caroliana,* and *Rhexia alifanus.*

A fourth association is common in areas where disturbance is frequent enough to prevent the occurrence of most graminoid species. Equipment associated with the maintenance of the

rights-of-way and private vehicles utilizing the utility companies' access roads had compacted soils and created large ruts that pond water. These areas are sparsely vegetated and support species such as *Drosera capillaris* and *Drosera intermedia*, which are poor competitors and are frequent in open habitats. Other species common in these areas are *Lycopodiella alopecuroides* and *Aletris farinosa.*

The last right-of-way association occurs in a large swale within the Four County Electric Membership Corporation right-of-way. The swale formed in an area that had been a landing for a timber harvest. It remains ponded longer than any other area within either right-of-way and it supports the largest number of sedge and rush species of all the associations. Dominant species include *Fimbrisylis miliacea, Juncus acuminatus, Eleocharis microcarpa, Rhynchospora macrostachya, Saccharum giganteum, Carex striata,* and *Xyris ambigua.*

Compositional Comparison to Big Savannah and Holly Shelter Game Land

A comparison of the dominant species listed above to the dominant species listed by Wells and Shunk (1928b) in their inventory of the Big Savannah supports the idea that WS shares a very similar plant community to that reported for Big Savannah. Nearly 80% of the dominants listed for Big Savannah are dominants at WS. Dominant species present at both savannas include *Arundinaria gigantea* ssp. *tecta, Andropogon virginicus* var. *virginicus, Ctenium aromaticum, Dichanthelium scabriusculum, Rhynchospora chapmanii, Schizachyrium scoparium,* and *Scleria minor*. While a number of the dominant species of Big Savannah and WS are present within HSGL savannas, they are not dominant at HSGL. Only one of the dominant species at WS and Big Savannah, *Ctenium aromaticum,* was also a dominant at HSGL in three of the six plots. *Aristida stricta* Michx. is present and dominant in all inventoried HSGL plots, but absent from both WS and Big Savannah. Additionally, 20

species of *Rhynchospora* occurred at WS. Twice as many species of *Rhynchospora* were observed during the permanent plot inventories at WS than at HSGL.

Soils

The soils at WS were significantly wetter than those at HSGL. All profiles from WS were poorly or somewhat poorly drained (Buol *et al.*, 2003; Table 2). Three of the six locations at HSGL were moderately well drained. Soils from all 14 WS sampling locations had signs of aquic conditions (Vepraskas, 1992). Their redoximorphic features, indicators of aquic conditions, included redox concentrations (iron accumulation), oxidized rhizospheres, redox depletions, and reduced matrices. Redoximorphic features were found closer to the surface in WS profiles than in all but two profiles from HSGL. The "F13-Umbric Surface" and "F3-Depleted Matrix" hydric indicators were noted in most profiles from both WS and HSGL.

TABLE 2. Soil features observed at Wells Savannah and Holly Shelter Game Land.

LOCATION	DRAINAGE CLASS	DEPTH TO REDOXIMORPHIC FEATURES	HYDRIC INDICATOR
WELLS SAVANNAH			
1	poorly drained	20 – 45 cm	Umbric Surface
2	poorly drained	20 – 45 cm*	Umbric Surface, Depleted Matrix
3	poorly drained	20 – 45 cm*	Umbric Surface,

			Depleted Matrix
4	poorly drained	15 – 20 cm*	Umbric Surface, Depleted Matrix
5	poorly drained	20 – 45 cm*	Umbric Surface
6	poorly drained	20 – 45 cm*	Umbric Surface, Depleted Matrix
7	somewhat poorly drained	20 – 40 cm	NOT HYDRIC
8	somewhat poorly drained	30 – 50 cm*	Umbric Surface
9	somewhat poorly drained	30 – 50 cm*	Umbric Surface
10	somewhat poorly drained	40 – 60 cm	Umbric Surface
11	poorly drained	15 – 20 cm*	Umbric Surface
12	poorly drained	20 – 45 cm*	Umbric Surface, Depleted Matrix
13	somewhat poorly drained	30 – 50 cm	NOT HYDRIC
14	poorly drained	15 –20 cm*	Umbric Surface, Depleted Matrix

HOLLY SHELTER

GAME LAND

1	somewhat poorly drained	40 – 60 cm	Umbric Surface
2	moderately well drained	45 – 60 cm	NOT HYDRIC
3	poorly drained	16 – 45 cm	Umbric Surface, Depleted Matrix
4	moderately well drained	40 – 60 cm	Umbric Surface
5	moderately well drained	below 60 cm	Umbric Surface
6	poorly drained	16 – 45 cm*	Umbric Surface

* Oxidized rhizospheres observed at surface (within A horizon).

Particle size clearly distinguished the soils at WS and HSGL (Table 3). WS soils had lower percentages of sand and higher percentages of silt and clay than did HSGL soils. Although these textural differences were present throughout the soil profile, they were more pronounced within the upper 60 cm.

TABLE 3. Particle size analysis averages for upper 60 cm of soils at Wells Savannah and Holly Shelter Game Land.

	% SILT	% SAND	% CLAY
WELLS			
SAVANNAH			
0-30cm			
Average	48.07	42.16	9.77
Range	43.77-52.32	38.92-45.08	5.40-15.92
30-60cm			
Average	51.57	37.61	11.67
Range	43.59-52.35	36.15-43.70	3.25-15.12
HOLLY			
SHELTER			
GAME LAND			
0-30cm			
Average	18.62	76.44	4.94
Range	11.24-28.21	69.54-83.36	2.25-6.66
30-60cm			
Average	16.45	78.09	8.91
Range	12.38-21.78	69.91-88.39	6.66-10.43

Wetland Indices

The plant communities in the WS plots demonstrated a greater community-level adaptation to wet soils than did the communities of the HSGL plots. The mean wetland indices for plant communities in the WS and HSGL plots were 2.0 and 2.3, respectively. These means were significantly different ($t = 2.84$, $df = 15$; $P < 0.05$).

DISCUSSION

The WS soils clearly were wetter than those at HSGL. The greater adaptation of the WS plant community to wet soils, relative to those of the HSGL communities, showed that saturation nearly to the soil surface has prevailed at WS for the long-term. The continually wet acidic soil is one of the unique features of WS.

A companion study to that reported here (Shelingoski *et al*., in review) showed that the species composition of the WS plant community was unique when compared with a wide sample of savanna communities in the southeastern NC Coastal Plain. The sites with communities most similar to that of WS were from HSGL.

Based on our comparison of shared dominant plant species, the community at WS bore a stronger similarity to that previously reported for Big Savannah (Wells and Shunk, 1928a and 1928b) than it did to HSGL. The strong affinity of vegetation of WS and Big Savannah is not surprising since (1) Big Savannah was a very wet savanna on Liddell soil, (2) WS is, perhaps, the wettest savanna on acidic soil currently known in NC and also occurs on Liddell soil, and (3) the Big Savannah and WS sites are only 8 km apart. The rich flora and wet soils of WS do not reside comfortably in either of the previously described ‘wet Ultisol’ or ‘wet Spodosol’ savanna types, such as those studied at HSGL. The most striking difference in the

floras of WS and HSGL was the complete lack of wiregrass (*Aristida stricta*) at WS and its relative abundance (25% or more cover) in every permanent plot at HSGL. WS is a species-rich, moist savanna, one of the most threatened of all southeastern grasslands (Frost *et al*., 1986), and its soils and flora are similar to those of Big Savannah. WS, the "Ghost of Big Savannah", warrants conservation and restoration.

All other Lower Coastal Plain savannas that have recently been inventoried (Taggart, 1990; Schafale, 1994; LeGrand and Sorrie, 1997) fit into the more general classifications for wet pine savannas described in *The Natural Communities of North Carolina* (Schafale and Weakley, 1990), and the more recent *International Classification of Ecological Communities* (NatureServe, 2003). The former classification system identifies a 'Pine Savanna' category. By definition, this community type occurs in "wet, generally flat areas, and occasionally low 'islands' in peatlands or swamps, saturated part of the year, with frequent fire." Wet mineral soils are noted as the substrate, but there is mention only of the Ultisol, Alfisol, and Spodosol soil orders. WS occurs on a soil series and order not previously identified as supporting a savanna association in southeastern North Carolina. WS could represent a new variant whose primary characteristics are soil texture, moisture, the lack of *Aristida stricta*, and the presence of high numbers of *Rhynchospora* species.

The *International Classification of Ecological Communities* lists a herbaceous, perennial graminoid, saturated temperate or subpolar grassland formation. WS resembles the *Rhynchospora oligantha, Sarracenia spp* – (*Aristida beyrichiana, Ctenium aromaticum*) – *Osmunda cinnamomea* / *Sphagnum* spp. saturated herbaceous alliance (V.A.5.N.m.17). Certain aspects of WS could place the site in this alliance typical of 'herbaceous bogs, hillside seepage bogs, wet prairies, muck bogs and poor fens, most often occurring on peaty

soils with significant organic accumulation'. The alliance supports up to ten different species of *Rhynchospora.* Despite the preceding general affinities, WS, with a silty surface layer and twenty species of *Rhynchospora,* does not entirely support its placement in this alliance. There are a number of other alliances within the formation dominated by species found at WS, yet all are associated with sandhill communities or wet, sandy soils with an impermeable subsurface layer that perches the water table. The woodland taxa (Class II) listed in the NatureServe Classification also contrast with WS. WS best fits into the *Pinus palustris, Pinus (elliottii, serotina),* saturated woodland alliance (II.A.4.N.f.6). The associations within the alliance that most resemble WS are all dominated by *Pinus palustris,*, have very minimal herbaceous layers, and occur on wet Spodosol soils. The woodland association having the closest resemblance to WS, the *Pinus palustris – Pinus serotina / Sporobolus pinetorum - Ctenium aromaticum – Eriocaulon decangulare* var. *decangulare* woodland (CEGL004502), is referenced as an Atlantic Coastal Plain Very Wet Clay Longleaf Pine Savanna. Both the *International Classification of Ecological Communities* and *The Natural Communities of North Carolina* fail to identify predominantly herbaceous communities occurring on saturated, fine textured soils. The 'Pine Savanna' community is listed by the North Carolina Natural Heritage Program as a natural community in need of protection. Pine Savannas have an S2 state rank, making the type imperiled in North Carolina because of rarity or otherwise vulnerable to extirpation in the state. Expanding this community type to include sites such as WS could help in the protection of the community type.

There are currently no other representatives of this kind of savanna ecosystem under protection. At present, HSGL is the largest protected area of fire-maintained savannas in the

state. Even so, none of the savannas found there closely compare in species composition or soil characteristics to those of WS. The species composition and associations identified at WS most closely resemble those of the extirpated Big Savannah.

ANNOTATED CHECKLIST OF TAXA

The 206 plant species observed at WS during this study are listed in the following annotated checklist of taxa. Families, genera, and species are arranged alphabetically within major taxonomic divisions. Each species is followed by the location where it was observed (R – rights-of-way, W – woodland), the wetland fidelity indicator, protection status (where applicable), and collection number.

LYCOPODIOPHYTA

LYCOPODIACEAE

Lycopodiella alopecuroides (L.) Cranfill R,W – OBL [156]

BRYOPHYTA

SPHAGNACEAE

Sphagnum sp. L. R,W – (FACW) [189]

PTERIDOPHYTA

DENNSTAEDTIACEAE

Pteridium aquilinum var. *pseudocaudatum* (Clute) Heller

R,W – FACU [650]

OSMUNDACEAE

Osmunda cinnamomea L. R, W – FACW+ [101]

Osmunda regalis L. var. *spectabilis* (Willd.) Gray R – OBL [317]

CONIFEROPHYTA

PINACEAE

Pinus palustris P. Mill. W – FACU+ [photo 646]

Pinus serotina Michx. W – FACW+ [photo 647]

Pinus taeda L. W – FAC [photo 648]

MAGNOLIOPHYTA:

MAGNOLIOPSIDA

ACERACEAE

Acer rubrum var. *trilobum* Torr. & Gray ex K. Koch R,W – FAC [309]

APIACEAE

Eryngium integrifolium Walt. R – FACW [34]

Oxypolis ternata Nutt. Heller R – OBL – WL [187]

AQUIFOLIACEAE

Ilex coriacea (Pursh) Chapman R,W – FACW [325]

Ilex glabra (L.) Gray R,W – FACW [504]

Ilex myrtifolia Walt. W – FACW [641]

Ilex opaca Ait. W – FAC [324]

ASCLEPIDACEAE

Asclepias longifolia Michx. R – FACW+ – WL [321]

ASTERACEAE

Ambrosia artemisiifolia L. R – FACU [665]

Arnoglosum ovatum (Walt) H.E. Robins R – FAC – SR-P, S1 [photo 677]

Baccharis halimifolia L. R – FAC [659]

Bigelowia nudata (Michx.) DC. R – FACW [633]

Carphephorus tomentosus (Michx.) Torr. & Gray R – FACW [170]

Chaptalia tomentosa Vent. R – FACW [635]

Cirsium virginianum (L.) Michx. R – OBL [637]

Coreopsis falcata Boynt. R – FACW [311]

Coreopsis linifolia Nutt. R,W – FACW [603]

Erigeron vernus (L.) Torr. & Gray R – OBL [308]

Eupatorium capillifolium (Lam.) Small R – FACU [639]

Eupatorium hyssopifolium L. R – (FACW) [318]

Eupatorium leucolepis (DC.) Torr. & Gray R – FACW+ [151]

Eupatorium mohrii Greene R – FACW- [306]

Eupatorium pilosum Walt. R,W – FACW [155]

Eupatorium rotundifolium L. R – FAC [158]

Eurybia paludosa (Ait) Nesom R – FACW [403]

Euthamia caroliniana (L.) Green ex Porter & Britt. R – FAC [608]

Helianthus atrorubens L. R – FAC [663]

Helianthus heterophyllus Nutt. R – OBL [160]

Liatris spicata var. *resinosa* (Nutt.) Gaiser R – FACU [172]

Marshallia graminifolia (Walt.) Small R – OBL [174]

Pityopsis graminifolia (Michx.) Nutt. var. *latifolia* (Fern.) Semple & Bowers R – FACU [666]

Solidago fistulosa P. Mill. R – FAC+ [657]

Solidago pulchra Small R – (OBL) – FSC, E, S3 [656]

Solidago rugosa P. Mill. var. *villosa* (Pursh) Fern. R – FAC [658]

Solidago stricta Ait. R – OBL [115]

Symphotrichum dumosum (L.) Nesom var. *dumosum* R – FAC [314]

CAMPANULACEAE

Lobelia canbyi Gray R – OBL [642]

CLETHRACEAE

Clethra alnifolia L. R,W – FACW [510]

CLUSIACEAE

Hypericum canadense L. R – FACW [610]

Hypericum crux-andreae (L.) Crantz R,W – FACW- [112]

Hypericum densiflorum Pursh R – FACW- [5297]

Hypericum denticulatum Walt. R – FACW [5227]

Hypericum galiodes Lam. R – OBL [190]

Hypericum gymnanthum Engelm. & Gray R – FACW [152]

CORNACEAE

Nyssa sylvatica Marsh. R – FAC [329]

CYRILLACEAE

Cyrilla racemiflora L. R,W – FACW [605]

DROSERACEAE

Drosera capillaris Poir. R – OBL [307]

Drosera intermedia Hayne R – OBL [319]

EBENACEAE

Diospyros virginiana L. R,W – FAC [638]

ERICACEAE

Gaylussacia dumosa (Andr.) Torr. & Gray R,W – FAC [640]

Gaylussacia frondosa (L.) Torr. & Gray ex Torr. R,W – FAC [502]

Lyonia ligustrina (L.) D.C. R – FACW [514]

Lyonia lucida (Lam.) K. Koch R,W – FACW [512]

Rhododendron atlanticum (Ashe) Rehd. W – FAC+ [651]

Rhododendron viscosum (L.) Torr. W – FACW+ [303]

Vaccinium crassifolium Andr. R,W – FAC+ [154]

Vaccinium formosum Andr. R,W – FAC+ [330]

Vaccinium fuscatum Ait. R,W – FAC+ [157]

FAGACEAE

Quercus falcata Michx. W – FACU- [507]

Quercus laurifolia Michx. W – FACW [511]

Quercus nigra L. W – FAC [619]

GENTINACEAE

Bartonia virginica (L.) B.S.P. R – FACW [601]

Sabatia difformis (L.) Druce R – OBL [625]

HALORAGACEAE

Proserpinaca pectinata Lam. R – OBL [649]

HAMAMELIDACEAE

Liquidambar styraciflua L. R,W – FAC+ [615]

LAMIACEAE

Lycopus amplectens Raf. R - OBL – WL [668]

Pycnanthemum flexuosum (Walt.) B.S.P. R – FACU [406]

Scutellaria integrifolia L. R – FAC [315]

LAURACEAE

Persea palustris (Raf.) Sarg. R,W – FACW [503]

LENTIBULARIACEAE

Utricularia juncea Vahl R – OBL [661]

LINACEAE

Linum floridanum (Planch.) Trel. var. *floridanum* R – FAC [613]

Linum medium (Planch.) Britt. var. *texanum* (Planch.) Fern. R – FACU [418]

Linum striatum Walt. R – FACW- [614]

LOGANIACEAE

Gelsemium sempervirens (L.) Ait. f. R – FAC [420]

LYTHRACEAE

Cuphea carthagenensis (Jacq.) J.F. Macbr. R – FACW [604]

Lythrum alatum Pursh var. *lanceolatum* (Ell.) Torr. & Gray ex Rothrock R – FACW+ – WL [4803]

MAGNOLIACEAE

Magnolia virginiana L. R,W – FACW+ [509]

MELASTOMATACEAE

Rhexia alifanus Walt. R,W – FACW [413]

Rhexia lutea Walt. R – FACW+ [112]

Rhexia nashii Small R – FACW+ [620]

Rhexia petiolata Walt. R,W – FACW+ [113]

MYRICACEAE

Morella caroliniensis (P.Mill.) Small R – FACW [508]

Morella cerifera (L.) Small R,W – FAC+ [506]

ONAGRACEAE

Ludwigia hirtella Raf. R – FACW+ [643]

Ludwigia linearis Walt. R – OBL [644]

Ludwigia microcarpa Michx. R – OBL [616]

Ludwigia virgata Michx. R – OBL [407]

POLYGALACEAE

Polygala cruciata var. *cruciata* L. R – OBL [401]

Polygala incarnata L. R – FAC- [612]

Polygala lutea L. R – FACW+ [180]

Polygala ramosa Ell. R – OBL 177]

PRIMULACEAE

Lysimachia loomisii Torr. R – OBL [326]

ROSACEAE

Amelanchier stolonifera Weig. R,W – FACU [301]

Prunus serotina Ehrh. R – FACU [660]

Rubus sp. L. R,W – (FAC) [417]

RUBIACEAE

Cephalanthus occidentalis L. R – OBL [627]

SARRACENIACEAE

Sarracenia flava L. R,W – OBL [305]

Sarracenia purpurea L. R – OBL [322]

SCROPHULARIACEAE

Agalinis aphylla (Nutt.) Raf. R – FACW – SR-P, S3 [photo 664]

Agalinis pupurea (L.) Pennell R – FACW [629]

Gratiola pilosa Michx. R – FACW- [188]

Mecardonia acuminata (Walt.) Small R – FACW [645]

SYMPLOCACEAE

Symplocos tinctoria (L.) L'Her. W – FAC [505]

MAGNOLIOPHYTA: LILIOPSIDA

CYPERACEAE

Carex glaucescens Ell. R,W – OBL [20]

Carex intumescens Rudge R – FACW [669]

Carex lonchocarpa Willd. R – OBL [312]

Carex striata Michx. R – OBL [634]

Carex venusta Dewey var. *minor* Boekl. R – FACW+ [5603]

Eleocharis microcarpa Torr. R – OBL [44]

Eleocharis tuberculosa (Michx.) Roemer & J.A. Schultes R – FACW+ [140]

Fimbristylis miliacea L. Vahl R – OBL [609]

Fuirena breviseta (Coville) Coville R – OBL [80]

Rhynchospora baldwinii Gray R – OBL [621]

Rhynchospora caduca Ell. R – OBL [670]

Rhynchospora cephalantha var *cephalantha* Gray R – OBL [15]

Rhynchospora cephalantha var *pleiocephala* Fern & Gray R – OBL [671]

Rhynchospora chalarocephala Fern. & Gale R – OBL [2]

Rhynchospora chapmanii M.A. Curtis R – OBL [652]

Rhynchospora debilis Gale R – FACW+ [622]

Rhynchospora divergens Chapman ex M.A. Curtis R – OBL – SR-P, S1 [5197]

Rhynchospora elliottii A. Dietr. R – FACW [6]

Rhynchospora fascicularis (Michx.) Vahl var. *distans* (Michx.) Chapman R – FACW+ [152]

Rhynchospora globularis (Chapman) Small var. *globularis* R – FACW+ [4804]

Rhynchospora gracilenta Gray R – OBL [623]

Rhynchospora inundata (Oakes) Fern. R – OBL [43]

Rhynchospora macrostachya Torr. ex Gray R – OBL [30]

Rhynchospora nitens (Vahl) Gray R - OBL – WL [150]

Rhynchospora pallida M.A. Curtis R – OBL [400]

Rhynchospora plumosa Ell. R – FACW [409]

Rhynchospora pusilla Chapman ex M.A. Curtis R – FACW [653]

Rhynchospora rariflora (Michx.) Ell. R – OBL [624]

Rhynchospora torreyana Gray R – OBL [411]

Scleria minor W. Stone R – FACW [626]

Scleria muehlenbergii Steud. R – FAC [654]

Scleria pauciflora var. *caroliniana* (Willd.) Wood R – FAC+ [655]

ERIOCAULACEAE

Eriocaulon decangulare L. R – OBL [607]

HAEMODORACEAE

Lachnanthes caroliana (Lam.) Dandy R – OBL [323]

IRIDACEAE

Sisyrinchium capillare Bickn. R – OBL [405]

JUNCACEAE

Juncus acuminatus Michx. R – OBL [328]

Juncus canadensis J. Gay ex Laharpe R – OBL [46]

Juncus coriaceus Mackenzie R – FACW [672]

Juncus dichotomus Ell. R – FACW [611]

Juncus elliottii Chapman R – OBL [482]

Juncus polycephalus Michx. R – OBL [316]

LILIACEAE

Aletris farinosa L. R – FAC+ [150]

Lilium catesbaei Walt. R – FAC+ [92]

Pleea tenuifolia Michx. R – OBL [185]

Zigadenus densus (Desr.) Fern. R,W – FACW+ [313]

Zigadenus glaberrimus Michx. R – FACW- [628]

ORCHIDACEAE

Calopogon pallidus Chapman R – OBL [302]

Calopogon tuberosus (L.) B.S.P. var. *tuberosus* R – OBL [673]

Cleistes divaricata (L.) Ames R – FAC+ [310]

Spiranthes praecox (Walt) S. Wats. R – FACW [304]

POACEAE

Agrostis hyemalis B.S.P. R – FAC [320]

Agrostis perennans (Walt.) Tuckerman R – FACU [32]

Amphicarpum purshii Kunth R – FACW – WL [600]

Andropogon capillipes Nash R – FACW [667]

Andropogon glaucopsis Ell. R,W – FACW+ [630]

Andropogon glomeratus (Walt.) B.S.P. var. *glomeratus* R,W – FACW+ [415]

Andropogon glomeratus (Walt.) B.S.P. var. *hirsutior* (Hack.) C. Mohr R – FACW+ [631]

Andropogon gyrans Ashe R – OBL – WL [123]

Andropogon mohrii (Hack.) .Hack. Ex Vasey R – OBL – SR-P, S1 [118]

Andropogon virginicus L. var. *virginicus* R – FAC- [13]

Anthaenantia rufa (Nutt.) J.A. Schultes R - FACU – WL [108]

Aristida palustris (Chapman) Vasey R – OBL [632]

Aristida purpurascens Poir. var. *virgata* (Trin.) Allred R – FACW- [10]

Arundinaria gigantea (Walt.) Muhl. ssp. *tecta* (Walt.) McClure R,W – FACW [513]

Calamagrostis coarctata (Torr.) Eat. R – OBL [13]

Calamovilfa brevipilis (Torr.) Scribn. R – OBL – WL [602]

Chasmanthium laxum (L.) Yates R – FACW- [636]

Ctenium aromaticum (Walt.) Wood R,W – FACW [55]

Dichanthelium consanguineum (Kunth) Gould & C.A. Clark R – FAC [5759]

Dichanthelium dichotomum (L.) Gould var. *dichotomum*

R – FAC [402]

Dichanthelium dichotomum (L.) Gould var. *ensifolium* (Baldw. ex Ell.) Gould & C.A. Clark R – FAC [5760]

Dichanthelium dichotomum (L.) Gould var. *tenue* (Muhl.) Gould & C. A. Clark R – (FAC) [674]

Dichanthelium longiligulatum (Nash) Freckman

R – FAC [5761]

Dichanthelium scabriusculum (Ell.) Gould & C.A. Clark

R – OBL [120]

Dichanthelium scoparium (Lam.) Gould R – FACW [128]

Eragrostis elliottii S. Wats. R – FACW [675]

Eragrostis refracta (Muhl.) Scribn. R – FACW [7]

Eragrostis spectabilis (Pursh) Steud. R – FACU [408]

Eustachys petraea (Sw.) Desv. R – FACU- [122]

Muhlenbergia capillaris (Lam.) Trin. var. *trichopodes* (Ell.) Vasey

R – FACW- [11]

Panicum anceps Michx. R – FAC- [5558]

Panicum rigidulum Bosc ex Nees var. *pubescens* (Vassey) Lelong

R – OBL [109]

Panicum virgatum L. var. *virgatum* R – FAC+ [617]

Paspalum laeve Michx. R – FACW- [618]

Paspalum praecox Walt. R – OBL – WL [662]

Paspalum urvillei Steud. R – FAC [131]

Saccharum coarctatum (Fern.) R. Webster R – FACW [117]

Saccharum giganteum (Walt.) Pers. R – FACW [31]

Schizachyrium scoparium (Michx.) Nash R,W – FACU [41]

Sphenopholis nitida (Biehler) Scribn. R – (FAC) [5322]

Sporobolus pinetorum A. Weakley & P.M. Peterson

R – FACW – WL [676]

SMILACACEAE

Smilax glauca Walt. R,W – FAC [501]

Smilax laurifolia L. R,W – FACW+ [327]

XYRIDACEAE

Xyris ambigua Bey. ex Kunth R – OBL [119]

Xyris caroliniana Walt. R – FACW+ [159]

Xyris difformis Chapman var. *floridana* Kral R – OBL – SR [5825]

Xyris laxifolia Mart. var. *iridifolia* (Chapman) Kral, comb. nov. ined.

R - OBL – WL [4815]

Xyris stricta Chapman R – OBL – SR [5799]

( ) Species for which wetland fidelity indicators were derived from typical habitat descriptions

R – Species which occur in the rights-of-way

W – Species which occur in the woodland

Protection Status Codes

E – Endangered: Any species or higher taxon of plant whose continued existence as a viable component of the state's flora is determined to be in jeopardy.

FSC – Federal Species of Concern: A taxon under consideration for which there is insufficient information to support listing.

SR – Significantly Rare: Species which are very rare in North Carolina, generally with 1-20 populations in the state, generally substantially reduced in numbers by habitat destruction (and sometimes also by direct exploitation or disease). These species are generally more common somewhere else in their ranges, occurring in North Carolina peripherally to their main ranges, mostly in habitats which are unusual in North Carolina. Also included are some species with 20-100 populations in North Carolina, if they also have only 50-100 populations rangewide and are declining.

P – Periphery: The species is at the periphery of its range in NC. These species are generally more common somewhere else in their ranges, occurring in North Carolina peripherally to their main ranges, mostly in habitats which are unusual in North Carolina.

S1 – Critically imperiled in North Carolina because of extreme rarity or otherwise very vulnerable to extirpation in the state.

S2 – Imperiled in North Carolina because of rarity or otherwise vulnerable to extirpation in the state.

S3 – Rare or uncommon in North Carolina.

WL – Watch list species in North Carolina.

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CHAPTER THREE

Comparison of Wells Savannah to Other Savanna Ecosystems in the Lower Coastal Plain of North Carolina

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ABSTRACT

Wells Savannah is a unique wet pine savanna located in the Lower Coastal Plain of North Carolina. The 47-hectare tract was discovered in 1997 during a North Carolina Natural Heritage Program Natural Areas Inventory of Pender County and was purchased by the North Carolina Coastal Land Trust in April of 2002. It consists of two transmission line rights-of-way and an adjacent fire-suppressed woodland with a pond pine (*Pinus serotina*) canopy. Poorly drained, hydric soils with unusually high (greater than 40%) silt content occur throughout the site. We compared vegetation and environment in ten plots at Wells Savannah, six reference plots established in Holly Shelter Game Land, and 120 plots extracted from the Carolina Vegetation Survey database. Multivariate analyses (cluster analysis, ordination using non-metric multidimensional scaling, and indicator species analysis) identified Wells Savannah as unique among the documented savanna ecosystems in the Lower Coastal Plain of North Carolina. Environmental variables associated with this unique ecosystem are high levels of iron, silt, and clay in the surface layers of the soil. Although the reference plots in Holly Shelter Game Land had vegetation similar to those established in Wells Savannah, we found that the existing vegetation of the transmission line rights-of-way at Wells Savannah offered the best targets for further restoration of the Wells Savannah site.

INTRODUCTION

Savannas, or savannahs, are generally defined as communities with a continuous graminoid layer and scattered trees or shrubs and were once prevalent in the southeastern United States (McPherson, 1997). Prior to European settlement, species-rich, fire-maintained savannas occurred naturally over millions of hectares in the Southeast from Virginia to Florida and west to Texas (Taggart, 1990). Extant savanna now occupies a fraction of its original range, as alternative land uses and fire suppression have reduced this ecosystem type to a series of small and scattered islands within a highly managed and manipulated landscape (Johnson and Tothill, 1984).

Wells Savannah (WS) is a 47-hectare tract located approximately eight km northwest of the historic Big Savannah on Pelham Road (SR 1319) in Pender County (Fig. 1). WS was identified as a site having high conservation value during a Natural Areas Inventory of Pender County conducted by the North Carolina Natural Heritage Program (NCNHP) in 1997 (LeBlond, 2000). The North Carolina Coastal Land Trust purchased the site in April of 2002, at which time a management plan was developed to both preserve and enhance the extraordinary plant community that the site supports. The plan includes mechanized clearing of the woodland area followed by biennial controlled burns. The objective of the program is to mimic the relatively frequent (recurring every two to five years), low intensity fires that were known to maintain the savanna communities in the Lower Coastal Plain region of North Carolina prior to fire suppression and increased urban development.

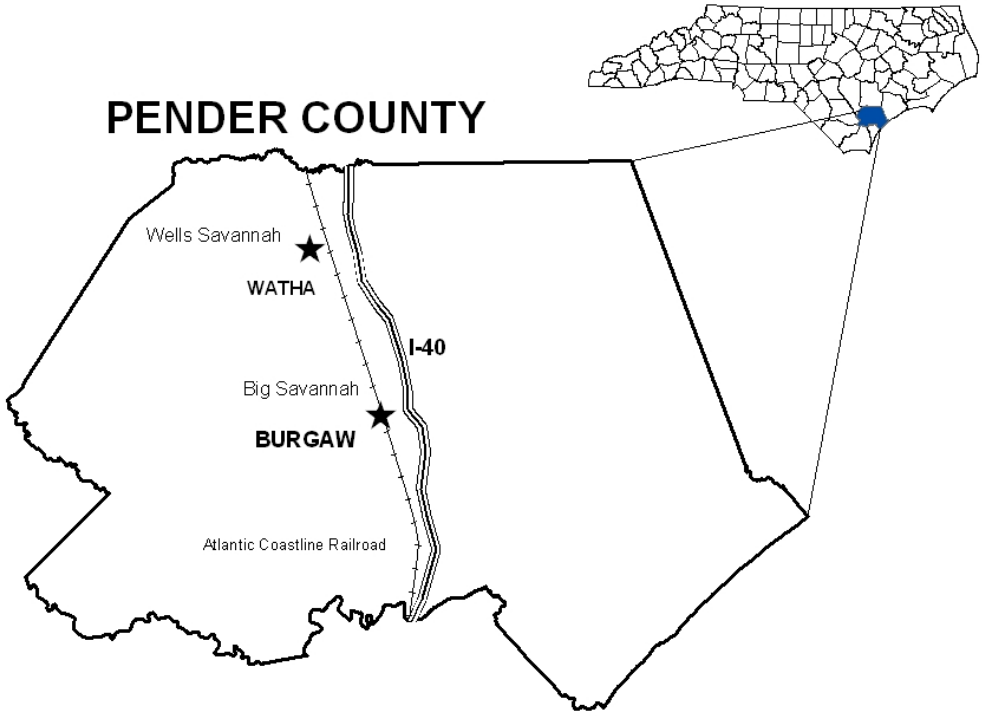

Figure 1. Location of Wells Savannah and the former Big Savannah in Pender County, North Carolina. Wells Savannah and the former Big Savannah are located near the towns of Watha and Burgaw, respectively. The stars represent the two savannas. The Atlantic Coastline Railroad once bisected the 1 500-acre Big Savannah.

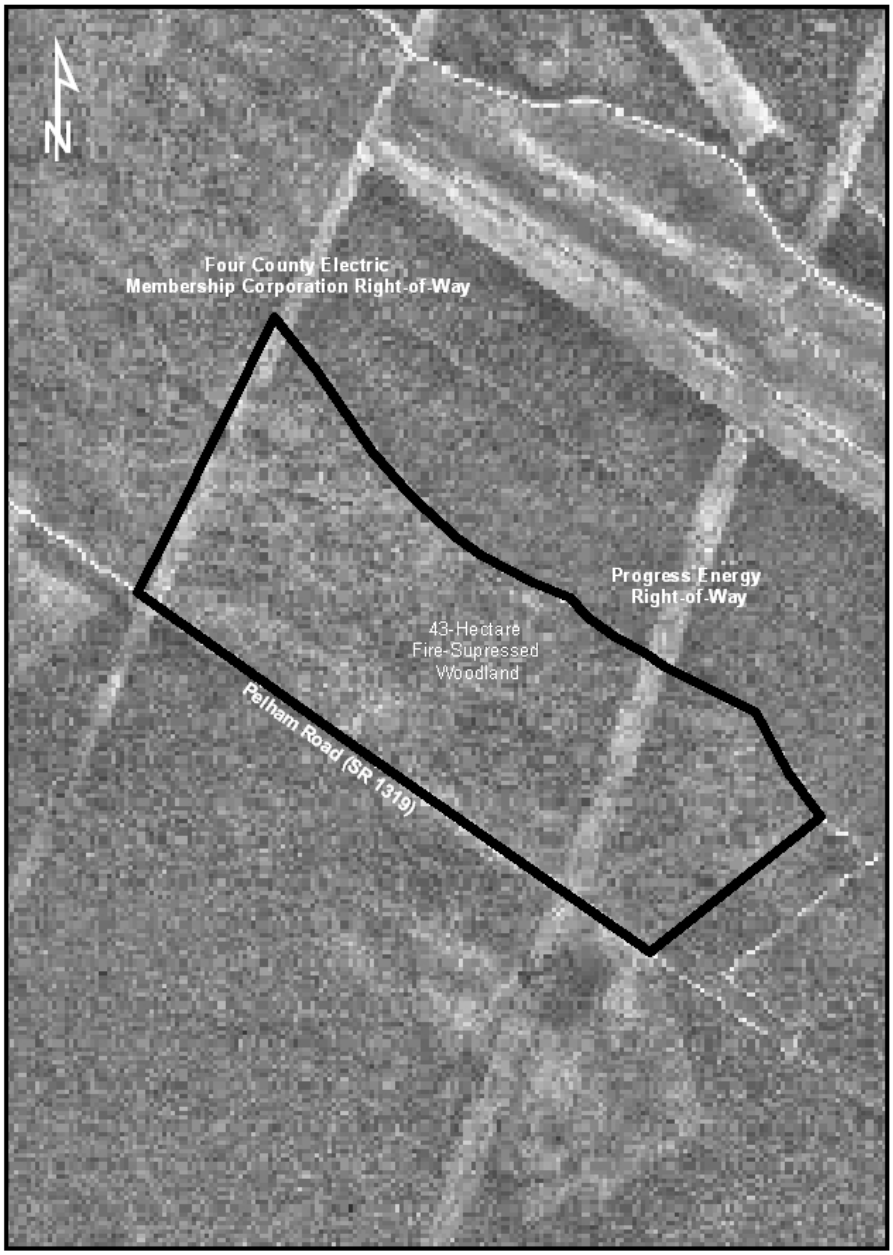

Figure 2. 1993 Aerial photograph of Wells Savannah. Wells Savannah is bordered to the south by Pelham Road. The Four County Electric Membership Corporation forms the boundary to the west. It is bordered to the east by habitat much like what exists within the woodland area.

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The site was purchased and named 'Wells Savannah' as a dedication to B.W. Wells, one of the pioneering plant ecologists working in North Carolina during the first half of the twentieth century. B.W. Wells and his colleague I.V. Shunk (1928b) conducted the first documented inventory of North Carolina Coastal Plain savannas in 1928. This study identified the area known as Big Savannah, a 1 500-acre tract in Pender County. Big Savannah was destroyed as a result of agricultural and urban land development in the late 1950s. It has been the belief that the unique plant community at Big Savannah can be attributed largely to the community's adaptation to acidic, silty soil, annual fire and seasonal saturation, often persisting for ten months or more. Wells and Shunk identified three distinct plant community associations at Big Savannah, all of which occur in small patches within the transmission line rights-of-way at WS. Although numerous savanna inventories and classifications have followed, there has yet to be a study that has identified associations matching those that Wells and Shunk first identified in 1928. WS presented an opportunity to examine and document a savanna community known to exist only in Pender County, and currently only at WS.

The purpose of this study was to document the species composition and soil attributes of WS in order to compare them with those of other savanna ecosystems found in the region. We ultimately used the comparison to determine whether reference sites exist that might provide target plant communities for restoration efforts at WS. Multivariate analyses of the data obtained at WS and at other savanna sites throughout the North Carolina Lower Coastal Plain were conducted to determine whether the plant community and soil attributes of WS are, in fact, unique. These analyses offered a means of assessing the position of WS in the group of wet savanna communities occurring in the

Lower Coastal Plain, as well as a means of determining which environmental (soil) variables are most influential in shaping the vegetation there.

The objectives of this study were to (1) Conduct a vegetation survey and describe the soils at WS, (2) Locate and survey reference sites that have species composition and soils most similar to those at WS, (3) Use ordinations to determine if WS is a unique savanna variant, and, if not unique, (4) Define a target plant community for the restoration work planned at WS.

STUDY AREA

All savannas used in this study are located in the Lower Coastal Plain Region of North Carolina. The Lower Coastal Plain is defined by the Surry (western limit) and Suffolk (eastern limit) scarps. The Lower Coastal Plain is below 29 m elevation and is characterized by wide interstream areas with very little local relief and large areas of poorly and very poorly drained soils (Daniels *et al.*, 1999). Marine sediments dominate the Lower Coastal Plain. The temperature regime is thermic, and precipitation averages 13 dm per year.

Wells Savannah

WS currently consists of two mowed transmission line rights-of-way extending northeastward from Pelham Road, and an adjacent 43-hectare fire-suppressed pond pine woodland (Fig. 2). Approximately four hectares of open savanna habitat currently exist within the two transmission line rights-of-way. Both corridors contain a diverse assemblage of native plants associated with wet pine savanna communities. In addition, the site supports a plant community much like that Wells and Shunk documented for Big

Savannah in the 1920s and 1930s. The location, soils, and plant species of WS suggest that, historically, this site could have very closely resembled Big Savannah. Both rights-of-way have been maintained by mowing since their installation.

The soil at WS, like that at Big Savannah, is of the Liddell soil series. The Liddell series is uncommon on the Lower Coastal Plain. It occurs in a continuous band that includes 9 762 ha in the northwestern portion of Pender County. A total of 10 226 ha of the series occur within the county, with the remaining 464 ha occurring in small patches throughout. The series does not occur in any of the surrounding counties. Liddell silt loam is characterized as a coarse-silty, very deep, poorly drained, moderately permeable soil found on upland areas of the Coastal Plain. It is classified as a Coarse-silty, siliceous, subactive, acid, thermic Typic Endoaquept (Barnhill, 1990). Its high content of silt and very fine sand is unique in this typically sandy-textured region of the state. The compact structure of the subsoil and flat topography act to severely retard drainage.

Holly Shelter Game Land

Six reference plots located in Holly Shelter Game Land (HSGL) were inventoried during this study. HSGL is located in southeastern Pender County. The 123 796 ha tract is owned and managed by the North Carolina Wildlife Resources Commission. Eighty percent of the area is covered by a shrub-covered peat bog with inclusions of sand believed to be remnants of Carolina Bays (Wells, 1946). The remaining 20 percent, located primarily in the southeastern corner, is occupied by flat, upland savanna communities. These savannas are managed primarily for quail by prescribed burning on a three-year rotation. Fires occur both during the growing and dormant seasons. Several savanna variants have been identified, most occurring on low, flat portions of sand ridges,

oftentimes grading into pond pine woodlands (LeGrand and Sorrie, 1997). Due to the proximity of HSGL to the Suffolk Scarp, the soils underlying these communities are much sandier than those found at WS. We identified two savanna variants described in the 1997 *Biological Inventory of Holly Shelter Game Land* (LeGrand *et al.*, 1997) from which to select reference plots. These were the 'Wet Spodosol' and 'Wet Ultisol' variants. The Spodosol variants are typically sandier, with better drainage than the Ultisol variants. Spodosol plant communities are often dominated by wiregrass (*Aristida stricta*). Ultisol plant communities tend to have less wiregrass and a more diverse herbaceous layer.

MATERIALS AND METHODS

Reference Sites

Holly Shelter Game Land

Reference sites were selected in HSGL because this area is close to WS, has soils that are similar to those of WS, and is maintained with frequent fire. Results of the *Biological Inventory of Holly Shelter Game Land* (LeGrand and Sorrie, 1997) were used to identify savanna sites within HSGL that most closely matched the soils and vegetation at WS. Site visits in March and April of 2002 were conducted to obtain profile information for the soils at six locations within HSGL. The soil characteristics (depth, color, saturation, texture) identified within the profiles were compared to those of the soils at WS. The six reference plots chosen were found to have soils similar to those at WS based on matrix color, depth to saturation, and texture.

The six reference plots are located within four savannas (SF-1, SF-2, SF-5, and SF-6) previously identified during the biological inventory conducted by the NCNHP in 1994-1996. Plots were chosen that occurred on soil series with characteristics most similar to the Liddell series. All plots within HSGL were placed within savannas underlain by Foreston, Leon, or Woodington soil series.

Carolina Vegetation Survey Database

To support our multivariate analyses, the existing Carolina Vegetation Survey (CVS) database was queried for plots with vegetation likely to be similar to that found at WS. We first limited plot selection to sites located within the following counties: Brunswick, Carteret, New Hanover, Onslow and Pender. These counties were chosen because their soils share many similarities, as treated in *Soil Systems in North Carolina* (Daniels *et al.*, 1999). Plot selection was also limited to those within the CVS database classified in the 'North Carolina Coastal Plain *Pinus palustris*' community type. The CVS database classification was developed by Richard Duncan for plots inventoried and used for a project funded by the US Forest Service. It is a hierarchical classification that breaks general community types (e.g., North Carolina Coastal Plain *Pinus palustris*) into groups more narrowly defined by dominant species. The North Carolina Coastal Plain *Pinus palustris* community type contains plots dominated by *Pinus palustris* and *Pinus serotina.* Plots from the following groups were selected (numbering system reflects assignment of categories (1) to plots at WS and (2) to plots at HSGL, respectively): (3) *Pinus palustris, Gaylussacia dumosa, Vaccinium tenellum, Aristida stricta* woodland, (4) Fire suppressed turkey oak woodland, (5) *Pinus palustris, Pinus serotina, Vaccinium crassifolium, Aristida stricta, Rhexia alifanus* woodland, (6) *Pinus palustris, Pinus*

serotina, Vaccinium crassifolium, Pleea tenuifolia, Lyonia lucida, Aristida stricta woodland, (7) *Pinus palustris, Vaccinium tenellum, Aristida stricta, Desmodium tenuifolium* woodland, (8) *Pinus serotina, Pinus palustris, Ctenium aromaticum, Muhlenbergia expansa* woodland, (9) *Pinus palustris, Gaylussacia dumosa, Aristida stricta, Liatris graminifolia* woodland, (10) *Pinus palustris, Pinus serotina, Sporobolus* sp., *Aristida stricta, Eryngium integrifolium* woodland, (11) *Pinus palustris, Pinus serotina, Sporobolus* sp., *Aristida stricta, Eryngium integrifolium* woodland, (12) *Pinus serotina, Pinus palustris, Ctenium aromaticum, Sporobolus* sp., *Eriocaulon decangulare* woodland, (13) *Pinus serotina, Pinus palustris, Ctenium aromaticum, Sporobolus* sp., *Eriocaulon decangulare* woodland, (14) *Acer rubrum, Arundinaria tecta, Ilex glabra, Aronia arbutifolia* woodland, and (15) Wet mesic longleaf pine savanna. The search resulted in 120 plots that were used to perform the multivariate analyses.

Vegetation Survey

Vegetation data were collected from WS and HSGL plots using CVS methodology (Peet *et al.*, 1998). The survey was conducted from May 31, 2002 to June 2, 2002. Six plots were placed in savannas within HSGL. Ten plots were placed within the transmission line rights-of-way at WS. Six of these were located in the larger transmission line right-of-way managed by Progress Energy, and four in the smaller transmission line right-of-way managed by Four County Electric Membership Corporation. Plot locations at both HSGL and WS were chosen based on observed differences in the plant community, microtopography, and soil characteristics. At WS, both transmission line rights-of-way are subject to frequent disturbance from both maintenance activities and public use. Because the soils at WS remain saturated

throughout much of the year, large tire ruts which pond water run through both rights-of-way. Additionally, WS also contains large swale areas that pond water and a number of old timber landings and clearings. The timber landings occur on high areas in the Four County Electric Membership Corporation right-of-way. These areas are driest and contain the most clay, whereas the saturated pools have higher silt content in the surface layers. We attempted to capture all community types when choosing plot locations.

Soil Nutrient Analysis

Soil samples were taken from each soil horizon of every plot at WS and HSGL during April of 2002. Each sample was divided into two halves at the time of sampling. One half was used for nutrient analysis, the other for particle size analysis. All soil samples for nutrient analysis were sent to Brookside Laboratory in Brookside, Ohio, which also has performed nutrient analyses for soil samples from the plots in the CVS database. The following properties were determined: Cation Exchange Capacity (CEC), pH, Organic Abundance (percentage loss on ignition), Nitrogen ppm, Sulfur ppm, Phosphorus ppm, Calcium ppm, Magnesium ppm, Potassium ppm, Sodium ppm, Boron ppm, Iron ppm, Manganese ppm, Copper ppm, Zinc ppm, Aluminum ppm, percentage Calcium in total sample, percentage Magnesium in total sample, percentage Potassium in total sample, percentage Sodium in total sample, percentage Hydrogen in total sample, Bulk Density (weight/volume), and Percentage Base Saturation.

Soil Particle Size Analysis

Particle size analyses were conducted at the North Carolina State University Soil Laboratory in August of 2002. The percentages of sand, silt, and clay were determined using the hydrometer method (Gee and Bauder, 1986).

Multivariate Analyses

Data Structure

The multivariate analyses used during this study were performed using the PC-ORD software program (McCune and Mefford, 1999). Two matrices were used to identify associations between plant compositional data and environmental variables. The first (main) matrix summarizes vegetation data. CVS assigns a study designation to all plots at the time of inventory. All plots inventoried during the study reported here begin with 49-. Plots extracted from the existing database are preceded with either 03- or 27-. The second matrix consists of environmental data for each plot. Attributes of this matrix include all soil nutrient data, percent sand, silt, and clay, county, plant community class (for CVS plots), and soil series.

Cluster Analysis

Cluster analyses were employed to define plot groups. We used a Euclidean (Pythagorean) distance measure and Ward's method for group linkage for all cluster analyses. We used an approach of successive fragmentation of the data set, similar to that employed by Peet and Christensen (1980). A cluster analysis including all 136 plots was performed to identify the overall data structure. A second cluster analysis was performed on one of the two principal subsets identified in the 136-plot analysis. This 52-plot subset included all plots from WS and HSGL, in addition to 36 CVS plots. A third cluster analysis was run on a 16-plot subset containing only WS and HSGL plots.

Non-Metric Multidimensional Scaling (NMS)

An NMS ordination was performed because of its ability to construct a low-dimensional ordination in which rank-order of inter-plot distances is as close as possible

to the rank-order of inter-plot distances in the original data. The NMS analysis was performed with two axes, 40 runs with real data, a stability criterion of 0.00001, 10 iterations, 400 maximum iterations, no step down in dimensionality, 0.20 initial step length, and varimax rotation. A Sorensen (Bray-Curtis) distance measure was used. The run with minimum stress was selected. Three NMS ordinations were performed, using each of the abovementioned datasets (136-, 52-, and 16-plot datasets). A vector overlay depicted the soil variables most closely associated with the ordinations. A 0.4 r-squared cutoff value was applied to all vectors.

Indicator Species Analysis

Indicator species analysis identifies species with high abundance and high fidelity as indicators for groupings of plots recognized using cluster analysis. The Monte-Carlo significance test (using 1000 runs) facilitated the identification of significant indicators. We have reported the strongest indicators for each analysis.

RESULTS

136-Plot Dataset

A preliminary cluster analysis (not shown) of the 136-plot dataset (120 CVS plots, ten WS plots, and six HSGL plots) revealed two distinct subsets. All 16 plots from WS and HSGL fell into one of these subsets, along with 36 of the plots extracted from the CVS database. We chose to work with this 52-plot subset for further multivariate analyses. The 52-plot subset included only plots from Pender, Brunswick, and Onslow counties, while the remaining 84 CVS plots occurred in all five counties represented in the 136-

plot dataset. The 84 CVS plots did not appear to sort by vegetation type, county, or soil series at lower levels within the hierarchy of this cluster analysis.

An NMS ordination (not shown) of the 136-plot dataset supported recognition of the two subsets revealed by the preliminary cluster analysis. The soil variable associated with the 84-plot CVS subset was higher bulk density. Indicator species for the 84-plot subset included *Aristida stricta, Pinus palustris,* and *Gaylussacia dumosa*. Higher levels of iron, aluminum, and potassium were associated with the 52-plot subset; indicator species included *Ctenium aromaticum, Coreopsis linifolia,* and *Aletris farinosa.*

52-Plot Subset

A cluster analysis of the 52-plot subset revealed that a clear distinction exists between the majority of the CVS plots and those from HSGL and WS (Fig. 3). We identified six groups within this cluster analysis for interpretive purposes. Group 1 incorporated all plots in one branch of the first cluster dichotomy and included 27 plots from the CVS database. Groups 2 through 6 were identified within the other branch of the first cluster dichotomy. Groups 2 and 3 included the remaining nine plots from the CVS database. Groups 4 and 5 included the 16 plots from WS and HSGL. WS plots were broken into two groups (4 and 5). All six HSGL plots were included within group 6. The plots in groups 3, 4, 5, and 6 were all located in Pender County. Groups 1 and 2 contained a mixture of plots from Pender, Brunswick and Onslow Counties. The CVS vegetation groups represented within the 52-plot subset were not distinctly clustered, although the CVS plots most closely associated with the WS and HSGL plots (in groups 2 and 3) were limited to vegetation groups 9, 12, 14, and 15 in Richard Duncan's classification of the CVS data. With the exception of the WS plots, which all occur on

the Liddell series, the plots in the cluster analysis of the 52-plot subset did not sort in accordance with soil series. The soil series represented within groups 2 through 6 included Foreston, Woodington, Leon, and Liddell.

The NMS ordination of the 52-plot subset supported the distinctions among the 6 groups evident in the cluster analysis (Fig. 4) of these data. Group 1, containing only CVS plots, was associated with higher bulk density in the soils. Indicator species included *Aristida stricta, Pinus palustris,* and *Gaylussacia dumosa.* Group 2, also containing only CVS plots, was associated with higher levels of phosphorus in the soils. The group did not have a strong indicator species. The single CVS plot in group 3 was associated with higher phosphorus and did not have an indicator species. Groups 4 and 5 (WS plots) were associated with higher levels of clay and iron. Indicator species for the WS plots included *Arundinaria gigantea* ssp. *tecta*, *Ctenium aromaticum, Coreopsis linifolia,* and *Aletris farinosa.* Group 6 (HSGL plots) was not associated with an environmental variable in this ordination, nor did the group have an indicator species.

16-Plot Subset

A final cluster analysis (not shown) run with just the 16 WS and HSGL plots (groups 4, 5, and 6 from the cluster analysis of the 52-plot subset) provided further support for recognition of these groups. An NMS ordination of the same 16 plots (Fig. 5) revealed strong environmental associations for each of the three groups. Group 4 (incorporating six plots from WS) was associated with higher percentage silt, whereas group 5 (incorporating the remaining four plots from WS) was associated with higher percentage clay. Indicator species for group 4 included *Rhododendron atlanticum* and *Arundinaria gigantea* ssp. *tecta.* *Andropogon mohrii, Euthamia minor,* and

Dichanthelium scabriusculum were indicators for group 5. Group 6 (incorporating the six plots from HSGL) was associated with a higher level of sodium and a higher percentage sand. Indicator species for group 6 included *Aristida stricta* and *Bigelowia nudata.*

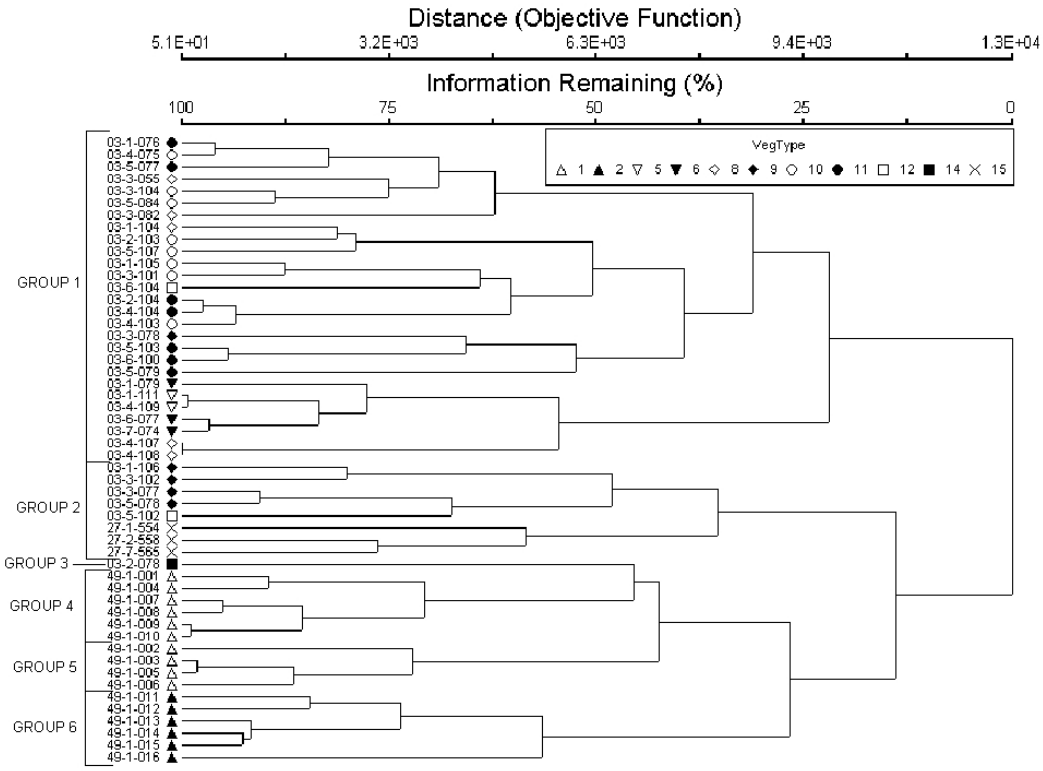

Figure 3. 52-plot cluster dendrogram identifying the vegetation types present in the subset. Group numbers are labeled on the side of the dendrogram. Groups 1, 2, and 3 contain strictly CVS plots. Groups 4 and 5 are WS plots, and group 6 contains all HSGL plots.

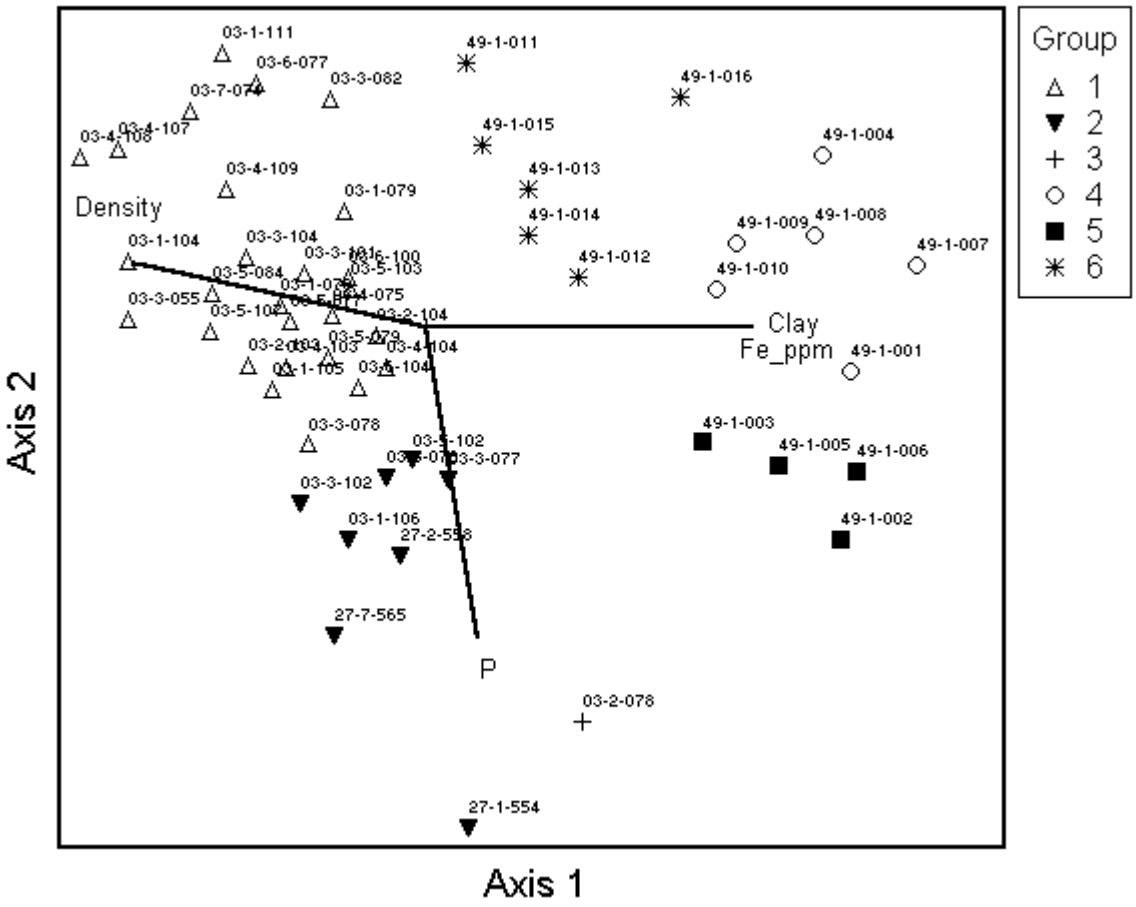

Figure 4. 52-plot NMS ordination with vector overlays. The groups defined in the cluster dendrogram are identified by six different symbols. The vectors represent environmental variables from the second matrix of the ordination that are associated with the groups.

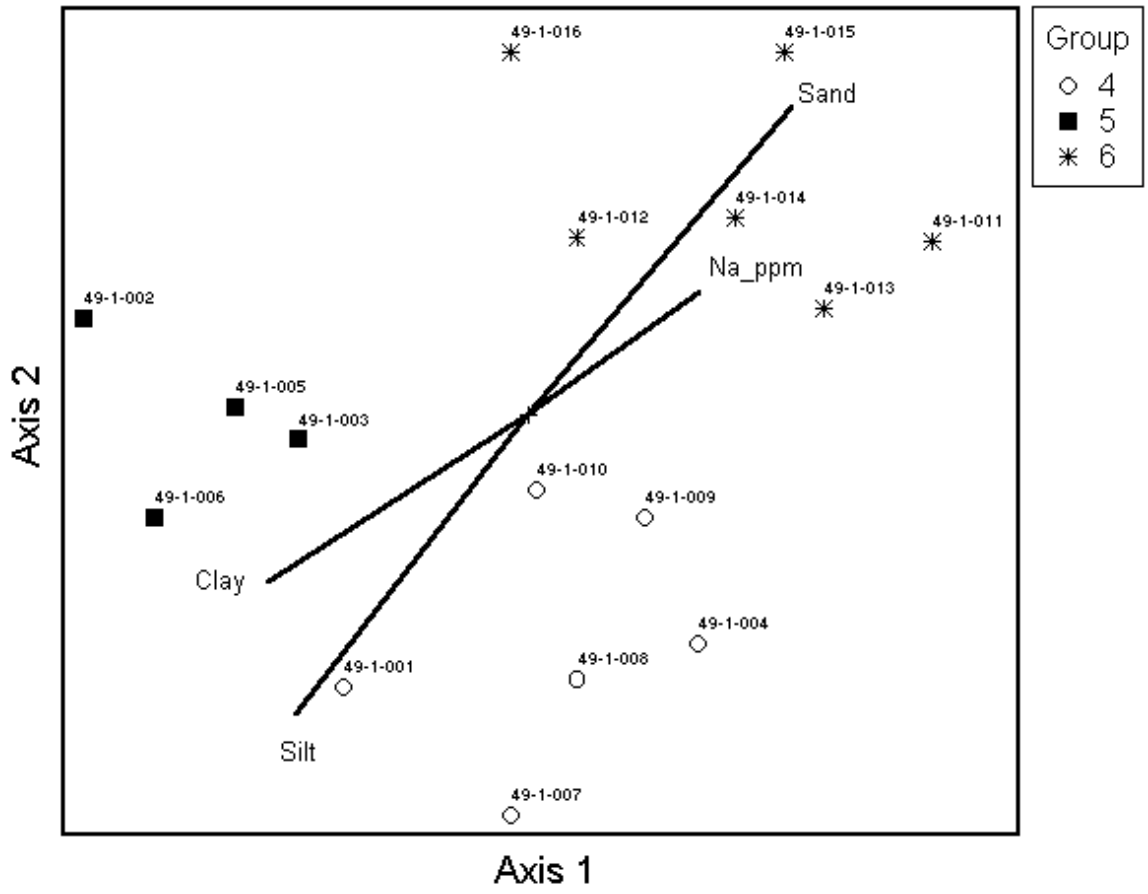

Figure 5. NMS ordination of 16 WS and HSGL plots. HSGL plots are associated with higher sand and sodium. WS plots are associated with higher silt and clay.

DISCUSSION

Geographic location (county) was more clearly associated with the two primary subsets of the full 136-plot dataset than were other plot attributes, such as vegetation group or soil series. The 52-plot subset, incorporating all plots from WS and HSGL, was restricted to Pender and Brunswick counties, with the exception of one plot located in Onslow County. As we proceeded to fragment the dataset into smaller subsets, the distinctiveness of geographic location remained evident. All plots from Brunswick County, plus the one plot from Onslow County, were restricted to groups 1 and 2 of the 52-plot subset. Groups 3, 4, 5, and 6 were comprised solely of plots from Pender County. Our findings are consistent with other reports of rapid geographic turnover in species composition in the southeastern US (White *et al.*, 2003).

The NMS ordinations indicated that the plant communities of WS are defined by soils with higher levels of silt, clay, and iron than are most other savannas on the Lower Coastal Plain of North Carolina. The ordinations also suggest that soils of other savannas in the geographic region are both sandier and denser. Bulk density appeared to be the variable most closely associated with the initial dichotomy of the 136-plot dataset; plots from the CVS database in the 84-plot subset were associated with denser soils. The indicator species analysis suggests that higher bulk density may be an indicator of drier soils. The strongest indicator species identified for the 84 CVS plots comprising this branch of the first dichotomy in the 136-plot dataset were *Aristida stricta* and *Vaccinium crassifolium*. Both species are dominants in the drier, sandier, upland, fire-maintained savannas in the region and are only facultative (FAC) wetland plants (USDA, 2002). Strong indicator species for the 52-plot subset (and ultimately for the WS plots) included

Ctenium aromaticum and *Coreopsis linifolia*. *Ctenium aromaticum* has often been regarded as an indicator species for high quality wet pine savannas (LeGrand and Sorrie, 1997). Both species are FACW wetland species (USDA, 2002). High bulk density was also identified as a variable strongly associated with plots from the CVS database in the ordination of the 52-plot subset. WS and HSGL plots were associated with higher iron and clay. Although the six HSGL plots behaved similarly to those from WS throughout most of the analyses, these plots were clearly distinguished from those at WS by sandier soils in the 16-plot ordination.

The similarity of the WS plots to our reference plots from HSGL suggests that the six reference plots represent the most comparable savanna communities inventoried thus far in the Lower Coastal Plain region. However, the fact that the HSGL plots segregated from those at WS in the 16-plot ordination indicates that these plots do not provide a viable target plant community for restoration of WS. The soils of HSGL are sandier and, most likely, drier. This is suggested by both the indicator species and the environmental variables associated with plots from the two sites. *Aristida stricta*, a FAC wetland species, was a strong indicator for plots from HSGL. The species does not occur at WS. Primary indicator species for WS included *Arundinaria gigantea* ssp. *tecta*, *Andropogon mohrii*, and *Dichanthelium scabriusculum*. Both *Andropogon mohrii* and *Dichanthelium scabriusculum* are obligate (OBL) wetland plants. *Arundinaria gigantea* ssp. *tecta* is a FACW wetland species. It thus appears that the higher levels of silt and clay in the soils at WS are associated with wetter soils. In addition, the reduction, movement, and oxidation of iron is highly associated with saturated and reduced soils (Buol *et al*., 2003). The fact that iron is abundant in the surface layers of the soil at WS suggests that this soil

is saturated to the surface more frequently and for longer periods of time than are soils of other sites included in the analyses.

Our results indicate that the best strategy for restoration of WS may be to perpetuate the community and associations already in existence within the transmission line rights-of-way. Management should act to encourage the present community to expand into the fire-suppressed woodland area.

Wet pine savannas are noted for their high species richness (Wells, 1928a; LeGrand and Sorrie, 1997; Taggart, 1990) and are often home to many rare, endangered, or endemic species. There are currently no representatives of this kind of savanna ecosystem under protection, making this preliminary study important in that it identifies a previously undescribed community type. The knowledge gained from this project will aid in the future management of WS, while offering an approach suitable for managers seeking to identify appropriate target communities for similar restoration sites. The project will also contribute to the restoration of WS, returning to Pender County a rare ecosystem of unparalleled natural beauty.

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APPENDICES

APPENDIX 1

UTM Coordinates for Plot Locations

WELLS SAVANNAH

PLOT NUMBER	EASTING	NORTHING
1	226204	3838817
2	226296	3839023
3	226290	3838971
4	226311	3839080
5	226352	3839118
6	226346	3839139
7	225680	3839625
8	225678	3839599
9	225555	3839373
10	225575	3839409
17	226318	3838926
18	226198	3839254
19	225626	3839362

HOLLY SHELTER GAME LAND

PLOT NUMBER	EASTING	NORTHING
11	248465	3812709
12	248417	3812679
13	255017	3813765
14	249873	3813765
15	249830	3813262
16	255021	3813747

APPENDIX 2

Raw Data Files
Main Matrix

Main Matrix

plotID	NC_CODE	cov
03-1-051	ANDRTER	2
03-1-051	ANDRVIRV	2
03-1-051	ARISSTR	7
03-1-051	CLEIDIV	1
03-1-051	DICHWEB	2
03-1-051	GAYLDUM	3
03-1-051	GAYLFRO	3
03-1-051	GELSSEM	1
03-1-051	HYPERED	2
03-1-051	ILEXGLA	4
03-1-051	LIATPILP	2
03-1-051	LYONMAR	3
03-1-051	MAGNVIR	2
03-1-051	MORECER	2
03-1-051	PHOTPYR	1
03-1-051	PINUPAL	7
03-1-051	PITYGRA	1
03-1-051	POLYPLM	1
03-1-051	PTERAQUP	6
03-1-051	QUERHEM	2
03-1-051	QUERICN	1
03-1-051	QUERLVS	1
03-1-051	SCLECILG	2
03-1-051	VACCCRA	4
03-1-051	VACCFUS	3
03-1-051	VACCTEN	3
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03-1-052	ACERRUB	1
03-1-052	ANDRGLO1	2
03-1-052	ANDRTER	2
03-1-052	ANDRVIRV	2
03-1-052	ARISSTR	7
03-1-052	BARTVIR	1
03-1-052	CARPBEL	1
03-1-052	CARPPAN	2
03-1-052	CARPTOM	1
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03-1-052	DICHDICE	2
03-1-052	DICHWEB	2
03-1-052	GAYLDUM	1
03-1-052	GELSSEM	2
03-1-052	GORDLAS	2
03-1-052	HYPERED	2
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03-1-052	ILEXGLA	4
03-1-052	ILEXOPAO	2
03-1-052	JUNCABO	2
03-1-052	LACHANC	2
03-1-052	LYONLUC	4
03-1-052	MAGNVIR	2
03-1-052	MORECER	2
03-1-052	NYSSSYL	3
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03-1-052	PHOTPYR	2
03-1-052	PINUPAL	7
03-1-052	PINUSER	2
03-1-052	POLYBRE	1
03-1-052	POLYLUT	2
03-1-052	RHEXALI	2
03-1-052	RHEXPET	2
03-1-052	RHYNFASF	2
03-1-052	RHYNPLU	2
03-1-052	SCLECILG	2
03-1-052	SMILLAU	1
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03-1-052	VACCFUS	3
03-1-052	VACCPAL	2
03-1-052	VACCTEN	2
03-1-052	XYRICAR	2
03-1-053	AGALSET	2
03-1-053	ANDRTER	2
03-1-053	ANDRVIRV	1
03-1-053	ARISSTR	8
03-1-053	ARUNGIGT	2
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03-1-053	CARPODO	3
03-1-053	CARPTOM	2
03-1-053	CLEIDIV	2
03-1-053	DICHDICE	1
03-1-053	DICHWEB	2
03-1-053	DIOSVIR	1
03-1-053	GAYLFRO	3
03-1-053	GENTAUT	1
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03-1-053	ILEXGLA	3
03-1-053	IONALIN	2
03-1-053	IRISVERV	2
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03-1-053	LYONMAR	3
03-1-053	MAGNVIR	2
03-1-053	MORECER	3
03-1-053	NYSSSYL	2
03-1-053	OSMUCINC	1
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03-1-053	PHOTPYR	2
03-1-053	PINUPAL	6
03-1-053	PINUSER	2
03-1-053	PITYGRA	2
03-1-053	POLYLUT	1
03-1-053	PTERAQUP	2
03-1-053	PTERPYC	2
03-1-053	RHUSCOP	2
03-1-053	RHYNPLU	2
03-1-053	SASSALB	1

03-1-053	SCLECILG	2
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03-1-053	SOLIODOO	1
03-1-053	SPIRLCRG	2
03-1-053	VACCCRA	7
03-1-053	VACCTEN	2
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03-1-056	ACERRUB	2
03-1-056	ALETFAR	2
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03-1-056	CARPBEL	2
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03-1-056	CHAMNICN	2
03-1-056	CHAPTOM	2
03-1-056	CHASLAX	2
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03-1-056	CIRSVIR	2
03-1-056	CLEIDIV	2
03-1-056	COREFAL	2
03-1-056	CORELIN	1
03-1-056	CROTPUR	2
03-1-056	DESMLIN	2
03-1-056	DESMTEN	2
03-1-056	DICHACI	2
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03-1-056	DICHOVAA	2
03-1-056	DICHSTRS	2
03-1-056	DICHWEB	2
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03-1-056	ERIGVER	2
03-1-056	EUPALEUL	2
03-1-056	EUPAMOH	2
03-1-056	EUPAPIL	2
03-1-056	EUPAROT	2
03-1-056	EURYPAL	2
03-1-056	GAMOPUR	1
03-1-056	GAYLFRO	3
03-1-056	GENTAUT	1
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03-1-056	HELIANG	2
03-1-056	HELIHET	2
03-1-056	HYPECRU	2
03-1-056	HYPESET	1
03-1-056	ILEXGLA	4
03-1-056	IONALIN	2
03-1-056	IRISVERV	2
03-1-056	LACT1S1	2
03-1-056	LESPCPT	2
03-1-056	LESPVGN	1
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03-1-056	LOBENUT	1
03-1-056	LYCOAPR	2
03-1-056	LYONLIGF	2
03-1-056	LYSILOO	2
03-1-056	LYSIQFO	2
03-1-056	MAGNVIR	1
03-1-056	MARSGRM	2
03-1-056	MORECAR	2
03-1-056	MORECER	2
03-1-056	NYSSSYL	2
03-1-056	ORBEPED2	2
03-1-056	OSMUCINC	2
03-1-056	OSMUREGS	1
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03-1-056	POLYLUT	2
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03-1-056	RHEXLUT	1
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03-1-056	RHYNFIL	1
03-1-056	RHYNRAR	1
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03-1-056	SCLETRI	1
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03-1-056	SISYCAP	2
03-1-056	SMILGLA	2
03-1-056	SMILLAU	2
03-1-056	SOLI1S1	2
03-1-056	SOLI1S2	2
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03-1-056	SYMPWAL	2
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03-1-056	TEPHSPI	2
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03-1-056	VACCFUS	4
03-1-056	VACCSTA	2
03-1-056	VACCTEN	4
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03-1-057	ANDRTER	2
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03-1-057	CARPPAN	2
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03-1-057	CLETALN	2
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03-1-057	IRISVERV	2
03-1-057	KALMCAR	4
03-1-057	LACHANC	2
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03-1-057	NYSSSYL	2
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03-1-057	SOLIRUG	1
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03-1-057	VACCTEN	2
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03-1-058	EUPAROT	1
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03-1-058	IRISVERV	2
03-1-058	LECHMIN	1
03-1-058	LESP1S1	2
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03-1-058	LESPCPT	2
03-1-058	LESPHIR	2
03-1-058	LIATPILP	2
03-1-058	LOBENUT	2
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03-1-058	PANIVIRV	2
03-1-058	PERSPLS	2
03-1-058	PHOTPYR	2
03-1-058	PINUPAL	6
03-1-058	PINUTAE	2
03-1-058	PITYGRA	2
03-1-058	PTERAQUP	3
03-1-058	PTERPYC	2
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03-1-058	RHEXALI	2
03-1-058	RHUSCOP	2
03-1-058	RHYNPLU	2
03-1-058	RUBUFLA	2
03-1-058	SCLECIL	2

03-1-058	SCLETRI	1
03-1-058	SERITOR	2
03-1-058	SMILBON	1
03-1-058	SMILGLA	2
03-1-058	SOLIODOO	2
03-1-058	STYLBIF	2
03-1-058	SYMPWAL	2
03-1-058	TEPH1S1	2
03-1-058	TEPHHIS	2
03-1-058	TRAGURE	2
03-1-058	VACCARB	2
03-1-058	VACCCRA	3
03-1-058	VACCTEN	4
03-1-058	WOODVIR	2
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03-1-059	ANDRTER	2
03-1-059	ANDRVIRV	2
03-1-059	ARISSTR	7
03-1-059	CALOTUBT	1
03-1-059	CARPODO	2
03-1-059	CARPPAN	2
03-1-059	CARPTOM	2
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03-1-059	CLEIDIV	1
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03-1-059	DICHOVAA	2
03-1-059	DICHSTRL	2
03-1-059	DICHWEB	2
03-1-059	DIOSVIR	1
03-1-059	DROSCAP	1
03-1-059	EUPAMOH	2
03-1-059	EUPAPIL	2
03-1-059	EUPAROT	1
03-1-059	EURYPAL	2
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03-1-059	GAYLFRO	5
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03-1-059	HYPECRU	2
03-1-059	HYPERED	2
03-1-059	ILEXCRC	2
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03-1-059	IRISVERV	2
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03-1-059	JUNCCAN	2
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03-1-059	LYCOALP	2
03-1-059	LYCOAPR	2
03-1-059	LYCOCARC	1
03-1-059	LYONLUC	2
03-1-059	MAGNVIR	2
03-1-059	MORECAR	2
03-1-059	MORECER	3
03-1-059	MUHLCAPT	1
03-1-059	OSMUCINC	4
03-1-059	PERSPLS	2
03-1-059	PHOTPYR	2
03-1-059	PINUPAL	4
03-1-059	PINUSER	2
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03-1-059	RHEXPET	2
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03-1-059	RHYNCIL	1
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03-1-059	VACCCRA	3
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03-1-059	XYRISP1	2
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03-1-075	ANDRTER	3
03-1-075	ARISSTR	8
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03-1-075	CNIDSTI	2
03-1-075	DICHMER	1
03-1-075	DICHOVAO	2
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03-1-075	GALAVOL	2
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03-1-075	IRISVERV	1
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03-1-075	LYONMAR	1
03-1-075	MAGNVIR	1
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03-1-075	PERSPLS	2
03-1-075	PINUPAL	2
03-1-075	PITYGRA	2
03-1-075	PTERAQUP	7
03-1-075	PTERPYC	2
03-1-075	SMILGLA	2
03-1-075	TRAGURE	2
03-1-075	VACCCRA	7
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03-1-076	AGALLIN	1
03-1-076	ALETFAR	2
03-1-076	ANDRTER	4
03-1-076	ANDRVIRV	2
03-1-076	ARISLNG	2
03-1-076	ARISSTR	7
03-1-076	ARUNGIGT	1
03-1-076	BAPTCIN	2
03-1-076	BAPTTIN	1
03-1-076	BIGENUDN	3
03-1-076	CALABRE	2
03-1-076	CALOPAL	2
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03-1-076	CARPTOM	2
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03-1-076	DESMLIN	2
03-1-076	DESMTEN	2
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03-1-076	DICHACUF	2
03-1-076	DICHDICD	2
03-1-076	DICHOVAO	2
03-1-076	DICHSTRL	2
03-1-076	DIONMUS	2
03-1-076	DIOSVIR	1
03-1-076	DROSCAP	2
03-1-076	ERIGVER	2
03-1-076	ERYNINT	2
03-1-076	EUPACAP	1
03-1-076	EUPAMOH	2
03-1-076	EUPAROT	2
03-1-076	EURYPAL	2
03-1-076	FIMBPUB	2
03-1-076	GAYLFRO	3
03-1-076	GYMNBRE	2
03-1-076	HELIHET	2
03-1-076	HYPECRU	2
03-1-076	HYPOHIR	2
03-1-076	ILEXGLA	4
03-1-076	IONALIN	1
03-1-076	IRISVERV	2
03-1-076	LACHANC	2
03-1-076	LINUFLO	1
03-1-076	LINUMEDT	2
03-1-076	LIQUSTY	1
03-1-076	LOBENUT	2
03-1-076	LYCOALP	2
03-1-076	LYONLIGF	2
03-1-076	LYONMAR	2
03-1-076	LYSILOO	1
03-1-076	MAGNVIR	2
03-1-076	MORECAR	2
03-1-076	MORECER	2
03-1-076	MUHLCAPT	6
03-1-076	OSMUCINC	1
03-1-076	PERSPLS	1
03-1-076	PHOTPYR	2
03-1-076	PINGCAE	2
03-1-076	PINUPAL	6
03-1-076	PINUSER	2
03-1-076	PITYGRA	4
03-1-076	POLYBRE	2
03-1-076	POLYLUT	2
03-1-076	PTERAQUP	1
03-1-076	QUERFLC	1
03-1-076	RHEXALI	2
03-1-076	RHEXPET	1
03-1-076	RHYNBAL	1
03-1-076	RHYNCHP	1
03-1-076	RHYNPLU	2
03-1-076	SABADIF	1
03-1-076	SARRFLA	1
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03-1-076	SCLECIL	1
03-1-076	SCLEMIN	2
03-1-076	SERILIN	2
03-1-076	SEYMCAS	1
03-1-076	SISYCAP	2
03-1-076	SMILGLA	2
03-1-076	SMILROT	1
03-1-076	SOLIPLC	2
03-1-076	SPIRPRA	1
03-1-076	SPORPIN	2
03-1-076	SYMPDUM1	2
03-1-076	SYMPWAL	1
03-1-076	TEPHHIS	2
03-1-076	TRIARAC	1
03-1-076	VACCCRA	2
03-1-076	VACCFOR	2
03-1-076	VACCFUS	2
03-1-076	VACCTEN	2
03-1-076	VIOLXPR	2
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03-1-076	XYRIAMB	2
03-1-076	XYRICAR	2
03-1-076	ZIGADEN	1
03-1-076	ZIGAGLB	1
03-1-078	ANDRGLA	2
03-1-078	ANDRTER	2
03-1-078	ARISSTR	7
03-1-078	CARPBEL	2
03-1-078	CARPPAN	2
03-1-078	CYRIRAC	7
03-1-078	DICHWEB	1
03-1-078	HYPERED	4
03-1-078	ILEXGLA	2

03-1-078	LYONLUC	6
03-1-078	LYONMAR	3
03-1-078	PERSPLS	2
03-1-078	PINUPAL	6
03-1-078	PINUSER	6
03-1-078	QUERHEM	2
03-1-078	RHYNPLU	2
03-1-078	SEYMCAS	2
03-1-078	SMILAUR	2
03-1-078	VACCCRA	7
03-1-078	VACCFUS	2
03-1-078	VACCTEN	2
03-1-078	XYRIAMB	2
03-1-078	XYRICAR	2
03-1-079	ACERRUB	2
03-1-079	ALETFAR	2
03-1-079	ANDRGLA	2
03-1-079	ANDRTER	2
03-1-079	ANDRVIRV	2
03-1-079	ARISPURV	2
03-1-079	ARISSTR	3
03-1-079	ARUNGIGT	2
03-1-079	BIGENUDN	2
03-1-079	CALABRE	2
03-1-079	CALOPAL	2
03-1-079	CARE1S1	2
03-1-079	CARPODO	2
03-1-079	CARPPAN	2
03-1-079	CLEIDIV	2
03-1-079	CORELIN	2
03-1-079	CTENARO	2
03-1-079	DICHTEN	2
03-1-079	DIONMUS	2
03-1-079	DROSCAP	2
03-1-079	ERIOCOM	2
03-1-079	EURYPAL	2
03-1-079	GAYLDUM	4
03-1-079	GAYLFRO	2
03-1-079	HYPECRU	2
03-1-079	HYPOHIR	2
03-1-079	ILEXGLA	5
03-1-079	JUNC1S1	2
03-1-079	LACHANC	2
03-1-079	LIATPILP	2
03-1-079	LYCOALP	2
03-1-079	LYONLIGF	2
03-1-079	LYONLUC	2
03-1-079	LYONMAR	2
03-1-079	MAGNVIR	4
03-1-079	MORECAR	5
03-1-079	MORECER	2
03-1-079	OSMUCINC	2
03-1-079	OXYPTER	2
03-1-079	PERSPLS	2
03-1-079	PHOTPYR	2
03-1-079	PINUPAL	4
03-1-079	PINUSER	5
03-1-079	PLAT1S1	2
03-1-079	PLEETEN	4
03-1-079	POGOOPH	2
03-1-079	POLYLUT	2
03-1-079	PTERAQUP	2
03-1-079	RHEXALI	2
03-1-079	RHEXPET	2
03-1-079	RHODATL	2
03-1-079	RHYNBAL	2
03-1-079	RHYNCIL	2
03-1-079	RHYNFASF	2
03-1-079	RHYNPLU	2
03-1-079	SARRFLA	2
03-1-079	SARRPUR3	2
03-1-079	SERILIN	2
03-1-079	SMILGLA	2
03-1-079	SMILLAU	2
03-1-079	SPORPIN	9
03-1-079	UNK1 2	
03-1-079	VACCCRA	3
03-1-079	VACCFUS	2
03-1-079	VACCTEN	2
03-1-079	WOODVIR	2
03-1-079	XYRIAMB	2
03-1-079	XYRICAR	2
03-1-079	ZIGADEN	2
03-1-079	ZIGAGLB	3
03-1-081	ANDRGLA	2
03-1-081	ANDRTER	2
03-1-081	ARISSTR	7
03-1-081	BALDUNI	1
03-1-081	CARP1S1	1
03-1-081	CARPBEL	2
03-1-081	CARPPAN	1
03-1-081	CARPTOM	2
03-1-081	DICHDICD	2
03-1-081	FIMBPUB	2
03-1-081	GALAVOL	1
03-1-081	GAYLDUM	6
03-1-081	GAYLFRO	1
03-1-081	GORDLAS	2
03-1-081	HELIHET	2
03-1-081	HYPERED	2
03-1-081	ILEXGLA	3
03-1-081	IRISVERV	1
03-1-081	LACHANC	2
03-1-081	LEIOBUX	2
03-1-081	LIATPILP	2
03-1-081	LYONMAR	4
03-1-081	MORECER	2
03-1-081	PERSPLS	2
03-1-081	PINUPAL	7
03-1-081	PINUSER	2
03-1-081	PITYGRA	2
03-1-081	POLYPLM	2
03-1-081	PYXIBAR	2
03-1-081	QUERGEM	2

03-1-081	QUERLVS	5
03-1-081	RHYNGRY	1
03-1-081	SMILLAU	2
03-1-081	STIPSETS	1
03-1-081	VACCCRA	4
03-1-081	VACCTEN	3
03-1-081	XYRICAR	2
03-1-082	AMPHPUR	2
03-1-082	ANDRGLA	2
03-1-082	ANDRGLO1	3
03-1-082	ANDRTER	3
03-1-082	ARISPURV	2
03-1-082	ARISSTR	7
03-1-082	ARUNGIGT	4
03-1-082	BIGENUDN	1
03-1-082	CARESTTB	2
03-1-082	CARPODO	2
03-1-082	CARPPAN	2
03-1-082	CLEIDIV	2
03-1-082	DICHDICD	2
03-1-082	DICHDICE	2
03-1-082	DICHDICM	3
03-1-082	DICHWEB	2
03-1-082	DIONMUS	2
03-1-082	DROSCAP	1
03-1-082	EUPA1S1	1
03-1-082	EUPAPIL	2
03-1-082	EURYPAL	2
03-1-082	GAYLDUM	3
03-1-082	GAYLFRO	4
03-1-082	HYPECIS	2
03-1-082	HYPECRU	2
03-1-082	ILEXCRC	2
03-1-082	ILEXGLA	3
03-1-082	ILEXMYR	1
03-1-082	IRISVERV	2
03-1-082	LYONLIGF	4
03-1-082	LYSILOO	2
03-1-082	MAGNVIR	2
03-1-082	MORECAR	2
03-1-082	MORECER	4
03-1-082	OSMUCINC	4
03-1-082	PERSPLS	2
03-1-082	PHOTPYR	2
03-1-082	PINUSER	2
03-1-082	PITYGRA	2
03-1-082	PLAT1S1	1
03-1-082	POLYBRE	1
03-1-082	POLYLUT	2
03-1-082	PTERAQUP	2
03-1-082	RHEXALI	2
03-1-082	RHEXPET	2
03-1-082	RHODVIS	4
03-1-082	RHYNBAL	2
03-1-082	RHYNCHL	2
03-1-082	RHYNCIL	3
03-1-082	RHYNFASF	2
03-1-082	RHYNPAL	2
03-1-082	SABADIF	1
03-1-082	SARRFLA	2
03-1-082	SARRPUR3	2
03-1-082	SMILGLA	2
03-1-082	SMILLAU	2
03-1-082	SOLIPLC	2
03-1-082	TRIARAC	2
03-1-082	UTRISUB	2
03-1-082	VACCCRA	6
03-1-082	VACCFUS	2
03-1-082	VACCTEN	3
03-1-082	WOODVIR	3
03-1-082	XYRIAMB	2
03-1-082	XYRICAR	2
03-1-082	ZIGADEN	2
03-1-082	ZIGAGLB	2
03-1-086	AMORHERH	4
03-1-086	ANDRTER	2
03-1-086	ARISSTR	6
03-1-086	CARPODO	3
03-1-086	CIRSREP	2
03-1-086	CNIDSTI	2
03-1-086	DICHACI	2
03-1-086	DICHCHA	2
03-1-086	DICHOVAA	2
03-1-086	DIOSVIR	3
03-1-086	EUPHIPE	1
03-1-086	GALAVOL	2
03-1-086	GAYLDUM	8
03-1-086	GYMNBRE	2
03-1-086	HIERMAR	2
03-1-086	HYPEHYP	2
03-1-086	ILEXGLA	5
03-1-086	IONALIN	2
03-1-086	LESPHIR	2
03-1-086	LIATPILP	3
03-1-086	MORECER	2
03-1-086	PINUPAL	6
03-1-086	PINUSER	4
03-1-086	PITYGRA	2
03-1-086	PTERAQUP	2
03-1-086	PTERPYC	2
03-1-086	QUERGEM	2
03-1-086	QUERLVS	2
03-1-086	RHYNPLU	1
03-1-086	SCLECIL1	2
03-1-086	SERITOR	2
03-1-086	SOLI1S1	2
03-1-086	SOLIODOO	2
03-1-086	SPIRLCRG	2
03-1-086	STYLBIF	1
03-1-086	SYMPWAL	2
03-1-086	TEPHHIS	2
03-1-086	TRAGURE	2
03-1-086	VACCCRA	2
03-1-086	VACCTEN	5

03-1-104	ALETFAR	2
03-1-104	AMORHERH	2
03-1-104	ANDR1S1	4
03-1-104	ARISSTR	6
03-1-104	BAPTTIN	2
03-1-104	BIGENUDN	2
03-1-104	CARPTOM	3
03-1-104	CHAPTOM	1
03-1-104	CIRSLEC	1
03-1-104	CLEIDIV	2
03-1-104	CORELIN	2
03-1-104	CROTPUR	2
03-1-104	CTENARO	2
03-1-104	DESMLIN	2
03-1-104	DESMTEN	2
03-1-104	DICHDICE	2
03-1-104	DICHDICM	1
03-1-104	DICHSTRS	2
03-1-104	DIONMUS	2
03-1-104	ERIGVER	2
03-1-104	ERYNINT	2
03-1-104	EUPACAP	2
03-1-104	EUPALEUL	2
03-1-104	EUPAROT	2
03-1-104	EUPHCRL	1
03-1-104	EUPHCUR	2
03-1-104	FIMBPUB	2
03-1-104	GAYLDUM	2
03-1-104	GAYLFRO	2
03-1-104	GYMNBRE	2
03-1-104	HELIHET	2
03-1-104	HYPECRU	1
03-1-104	HYPEHYP	1
03-1-104	HYPOSES	2
03-1-104	HYPOWRI	2
03-1-104	ILEXGLA	2
03-1-104	IRISVERV	2
03-1-104	LESPCPT	2
03-1-104	LIAT1S1	2
03-1-104	LILICAT	2
03-1-104	LINUFLO	1
03-1-104	LOBENUT	2
03-1-104	LUDWVIR	2
03-1-104	MAGNVIR	1
03-1-104	MORECER	1
03-1-104	MUHLCAPT	2
03-1-104	PHOTPYR	2
03-1-104	PINUPAL	7
03-1-104	PINUTAE	1
03-1-104	PITYGRA	4
03-1-104	POLYHOO	1
03-1-104	POLYLUT	2
03-1-104	PRENAUT	2
03-1-104	RHEXALI	2
03-1-104	RHEXLUT	2
03-1-104	RHYNBRE	2
03-1-104	RHYNPLU	3
03-1-104	SCLEMIN	1
03-1-104	SCLEPAUP	2
03-1-104	SISYCAP	2
03-1-104	SPORPIN	7
03-1-104	STYLBIF	2
03-1-104	SYMPWAL	2
03-1-104	TEPHHIS	2
03-1-104	UNK1 2	
03-1-104	VACCCRA	2
03-1-104	VACCFUS	2
03-1-104	VACCTEN	2
03-1-104	VIOLSPL	2
03-1-104	XYRICAR	2
03-1-105	ACERRUB	1
03-1-105	ALETFAR	2
03-1-105	ANDR1S1	5
03-1-105	ANDRGLA	1
03-1-105	ANDRGLO1	1
03-1-105	ANDRMOH	2
03-1-105	ARNOOVA	1
03-1-105	ARUNGIGT	2
03-1-105	ASCLLON	1
03-1-105	BIGENUDN	2
03-1-105	CALOBAR	1
03-1-105	CALOPAL	1
03-1-105	CALOTUBT	1
03-1-105	CARPPAN	2
03-1-105	CARPTOM	2
03-1-105	CHAPTOM	2
03-1-105	CIRSLEC	2
03-1-105	CLEIDIV	2
03-1-105	COREFAL	2
03-1-105	CORELIN	3
03-1-105	CTENARO	2
03-1-105	DICHSTRL	2
03-1-105	DICHWEB	4
03-1-105	DIONMUS	2
03-1-105	DROSCAP	2
03-1-105	ERIGVER	3
03-1-105	ERIODECD	1
03-1-105	ERYNINT	2
03-1-105	EUPAALB	1
03-1-105	EUPALEUL	2
03-1-105	EUPAROT	1
03-1-105	EURYPAL	2
03-1-105	FIMBPUB	2
03-1-105	GAYLDUM	2
03-1-105	GAYLFRO	3
03-1-105	GYMNBRE	2
03-1-105	HELIANG	2
03-1-105	HELIHET	2
03-1-105	HYPECRU	2
03-1-105	HYPERED	2
03-1-105	HYPOHIR	1
03-1-105	ILEXGLA	3
03-1-105	LACHANC	1
03-1-105	LIAT1S1	2

03-1-105	LIATSPI	2
03-1-105	LOBENUT	2
03-1-105	LUDWVIR	1
03-1-105	LYCOALP	2
03-1-105	MAGNVIR	2
03-1-105	MORECAR	1
03-1-105	MUHLCAPT	4
03-1-105	NYSSSYL	1
03-1-105	PERSPLS	2
03-1-105	PHOTPYR	2
03-1-105	PINUPAL	6
03-1-105	PINUSER	1
03-1-105	PITYGRA	4
03-1-105	PLAT1S1	1
03-1-105	POLYHOO	2
03-1-105	POLYLUT	2
03-1-105	POLYRMA	1
03-1-105	PTERAQUP	6
03-1-105	RHEX1S1	2
03-1-105	RHEXALI	2
03-1-105	RHEXLUT	1
03-1-105	RHYNBAL	1
03-1-105	RHYNLAT	2
03-1-105	RHYNPLU	2
03-1-105	SABADIF	1
03-1-105	SARRFLA	1
03-1-105	SCLECIL	1
03-1-105	SEYMCAS	2
03-1-105	SISYCAP	2
03-1-105	SMILLAU	2
03-1-105	SMILROT	2
03-1-105	SOLIGRC	1
03-1-105	SOLIPLC	2
03-1-105	SOLISTC	2
03-1-105	SPIR1S1	2
03-1-105	SPORPIN	8
03-1-105	SYMPDUM1	2
03-1-105	SYMPTIN	1
03-1-105	VACCCRA	1
03-1-105	VACCFOR	1
03-1-105	VACCTEN	2
03-1-105	VIOLXPR	1
03-1-105	WOODVIR	6
03-1-105	XYRIAMB	2
03-1-105	XYRICAR	2
03-1-106	ACERRUB	2
03-1-106	ANDR1S1	4
03-1-106	ANDRGLA	1
03-1-106	ARISPAL	2
03-1-106	ARNOOVA	2
03-1-106	ASCLLON	1
03-1-106	BIGENUDN	2
03-1-106	CALOPAL	1
03-1-106	CAMPRAD	2
03-1-106	CARESTTB	2
03-1-106	CARPODO	1
03-1-106	CARPPAN	2
03-1-106	CARPTOM	2
03-1-106	CENTASI	2
03-1-106	CHAPTOM	2
03-1-106	CHIOVIR	1
03-1-106	CIRSVIR	2
03-1-106	CORELIN	2
03-1-106	CTENARO	6
03-1-106	CYRIRAC	2
03-1-106	DICH1S1	2
03-1-106	DICH1S2	2
03-1-106	DICH1S3	1
03-1-106	DICHCHA	2
03-1-106	DICHLON	2
03-1-106	DICHOVAA	2
03-1-106	DIONMUS	2
03-1-106	DIOSVIR	1
03-1-106	DROSCAP	2
03-1-106	ERIGVER	2
03-1-106	ERIODECD	2
03-1-106	ERYNINT	1
03-1-106	EUPALEUL	2
03-1-106	FIMBPUB	2
03-1-106	GAYLDUM	2
03-1-106	HELIANG	1
03-1-106	HELIHET	2
03-1-106	HYPE1S1	2
03-1-106	HYPEGAL	1
03-1-106	HYPEHYP	2
03-1-106	HYPERED	2
03-1-106	ILEXCRC	2
03-1-106	ILEXGLA	5
03-1-106	IRISPRI	2
03-1-106	LACHANC	2
03-1-106	LACHCAR	2
03-1-106	LINUFLO	2
03-1-106	LIQUSTY	1
03-1-106	LOBENUT	1
03-1-106	LUDWVIR	2
03-1-106	LYCOALP	2
03-1-106	LYCOAPR	1
03-1-106	LYONLUC	2
03-1-106	MAGNVIR	3
03-1-106	MORECAR	5
03-1-106	MORECER	4
03-1-106	MUHLCAPT	6
03-1-106	NYSSSYL	2
03-1-106	OSMUREGS	2
03-1-106	OXYPFIL	1
03-1-106	PANIVIRV	2
03-1-106	PERSPLS	2
03-1-106	PHOTPYR	2
03-1-106	PINUPAL	2
03-1-106	PINUSER	2
03-1-106	POLYHOO	1
03-1-106	POLYLUT	2
03-1-106	POLYRMA	2
03-1-106	PYCNFLE	2

03-1-106	QUERNIG	2
03-1-106	RHEX1S1	2
03-1-106	RHEXALI	2
03-1-106	RHEXLUT	2
03-1-106	RHUSCOP	2
03-1-106	RHYN1S1	2
03-1-106	RHYN1S2	2
03-1-106	RHYNCIL	2
03-1-106	RHYNLAT	1
03-1-106	RHYNOLI	2
03-1-106	RHYNPLU	2
03-1-106	RUBU1S1	2
03-1-106	SABADIF	2
03-1-106	SACCGIG	2
03-1-106	SARRFLA	2
03-1-106	SARRPUR3	2
03-1-106	SCLE1S1	1
03-1-106	SISYCAP	2
03-1-106	SMILGLA	2
03-1-106	SMILLAU	2
03-1-106	SOLI1S1	2
03-1-106	SPIRPRA	2
03-1-106	SPORTER	7
03-1-106	SYMPWAL	1
03-1-106	TAXOASC	2
03-1-106	TOXIRAD	2
03-1-106	UNK1 2	
03-1-106	VACCCRA	2
03-1-106	VACCFOR	2
03-1-106	VACCFUS	2
03-1-106	WOODVIR	2
03-1-106	XYRIAMB	2
03-1-106	XYRIBAL	2
03-1-106	XYRICAR	1
03-1-106	ZIGADEN	2
03-1-110	ANDR1S1	2
03-1-110	ARISSTR	7
03-1-110	CARPPAN	2
03-1-110	CLETALN	4
03-1-110	DICHWEB	1
03-1-110	DIOSVIR	2
03-1-110	GAYLDUM	4
03-1-110	GAYLFRO	1
03-1-110	GELSSEM	2
03-1-110	HYPERED	2
03-1-110	ILEXCRC	2
03-1-110	ILEXGLA	5
03-1-110	ILEXMYR	1
03-1-110	ILEXOPAO	1
03-1-110	IRISVERV	2
03-1-110	LIATPILP	1
03-1-110	LYONLUC	3
03-1-110	LYONMAR	3
03-1-110	MAGNVIR	4
03-1-110	MORECER	2
03-1-110	NYSSSYL	1
03-1-110	PERSPLS	2
03-1-110	PHOTPYR	2
03-1-110	PINUPAL	7
03-1-110	PINUSER	2
03-1-110	PYXIBAR	2
03-1-110	RHEXALI	2
03-1-110	RHODATL	1
03-1-110	SMILGLA	2
03-1-110	VACCCRA	7
03-1-110	VACCFOR	2
03-1-110	VACCTEN	4
03-1-110	XYRICAR	2
03-1-111	ACERRUB	1
03-1-111	ANDR1S1	2
03-1-111	ANDRGLA	2
03-1-111	ARISSTR	2
03-1-111	CARPPAN	2
03-1-111	CARPTOM	1
03-1-111	CLEIDIV	2
03-1-111	CORELIN	1
03-1-111	CYRIRAC	2
03-1-111	DICHACI	2
03-1-111	DICHSTRS	1
03-1-111	DROSCAP	1
03-1-111	EUPAPIL	1
03-1-111	EUPHCUR	2
03-1-111	EUTHCAR	1
03-1-111	GAYLDUM	4
03-1-111	GAYLFRO	2
03-1-111	GELSSEM	1
03-1-111	HYPERED	2
03-1-111	ILEXCRC	2
03-1-111	ILEXGLA	5
03-1-111	IRISVERV	2
03-1-111	KALMCAR	1
03-1-111	LEUCRAC	2
03-1-111	LYONLIGF	2
03-1-111	LYONMAR	2
03-1-111	MAGNVIR	3
03-1-111	MORECER	2
03-1-111	NYSSSYL	1
03-1-111	OSMUCINC	1
03-1-111	PERSPLS	2
03-1-111	PHOTPYR	2
03-1-111	PINUPAL	7
03-1-111	PINUSER	5
03-1-111	PITYGRA	2
03-1-111	PLEETEN	2
03-1-111	POLYLUT	1
03-1-111	PTERAQUP	2
03-1-111	RHEXALI	2
03-1-111	RHYN1S1	1
03-1-111	RHYNPLU	1
03-1-111	SCLECILG	2
03-1-111	SCLETRI	1
03-1-111	SMILGLA	2
03-1-111	SMILLAU	2
03-1-111	SOLIPLC	2

03-1-111	SOLISTC	2
03-1-111	SPORPIN	8
03-1-111	TEPHHIS	1
03-1-111	VACCCRA	7
03-1-111	VACCFOR	2
03-1-111	VACCTEN	4
03-1-111	WOODVIR	1
03-1-111	XYRICAR	2
03-1-114	AGALSET	2
03-1-114	AMEL1S1	2
03-1-114	ANDRVIRV	2
03-1-114	ARISSTR	8
03-1-114	ARUNGIGT	2
03-1-114	CARPBEL	2
03-1-114	CARPODO	1
03-1-114	CARPPAN	2
03-1-114	CARPTOM	2
03-1-114	DESMSTR	2
03-1-114	DICHDICE	1
03-1-114	DICHLNC	1
03-1-114	GALAVOL	2
03-1-114	GAYLDUM	3
03-1-114	GAYLFRO	4
03-1-114	HYPERED	1
03-1-114	ILEXCRC	2
03-1-114	ILEXGLA	4
03-1-114	IONALIN	2
03-1-114	IRISVERV	1
03-1-114	LYONLIGF	2
03-1-114	LYONLUC	2
03-1-114	LYONMAR	4
03-1-114	MAGNVIR	2
03-1-114	MONOUNI	2
03-1-114	MORECER	4
03-1-114	PERSPLS	2
03-1-114	PHOTPYR	2
03-1-114	PINUPAL	4
03-1-114	PINUSER	2
03-1-114	PITYGRA	2
03-1-114	PTERAQUP	4
03-1-114	QUERHEM	2
03-1-114	QUERNIG	2
03-1-114	RHYNFASF	1
03-1-114	RHYNPLU	2
03-1-114	SCLECILG	2
03-1-114	SMILGLA	1
03-1-114	SOLIODOO	1
03-1-114	VACCCRA	2
03-1-114	VACCFOR	2
03-1-114	VACCTEN	4
03-1-114	XYRICAR	1
03-2-050	ANDRTER	2
03-2-050	ARISSTR	6
03-2-050	CARPPAN	2
03-2-050	CARPTOM	2
03-2-050	GAYLDUM	3
03-2-050	HYPERED	1
03-2-050	ILEXGLA	2
03-2-050	ILEXMYR	2
03-2-050	IONALIN	1
03-2-050	LIATPILP	2
03-2-050	LYONMAR	3
03-2-050	MAGNVIR	1
03-2-050	MORECER	2
03-2-050	PINUPAL	6
03-2-050	PINUSER	1
03-2-050	PITYGRA	2
03-2-050	POLYLUT	1
03-2-050	PTERAQUP	2
03-2-050	PYXIBAR	2
03-2-050	QUERICN	1
03-2-050	QUERLVS	2
03-2-050	RHYNPLU	1
03-2-050	SCLECILG	2
03-2-050	SERITOR	2
03-2-050	VACCCRA	2
03-2-050	VACCTEN	4
03-2-050	XYRICAR	2
03-2-051	ANDRTER	3
03-2-051	ARISSTR	7
03-2-051	DICHWEB	2
03-2-051	GALAVOL	2
03-2-051	GAYLDUM	4
03-2-051	GAYLFRO	2
03-2-051	HYPERED	2
03-2-051	ILEXGLA	2
03-2-051	ILEXMYR	2
03-2-051	LIATPILP	2
03-2-051	LYONLUC	2
03-2-051	MAGNVIR	1
03-2-051	MORECER	3
03-2-051	NYSSSYL	2
03-2-051	PINUPAL	6
03-2-051	PITYGRA	2
03-2-051	QUERGEM	1
03-2-051	QUERHEM	2
03-2-051	QUERICN	2
03-2-051	QUERLVS	2
03-2-051	QUERNIG	2
03-2-051	QUERXSI	1
03-2-051	SERITOR	2
03-2-051	VACC1S1	4
03-2-051	VACCCRA	2
03-2-051	VACCFUS	1
03-2-051	VACCTEN	3
03-2-053	ANDRTER	2
03-2-053	ARISSTR	2
03-2-053	CARPBEL	2
03-2-053	CARPODO	2
03-2-053	CIRSREP	1
03-2-053	CLETALN	3
03-2-053	DICHWEB	1
03-2-053	DIOSVIR	3
03-2-053	EUPAROT	1

03-2-053	EUPHIPE	1
03-2-053	GALAVOL	2
03-2-053	GAYLDUM	1
03-2-053	GAYLFRO	4
03-2-053	GELSSEM	1
03-2-053	ILEXGLA	2
03-2-053	IONALIN	1
03-2-053	IRISVERV	1
03-2-053	LIATPILP	2
03-2-053	MAGNVIR	2
03-2-053	MORECER	2
03-2-053	PERSPLS	2
03-2-053	PINUPAL	7
03-2-053	PITYGRA	2
03-2-053	QUERFLC	2
03-2-053	QUERLVS	4
03-2-053	QUERSTE	2
03-2-053	SASSALB	2
03-2-053	SERITOR	1
03-2-053	SMILGLA	1
03-2-053	SMILROT	1
03-2-053	SOLIODOO	2
03-2-053	SYMPTIN	2
03-2-053	VACCCRA	4
03-2-053	VACCSTA	4
03-2-053	VACCTEN	6
03-2-055	ACERRUB	3
03-2-055	ANDRVIRV	2
03-2-055	ARISSTR	2
03-2-055	ARUNGIGT	4
03-2-055	CARPODO	1
03-2-055	CARPTOM	1
03-2-055	CLEIDIV	1
03-2-055	EUPAPIL	1
03-2-055	GALAVOL	2
03-2-055	GAULPRO	3
03-2-055	GAYLDUM	3
03-2-055	GAYLFRO	6
03-2-055	GELSSEM	2
03-2-055	GENTAUT	1
03-2-055	ILEXCRC	2
03-2-055	ILEXGLA	4
03-2-055	IRISVERV	2
03-2-055	LYONLIGF	2
03-2-055	LYONLUC	3
03-2-055	LYONMAR	2
03-2-055	MAGNVIR	2
03-2-055	MORECER	2
03-2-055	NYSSSYL	2
03-2-055	PERSPLS	2
03-2-055	PHOTPYR	2
03-2-055	PINUPAL	6
03-2-055	PITYGRA	2
03-2-055	PTERAQUP	6
03-2-055	RHEXALI	2
03-2-055	RHODATL	2
03-2-055	SCLE1S1	2
03-2-055	SMILGLA	2
03-2-055	SMILLAU	2
03-2-055	SYMPTIN	2
03-2-055	TOXIRAD	1
03-2-055	UNK1 1	
03-2-055	VACCCRA	3
03-2-055	VACCFUS	2
03-2-055	VACCTEN	2
03-2-055	XYRICAR	1
03-2-056	ANDRTER	2
03-2-056	ANDRVIRV	2
03-2-056	ARISSTR	4
03-2-056	ARUNGIGT	2
03-2-056	CARPODO	2
03-2-056	CLETALN	2
03-2-056	DICHWEB	2
03-2-056	DIOSVIR	2
03-2-056	EUPAPIL	2
03-2-056	GALAVOL	2
03-2-056	GAYLDUM	2
03-2-056	GAYLFRO	2
03-2-056	GENTAUT	1
03-2-056	GORDLAS	2
03-2-056	HYPERED	2
03-2-056	ILEXGLA	4
03-2-056	IONALIN	2
03-2-056	IRISVERV	1
03-2-056	LIATPILP	2
03-2-056	LYONLIGF	1
03-2-056	LYONMAR	2
03-2-056	MAGNVIR	1
03-2-056	MORECER	2
03-2-056	NYSSSYL	2
03-2-056	PERSPLS	2
03-2-056	PHOTPYR	2
03-2-056	PINUPAL	6
03-2-056	PITYGRA	2
03-2-056	PTERPYC	2
03-2-056	QUERLVS	2
03-2-056	QUERNIG	1
03-2-056	RHODATL	5
03-2-056	RHUSCOP	2
03-2-056	SASSALB	1
03-2-056	SCLECILG	2
03-2-056	SERITOR	2
03-2-056	SOLIODOO	2
03-2-056	SPIRLCRG	1
03-2-056	VACCCRA	2
03-2-056	VACCSTA	2
03-2-056	VACCTEN	2
03-2-056	WOODVIR	1
03-2-056	XYRICAR	2
03-2-057	ACERRUB	2
03-2-057	AMELOBO	2
03-2-057	ANDRGLA	2
03-2-057	ANDRGLO1	4
03-2-057	ANDRTER	2

03-2-057	ARISSTR	6
03-2-057	ARUNGIGT	6
03-2-057	CARE1S1	1
03-2-057	CARPODO	2
03-2-057	CARPPAN	2
03-2-057	CHASLAX	2
03-2-057	CLETALN	3
03-2-057	CUSC1S1	2
03-2-057	CYRIRAC	1
03-2-057	DICHDICD	2
03-2-057	DICHDICE	2
03-2-057	DICHDICM	2
03-2-057	DICHWEB	2
03-2-057	DIONMUS	1
03-2-057	ERIGVER	2
03-2-057	EUPAPIL	2
03-2-057	FOTHGAR	7
03-2-057	GAYLFRO	2
03-2-057	GORDLAS	2
03-2-057	ILEXCRC	2
03-2-057	ILEXGLA	4
03-2-057	IRISVERV	2
03-2-057	KALMCAR	2
03-2-057	LILICAT	1
03-2-057	LIQUSTY	2
03-2-057	LYONLIGF	2
03-2-057	LYONLUC	2
03-2-057	LYONMAR	2
03-2-057	MAGNVIR	2
03-2-057	MITCREP	2
03-2-057	MORECER	2
03-2-057	OSMUCINC	2
03-2-057	PERSPLS	4
03-2-057	PHOTPYR	2
03-2-057	PINUPAL	6
03-2-057	PINUSER	4
03-2-057	POLYLUT	2
03-2-057	PTERAQUP	2
03-2-057	RHEXALI	2
03-2-057	RHEXPET	2
03-2-057	RHODATL	3
03-2-057	RHUSCOP	2
03-2-057	RHYNFASF	1
03-2-057	RHYNPLU	2
03-2-057	SARRFLA	2
03-2-057	SCLECILG	2
03-2-057	SMILGLA	2
03-2-057	SMILLAU	2
03-2-057	SMILROT	1
03-2-057	UNK1 1	
03-2-057	VACCCRA	2
03-2-057	VACCFUS	2
03-2-057	VACCTEN	2
03-2-057	VIBUPRU	1
03-2-057	XYRICAR	2
03-2-057	XYRISP1	2
03-2-057	ZIGADEN	1

03-2-058	AGAL1S1	1
03-2-058	ANDRTER	3
03-2-058	ANDRVIRV	2
03-2-058	ANTEPLA	2
03-2-058	ARISSTR	8
03-2-058	CARPODO	2
03-2-058	CARPTOM	2
03-2-058	CHASLAX	2
03-2-058	CIRSREP	1
03-2-058	CNIDSTI	2
03-2-058	DESM1S1	1
03-2-058	DESMTEN	2
03-2-058	DICHCMM	2
03-2-058	DIOSVIR	2
03-2-058	EUPAALB	1
03-2-058	EUPHIPE	2
03-2-058	GALAERE	2
03-2-058	GAYLDUM	2
03-2-058	GAYLFRO	5
03-2-058	HYPEHYP	2
03-2-058	ILEXGLA	3
03-2-058	IONALIN	2
03-2-058	IRISVERV	2
03-2-058	KALMCAR	1
03-2-058	LESPANG	2
03-2-058	LESPCPT	2
03-2-058	LESPHIR	2
03-2-058	LIATPILP	2
03-2-058	MORECER	4
03-2-058	OSMUCINC	1
03-2-058	PINUPAL	6
03-2-058	PINUTAE	5
03-2-058	PITYGRA	2
03-2-058	POLYLUT	1
03-2-058	PTERPYC	2
03-2-058	QUERFLC	1
03-2-058	QUERICN	5
03-2-058	QUERMRG	2
03-2-058	QUERMRL	4
03-2-058	QUERXIM	2
03-2-058	QUERXLM	2
03-2-058	RHUSCOP	2
03-2-058	RHYNPLU	1
03-2-058	RUBUFLA	2
03-2-058	SASSALB	1
03-2-058	SCLECIL	2
03-2-058	SCLETRI	2
03-2-058	SERITOR	1
03-2-058	SILPCOM	1
03-2-058	SMILBON	1
03-2-058	SMILGLA	2
03-2-058	SOLIODOO	2
03-2-058	SYMPCON	1
03-2-058	SYMPWAL	2
03-2-058	TEPHHIS	2
03-2-058	TILLUSN	1
03-2-058	TRAGURE	2

03-2-058	VACCCRA	2
03-2-058	VACCTEN	4
03-2-059	AGALSET	2
03-2-059	ANDRTER	2
03-2-059	ANDRVIRV	4
03-2-059	ARISSTR	6
03-2-059	CARPODO	2
03-2-059	CARPTOM	2
03-2-059	CHAMNICN	1
03-2-059	CHASLAX	1
03-2-059	CIRSREP	2
03-2-059	CROTPUR	1
03-2-059	DANTSSS	2
03-2-059	DESMLIN	2
03-2-059	DESMROT	1
03-2-059	DESMTEN	1
03-2-059	DICHCMM	2
03-2-059	DICHDICD	1
03-2-059	DICHDICE	2
03-2-059	DICHLCT	2
03-2-059	DIOSVIR	2
03-2-059	ELEPNDT	1
03-2-059	EUPAMOH	2
03-2-059	EUPAROT	2
03-2-059	EUPHIPE	1
03-2-059	EUTHCAR	2
03-2-059	GAYLDUM	2
03-2-059	GAYLFRO	6
03-2-059	GELSSEM	2
03-2-059	GYMNBRE	2
03-2-059	HYPECRU	1
03-2-059	HYPEHYP	2
03-2-059	ILEXGLA	5
03-2-059	ILEXOPAO	1
03-2-059	IONALIN	2
03-2-059	IRISVERV	2
03-2-059	LECH1S1	1
03-2-059	LESPANG	2
03-2-059	LESPCPT	2
03-2-059	LESPHIR	2
03-2-059	LIATPILP	1
03-2-059	LIQUSTY	6
03-2-059	LOBENUT	1
03-2-059	MORECER	3
03-2-059	OSMUCINC	1
03-2-059	PERSPLS	2
03-2-059	PINUTAE	7
03-2-059	PITYGRA	2
03-2-059	PLAT1S1	1
03-2-059	POLYINR	2
03-2-059	POLYLUT	1
03-2-059	PRUNCAR	1
03-2-059	PTERPYC	2
03-2-059	QUERFLC	2
03-2-059	QUERHEM	2
03-2-059	QUERICN	2
03-2-059	QUERMRG	2
03-2-059	QUERMRL	2
03-2-059	QUERNIG	2
03-2-059	QUERSTE	2
03-2-059	RHEXALI	1
03-2-059	RHEXPET	1
03-2-059	RHUSCOP	2
03-2-059	RUBUCUN	1
03-2-059	RUBUFLA	2
03-2-059	SERILIN	2
03-2-059	SERITOR	2
03-2-059	SILPCOM	1
03-2-059	SMILBON	2
03-2-059	SMILGLA	2
03-2-059	SMILLAU	1
03-2-059	SMILROT	2
03-2-059	SOLIODOO	2
03-2-059	STYLBIF	2
03-2-059	SYMPDUM1	2
03-2-059	SYMPWAL	1
03-2-059	TEPHHIS	2
03-2-059	TRAGURE	1
03-2-059	VACCCRA	2
03-2-059	VACCFUS	2
03-2-059	VACCTEN	4
03-2-059	VITIROT	2
03-2-060	AGALSET	2
03-2-060	ANDRTER	2
03-2-060	ANDRVIRV	2
03-2-060	ARISSTR	8
03-2-060	CALO1S1	1
03-2-060	CARPBEL	3
03-2-060	CARPPAN	3
03-2-060	CARPTOM	2
03-2-060	CLEIDIV	2
03-2-060	CYPE-S1	1
03-2-060	DICHDICE	2
03-2-060	ERIGVER	2
03-2-060	FIMBPUB	2
03-2-060	GAYLDUM	2
03-2-060	HYPERED	2
03-2-060	ILEXCRC	2
03-2-060	ILEXGLA	4
03-2-060	IRISVERV	2
03-2-060	LIATPILP	2
03-2-060	LOBENUT	2
03-2-060	MAGNVIR	2
03-2-060	MORECAR	2
03-2-060	MORECER	3
03-2-060	PERSPLS	1
03-2-060	PHOTPYR	2
03-2-060	PINUPAL	6
03-2-060	PINUSER	1
03-2-060	PITYGRA	2
03-2-060	PLAT1S1	2
03-2-060	POLYBRE	2
03-2-060	POLYLUT	2
03-2-060	PTERAQUP	2

03-2-060	RHEXALI	2
03-2-060	RHYNCIL	1
03-2-060	RHYNPLU	2
03-2-060	SABADIF	2
03-2-060	SCLERET	2
03-2-060	SEYMCAS	2
03-2-060	SMILLAU	2
03-2-060	SOLISTC	2
03-2-060	SPIRLCRG	1
03-2-060	UNK1 2	
03-2-060	VACCCRA	4
03-2-060	VACCTEN	2
03-2-060	XYRICAR	2
03-2-061	AGAL1S1	2
03-2-061	ANDRTER	2
03-2-061	ANDRVIRV	2
03-2-061	ARISSTR	6
03-2-061	BIGENUDN	2
03-2-061	CARPBEL	2
03-2-061	CARPTOM	2
03-2-061	GALAVOL	1
03-2-061	GAYLDUM	4
03-2-061	GAYLFRO	2
03-2-061	GENTAUT	1
03-2-061	ILEXCRC	1
03-2-061	ILEXGLA	2
03-2-061	IONALIN	2
03-2-061	LIATPILP	2
03-2-061	LOBENUT	2
03-2-061	LYONMAR	2
03-2-061	MORECER	3
03-2-061	PINUPAL	6
03-2-061	PITYGRA	2
03-2-061	POLYLUT	1
03-2-061	PTERPYC	1
03-2-061	QUERICN	1
03-2-061	QUERLVS	2
03-2-061	SERITOR	2
03-2-061	VACCCRA	4
03-2-061	VACCTEN	4
03-2-061	XYRICAR	2
03-2-075	ANDRGLA	1
03-2-075	ANDRVIRV	2
03-2-075	ARISSTR	8
03-2-075	ARUNGIGT	1
03-2-075	CARPBEL	1
03-2-075	CARPODO	2
03-2-075	CARPTOM	1
03-2-075	CLEIBIF	1
03-2-075	CYRIRAC	2
03-2-075	DICHWEB	2
03-2-075	DROSBRE	1
03-2-075	GAYLDUM	4
03-2-075	GAYLFRO	3
03-2-075	ILEXGLA	3
03-2-075	IRISVERV	2
03-2-075	KALMCAR	2
03-2-075	LEUCRAC	2
03-2-075	LYONLIGF	2
03-2-075	LYONLUC	1
03-2-075	MAGNVIR	2
03-2-075	MORECER	3
03-2-075	PERSPLS	2
03-2-075	PHOTPYR	2
03-2-075	PINUSER	5
03-2-075	POLYLUT	2
03-2-075	PTERAQUP	4
03-2-075	PYXIBAR	3
03-2-075	RHEXALI	2
03-2-075	SCLECILG	1
03-2-075	SMILLAU	1
03-2-075	SPORPIN	5
03-2-075	VACCCRA	6
03-2-075	VACCTEN	4
03-2-075	XYRICAR	2
03-2-076	AMORHERH	2
03-2-076	ANDR1S1	2
03-2-076	ANDR1S2	1
03-2-076	ANDRTER	2
03-2-076	ARISSTR	6
03-2-076	BAPTCIN	1
03-2-076	CARPODO	2
03-2-076	CHAMFAS	1
03-2-076	CIRSREP	2
03-2-076	CRAT1S1	2
03-2-076	CROTPUR	1
03-2-076	DESMCLR	2
03-2-076	DESMLIN	2
03-2-076	DESMTEN	1
03-2-076	DICHDICD	2
03-2-076	DICHOVAO	2
03-2-076	DICHSTRL	2
03-2-076	DIOSVIR	2
03-2-076	EUPAMOH	1
03-2-076	EUPAROT	1
03-2-076	EUPHIPE	2
03-2-076	GALAERE	2
03-2-076	GALAVOL	2
03-2-076	GAMOPUR	2
03-2-076	GELSSEM	1
03-2-076	HELICAR	2
03-2-076	HIERMAR	2
03-2-076	HYPEHYP	2
03-2-076	ILEXGLA	2
03-2-076	ILEXOPAO	1
03-2-076	IONALIN	2
03-2-076	LECHMIN	2
03-2-076	LESP1S1	2
03-2-076	LESPHIR	2
03-2-076	LIAT1S1	2
03-2-076	LIQUSTY	2
03-2-076	LYONMAR	1
03-2-076	MORECER	2
03-2-076	ORBEPED2	1

03-2-076	PANIANC	2
03-2-076	PANIVIRV	2
03-2-076	PERSPLS	1
03-2-076	PINUPAL	6
03-2-076	PINUTAE	5
03-2-076	PITYGRA	2
03-2-076	PTERAQUP	2
03-2-076	QUERFLC	5
03-2-076	QUERICN	2
03-2-076	RHUSCOP	2
03-2-076	RHYNPLU	1
03-2-076	RHYNREN	2
03-2-076	RUBUFLA	2
03-2-076	SASSALB	2
03-2-076	SCLECIL1	2
03-2-076	SERILIN	1
03-2-076	SERITOR	2
03-2-076	SISYCAP	2
03-2-076	SMILBON	1
03-2-076	SMILGLA	2
03-2-076	SOLIARG	2
03-2-076	STYLBIF	2
03-2-076	STYLPATA	2
03-2-076	SYMPCON	2
03-2-076	SYMPPIL1	1
03-2-076	SYMPTIN	1
03-2-076	SYMPWAL	2
03-2-076	TEPHFLO	2
03-2-076	TRAGURE	2
03-2-076	VACCCRA	2
03-2-076	VACCTEN	2
03-2-076	XYRICAR	2
03-2-077	ANDRGLA	2
03-2-077	ANDRVIRV	2
03-2-077	ARISSTR	7
03-2-077	CARPBEL	2
03-2-077	CARPPAN	2
03-2-077	CARPTOM	2
03-2-077	CLEIDIV	2
03-2-077	DICHDICD	1
03-2-077	DIONMUS	2
03-2-077	DROSCAP	1
03-2-077	ERIC-S1	1
03-2-077	GAYLDUM	5
03-2-077	GAYLFRO	2
03-2-077	HYPERED	2
03-2-077	ILEXCRC	2
03-2-077	ILEXGLA	3
03-2-077	ILEXOPAO	2
03-2-077	IRISVERV	2
03-2-077	LACHANC	1
03-2-077	LEIOBUX	6
03-2-077	LIAT1S1	1
03-2-077	MAGNVIR	2
03-2-077	MORECER	2
03-2-077	PERSPLS	2
03-2-077	PHOTPYR	2
03-2-077	PINUPAL	4
03-2-077	PINUSER	2
03-2-077	POLYLUT	1
03-2-077	PYXIBAR	2
03-2-077	QUERGEM	2
03-2-077	QUERHEM	3
03-2-077	RHYNPLU	1
03-2-077	SCLECILG	1
03-2-077	VACC1S1	2
03-2-077	VACCCRA	5
03-2-077	VACCTEN	2
03-2-077	XYRICAR	2
03-2-078	ACERRUB	6
03-2-078	ALETFAR	2
03-2-078	AMELCAN	2
03-2-078	ANDR1S1	2
03-2-078	ANDRGLO1	6
03-2-078	ANDRTER	1
03-2-078	ARUNGIGT	3
03-2-078	CARE1S1	2
03-2-078	CAREDEBD	2
03-2-078	CHIOVIR	2
03-2-078	CLETALN	2
03-2-078	CYRIRAC	2
03-2-078	DICHDICD	2
03-2-078	DICHDICE	2
03-2-078	DICHSTRL	2
03-2-078	DICHVILV	1
03-2-078	DROSCAP	2
03-2-078	ERIA1S1	2
03-2-078	ERIGVER	1
03-2-078	ERYNINT	1
03-2-078	EUPAMOH	2
03-2-078	EUPAPIL	2
03-2-078	EUPAROT	2
03-2-078	EUTHCAR	2
03-2-078	GELSSEM	1
03-2-078	GENTCAT	1
03-2-078	HYPECRU	2
03-2-078	HYPEHYP	1
03-2-078	HYPOHIR	1
03-2-078	ILEXGLA	2
03-2-078	IPOM1S1	1
03-2-078	IRISVERV	1
03-2-078	LACHANC	2
03-2-078	LECHMIN	1
03-2-078	LIQUSTY	6
03-2-078	LYCOALP	2
03-2-078	LYCOVIR	2
03-2-078	LYONLUC	2
03-2-078	LYSILOO	2
03-2-078	MAGNVIR	4
03-2-078	MORECAR	2
03-2-078	NYSSSYL	1
03-2-078	OSMUCINC	2
03-2-078	OSMUREGS	2
03-2-078	PANIANC	2

03-2-078	PHOTPYR	2
03-2-078	PINUSER	1
03-2-078	POLYLUT	2
03-2-078	PTERAQUP	2
03-2-078	QUERHEM	1
03-2-078	QUERLAU	2
03-2-078	QUERNIG	2
03-2-078	RHEXALI	1
03-2-078	RHEXMAR	2
03-2-078	RHODATL	2
03-2-078	RHUSCOP	2
03-2-078	RHYN1S1	1
03-2-078	RHYNBAL	2
03-2-078	RHYNGLM	1
03-2-078	RHYNRAR	2
03-2-078	RUBUFLA	2
03-2-078	SCLEMIN	2
03-2-078	SCLETRI	2
03-2-078	SCUTINT	1
03-2-078	SMILGLA	2
03-2-078	SMILLAU	2
03-2-078	SMILTMN	1
03-2-078	SOLI1S1	1
03-2-078	SOLIPTL	2
03-2-078	SOLITOR	1
03-2-078	SPIRPRA	1
03-2-078	STYRAME	1
03-2-078	SYMPCON	1
03-2-078	SYMPGRA	1
03-2-078	SYMPPIL1	2
03-2-078	TOXIRAD	1
03-2-078	UNK1 1	
03-2-078	UNK2 1	
03-2-078	VACCFUS	2
03-2-078	VIBUNUDN	2
03-2-078	VIOLXPR	2
03-2-078	WOODARE	2
03-2-078	WOODVIR	7
03-2-078	XYRIAMB	2
03-2-078	ZIGADEN	2
03-2-080	ACERRUB	1
03-2-080	ANDRGLO1	4
03-2-080	ANDRVIRV	2
03-2-080	ARISSTR	4
03-2-080	CARPPAN	1
03-2-080	DICHDICD	2
03-2-080	DIONMUS	1
03-2-080	GAYLDUM	6
03-2-080	GAYLFRO	2
03-2-080	GORDLAS	2
03-2-080	HYPERED	1
03-2-080	ILEXCRC	2
03-2-080	ILEXGLA	6
03-2-080	IRISVERV	1
03-2-080	LACHANC	1
03-2-080	LEIOBUX	2
03-2-080	LYONLIGF	2
03-2-080	LYONLUC	2
03-2-080	MAGNVIR	3
03-2-080	MORECER	2
03-2-080	PERSPLS	2
03-2-080	PHOTPYR	1
03-2-080	PINUPAL	6
03-2-080	PINUSER	3
03-2-080	PLEETEN	4
03-2-080	POLYLUT	1
03-2-080	PTERAQUP	2
03-2-080	RHEXALI	2
03-2-080	RHEXPET	1
03-2-080	RHYNRAR	1
03-2-080	SMILLAU	2
03-2-080	SPORPIN	2
03-2-080	VACCCRA	7
03-2-080	VACCFOR	2
03-2-080	VACCFUS	2
03-2-080	VACCTEN	2
03-2-080	WOODVIR	1
03-2-080	XYRICAR	2
03-2-081	ALETFAR	2
03-2-081	AMORHERH	2
03-2-081	ANDRTER	1
03-2-081	ANDRVIRV	2
03-2-081	ARISSTR	7
03-2-081	ARUNGIGT	2
03-2-081	ASCLPED	1
03-2-081	BALDUNI	2
03-2-081	CARPBEL	1
03-2-081	CARPODO	3
03-2-081	CARPTOM	2
03-2-081	CHRYMAR	2
03-2-081	CORELIN	1
03-2-081	DESMLIN	1
03-2-081	DICHDICE	1
03-2-081	DICHOVAO	2
03-2-081	DICHTEN	3
03-2-081	GAYLDUM	3
03-2-081	GENTAUT	2
03-2-081	GYMNBRE	2
03-2-081	HYPECRU	1
03-2-081	HYPERED	1
03-2-081	HYPOJUN	2
03-2-081	ILEXGLA	2
03-2-081	IONALIN	2
03-2-081	IRISVERV	2
03-2-081	JUNCBIF	1
03-2-081	JUNCSCI	1
03-2-081	LIAT1S1	2
03-2-081	LINU1S1	1
03-2-081	LYONLIGF	1
03-2-081	LYONMAR	2
03-2-081	MAGNVIR	1
03-2-081	MORECAR	1
03-2-081	MORECER	3
03-2-081	PINUPAL	6

03-2-081	PINUSER	4
03-2-081	PITYGRA	2
03-2-081	POLY6S1	1
03-2-081	POLYLUT	2
03-2-081	PTERAQUP	3
03-2-081	PTERPYC	2
03-2-081	RHEXALI	2
03-2-081	RHEXMAR	1
03-2-081	RHYNPLU	2
03-2-081	SCLECIL1	2
03-2-081	SCLECILG	2
03-2-081	SISYCAP	2
03-2-081	SMILGLA	2
03-2-081	SOLIPLC	1
03-2-081	SYMPWAL	2
03-2-081	TEPHFLO	2
03-2-081	TEPHHIS	2
03-2-081	VACCCRA	4
03-2-081	VACCTEN	4
03-2-081	XYRICAR	2
03-2-103	AGAL1S1	2
03-2-103	ALETFAR	2
03-2-103	ANDR1S1	1
03-2-103	ANDRMOH	1
03-2-103	ANDRVIRV	3
03-2-103	ARISPURV	1
03-2-103	ARISSTR	6
03-2-103	ARUNGIGT	2
03-2-103	ASTE1S1	2
03-2-103	BAPTCIN	2
03-2-103	BIGENUDN	3
03-2-103	CALOBAR	1
03-2-103	CALOPAL	1
03-2-103	CARPPAN	2
03-2-103	CARPTOM	4
03-2-103	CLEIDIV	1
03-2-103	COREFAL	2
03-2-103	CORELIN	4
03-2-103	CTENARO	2
03-2-103	DICH1S1	2
03-2-103	DICHDICE	2
03-2-103	DICHSTRL	2
03-2-103	DIONMUS	2
03-2-103	DROSBRE	2
03-2-103	DROSCAP	2
03-2-103	ERIGVER	2
03-2-103	ERYNINT	2
03-2-103	EUPALEUL	2
03-2-103	EUPAROT	1
03-2-103	EUPHCUR	2
03-2-103	EURYPAL	2
03-2-103	GAYLDUM	2
03-2-103	GELSSEM	1
03-2-103	GYMNBRE	2
03-2-103	HELIHET	3
03-2-103	HYPECRU	2
03-2-103	HYPOHIR	2
03-2-103	ILEXGLA	2
03-2-103	IRISVERV	2
03-2-103	LACHANC	1
03-2-103	LACHCAR	1
03-2-103	LILICAT	2
03-2-103	LINUFLO	2
03-2-103	LOBENUT	1
03-2-103	LYCOALP	1
03-2-103	MAGNVIR	1
03-2-103	MORECAR	1
03-2-103	MORECER	2
03-2-103	MUHLCAPT	6
03-2-103	NYSSSYL	1
03-2-103	OSMUREGS	2
03-2-103	PASPPRA	2
03-2-103	PHOTPYR	1
03-2-103	PINUPAL	4
03-2-103	PINUSER	1
03-2-103	PITYGRA	2
03-2-103	PLEETEN	2
03-2-103	POLYHOO	2
03-2-103	POLYLUT	2
03-2-103	PRENAUT	1
03-2-103	RHEXALI	2
03-2-103	RHEXLUT	1
03-2-103	RHYNBAL	2
03-2-103	RHYNBRE	4
03-2-103	RHYNCHP	2
03-2-103	RHYNCIL	2
03-2-103	RHYNOLI	2
03-2-103	RHYNPLU	2
03-2-103	SCLECIL	2
03-2-103	SCLEMIN	2
03-2-103	SEYMCAS	1
03-2-103	SISYCAP	2
03-2-103	SMILLAU	2
03-2-103	SOLIPLC	1
03-2-103	SOLISTC	1
03-2-103	SPIRPRA	1
03-2-103	SPORPIN	6
03-2-103	SYMPWAL	2
03-2-103	TEPHHIS	2
03-2-103	TRIARAC	2
03-2-103	UTRISUB	2
03-2-103	VACCCRA	2
03-2-103	VACCELL	1
03-2-103	XYRIAMB	2
03-2-103	XYRIBAL	1
03-2-103	XYRICAR	2
03-2-104	ACERRUB	2
03-2-104	AGALLIN	2
03-2-104	ALETFAR	2
03-2-104	ANDR1S1	4
03-2-104	ARISSTR	6
03-2-104	ARUNGIGT	2
03-2-104	ASCLLON	2
03-2-104	ASTE-S1	1

03-2-104	BIGENUDN	2
03-2-104	CALOPAL	2
03-2-104	CARPODO	2
03-2-104	CARPPAN	2
03-2-104	CARPTOM	2
03-2-104	CHAPTOM	1
03-2-104	CLEIDIV	1
03-2-104	CLETALN	2
03-2-104	COREFAL	2
03-2-104	CORELIN	2
03-2-104	CTENARO	6
03-2-104	CYRIRAC	1
03-2-104	DICHDICE	2
03-2-104	DICHLON	2
03-2-104	DICHOVAO	2
03-2-104	DICHSTRL	2
03-2-104	DICHTEN	1
03-2-104	DIONMUS	1
03-2-104	ERIGVER	1
03-2-104	ERIODECD	1
03-2-104	ERYNINT	2
03-2-104	EUPAHYS	2
03-2-104	EUPALEUL	2
03-2-104	EUPAMOH	1
03-2-104	EUPAROT	1
03-2-104	EURYPAL	2
03-2-104	GAYLDUM	2
03-2-104	GAYLFRO	2
03-2-104	GELSSEM	1
03-2-104	GYMNBRE	2
03-2-104	HELIANG	2
03-2-104	HELIHET	2
03-2-104	HYPECRU	1
03-2-104	HYPOHIR	1
03-2-104	ILEXGLA	3
03-2-104	IRISVERV	1
03-2-104	LACHANC	2
03-2-104	LACHCAR	1
03-2-104	LIAT1S1	2
03-2-104	LINUFLO	1
03-2-104	LIQUSTY	1
03-2-104	LOBENUT	1
03-2-104	LYCOALP	1
03-2-104	LYCOCARC	1
03-2-104	LYONLIGF	2
03-2-104	LYONLUC	2
03-2-104	LYONMAR	2
03-2-104	LYSILOO	1
03-2-104	MAGNVIR	2
03-2-104	MARSGRM	2
03-2-104	MORECAR	2
03-2-104	MORECER	2
03-2-104	MUHLCAPT	5
03-2-104	NYSSSYL	2
03-2-104	PHOTPYR	1
03-2-104	PING1S1	1
03-2-104	PINUPAL	3
03-2-104	PINUSER	2
03-2-104	PITYGRA	2
03-2-104	PLEETEN	2
03-2-104	POLYBRE	1
03-2-104	POLYHOO	1
03-2-104	POLYLUT	2
03-2-104	PTERAQUP	1
03-2-104	RHEXALI	2
03-2-104	RHEXLUT	3
03-2-104	RHEXPET	1
03-2-104	RHODATL	2
03-2-104	RHYNBAL	1
03-2-104	RHYNBRE	2
03-2-104	RHYNCHP	2
03-2-104	RHYNCIL	2
03-2-104	RHYNPLU	2
03-2-104	RUBU1S1	1
03-2-104	SARRFLA	2
03-2-104	SCLEMIN	2
03-2-104	SCLEPAUP	2
03-2-104	SEYMCAS	2
03-2-104	SISYCAP	2
03-2-104	SMILGLA	1
03-2-104	SOLIPLC	2
03-2-104	SOLISTC	1
03-2-104	SPORPIN	6
03-2-104	SYMPDUM1	2
03-2-104	SYMPTIN	2
03-2-104	TRIARAC	2
03-2-104	VACCCRA	2
03-2-104	VACCFOR	2
03-2-104	VITIROT	1
03-2-104	WOODVIR	2
03-2-104	XYRIAMB	2
03-2-104	XYRICAR	2
03-2-104	ZIGADEN	1
03-2-104	ZIGAGLB	2
03-2-107	ACERRUB	2
03-2-107	ANDR1S1	2
03-2-107	ANDRGLA	1
03-2-107	ARISSTR	5
03-2-107	ASCLPED	1
03-2-107	CALLGRM	1
03-2-107	CARPBEL	1
03-2-107	CARPPAN	1
03-2-107	CARPTOM	2
03-2-107	CNIDSTI	1
03-2-107	DICHLNC	1
03-2-107	GALAVOL	1
03-2-107	GAYLDUM	6
03-2-107	HYPERED	2
03-2-107	ILEXCRC	1
03-2-107	ILEXGLA	2
03-2-107	ILEXOPAO	1
03-2-107	IONALIN	1
03-2-107	IRISVERV	1
03-2-107	JUNCSCI	1

03-2-107	LEIOBUX	2
03-2-107	LIAT1S1	2
03-2-107	LYONMAR	4
03-2-107	MAGNVIR	2
03-2-107	MORECER	2
03-2-107	NYSSSYL	2
03-2-107	OSMUCINC	2
03-2-107	PERSPLS	1
03-2-107	PHOTPYR	1
03-2-107	PINUPAL	5
03-2-107	PITYGRA	2
03-2-107	PTERAQUP	4
03-2-107	QUERFLC	2
03-2-107	QUERGEM	6
03-2-107	QUERICN	2
03-2-107	QUERLVS	1
03-2-107	RHYNPLU	1
03-2-107	SCLECIL	2
03-2-107	SMILLAU	2
03-2-107	STIPSETS	1
03-2-107	UNK1 1	
03-2-107	VACCARB	2
03-2-107	VACCCRA	4
03-2-107	VACCFOR	1
03-2-107	VACCTEN	5
03-2-107	XYRICAR	2
03-3-051	ANDRTER	3
03-3-051	ANDRVIRV	2
03-3-051	ARISSTR	8
03-3-051	CARPODO	2
03-3-051	CARPTOM	2
03-3-051	CNIDSTI	2
03-3-051	DESM1S1	1
03-3-051	GAYLDUM	2
03-3-051	GAYLFRO	1
03-3-051	HYPERED	1
03-3-051	ILEXGLA	4
03-3-051	ILEXOPAO	1
03-3-051	IONALIN	2
03-3-051	IRISVERV	2
03-3-051	LIAT1S2	1
03-3-051	LIATPILP	2
03-3-051	MAGNVIR	2
03-3-051	MORECER	2
03-3-051	NYSSSYL	1
03-3-051	PERSPLS	2
03-3-051	PINUPAL	7
03-3-051	PINUSER	1
03-3-051	PITYGRA	2
03-3-051	PTERAQUP	1
03-3-051	QUERLVS	2
03-3-051	QUERNIG	2
03-3-051	QUERSTE	2
03-3-051	SASSALB	1
03-3-051	SERITOR	2
03-3-051	SMILGLA	1
03-3-051	SPIRLCRG	1
03-3-051	VACCCRA	7
03-3-051	VACCSTA	2
03-3-051	VACCTEN	3
03-3-052	ANDRGLO1	2
03-3-052	ANDRTER	4
03-3-052	ANDRVIRV	3
03-3-052	ARISSTR	5
03-3-052	CARPBEL	2
03-3-052	CARPODO	2
03-3-052	CARPTOM	2
03-3-052	CHRYGOSG	2
03-3-052	CIRSREP	1
03-3-052	CNIDSTI	2
03-3-052	DANTSSS	1
03-3-052	DESMCLR	1
03-3-052	DESMLIN	1
03-3-052	DESMVIR	2
03-3-052	DICHWEB	2
03-3-052	DIOSVIR	2
03-3-052	EUPAALB	1
03-3-052	EUPAROT	2
03-3-052	EUPHIPE	2
03-3-052	GALAERE	1
03-3-052	GALAREG	1
03-3-052	GAYLDUM	6
03-3-052	GAYLFRO	5
03-3-052	GELSSEM	2
03-3-052	HYPE1S1	2
03-3-052	HYPEHYP	2
03-3-052	ILEXGLA	2
03-3-052	IONALIN	2
03-3-052	IRISVERV	2
03-3-052	LECHMIN	1
03-3-052	LESPCPT	2
03-3-052	LIATPILP	2
03-3-052	MORECER	2
03-3-052	PINUPAL	5
03-3-052	PINUSER	1
03-3-052	PITYGRA	3
03-3-052	PTERAQUP	1
03-3-052	QUERFLC	5
03-3-052	QUERHEM	5
03-3-052	QUERICN	7
03-3-052	QUERLVS	2
03-3-052	QUERMRL	3
03-3-052	QUERPHE	1
03-3-052	QUERSTE	6
03-3-052	RHUSCOP	4
03-3-052	SASSALB	2
03-3-052	SCLETRI	4
03-3-052	SERITOR	2
03-3-052	SMILBON	1
03-3-052	SMILGLA	1
03-3-052	SOLIODOO	2
03-3-052	STYLBIF	2
03-3-052	SYMPWAL	2
03-3-052	TEPHFLO	1

03-3-052	TOXIRAD	4
03-3-052	TRAGURE	2
03-3-052	VACCFUS	2
03-3-052	VACCSTA	3
03-3-052	VACCTEN	4
03-3-053	ACERRUB	2
03-3-053	ALETFAR	2
03-3-053	ANDRGLA	2
03-3-053	ANDRGLO1	2
03-3-053	ANDRTER	2
03-3-053	ANDRVIRV	3
03-3-053	ARISSTR	4
03-3-053	ARNIACA	2
03-3-053	ARUNGIGT	6
03-3-053	ASTE1S1	1
03-3-053	ASTE1S2	1
03-3-053	CARPODO	2
03-3-053	CARPTOM	1
03-3-053	CLEIDIV	2
03-3-053	CORELIN	2
03-3-053	DESMLIN	2
03-3-053	DESMTEN	2
03-3-053	DICH1S2	2
03-3-053	DICH1S3	2
03-3-053	DICHACI	2
03-3-053	DICHDICE	2
03-3-053	DICHDICM	2
03-3-053	DICHOVAA	2
03-3-053	DICHSTRS	2
03-3-053	DIOSVIR	2
03-3-053	DROSCAP	2
03-3-053	ERIGVER	2
03-3-053	EUPACAP	1
03-3-053	EUPALEUL	2
03-3-053	EUPAPIL	2
03-3-053	EUPAROT	2
03-3-053	EUTHCAR	2
03-3-053	GAULPRO	2
03-3-053	GAYLDUM	3
03-3-053	GAYLFRO	5
03-3-053	GELSSEM	2
03-3-053	GENTAUT	2
03-3-053	GRATPIL	2
03-3-053	GYMNBRE	2
03-3-053	HELIHET	2
03-3-053	HIERGRO	2
03-3-053	HYPECRU	2
03-3-053	HYPESET	1
03-3-053	HYPO1S1	1
03-3-053	ILEXGLA	5
03-3-053	IONALIN	2
03-3-053	IRISVERV	2
03-3-053	LACTCAN	2
03-3-053	LAMI-S1	1
03-3-053	LESPCPT	2
03-3-053	LIATPILP	2
03-3-053	LINUSTR	1
03-3-053	LIQUSTY	3
03-3-053	LOBENUT	2
03-3-053	LYCOAPR	2
03-3-053	LYONLIGF	2
03-3-053	LYONLUC	2
03-3-053	LYSIASP	1
03-3-053	LYSILOO	2
03-3-053	MAGNVIR	2
03-3-053	MARSGRM	1
03-3-053	MORECAR	3
03-3-053	MORECER	3
03-3-053	NYSSSYL	2
03-3-053	OSMUCINC	2
03-3-053	PANIVIRV	1
03-3-053	PERSPLS	2
03-3-053	PHOTPYR	2
03-3-053	PINUPAL	6
03-3-053	PINUSER	6
03-3-053	PITYGRA	2
03-3-053	POAC-S1	2
03-3-053	POLYCRU	2
03-3-053	POLYINR	1
03-3-053	POLYLUT	1
03-3-053	POLYRMA	1
03-3-053	PRUNSER	2
03-3-053	PTERAQUP	7
03-3-053	PTERPYC	2
03-3-053	PYCNFLE	2
03-3-053	QUERFLC	2
03-3-053	RHEXALI	2
03-3-053	RHEXLUT	1
03-3-053	RHEXMAR	2
03-3-053	RHEXNAS	2
03-3-053	RHUSCOP	2
03-3-053	RHYNDEB	1
03-3-053	RHYNWRI	1
03-3-053	RUBUFLA	1
03-3-053	SCLEPAUP	2
03-3-053	SCLETRI	2
03-3-053	SERILIN	2
03-3-053	SISYCAP	2
03-3-053	SMILBON	1
03-3-053	SMILGLA	2
03-3-053	SMILROT	1
03-3-053	SOLI1S1	2
03-3-053	SOLI1S2	1
03-3-053	SOLI1S3	2
03-3-053	SOLISTC	1
03-3-053	SPIRLCRG	1
03-3-053	STYLBIF	1
03-3-053	SYMPDUM1	2
03-3-053	SYMPTIN	3
03-3-053	SYMPWAL	2
03-3-053	TEPHHIS	2
03-3-053	UVULPUB	2
03-3-053	VACCCRA	2
03-3-053	VACCFOR	2

03-3-053	VACCFUS	2
03-3-053	VACCSTA	2
03-3-053	VACCTEN	4
03-3-053	VIOLXPR	2
03-3-053	WOODVIR	2
03-3-053	XYRIAMB	2
03-3-053	XYRICAR	2
03-3-054	ACERRUB	4
03-3-054	AMARCAN	1
03-3-054	ANDRGLA	2
03-3-054	ANDRGLO1	2
03-3-054	ANDRTER	4
03-3-054	ANDRVIRV	6
03-3-054	ARISSTR	2
03-3-054	ARTHHIS	1
03-3-054	ARUNGIGT	5
03-3-054	ASTE1S1	1
03-3-054	BERCSCA	2
03-3-054	CALLAME	2
03-3-054	CARE1S1	2
03-3-054	CARPODO	2
03-3-054	CENTASI	6
03-3-054	CHASLAX	6
03-3-054	CIRSHOR	2
03-3-054	CLETALN	3
03-3-054	CRAT1S1	1
03-3-054	CUSC1S1	1
03-3-054	CYPE-S1	2
03-3-054	CYRIRAC	2
03-3-054	DESM1S1	1
03-3-054	DESMPAN	1
03-3-054	DICH1S1	1
03-3-054	DICH1S2	2
03-3-054	DICH1S3	1
03-3-054	DICH1S4	4
03-3-054	DICHCMM	2
03-3-054	DICHDICM	3
03-3-054	DICHSCO	3
03-3-054	DICOT1	1
03-3-054	DIONMUS	2
03-3-054	ELEPTOM	1
03-3-054	ERECHIEH	2
03-3-054	EUPACAP	2
03-3-054	EUPAPIL	2
03-3-054	EUPAROT	1
03-3-054	EUTHCAR	2
03-3-054	GAYLFRO	2
03-3-054	GELSSEM	1
03-3-054	GORDLAS	2
03-3-054	HYPECRU	2
03-3-054	HYPEHYP	2
03-3-054	ILEXGLA	6
03-3-054	IRISVERV	2
03-3-054	KALMCAR	3
03-3-054	LAMI-S1	2
03-3-054	LESPCPT	1
03-3-054	LESPVGN	1
03-3-054	LIQUSTY	3
03-3-054	LYCO3S1	2
03-3-054	LYONLIGF	2
03-3-054	LYONLUC	2
03-3-054	MAGNVIR	2
03-3-054	MIKASCA	2
03-3-054	MORECAR	1
03-3-054	MORECER	2
03-3-054	MUHLCAPT	2
03-3-054	NYSSSYL	5
03-3-054	OSMUCINC	2
03-3-054	OSMUREGS	2
03-3-054	PASP1S1	2
03-3-054	PASPSET	2
03-3-054	PERSPLS	4
03-3-054	PHOTPYR	2
03-3-054	PINUPAL	4
03-3-054	PINUSER	6
03-3-054	PINUTAE	6
03-3-054	PLUCCAM	1
03-3-054	POAC-S1	1
03-3-054	POLY6S1	2
03-3-054	POLYBRE	1
03-3-054	POLYLUT	1
03-3-054	PTERAQUP	2
03-3-054	PTILCAP	1
03-3-054	QUERNIG	3
03-3-054	RHEXALI	2
03-3-054	RHEXPET	2
03-3-054	RHODATL	4
03-3-054	RHUSCOP	2
03-3-054	RHYNINE	4
03-3-054	RHYNRAR	2
03-3-054	RHYNWRI	2
03-3-054	RUBUCUN	1
03-3-054	RUBUFLA	2
03-3-054	SANI1S1	2
03-3-054	SARRFLA	2
03-3-054	SASSALB	1
03-3-054	SCUTINT	2
03-3-054	SMILGLA	2
03-3-054	SMILLAU	1
03-3-054	SMILROT	1
03-3-054	SOLACARC	2
03-3-054	TOXIRAD	2
03-3-054	UNK2 1	
03-3-054	VACCCRA	2
03-3-054	VACCFOR	2
03-3-054	VACCTEN	2
03-3-054	VITIROT	2
03-3-054	WOODARE	2
03-3-054	XYRICAR	2
03-3-054	ZIGADEN	2
03-3-055	ALETFAR	2
03-3-055	ANDRGLA	2
03-3-055	ANDRTER	3
03-3-055	ANDRVIRV	2

03-3-055	ARISSTR	9
03-3-055	ASTE1S1	2
03-3-055	BIGENUDN	2
03-3-055	CARPODO	2
03-3-055	CARPTOM	2
03-3-055	CHAMNICN	1
03-3-055	CHAPTOM	2
03-3-055	CLEIDIV	2
03-3-055	CORELIN	2
03-3-055	CROTPUR	1
03-3-055	CTENARO	2
03-3-055	DESMTEN	2
03-3-055	DICH1S1	2
03-3-055	DICH1S2	2
03-3-055	DICH1S3	2
03-3-055	DICH1S4	1
03-3-055	DICHDICD	2
03-3-055	DICHDICE	2
03-3-055	DICHOVAA	1
03-3-055	DICHSCA	2
03-3-055	DICHSTRL	2
03-3-055	DROSCAP	2
03-3-055	ERIGVER	2
03-3-055	EUPALEUL	2
03-3-055	EUPAMOH	1
03-3-055	EUPAPIL	1
03-3-055	EUPAROT	2
03-3-055	EUTHCAR	2
03-3-055	GAYLDUM	2
03-3-055	GAYLFRO	3
03-3-055	GYMN3S1	2
03-3-055	HELIHET	2
03-3-055	HYPECRU	2
03-3-055	HYPEHYP	1
03-3-055	HYPESET	2
03-3-055	ILEXGLA	3
03-3-055	IONALIN	2
03-3-055	IRISVERV	2
03-3-055	LACHANC	2
03-3-055	LECH1S1	2
03-3-055	LECH1S2	2
03-3-055	LESPANG	1
03-3-055	LESPCPT	2
03-3-055	LINUSTR	1
03-3-055	LIQUSTY	2
03-3-055	LOBENUT	2
03-3-055	LUDWVIR	2
03-3-055	LYCOAPR	2
03-3-055	LYONMAR	2
03-3-055	LYSILOO	2
03-3-055	MAGNVIR	1
03-3-055	MARSGRM	1
03-3-055	MORECER	2
03-3-055	MUHLCAPT	1
03-3-055	PHOTPYR	2
03-3-055	PINUPAL	3
03-3-055	PINUSER	3
03-3-055	PINUTAE	5
03-3-055	PITYGRA	2
03-3-055	POAC-S2	2
03-3-055	POAC-S3	2
03-3-055	POLYBRE	2
03-3-055	POLYINR	1
03-3-055	POLYLUT	2
03-3-055	PTERAQUP	2
03-3-055	QUERMRG	2
03-3-055	QUERMRL	2
03-3-055	QUERNIG	1
03-3-055	QUERSTE	1
03-3-055	RHEXALI	2
03-3-055	RHEXPET	2
03-3-055	RHYNPLU	2
03-3-055	RHYNRAR	2
03-3-055	RUBUFLA	1
03-3-055	SCLEPAUP	2
03-3-055	SERILIN	2
03-3-055	SEYMCAS	2
03-3-055	SILPCOM	2
03-3-055	SISYCAP	2
03-3-055	SMILGLA	2
03-3-055	SOLI1S1	2
03-3-055	SOLI1S2	2
03-3-055	SOLIODOO	1
03-3-055	SOLISTC	2
03-3-055	SPIRLCRG	1
03-3-055	STYLBIF	2
03-3-055	SYMPDUM1	1
03-3-055	SYMPWAL	2
03-3-055	TEPHHIS	2
03-3-055	VACCCRA	2
03-3-055	VACCFOR	3
03-3-055	VACCTEN	2
03-3-055	VIOLXPR	2
03-3-055	WOODVIR	1
03-3-055	XYRICAR	2
03-3-077	ACERRUB	3
03-3-077	ALETFAR	2
03-3-077	ANDR1S1	5
03-3-077	ARUNGIGT	2
03-3-077	ASCLLON	1
03-3-077	BIGENUDN	2
03-3-077	CALOPAL	2
03-3-077	CALOTUBT	1
03-3-077	CARESTTB	2
03-3-077	CARPPAN	2
03-3-077	CARPTOM	2
03-3-077	CHAPTOM	1
03-3-077	CIRSVIR	2
03-3-077	CORELIN	2
03-3-077	CTENARO	7
03-3-077	CYPE-S1	2
03-3-077	CYRIRAC	2
03-3-077	DICHDICE	5
03-3-077	DICHOVA	2

03-3-077	DIONMUS	1
03-3-077	DROSCAP	2
03-3-077	ERIGVER	2
03-3-077	ERIODECD	2
03-3-077	ERYNAQUA	2
03-3-077	EUPALEUL	2
03-3-077	EURYPAL	2
03-3-077	HELIANG	2
03-3-077	HELIHET	2
03-3-077	HYPECRU	2
03-3-077	HYPO1S1	2
03-3-077	ILEXGLA	4
03-3-077	ILEXOPAO	1
03-3-077	IRISTRD	2
03-3-077	LIATSPI	2
03-3-077	LIQUSTY	1
03-3-077	LOBENUT	1
03-3-077	LYCOALP	2
03-3-077	LYSILOO	2
03-3-077	MAGNVIR	4
03-3-077	MARSGRM	2
03-3-077	MORECAR	2
03-3-077	MORECER	3
03-3-077	MUHLCAPT	6
03-3-077	NYSSSYL	2
03-3-077	PANIVIRV	3
03-3-077	PERSPLS	1
03-3-077	PING1S1	2
03-3-077	PINUPAL	2
03-3-077	PINUSER	4
03-3-077	PLAT1S1	1
03-3-077	POGOOPH	1
03-3-077	POLYBRE	2
03-3-077	PRUNSER	2
03-3-077	PTERAQUP	1
03-3-077	QUER1S1	2
03-3-077	QUERMRG	1
03-3-077	QUERMRL	2
03-3-077	RHEXALI	3
03-3-077	RHEXLUT	2
03-3-077	RHEXPET	2
03-3-077	RHYNBAL	2
03-3-077	RHYNCHP	2
03-3-077	RHYNLAT	2
03-3-077	RHYNOLI	4
03-3-077	RHYNPLU	1
03-3-077	SARRFLA	4
03-3-077	SARRPUR3	2
03-3-077	SCLECIL	2
03-3-077	SCUTINT	2
03-3-077	SISYCAP	2
03-3-077	SMILLAU	2
03-3-077	SOLISTC	2
03-3-077	SYMPDUM1	2
03-3-077	SYMPTIN	2
03-3-077	TRIARAC	2
03-3-077	UTRISUB	1
03-3-077	VACCFOR	2
03-3-077	WOODARE	1
03-3-077	WOODVIR	2
03-3-077	XYRIBAL	1
03-3-077	XYRICAR	2
03-3-077	XYRIDIF	2
03-3-077	ZIGADEN	2
03-3-077	ZIGAGLB	1
03-3-078	ACERRUB	2
03-3-078	AGAL1S1	2
03-3-078	ALETFAR	1
03-3-078	ANDR1S1	2
03-3-078	ARISSTR	5
03-3-078	ARNOOVA	1
03-3-078	ARUNGIGT	1
03-3-078	BERCSCA	2
03-3-078	BIGENUDN	2
03-3-078	CALO1S1	2
03-3-078	CAMPRAD	1
03-3-078	CARE1S1	1
03-3-078	CARPTOM	2
03-3-078	CENTASI	2
03-3-078	CENTVIR	2
03-3-078	CHAPTOM	2
03-3-078	CIRSVIR	1
03-3-078	CLEIDIV	1
03-3-078	CLETALN	2
03-3-078	CORELIN	2
03-3-078	CTENARO	3
03-3-078	CYRIRAC	2
03-3-078	DICH1S1	2
03-3-078	DICHDICE	2
03-3-078	DICHSTRL	2
03-3-078	DIONMUS	1
03-3-078	DIOSVIR	2
03-3-078	DROSCAP	2
03-3-078	ERIA1S1	2
03-3-078	ERIGVER	3
03-3-078	ERYNAQUA	2
03-3-078	ERYNYUC	1
03-3-078	EUPACAP	1
03-3-078	EUPALEUL	2
03-3-078	EUPAMOH	1
03-3-078	EUPAPERP	1
03-3-078	EUPAPIL	1
03-3-078	EUPAROT	2
03-3-078	EURYPAL	2
03-3-078	FIMBPUB	2
03-3-078	GAYLDUM	2
03-3-078	GAYLFRO	4
03-3-078	GELSSEM	1
03-3-078	GENTAUT	1
03-3-078	HELIANG	2
03-3-078	HELIHET	2
03-3-078	HYPECIS	2
03-3-078	HYPECRU	2
03-3-078	HYPEHYP	2

03-3-078	HYPERED	3
03-3-078	HYPTALA	1
03-3-078	ILEXGLA	4
03-3-078	IRISTRD	2
03-3-078	JUNC1S1	1
03-3-078	LACHANC	2
03-3-078	LACHCAR	2
03-3-078	LAMI-S1	2
03-3-078	LECH1S1	1
03-3-078	LIATSPI	2
03-3-078	LIQUSTY	3
03-3-078	LOBENUT	1
03-3-078	LUDWMAR	1
03-3-078	LYCOALP	2
03-3-078	LYCOAME	1
03-3-078	LYCOCARC	1
03-3-078	LYONLIGF	2
03-3-078	LYSILOO	1
03-3-078	MAGNVIR	4
03-3-078	MARSGRM	2
03-3-078	MORECAR	2
03-3-078	MORECER	5
03-3-078	MUHLCAPT	6
03-3-078	NYSSSYL	2
03-3-078	OENO1S1	2
03-3-078	OSMUCINC	1
03-3-078	OSMUREGS	2
03-3-078	PERSPLS	2
03-3-078	PHOTPYR	2
03-3-078	PHYSPUR	1
03-3-078	PING1S1	1
03-3-078	PINUPAL	1
03-3-078	PINUSER	2
03-3-078	POLYBRE	2
03-3-078	POLYLUT	2
03-3-078	POTECND	2
03-3-078	PTERAQUP	2
03-3-078	QUERLAU	1
03-3-078	QUERNIG	2
03-3-078	RHEXALI	2
03-3-078	RHEXMAR	1
03-3-078	RHEXPET	2
03-3-078	RHODATL	2
03-3-078	RHUSCOP	2
03-3-078	RHYNBAL	2
03-3-078	RHYNCHP	2
03-3-078	RHYNCIL	2
03-3-078	RHYNLAT	2
03-3-078	RHYNOLI	2
03-3-078	RHYNPLU	2
03-3-078	RHYNTHO	2
03-3-078	RUBUTRI	2
03-3-078	SARRFLA	1
03-3-078	SCLECIL	1
03-3-078	SCUTINT	2
03-3-078	SEYMCAS	2
03-3-078	SISYCAP	2
03-3-078	SMILGLA	2
03-3-078	SMILLAU	1
03-3-078	SOLISTC	2
03-3-078	SORGNUT	1
03-3-078	SPIR1S1	1
03-3-078	SPORPIN	5
03-3-078	SYMPDUM1	2
03-3-078	SYMPWAL	2
03-3-078	TAXOASC	2
03-3-078	TEPHHIS	2
03-3-078	THALCOO	2
03-3-078	TOXIRAD	2
03-3-078	TRIARAC	2
03-3-078	UNK1 1	
03-3-078	VACCCRA	2
03-3-078	VACCFOR	2
03-3-078	VIOLXPR	2
03-3-078	VITIAES	2
03-3-078	XYRICAR	2
03-3-078	XYRIDIF	2
03-3-078	ZIGAGLB	2
03-3-078	ZIZIAUR	2
03-3-079	ACERRUB	2
03-3-079	ANDR1S1	2
03-3-079	ARISSTR	4
03-3-079	ASCLPED	2
03-3-079	CARPBEL	2
03-3-079	CLEIDIV	2
03-3-079	CYRIRAC	2
03-3-079	DICH1S1	2
03-3-079	GAYLDUM	4
03-3-079	GAYLFRO	2
03-3-079	GELSSEM	2
03-3-079	GORDLAS	2
03-3-079	HYPERED	2
03-3-079	ILEXCRC	4
03-3-079	ILEXGLA	3
03-3-079	ILEXOPAO	2
03-3-079	IRISVERV	1
03-3-079	LEIOBUX	4
03-3-079	LIATPILP	2
03-3-079	LYONLUC	2
03-3-079	LYONMAR	6
03-3-079	MAGNVIR	4
03-3-079	MORECER	2
03-3-079	NYSSSYL	2
03-3-079	OSMUCINC	2
03-3-079	PERSPLS	2
03-3-079	PHOTPYR	2
03-3-079	PINUPAL	5
03-3-079	PINUSER	2
03-3-079	PLEETEN	2
03-3-079	POLYPLM	2
03-3-079	PYXIBAR	2
03-3-079	QUERGEM	2
03-3-079	QUERLVS	3
03-3-079	RHEXALI	2

03-3-079	RHYNMEG	2
03-3-079	SCLECILG	1
03-3-079	SERITOR	2
03-3-079	SMILLAU	2
03-3-079	VACCCRA	8
03-3-079	VACCTEN	5
03-3-079	XYRICAR	2
03-3-079	ZENOPUL	2
03-3-082	ACERRUB	2
03-3-082	ALETFAR	2
03-3-082	ANDRGLA	2
03-3-082	ANDRGLO1	4
03-3-082	ANDRTER	4
03-3-082	ARISSTR	8
03-3-082	ARUNGIGT	4
03-3-082	ASTE1S1	2
03-3-082	ASTE1S2	2
03-3-082	ASTE1S3	1
03-3-082	BAPTTIN	1
03-3-082	BIGENUDN	2
03-3-082	CALABRE	2
03-3-082	CARPODO	4
03-3-082	CARPTOM	2
03-3-082	CHAPTOM	2
03-3-082	CIRSHOR	2
03-3-082	CLEIDIV	1
03-3-082	CROTPUR	2
03-3-082	CYRIRAC	2
03-3-082	DESMTEN	1
03-3-082	DICH1S1	2
03-3-082	DICHACU	2
03-3-082	DICHOVAO	2
03-3-082	DICHSTRL	2
03-3-082	DIOSVIR	2
03-3-082	DROSCAP	2
03-3-082	ERIGVER	2
03-3-082	EUPAMOH	2
03-3-082	EUPAROT	1
03-3-082	EUTHCAR	1
03-3-082	GAYLFRO	2
03-3-082	HELIHET	2
03-3-082	HYPEHYP	2
03-3-082	HYPESET	1
03-3-082	ILEXGLA	3
03-3-082	LIQUSTY	4
03-3-082	LOBENUT	1
03-3-082	LUDWMAR	1
03-3-082	LYONLIGF	1
03-3-082	LYONMAR	1
03-3-082	MORECER	2
03-3-082	MUHLCAPT	2
03-3-082	OSMUCINC	2
03-3-082	OSMUREGS	1
03-3-082	PERSPLS	2
03-3-082	PHOTPYR	1
03-3-082	PINUPAL	8
03-3-082	PINUSER	2
03-3-082	PITYGRA	2
03-3-082	POLYLUT	3
03-3-082	POLYRMA	1
03-3-082	PRENAUT	1
03-3-082	PTERAQUP	3
03-3-082	QUERNIG	2
03-3-082	RHEXALI	2
03-3-082	RHYN1S1	1
03-3-082	RHYNCIL	2
03-3-082	RHYNPLU	2
03-3-082	RUBUTRI	2
03-3-082	SARRFLA	2
03-3-082	SCHISCO	6
03-3-082	SCLEMIN	2
03-3-082	SERILIN	1
03-3-082	SISYCAP	1
03-3-082	SMILGLA	1
03-3-082	SMILLAU	1
03-3-082	SOLI1S1	2
03-3-082	SOLI1S2	1
03-3-082	SOLI1S3	2
03-3-082	SYMPTIN	1
03-3-082	TEPHFLO	1
03-3-082	TRIARAC	2
03-3-082	VACCCRA	4
03-3-082	VACCFOR	2
03-3-082	VACCTEN	5
03-3-082	VIOLXPR	2
03-3-082	WOODVIR	2
03-3-082	XYRICAR	2
03-3-083	AMIAMUS	2
03-3-083	AMPHPUR	2
03-3-083	ANDRGLO1	5
03-3-083	ANDRVIRV	3
03-3-083	ARISPURV	2
03-3-083	ARISSTR	6
03-3-083	ARUNGIGT	6
03-3-083	CALOTUBT	1
03-3-083	CARESTTB	2
03-3-083	CHAMLUT	1
03-3-083	CLEIDIV	2
03-3-083	CLETALN	3
03-3-083	CYRIRAC	2
03-3-083	DICH1S1	2
03-3-083	DICHDICD	2
03-3-083	DICHDICE	3
03-3-083	DIONMUS	2
03-3-083	DROSBRE	1
03-3-083	EUPAPIL	2
03-3-083	EURYPAL	2
03-3-083	GAYLDUM	2
03-3-083	GAYLFRO	4
03-3-083	HYPEHYP	2
03-3-083	ILEXCRC	2
03-3-083	ILEXGLA	5
03-3-083	LECHPULP	1
03-3-083	LYONLIGF	3

03-3-083	LYONLUC	2
03-3-083	LYSILOO	2
03-3-083	MAGNVIR	2
03-3-083	MORECAR	4
03-3-083	MORECER	3
03-3-083	OSMUCINC	7
03-3-083	OXYPTER	1
03-3-083	PERSPLS	5
03-3-083	PHOTPYR	4
03-3-083	PINUSER	6
03-3-083	POLYBRE	1
03-3-083	POLYLUT	2
03-3-083	PTERAQUP	2
03-3-083	RHEXALI	2
03-3-083	RHEXNAS	2
03-3-083	RHODATL	5
03-3-083	RHYN1S1	1
03-3-083	RHYNCHL	2
03-3-083	RHYNCIL	3
03-3-083	RHYNPAL	2
03-3-083	SARRFLA	1
03-3-083	SARRPUR3	1
03-3-083	SEYMCAS	1
03-3-083	SMILGLA	2
03-3-083	SMILLAU	2
03-3-083	SOLIPLC	3
03-3-083	TRIARAC	2
03-3-083	UTRISUB	1
03-3-083	VACCCRA	4
03-3-083	VACCFOR	2
03-3-083	VACCTEN	3
03-3-083	WOODVIR	5
03-3-083	XYRIAMB	3
03-3-083	XYRICAR	2
03-3-083	ZENOPUL	5
03-3-083	ZIGADEN	2
03-3-084	AMPHPUR	2
03-3-084	ANDRGLO1	2
03-3-084	ANDRVIRV	4
03-3-084	ARISSTR	8
03-3-084	ARUNGIGT	4
03-3-084	CARESTTB	1
03-3-084	CARPODO	1
03-3-084	CARPPAN	2
03-3-084	CLEIDIV	2
03-3-084	DICH1S1	1
03-3-084	DICHDICD	2
03-3-084	DICHDICE	4
03-3-084	DICHDICM	2
03-3-084	DICHWEB	2
03-3-084	DIONMUS	1
03-3-084	DROSBRE	2
03-3-084	EURYPAL	2
03-3-084	GAYLDUM	2
03-3-084	GAYLFRO	2
03-3-084	GENTAUT	2
03-3-084	HYPEHYP	2
03-3-084	ILEXGLA	2
03-3-084	IRISVERV	2
03-3-084	LIAT1S1	1
03-3-084	LYONLIGF	3
03-3-084	LYONMAR	2
03-3-084	LYSILOO	1
03-3-084	MAGNVIR	3
03-3-084	MORECAR	2
03-3-084	MORECER	4
03-3-084	OSMUCINC	2
03-3-084	PERSPLS	2
03-3-084	PHOTPYR	2
03-3-084	PINUSER	3
03-3-084	PITYGRA	2
03-3-084	PLAT1S1	1
03-3-084	PLEETEN	1
03-3-084	POLY6S1	1
03-3-084	POLYLUT	3
03-3-084	PTERAQUP	3
03-3-084	PYXIBAR	1
03-3-084	RHEXALI	2
03-3-084	RHEXPET	2
03-3-084	RHODATL	1
03-3-084	RHYN1S1	2
03-3-084	RHYNBAL	2
03-3-084	RHYNFASF	3
03-3-084	RHYNPLU	2
03-3-084	SARRPUR3	2
03-3-084	SCLEMIN	1
03-3-084	SMILGLA	2
03-3-084	SMILLAU	2
03-3-084	SOLIPLC	4
03-3-084	SPIRPRA	1
03-3-084	TRIARAC	2
03-3-084	UTRISUB	2
03-3-084	VACCCRA	5
03-3-084	VACCFUS	2
03-3-084	VACCTEN	2
03-3-084	WOODVIR	4
03-3-084	XYRIAMB	2
03-3-084	XYRICAR	2
03-3-084	ZIGADEN	2
03-3-084	ZIGAGLB	2
03-3-101	ALETFAR	2
03-3-101	ANDR1S1	2
03-3-101	ANDR1S2	2
03-3-101	ANDR1S3	1
03-3-101	ANDRGLA	1
03-3-101	ARISSTR	2
03-3-101	ARUNGIGT	5
03-3-101	ASCLLON	1
03-3-101	BIGENUDN	2
03-3-101	CALOPAL	2
03-3-101	CARPPAN	2
03-3-101	CARPTOM	2
03-3-101	CIRSVIR	2
03-3-101	CLEIDIV	1

03-3-101	CORELIN	2
03-3-101	CTENARO	1
03-3-101	DESMTEN	2
03-3-101	DICH1S1	2
03-3-101	DICHCHA	2
03-3-101	DICHDICM	1
03-3-101	DICHSTRL	1
03-3-101	DIONMUS	1
03-3-101	DROSCAP	2
03-3-101	ERIGVER	2
03-3-101	ERYNINT	2
03-3-101	EUPALEUL	2
03-3-101	EUPAPIL	2
03-3-101	EUPAROT	1
03-3-101	EURYPAL	2
03-3-101	FIMBPUB	2
03-3-101	GAYLFRO	5
03-3-101	GYMNBRE	2
03-3-101	HELIANG	2
03-3-101	HELIHET	2
03-3-101	HYPECRU	1
03-3-101	HYPO1S1	2
03-3-101	ILEXGLA	5
03-3-101	LACHANC	2
03-3-101	LOBENUT	2
03-3-101	MAGNVIR	2
03-3-101	MORECAR	2
03-3-101	MORECER	1
03-3-101	MUHLCAPT	2
03-3-101	NYSSSYL	1
03-3-101	OSMUCINC	2
03-3-101	PHOTPYR	2
03-3-101	PINUPAL	8
03-3-101	PINUSER	1
03-3-101	PITYGRA	2
03-3-101	PLAT1S1	1
03-3-101	POLYLUT	2
03-3-101	PTERAQUP	3
03-3-101	RHEXALI	2
03-3-101	RHEXLUT	1
03-3-101	RHEXPET	1
03-3-101	RHYN1S1	1
03-3-101	SABADIF	1
03-3-101	SARRPUR3	1
03-3-101	SCLEMIN	3
03-3-101	SEYMCAS	2
03-3-101	SISYCAP	1
03-3-101	SMILGLA	2
03-3-101	SMILLAU	2
03-3-101	SOLISTC	2
03-3-101	SPORPIN	8
03-3-101	SYMPDUM1	2
03-3-101	TEPHVIR	1
03-3-101	TRIARAC	1
03-3-101	VACCCRA	2
03-3-101	VACCFOR	3
03-3-101	VACCTEN	2
03-3-101	VIOLXPR	2
03-3-101	XYRIAMB	2
03-3-101	XYRICAR	1
03-3-102	ACERRUB	3
03-3-102	ALETFAR	2
03-3-102	AMBRART	1
03-3-102	ANDR1S1	4
03-3-102	ANDRGLA	2
03-3-102	ARISSTR	2
03-3-102	ARNOOVA	2
03-3-102	ASTE1S1	2
03-3-102	BERCSCA	2
03-3-102	BIGENUDN	2
03-3-102	CALOPAL	2
03-3-102	CARESTL	2
03-3-102	CARPBEL	2
03-3-102	CARPCAR	1
03-3-102	CARPPAN	2
03-3-102	CARPTOM	2
03-3-102	CENTASI	2
03-3-102	CHAPTOM	3
03-3-102	CHRYGOSG	1
03-3-102	CIRSLEC	2
03-3-102	CIRSVIR	2
03-3-102	COREGLA	1
03-3-102	CORELIN	2
03-3-102	CTENARO	6
03-3-102	DICHACUF	2
03-3-102	DICHDICM	2
03-3-102	DICHOVAA	2
03-3-102	DICHOVAO	2
03-3-102	DICHSCO	2
03-3-102	DIODVIR	1
03-3-102	DIONMUS	2
03-3-102	DIOSVIR	2
03-3-102	DROSCAP	2
03-3-102	ERECHIEH	2
03-3-102	ERIGVER	2
03-3-102	ERYNINT	2
03-3-102	ERYNYUC	2
03-3-102	EUPACAP	2
03-3-102	EUPALEUL	2
03-3-102	EUPAROT	2
03-3-102	EURYPAL	2
03-3-102	FIMBPUB	2
03-3-102	GAYLDUM	1
03-3-102	GAYLFRO	2
03-3-102	GELSSEM	1
03-3-102	GYMNBRE	2
03-3-102	HELIANG	2
03-3-102	HELIHET	2
03-3-102	HYPECRU	1
03-3-102	HYPERED	2
03-3-102	HYPOHIR	2
03-3-102	ILEXCRC	2
03-3-102	ILEXGLA	6
03-3-102	ILEXOPAO	1

03-3-102	IRISPRI	2
03-3-102	LACHANC	2
03-3-102	LACHCAR	2
03-3-102	LIAT1S1	2
03-3-102	LINUFLO	1
03-3-102	LUDWVIR	2
03-3-102	LYCOALP	1
03-3-102	LYCOAPR	2
03-3-102	LYONLUC	2
03-3-102	LYONMAR	2
03-3-102	MAGNVIR	3
03-3-102	MARSGRM	2
03-3-102	MORECAR	3
03-3-102	MORECER	4
03-3-102	MUHLCAPT	4
03-3-102	NYSSSYL	1
03-3-102	OSMUCINC	1
03-3-102	PANIVIRV	2
03-3-102	PASPPRA	2
03-3-102	PERSPLS	2
03-3-102	PHOTPYR	2
03-3-102	PHYSPUR	2
03-3-102	PINUPAL	3
03-3-102	PINUSER	1
03-3-102	POLYBRE	2
03-3-102	POLYLUT	1
03-3-102	PYCNFLE	2
03-3-102	QUERHEM	1
03-3-102	RHEXALI	2
03-3-102	RHEXLUT	2
03-3-102	RHEXPET	1
03-3-102	RHUSCOP	2
03-3-102	RHYN1S1	1
03-3-102	RHYNLAT	3
03-3-102	RHYNPLU	2
03-3-102	RUBU1S1	2
03-3-102	SARRFLA	3
03-3-102	SARRPUR3	2
03-3-102	SARRRUBR	1
03-3-102	SCUTINT	2
03-3-102	SISYCAP	1
03-3-102	SMILLAU	2
03-3-102	SMILROT	1
03-3-102	SOLI1S1	2
03-3-102	SOLISTC	2
03-3-102	SPORTER	7
03-3-102	SYMPDUM1	2
03-3-102	TAXOASC	1
03-3-102	THALCOO	2
03-3-102	TOXIRAD	2
03-3-102	TRIARAC	2
03-3-102	UNK1 1	
03-3-102	UNK2 1	
03-3-102	VACCCRA	1
03-3-102	VACCFOR	2
03-3-102	VIOLXPR	2
03-3-102	XYRIAMB	2
03-3-102	XYRICAR	2
03-3-102	ZIGADEN	2
03-3-102	ZIGAGLB	1
03-3-104	ACERRUB	1
03-3-104	AGALAPH	1
03-3-104	ALETFAR	2
03-3-104	AMORGEOC	2
03-3-104	ANDR1S1	2
03-3-104	ANDRGLA	1
03-3-104	ANDRGLO1	2
03-3-104	ANDRGYRG	2
03-3-104	ANDRVIRV	2
03-3-104	ARISSTR	9
03-3-104	BIGENUDN	2
03-3-104	CARPPAN	2
03-3-104	CARPTOM	2
03-3-104	CHAPTOM	2
03-3-104	CLEIDIV	1
03-3-104	CORELIN	2
03-3-104	CTENARO	2
03-3-104	DESMTEN	1
03-3-104	DICHDICE	2
03-3-104	DICHSTRL	2
03-3-104	DIONMUS	2
03-3-104	DROSCAP	2
03-3-104	ERIGVER	2
03-3-104	ERYNINT	1
03-3-104	EUPALEUL	2
03-3-104	EUPHCUR	2
03-3-104	EURYPAL	2
03-3-104	FIMBPUB	2
03-3-104	GAYLDUM	2
03-3-104	GAYLFRO	2
03-3-104	GYMNBRE	2
03-3-104	HYPECRU	2
03-3-104	HYPOHIR	2
03-3-104	ILEXGLA	2
03-3-104	LACHANC	2
03-3-104	LUDWVIR	2
03-3-104	LYCOALP	2
03-3-104	LYCOCARC	2
03-3-104	LYONMAR	2
03-3-104	MAGNVIR	2
03-3-104	MARSGRM	1
03-3-104	MORECAR	2
03-3-104	MORECER	2
03-3-104	PHOTPYR	2
03-3-104	PINUPAL	7
03-3-104	PLAT1S1	1
03-3-104	POLYLUT	2
03-3-104	PTERAQUP	2
03-3-104	RHEXALI	2
03-3-104	RHYNCHP	2
03-3-104	RHYNCIL	2
03-3-104	RHYNPLU	2
03-3-104	SCLEPAUP	2
03-3-104	SMILGLA	2

03-3-104	SMILLAU	1
03-3-104	SPORPIN	2
03-3-104	SYMPDUM1	1
03-3-104	SYMPWAL	2
03-3-104	TEPHFLO	2
03-3-104	TRIARAC	1
03-3-104	UNK1 2	
03-3-104	VACCCRA	2
03-3-104	VACCFOR	2
03-3-104	VACCTEN	3
03-3-104	VIOLSPL	2
03-3-104	VIOLXPR	1
03-3-104	WOODVIR	1
03-3-104	XYRIAMB	2
03-3-104	XYRICAR	2
03-3-105	ACERRUB	1
03-3-105	ANDR1S1	2
03-3-105	ARISSTR	8
03-3-105	ARUNGIGT	2
03-3-105	CARPPAN	2
03-3-105	CLETALN	2
03-3-105	CORELIN	2
03-3-105	DICHWEB	2
03-3-105	EUPAPIL	2
03-3-105	GAYLDUM	3
03-3-105	GAYLFRO	2
03-3-105	HYPERED	2
03-3-105	ILEXCRC	2
03-3-105	ILEXGLA	6
03-3-105	ILEXOPAO	2
03-3-105	IRISVERV	2
03-3-105	LIATPILP	2
03-3-105	LYONLIGF	2
03-3-105	LYONMAR	2
03-3-105	MAGNVIR	2
03-3-105	MORECER	2
03-3-105	NYSSSYL	3
03-3-105	PERSPLS	2
03-3-105	PHOTPYR	2
03-3-105	PINUPAL	6
03-3-105	PINUSER	5
03-3-105	PITYGRA	2
03-3-105	POLYLUT	1
03-3-105	PTERPYC	1
03-3-105	QUERICN	2
03-3-105	RHEXALI	2
03-3-105	RHEXPET	1
03-3-105	RHODATL	2
03-3-105	RHUSCOP	2
03-3-105	SMILGLA	2
03-3-105	VACCCRA	8
03-3-105	VACCFOR	2
03-3-105	VACCTEN	2
03-3-105	XYRICAR	1
03-3-107	ANDR1S1	2
03-3-107	ANDRGLA	2
03-3-107	ARISSTR	7
03-3-107	ASCLPED	1
03-3-107	CARPPAN	2
03-3-107	CARPTOM	2
03-3-107	DICHLNC	1
03-3-107	GAYLDUM	3
03-3-107	GAYLFRO	2
03-3-107	GELSSEM	1
03-3-107	HYPERED	2
03-3-107	ILEXCRC	2
03-3-107	ILEXGLA	4
03-3-107	ILEXOPAO	2
03-3-107	IRISVERV	1
03-3-107	LACHANC	2
03-3-107	LEIOBUX	4
03-3-107	LIAT1S1	1
03-3-107	MAGNVIR	2
03-3-107	MORECER	2
03-3-107	OSMAAME	2
03-3-107	PERSPLS	2
03-3-107	PHOTPYR	2
03-3-107	PINUELLE	4
03-3-107	PINUPAL	7
03-3-107	PITYGRA	1
03-3-107	POLYPLM	2
03-3-107	PYXIBAR	2
03-3-107	QUERGEM	2
03-3-107	QUERICN	1
03-3-107	QUERLVS	1
03-3-107	RHYNPLU	2
03-3-107	SCLECILG	2
03-3-107	SMILLAU	2
03-3-107	VACCCRA	6
03-3-107	VACCTEN	2
03-3-107	XYRICAR	2
03-4-050	AMPHPUR	2
03-4-050	ANDR1S1	2
03-4-050	ANDRGLO1	2
03-4-050	ANDRTER	2
03-4-050	ARISSTR	4
03-4-050	ARUNGIGT	2
03-4-050	CALOBAR	1
03-4-050	CARPPAN	2
03-4-050	CARPTOM	1
03-4-050	CLEIDIV	2
03-4-050	CYRIRAC	2
03-4-050	DICHDICM	2
03-4-050	DICHWEB	2
03-4-050	EUPAPIL	2
03-4-050	EURYPAL	2
03-4-050	GAYLDUM	2
03-4-050	GAYLFRO	4
03-4-050	HYPERED	2
03-4-050	ILEXCRC	6
03-4-050	ILEXOPAO	2
03-4-050	IRISVERV	2
03-4-050	LYONLIGF	4
03-4-050	LYONLUC	2

03-4-050	MAGNVIR	4
03-4-050	MORECER	4
03-4-050	NYSSSYL	4
03-4-050	OSMUCINC	2
03-4-050	PERSPLS	4
03-4-050	PHOTPYR	2
03-4-050	PINUPAL	2
03-4-050	PINUSER	5
03-4-050	PITYGRA	1
03-4-050	PLAT1S1	2
03-4-050	POLYBRE	2
03-4-050	POLYLUT	2
03-4-050	PTERAQUP	5
03-4-050	PYXIBAR	2
03-4-050	RHEXALI	2
03-4-050	RHEXPET	1
03-4-050	RHODATL	2
03-4-050	RHUSCOP	1
03-4-050	RHYNFASF	2
03-4-050	RHYNLAT	2
03-4-050	SCLECIL	2
03-4-050	SEYMCAS	2
03-4-050	SMILGLA	1
03-4-050	SMILLAU	2
03-4-050	SOLIPLC	1
03-4-050	SPIRLCRG	1
03-4-050	VACCCRA	4
03-4-050	VACCFOR	2
03-4-050	VACCFUS	2
03-4-050	VACCTEN	3
03-4-050	WOODVIR	4
03-4-050	XYRICAR	2
03-4-050	ZIGADEN	2
03-4-053	AGALSET	1
03-4-053	ANDR1S1	2
03-4-053	ANDRTER	2
03-4-053	ANDRVIRV	2
03-4-053	ARISSTR	7
03-4-053	CARPBEL	1
03-4-053	CARPODO	3
03-4-053	CLEIDIV	2
03-4-053	DICHWEB	2
03-4-053	DIOSVIR	1
03-4-053	GALAVOL	1
03-4-053	GAYLDUM	4
03-4-053	GAYLFRO	3
03-4-053	GENTAUT	1
03-4-053	HYPERED	2
03-4-053	ILEXGLA	2
03-4-053	IONALIN	1
03-4-053	IRISVERV	2
03-4-053	LIATPILP	1
03-4-053	LOBENUT	2
03-4-053	LYONLIGF	2
03-4-053	LYONMAR	3
03-4-053	MAGNVIR	2
03-4-053	MORECAR	1
03-4-053	MORECER	3
03-4-053	NYSSSYL	2
03-4-053	PERSPLS	2
03-4-053	PHOTPYR	2
03-4-053	PINUPAL	4
03-4-053	PINUSER	5
03-4-053	PINUTAE	2
03-4-053	PITYGRA	2
03-4-053	POLYLUT	2
03-4-053	PTERAQUP	2
03-4-053	PTERPYC	1
03-4-053	PYXIBAR	2
03-4-053	RHEXALI	2
03-4-053	RHEXPET	1
03-4-053	RHYNBAL	1
03-4-053	RHYNPLU	2
03-4-053	SCLECILG	2
03-4-053	SEYMCAS	2
03-4-053	SMILBON	1
03-4-053	SPIRLCRG	1
03-4-053	VACCCRA	4
03-4-053	VACCSTA	1
03-4-053	VACCTEN	2
03-4-053	XYRICAR	2
03-4-056	ACERRUB	2
03-4-056	AGALSET	2
03-4-056	ANDRGLO1	1
03-4-056	ANDRTER	2
03-4-056	ANDRVIRV	2
03-4-056	ARISSTR	6
03-4-056	ARUNGIGT	1
03-4-056	CARPODO	2
03-4-056	CARPPAN	2
03-4-056	CARPTOM	2
03-4-056	CUSC1S1	2
03-4-056	DICHDICE	1
03-4-056	DICHWEB	2
03-4-056	DIONMUS	2
03-4-056	DIOSVIR	2
03-4-056	FIMBPUB	1
03-4-056	GAYLDUM	4
03-4-056	GAYLFRO	4
03-4-056	GENTAUT	1
03-4-056	HYPERED	1
03-4-056	ILEXCRC	1
03-4-056	ILEXGLA	5
03-4-056	ILEXOPAO	1
03-4-056	IRISVERV	2
03-4-056	LACHANC	1
03-4-056	LIAT1S2	2
03-4-056	LIATPILP	2
03-4-056	LIQUSTY	2
03-4-056	LYONMAR	2
03-4-056	MAGNVIR	2
03-4-056	MORECER	2
03-4-056	PERSPLS	2
03-4-056	PHOTPYR	2

03-4-056	PINUPAL	6
03-4-056	PINUSER	3
03-4-056	PITYGRA	2
03-4-056	POLYBRE	1
03-4-056	POLYLUT	2
03-4-056	PTERAQUP	3
03-4-056	PYXIBAR	2
03-4-056	RHEXALI	2
03-4-056	RHODATL	2
03-4-056	RHUSCOP	1
03-4-056	RHYNPLU	2
03-4-056	SCLECIL	2
03-4-056	SEYMCAS	1
03-4-056	SOLIODOO	1
03-4-056	SOLISTC	1
03-4-056	SPORPIN	5
03-4-056	SYMPDUM1	2
03-4-056	VACCCRA	6
03-4-056	VACCTEN	3
03-4-056	WOODVIR	2
03-4-056	XYRICAR	2
03-4-057	AMELCAN	1
03-4-057	ANDRTER	1
03-4-057	ANDRVIRV	2
03-4-057	ARISSTR	6
03-4-057	CARPBEL	2
03-4-057	CARPODO	2
03-4-057	DICHDICE	2
03-4-057	DICHWEB	2
03-4-057	DIOSVIR	1
03-4-057	EPIGREP	1
03-4-057	GALAVOL	1
03-4-057	GAYLDUM	4
03-4-057	GAYLFRO	2
03-4-057	GELSSEM	1
03-4-057	ILEXCRC	2
03-4-057	ILEXGLA	4
03-4-057	IRISVERV	2
03-4-057	KALMCAR	2
03-4-057	LACHANC	1
03-4-057	LIATPILP	2
03-4-057	LOBENUT	1
03-4-057	LYONLUC	1
03-4-057	LYONMAR	4
03-4-057	MORECER	2
03-4-057	NYSSSYL	2
03-4-057	PERSPLS	2
03-4-057	PHOTPYR	2
03-4-057	PINUPAL	6
03-4-057	PINUSER	3
03-4-057	PITYGRA	2
03-4-057	POLYLUT	1
03-4-057	POLYPLM	1
03-4-057	PTERAQUP	2
03-4-057	PTERPYC	1
03-4-057	PYXIBAR	2
03-4-057	QUERGEM	2
03-4-057	QUERLVS	4
03-4-057	RHODATL	2
03-4-057	SASSALB	2
03-4-057	SCLECIL	1
03-4-057	SMILGLA	1
03-4-057	SPIRLCRG	1
03-4-057	VACCCRA	6
03-4-057	VACCSTA	1
03-4-057	VACCTEN	4
03-4-057	XYRICAR	2
03-4-058	ANDRTER	4
03-4-058	ANDRVIRV	3
03-4-058	ARISSTR	7
03-4-058	BIGENUDN	1
03-4-058	CARPODO	2
03-4-058	CHAMNICN	1
03-4-058	CLEIDIV	1
03-4-058	CROTPUR	1
03-4-058	DESMCLR	1
03-4-058	DESMLIN	1
03-4-058	DESMTEN	2
03-4-058	DICHOVAA	1
03-4-058	DICHSTRL	1
03-4-058	DIOSVIR	2
03-4-058	EUPAMOH	2
03-4-058	EUPAROT	2
03-4-058	GALAERE	1
03-4-058	GAYLDUM	3
03-4-058	GAYLFRO	2
03-4-058	GYMNBRE	2
03-4-058	HYPECRU	1
03-4-058	ILEXGLA	3
03-4-058	IONALIN	2
03-4-058	IRISVERV	1
03-4-058	LESPANG	2
03-4-058	LESPHIR	1
03-4-058	LIATPILP	2
03-4-058	LOBENUT	2
03-4-058	LUDWVIR	2
03-4-058	LYONMAR	2
03-4-058	MORECER	2
03-4-058	PARTINTI	1
03-4-058	PERSPLS	2
03-4-058	PHOTPYR	2
03-4-058	PINUPAL	6
03-4-058	PINUSER	2
03-4-058	PITYGRA	2
03-4-058	POLYLUT	1
03-4-058	PTERAQUP	2
03-4-058	QUERFLC	1
03-4-058	RHEXALI	1
03-4-058	RHUSCOP	1
03-4-058	SCLECIL	2
03-4-058	SERITOR	2
03-4-058	SISYCAP	2
03-4-058	SMILGLA	1
03-4-058	SOLIODOO	2

03-4-058	STYLPATP	2
03-4-058	SYMPTIN	2
03-4-058	SYMPWAL	2
03-4-058	TEPHHIS	2
03-4-058	VACCCRA	5
03-4-058	VACCTEN	4
03-4-058	XYRICAR	1
03-4-059	AGAL1S1	1
03-4-059	ANDRTER	3
03-4-059	ANDRVIRV	4
03-4-059	ARISSTR	7
03-4-059	BAPTTIN	2
03-4-059	CARPODO	2
03-4-059	CHRYGOSG	2
03-4-059	CIRSREP	1
03-4-059	CNIDSTI	1
03-4-059	DESMLIN	1
03-4-059	DICH1S1	2
03-4-059	DICHOVAA	2
03-4-059	DICHWEB	1
03-4-059	EUPAROT	1
03-4-059	EUPHIPE	1
03-4-059	GALAERE	1
03-4-059	GALAVOL	1
03-4-059	GAYLDUM	5
03-4-059	GAYLFRO	3
03-4-059	GENTAUT	1
03-4-059	GYMNBRE	1
03-4-059	HELIHET	1
03-4-059	HYPECRU	2
03-4-059	HYPEHYP	1
03-4-059	ILEXGLA	4
03-4-059	IONALIN	2
03-4-059	IRISVERV	2
03-4-059	LECH1S1	2
03-4-059	LESPANG	1
03-4-059	LESPCPT	1
03-4-059	LESPHIR	1
03-4-059	LIATPILP	2
03-4-059	LIQUSTY	1
03-4-059	LOBENUT	1
03-4-059	MORECER	4
03-4-059	PERSPLS	1
03-4-059	PINUPAL	6
03-4-059	PINUSER	2
03-4-059	PINUTAE	1
03-4-059	PITYGRA	2
03-4-059	POLYLUT	1
03-4-059	PTERAQUP	2
03-4-059	PTERPYC	2
03-4-059	QUERFLC	2
03-4-059	QUERICN	2
03-4-059	QUERLVS	1
03-4-059	QUERMRG	1
03-4-059	QUERMRL	4
03-4-059	QUERSTE	2
03-4-059	QUERXLM	1
03-4-059	RHUSCOP	2
03-4-059	RHYNPLU	2
03-4-059	RUBUFLA	1
03-4-059	SCLECIL	1
03-4-059	SERITOR	1
03-4-059	SMILROT	1
03-4-059	SOLI1S1	2
03-4-059	SOLIODOO	2
03-4-059	STYLBIF	1
03-4-059	SYMPWAL	2
03-4-059	TEPHHIS	2
03-4-059	TOXIPUB	1
03-4-059	TRAGURE	1
03-4-059	VACCCRA	4
03-4-059	VACCFOR	2
03-4-059	VACCTEN	3
03-4-059	XYRICAR	1
03-4-060	AGAL1S1	2
03-4-060	AMPHPUR	3
03-4-060	ANDRVIRV	2
03-4-060	ARISPURP	1
03-4-060	ARISSTR	2
03-4-060	ARUNGIGT	2
03-4-060	CALABRE	7
03-4-060	CALOBAR	2
03-4-060	CARPPAN	2
03-4-060	CARPTOM	2
03-4-060	CLEIDIV	1
03-4-060	CUSC1S1	2
03-4-060	DICH1S1	2
03-4-060	DICHDICE	4
03-4-060	DICHDICM	2
03-4-060	DIOSVIR	1
03-4-060	DROSCAP	1
03-4-060	EUPAHYS	2
03-4-060	EUPAPIL	1
03-4-060	EURYPAL	2
03-4-060	GAYLDUM	4
03-4-060	GAYLFRO	2
03-4-060	GORDLAS	2
03-4-060	GYMNBRE	2
03-4-060	HYPECRU	2
03-4-060	HYPERED	2
03-4-060	ILEXCRC	2
03-4-060	ILEXGLA	5
03-4-060	IRISVERV	2
03-4-060	JUNCABO	2
03-4-060	LACHCAR	2
03-4-060	LIATPILP	2
03-4-060	LYONLIGF	2
03-4-060	LYONLUC	2
03-4-060	MAGNVIR	3
03-4-060	MORECAR	3
03-4-060	MORECER	1
03-4-060	NYSSSYL	1
03-4-060	PERSPLS	2
03-4-060	PHOTPYR	2

03-4-060	PINUPAL	5
03-4-060	PINUSER	3
03-4-060	PINUTAE	2
03-4-060	PLAT1S1	2
03-4-060	POLYBRE	2
03-4-060	POLYLUT	2
03-4-060	RHEXALI	2
03-4-060	RHEXPET	2
03-4-060	RHYNCHP	2
03-4-060	RHYNCIL	1
03-4-060	RHYNFASF	1
03-4-060	RHYNHRV	2
03-4-060	RHYNLAT	2
03-4-060	RHYNPAL	2
03-4-060	RHYNPLU	2
03-4-060	SABADIF	2
03-4-060	SARRFLA	2
03-4-060	SCLEMIN	2
03-4-060	SEYMCAS	1
03-4-060	SMILLAU	3
03-4-060	SOLISTC	2
03-4-060	VACCCRA	2
03-4-060	VACCFOR	2
03-4-060	VACCTEN	2
03-4-060	WOODVIR	2
03-4-060	XYRIAMB	2
03-4-060	XYRICAR	2
03-4-060	ZIGADEN	2
03-4-061	AGALAPH	1
03-4-061	AGALSET	1
03-4-061	ANDRVIRV	2
03-4-061	ARISSTR	7
03-4-061	BIGENUDN	1
03-4-061	CARPPAN	2
03-4-061	CARPTOM	2
03-4-061	CLEIDIV	2
03-4-061	CUSC1S1	2
03-4-061	DICHDICE	2
03-4-061	EURYPAL	2
03-4-061	FIMBPUB	2
03-4-061	GAYLDUM	6
03-4-061	GAYLFRO	2
03-4-061	HYPERED	2
03-4-061	ILEXCRC	1
03-4-061	ILEXGLA	4
03-4-061	IRISVERV	2
03-4-061	LIATPILP	1
03-4-061	LOBENUT	2
03-4-061	LYONMAR	2
03-4-061	MAGNVIR	3
03-4-061	MORECAR	2
03-4-061	MORECER	2
03-4-061	NYSSSYL	2
03-4-061	PERSPLS	2
03-4-061	PHOTPYR	1
03-4-061	PINUPAL	6
03-4-061	PINUSER	2
03-4-061	PITYGRA	2
03-4-061	POLYLUT	1
03-4-061	PYXIBAR	2
03-4-061	RHEXALI	2
03-4-061	RHYNPLU	2
03-4-061	SABADIF	1
03-4-061	SCLECIL	2
03-4-061	SEYMCAS	2
03-4-061	SMILLAU	1
03-4-061	SOLISTC	1
03-4-061	SPIRPRA	1
03-4-061	VACCCRA	5
03-4-061	VACCTEN	2
03-4-061	XYRICAR	2
03-4-062	ACERRUB	1
03-4-062	AGAL1S1	2
03-4-062	ALETFAR	2
03-4-062	AMIAMUS	1
03-4-062	AMPHPUR	2
03-4-062	ANDRTER	6
03-4-062	ANDRVIRV	5
03-4-062	ARISLNG	3
03-4-062	ARISSTR	3
03-4-062	ARUNGIGT	2
03-4-062	BIGENUDN	2
03-4-062	CALOPAL	1
03-4-062	CALOTUBT	1
03-4-062	CARE1S1	1
03-4-062	CARESTTB	2
03-4-062	CARPODO	2
03-4-062	CARPPAN	2
03-4-062	CARPTOM	2
03-4-062	CENTASI	2
03-4-062	CHAPTOM	2
03-4-062	CLEIDIV	2
03-4-062	CLETALN	2
03-4-062	CORELIN	4
03-4-062	CTENARO	5
03-4-062	DICHDICD	2
03-4-062	DICHDICE	2
03-4-062	DICHDICM	2
03-4-062	DIONMUS	2
03-4-062	DROSCAP	1
03-4-062	ERIGVER	2
03-4-062	ERIOCOM	2
03-4-062	EUPAMOH	2
03-4-062	EUPAPIL	2
03-4-062	EURYPAL	2
03-4-062	GAYLDUM	2
03-4-062	GAYLFRO	2
03-4-062	HELIHET	2
03-4-062	HYPECRU	2
03-4-062	HYPERED	1
03-4-062	HYPO1S1	1
03-4-062	ILEXCRC	2
03-4-062	ILEXGLA	2
03-4-062	IRISVERV	2

03-4-062	JUNCABO	2
03-4-062	KALMCAR	2
03-4-062	LACHANC	2
03-4-062	LIATPILP	2
03-4-062	LIATSPI	2
03-4-062	LILICAT	2
03-4-062	LIQUSTY	2
03-4-062	LYCOALP	2
03-4-062	LYCOAPR	2
03-4-062	LYONLUC	2
03-4-062	LYONMAR	2
03-4-062	LYSILOO	2
03-4-062	MAGNVIR	2
03-4-062	MARSGRM	2
03-4-062	MORECAR	2
03-4-062	MORECER	2
03-4-062	NYSSSYL	2
03-4-062	OSMUCINC	6
03-4-062	OSMUREGS	2
03-4-062	OXYPTER	1
03-4-062	PANIVIRV	2
03-4-062	PERSPLS	2
03-4-062	PHOTPYR	2
03-4-062	PINUPAL	4
03-4-062	PINUSER	6
03-4-062	PINUTAE	2
03-4-062	PLAT1S1	2
03-4-062	POGOOPH	2
03-4-062	POLYBRE	1
03-4-062	POLYHOO	1
03-4-062	POLYLUT	2
03-4-062	RHEXALI	2
03-4-062	RHEXLUT	2
03-4-062	RHEXPET	2
03-4-062	RHYNBAL	1
03-4-062	RHYNBRE	2
03-4-062	RHYNCHP	2
03-4-062	RHYNFASF	1
03-4-062	RHYNPAL	1
03-4-062	RHYNPLU	2
03-4-062	SABADIF	2
03-4-062	SARRFLA	2
03-4-062	SARRRUBR	2
03-4-062	SCLECIL1	2
03-4-062	SEYMCAS	1
03-4-062	SMILGLA	1
03-4-062	SMILLAU	2
03-4-062	SOLISTC	2
03-4-062	SPIRLCRG	2
03-4-062	SYMPDUM1	2
03-4-062	VACCCRA	2
03-4-062	VACCFOR	2
03-4-062	VACCTEN	2
03-4-062	VIBUNUDN	2
03-4-062	VIOLXPR	2
03-4-062	WOODARE	2
03-4-062	WOODVIR	2
03-4-062	XYRIAMB	2
03-4-062	XYRIBAL	2
03-4-062	XYRICAR	2
03-4-062	ZIGADEN	2
03-4-075	ACERRUB	1
03-4-075	AGALLIN	2
03-4-075	ALETFAR	2
03-4-075	ANDR1S1	2
03-4-075	ANDR1S2	2
03-4-075	ANDRTER	4
03-4-075	ANDRVIRV	2
03-4-075	ARISPURV	1
03-4-075	ARISSTR	7
03-4-075	ARUNGIGT	1
03-4-075	BAPTCIN	2
03-4-075	BAPTTIN	1
03-4-075	BIGENUDN	4
03-4-075	CALOBAR	1
03-4-075	CALOPAL	2
03-4-075	CARPODO	2
03-4-075	CARPPAN	1
03-4-075	CARYALB	2
03-4-075	CHAPTOM	1
03-4-075	CIRSVIR	2
03-4-075	CLEIDIV	1
03-4-075	CORELIN	3
03-4-075	CTENARO	5
03-4-075	CYRIRAC	2
03-4-075	DESMTEN	2
03-4-075	DICHDICE	3
03-4-075	DICHLCT	1
03-4-075	DICHOVAO	1
03-4-075	DICHSTRL	2
03-4-075	DIONMUS	2
03-4-075	DROSCAP	2
03-4-075	ERIGVER	2
03-4-075	ERYNINT	2
03-4-075	EUPAMOH	2
03-4-075	EUPAROT	1
03-4-075	EURYPAL	2
03-4-075	GAYLFRO	2
03-4-075	GYMNBRE	2
03-4-075	HELIANG	1
03-4-075	HELIHET	3
03-4-075	HYPECRU	2
03-4-075	HYPOHIR	2
03-4-075	ILEXGLA	5
03-4-075	LACHANC	2
03-4-075	LACHCAR	2
03-4-075	LIAT1S1	1
03-4-075	LINU1S1	1
03-4-075	LIQUSTY	1
03-4-075	LOBENUT	1
03-4-075	LYCOAPR	2
03-4-075	LYCOCARC	2
03-4-075	LYONMAR	1
03-4-075	LYSILOO	1

03-4-075	MAGNVIR	2
03-4-075	MARSGRM	1
03-4-075	MORECAR	2
03-4-075	MUHLCAPT	3
03-4-075	NYSSSYL	1
03-4-075	PASPPRA	1
03-4-075	PERSPLS	1
03-4-075	PHOTPYR	2
03-4-075	PINGCAE	1
03-4-075	PINUPAL	5
03-4-075	PINUSER	4
03-4-075	PITYGRA	2
03-4-075	PLAT1S1	1
03-4-075	POLYBRE	1
03-4-075	POLYHOO	2
03-4-075	POLYLUT	2
03-4-075	PRENAUT	1
03-4-075	PTERAQUP	4
03-4-075	PYCNFLE	2
03-4-075	RHEXALI	4
03-4-075	RHEXLUT	2
03-4-075	RHEXPET	2
03-4-075	RHYNBAL	2
03-4-075	RHYNCHP	2
03-4-075	RHYNCIL	1
03-4-075	RHYNPLU	2
03-4-075	SARRPUR3	1
03-4-075	SCLECIL1	1
03-4-075	SCLEMIN	2
03-4-075	SEYMCAS	1
03-4-075	SISYCAP	1
03-4-075	SMILGLA	2
03-4-075	SMILLAU	1
03-4-075	SOLIPLC	2
03-4-075	SPORPIN	1
03-4-075	SYMPDUM1	3
03-4-075	TEPHHIS	2
03-4-075	TOXIRAD	1
03-4-075	TRIARAC	2
03-4-075	VACCCRA	2
03-4-075	VACCFOR	2
03-4-075	VACCFUS	1
03-4-075	VACCTEN	1
03-4-075	VIOLXPR	2
03-4-075	WOODVIR	2
03-4-075	XYRIAMB	2
03-4-075	XYRIBAL	1
03-4-075	XYRICAR	2
03-4-075	ZIGAGLB	2
03-4-076	ANDRGLA	1
03-4-076	ANDRTER	1
03-4-076	ARISSTR	7
03-4-076	CARPPAN	2
03-4-076	CLEIDIV	1
03-4-076	DICH1S2	2
03-4-076	DICHCHA	2
03-4-076	DIONMUS	2
03-4-076	GAYLDUM	4
03-4-076	GAYLFRO	4
03-4-076	HYPERED	2
03-4-076	HYPOHIR	1
03-4-076	ILEXCRC	2
03-4-076	ILEXGLA	3
03-4-076	ILEXOPAO	1
03-4-076	IRISVERV	2
03-4-076	LACHANC	2
03-4-076	LEIOBUX	7
03-4-076	LIAT1S1	2
03-4-076	LYONLUC	1
03-4-076	LYONMAR	1
03-4-076	MAGNVIR	1
03-4-076	MORECER	2
03-4-076	NYSSSYL	1
03-4-076	PERSPLS	2
03-4-076	PHOTPYR	1
03-4-076	PINUPAL	6
03-4-076	PINUSER	2
03-4-076	QUERGEM	2
03-4-076	QUERHEM	4
03-4-076	RHYNPLU	2
03-4-076	SCLECILG	1
03-4-076	SMILGLA	1
03-4-076	SMILLAU	1
03-4-076	VACCCRA	4
03-4-076	VACCFOR	2
03-4-076	VACCTEN	3
03-4-076	WOODVIR	2
03-4-076	XYRIBRE	1
03-4-076	XYRICAR	2
03-4-077	AGALPUR	1
03-4-077	ANDR1S1	2
03-4-077	ANDRGLA	1
03-4-077	ARISSTR	7
03-4-077	CARPODO	2
03-4-077	CARPPAN	1
03-4-077	CARPTOM	2
03-4-077	DICH1S1	1
03-4-077	DICHDICD	2
03-4-077	GAYLDUM	4
03-4-077	GAYLFRO	2
03-4-077	GENTAUT	1
03-4-077	GORDLAS	2
03-4-077	HYPERED	2
03-4-077	HYPOHIR	1
03-4-077	ILEXGLA	2
03-4-077	IONALIN	2
03-4-077	IRISVERV	2
03-4-077	LIAT1S1	2
03-4-077	LYONLIGF	1
03-4-077	LYONMAR	2
03-4-077	MAGNVIR	2
03-4-077	MORECAR	2
03-4-077	MORECER	1
03-4-077	OSMUCINC	1

03-4-077	PERSPLS	2
03-4-077	PINUPAL	5
03-4-077	PINUSER	2
03-4-077	PITYGRA	2
03-4-077	POLYLUT	1
03-4-077	PTERAQUP	4
03-4-077	PYXIBAR	5
03-4-077	RHEXALI	1
03-4-077	RHODATL	2
03-4-077	RHYNPLU	2
03-4-077	SCLECILG	1
03-4-077	SMILGLA	1
03-4-077	SMILLAU	2
03-4-077	UNK1 2	
03-4-077	VACCCRA	6
03-4-077	VACCFOR	2
03-4-077	VACCTEN	5
03-4-077	WOODVIR	1
03-4-077	XYRICAR	2
03-4-080	ANDR1S1	2
03-4-080	ANDRGLA	2
03-4-080	ARISSTR	7
03-4-080	CARPBEL	2
03-4-080	CARPPAN	2
03-4-080	CARPTOM	2
03-4-080	CLEIBIF	2
03-4-080	DICH1S1	2
03-4-080	DICHWEB	2
03-4-080	DIONMUS	2
03-4-080	DROSBRE	1
03-4-080	EURYPAL	1
03-4-080	FIMBPUB	2
03-4-080	GAYLDUM	4
03-4-080	GAYLFRO	2
03-4-080	HYPERED	2
03-4-080	ILEXCRC	1
03-4-080	ILEXGLA	4
03-4-080	IRISVERV	2
03-4-080	LACHANC	1
03-4-080	LACHCAR	1
03-4-080	LECHTOR	1
03-4-080	LEIOBUX	1
03-4-080	LIAT1S1	1
03-4-080	LYONLUC	2
03-4-080	LYONMAR	2
03-4-080	MAGNVIR	2
03-4-080	MORECER	3
03-4-080	PERSPLS	2
03-4-080	PHOTPYR	2
03-4-080	PINUPAL	2
03-4-080	PINUSER	2
03-4-080	PLEETEN	2
03-4-080	POLYLUT	2
03-4-080	RHEXALI	2
03-4-080	RHYNPLU	1
03-4-080	SMILLAU	2
03-4-080	SOLIPLC	2
03-4-080	SPIRPRA	1
03-4-080	SPORPIN	3
03-4-080	TOFIGLA	1
03-4-080	VACCCRA	6
03-4-080	VACCFUS	2
03-4-080	VACCTEN	2
03-4-080	XYRICAR	2
03-4-103	AGALOBT	1
03-4-103	ALETFAR	2
03-4-103	ANDR1S1	6
03-4-103	ARISPURV	1
03-4-103	ARISSTR	7
03-4-103	ASCLLON	1
03-4-103	BIGENUDN	3
03-4-103	CALOBAR	2
03-4-103	CALOPAL	2
03-4-103	CALOTUBT	2
03-4-103	CARPPAN	2
03-4-103	CARPTOM	2
03-4-103	CHAPTOM	1
03-4-103	CIRSVIR	1
03-4-103	CLEIDIV	2
03-4-103	CORELIN	4
03-4-103	CTENARO	5
03-4-103	DICHDICE	3
03-4-103	DIONMUS	3
03-4-103	DROSCAP	2
03-4-103	ERIGVER	2
03-4-103	ERYNINT	2
03-4-103	EUPALEUL	2
03-4-103	EUPAROT	1
03-4-103	EUPHCUR	2
03-4-103	EURYPAL	2
03-4-103	FIMBPUB	2
03-4-103	GAYLDUM	1
03-4-103	GAYLFRO	2
03-4-103	GYMNBRE	2
03-4-103	HELIANG	2
03-4-103	HELIHET	2
03-4-103	HYPECRU	2
03-4-103	HYPOWRI	2
03-4-103	ILEXCRC	1
03-4-103	ILEXGLA	2
03-4-103	LACHANC	2
03-4-103	LIAT1S1	1
03-4-103	LILICAT	2
03-4-103	LOBENUT	2
03-4-103	LUDWVIR	2
03-4-103	LYCOALP	2
03-4-103	LYCOAPR	1
03-4-103	LYCOCARC	2
03-4-103	MAGNVIR	1
03-4-103	MARSGRM	2
03-4-103	MORECAR	2
03-4-103	MORECER	1
03-4-103	MUHLCAPT	5
03-4-103	NYSSSYL	1

03-4-103	OXYPTER	1
03-4-103	PHOTPYR	2
03-4-103	PING1S1	2
03-4-103	PINUPAL	4
03-4-103	PITYGRA	2
03-4-103	PLAT1S1	2
03-4-103	POGOOPH	2
03-4-103	POLYCRU	1
03-4-103	POLYHOO	2
03-4-103	POLYLUT	2
03-4-103	PRENAUT	2
03-4-103	QUERNIG	2
03-4-103	RHEXALI	2
03-4-103	RHEXLUT	2
03-4-103	RHEXPET	1
03-4-103	RHYNBAL	2
03-4-103	RHYNBRE	2
03-4-103	RHYNCHP	2
03-4-103	RHYNCIL	2
03-4-103	RHYNPLU	3
03-4-103	SABADIF	1
03-4-103	SARRPUR3	2
03-4-103	SCLEMIN	3
03-4-103	SCLEPAUP	3
03-4-103	SEYMCAS	2
03-4-103	SISYCAP	2
03-4-103	SMILLAU	1
03-4-103	SOLIPLC	3
03-4-103	SOLISTC	1
03-4-103	SPIRPRA	1
03-4-103	SPORPIN	6
03-4-103	SYMPDUM1	2
03-4-103	TRIARAC	2
03-4-103	VACCCRA	2
03-4-103	VACCFOR	2
03-4-103	VACCFUS	1
03-4-103	VACCTEN	2
03-4-103	VIOLXPR	2
03-4-103	WOODVIR	2
03-4-103	XYRIAMB	2
03-4-103	XYRICAR	2
03-4-104	ACERRUB	1
03-4-104	AGALAPH	1
03-4-104	AGALOBT	1
03-4-104	ALETFAR	2
03-4-104	ANDR1S1	6
03-4-104	ANDRMOH	1
03-4-104	ANTHRUF	1
03-4-104	ARISPURV	1
03-4-104	ARISSTR	2
03-4-104	ARUNGIGT	2
03-4-104	ASCLLON	1
03-4-104	BIGENUDN	2
03-4-104	CALOBAR	1
03-4-104	CALOPAL	2
03-4-104	CARPTOM	1
03-4-104	CHAPTOM	1
03-4-104	CIRSVIR	1
03-4-104	CLEIDIV	1
03-4-104	CLETALN	2
03-4-104	CORELIN	4
03-4-104	CTENARO	6
03-4-104	DICH1S1	1
03-4-104	DICHDICE	2
03-4-104	DIONMUS	2
03-4-104	DIOSVIR	1
03-4-104	DROSBRE	1
03-4-104	DROSCAP	2
03-4-104	ERIGVER	2
03-4-104	ERIOCOM	2
03-4-104	ERYNINT	1
03-4-104	EUPALEUL	2
03-4-104	EUPAROT	2
03-4-104	EURYPAL	2
03-4-104	GAYLDUM	2
03-4-104	GAYLFRO	2
03-4-104	GYMNBRE	2
03-4-104	HELIANG	2
03-4-104	HELIHET	2
03-4-104	HYPECRU	2
03-4-104	HYPO1S1	2
03-4-104	HYPO1S2	1
03-4-104	ILEXCRC	1
03-4-104	ILEXGLA	3
03-4-104	IRISVERV	1
03-4-104	LACHANC	2
03-4-104	LACHCAR	1
03-4-104	LIAT1S1	2
03-4-104	LIQUSTY	1
03-4-104	LOBENUT	1
03-4-104	LYCOALP	2
03-4-104	LYCOAPR	1
03-4-104	LYCOCARC	2
03-4-104	LYONLIGF	2
03-4-104	LYSILOO	2
03-4-104	MAGNVIR	2
03-4-104	MARSGRM	2
03-4-104	MORECAR	3
03-4-104	MUHLCAPT	4
03-4-104	NYSSSYL	2
03-4-104	OXYPTER	1
03-4-104	PARNCAR	2
03-4-104	PERSPLS	1
03-4-104	PHOTPYR	2
03-4-104	PINUELLE	2
03-4-104	PINUPAL	1
03-4-104	PINUSER	2
03-4-104	PITYGRA	1
03-4-104	PLAT1S1	2
03-4-104	PLEETEN	2
03-4-104	POAC-S1	1
03-4-104	POLYBRE	2
03-4-104	POLYHOO	2
03-4-104	POLYLUT	2

03-4-104	PRENAUT	1
03-4-104	PTERAQUP	2
03-4-104	RHEXALI	2
03-4-104	RHEXLUT	5
03-4-104	RHEXPET	2
03-4-104	RHYNBAL	1
03-4-104	RHYNBRE	1
03-4-104	RHYNCHP	2
03-4-104	RHYNCIL	2
03-4-104	RHYNPLU	2
03-4-104	SABADIF	1
03-4-104	SARRFLA	2
03-4-104	SARRPUR3	2
03-4-104	SCLEMIN	2
03-4-104	SCLEPAUP	2
03-4-104	SEYMCAS	1
03-4-104	SISYCAP	2
03-4-104	SMILLAU	1
03-4-104	SOLIPLC	3
03-4-104	SOLISTC	2
03-4-104	SPIRPRA	1
03-4-104	SPORPIN	7
03-4-104	SYMPDUM1	2
03-4-104	TRIARAC	1
03-4-104	UTRISUB	1
03-4-104	VACCCRA	2
03-4-104	VACCFOR	1
03-4-104	XYRIAMB	2
03-4-104	XYRICAR	2
03-4-104	ZIGADEN	1
03-4-104	ZIGAGLB	2
03-4-107	ALETFAR	2
03-4-107	AMORGEOC	2
03-4-107	ANDR1S1	3
03-4-107	ARISSTR	6
03-4-107	ARUNGIGT	1
03-4-107	BAPTTIN	1
03-4-107	CARPPAN	2
03-4-107	CHRYMAR	1
03-4-107	CLEIDIV	1
03-4-107	CORELIN	1
03-4-107	CROTPUR	1
03-4-107	CYRIRAC	1
03-4-107	DESMLIN	2
03-4-107	DESMTEN	2
03-4-107	DICHDICE	2
03-4-107	DICHLON	1
03-4-107	DICHOVAA	2
03-4-107	DICHSTRL	2
03-4-107	DICHTEN	2
03-4-107	DIOSVIR	1
03-4-107	EUPALEUL	2
03-4-107	EUPAROT	1
03-4-107	EUPHCUR	2
03-4-107	GAYLDUM	4
03-4-107	GAYLFRO	4
03-4-107	GYMNBRE	2
03-4-107	HIERMAR	1
03-4-107	HYPECRU	1
03-4-107	HYPOWRI	1
03-4-107	ILEXCRC	1
03-4-107	ILEXGLA	5
03-4-107	IONALIN	2
03-4-107	LESPCPT	2
03-4-107	LIATPILP	2
03-4-107	LOBENUT	1
03-4-107	LYONMAR	1
03-4-107	MAGNVIR	2
03-4-107	MORECAR	2
03-4-107	MORECER	2
03-4-107	PERSPLS	1
03-4-107	PHLONIVN	1
03-4-107	PHOTPYR	2
03-4-107	PINUPAL	6
03-4-107	PITYGRA	2
03-4-107	PLAT1S1	1
03-4-107	POLYLUT	1
03-4-107	PRENAUT	1
03-4-107	PTERAQUP	5
03-4-107	PTERPYC	1
03-4-107	RHEXALI	2
03-4-107	RHYNPLU	2
03-4-107	SCLECIL	1
03-4-107	SMILGLA	1
03-4-107	SOLIODOO	1
03-4-107	SPORPIN	5
03-4-107	STYLBIF	2
03-4-107	SYMPDUM1	1
03-4-107	SYMPTIN	1
03-4-107	SYMPWAL	2
03-4-107	TEPHHIS	2
03-4-107	TRAGURE	1
03-4-107	VACCCRA	5
03-4-107	VACCFOR	2
03-4-107	VACCTEN	4
03-4-107	VIOLSPL	2
03-4-107	WOODVIR	1
03-4-107	XYRICAR	2
03-4-108	ALETFAR	1
03-4-108	AMORGEOC	2
03-4-108	ANDR1S1	4
03-4-108	ARISPURP	2
03-4-108	ARISSTR	6
03-4-108	BIGENUDN	1
03-4-108	CARPPAN	1
03-4-108	CHRYMAR	1
03-4-108	CIRSVIR	1
03-4-108	CORELIN	2
03-4-108	CROTPUR	1
03-4-108	DESMCLR	1
03-4-108	DESMLIN	2
03-4-108	DESMROT	1
03-4-108	DESMTEN	2
03-4-108	DICHDICE	2

03-4-108	DICHLON	1
03-4-108	DICHSTRL	2
03-4-108	DICHTEN	1
03-4-108	DICHVILV	2
03-4-108	DIOSVIR	1
03-4-108	ELEPNDT	2
03-4-108	ERIGVER	2
03-4-108	EUPALEUL	2
03-4-108	EUPAROT	1
03-4-108	EUPHCUR	1
03-4-108	GALAERE	1
03-4-108	GAYLDUM	2
03-4-108	GAYLFRO	4
03-4-108	GYMNBRE	1
03-4-108	HYPECRU	2
03-4-108	ILEXGLA	4
03-4-108	IONALIN	2
03-4-108	LESPCPT	2
03-4-108	LIAT1S1	2
03-4-108	PARTINTI	1
03-4-108	PINUPAL	7
03-4-108	PITYGRA	2
03-4-108	POLYLUT	2
03-4-108	PRENAUT	1
03-4-108	PTERAQUP	5
03-4-108	PTERPYC	1
03-4-108	RHEXALI	2
03-4-108	RHYNPLU	2
03-4-108	SCLECIL	2
03-4-108	SERILIN	2
03-4-108	SMILGLA	1
03-4-108	SOLI1S1	1
03-4-108	SOLISTC	2
03-4-108	SPIRPRA	1
03-4-108	SPORPIN	5
03-4-108	STYLBIF	2
03-4-108	SYMPDUM1	2
03-4-108	SYMPWAL	2
03-4-108	TEPHHIS	2
03-4-108	TEPHSPI	2
03-4-108	TRAGURE	1
03-4-108	VACCCRA	4
03-4-108	VACCFOR	2
03-4-108	VACCFUS	2
03-4-108	VACCTEN	5
03-4-108	VIOLSPL	1
03-4-108	WOODVIR	1
03-4-108	XYRICAR	2
03-4-109	ACERRUB	2
03-4-109	ANDR1S1	3
03-4-109	ARISSTR	4
03-4-109	ARUNGIGT	1
03-4-109	BIGENUDN	1
03-4-109	CARPPAN	2
03-4-109	CORELIN	2
03-4-109	CYRIRAC	2
03-4-109	DESMTEN	1
03-4-109	DICHCHA	2
03-4-109	DICHLNC	2
03-4-109	DICHSTRL	2
03-4-109	DICHTEN	2
03-4-109	DIONMUS	1
03-4-109	DROSCAP	2
03-4-109	EUPALEUL	2
03-4-109	EUPAROT	1
03-4-109	EUPHCUR	2
03-4-109	EURYPAL	2
03-4-109	GAYLDUM	3
03-4-109	GAYLFRO	2
03-4-109	GENTAUT	2
03-4-109	HYPERED	2
03-4-109	ILEXCRC	1
03-4-109	ILEXGLA	4
03-4-109	IRISVERV	2
03-4-109	LACHANC	2
03-4-109	LEUCRAC	2
03-4-109	LOBENUT	1
03-4-109	LYONMAR	2
03-4-109	MAGNVIR	2
03-4-109	MARSGRM	1
03-4-109	MORECER	2
03-4-109	MUHLCAPT	2
03-4-109	NYSSSYL	2
03-4-109	PERSPLS	2
03-4-109	PHOTPYR	2
03-4-109	PINUPAL	5
03-4-109	PINUSER	5
03-4-109	PITYGRA	2
03-4-109	POLYLUT	2
03-4-109	PTERAQUP	3
03-4-109	RHEXALI	2
03-4-109	RHYNBAL	2
03-4-109	RHYNCHP	1
03-4-109	RHYNPLU	2
03-4-109	RUBUFLA	1
03-4-109	SCLEPAUP	1
03-4-109	SISYCAP	1
03-4-109	SMILGLA	2
03-4-109	SMILLAU	1
03-4-109	SPORPIN	7
03-4-109	TEPHHIS	2
03-4-109	VACCCRA	5
03-4-109	VACCFOR	2
03-4-109	VACCFUS	2
03-4-109	VACCPAL	2
03-4-109	VACCSTA	1
03-4-109	VACCTEN	4
03-4-109	WOODVIR	2
03-4-109	XYRICAR	2
03-4-120	AGAL1S1	2
03-4-120	AMEL1S1	2
03-4-120	ANDR1S1	3
03-4-120	ARISSTR	7
03-4-120	CARPBEL	1

03-4-120	CARPTOM	2
03-4-120	CYRIRAC	4
03-4-120	DICH1S1	1
03-4-120	GAYLDUM	2
03-4-120	HYPERED	1
03-4-120	ILEXGLA	2
03-4-120	ILEXOPAO	2
03-4-120	ILEXVOM	2
03-4-120	IONALIN	2
03-4-120	KALMCAR	2
03-4-120	LEIOBUX	6
03-4-120	LIATPILP	2
03-4-120	LYONLIGF	3
03-4-120	LYONLUC	2
03-4-120	LYONMAR	2
03-4-120	MORECER	2
03-4-120	PERSPLS	2
03-4-120	PHOTPYR	1
03-4-120	PINUSER	6
03-4-120	PITYGRA	1
03-4-120	PTERAQUP	5
03-4-120	QUERICN	2
03-4-120	QUERNIG	2
03-4-120	QUERVIR	4
03-4-120	RHYN1S1	2
03-4-120	SMILGLA	1
03-4-120	VACCCRA	7
03-4-120	VACCPAL	1
03-4-120	VACCTEN	2
03-4-120	XYRICAR	1
03-5-050	AGALFAS	1
03-5-050	AMPHPUR	2
03-5-050	ANDR1S1	2
03-5-050	ARISSTR	8
03-5-050	BALDUNI	2
03-5-050	BIGENUDN	2
03-5-050	CALABRE	2
03-5-050	CALOPAL	2
03-5-050	CARESTTB	1
03-5-050	CARPBEL	2
03-5-050	CARPPAN	3
03-5-050	CARPTOM	2
03-5-050	CLEIDIV	2
03-5-050	CLETALN	2
03-5-050	COREFAL	1
03-5-050	CTENARO	1
03-5-050	CYRIRAC	2
03-5-050	DICHDICE	2
03-5-050	DICHDICM	2
03-5-050	DICHWEB	2
03-5-050	DIONMUS	2
03-5-050	DROSCAP	1
03-5-050	ERIGVER	1
03-5-050	EUPAPIL	2
03-5-050	EURYPAL	2
03-5-050	FIMBPUB	1
03-5-050	GAYLDUM	4
03-5-050	GAYLFRO	3
03-5-050	GORDLAS	2
03-5-050	HYPECRU	1
03-5-050	HYPERED	2
03-5-050	ILEXCRC	5
03-5-050	ILEXGLA	4
03-5-050	ILEXMYR	2
03-5-050	IRISVERV	2
03-5-050	LIATSPI	1
03-5-050	LYONLIGF	2
03-5-050	LYONLUC	2
03-5-050	MAGNVIR	4
03-5-050	MORECAR	2
03-5-050	MORECER	3
03-5-050	NYSSSYL	2
03-5-050	OSMUCINC	2
03-5-050	OXYPTER	1
03-5-050	PERSPLS	3
03-5-050	PHOTPYR	2
03-5-050	PINGCAE	1
03-5-050	PINUPAL	2
03-5-050	PINUSER	5
03-5-050	PITYGRA	2
03-5-050	PLAT1S1	1
03-5-050	POGOOPH	2
03-5-050	POLYBRE	2
03-5-050	POLYLUT	2
03-5-050	PTERAQUP	3
03-5-050	PYXIBAR	2
03-5-050	RHEXALI	2
03-5-050	RHEXMAR	1
03-5-050	RHEXPET	2
03-5-050	RHYNCIL	2
03-5-050	RHYNFASF	2
03-5-050	RHYNOLI	1
03-5-050	RHYNPLU	1
03-5-050	SARRFLA	1
03-5-050	SCLECILG	2
03-5-050	SEYMCAS	2
03-5-050	SMILLAU	2
03-5-050	SOLIPLC	2
03-5-050	SPIRLCRG	1
03-5-050	VACCCRA	7
03-5-050	VACCTEN	3
03-5-050	WOODVIR	1
03-5-050	XYRIAMB	1
03-5-050	XYRICAR	2
03-5-050	ZIGADEN	2
03-5-054	AGALSET	2
03-5-054	ANDR1S1	2
03-5-054	ARISSTR	7
03-5-054	ASCLPED	1
03-5-054	CARPBEL	2
03-5-054	CARPODO	2
03-5-054	CARPPAN	2
03-5-054	CARPTOM	2
03-5-054	CLEIDIV	2

03-5-054	DICH1S1	2
03-5-054	DICHWEB	2
03-5-054	GAYLDUM	6
03-5-054	GAYLFRO	2
03-5-054	HYPERED	2
03-5-054	ILEXGLA	2
03-5-054	IONALIN	1
03-5-054	IRISVERV	2
03-5-054	JUNCCAN	2
03-5-054	LACHANC	2
03-5-054	LIATPILP	2
03-5-054	LIQUSTY	1
03-5-054	LOBENUT	2
03-5-054	LYONMAR	5
03-5-054	MAGNVIR	2
03-5-054	MORECER	4
03-5-054	NYSSSYL	1
03-5-054	OSMUCINC	1
03-5-054	PERSPLS	2
03-5-054	PHOTPYR	1
03-5-054	PINUPAL	5
03-5-054	PINUSER	2
03-5-054	PITYGRA	2
03-5-054	PTERAQUP	2
03-5-054	PTERPYC	2
03-5-054	QUERMRL	1
03-5-054	QUERNIG	1
03-5-054	RHEXALI	2
03-5-054	RHEXPET	2
03-5-054	RHODATL	4
03-5-054	RHUSCOP	1
03-5-054	RHYNPLU	2
03-5-054	SCLECILG	1
03-5-054	SMILLAU	1
03-5-054	SMILROT	1
03-5-054	VACCCRA	4
03-5-054	VACCFUS	1
03-5-054	VACCTEN	2
03-5-054	WOODVIR	2
03-5-054	XYRICAR	2
03-5-055	AGAL1S1	1
03-5-055	ANDRTER	3
03-5-055	ANDRVIRV	2
03-5-055	ARISSTR	4
03-5-055	ASCLHUM	2
03-5-055	CARPODO	2
03-5-055	CHRYGOSG	2
03-5-055	CIRSREP	2
03-5-055	CNIDSTI	2
03-5-055	CORNFLO	2
03-5-055	CROTPUR	2
03-5-055	DESMLIN	2
03-5-055	DESMTEN	2
03-5-055	DESMTOR	2
03-5-055	DICH1S1	1
03-5-055	DICHOVAA	2
03-5-055	DIOSVIR	2
03-5-055	EUPAALB	2
03-5-055	EUPAROT	2
03-5-055	GALAERE	2
03-5-055	GALAREG	2
03-5-055	GAYLDUM	7
03-5-055	GAYLFRO	2
03-5-055	HIERGRO	1
03-5-055	HYPEHYP	2
03-5-055	ILEXGLA	2
03-5-055	IONALIN	2
03-5-055	IRISVERV	2
03-5-055	LECHMIN	2
03-5-055	LESP1S1	2
03-5-055	LESPANG	1
03-5-055	LESPCPT	2
03-5-055	LIATPILP	2
03-5-055	MAGNVIR	1
03-5-055	MORECER	4
03-5-055	PANIVIRV	2
03-5-055	PINUPAL	4
03-5-055	PINUTAE	6
03-5-055	PITYGRA	2
03-5-055	PTERAQUP	1
03-5-055	QUERFLC	4
03-5-055	QUERICN	2
03-5-055	QUERLVS	4
03-5-055	QUERMRL	2
03-5-055	QUERSTE	3
03-5-055	RHUSCOP	2
03-5-055	RHYNBAL	2
03-5-055	RUBUCUN	1
03-5-055	SASSALB	2
03-5-055	SCLECIL	2
03-5-055	SCLETRI	2
03-5-055	SERITOR	2
03-5-055	SOLIODOO	2
03-5-055	STYLBIF	2
03-5-055	SYMPWAL	2
03-5-055	TEPHFLO	2
03-5-055	TOXIPUB	2
03-5-055	TRAGURE	2
03-5-055	VACCARB	2
03-5-055	VACCFUS	2
03-5-055	VACCTEN	4
03-5-056	ACERRUB	2
03-5-056	ALETFAR	1
03-5-056	ANDRGLA	2
03-5-056	ANDRTER	2
03-5-056	ANDRVIRV	2
03-5-056	ARISSTR	3
03-5-056	ARUNGIGT	4
03-5-056	BIGENUDN	1
03-5-056	CARPODO	2
03-5-056	CARPPAN	2
03-5-056	CARPTOM	2
03-5-056	CLEIDIV	1
03-5-056	DESMTEN	2

03-5-056	DICH1S1	2
03-5-056	DICHWEB	2
03-5-056	EUPALEUL	1
03-5-056	EUPAPIL	2
03-5-056	EURYPAL	2
03-5-056	GALAVOL	2
03-5-056	GAYLDUM	6
03-5-056	GAYLFRO	5
03-5-056	ILEXCRC	1
03-5-056	ILEXGLA	5
03-5-056	IRISVERV	2
03-5-056	LACT1S1	1
03-5-056	LIATPILP	2
03-5-056	LIATSPI	2
03-5-056	LIQUSTY	1
03-5-056	LOBENUT	1
03-5-056	LYCOALP	1
03-5-056	LYONLIGF	2
03-5-056	LYONLUC	2
03-5-056	LYONMAR	2
03-5-056	LYSILOO	1
03-5-056	MAGNVIR	2
03-5-056	MORECAR	1
03-5-056	MORECER	2
03-5-056	NYSSSYL	1
03-5-056	PERSPLS	2
03-5-056	PHOTPYR	2
03-5-056	PINUPAL	5
03-5-056	PINUTAE	1
03-5-056	PITYGRA	2
03-5-056	POLYCRU	1
03-5-056	POLYLUT	1
03-5-056	PTERAQUP	5
03-5-056	RHEXALI	1
03-5-056	RHEXLUT	1
03-5-056	RHEXPET	2
03-5-056	RHUSCOP	1
03-5-056	RUBUFLA	1
03-5-056	SCLETRI	1
03-5-056	SMILGLA	2
03-5-056	SMILLAU	2
03-5-056	SOLI1S1	1
03-5-056	SOLISTC	1
03-5-056	SPIRLCRG	1
03-5-056	SYMPWAL	2
03-5-056	TOXIRAD	1
03-5-056	VACCCRA	6
03-5-056	VACCFUS	2
03-5-056	VACCSTA	2
03-5-056	VACCTEN	4
03-5-056	XYRICAR	2
03-5-058	ANDRTER	2
03-5-058	ARISSTR	3
03-5-058	CARPBEL	2
03-5-058	CARPODO	1
03-5-058	DICHWEB	1
03-5-058	GALAREG	2
03-5-058	GAYLDUM	2
03-5-058	GAYLFRO	4
03-5-058	GELSSEM	1
03-5-058	HYPERED	1
03-5-058	ILEXGLA	1
03-5-058	LACHANC	1
03-5-058	LYONMAR	2
03-5-058	MORECER	2
03-5-058	NYSSSYL	1
03-5-058	PERSPLS	2
03-5-058	PINUPAL	4
03-5-058	PITYGRA	2
03-5-058	PTERAQUP	1
03-5-058	PYXIBAR	1
03-5-058	QUERLVS	7
03-5-058	QUERNIG	2
03-5-058	RHYNPLU	1
03-5-058	SCLECILG	2
03-5-058	SMILGLA	2
03-5-058	TILLUSN	1
03-5-058	VACCCRA	2
03-5-058	VACCSTA	5
03-5-058	VACCTEN	3
03-5-058	XYRICAR	1
03-5-059	ACERRUB	2
03-5-059	ALETFAR	2
03-5-059	ANDRGLA	2
03-5-059	ANDRGLO1	4
03-5-059	ANDRTER	2
03-5-059	ANDRVIRV	5
03-5-059	ANTHRUF	2
03-5-059	ARISSTR	6
03-5-059	CARPODO	2
03-5-059	CENTASI	2
03-5-059	CHASLAX	2
03-5-059	CLEIDIV	2
03-5-059	CLETALN	3
03-5-059	CTENARO	2
03-5-059	CYRIRAC	2
03-5-059	DICHDICM	1
03-5-059	DICHOVAA	2
03-5-059	DICHWEB	2
03-5-059	DIOSVIR	2
03-5-059	DROSCAP	2
03-5-059	EUPALEUL	2
03-5-059	EUPAPIL	2
03-5-059	EUPAROT	2
03-5-059	GAYLDUM	2
03-5-059	GAYLFRO	5
03-5-059	HYPECRU	2
03-5-059	ILEXGLA	5
03-5-059	ILEXOPAO	1
03-5-059	IRISVERV	2
03-5-059	KALMCAR	1
03-5-059	LACHANC	2
03-5-059	LIATPILP	2
03-5-059	LIQUSTY	4

03-5-059	LOBENUT	2
03-5-059	LUDWVIR	2
03-5-059	LYCOALP	2
03-5-059	LYONLUC	2
03-5-059	LYONMAR	1
03-5-059	MAGNVIR	2
03-5-059	MITCREP	2
03-5-059	OSMUCINC	3
03-5-059	OSMUREGS	2
03-5-059	PANIVIRV	2
03-5-059	PERSPLS	4
03-5-059	PHOTPYR	2
03-5-059	PINUPAL	4
03-5-059	PINUSER	1
03-5-059	PINUTAE	4
03-5-059	PITYGRA	1
03-5-059	PLAT1S1	2
03-5-059	POLYLUT	2
03-5-059	PTERAQUP	4
03-5-059	QUERFLC	2
03-5-059	QUERNIG	2
03-5-059	RHEXALI	2
03-5-059	RHEXLUT	2
03-5-059	RHEXNAS	2
03-5-059	RHEXPET	2
03-5-059	RHYNBAL	2
03-5-059	RHYNFASF	2
03-5-059	SCLECIL1	1
03-5-059	SCLEMIN	2
03-5-059	SERITOR	1
03-5-059	SMILGLA	2
03-5-059	SMILLAU	2
03-5-059	SMILROT	2
03-5-059	SOLISTC	2
03-5-059	SPIRLCRG	1
03-5-059	VACCCRA	2
03-5-059	VACCFUS	4
03-5-059	VACCTEN	2
03-5-059	WOODVIR	4
03-5-059	XYRIAMB	2
03-5-059	XYRICAR	2
03-5-060	ANDRTER	3
03-5-060	ANDRVIRV	3
03-5-060	ARISSTR	6
03-5-060	CARPODO	3
03-5-060	CNIDSTI	1
03-5-060	CROTPUR	1
03-5-060	DESMLIN	2
03-5-060	DESMTEN	2
03-5-060	DICH1S1	2
03-5-060	DICHOVAA	2
03-5-060	EUPALEUL	2
03-5-060	EUPAROT	2
03-5-060	GAYLDUM	6
03-5-060	GAYLFRO	7
03-5-060	GYMNAMB	2
03-5-060	HYPECRU	2
03-5-060	HYPEHYP	2
03-5-060	ILEXGLA	4
03-5-060	IONALIN	2
03-5-060	IRISVERV	2
03-5-060	LESPANG	2
03-5-060	LESPCPT	2
03-5-060	LIATPILP	1
03-5-060	LYONMAR	1
03-5-060	MORECER	2
03-5-060	PERSPLS	2
03-5-060	PHOTPYR	2
03-5-060	PINUPAL	5
03-5-060	PINUSER	2
03-5-060	PINUTAE	4
03-5-060	PITYGRA	2
03-5-060	POLYLUT	2
03-5-060	PTERAQUP	4
03-5-060	PTERPYC	2
03-5-060	RHEXALI	1
03-5-060	RHUSCOP	1
03-5-060	RHYNPLU	2
03-5-060	RUBUCUN	2
03-5-060	SERILIN	2
03-5-060	SERITOR	2
03-5-060	SILPCOM	1
03-5-060	SMILBON	2
03-5-060	SMILGLA	2
03-5-060	SMILLAU	1
03-5-060	SOLIODOO	2
03-5-060	SPIRLCRG	1
03-5-060	SPIRVER	1
03-5-060	SYMPWAL	2
03-5-060	TEPHHIS	2
03-5-060	TRAGURE	2
03-5-060	VACCCRA	2
03-5-060	VACCTEN	3
03-5-060	WOODVIR	2
03-5-061	ACERRUB	2
03-5-061	AGAL1S1	2
03-5-061	AMPHPUR	2
03-5-061	ANDRGLA	1
03-5-061	ANDRTER	2
03-5-061	ANDRVIRV	3
03-5-061	APIOAME	2
03-5-061	ARISSTR	7
03-5-061	ARUNGIGT	2
03-5-061	BIGENUDN	2
03-5-061	CARPPAN	2
03-5-061	CARPTOM	2
03-5-061	CENTASI	2
03-5-061	CHAMNICN	2
03-5-061	CHAPTOM	1
03-5-061	CHASLAX	2
03-5-061	CLEIDIV	2
03-5-061	CLETALN	3
03-5-061	CORELIN	3
03-5-061	CROTPUR	2

03-5-061	DESMSTR	2
03-5-061	DESMTEN	2
03-5-061	DICHDICE	2
03-5-061	DICHDICM	2
03-5-061	DICHOVAA	2
03-5-061	DICHWEB	2
03-5-061	DIOSVIR	1
03-5-061	DROSCAP	2
03-5-061	ELEPTOM	2
03-5-061	ERIGVER	2
03-5-061	EUPALEUL	2
03-5-061	EUPAPIL	2
03-5-061	EUPAROT	2
03-5-061	EURYPAL	2
03-5-061	GAYLDUM	2
03-5-061	GAYLFRO	3
03-5-061	GELSSEM	2
03-5-061	GRATPIL	1
03-5-061	GYMNAMB	2
03-5-061	HELIHET	1
03-5-061	HIERGRO	2
03-5-061	HYPECRU	2
03-5-061	ILEXCRC	2
03-5-061	ILEXGLA	4
03-5-061	IONALIN	2
03-5-061	IRISVERV	2
03-5-061	LACT1S1	2
03-5-061	LESPCPT	2
03-5-061	LIATPILP	2
03-5-061	LINUFLO	2
03-5-061	LIQUSTY	4
03-5-061	LOBENUT	2
03-5-061	LYCOALP	2
03-5-061	LYONLIGF	2
03-5-061	LYONLUC	2
03-5-061	LYONMAR	2
03-5-061	LYSILOO	4
03-5-061	MARSGRM	2
03-5-061	MORECAR	2
03-5-061	MORECER	3
03-5-061	NYSSSYL	4
03-5-061	OSMUCINC	1
03-5-061	PERSPLS	1
03-5-061	PHOTPYR	2
03-5-061	PINUPAL	6
03-5-061	PINUSER	3
03-5-061	PINUTAE	1
03-5-061	PITYGRA	4
03-5-061	PLAT1S1	2
03-5-061	POLYLUT	2
03-5-061	PTERAQUP	2
03-5-061	PYCNFLE	2
03-5-061	QUERFLC	2
03-5-061	QUERMRL	2
03-5-061	QUERNIG	2
03-5-061	QUERSTE	2
03-5-061	RHEXALI	2
03-5-061	RHEXNAS	1
03-5-061	RHEXPET	2
03-5-061	RHODATL	4
03-5-061	RHUSCOP	3
03-5-061	RHYNFASF	1
03-5-061	RUBUFLA	2
03-5-061	SASSALB	2
03-5-061	SCLECIL	2
03-5-061	SCLETRI	1
03-5-061	SERILIN	2
03-5-061	SISYCAP	2
03-5-061	SMILGLA	2
03-5-061	SOLI1S1	2
03-5-061	SOLIODOO	2
03-5-061	SOLISTC	2
03-5-061	SORGNUT	1
03-5-061	STYLBIF	2
03-5-061	SYMPDUM1	2
03-5-061	SYMPTIN	2
03-5-061	SYMPWAL	2
03-5-061	TEPHHIS	2
03-5-061	UVULPUB	2
03-5-061	VACCCRA	2
03-5-061	VACCFUS	2
03-5-061	VACCTEN	3
03-5-061	VIOLXPR	2
03-5-061	WOODVIR	2
03-5-061	XYRICAR	2
03-5-062	AGAL1S1	2
03-5-062	ANDRGLA	2
03-5-062	ANDRTER	2
03-5-062	ANDRVIRV	2
03-5-062	ARISSTR	8
03-5-062	CARPPAN	2
03-5-062	CLEIDIV	2
03-5-062	CYRIRAC	2
03-5-062	DICH1S1	2
03-5-062	DICHWEB	2
03-5-062	DIONMUS	2
03-5-062	EUPAPIL	1
03-5-062	EURYPAL	2
03-5-062	GAYLDUM	5
03-5-062	GAYLFRO	4
03-5-062	GORDLAS	2
03-5-062	HYPERED	2
03-5-062	ILEXCRC	3
03-5-062	ILEXGLA	2
03-5-062	IRISVERV	2
03-5-062	LACHANC	1
03-5-062	LYONLIGF	2
03-5-062	LYONLUC	2
03-5-062	LYONMAR	2
03-5-062	MAGNVIR	3
03-5-062	MORECER	1
03-5-062	NYSSSYL	2
03-5-062	OSMUCINC	2
03-5-062	PERSPLS	2

03-5-062	PHOTPYR	2
03-5-062	PINUPAL	5
03-5-062	PINUSER	3
03-5-062	PLEETEN	2
03-5-062	POLYLUT	2
03-5-062	RHEXALI	2
03-5-062	RHEXPET	1
03-5-062	RHYNBAL	2
03-5-062	RHYNFASF	2
03-5-062	SABADIF	1
03-5-062	SARRFLA	1
03-5-062	VACCCRA	4
03-5-062	VACCFOR	2
03-5-062	VACCTEN	2
03-5-062	WOODVIR	2
03-5-062	XYRICAR	2
03-5-062	ZIGADEN	2
03-5-063	AMORHERH	4
03-5-063	ANDRGLA	2
03-5-063	ANDRTER	2
03-5-063	ANDRVIRV	2
03-5-063	ANTHRUF	2
03-5-063	ARISSTR	4
03-5-063	BIGENUDN	2
03-5-063	CARPODO	2
03-5-063	CENTASI	2
03-5-063	CORELIN	2
03-5-063	DESMTEN	1
03-5-063	DICHDICD	1
03-5-063	DICHOVAA	2
03-5-063	DICHWEB	2
03-5-063	DIOSVIR	2
03-5-063	ELEOMEL	2
03-5-063	EUPALEUL	2
03-5-063	GAYLDUM	6
03-5-063	GAYLFRO	4
03-5-063	GENTAUT	1
03-5-063	GRATPIL	2
03-5-063	GYMNAMB	2
03-5-063	HYPECRU	2
03-5-063	ILEXGLA	4
03-5-063	IONALIN	2
03-5-063	IRISVERV	2
03-5-063	LIATPILP	1
03-5-063	LIQUSTY	2
03-5-063	LOBENUT	2
03-5-063	LYONMAR	2
03-5-063	MORECER	2
03-5-063	PANIVIRV	3
03-5-063	PERSPLS	2
03-5-063	PINUPAL	4
03-5-063	PINUTAE	5
03-5-063	PITYGRA	2
03-5-063	POLYLUT	2
03-5-063	PTERAQUP	3
03-5-063	QUERFLC	2
03-5-063	QUERICN	3
03-5-063	QUERMRL	2
03-5-063	RHEXALI	2
03-5-063	RHUSCOP	1
03-5-063	RHYNPLU	2
03-5-063	SARRFLA	2
03-5-063	SASSALB	2
03-5-063	SCLETRI	1
03-5-063	SERILIN	2
03-5-063	SERITOR	2
03-5-063	SMILGLA	2
03-5-063	SOLIODOO	2
03-5-063	SYMPDUM1	2
03-5-063	SYMPWAL	2
03-5-063	TEPHHIS	2
03-5-063	TRAGURE	2
03-5-063	VACCCRA	2
03-5-063	VACCFOR	2
03-5-063	VACCFUS	2
03-5-063	VACCTEN	5
03-5-063	VIOLXPR	1
03-5-075	AGAL1S1	1
03-5-075	ANDR1S1	2
03-5-075	ARISSTR	8
03-5-075	CARPODO	2
03-5-075	CARPPAN	2
03-5-075	DICHTEN	1
03-5-075	DICHWEB	2
03-5-075	DROSBRE	1
03-5-075	GAYLDUM	5
03-5-075	GENTAUT	2
03-5-075	ILEXGLA	3
03-5-075	IRISVERV	2
03-5-075	LIAT1S1	2
03-5-075	MAGNVIR	2
03-5-075	MORECER	4
03-5-075	PERSPLS	2
03-5-075	PINUPAL	2
03-5-075	PINUSER	2
03-5-075	PITYGRA	2
03-5-075	POLYLUT	1
03-5-075	PTERAQUP	5
03-5-075	PYXIBAR	2
03-5-075	RHEXALI	2
03-5-075	RHYNPLU	2
03-5-075	SCLECILG	2
03-5-075	SPORPIN	3
03-5-075	VACCCRA	7
03-5-075	VACCTEN	4
03-5-075	XYRICAR	2
03-5-077	ACERRUB	1
03-5-077	AGAL1S1	2
03-5-077	ALETFAR	2
03-5-077	ANDR1S1	2
03-5-077	ARISPURV	1
03-5-077	ARISSTR	7
03-5-077	ARUNGIGT	2
03-5-077	ASTE-S1	2

03-5-077	BAPTTIN	2
03-5-077	BIGENUDN	2
03-5-077	CALOBAR	2
03-5-077	CALOPAL	2
03-5-077	CALOTUBT	1
03-5-077	CARPODO	3
03-5-077	CARPPAN	2
03-5-077	CARPTOM	2
03-5-077	CHAMNICN	2
03-5-077	CIRS1S1	2
03-5-077	CLEIDIV	2
03-5-077	CORELIN	3
03-5-077	CROTPUR	2
03-5-077	CTENARO	3
03-5-077	CYRIRAC	2
03-5-077	DESMLIN	2
03-5-077	DESMTEN	2
03-5-077	DICHDICD	2
03-5-077	DICHMER	2
03-5-077	DICHOVAO	2
03-5-077	DICHSTRL	2
03-5-077	DIONMUS	2
03-5-077	DIOSVIR	2
03-5-077	DROSBRE	2
03-5-077	DROSCAP	2
03-5-077	ERIGVER	3
03-5-077	ERYNINT	2
03-5-077	EUPAMOH	2
03-5-077	EUPAROT	2
03-5-077	EURYPAL	2
03-5-077	GAYLFRO	3
03-5-077	GENTAUT	1
03-5-077	GYMNBRE	2
03-5-077	HELIHET	3
03-5-077	HYPECRU	2
03-5-077	HYPESET	1
03-5-077	ILEXGLA	3
03-5-077	IRISVERV	2
03-5-077	LACHANC	2
03-5-077	LESPCPT	2
03-5-077	LIAT1S1	2
03-5-077	LINUFLO	2
03-5-077	LIQUSTY	2
03-5-077	LOBENUT	2
03-5-077	LUDWVIR	2
03-5-077	LYCOALP	2
03-5-077	LYCOAPR	2
03-5-077	LYCOCARC	1
03-5-077	LYONMAR	4
03-5-077	LYSILOO	2
03-5-077	MAGNVIR	2
03-5-077	MITCREP	2
03-5-077	MORECAR	2
03-5-077	MORECER	2
03-5-077	MUHLCAPT	2
03-5-077	NYSSSYL	1
03-5-077	OSMUCINC	2
03-5-077	OXYPTER	1
03-5-077	PERSPLS	2
03-5-077	PHOTPYR	2
03-5-077	PING1S1	2
03-5-077	PINUPAL	4
03-5-077	PINUSER	4
03-5-077	PITYGRA	2
03-5-077	PLAT1S1	2
03-5-077	POLYBRE	2
03-5-077	POLYCRU	2
03-5-077	POLYLUT	2
03-5-077	PRENAUT	2
03-5-077	PTERAQUP	4
03-5-077	PYCNFLE	2
03-5-077	RHEXALI	2
03-5-077	RHEXLUT	2
03-5-077	RHEXPET	2
03-5-077	RHYNBAL	2
03-5-077	RHYNCIL	2
03-5-077	RHYNPLU	1
03-5-077	SARRFLA	1
03-5-077	SARRPUR3	2
03-5-077	SCLECIL1	2
03-5-077	SCLEMIN	2
03-5-077	SERILIN	2
03-5-077	SISYCAP	2
03-5-077	SMILGLA	2
03-5-077	SOLIPLC	2
03-5-077	SOLISTC	2
03-5-077	STYLBIF	2
03-5-077	SYMPDUM1	2
03-5-077	SYMPWAL	1
03-5-077	TEPHHIS	2
03-5-077	TOFIGLA	2
03-5-077	VACCCRA	2
03-5-077	VACCFOR	2
03-5-077	VACCFUS	2
03-5-077	VACCTEN	2
03-5-077	VIOLXPR	2
03-5-077	XYRIAMB	2
03-5-077	XYRICAR	2
03-5-077	ZIGADEN	2
03-5-077	ZIGAGLB	2
03-5-078	ACERRUB	2
03-5-078	ALETFAR	2
03-5-078	AMEL1S1	2
03-5-078	ANDR1S1	3
03-5-078	ANTHRUF	2
03-5-078	ARISSTR	2
03-5-078	ARNOOVA	1
03-5-078	ARUNGIGT	2
03-5-078	ASCLLON	2
03-5-078	BERCSCA	1
03-5-078	BIGENUDN	2
03-5-078	CALOPAL	2
03-5-078	CALOTUBT	2
03-5-078	CARESTTB	2

03-5-078	CARPPAN	2
03-5-078	CARPTOM	2
03-5-078	CEPHOCC	2
03-5-078	CHAPTOM	2
03-5-078	CIRSVIR	2
03-5-078	COREFAL	2
03-5-078	CORELIN	2
03-5-078	CTENARO	4
03-5-078	DICH1S1	2
03-5-078	DICHDICE	4
03-5-078	DICHOVAO	2
03-5-078	DICHSCO	2
03-5-078	DROSCAP	2
03-5-078	ERECHIEH	1
03-5-078	ERIGVER	2
03-5-078	ERIODECD	2
03-5-078	ERYNINT	2
03-5-078	ERYNYUC	2
03-5-078	EUPACAP	1
03-5-078	EUPALEUL	2
03-5-078	EUPAROT	2
03-5-078	EURYPAL	2
03-5-078	EUTHCAR	2
03-5-078	FIMBPUB	2
03-5-078	GELSSEM	1
03-5-078	GENTAUT	2
03-5-078	GYMNBRE	2
03-5-078	HELIANG	2
03-5-078	HELIHET	2
03-5-078	HYPECRU	2
03-5-078	HYPOHIR	2
03-5-078	ILEXGLA	4
03-5-078	IRISTRD	2
03-5-078	LIATSPI	2
03-5-078	LIQUSTY	2
03-5-078	LIRITUL	1
03-5-078	LOBENUT	2
03-5-078	LYCOALP	2
03-5-078	LYSILOO	2
03-5-078	MAGNVIR	2
03-5-078	MORECAR	3
03-5-078	MORECER	2
03-5-078	MUHLCAPT	8
03-5-078	NYSSSYL	4
03-5-078	OSMUCINC	2
03-5-078	OXYPTER	1
03-5-078	PANIVIRV	2
03-5-078	PARNCAR	2
03-5-078	PHOTPYR	1
03-5-078	PINUPAL	2
03-5-078	PINUSER	3
03-5-078	PITYGRA	2
03-5-078	POLYBRE	2
03-5-078	POLYCRU	2
03-5-078	POLYINR	1
03-5-078	RHEXALI	2
03-5-078	RHEXLUT	2
03-5-078	RHUSCOP	1
03-5-078	RHYNBAL	2
03-5-078	RHYNCHP	2
03-5-078	RHYNLAT	2
03-5-078	RHYNOLI	3
03-5-078	RHYNPLU	2
03-5-078	RUBUTRI	2
03-5-078	SARRFLA	2
03-5-078	SARRPUR3	2
03-5-078	SARRXCA	2
03-5-078	SCLECIL1	2
03-5-078	SISYCAP	2
03-5-078	SMILAUR	2
03-5-078	SMILGLA	2
03-5-078	SOLI1S1	2
03-5-078	SOLISTC	2
03-5-078	SYMPDUM1	2
03-5-078	TOXIRAD	1
03-5-078	TRIARAC	2
03-5-078	VACCFOR	2
03-5-078	VIOLXPR	2
03-5-078	XYRIAMB	2
03-5-078	XYRICAR	2
03-5-078	ZIGADEN	1
03-5-078	ZIGAGLB	2
03-5-079	ACERRUB	2
03-5-079	AGAL1S1	2
03-5-079	AGALAPH	1
03-5-079	ALETFAR	2
03-5-079	AMELCAN	2
03-5-079	ANDR1S1	6
03-5-079	ANDRGLO1	2
03-5-079	APIOAME	2
03-5-079	ARISSTR	5
03-5-079	ARNIACA	1
03-5-079	ARUNGIGT	2
03-5-079	BIGENUDN	2
03-5-079	CALOBAR	2
03-5-079	CALOPAL	1
03-5-079	CALOTUBT	2
03-5-079	CARPODO	2
03-5-079	CARPPAN	2
03-5-079	CHAMFAS	1
03-5-079	CHASLAX	2
03-5-079	CIRSVIR	1
03-5-079	CLEIDIV	2
03-5-079	CLETALN	3
03-5-079	CORELIN	2
03-5-079	CTENARO	1
03-5-079	CYRIRAC	2
03-5-079	DESM1S1	2
03-5-079	DESMTEN	2
03-5-079	DICHDICE	2
03-5-079	DICHDICM	2
03-5-079	DIOSVIL	2
03-5-079	DIOSVIR	2
03-5-079	DROSBRE	2

03-5-079	DROSCAP	2
03-5-079	ELEPNDT	2
03-5-079	ERIGVER	2
03-5-079	ERYNINT	1
03-5-079	EUPAHYS	2
03-5-079	EUPAMOH	2
03-5-079	EUPAPIL	2
03-5-079	EUPAROT	2
03-5-079	EUTHCAR	2
03-5-079	GAYLFRO	3
03-5-079	GENTCAT	1
03-5-079	GYMNBRE	2
03-5-079	HELIANG	2
03-5-079	HELIHET	2
03-5-079	HYPECRU	2
03-5-079	HYPEDNS	2
03-5-079	HYPEGAL	2
03-5-079	HYPOHIR	2
03-5-079	ILEXGLA	2
03-5-079	IRISVERV	2
03-5-079	LACHANC	2
03-5-079	LACHCAR	2
03-5-079	LESPCPT	2
03-5-079	LIAT1S1	2
03-5-079	LINU1S1	1
03-5-079	LIQUSTY	3
03-5-079	LOBENUT	1
03-5-079	LYCOALP	2
03-5-079	LYONLIGF	6
03-5-079	LYSILOO	3
03-5-079	MAGNVIR	2
03-5-079	MORECAR	2
03-5-079	MORECER	6
03-5-079	NYSSSYL	2
03-5-079	OSMUCINC	2
03-5-079	OXYPTER	2
03-5-079	PHOTPYR	2
03-5-079	PINUPAL	1
03-5-079	PINUSER	2
03-5-079	PITYGRA	2
03-5-079	PLAT1S1	1
03-5-079	POGOOPH	1
03-5-079	POLYLUT	2
03-5-079	PTERAQUP	5
03-5-079	QUERLAU	1
03-5-079	RHEXALI	2
03-5-079	RHEXLUT	1
03-5-079	RHEXPET	2
03-5-079	RHODATL	4
03-5-079	RHYNBAL	2
03-5-079	RHYNCHP	1
03-5-079	RHYNCIL	2
03-5-079	RHYNGLB	1
03-5-079	RHYNINE	1
03-5-079	RHYNPLU	2
03-5-079	RUBU1S1	2
03-5-079	SABADIF	1
03-5-079	SACCGIG	2
03-5-079	SARRFLA	1
03-5-079	SASSALB	2
03-5-079	SCLECIL1	2
03-5-079	SCLEMIN	2
03-5-079	SCLETRI	2
03-5-079	SISYCAP	2
03-5-079	SMILGLA	2
03-5-079	SOLI1S1	2
03-5-079	SOLI1S2	2
03-5-079	SOLIODOO	1
03-5-079	SOLIPLC	2
03-5-079	SOLISTC	2
03-5-079	SPIRPRA	2
03-5-079	SPIRTUB	1
03-5-079	SPORPIN	6
03-5-079	SYMPDUM1	2
03-5-079	SYMPTIN	4
03-5-079	TEPHHIS	1
03-5-079	TOFIGLA	2
03-5-079	VACCCRA	2
03-5-079	VACCFUS	2
03-5-079	VACCTEN	2
03-5-079	VIBUNUDN	2
03-5-079	VIOLXPR	2
03-5-079	WOODVIR	4
03-5-079	XYRIAMB	2
03-5-079	XYRICAR	2
03-5-079	ZENOPUL	1
03-5-079	ZIGAGLB	2
03-5-080	ANDR1S1	2
03-5-080	ANDRGLA	2
03-5-080	ARISSTR	4
03-5-080	CARPPAN	2
03-5-080	CARPTOM	2
03-5-080	CLETALN	2
03-5-080	CYRIRAC	3
03-5-080	DICH1S1	2
03-5-080	GAYLDUM	2
03-5-080	GAYLFRO	2
03-5-080	GELSSEM	2
03-5-080	GORDLAS	2
03-5-080	HYPERED	2
03-5-080	ILEXCRC	2
03-5-080	ILEXGLA	2
03-5-080	ILEXOPAO	2
03-5-080	ILEXVOM	2
03-5-080	LEIOBUX	2
03-5-080	LIAT1S1	2
03-5-080	LYONLIGF	2
03-5-080	LYONLUC	2
03-5-080	LYONMAR	7
03-5-080	MAGNVIR	2
03-5-080	MORECER	2
03-5-080	PERSPLS	2
03-5-080	PHOTPYR	2
03-5-080	PINUPAL	6

03-5-080	PINUSER	3
03-5-080	PITYGRA	1
03-5-080	PLEETEN	2
03-5-080	POLYPLM	2
03-5-080	PTERAQUP	3
03-5-080	QUERGEM	2
03-5-080	QUERLVS	4
03-5-080	RHEXALI	2
03-5-080	SERITOR	1
03-5-080	SMILLAU	2
03-5-080	VACCCRA	6
03-5-080	VACCTEN	4
03-5-081	ANDR1S1	2
03-5-081	ARISSTR	8
03-5-081	BALDUNI	2
03-5-081	CYRIRAC	2
03-5-081	DICH1S1	1
03-5-081	FIMBPUB	1
03-5-081	GAYLDUM	2
03-5-081	GAYLFRO	2
03-5-081	GELSSEM	2
03-5-081	HYPERED	2
03-5-081	ILEXCAS	2
03-5-081	ILEXCRC	4
03-5-081	ILEXGLA	3
03-5-081	ILEXOPAO	2
03-5-081	IRISVERV	2
03-5-081	LACHANC	1
03-5-081	LEIOBUX	5
03-5-081	LIATPILP	2
03-5-081	LOBENUT	2
03-5-081	LYONMAR	5
03-5-081	MAGNVIR	2
03-5-081	MORECER	2
03-5-081	OSMUCINC	2
03-5-081	PERSPLS	2
03-5-081	PHOTPYR	2
03-5-081	PINUPAL	4
03-5-081	PINUSER	5
03-5-081	PITYGRA	2
03-5-081	PLEETEN	2
03-5-081	PTERAQUP	2
03-5-081	PYXIBAR	2
03-5-081	QUERGEM	1
03-5-081	RHYNPLU	2
03-5-081	SMILLAU	2
03-5-081	VACCCRA	5
03-5-081	VACCTEN	2
03-5-081	XYRICAR	1
03-5-082	AGAL1S1	1
03-5-082	AMPHPUR	2
03-5-082	ANDR1S1	2
03-5-082	ANDRGLO1	2
03-5-082	ARISSTR	9
03-5-082	ARUNGIGT	2
03-5-082	ASCLPED	1
03-5-082	BALDUNI	2
03-5-082	BARTVER	2
03-5-082	CALABRE	2
03-5-082	CALOBAR	1
03-5-082	CARESTTB	1
03-5-082	CARPODO	2
03-5-082	CARPPAN	4
03-5-082	CLEIDIV	2
03-5-082	CLETALN	1
03-5-082	CYRIRAC	2
03-5-082	DICHDICD	2
03-5-082	DICHDICE	2
03-5-082	DICHDICM	2
03-5-082	DICHWEB	2
03-5-082	DIONMUS	2
03-5-082	DROSBRE	2
03-5-082	DROSCAP	2
03-5-082	EUPAPIL	2
03-5-082	EURYPAL	2
03-5-082	GAYLDUM	2
03-5-082	GAYLFRO	2
03-5-082	HYPECRU	1
03-5-082	HYPOJUN	1
03-5-082	ILEXGLA	2
03-5-082	IRISVERV	2
03-5-082	LYONLIGF	4
03-5-082	LYONMAR	3
03-5-082	LYSILOO	2
03-5-082	MAGNVIR	4
03-5-082	MARSGRM	2
03-5-082	MORECAR	2
03-5-082	MORECER	4
03-5-082	NYSSSYL	2
03-5-082	OSMUCINC	2
03-5-082	PERSPLS	3
03-5-082	PHOTPYR	2
03-5-082	PINGPUM	2
03-5-082	PINUPAL	4
03-5-082	PINUSER	2
03-5-082	PITYGRA	2
03-5-082	PLEETEN	2
03-5-082	POLYCRU	1
03-5-082	POLYLUT	2
03-5-082	PYXIBAR	2
03-5-082	RHEXALI	2
03-5-082	RHEXPET	2
03-5-082	RHODATL	2
03-5-082	RHYNCHP	2
03-5-082	RHYNCIL	2
03-5-082	RHYNFASF	2
03-5-082	RHYNPLU	2
03-5-082	SARRFLA	2
03-5-082	SCLECILG	2
03-5-082	SCLEMIN	2
03-5-082	SMILGLA	1
03-5-082	SMILLAU	2
03-5-082	SOLIPLC	3
03-5-082	SPIRPRA	1

03-5-082	TRIARAC	2
03-5-082	UTRISUB	2
03-5-082	VACCCRA	4
03-5-082	VACCTEN	4
03-5-082	WOODVIR	2
03-5-082	XYRIAMB	2
03-5-082	XYRICAR	2
03-5-082	ZENOPUL	2
03-5-082	ZIGADEN	2
03-5-082	ZIGAGLB	2
03-5-083	AGAL1S1	1
03-5-083	ANDRGLA	2
03-5-083	ANDRVIRV	2
03-5-083	ARISSTR	6
03-5-083	ARUNGIGT	2
03-5-083	CALABRE	2
03-5-083	CARESTTB	1
03-5-083	CARPPAN	2
03-5-083	CLEIBIF	2
03-5-083	CLETALN	2
03-5-083	CYRIRAC	3
03-5-083	DICHDICD	1
03-5-083	DICHDICE	2
03-5-083	DICHDICM	2
03-5-083	DICHWEB	2
03-5-083	DIONMUS	2
03-5-083	DROSBRE	2
03-5-083	EURYPAL	2
03-5-083	FIMBPUB	1
03-5-083	GAYLDUM	3
03-5-083	GAYLFRO	1
03-5-083	GORDLAS	2
03-5-083	HYPERED	2
03-5-083	ILEXCAS	1
03-5-083	ILEXCRC	2
03-5-083	ILEXGLA	7
03-5-083	IRISVERV	2
03-5-083	LACHCAR	2
03-5-083	LEIOBUX	1
03-5-083	LEUCRAC	2
03-5-083	LYONLUC	3
03-5-083	LYONMAR	2
03-5-083	LYSIASP	2
03-5-083	MAGNVIR	2
03-5-083	MORECAR	2
03-5-083	MORECER	4
03-5-083	PERSPLS	2
03-5-083	PHOTPYR	2
03-5-083	PING1S1	1
03-5-083	PINUPAL	3
03-5-083	PINUSER	5
03-5-083	PLAT1S1	1
03-5-083	PLEETEN	7
03-5-083	POLYCRU	2
03-5-083	POLYLUT	2
03-5-083	RHEXALI	2
03-5-083	RHEXPET	2
03-5-083	RHYNCHP	2
03-5-083	RHYNCIL	1
03-5-083	RHYNFASF	1
03-5-083	RHYNPLU	2
03-5-083	SARRFLA	2
03-5-083	SARRPUR3	2
03-5-083	SEYMCAS	2
03-5-083	SMILLAU	2
03-5-083	SOLIPLC	2
03-5-083	SPORPIN	4
03-5-083	TOXIRAD	1
03-5-083	UTRISUB	1
03-5-083	VACCCRA	6
03-5-083	VACCFOR	1
03-5-083	VACCTEN	4
03-5-083	XYRIAMB	1
03-5-083	XYRICAR	2
03-5-083	ZENOPUL	4
03-5-083	ZIGAGLB	2
03-5-084	ACERRUB	2
03-5-084	AGAL1S1	2
03-5-084	ALETFAR	2
03-5-084	ANDR1S1	2
03-5-084	ARISSTR	9
03-5-084	ARUNGIGT	2
03-5-084	BARTVIR	1
03-5-084	BIGENUDN	3
03-5-084	CARPODO	3
03-5-084	CARPPAN	2
03-5-084	CARPTOM	2
03-5-084	CHAMNICN	1
03-5-084	CHAPTOM	2
03-5-084	CIRSVIR	2
03-5-084	CORELIN	2
03-5-084	CROTPUR	2
03-5-084	CTENARO	2
03-5-084	DESMLIN	2
03-5-084	DESMTEN	2
03-5-084	DICH1S1	2
03-5-084	DICHDICD	2
03-5-084	DICHDICE	2
03-5-084	DICHSTRL	2
03-5-084	DIONMUS	2
03-5-084	DROSBRE	2
03-5-084	ERIGVER	2
03-5-084	ERYNINT	1
03-5-084	EUPALEUL	2
03-5-084	EUPAROT	2
03-5-084	EURYPAL	2
03-5-084	GALA1S1	2
03-5-084	GENTAUT	2
03-5-084	GYMNBRE	2
03-5-084	HELIANG	1
03-5-084	HELIHET	2
03-5-084	HYPECRU	1
03-5-084	ILEXGLA	4
03-5-084	IRISVERV	2

03-5-084	LACHANC	2
03-5-084	LESPCPT	2
03-5-084	LINU1S1	2
03-5-084	LOBENUT	1
03-5-084	LUDWVIR	1
03-5-084	LYCOAPR	2
03-5-084	MAGNVIR	2
03-5-084	MUHLCAPT	2
03-5-084	NYSSSYL	2
03-5-084	PHOTPYR	2
03-5-084	PINUPAL	6
03-5-084	PINUSER	2
03-5-084	PITYGRA	3
03-5-084	PLAT1S1	2
03-5-084	POLY6S1	1
03-5-084	POLYBRE	2
03-5-084	POLYLUT	2
03-5-084	PRENAUT	2
03-5-084	PTERAQUP	2
03-5-084	RHEXALI	2
03-5-084	RHEXLUT	2
03-5-084	RHYNBAL	1
03-5-084	RHYNCHP	2
03-5-084	RHYNFASF	1
03-5-084	RHYNPLU	2
03-5-084	SCLECIL1	2
03-5-084	SCLEMIN	1
03-5-084	SERILIN	2
03-5-084	SEYMCAS	2
03-5-084	SISYCAP	1
03-5-084	SMILBON	1
03-5-084	SOLIPLC	1
03-5-084	STYLBIF	2
03-5-084	SYMPDUM1	2
03-5-084	SYMPWAL	2
03-5-084	TEPHFLO	2
03-5-084	TRIARAC	2
03-5-084	VACCCRA	4
03-5-084	VACCTEN	2
03-5-084	VIOLXPR	2
03-5-084	XYRICAR	2
03-5-102	ACERRUB	2
03-5-102	ALETFAR	2
03-5-102	ANDR1S1	2
03-5-102	ANDRGLO1	2
03-5-102	ANTHRUF	2
03-5-102	ARISPAL	2
03-5-102	ARISSTR	2
03-5-102	ARUNGIGT	2
03-5-102	ASTE1S1	2
03-5-102	BIGENUDN	2
03-5-102	CALOPAL	2
03-5-102	CALOTUBT	1
03-5-102	CARESTTB	1
03-5-102	CARPTOM	2
03-5-102	CHAPTOM	3
03-5-102	CIRSVIR	2
03-5-102	CLEIDIV	1
03-5-102	COREFAL	2
03-5-102	CORELIN	2
03-5-102	CTENARO	8
03-5-102	DICH1S1	2
03-5-102	DICH1S2	2
03-5-102	DICHACUF	2
03-5-102	DICHDICE	2
03-5-102	DICHDICM	2
03-5-102	DIONMUS	2
03-5-102	DROSBRE	2
03-5-102	DROSCAP	4
03-5-102	DROSINT	1
03-5-102	ERIA1S1	2
03-5-102	ERIGSTR	2
03-5-102	ERIGVER	2
03-5-102	ERIODECD	2
03-5-102	EUPACAP	1
03-5-102	EUPALEUL	2
03-5-102	EUPAPIL	2
03-5-102	EURYPAL	2
03-5-102	FIMBPUB	2
03-5-102	GAYLDUM	1
03-5-102	GAYLFRO	2
03-5-102	HELIHET	2
03-5-102	HYPECRU	1
03-5-102	HYPEFAS	2
03-5-102	HYPERED	2
03-5-102	ILEXGLA	2
03-5-102	ILEXMYR	2
03-5-102	IRISVERV	2
03-5-102	JUNC1S1	2
03-5-102	LACHCAR	2
03-5-102	LIATSPI	2
03-5-102	LINUFLO	2
03-5-102	LOBENUT	2
03-5-102	LYCOALP	2
03-5-102	MAGNVIR	2
03-5-102	MELAWOO	2
03-5-102	MORECAR	2
03-5-102	MUHLCAPT	7
03-5-102	NYSSSYL	2
03-5-102	PERSPLS	2
03-5-102	PHOTPYR	2
03-5-102	PING1S1	2
03-5-102	PINUPAL	2
03-5-102	PINUSER	2
03-5-102	PLEETEN	2
03-5-102	POGOOPH	1
03-5-102	POLYHOO	2
03-5-102	POLYLUT	2
03-5-102	POLYRMA	2
03-5-102	RHEXALI	2
03-5-102	RHEXLUT	2
03-5-102	RHYNBRE	2
03-5-102	RHYNCHP	2
03-5-102	RHYNLAT	2

03-5-102	RHYNOLI	2
03-5-102	RHYNPLU	2
03-5-102	SABADIF	2
03-5-102	SARRFLA	2
03-5-102	SARRPUR3	2
03-5-102	SARRRUBR	2
03-5-102	SARRXCA	1
03-5-102	SARRXCH	1
03-5-102	SCLEMIN	4
03-5-102	SISYCAP	2
03-5-102	SMILGLA	1
03-5-102	SMILLAU	2
03-5-102	SOLIPLC	2
03-5-102	SOLISTC	2
03-5-102	SPIRVER	2
03-5-102	SPORPIN	4
03-5-102	SYMPDUM1	2
03-5-102	TOFIGLA	2
03-5-102	TOXIRAD	2
03-5-102	UNK1 1	
03-5-102	UNK2 1	
03-5-102	UTRISUB	2
03-5-102	VACCCRA	1
03-5-102	VACCFOR	2
03-5-102	VIOLXPR	2
03-5-102	WOODARE	2
03-5-102	XYRIAMB	3
03-5-102	XYRIBAL	2
03-5-102	XYRICAR	2
03-5-102	ZIGADEN	2
03-5-103	ACERRUB	2
03-5-103	ALETFAR	2
03-5-103	ANDRGLO1	2
03-5-103	ANDRVIRV	2
03-5-103	ARISSTR	7
03-5-103	ARUNGIGT	2
03-5-103	BIGENUDN	2
03-5-103	CALABRE	1
03-5-103	CARPTOM	2
03-5-103	CHAPTOM	1
03-5-103	CLETALN	4
03-5-103	CORELIN	2
03-5-103	CTENARO	2
03-5-103	CYRIRAC	2
03-5-103	DICHDICE	2
03-5-103	DICHLAX	2
03-5-103	DICHOVAO	1
03-5-103	DICHSTRL	2
03-5-103	DIONMUS	2
03-5-103	DROSCAP	2
03-5-103	ERYNINT	2
03-5-103	EUPALEUL	2
03-5-103	EUPAROT	2
03-5-103	EURYPAL	2
03-5-103	EUTHCAR	2
03-5-103	GAYLDUM	5
03-5-103	GAYLFRO	5
03-5-103	GYMNBRE	2
03-5-103	HELIANG	1
03-5-103	HELIHET	3
03-5-103	HYPECIS	5
03-5-103	HYPECRU	2
03-5-103	HYPERED	1
03-5-103	HYPOHIR	2
03-5-103	ILEXGLA	5
03-5-103	IRISVERV	2
03-5-103	JUNCSCI	2
03-5-103	LACHANC	2
03-5-103	LIAT1S1	1
03-5-103	LINUFLOF	2
03-5-103	LIQUSTY	1
03-5-103	LYONLIGF	4
03-5-103	LYONMAR	2
03-5-103	LYSILOO	2
03-5-103	MAGNVIR	2
03-5-103	MORECAR	3
03-5-103	MORECER	3
03-5-103	MUHLCAPT	3
03-5-103	NYSSSYL	2
03-5-103	OXYPTER	1
03-5-103	PANIANC	2
03-5-103	PERSPLS	2
03-5-103	PHOTPYR	2
03-5-103	PINUSER	5
03-5-103	PINUTAE	2
03-5-103	PITYGRA	2
03-5-103	PLEETEN	1
03-5-103	POLYLUT	2
03-5-103	POLYRMA	1
03-5-103	PTERAQUP	1
03-5-103	QUERNIG	2
03-5-103	RHEXALI	2
03-5-103	RHEXNAS	2
03-5-103	RHEXPET	2
03-5-103	RHODATL	2
03-5-103	RHYNBAL	2
03-5-103	RHYNCHP	2
03-5-103	RHYNCIL	2
03-5-103	RHYNGLM	2
03-5-103	RHYNPLU	2
03-5-103	SABADIF	1
03-5-103	SARRFLA	2
03-5-103	SCLECIL1	2
03-5-103	SISYCAP	2
03-5-103	SMILGLA	1
03-5-103	SOLIPLC	2
03-5-103	SPORPIN	5
03-5-103	SYMPDUM1	2
03-5-103	SYMPTIN	2
03-5-103	TEPHSPI	2
03-5-103	UTRISUB	1
03-5-103	VACCCRA	2
03-5-103	VACCFUS	1
03-5-103	VACCTEN	2

03-5-103	XYRIAMB	2
03-5-103	XYRICAR	2
03-5-103	ZIGADEN	1
03-5-107	ACERRUB	1
03-5-107	AGALAPH	2
03-5-107	ALETFAR	2
03-5-107	AMORGEOC	3
03-5-107	ANDRGLA	2
03-5-107	ANDRGLO1	2
03-5-107	ANDRVIRV	2
03-5-107	ARISSTR	6
03-5-107	BAPTCIN	2
03-5-107	BIGENUDN	2
03-5-107	CALOBAR	1
03-5-107	CALOPAL	2
03-5-107	CALOTUBT	1
03-5-107	CARPPAN	2
03-5-107	CARPTOM	1
03-5-107	CIRSVIR	2
03-5-107	CLEIDIV	1
03-5-107	CORELIN	2
03-5-107	CROTPUR	2
03-5-107	CTENARO	2
03-5-107	DESMLIN	2
03-5-107	DESMSTR	2
03-5-107	DICHACI	2
03-5-107	DICHDICE	2
03-5-107	DICHSTRS	2
03-5-107	DIONMUS	2
03-5-107	DROSBRE	2
03-5-107	DROSCAP	2
03-5-107	ERIGVER	1
03-5-107	ERYNINT	2
03-5-107	EUPALEUL	2
03-5-107	EUPHCUR	2
03-5-107	EURYPAL	2
03-5-107	GAYLDUM	2
03-5-107	GAYLFRO	3
03-5-107	GYMNBRE	2
03-5-107	HYPECRU	2
03-5-107	HYPOHIR	1
03-5-107	ILEXGLA	2
03-5-107	IRISVERV	2
03-5-107	LACHANC	2
03-5-107	LESPCPT	2
03-5-107	LIATPILP	2
03-5-107	LIATSPI	2
03-5-107	LOBENUT	1
03-5-107	LUDWVIR	2
03-5-107	LYCOAPR	1
03-5-107	MARSGRM	2
03-5-107	MORECAR	2
03-5-107	MORECER	3
03-5-107	MUHLCAPT	4
03-5-107	OXYPTER	1
03-5-107	PINUPAL	2
03-5-107	PINUSER	2
03-5-107	PITYGRA	2
03-5-107	PLAT1S1	1
03-5-107	PLEETEN	2
03-5-107	POLYBRE	1
03-5-107	POLYLUT	2
03-5-107	POLYRMA	2
03-5-107	PTERAQUP	1
03-5-107	RHEXALI	2
03-5-107	RHYNBAL	2
03-5-107	RHYNCHP	2
03-5-107	RHYNCIL	2
03-5-107	RHYNGLM	2
03-5-107	RHYNLAT	2
03-5-107	RHYNPLU	3
03-5-107	SARRFLA	1
03-5-107	SARRRUBR	1
03-5-107	SCLEPAUP	2
03-5-107	SISYCAP	1
03-5-107	SMILGLA	2
03-5-107	SMILLAU	2
03-5-107	SOLISTC	2
03-5-107	SPIRPRA	1
03-5-107	SPORPIN	8
03-5-107	STYLBIF	2
03-5-107	SYMPWAL	2
03-5-107	TEPHHIS	2
03-5-107	UNK1 2	
03-5-107	UTRISUB	2
03-5-107	VACCCRA	4
03-5-107	VACCFUS	2
03-5-107	VACCTEN	2
03-5-107	VIOLSPL	2
03-5-107	VIOLXPR	2
03-5-107	WOODVIR	2
03-5-107	XYRIAMB	2
03-5-107	XYRICAR	2
03-5-108	ACERRUB	2
03-5-108	ANDRGLA	1
03-5-108	ARISSTR	4
03-5-108	DICHWEB	1
03-5-108	GAYLDUM	3
03-5-108	GAYLFRO	1
03-5-108	GELSSEM	2
03-5-108	GORDLAS	1
03-5-108	HYPERED	1
03-5-108	ILEXCRC	4
03-5-108	ILEXGLA	6
03-5-108	ILEXMYR	1
03-5-108	ILEXOPAO	3
03-5-108	IRISVERV	1
03-5-108	LEIOBUX	8
03-5-108	LYONMAR	2
03-5-108	MAGNVIR	1
03-5-108	PERSPLS	2
03-5-108	PHOTPYR	2
03-5-108	PINUPAL	6
03-5-108	PINUSER	2

03-5-108	PITYGRA	1
03-5-108	POLYPLM	1
03-5-108	PYXIBAR	2
03-5-108	QUERGEM	2
03-5-108	RHYNPLU	1
03-5-108	SMILLAU	2
03-5-108	VACCCRA	6
03-5-108	XYRICAR	2
03-5-109	ANDRGLA	2
03-5-109	ANDRVIRV	2
03-5-109	ARISSTR	6
03-5-109	BALDUNI	1
03-5-109	CARPBEL	2
03-5-109	CARPPAN	2
03-5-109	CARPTOM	2
03-5-109	DICHSTRL	2
03-5-109	DICHWEB	2
03-5-109	DIOSVIR	1
03-5-109	GAYLDUM	6
03-5-109	GAYLFRO	2
03-5-109	GELSSEM	2
03-5-109	HYPERED	2
03-5-109	ILEXCRC	1
03-5-109	ILEXGLA	4
03-5-109	IRISVERV	1
03-5-109	JUNCELLE	1
03-5-109	LACHBEY	2
03-5-109	LEIOBUX	5
03-5-109	LIAT1S1	2
03-5-109	MAGNVIR	2
03-5-109	MORECER	2
03-5-109	OSMAAME	1
03-5-109	PERSPLS	2
03-5-109	PHOTPYR	2
03-5-109	PINUELLE	4
03-5-109	PINUPAL	4
03-5-109	PINUSER	1
03-5-109	PITYGRA	1
03-5-109	POLYPLM	2
03-5-109	PYXIBAR	2
03-5-109	QUERGEM	5
03-5-109	QUERLVS	2
03-5-109	RHYNPLU	2
03-5-109	SCLECIL1	1
03-5-109	SMILGLA	1
03-5-109	SMILLAU	2
03-5-109	STIPSETS	1
03-5-109	VACCCRA	6
03-5-109	VACCFUS	1
03-5-109	VACCTEN	2
03-5-109	XYRICAR	2
03-5-120	AGALSET	2
03-5-120	ARISSTR	6
03-5-120	CARPTOM	1
03-5-120	DICHLNC	2
03-5-120	GAYLDUM	6
03-5-120	GAYLFRO	2
03-5-120	ILEXCRC	1
03-5-120	ILEXGLA	2
03-5-120	IONALIN	2
03-5-120	LIATPILP	2
03-5-120	LYONMAR	2
03-5-120	MAGNVIR	1
03-5-120	MORECER	4
03-5-120	OSMAAME	2
03-5-120	PERSPLS	1
03-5-120	PINUPAL	5
03-5-120	PINUSER	5
03-5-120	PITYGRA	2
03-5-120	PTERAQUP	4
03-5-120	QUER1S1	2
03-5-120	QUERHEM	4
03-5-120	QUERVIR	6
03-5-120	SASSALB	1
03-5-120	SCHISCO	2
03-5-120	SCLECILG	2
03-5-120	SERITOR	2
03-5-120	SEYMCAS	2
03-5-120	VACCCRA	4
03-5-120	VACCTEN	5
03-5-120	VITI1S1	1
03-5-121	AGALSET	2
03-5-121	AMELCAN	2
03-5-121	ANDRVIRV	2
03-5-121	ARISSTR	3
03-5-121	ARUNGIGT	2
03-5-121	DICH1S1	1
03-5-121	GAYLDUM	7
03-5-121	GAYLFRO	7
03-5-121	ILEXCRC	2
03-5-121	ILEXGLA	6
03-5-121	ILEXOPAO	2
03-5-121	IONALIN	2
03-5-121	LIATPILP	2
03-5-121	MAGNVIR	2
03-5-121	MONOUNI	2
03-5-121	MORECER	3
03-5-121	PERSPLS	3
03-5-121	PHOTPYR	2
03-5-121	PINUPAL	5
03-5-121	PINUSER	5
03-5-121	PINUTAE	3
03-5-121	PITYGRA	2
03-5-121	PTERAQUP	7
03-5-121	QUERHEM	2
03-5-121	QUERVIR	4
03-5-121	SASSALB	2
03-5-121	SCHISCO	2
03-5-121	SERITOR	2
03-5-121	SEYMCAS	1
03-5-121	VACCCRA	7
03-5-121	VACCFOR	2
03-5-121	VACCFUS	2
03-5-121	VACCTEN	6

03-5-121	XYRICAR	2
03-6-052	ACERRUB	2
03-6-052	ANDRTER	1
03-6-052	ANDRVIRV	4
03-6-052	ARISSTR	8
03-6-052	CARPODO	4
03-6-052	CENTASI	1
03-6-052	CHAMNICN	2
03-6-052	CHASLAX	2
03-6-052	DANTSSS	2
03-6-052	DESM1S1	1
03-6-052	DESMLIN	2
03-6-052	DESMTEN	2
03-6-052	DICHOVAA	2
03-6-052	DIOSVIR	2
03-6-052	EUPALEUL	2
03-6-052	EUPAPIL	1
03-6-052	EUPAROT	1
03-6-052	EUTHCAR	2
03-6-052	GALAERE	1
03-6-052	GALAVOL	1
03-6-052	GAYLDUM	4
03-6-052	GAYLFRO	6
03-6-052	GELSSEM	2
03-6-052	GYMN3S1	2
03-6-052	HIERGRO	2
03-6-052	HYPEHYP	1
03-6-052	HYPERED	1
03-6-052	HYPESET	1
03-6-052	ILEXGLA	5
03-6-052	IONALIN	2
03-6-052	IRISVERV	2
03-6-052	LESPANG	1
03-6-052	LESPCPT	2
03-6-052	LIATPILP	1
03-6-052	LIQUSTY	2
03-6-052	LOBENUT	2
03-6-052	LYONMAR	2
03-6-052	MORECER	2
03-6-052	PANIVIRV	4
03-6-052	PERSPLS	2
03-6-052	PHOTPYR	1
03-6-052	PINUPAL	5
03-6-052	PINUSER	4
03-6-052	PINUTAE	6
03-6-052	PITYGRA	2
03-6-052	POLYLUT	2
03-6-052	PTERAQUP	4
03-6-052	PTERPYC	2
03-6-052	QUERFLC	1
03-6-052	QUERSTE	1
03-6-052	RHEXALI	2
03-6-052	RHUSCOP	2
03-6-052	RHYNPLU	1
03-6-052	RUBUCUN	1
03-6-052	RUBUFLA	1
03-6-052	SERITOR	2
03-6-052	SMILBON	2
03-6-052	SMILGLA	2
03-6-052	SOLIODOO	2
03-6-052	SPIRLCRG	2
03-6-052	STYLBIF	2
03-6-052	SYMPDUM1	1
03-6-052	SYMPWAL	2
03-6-052	TEPHFLO	2
03-6-052	TEPHHIS	1
03-6-052	VACCCRA	6
03-6-052	VACCTEN	5
03-6-052	WOODVIR	2
03-6-052	XYRICAR	2
03-6-053	ACERRUB	6
03-6-053	ANDRGLA	2
03-6-053	ANDRGLO1	2
03-6-053	ANDRTER	1
03-6-053	ANDRVIRV	2
03-6-053	ARUNGIGT	8
03-6-053	CARESTTB	2
03-6-053	CENTASI	1
03-6-053	CHASLAX	4
03-6-053	DICH1S1	1
03-6-053	DICHDICD	2
03-6-053	DICHDICM	1
03-6-053	DICHOVAA	1
03-6-053	DICHSCA	1
03-6-053	DIOSVIR	2
03-6-053	EUPAPIL	2
03-6-053	GAYLFRO	2
03-6-053	GELSSEM	2
03-6-053	HYPEHYP	2
03-6-053	ILEXCRC	1
03-6-053	ILEXGLA	7
03-6-053	ILEXOPAO	2
03-6-053	LEUCRAC	2
03-6-053	LIATPILP	1
03-6-053	LIQUSTY	4
03-6-053	LYONLIGF	1
03-6-053	LYSILOO	2
03-6-053	MAGNVIR	2
03-6-053	MORECAR	2
03-6-053	MORECER	4
03-6-053	NYSSSYL	4
03-6-053	PANIVIRV	2
03-6-053	PERSPLS	4
03-6-053	PHOTPYR	1
03-6-053	PINUPAL	6
03-6-053	PINUSER	2
03-6-053	PINUTAE	2
03-6-053	POLYLUT	2
03-6-053	QUERHEM	2
03-6-053	QUERNIG	2
03-6-053	RHEXNAS	2
03-6-053	RHYNBAL	2
03-6-053	RHYNDEB	1
03-6-053	RUBUFLA	2

03-6-053	SCLECIL1	1
03-6-053	SMILBON	1
03-6-053	SMILGLA	2
03-6-053	SMILLAU	2
03-6-053	TOXIRAD	2
03-6-053	VACCFUS	4
03-6-053	VACCTEN	2
03-6-053	VIBUNUDN	2
03-6-053	VIOLXPR	1
03-6-053	VITIROT	2
03-6-053	WOODARE	1
03-6-053	WOODVIR	1
03-6-055	ANDRGLA	3
03-6-055	ANDRGLO1	3
03-6-055	ANDRTER	2
03-6-055	ANDRVIRV	2
03-6-055	ARISSTR	2
03-6-055	CARPODO	2
03-6-055	CENTASI	4
03-6-055	CHASLAX	3
03-6-055	CORELIN	5
03-6-055	DESMTEN	2
03-6-055	DICHOVAA	2
03-6-055	DICHSTRL	2
03-6-055	DICHWEB	2
03-6-055	DIOSVIR	2
03-6-055	ELEO1S1	1
03-6-055	EUPALEUL	2
03-6-055	EUPAMOH	2
03-6-055	GALAREG	2
03-6-055	GAYLDUM	3
03-6-055	GAYLFRO	4
03-6-055	GELSSEM	1
03-6-055	GRATPIL	2
03-6-055	GYMN3S1	3
03-6-055	HYPECRU	1
03-6-055	ILEXGLA	4
03-6-055	LACHANC	2
03-6-055	LECHPULP	1
03-6-055	LESPANG	1
03-6-055	LIATPILP	2
03-6-055	LIQUSTY	6
03-6-055	LOBENUT	2
03-6-055	LUDWMAR	2
03-6-055	LYONLIGF	2
03-6-055	LYONMAR	2
03-6-055	MORECER	2
03-6-055	NYSSSYL	7
03-6-055	PANIVIRV	5
03-6-055	PERSPLS	1
03-6-055	PINUPAL	2
03-6-055	PINUTAE	8
03-6-055	PITYGRA	2
03-6-055	POAC-S1	2
03-6-055	QUERFLC	1
03-6-055	QUERHEM	2
03-6-055	QUERICN	2
03-6-055	QUERLAU	2
03-6-055	QUERNIG	2
03-6-055	QUERPHE	2
03-6-055	QUERSTE	2
03-6-055	RHEXALI	2
03-6-055	RHEXNAS	2
03-6-055	RHUSCOP	2
03-6-055	RHYN1S1	2
03-6-055	RHYNPLU	1
03-6-055	SASSALB	2
03-6-055	SMILGLA	2
03-6-055	SOLIODOO	2
03-6-055	SYMPDUM1	3
03-6-055	SYMPWAL	1
03-6-055	TEPHHIS	1
03-6-055	VACCCRA	3
03-6-055	VACCFOR	2
03-6-055	VACCFUS	3
03-6-055	VACCSTA	2
03-6-055	VACCTEN	3
03-6-055	XYRICAR	2
03-6-077	ALETFAR	2
03-6-077	ANDR1S1	2
03-6-077	ARISSTR	5
03-6-077	BARTVIR	1
03-6-077	CALOTUBT	2
03-6-077	CARESTTB	2
03-6-077	CLEIDIV	2
03-6-077	CORELIN	2
03-6-077	DICHTEN	2
03-6-077	DICHWEB	2
03-6-077	DIONMUS	1
03-6-077	DROSCAP	1
03-6-077	FIMBPUB	2
03-6-077	GAYLFRO	2
03-6-077	HYPE1S1	1
03-6-077	HYPEHYP	1
03-6-077	HYPO1S1	1
03-6-077	ILEXGLA	5
03-6-077	LACHCAR	2
03-6-077	LYCOALP	2
03-6-077	LYONLUC	2
03-6-077	LYONMAR	2
03-6-077	MAGNVIR	3
03-6-077	MORECAR	2
03-6-077	MORECER	4
03-6-077	OXYPTER	2
03-6-077	PERSPLS	2
03-6-077	PHOTPYR	2
03-6-077	PINUPAL	3
03-6-077	PINUSER	2
03-6-077	PLAT1S1	2
03-6-077	PLEETEN	4
03-6-077	POGOOPH	1
03-6-077	POLYLUT	2
03-6-077	PTERAQUP	2
03-6-077	RHEXALI	2

03-6-077	RHEXPET	2
03-6-077	RHYN1S1	2
03-6-077	RHYNPAL	1
03-6-077	RHYNPLU	2
03-6-077	SARRFLA	2
03-6-077	SARRPUR3	1
03-6-077	SERILIN	2
03-6-077	SMILLAU	1
03-6-077	SPORPIN	9
03-6-077	VACCCRA	4
03-6-077	VACCSTA	2
03-6-077	VACCTEN	5
03-6-077	WOODARE	2
03-6-077	XYRIAMB	2
03-6-077	XYRICAR	2
03-6-077	ZIGADEN	2
03-6-077	ZIGAGLB	2
03-6-100	ACERRUB	3
03-6-100	ALETFAR	2
03-6-100	ANDR1S1	3
03-6-100	ANDRGLO1	1
03-6-100	ARISSTR	7
03-6-100	ARUNGIGT	2
03-6-100	BIGENUDN	2
03-6-100	CALABRE	2
03-6-100	CARPODO	2
03-6-100	CARPPAN	2
03-6-100	CARPTOM	2
03-6-100	CLEIDIV	1
03-6-100	CLETALN	2
03-6-100	CORELIN	2
03-6-100	DESMTEN	2
03-6-100	DICHDICE	2
03-6-100	DICHSTRL	2
03-6-100	DIONMUS	1
03-6-100	DROSCAP	2
03-6-100	ERYNINT	1
03-6-100	EUPALEUL	2
03-6-100	EUPAROT	2
03-6-100	EURYPAL	2
03-6-100	GAYLDUM	2
03-6-100	GAYLFRO	2
03-6-100	HELIANG	2
03-6-100	HELIHET	2
03-6-100	HYPECRU	2
03-6-100	HYPERED	2
03-6-100	HYPOHIR	1
03-6-100	ILEXGLA	5
03-6-100	IRISVERV	2
03-6-100	LACHANC	2
03-6-100	LILICAT	1
03-6-100	LIQUSTY	2
03-6-100	LYONLIGF	4
03-6-100	LYONMAR	1
03-6-100	LYSILOO	2
03-6-100	MAGNVIR	2
03-6-100	MORECAR	4
03-6-100	MORECER	3
03-6-100	MUHLCAPT	4
03-6-100	NYSSSYL	2
03-6-100	PHOTPYR	2
03-6-100	PINUPAL	2
03-6-100	PINUSER	6
03-6-100	PITYGRA	2
03-6-100	POLYLUT	2
03-6-100	RHEXALI	2
03-6-100	RHEXPET	2
03-6-100	RHYNCHP	2
03-6-100	RHYNCIL	2
03-6-100	SARRFLA	2
03-6-100	SARRPUR3	2
03-6-100	SCLEMIN	2
03-6-100	SISYCAP	2
03-6-100	SOLIPLC	2
03-6-100	SOLISTC	1
03-6-100	SPORPIN	8
03-6-100	SYMPDUM1	2
03-6-100	SYMPTIN	2
03-6-100	TEPHHIS	1
03-6-100	VACCCRA	2
03-6-100	VACCFUS	2
03-6-100	VACCTEN	2
03-6-100	VIOLXPR	2
03-6-100	XYRICAR	2
03-6-103	ANDRGLA	2
03-6-103	ANDRVIRV	2
03-6-103	ARISSTR	5
03-6-103	CHAMLUT	2
03-6-103	CLEIDIV	2
03-6-103	CYRIRAC	3
03-6-103	DICH1S1	2
03-6-103	DICHWEB	2
03-6-103	DIONMUS	2
03-6-103	DROSCAP	2
03-6-103	EURYPAL	2
03-6-103	GAYLDUM	7
03-6-103	GAYLFRO	4
03-6-103	HYPEFAS	2
03-6-103	ILEXCRC	6
03-6-103	ILEXGLA	6
03-6-103	LYONLIGF	3
03-6-103	LYONLUC	6
03-6-103	LYSIASP	2
03-6-103	MAGNVIR	2
03-6-103	MORECAR	2
03-6-103	MORECER	2
03-6-103	NYSSSYL	1
03-6-103	OSMUCINC	2
03-6-103	PERSPLS	2
03-6-103	PHOTPYR	2
03-6-103	PINUPAL	5
03-6-103	PINUSER	2
03-6-103	PLEETEN	8
03-6-103	POLYLUT	2

03-6-103	RHEXALI	2
03-6-103	RHEXPET	2
03-6-103	SARRPUR3	1
03-6-103	SMILLAU	2
03-6-103	VACCCRA	6
03-6-103	VACCFOR	2
03-6-103	VACCTEN	2
03-6-103	WOODVIR	2
03-6-103	XYRIAMB	2
03-6-103	XYRICAR	2
03-6-103	ZENOPUL	2
03-6-103	ZIGADEN	2
03-6-103	ZIGAGLB	4
03-6-104	ACERRUB	2
03-6-104	AGAL1S1	2
03-6-104	ALETFAR	2
03-6-104	ANDR1S1	4
03-6-104	ANDRGLO1	2
03-6-104	ANDRMOH	2
03-6-104	ARISSTR	4
03-6-104	ARUNGIGT	2
03-6-104	ASTE1S1	1
03-6-104	ASTE-S1	2
03-6-104	BIGENUDN	2
03-6-104	CALOBAR	2
03-6-104	CALOPAL	2
03-6-104	CALOTUBT	1
03-6-104	CARPPAN	2
03-6-104	CARPTOM	2
03-6-104	CHAPTOM	3
03-6-104	CIRSVIR	2
03-6-104	CLEIDIV	2
03-6-104	CORELIN	4
03-6-104	CTENARO	2
03-6-104	CYRIRAC	3
03-6-104	DANTSSS	2
03-6-104	DESMTEN	2
03-6-104	DICHDICE	2
03-6-104	DICHSTRL	2
03-6-104	DIONMUS	3
03-6-104	DROSCAP	4
03-6-104	ERIGVER	5
03-6-104	ERIODECD	2
03-6-104	ERYNINT	4
03-6-104	EUPALEUL	2
03-6-104	EUPAPIL	2
03-6-104	EUPAROT	2
03-6-104	EURYPAL	2
03-6-104	GAYLDUM	2
03-6-104	GAYLFRO	2
03-6-104	HELIANG	2
03-6-104	HELIHET	2
03-6-104	HYPECRU	2
03-6-104	HYPERED	2
03-6-104	ILEXCRC	3
03-6-104	ILEXGLA	5
03-6-104	IRISPRI	2
03-6-104	LOBENUT	1
03-6-104	LYCOALP	2
03-6-104	LYCOCARC	2
03-6-104	LYONLIGF	2
03-6-104	LYONLUC	2
03-6-104	LYONMAR	2
03-6-104	LYSIASP	2
03-6-104	MAGNVIR	2
03-6-104	MARSGRM	2
03-6-104	MORECAR	2
03-6-104	MUHLCAPT	7
03-6-104	NYSSSYL	3
03-6-104	OSMUREGS	2
03-6-104	OXYPFIL	2
03-6-104	PHOTPYR	2
03-6-104	PING1S1	2
03-6-104	PINUPAL	5
03-6-104	PINUSER	5
03-6-104	PLAT1S1	2
03-6-104	PLEETEN	2
03-6-104	POLYLUT	2
03-6-104	POLYRMA	2
03-6-104	PTERAQUP	2
03-6-104	RHEXALI	2
03-6-104	RHEXLUT	2
03-6-104	RHEXMAR	2
03-6-104	RHEXPET	2
03-6-104	RHYN1S1	4
03-6-104	RHYNBAL	3
03-6-104	RHYNCHP	2
03-6-104	RHYNLAT	2
03-6-104	RHYNOLI	2
03-6-104	RHYNPLU	2
03-6-104	RHYNRAR	2
03-6-104	SARRPUR3	2
03-6-104	SARRRUBR	2
03-6-104	SCLEMIN	2
03-6-104	SCLEPAUP	2
03-6-104	SILPCOM	2
03-6-104	SISYCAP	2
03-6-104	SMILLAU	2
03-6-104	SMILROT	1
03-6-104	SOLIPLC	4
03-6-104	SOLISTC	2
03-6-104	SPIRPRA	2
03-6-104	SPORPIN	8
03-6-104	SYMPDUM1	2
03-6-104	VACCFOR	2
03-6-104	VACCFUS	2
03-6-104	VIOLXPR	2
03-6-104	WOODVIR	4
03-6-104	XYRIAMB	2
03-6-104	XYRICAR	2
03-6-104	ZENOPUL	1
03-6-104	ZIGADEN	2
03-6-110	ANDRGLA	1
03-6-110	ANDRGYRG	1

03-6-110	ANDRTER	2
03-6-110	ANDRVIRV	1
03-6-110	ARISSTR	6
03-6-110	ARUNGIGT	1
03-6-110	ASCLPED	1
03-6-110	BALDUNI	1
03-6-110	CARPBEL	1
03-6-110	CARPTOM	2
03-6-110	CNIDSTI	1
03-6-110	CYRIRAC	2
03-6-110	DICHLNC	2
03-6-110	DICHTEN	1
03-6-110	GAYLDUM	6
03-6-110	GORDLAS	1
03-6-110	HYPERED	2
03-6-110	ILEXCRC	1
03-6-110	ILEXGLA	2
03-6-110	IONALIN	1
03-6-110	IRISVERV	1
03-6-110	LEIOBUX	5
03-6-110	LIATPILP	2
03-6-110	LYONLUC	2
03-6-110	LYONMAR	5
03-6-110	MAGNVIR	2
03-6-110	MORECER	1
03-6-110	NYSSSYL	2
03-6-110	OSMUCINC	1
03-6-110	PERSPLS	2
03-6-110	PHOTPYR	2
03-6-110	PINUPAL	5
03-6-110	PINUSER	2
03-6-110	PITYASP2	2
03-6-110	PTERAQUP	4
03-6-110	PYXIBAR	4
03-6-110	QUERGEM	2
03-6-110	QUERLVS	3
03-6-110	QUERXLV	1
03-6-110	QUERXWA	2
03-6-110	RHODVIS	2
03-6-110	RHYNPLU	2
03-6-110	SCLECILG	1
03-6-110	SMILLAU	1
03-6-110	STIPSETS	1
03-6-110	VACCCRA	8
03-6-110	VACCFUS	1
03-6-110	VACCSTA	1
03-6-110	VACCTEN	2
03-6-110	XYRICAR	2
03-7-050	AGAL1S1	2
03-7-050	AGALAPH	1
03-7-050	AMPHPUR	2
03-7-050	ANDR1S1	2
03-7-050	ANDR1S2	2
03-7-050	ANDR1S3	2
03-7-050	ARISSTR	8
03-7-050	BARTVIR	1
03-7-050	BIGENUDN	2
03-7-050	CALABRE	2
03-7-050	CALOBAR	2
03-7-050	CALOPAL	1
03-7-050	CARESTTB	1
03-7-050	CARPPAN	4
03-7-050	CARPTOM	4
03-7-050	CLEIDIV	1
03-7-050	DICHDICE	4
03-7-050	DROSCAP	2
03-7-050	EURYPAL	1
03-7-050	FIMBPUB	2
03-7-050	GAYLDUM	5
03-7-050	GAYLFRO	2
03-7-050	GENTAUT	3
03-7-050	HYPECRU	2
03-7-050	HYPERED	4
03-7-050	ILEXGLA	5
03-7-050	IONALIN	2
03-7-050	LACHCAR	2
03-7-050	LECHMIN	2
03-7-050	LIATSPI	2
03-7-050	LOBENUT	2
03-7-050	LYONMAR	2
03-7-050	MAGNVIR	4
03-7-050	MORECAR	2
03-7-050	MORECER	4
03-7-050	PERSPLS	3
03-7-050	PHOTPYR	4
03-7-050	PINUPAL	6
03-7-050	PINUSER	4
03-7-050	PITYGRA	2
03-7-050	PLAT1S1	2
03-7-050	POLYBRE	1
03-7-050	POLYCRU	3
03-7-050	POLYLUT	3
03-7-050	PTERAQUP	2
03-7-050	RHEXALI	3
03-7-050	RHEXPET	2
03-7-050	RHYNBAL	1
03-7-050	RHYNCHP	2
03-7-050	RHYNCIL	4
03-7-050	RHYNPAL	1
03-7-050	RHYNPLU	4
03-7-050	SABADIF	2
03-7-050	SARRFLA	2
03-7-050	SCLECIL	2
03-7-050	SEYMCAS	2
03-7-050	SMILLAU	2
03-7-050	SOLISTC	5
03-7-050	TRIARAC	3
03-7-050	UTRISUB	2
03-7-050	VACCCRA	5
03-7-050	WOODVIR	1
03-7-050	XYRIAMB	2
03-7-050	XYRICAR	3
03-7-050	ZIGADEN	3
03-7-051	AGALPUR	2

03-7-051	ANDR1S1	2
03-7-051	ANDR1S2	2
03-7-051	ARISSTR	8
03-7-051	BIGENUDN	2
03-7-051	CARPBEL	1
03-7-051	CARPPAN	2
03-7-051	CARPTOM	3
03-7-051	CLEIDIV	1
03-7-051	DICHSTRL	2
03-7-051	FIMBPUB	2
03-7-051	GAYLDUM	5
03-7-051	GAYLFRO	2
03-7-051	GENTAUT	2
03-7-051	HYPERED	2
03-7-051	ILEXCRC	1
03-7-051	ILEXGLA	4
03-7-051	LECHMIN	1
03-7-051	LIATPILP	2
03-7-051	LOBENUT	2
03-7-051	LYONMAR	4
03-7-051	MAGNVIR	2
03-7-051	MARSGRM	1
03-7-051	MORECER	5
03-7-051	PINUPAL	7
03-7-051	PINUSER	2
03-7-051	PITYGRA	3
03-7-051	PLAT1S1	1
03-7-051	POLYLUT	2
03-7-051	RHEXALI	3
03-7-051	RHYNCIL	1
03-7-051	RHYNPLU	2
03-7-051	SCLECIL	2
03-7-051	SEYMCAS	2
03-7-051	SPIRLCRG	1
03-7-051	TRIARAC	2
03-7-051	VACCCRA	5
03-7-051	VACCTEN	3
03-7-051	XYRICAR	2
03-7-052	AGAL1S1	2
03-7-052	ANDR1S1	2
03-7-052	ANDR1S2	2
03-7-052	ANDR1S3	2
03-7-052	ANDR1S4	1
03-7-052	ARISSTR	8
03-7-052	CARPPAN	2
03-7-052	CLEIDIV	2
03-7-052	CYRIRAC	2
03-7-052	DICHDICE	2
03-7-052	DICHSCA	2
03-7-052	DIONMUS	2
03-7-052	DROSCAP	1
03-7-052	EUPAPIL	1
03-7-052	EURYPAL	1
03-7-052	GAYLDUM	3
03-7-052	GAYLFRO	4
03-7-052	GORDLAS	2
03-7-052	HYPERED	2
03-7-052	ILEXCRC	2
03-7-052	ILEXGLA	4
03-7-052	JUNCABO	1
03-7-052	LACHANC	1
03-7-052	LYONLIGF	2
03-7-052	LYONLUC	2
03-7-052	MAGNVIR	4
03-7-052	MORECAR	2
03-7-052	MORECER	2
03-7-052	OSMUCINC	2
03-7-052	PERSPLS	2
03-7-052	PHOTPYR	2
03-7-052	PINUPAL	7
03-7-052	PINUSER	4
03-7-052	POLYLUT	2
03-7-052	PTERAQUP	2
03-7-052	RHEXALI	2
03-7-052	RHEXMAR	1
03-7-052	RHEXPET	2
03-7-052	RHYNFASF	2
03-7-052	RHYNPLU	1
03-7-052	SARRFLA	2
03-7-052	SMILGLA	1
03-7-052	SMILLAU	1
03-7-052	SOLISTC	2
03-7-052	TRIARAC	2
03-7-052	VACCCRA	5
03-7-052	VACCFOR	3
03-7-052	VACCTEN	2
03-7-052	WOODVIR	2
03-7-052	XYRIAMB	2
03-7-052	XYRICAR	2
03-7-052	ZENOPUL	1
03-7-052	ZIGADEN	3
03-7-074	ACERRUB	1
03-7-074	ANDR1S1	2
03-7-074	ANDR1S2	2
03-7-074	ARISSTR	7
03-7-074	CALOBAR	1
03-7-074	CARPPAN	2
03-7-074	CLEIDIV	2
03-7-074	CORELIN	2
03-7-074	DICH1S1	1
03-7-074	DICH1S2	1
03-7-074	DICHTEN	2
03-7-074	DIONMUS	2
03-7-074	EURYPAL	2
03-7-074	FIMBPUB	1
03-7-074	GAYL1S1	2
03-7-074	GAYLDUM	4
03-7-074	GAYLFRO	2
03-7-074	GENTAUT	1
03-7-074	ILEXCRC	2
03-7-074	ILEXGLA	3
03-7-074	IRISVERV	2
03-7-074	LACHCAR	2
03-7-074	LIATPILP	1

03-7-074	LYCOAPR	2
03-7-074	LYONMAR	2
03-7-074	MAGNVIR	4
03-7-074	MORECAR	1
03-7-074	MORECER	4
03-7-074	NYSSSYL	2
03-7-074	OSMUCINC	1
03-7-074	PERSPLS	2
03-7-074	PHOTPYR	2
03-7-074	PINUPAL	6
03-7-074	PINUSER	2
03-7-074	PITYGRA	2
03-7-074	PLATCIL	1
03-7-074	PLEETEN	4
03-7-074	POLYLUT	2
03-7-074	PTERAQUP	2
03-7-074	PYXIBAR	3
03-7-074	RHEXALI	2
03-7-074	RHEXPET	1
03-7-074	RHYN1S1	1
03-7-074	RHYN1S2	2
03-7-074	RHYNCIL	2
03-7-074	RHYNPLU	1
03-7-074	SCLEMIN	1
03-7-074	SCLETRI	2
03-7-074	SMILGLA	1
03-7-074	SMILLAU	2
03-7-074	SOLIPLC	2
03-7-074	SOLISTC	1
03-7-074	SPORPIN	7
03-7-074	VACCCRA	5
03-7-074	VACCTEN	2
03-7-074	XYRIAMB	1
03-7-074	XYRICAR	2
03-7-074	ZIGADEN	1
03-7-076	ACERRUB	2
03-7-076	ANDR1S1	2
03-7-076	ANDRGLA	2
03-7-076	ARISSTR	4
03-7-076	CARPODO	2
03-7-076	CHAMLUT	2
03-7-076	CLEIDIV	2
03-7-076	CLETALN	5
03-7-076	CYRIRAC	2
03-7-076	DICH1S1	2
03-7-076	DICHCHA	2
03-7-076	DICHDICD	2
03-7-076	DICHDICM	2
03-7-076	DIONMUS	2
03-7-076	EUPAALB	2
03-7-076	GAYLFRO	6
03-7-076	HYPERED	2
03-7-076	ILEXCRC	4
03-7-076	ILEXGLA	2
03-7-076	LIAT1S1	2
03-7-076	LYONLIGF	2
03-7-076	LYONLUC	6
03-7-076	MORECER	2
03-7-076	NUTTCAN	2
03-7-076	PHOTPYR	5
03-7-076	PINUPAL	4
03-7-076	PINUSER	5
03-7-076	POLYLUT	2
03-7-076	PTERAQUP	2
03-7-076	PTERPYC	2
03-7-076	PYCN1S1	2
03-7-076	PYCNFLE	2
03-7-076	QUERGEM	2
03-7-076	QUERLVS	2
03-7-076	RHEXPET	2
03-7-076	RHYNBAL	2
03-7-076	SCLECIL	2
03-7-076	SCLETRI	2
03-7-076	SMILAUR	2
03-7-076	SMILLAU	2
03-7-076	SPIRPRA	2
03-7-076	TOXIRAD	2
03-7-076	VACCCRA	7
03-7-076	VACCTEN	3
03-7-076	XYRIAMB	1
03-7-076	XYRICAR	2
03-7-076	ZIGAGLB	2
03-7-079	AGAL1S1	1
03-7-079	ANDRGLA	2
03-7-079	ANDRTER	2
03-7-079	ARISSTR	7
03-7-079	ARUNGIGT	2
03-7-079	CARESTTB	1
03-7-079	CARPBEL	2
03-7-079	CARPTOM	2
03-7-079	CLEIDIV	2
03-7-079	DICH1S1	2
03-7-079	DICHLNC	2
03-7-079	DICHSBLT	1
03-7-079	DIONMUS	1
03-7-079	GAYLDUM	2
03-7-079	GORDLAS	2
03-7-079	HYPERED	2
03-7-079	ILEXCRC	2
03-7-079	ILEXGLA	5
03-7-079	IRISVERV	2
03-7-079	LACHANC	2
03-7-079	LEIOBUX	7
03-7-079	LIAT1S1	2
03-7-079	LYONMAR	3
03-7-079	MAGNVIR	2
03-7-079	MORECER	2
03-7-079	NYSSSYL	2
03-7-079	PERSPLS	2
03-7-079	PHOTPYR	2
03-7-079	PINUPAL	7
03-7-079	PINUSER	2
03-7-079	PITYGRA	2
03-7-079	POLYLUT	2

03-7-079	PTERAQUP	2
03-7-079	PYXIBAR	2
03-7-079	RHEXALI	2
03-7-079	RHEXPET	2
03-7-079	RHYNPLU	2
03-7-079	SCLECIL1	1
03-7-079	SMILLAU	2
03-7-079	VACCCRA	7
03-7-079	VACCFOR	1
03-7-079	VACCTEN	3
03-7-079	XYRICAR	2
03-7-080	AGAL1S1	2
03-7-080	AGAL1S2	2
03-7-080	ANDRGLA	1
03-7-080	ANDRVIRV	2
03-7-080	ARISSTR	8
03-7-080	ARUNGIGT	2
03-7-080	BALDUNI	2
03-7-080	BARTVER	1
03-7-080	CARPBEL	2
03-7-080	CARPODO	2
03-7-080	CARPPAN	3
03-7-080	CARPTOM	2
03-7-080	CLEIDIV	1
03-7-080	CYRIRAC	2
03-7-080	DICHDICM	1
03-7-080	DICHTEN	2
03-7-080	DICHWEB	2
03-7-080	DIONMUS	2
03-7-080	DROSBRE	2
03-7-080	EURYPAL	2
03-7-080	FIMBPUB	1
03-7-080	GAYLDUM	4
03-7-080	GAYLFRO	2
03-7-080	GENTAUT	2
03-7-080	HYPECRU	2
03-7-080	HYPOJUN	2
03-7-080	ILEXGLA	2
03-7-080	ILEXMYR	2
03-7-080	LIAT1S1	2
03-7-080	LINU1S1	1
03-7-080	LOBENUT	1
03-7-080	LYONLIGF	1
03-7-080	LYONMAR	2
03-7-080	MAGNVIR	3
03-7-080	MORECER	5
03-7-080	OSMUCINC	2
03-7-080	PERSPLS	2
03-7-080	PHOTPYR	2
03-7-080	PINGPUM	2
03-7-080	PINUPAL	4
03-7-080	PINUSER	2
03-7-080	PITYGRA	2
03-7-080	POLYLUT	2
03-7-080	PTERAQUP	1
03-7-080	PYXIBAR	2
03-7-080	RHEXALI	2
03-7-080	RHEXPET	2
03-7-080	RHODATL	2
03-7-080	RHYNBAL	1
03-7-080	RHYNCIL	2
03-7-080	RHYNFASF	1
03-7-080	RHYNPLU	2
03-7-080	SCLECILG	2
03-7-080	SCLEMIN	2
03-7-080	SMILLAU	1
03-7-080	SOLIPLC	2
03-7-080	SPIRPRA	1
03-7-080	TEPHHIS	1
03-7-080	TRIARAC	2
03-7-080	UTRISUB	2
03-7-080	VACCCRA	4
03-7-080	VACCTEN	2
03-7-080	WOODVIR	1
03-7-080	XYRIAMB	2
03-7-080	XYRICAR	2
03-7-080	ZIGADEN	1
03-7-080	ZIGAGLB	1
03-R-069	AMEL1S1	2
03-R-069	ANDR1S1	2
03-R-069	ARISSTR	8
03-R-069	CARPTOM	2
03-R-069	CNIDSTI	1
03-R-069	DIOSVIR	3
03-R-069	GAYLDUM	5
03-R-069	GAYLFRO	3
03-R-069	GELSSEM	2
03-R-069	ILEXVOM	2
03-R-069	IONALIN	2
03-R-069	LIATPILP	1
03-R-069	LYONMAR	2
03-R-069	MORECER	3
03-R-069	PERSPLS	3
03-R-069	PHOTPYR	2
03-R-069	PINUPAL	2
03-R-069	PITYGRA	2
03-R-069	PRUNSER	1
03-R-069	QUERHEM	2
03-R-069	QUERICN	2
03-R-069	QUERNIG	5
03-R-069	QUERVIR	6
03-R-069	SERITOR	2
03-R-069	VACCCRA	3
03-R-069	VACCTEN	3
03-R-070	ACERRUB	2
03-R-070	AMEL1S1	2
03-R-070	ANDR1S1	2
03-R-070	ARISSTR	7
03-R-070	ARUNGIGT	1
03-R-070	CARPBEL	2
03-R-070	CARPPAN	1
03-R-070	CARPTOM	2
03-R-070	CNIDSTI	1
03-R-070	GAYLDUM	6

03-R-070	GAYLFRO	2
03-R-070	ILEXGLA	2
03-R-070	IONALIN	2
03-R-070	LIATPILP	1
03-R-070	LYONLUC	2
03-R-070	LYONMAR	3
03-R-070	MAGNVIR	1
03-R-070	MORECER	2
03-R-070	PERSPLS	1
03-R-070	PHOTPYR	1
03-R-070	PINUPAL	7
03-R-070	PINUSER	2
03-R-070	PITYGRA	1
03-R-070	QUERICN	5
03-R-070	QUERNIG	2
03-R-070	QUERVIR	2
03-R-070	RHUSCOP	1
03-R-070	SERITOR	2
03-R-070	VACCCRA	2
03-R-070	VACCSTA	2
03-R-070	VACCTEN	4
03-R-070	WOODVIR	1
03-R-070	XYRICAR	1
27-1-554	ACERRUB	2
27-1-554	ALETAUR	2
27-1-554	ANDRGLOH	2
27-1-554	ANDRVIR	4
27-1-554	ARISPAL	2
27-1-554	ASCLLAN	2
27-1-554	ASCLLON	2
27-1-554	CALOPAL	2
27-1-554	CALOTUBT	2
27-1-554	CARELUT	4
27-1-554	CARESTT	5
27-1-554	CLEI1S1	1
27-1-554	COREFAL	2
27-1-554	CORELIN	2
27-1-554	CTENARO	2
27-1-554	CYRIRAC	2
27-1-554	DICHACU1	2
27-1-554	DICHACUF	2
27-1-554	DICHDICE	2
27-1-554	DICHLON	2
27-1-554	DICHSCA	6
27-1-554	DICOT1	1
27-1-554	DROSCAP	2
27-1-554	ERIGVER	2
27-1-554	ERIODECD	2
27-1-554	ERYNINT	2
27-1-554	ERYNYUC	3
27-1-554	FIMBPUB	3
27-1-554	GALI1S1	2
27-1-554	HYPE1S2	2
27-1-554	HYPOJUN	1
27-1-554	HYPTALA	2
27-1-554	ILEXGLA	1
27-1-554	IRISTRD	4
27-1-554	IRISVIRS	2
27-1-554	JUNCPOL	2
27-1-554	LACHCAR	6
27-1-554	LIQUSTY	2
27-1-554	LOBEGLN	2
27-1-554	LUDWHIR	2
27-1-554	LUDWVIR	1
27-1-554	LYCOALP	2
27-1-554	LYCORUB	1
27-1-554	LYSILOO	2
27-1-554	MORECAR	2
27-1-554	MORECER	3
27-1-554	MUHLCAPT	4
27-1-554	NYSSBIF	2
27-1-554	OSMUREGS	2
27-1-554	PANIRIGP	2
27-1-554	PANIVIRV	5
27-1-554	PARNASA	2
27-1-554	PASPPRA	2
27-1-554	PHOTPYR	2
27-1-554	PINUSER	1
27-1-554	PLAT1S1	2
27-1-554	PLEETEN	4
27-1-554	POLYBRE	1
27-1-554	POLYRMA	2
27-1-554	PYCNFLE	2
27-1-554	QUERLAU	2
27-1-554	RHEXALI	2
27-1-554	RHEXLUT	2
27-1-554	RHEXPET	2
27-1-554	RHYNCEP	2
27-1-554	RHYNFAS	2
27-1-554	RHYNLAT	5
27-1-554	RHYNPLU	2
27-1-554	RHYNPUS	1
27-1-554	RHYNRAR	2
27-1-554	SABADIF	2
27-1-554	SACCGIG	2
27-1-554	SARRFLA	3
27-1-554	SARRXCA	1
27-1-554	SCLEBAL	2
27-1-554	SCLEGEO	2
27-1-554	SCUTINT	1
27-1-554	SISYANG	2
27-1-554	SMILGLA	1
27-1-554	SMILLAU	2
27-1-554	SPHAGNUM	2
27-1-554	SYMPDUM1	2
27-1-554	TAXOASC	5
27-1-554	TRIARAC	2
27-1-554	VACCFUS	2
27-1-554	VIOLLNCV	2
27-1-554	VIOLXPR	2
27-1-554	XYRIAMB	2
27-2-558	ACERRUB	2
27-2-558	AGALAPH	1
27-2-558	ALETFAR	1

27-2-558	AMELOBO	1
27-2-558	ANDRVIR	2
27-2-558	ASCLLON	2
27-2-558	BALDUNI	2
27-2-558	BIGENUDN	2
27-2-558	CALOPAL	1
27-2-558	CALOTUBT	1
27-2-558	CARESTT	2
27-2-558	CARPPAN	2
27-2-558	CARPTOM	1
27-2-558	CORELIN	2
27-2-558	CTENARO	2
27-2-558	CYRIRAC	2
27-2-558	DICHACUF	2
27-2-558	DICHDICE	4
27-2-558	DICHLON	2
27-2-558	DICHSPR	2
27-2-558	DIONMUS	1
27-2-558	DROSCAP	2
27-2-558	ERIODECD	2
27-2-558	EUPAMOH	1
27-2-558	EURYPAL	2
27-2-558	FIMBPUB	1
27-2-558	GAYLDUM	2
27-2-558	GAYLFRO	2
27-2-558	HYPE1S2	2
27-2-558	HYPEGAL	1
27-2-558	ILEXGLA	2
27-2-558	ILEXMYR	2
27-2-558	IRISTRD	1
27-2-558	LACHANC	2
27-2-558	LACHCAR	4
27-2-558	LIATSPI2	2
27-2-558	LOBENUT	1
27-2-558	LUDWVIR	1
27-2-558	LYCOALP	3
27-2-558	LYONLIG	2
27-2-558	LYONLUC	1
27-2-558	MAGNVIR	2
27-2-558	MORECAR	5
27-2-558	MORECER	2
27-2-558	MUHLCAPT	2
27-2-558	OSMUCINC	1
27-2-558	PANIVIRV	2
27-2-558	PARNCAR	2
27-2-558	PASPPRA	1
27-2-558	PHOTPYR	2
27-2-558	PINUPAL	1
27-2-558	PLEETEN	4
27-2-558	POLYLUT	1
27-2-558	PRUNSER	1
27-2-558	PTERAQU	1
27-2-558	RHEXALI	2
27-2-558	RHEXLUT	2
27-2-558	RHEXPET	2
27-2-558	RHYNBAL	2
27-2-558	RHYNCEP	1
27-2-558	RHYNLAT	2
27-2-558	RHYNPLU	2
27-2-558	RUBU1S1	2
27-2-558	SABADIF	1
27-2-558	SARRFLA	4
27-2-558	SARRPUR3	2
27-2-558	SISYCAP	2
27-2-558	SMILGLA	1
27-2-558	SMILLAU	1
27-2-558	SPORPIN	7
27-2-558	SYMPDUM1	2
27-2-558	TRIARAC	1
27-2-558	VACCFUS	2
27-2-558	VIOLLNC	1
27-2-558	VIOLXPR	2
27-2-558	WOODVIR	2
27-2-558	XYRICAR	2
27-2-558	ZIGADEN	2
27-2-558	ZIGAGLB	2
27-7-565	ACERRUB	2
27-7-565	ALETAUR	1
27-7-565	ALETFAR	2
27-7-565	ALLI1T1	1
27-7-565	ANDRGLA	2
27-7-565	ANDRGLOH	1
27-7-565	ANDRGYRS	2
27-7-565	ANDRVIRD	3
27-7-565	ANTHRUF	2
27-7-565	ARISPAL	4
27-7-565	ARISPURV	2
27-7-565	ASCLLON	2
27-7-565	BIGENUDN	2
27-7-565	CALOPAL	1
27-7-565	CALOTUBT	1
27-7-565	CARELUT	2
27-7-565	CARESTL	2
27-7-565	CENTERE	2
27-7-565	CIRSNUT	1
27-7-565	CTENARO	2
27-7-565	CYRIRAC	2
27-7-565	DICHACUF	1
27-7-565	DICHCHA	2
27-7-565	DICHCON	1
27-7-565	DICHDICE	2
27-7-565	DICHLON	2
27-7-565	DICHSCA	2
27-7-565	DICHSPR	1
27-7-565	DICHSTRL	1
27-7-565	DIONMUS	2
27-7-565	DIOSVIR	1
27-7-565	DROSBRE	2
27-7-565	DROSCAP	2
27-7-565	ERAGREF	1
27-7-565	ERIGVER	2
27-7-565	ERIODECD	2
27-7-565	ERYNINT	2
27-7-565	ERYNYUCS	2

27-7-565	EURYPAL	1
27-7-565	FIMBPUB	2
27-7-565	GALIPIL	1
27-7-565	GAYLDUM	1
27-7-565	GAYLFRO	2
27-7-565	HELIHET	2
27-7-565	HYPERED	2
27-7-565	HYPOJUN	1
27-7-565	ILEXGLA	3
27-7-565	ILEXMYR	1
27-7-565	IRISTRD	2
27-7-565	LACHANC	1
27-7-565	LACHCAR	6
27-7-565	LIATSPI2	2
27-7-565	LIQUSTY	2
27-7-565	LOBENUT	1
27-7-565	LYCOALP	2
27-7-565	LYCOAPR	1
27-7-565	LYCOCARC	1
27-7-565	LYCOCOK	1
27-7-565	LYCOPRS	2
27-7-565	LYONLUC	2
27-7-565	LYONMAR	2
27-7-565	LYSILOO	2
27-7-565	MARSGRM	2
27-7-565	MITRSES	1
27-7-565	MORECAR	6
27-7-565	MORECER	5
27-7-565	MUHLCAPT	4
27-7-565	NYSSBIF	2
27-7-565	OENOFSS	1
27-7-565	OSMUCINC	1
27-7-565	OSMUREGS	2
27-7-565	OXYPRIG	1
27-7-565	OXYPTER	1
27-7-565	PANIVIRV	4
27-7-565	PARNCAR	2
27-7-565	PASPPRA	2
27-7-565	PERSPLS	1
27-7-565	PHOTPYR	2
27-7-565	PHYSPUR	1
27-7-565	PINUSER	2
27-7-565	PLAT1S1	1
27-7-565	PLEETEN	6
27-7-565	POAC-S1	2
27-7-565	POLYHOO	1
27-7-565	POLYLUT	1
27-7-565	POLYRMA	1
27-7-565	PYCNFLE	2
27-7-565	QUERLAU	1
27-7-565	RHEXALI	2
27-7-565	RHEXLUT	2
27-7-565	RHEXPET	2
27-7-565	RHODVIS	1
27-7-565	RHYNCHL	2
27-7-565	RHYNCHP	2
27-7-565	RHYNFASF	2
27-7-565	RHYNLAT	3
27-7-565	RHYNPLU	2
27-7-565	RHYNRAR	2
27-7-565	RHYNTHO	1
27-7-565	SABADIF	1
27-7-565	SARRFLA	4
27-7-565	SARRPUR3	2
27-7-565	SARRXCA	1
27-7-565	SCLEGEO	2
27-7-565	SCLEMIN	1
27-7-565	SISYALB	1
27-7-565	SISYCAP	1
27-7-565	SMILGLA	1
27-7-565	SMILLAU	1
27-7-565	SPORPIN	5
27-7-565	SYMPDUM1	2
27-7-565	TAXOASC	4
27-7-565	THALCOO	2
27-7-565	TOXIRAD	2
27-7-565	TRIARAC	2
27-7-565	VACCFOR	2
27-7-565	VACCFUS	2
27-7-565	VIOLAFF	1
27-7-565	VIOLLNCL	2
27-7-565	VIOLSPL	1
27-7-565	VIOLXPR	1
27-7-565	WOODVIR	2
27-7-565	XYRIAMB	2
27-7-565	XYRIBAL	1
27-7-565	XYRICAR	2
27-7-565	ZIGADEN	1
49-1-001	ARUNTCT	9
49-1-001	LYCOALP	2
49-1-001	MUHLEXP	2
49-1-001	RHYNCHP	3
49-1-001	HYPECRU	2
49-1-001	RHEXLUT	2
49-1-001	ARONARB	3
49-1-001	ERIGVER	1
49-1-001	HYPEDNS	2
49-1-001	DROSINT	1
49-1-001	EUPALEU	2
49-1-001	SMILGLA	2
49-1-001	DICHSCA	2
49-1-001	ACERRUB	2
49-1-001	OSMUCIN	3
49-1-001	SMILLAU	2
49-1-001	MYRIHTA	2
49-1-001	LYSILOO	2
49-1-001	COREFAL	1
49-1-001	DICHENS	2
49-1-001	ILEXGLA	2
49-1-001	SPHAGNUM	2
49-1-001	RHODATL	2
49-1-001	EUPAROT	2
49-1-001	CLETALN	2
49-1-001	DROSCAP	1

49-1-001	POLYLUT	2
49-1-001	SARRFLA	2
49-1-001	SARRPUR	2
49-1-001	ZIGAGLB	2
49-1-001	LYONLIG	2
49-1-001	VACCFOR	3
49-1-001	ZIGADEN	2
49-1-001	RUBU1S1	1
49-1-001	MAGNVIR	2
49-1-001	EUPAPIL	1
49-1-001	DICHMAT	2
49-1-001	LACHCAR	2
49-1-001	PINUSER	1
49-1-001	AMELSTO	1
49-1-001	NYSSBIF	2
49-1-001	EUBORAC	1
49-1-001	ERIODEC	2
49-1-001	ASTEDUM	1
49-1-001	EUTHMIC	1
49-1-001	ANDR1S1	2
49-1-001	ANDR1S2	2
49-1-001	ANDR1S3	2
49-1-001	RHYN1S1	1
49-1-001	SOLIPLC	2
49-1-001	MARSGRM	1
49-1-002	RHEXLUT	3
49-1-002	LACHCAR	4
49-1-002	CTENARO	5
49-1-002	ASTE-T1	2
49-1-002	ARONARB	2
49-1-002	MITRSES	2
49-1-002	MYRIHTA	2
49-1-002	LYCOALP	2
49-1-002	DICHSCA	4
49-1-002	DROSCAP	5
49-1-002	RHYNFIL	6
49-1-002	ANDRPRN	5
49-1-002	ILEXGLA	2
49-1-002	RHYN1S3	4
49-1-002	SARRFLA	5
49-1-002	SPHAGNUM	2
49-1-002	DICHENS	2
49-1-002	RHEXALI	2
49-1-002	ANDRMOH	4
49-1-002	LIATSPI	2
49-1-002	ZIGADEN	2
49-1-002	CARPODO	2
49-1-002	SCLEPAU	3
49-1-002	ERIODEC	4
49-1-002	ANDR1S1	2
49-1-002	SOLI1S1	2
49-1-002	ANDR1S2	1
49-1-002	TOFI	1
49-1-002	ANDRGLO	2
49-1-002	CARPTOM	2
49-1-002	EUPALEU	2
49-1-002	ACERRUB	1
49-1-002	SARRPUR	2
49-1-002	POAC-S1	2
49-1-002	ARUNTCT	5
49-1-002	CORELIN	2
49-1-002	RHYN1S1	2
49-1-002	UNK1	1
49-1-002	CYRIRAC	2
49-1-002	COREFAL	2
49-1-002	DROSCAP	2
49-1-002	PANIANCR	2
49-1-002	POLY6S1	1
49-1-002	JUNCTEN	1
49-1-002	CALOBAR	2
49-1-002	ALETFAR	2
49-1-002	SMILLAU	2
49-1-002	SCLEMIN	2
49-1-002	UNK2	2
49-1-002	POLYRMA	2
49-1-002	ANDRVIR	2
49-1-002	IRISVER	1
49-1-002	XYRIBAL	2
49-1-002	POAC-T1	1
49-1-002	DICH1S1	2
49-1-002	ANDR1S2	1
49-1-002	POAC-T2	1
49-1-002	PANI1S1	1
49-1-002	HYPEDNT	1
49-1-002	ERIG	1
49-1-002	ANDR1S3	1
49-1-002	RHYN1S2	1
49-1-002	UNK1	1
49-1-002	SABADIF	2
49-1-002	PINUSER	2
49-1-002	NYSSSYL	2
49-1-003	RHYNCHP	5
49-1-003	DICHSCA	5
49-1-003	LACHCAR	4
49-1-003	SCLEMIN	5
49-1-003	COREFAL	2
49-1-003	CTENARO	4
49-1-003	MYRIHTA	4
49-1-003	SMILLAU	2
49-1-003	EUTHMIN	2
49-1-003	ARUNTCT	2
49-1-003	SOLISTC	2
49-1-003	PANIVRG	4
49-1-003	ILEXGLA	4
49-1-003	ACERRUB	2
49-1-003	PINUSER	2
49-1-003	EUBORAC	1
49-1-003	PERSPLS	1
49-1-003	VACCFOR	3
49-1-003	SCHISCO	4
49-1-003	EUPALEU	2
49-1-003	ANDRMOH	3
49-1-003	ARONARB	2
49-1-003	EUPAROT	2

49-1-003	HELIHET	2
49-1-003	ASTEPAL	2
49-1-003	MUHLEXP	5
49-1-003	ALETFAR	2
49-1-003	POLYCRU	1
49-1-003	SPHAGNUM	2
49-1-003	DICHENS	2
49-1-003	ERIGVER	2
49-1-003	HYPECRU	2
49-1-003	PROSPEC	1
49-1-003	RHEXALI	2
49-1-003	SOLIPLC	1
49-1-003	SCLEPAU	2
49-1-003	XYRIIRI	1
49-1-003	HYPEDNT	1
49-1-003	CALOBAR	2
49-1-003	ZIGAGLB	2
49-1-003	HELIANG	1
49-1-003	SCUTINT	2
49-1-003	LIATSPI	2
49-1-003	DROSCAP	1
49-1-003	LUDWVIR	2
49-1-003	RUBU1S1	2
49-1-003	FIMBMIL	2
49-1-003	CHAPTOM	2
49-1-003	GAYLFRO	2
49-1-003	CIRSVIR	1
49-1-003	LYONLIG	1
49-1-003	LYCOALP	2
49-1-003	ERYNINT	2
49-1-003	POLYLUT	1
49-1-003	CLETALN	1
49-1-003	ASCLLON	1
49-1-003	ANDR1S1	2
49-1-003	RHYNPLU	2
49-1-003	RHEX1S1	2
49-1-003	RHEXLUT	3
49-1-004	ASTEDUM	1
49-1-004	ARUNTCT	8
49-1-004	ARONARB	6
49-1-004	LACHCAR	4
49-1-004	ANDRVIR	6
49-1-004	SCLEMIN	4
49-1-004	HYPECRU	1
49-1-004	POLYLUT	1
49-1-004	ERIGVER	1
49-1-004	CLETALN	4
49-1-004	SMILLAU	2
49-1-004	ILEXGLA	6
49-1-004	GAYLFRO	5
49-1-004	ZIGAGLB	4
49-1-004	RHEXLUT	1
49-1-004	DICHMAT	4
49-1-004	ACERRUB	1
49-1-004	PTERAQU	1
49-1-004	ZIGADEN	1
49-1-004	DICHSCA	1
49-1-004	MYRIHTA	3
49-1-004	CORELIN	1
49-1-004	EUPAROT	1
49-1-004	EUPALEU	1
49-1-004	SPHAGNUM	2
49-1-004	MUHLEXP	1
49-1-004	DICHENS	1
49-1-004	ANDRPRN	2
49-1-004	LYCOALP	2
49-1-004	VACCFUS	3
49-1-004	RHYNCHP	1
49-1-004	RHEXALI	1
49-1-004	ANDRMOH	1
49-1-004	LYONLIG	3
49-1-004	CARPTOM	1
49-1-004	SCLETRI	1
49-1-004	IRISVER	2
49-1-004	SOLI1S1	1
49-1-004	MAGNVIR	1
49-1-004	EUPAPIL	1
49-1-004	RHODATL	1
49-1-004	RUBU1S1	1
49-1-004	RHEXPET	1
49-1-004	CTENARO	1
49-1-004	GAYLDUM	2
49-1-004	SMILGLA	1
49-1-004	XYRICAR	1
49-1-004	HYPEDNS	1
49-1-004	RHYN1S1	1
49-1-004	PERSPLS	3
49-1-004	RHYNCEP	1
49-1-004	XYRIAMB	1
49-1-004	ANDRGLO	1
49-1-004	NYSSSYL	1
49-1-004	XYRICAR	1
49-1-004	SYMPTIN	1
49-1-005	EUPAROT	2
49-1-005	SCLEPAU	2
49-1-005	LACHCAR	3
49-1-005	HELIHET	2
49-1-005	LIATSPI	2
49-1-005	RHEXLUT	2
49-1-005	CTENARO	5
49-1-005	DICHENS	2
49-1-005	SPHAGNUM	2
49-1-005	COREFAL	2
49-1-005	SMILLAU	2
49-1-005	ILEXGLA	2
49-1-005	ALETFAR	2
49-1-005	MYRIHTA	3
49-1-005	ARONARB	2
49-1-005	ARUNTCT	4
49-1-005	RHYNCHP	2
49-1-005	SCLEMIN	5
49-1-005	DICHSCA	4
49-1-005	SCHISCO	5
49-1-005	SABADIF	2

49-1-005	SARRFLA	2
49-1-005	SARRPUR	2
49-1-005	LYCOALP	2
49-1-005	CARPTOM	1
49-1-005	RHEXALI	2
49-1-005	RHYNFIL	2
49-1-005	ERIODEC	2
49-1-005	ANDRMOH	2
49-1-005	DROSCAP	2
49-1-005	ASTEPAL	2
49-1-005	EUPALEU	2
49-1-005	RHYNINE	2
49-1-005	LOBENUT	2
49-1-005	PANIVRG	4
49-1-005	HYPECRU	1
49-1-005	EUTHMIN	2
49-1-005	POLYRMA	1
49-1-005	CLETALN	2
49-1-005	MAGNVIR	2
49-1-005	PINUSER	2
49-1-005	VACCFOR	2
49-1-005	ACERRUB	2
49-1-005	AMELSTO	2
49-1-005	ASCLLON	2
49-1-005	SISYMUC	1
49-1-005	CYRIRAC	2
49-1-005	ANDR1S1	3
49-1-005	UNK1	1
49-1-005	UNK2	2
49-1-006	ANDRGLO	4
49-1-006	LACHCAR	4
49-1-006	MYRIHTA	2
49-1-006	ARUNTCT	2
49-1-006	SPHAGNUM	2
49-1-006	PINUSER	2
49-1-006	CLETALN	2
49-1-006	ILEXGLA	2
49-1-006	RHEXLUT	2
49-1-006	SCLEMIN	2
49-1-006	MUHLEXP	2
49-1-006	RHYNCHP	4
49-1-006	SMILLAU	2
49-1-006	EUPALEU	2
49-1-006	EUTHMIN	1
49-1-006	HYPECRU	1
49-1-006	SOLIPLC	2
49-1-006	ALETFAR	2
49-1-006	POLYRMA	2
49-1-006	COREFAL	2
49-1-006	ERIODEC	2
49-1-006	DROSCAP	2
49-1-006	LYCOALP	2
49-1-006	LIATPIL	2
49-1-006	DROSINT	2
49-1-006	CORELIN	1
49-1-006	PANIVRG	2
49-1-006	ZIGAGLB	2
49-1-006	ARISVIR	2
49-1-006	DICHSCA	7
49-1-006	SARRFLA	2
49-1-006	NYSSSYL	2
49-1-006	ASTEDUM	2
49-1-006	CTENARO	3
49-1-006	LUDWHIR	1
49-1-006	MAGNVIR	2
49-1-006	ACERRUB	1
49-1-006	RHEXALI	1
49-1-006	ARONARB	2
49-1-006	XYRITOR	1
49-1-006	SABADIF	1
49-1-006	PROSPEC	2
49-1-006	DICHLON	2
49-1-006	OENO1S1	1
49-1-006	POLYINR	1
49-1-006	RHYNCEP	2
49-1-006	ELEOTUB	1
49-1-006	UNK1	1
49-1-006	ANDR1S1	2
49-1-006	ANDRVIR	2
49-1-006	RHYNFIL	2
49-1-006	ANDRPRN	2
49-1-006	ANDR1S2	2
49-1-006	ANDR1S3	2
49-1-006	XYRIAMB	1
49-1-006	MITRSES	2
49-1-007	DICHENS	2
49-1-007	POLYCRU	1
49-1-007	HYPEDNS	2
49-1-007	ARUNTCT	6
49-1-007	XYRI1S1	3
49-1-007	ILEXGLA	5
49-1-007	UNK1	2
49-1-007	HELI1S1	2
49-1-007	ANDRGLO	6
49-1-007	RHEXPET	2
49-1-007	ASTEPAL	2
49-1-007	RHEXALI	3
49-1-007	ARONARB	2
49-1-007	CTENARO	4
49-1-007	DICHSCA	3
49-1-007	ERYNINT	1
49-1-007	ACERRUB	2
49-1-007	RHYNCHL	2
49-1-007	RHYNELL	3
49-1-007	UNK2	2
49-1-007	PANI1S1	1
49-1-007	LYCOALP	3
49-1-007	ZIGAGLB	2
49-1-007	SMILLAU	2
49-1-007	ARISVIR	2
49-1-007	MYRIHTA	2
49-1-007	RUBU1S1	2
49-1-007	POLYLUT	2
49-1-007	DICHMAT	2

49-1-007	ANDR1S1	3		49-1-008	SOLI1S2	2
49-1-007	RHYNINE	2		49-1-008	ZIGAGLB	2
49-1-007	XYRIBAL	2		49-1-008	CYRIRAC	2
49-1-007	EUPAPIL	1		49-1-008	SMILLAU	2
49-1-007	LYONLIG	2		49-1-008	HYPECRU	1
49-1-007	EUPAROT	2		49-1-008	RHEXLUT	1
49-1-007	MUHLEXP	2		49-1-008	HELI1S1	1
49-1-007	ASTE-S1	2		49-1-008	DICH1S1	1
49-1-007	UNK3	2		49-1-009	CTENARO	6
49-1-007	RHEXLUT	1		49-1-009	ARONARB	4
49-1-007	ALETFAR	2		49-1-009	DICHENS	1
49-1-007	KALM	2		49-1-009	RHEXLUT	2
49-1-007	OSMUCIN	2		49-1-009	LYCOALP	2
49-1-007	SMILGLA	2		49-1-009	ANDRVIR	4
49-1-007	XYRIAMB	1		49-1-009	ARUNTCT	4
49-1-007	MITRSES	2		49-1-009	ILEXGLA	7
49-1-007	UNK4	2		49-1-009	RHEXPET	2
49-1-008	LYCOALP	2		49-1-009	CYRIRAC	1
49-1-008	CTENARO	6		49-1-009	ARISVIR	2
49-1-008	ARUNTCT	8		49-1-009	ALETFAR	2
49-1-008	ACERRUB	2		49-1-009	RHEXALI	2
49-1-008	ILEXGLA	4		49-1-009	SCLEMIN	2
49-1-008	DICHVILV	2		49-1-009	ACERRUB	4
49-1-008	ANDRVIR	3		49-1-009	LYONLUC	2
49-1-008	RUBU1S1	2		49-1-009	HYPECRU	2
49-1-008	RHEXALI	2		49-1-009	COREFAL	2
49-1-008	GALYFRO	2		49-1-009	MUHLEXP	6
49-1-008	VACCCRA	3		49-1-009	GAYLFRO	1
49-1-008	FRUTICOS	1		49-1-009	ANDRGLO	6
49-1-008	ANDRGLO	3		49-1-009	DICHSCA	1
49-1-008	FRUTICOS	3		49-1-009	CLADONIA	2
49-1-008	RHYN1S1	2		49-1-009	ZIGAGLB	1
49-1-008	ALETFAR	2		49-1-009	CARPTOM	2
49-1-008	SPHAGNUM	1		49-1-009	EUPALEU	1
49-1-008	MYRIHTA	3		49-1-009	ILEXCRC	2
49-1-008	SOLI1S1	2		49-1-009	VACCCRA	2
49-1-008	POLYLUT	2		49-1-009	PTERAQU	2
49-1-008	ARONARB	3		49-1-009	OSMUCIN	1
49-1-008	EUPAPIL	2		49-1-009	RHODATL	1
49-1-008	EUPAROT	2		49-1-009	HYPEDNS	2
49-1-008	HYPE1S1	2		49-1-009	SMILGLA	1
49-1-008	LYONLIG	4		49-1-009	SYMPTIN	2
49-1-008	LIQUSTY	2		49-1-009	RHYNINE	1
49-1-008	RHYNCHP	2		49-1-009	GELSSEM	1
49-1-008	ANDR1S1	2		49-1-009	SMILLAU	2
49-1-008	SMILGLA	2		49-1-009	PINUSER	2
49-1-008	GELS	1		49-1-009	DIOSVIR	1
49-1-008	LOBENUT	1		49-1-009	PERSPLS	1
49-1-008	DICHENS	1		49-1-009	MARSGRM	1
49-1-008	KALM	3		49-1-009	TOFIRAC	1
49-1-008	PINUSER	1		49-1-009	ANDRPRN	1
49-1-008	RHYNCHL	2		49-1-009	UNK1	1
49-1-008	EUPALEU	2		49-1-009	ANDRGLA	2
49-1-008	MUHLEXP	2		49-1-009	RUBU1S1	1
49-1-008	CORE1S1	2		49-1-009	MAGNVIR	2
49-1-008	RHEXPET	2		49-1-009	VACCFUS	1
49-1-008	WOODVIR	2		49-1-009	CLETALN	1

49-1-009	POLYLUT	1
49-1-009	CALACIN	1
49-1-009	GAYLDUM	1
49-1-009	AMELSTO	1
49-1-009	MYRICER	2
49-1-009	UNK2	1
49-1-009	EUPAROT	2
49-1-010	CTENARO	4
49-1-010	ACERRUB	2
49-1-010	ARUNTCT	7
49-1-010	ARONARB	2
49-1-010	MUHLEXP	3
49-1-010	CORELIN	1
49-1-010	RHYNCHP	2
49-1-010	VIOLPRM	1
49-1-010	ILEXGLA	5
49-1-010	LYCOALP	2
49-1-010	ALETFAR	2
49-1-010	SABADIF	1
49-1-010	HYPECRU	2
49-1-010	SCLEMIN	2
49-1-010	SOLIPLC	2
49-1-010	RHEXALI	2
49-1-010	COREFAL	2
49-1-010	DICHENS	3
49-1-010	PINUSER	2
49-1-010	ZIGAGLB	3
49-1-010	ANDRVIR	4
49-1-010	SCLEPAU	1
49-1-010	SMILLAU	2
49-1-010	CARPTOM	2
49-1-010	ANDRGLO	4
49-1-010	MYRIHTA	2
49-1-010	GAYLDUM	2
49-1-010	OSMUCIN	2
49-1-010	EUPACNF	1
49-1-010	GELSSEM	1
49-1-010	CYRIRAC	2
49-1-010	RHEXPET	2
49-1-010	TOFIRAC	1
49-1-010	VACCCRA	3
49-1-010	CLETALN	2
49-1-010	CALABRE	2
49-1-010	RHEXLUT	2
49-1-010	ARISVIR	2
49-1-010	PERSPLS	1
49-1-010	CLEIDIV	1
49-1-010	OSMUREG	1
49-1-010	SOLISTC	2
49-1-010	MARSGRM	1
49-1-010	LYONLIG	1
49-1-010	PANIVRG	2
49-1-010	ERIGVER	1
49-1-010	EUPALEU	1
49-1-010	CALACIN	1
49-1-010	SMILGLA	1
49-1-010	RUBU1S1	2
49-1-010	CARPPAN	1
49-1-010	EUPAROT	1
49-1-010	SYMPTIN	2
49-1-010	ANDRGLA	1
49-1-010	RHODVIS	2
49-1-011	CARPPAN	2
49-1-011	SMILLAU	1
49-1-011	ARISSTR	8
49-1-011	VACCCRA	4
49-1-011	ANDRVIR	3
49-1-011	GAYLFRO	2
49-1-011	LYONLIG	2
49-1-011	ERIGVER	2
49-1-011	HELIHET	1
49-1-011	ILEXGLA	4
49-1-011	ARONARB	2
49-1-011	RHEXALI	2
49-1-011	ARUNTCT	2
49-1-011	IRISVER	2
49-1-011	POLYLUT	2
49-1-011	RHEXPET	2
49-1-011	RHEXLUT	1
49-1-011	PINUSER	4
49-1-011	VACCFUS	2
49-1-011	ASTEPAL	2
49-1-011	BIGENUD	2
49-1-011	PTERAQU	2
49-1-011	ZIGAGLB	2
49-1-011	VACCFOR	2
49-1-011	PITYGRA	2
49-1-011	DICHENS	2
49-1-011	RHYN1S1	2
49-1-011	XYRICAR	2
49-1-011	CARPTOM	2
49-1-011	SYMPTIN	2
49-1-011	GAYLDUM	4
49-1-011	TOFIRAC	1
49-1-011	CORELIN	1
49-1-011	HYPECRU	2
49-1-011	VACCTEN	2
49-1-011	DIONMUS	1
49-1-011	SOLIPLC	2
49-1-011	ZIGADEN	2
49-1-011	CLEIDIV	1
49-1-011	GELSSEM	2
49-1-011	MAGNVIR	2
49-1-011	MYRICER	1
49-1-011	LYSILOO	1
49-1-011	SCHISCO	2
49-1-011	ANDRGLO	2
49-1-012	ANDRVIR	5
49-1-012	LYCOALP	2
49-1-012	ZIGAGLB	2
49-1-012	ARISVIR	1
49-1-012	DICHENS	3
49-1-012	SCHISCO	5
49-1-012	BIGENUD	3

49-1-012	CTENARO	6
49-1-012	ZIGADEN	2
49-1-012	ARONARB	2
49-1-012	RHEXALI	3
49-1-012	ARISSTR	8
49-1-012	LACHANC	2
49-1-012	XYRIAMB	2
49-1-012	CORELIN	2
49-1-012	SARRFLA	3
49-1-012	RHEXLUT	2
49-1-012	ILEXGLA	5
49-1-012	SABADIF	2
49-1-012	ALETFAR	2
49-1-012	ANDRGLO	3
49-1-012	MYRIHTA	3
49-1-012	RHYNCHP	2
49-1-012	POLYLUT	2
49-1-012	SARRPUR	2
49-1-012	PINUSER	3
49-1-012	ERIGVER	2
49-1-012	LACHCAR	3
49-1-012	LYONLIG	3
49-1-012	VACCCRA	2
49-1-012	VACCFUS	2
49-1-012	GAYLDUM	2
49-1-012	TOFIGLA	2
49-1-012	CLEIDIV	1
49-1-012	CALOBAR	2
49-1-012	RHYNCIL	2
49-1-012	SCLEMIN	2
49-1-012	ILEXMYR	1
49-1-012	ANDRGLA	1
49-1-012	DROSCAP	2
49-1-012	XYRIIRI	2
49-1-012	HYPECRU	2
49-1-012	SPHAGNUM	3
49-1-012	ASTEDUM	2
49-1-012	ASTEPAL	2
49-1-012	XYRICAR	2
49-1-012	COREFAL	2
49-1-012	HELIATR	1
49-1-012	CHAPTOM	2
49-1-012	MYRICER	2
49-1-012	LYSILOO	2
49-1-012	SMILLAU	1
49-1-012	MUHLEXP	2
49-1-012	ACERRUB	2
49-1-012	PSEUCAR	1
49-1-012	PINUPAL	4
49-1-013	ARISSTR	7
49-1-013	LYONLIG	4
49-1-013	VACCCRA	3
49-1-013	GAYLFRO	3
49-1-013	ARONARB	4
49-1-013	LYSILOO	3
49-1-013	SCLEMIN	2
49-1-013	RHEXALI	3
49-1-013	CYRIRAC	4
49-1-013	PTERAQU	4
49-1-013	ARUNTCT	4
49-1-013	XYRI1S1	3
49-1-013	LIAT1S1	1
49-1-013	SMILGLA	3
49-1-013	ILEXGLA	4
49-1-013	GAYLDUM	2
49-1-013	CARPODO	4
49-1-013	ANDRGLO	3
49-1-013	MARSGRM	3
49-1-013	CORELIN	2
49-1-013	TOFIRAC	1
49-1-013	POLYLUT	2
49-1-013	ALETFAR	3
49-1-013	CTENARO	3
49-1-013	LIQUSTY	4
49-1-013	LYCOALP	2
49-1-013	ASTEDUM	2
49-1-013	HYPECRU	2
49-1-013	XYRIAMB	2
49-1-013	DICHENS	2
49-1-013	SARRPUR	1
49-1-013	XYRICAR	2
49-1-013	VACCTEN	3
49-1-013	ACERRUB	2
49-1-013	ERIGVER	2
49-1-013	RHOD1S1	1
49-1-013	BIGENUD	2
49-1-013	TEPHSPI	2
49-1-013	PINUPAL	3
49-1-013	ARISVIR	2
49-1-013	LESP1S1	1
49-1-013	DICHACU	2
49-1-013	EUPAROT	2
49-1-013	PITYGRA	1
49-1-013	SCUTINT	2
49-1-013	PINUSER	2
49-1-013	ASTE-S1	1
49-1-013	SARRFLA	2
49-1-013	DROSROT	1
49-1-013	LACHANC	2
49-1-013	VIOLPRM	2
49-1-013	HELIHET	2
49-1-013	HYPE1S1	1
49-1-013	RHEXPET	1
49-1-013	EUPAPIL	1
49-1-013	ZIGADEN	2
49-1-013	LUDWVIR	1
49-1-013	RHEXLUT	1
49-1-013	UNK1	1
49-1-013	MYRICER	2
49-1-013	VACCFUS	2
49-1-013	RHYNPLU	1
49-1-013	EUPALEU	1
49-1-013	ASTEPAL	1
49-1-013	SPHAGNUM	1

49-1-013	ZIGAGLB	1
49-1-013	ANDRVIR	2
49-1-013	PLATBLE	2
49-1-013	ERAGSPE	1
49-1-014	XYRICAR	2
49-1-014	CARPODO	3
49-1-014	DICHENS	2
49-1-014	ANDRVIR	3
49-1-014	SCLEMIN	4
49-1-014	ARUNTCT	4
49-1-014	ILEXGLA	5
49-1-014	LYONLIG	5
49-1-014	HELIATR	3
49-1-014	ASTEPAL	2
49-1-014	HYPOMIC	2
49-1-014	LYSILOO	2
49-1-014	PINUSER	5
49-1-014	PTERAQU	7
49-1-014	CTENARO	7
49-1-014	RHEXALI	2
49-1-014	EUPAROT	2
49-1-014	ERIGVER	3
49-1-014	VIOLPRM	2
49-1-014	ARONARB	4
49-1-014	SMILGLA	2
49-1-014	VACCTEN	2
49-1-014	HYPECRU	2
49-1-014	BIGENUD	2
49-1-014	DIONMUS	2
49-1-014	SMILLAU	2
49-1-014	ZIGAGLB	2
49-1-014	ZIGADEN	2
49-1-014	PRENAUT	3
49-1-014	RHEXLUT	3
49-1-014	SARRFLA	2
49-1-014	XYRIAMB	2
49-1-014	RHYNPLU	2
49-1-014	PITYGRA	2
49-1-014	LIQUSTY	3
49-1-014	COREFAL	2
49-1-014	HELIHET	2
49-1-014	EUPALEU	2
49-1-014	ASTEDUM	2
49-1-014	MAGNVIR	2
49-1-014	VACCFUS	2
49-1-014	SISYMUC	1
49-1-014	VACCCRA	2
49-1-014	ARISSTR	4
49-1-014	VACCFOR	2
49-1-014	CIRSVIR	2
49-1-014	DICHOVA	2
49-1-014	RHEXPET	1
49-1-014	CYRIRAC	2
49-1-014	EUPAMOH	1
49-1-014	GAYLFRO	2
49-1-014	LYCOALP	2
49-1-014	MYRICER	2
49-1-014	EUPAPIL	2
49-1-014	LIATSPI	2
49-1-014	LACHANC	1
49-1-014	OSMUCIN	2
49-1-014	PERSPLS	2
49-1-014	NYSSSYL	1
49-1-014	PINUPAL	3
49-1-014	DICHMAT	2
49-1-014	SABADIF	1
49-1-014	CLEIDIV	1
49-1-014	GYMNBRE	2
49-1-015	PSEUCAR	2
49-1-015	DICHENS	2
49-1-015	CORELIN	2
49-1-015	DIONMUS	1
49-1-015	CTENARO	3
49-1-015	RHYNCHP	2
49-1-015	ANDRVIR	3
49-1-015	HELIHET	3
49-1-015	RHEXALI	3
49-1-015	HELIATR	1
49-1-015	PITYGRA	2
49-1-015	ASTEDUM	1
49-1-015	RHEXLUT	1
49-1-015	XYRICAR	2
49-1-015	XYRIAMB	2
49-1-015	ARISSTR	4
49-1-015	SCLEPAU	1
49-1-015	ILEXGLA	6
49-1-015	LACHCAR	1
49-1-015	TOFIRAC	1
49-1-015	ERIGVER	2
49-1-015	SARRFLA	2
49-1-015	SARRPUR	1
49-1-015	ASTEPAL	2
49-1-015	BIGENUD	2
49-1-015	SPORPIN	1
49-1-015	ARONARB	2
49-1-015	LACHANC	2
49-1-015	RHYNPLU	2
49-1-015	MYRIHTA	1
49-1-015	CARPTOM	1
49-1-015	ALETFAR	2
49-1-015	CLEIDIV	1
49-1-015	EUPALEU	1
49-1-015	TEPHSPI	1
49-1-015	VACCFUS	2
49-1-015	PTERAQU	6
49-1-015	CARPODO	2
49-1-015	LOBENUT	1
49-1-015	CARPPAN	1
49-1-015	HYPOMIC	1
49-1-015	VACCFOR	2
49-1-015	PINUPAL	6
49-1-015	SMILLAU	1
49-1-015	SISYCAP	1
49-1-015	PINUSER	2

49-1-015	OSMUCIN	1
49-1-015	DIOSVIR	1
49-1-015	LIQUSTY	1
49-1-015	SCLEMIN	2
49-1-015	PLATBLE	1
49-1-015	LYCOALP	2
49-1-015	VIOLPRM	1
49-1-015	DESMTEN	1
49-1-015	CHAPTOM	1
49-1-015	GAYLFRO	1
49-1-015	VACCCRA	1
49-1-015	VACCTEN	1
49-1-015	EUPAMOH	1
49-1-015	UNK1	1
49-1-016	LYONLUC	3
49-1-016	GAYLFRO	3
49-1-016	ARONARB	2
49-1-016	LIATSPI	2
49-1-016	CTENARO	6
49-1-016	SMILLAU	2
49-1-016	RHEXALI	2
49-1-016	GAYLDUM	2
49-1-016	SPHAGNUM	7
49-1-016	ARISVIR	3
49-1-016	DICHENS	2
49-1-016	ANDRVIR	3
49-1-016	ILEXGLA	6
49-1-016	RHEXPET	2
49-1-016	SARRFLA	3
49-1-016	PLATBLE	2
49-1-016	ASTEPAL	2
49-1-016	MYRIHTA	5
49-1-016	ANDRPRN	2
49-1-016	ZENOPUL	3
49-1-016	OSMUCIN	2
49-1-016	CORELIN	2
49-1-016	VACCTEN	3
49-1-016	ACERRUB	1
49-1-016	MARSGRM	2
49-1-016	ZIGAGLB	2
49-1-016	RHYNCIL	2
49-1-016	XYRIBAL	2
49-1-016	MAGNVIR	3
49-1-016	RHYNOLI	2
49-1-016	ARISSTR	2
49-1-016	ARUNTCT	1
49-1-016	PINUSER	4
49-1-016	XYRIAMB	2
49-1-016	ILEXCRC	2
49-1-016	CARPODO	2
49-1-016	CLEIDIV	1
49-1-016	GORDLAS	3
49-1-016	POLYLUT	1
49-1-016	HYPECRU	1
49-1-016	ILEXMYR	2
49-1-016	NYSSBIF	2
49-1-016	VACC1S1	1
49-1-016	COREFAL	1
49-1-016	DIONMUS	1
49-1-016	RHYNCHP	2
49-1-016	WOODVIR	2
49-1-016	SCLEPAU	2
49-1-016	RHYNPAL	2
49-1-016	ZIGADEN	1
49-1-016	CALOTUB	2
49-1-016	RHEXLUT	1
49-1-016	DROSCAP	1
49-1-016	XYRIPLA	2
49-1-016	BIGENUD	2
49-1-016	CYRIRAC	2
49-1-016	VACC1S2	1
49-1-016	CLETALN	2
49-1-016	ANDRGLO	2

APPENDIX 3

Raw Data Files
Second Matrix

136 plotID

34 attrs

	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
	Q	Q	Q	Q	C	C	Q	Q	C	C		
	CEC	pH	Org	N	S	P	Ca_ppm		Mg_ppm		K_ppm	
	Na_ppm		%Ca	%Mg	%K	%Na	%Othr	%H	B_ppm	Fe_ppm		
	Mn_ppm		Cu_ppm		Zn_ppm		Al_ppm		Density		%BaseSat	
	Ca/Mg	ppm	Clay	Silt	Sand	CountyID		UTMZone		UTME	UTMN	
	Series	VegType										
03-1-051		4.91	4	0.3	25.5	7.25	5.25	164	39	18	20	
	16.8	6.65	0.94	1.71	9.4	64.5	0.71	31	2	0.33	1.03	78
	1.34	26.1	4.3	2.74	18.36	78.9	2	18	320060		3844050	
	6	3										
03-1-052		6.56	3.6	0.53	46.4	12.5	6.25	139.3	51	30.5	34.25	
	10.72	6.6	1.17	2.31	10.2	69	0.99	53.25	0.75	0.25	1.2	
	121.5	1.11	20.8	2.72	3.24	27.21	69.55	2	18	319900		
	3844310		10	5								
03-1-053		5.91	3.9	0.4	42.63	12	7	182	46.25	21	20.5	
	15.58	6.63	0.93	1.52	9.6	65.75	0.68	42.5	1.25	0.3	1.48	101
	1.25	24.7	4	2.83	45.52	51.65	4	18	287420		3832060	
	7	5										
03-1-056		9.3	4.2	1.3	58.5	19.25	9.75	453.75	49.75	21	26.75	
	24.25	4.45	0.58	1.28	8.95	60.5	0.35	263.75	1	0.23	1.3	
	739.25	0.85	30.55	9.05	5.34	54.64	40.1	2	18	311920		
	3873890		11	8								
03-1-057		10.53	3.58	0.63	45.87	15.75	6.75	269	74	26.5	31	
	12.58	5.89	0.71	1.33	10.25	69.25	0.64	33.25	1.25	0.13	1.85	
	92.5	1.19	20.5	3.63	2.59	45.29	52.13	4	18	277570		
	3836860		7	5								
03-1-058		4.86	4.03	0.63	33	9.67	7	182	35.33	11.67	12	
	18.67	6.04	0.55	1.07	9.33	64.33	0.25	94	4.33	0.1	1.43	
	267.33	1.23	26.33	5.15	2.84	45.29	51.87	4	18	293820		
	3841920		4	7								
03-1-059		6.83	3.73	0.1	40.5	17.75	8.5	192	45.25	26	26.5	
	14.12	5.53	0.98	1.68	9.95	67.75	0.57	90.5	1.5	0.13	1.43	
	210.5	1.2	22.3	4.23	2.77	47.53	49.7	4	18	289850		
	3835130		1	6								
03-1-075		5.46	4.05	3.35	40.5	8.5	14	208	39.75	14.25	21	
	18.57	6.03	0.66	1.68	9.3	63.75	0.72	92.25	3.25	0.1	1.58	204
	1.11	26.95	5.17	3.81	39.44	56.75	5	18	248280		3825220	
	12	3										
03-1-076		3.16	4.08	6	52	24.75	9.75	96.75	26.75	19.75	22.75	
	15.61	7.22	1.7	3.24	9.25	63	0.1	284	0.75	0.1	1.13	833

	0.99	27.75	3.61	7.72	71.83	20.45	5	18	249040		3813110
	14	11									
03-1-078	6.35	3.7	4.6	47.25	12.5	3.5	144.5	58	23	33	
	11.07	7.83	0.91	2.2	10	68	0.88	62.5	0.5	0.1	1.2	178
	1.21	22	2.51	5.06	8.94	86	3	18	231060		3767060
	7	5									
03-1-079	4.64	3.9	5.53	62.63	16.25	8.75	131	36.25	34.25	23.75	
	13.92	6.57	1.94	2.24	9.6	65.75	0.54	153	1	0.1	1.15	420
	0.84	24.65	3.61	3.55	77.86	18.6	5	18	255740		3830220
	8	6									
03-1-081	3.87	4	0.9	17.5	7	2	127	29	5.5	28.25	
	16.51	6.2	0.35	3.06	9.4	64.5	1.07	23.25	1	0.1	1.37	
	52.75	1.44	26.1	4.48	3.95	6.15	89.9	1	17	777090		
	3765224		9	3								
03-1-082	13.58	3.63	3.6	67.13	18.75	7.75	283.75	126	68.75	36.5		
	10.67	7.71	1.43	1.29	10.15	68.75	0.72	127.5	1.75	0.1	2.03	291
	0.62	21.1	2.34	3.88	55.67	40.45	5	18	252630		3815460
	8	6									
03-1-086	11.62	4.05	4.83	52.63	12.75	9.75	444	75.25	32.75	24.25		
	20.04	5.66	0.75	1.02	9.3	63.25	0.55	89.75	4.25	0.25	1.75	
	346.75	1.03	27.45	5.9	6.24	33.26	60.5	5	18	254810		
	3813990		9	7								
03-1-104	4	4	6.9	52.38	49.25	7.25	110	33	24.5	32.75		
	14.14	7	1.65	3.56	9.4	64.25	0.56	322.25	1.75	0.29	0.65	
	1094.75		0.97	26.35	3.4	8.7	40.15	51.15	1	17	748620	
	3775080		3	8								
03-1-105	4.58	4.05	11.9	63.25	48.5	9.25	132	38.5	36	30		
	14.56	7.35	2.27	3.03	9.3	63.5	0.49	144.75	1	0.41	0.68	
	1384.25		0.78	27.2	3.84	4.9	68.35	26.75	1	17	748940	
	3775050		14	10								
03-1-106	6.44	3.92	5.45	51.13	30.25	8.25	278.75	27.75	19.25	15.25		
	19.63	3.82	0.86	1.15	9.55	65	0.47	182	0.75	0.26	0.53	
	538.75	0.99	25.45	9.41	4.45	74.7	20.85	1	17	730560		
	3780250		14	9								
03-1-110	6.31	3.65	4.3	46.25	11.25	3.75	142.5	54.25	19.25	25.75		
	11.48	7.31	0.81	1.81	10.1	68.5	0.43	49.5	1.25	0.23	0.45	122
	1.17	21.4	2.6	4.2	22.45	73.35	1	17	728020		3767090	
	7	5										
03-1-111	5.84	3.68	4.05	44.5	18.25	6.75	145.5	41	16.5	27		
	12.7	5.86	0.78	2.35	10.05	68.25	0.44	95	0.75	0.2	0.5	
	346.75	1.07	21.7	3.61	2.95	32.05	65	1	17	767220		
	3790440		9	5								
03-1-114	8.75	3.89	7.93	47.75	9.75	4	215.75	88	31.5	27.5		
	13.97	8.29	0.89	1.45	9.65	65.75	0.28	66	1	0.22	0.8	175
	0.96	24.6	2.98	2.2	20.7	77.1	2	18	374760		3864250	
	7	3										

03-2-050	4.64	4.18	0.58	25.75	6.25	3	163.75	38.25	8.75	42
17.94	6.93	0.49	4.1	9.05	61.5	1.03	27.25	1.5	0.15	1.7
63.5	1.4	29.45	4.3	1.84	16.21	81.95	2	18	318350	
3845980		7	3							
03-2-051	4.65	4	0.48	29.75	6.25	5.75	146.75	35.75	8.75	35.75
15.79	6.45	0.48	3.4	9.4	64.5	0.98	35	2	0.45	2.23
92.5	1.35	26.1	4.1	2.52	16.73	80.75	2	18	320130	
3844060		6	3							
03-2-053	6.4	3.73	0.3	44.63	9.25	6.75	171.5	48.25	16.25	31
13.26	6.29	0.65	2.11	9.95	67.75	0.7	41	2.5	0.22	1.38
137.25	1.14	22.3	3.54	2.79	35.1	62.2	4	18	286510	
3831960		11	3							
03-2-055	14.32	3.65	0.4	57.5	13.75	8.25	411.25	96.5	39.5	32.5
14.1	5.54	0.74	1.03	10.1	68.5	0.61	64	3.25	0.51	1.85
215.75	1.07	21.4	4.26	2.52	26.53	70.95	2	18	314030	
3869950		13	5							
03-2-056	9.79	4.15	0.63	48	10.5	7	370	80.75	31	44.75
19.1	7	0.83	2.03	9.1	62	1.14	33.25	2.75	0.21	1.93	93
1.21	28.9	4.6	2.34	45.46	52.2	4	18	277730		3837210
7	3									
03-2-057	26.02	3.6	6.05	68.5	26.75	11.5	698	179.25	78.75	55.25
13.71	5.84	0.79	0.97	10.2	68.5	0.67	103	2.75	0.57	3.5
336.24	0.71	21.3	5.64	2.18	62.92	34.9	4	18	277610	
3837240		7	6							
03-2-058	3.39	4.78	0.43	32.75	12.25	6.5	173.25	35.5	13.5	22.75
30.06	1.26	1.32	3.1	7.85	47.5	0.62	96.75	3	0.21	1.25
241.5	1.24	44.65	4.89	4.18	54.82	41	4	18	293920	
3842340		2	7							
03-2-059	3.4	4.85	0.45	36.13	11.75	5.75	209.25	39	11.75	20.75
30.69	9.96	0.93	2.95	7.7	47.75	0.5	193.75	3.75	0.1	1.15
314.75	1.24	44.55	5.33	3.59	61.66	34.75	4	18	294010	
3842550		2	7							
03-2-060	11.25	3.75	0.6	50.75	14.25	6.5	269.5	93	33.75	70.25
12.26	6.79	0.79	2.77	9.9	67.5	0.96	70.25	1	0.1	1.08
184.25	1.21	22.6	3.08	2.09	51.21	46.7	2	18	320300	
3848160		7	5							
03-2-061	6.51	4.03	0.45	33.88	8.82	6.25	218	49.25	15.75	44.75
16.98	6.35	0.63	2.96	9.35	63.75	1.25	40	3.25	0.15	1.5
109.75	1.24	26.9	4.46	1.93	36.62	61.45	2	18	321010	
3848270		2	3							
03-2-075	7.39	3.58	0.48	51.75	12.75	5.5	145.75	69.75	23.75	33.5
9.74	7.98	0.82	1.97	10.25	69.25	0.87	62.5	0.25	0.1	0.9
202.75	1.17	20.5	2.22	2.63	65.07	32.3	5	18	248930	
3825410		8	5							
03-2-076	3.48	4.37	0.25	37.88	10.75	6.75	159	29.75	8	21
23.37	7.28	0.55	2.66	8.65	57.5	0.49	166	2.5	0.1	1.05

	416.5	1.16	33.85	5.38	2.95	81.45	15.6	5	18	249050	
	3813040		2	7							
03-2-077	5.3	3.9	0.95	47	10.75	3.5	133	52.25	19.25	28.5	
	13.76	8.87	1.07	2.44	9.6	64.25	1.11	37	0.5	0.1	1.03
	96.25	1.2	26.15	2.78	2.63	23.87	73.5	1	18	224040	
	3767540		7	5							
03-2-078	6.29	3.83	2.67	70	29.33	24	177.67	38.67	56.33	29.33	
	14.09	5.13	2.32	2.05	9.73	66.67	0.1	79.67	1	0.1	1.37
	1325.67		0.52	23.6	4.6	3.04	85.29	11.67	5	18	254290
	3834980		14	14							
03-2-080	10.23	3.5	4.8	61.75	10	4.25	138.25	117.75	29.5	54.5	
	7.13	9.31	0.72	2.44	10.4	70	0.79	64.25	0.75	0.13	1.1
	178.25	0.78	19.6	1.35	4.15	29.2	66.65	1	17	776760	
	3768490		10	6							
03-2-081	4.28	4.49	0.4	35.88	14.25	8.5	200	36.25	17.75	29.5	
	24.31	7.47	1.2	3.06	8.45	55.5	0.54	117.5	1.5	0.18	1.45	348
	1.3	36.05	5.34	3.81	28.54	67.65	5	18	252680		3815450	
	3	7										
03-2-103	5.17	4.03	8.18	56.88	40.25	7.75	171.5	37	24.5	26.75	
	16.52	6.13	1.26	2.25	9.35	64.5	0.47	223.25	1	0.27	0.6
	1040.25		0.89	26.15	4.59	3.2	53.6	43.2	1	17	749070
	3774340		3	10							
03-2-104	4.36	3.78	9.38	61.25	36	10	123.75	29.75	22	16	
	14.28	5.7	1.31	1.62	9.85	67.25	0.35	191.25	0.5	0.23	0.55
	890.75	0.86	22.9	4.26	3.45	80.35	16.2	5	18	254180	
	3834400		14	11							
03-2-107	3.04	3.85	0.93	18	6.75	2.5	87.5	22	6.75	16.25	
	14.99	6.26	0.57	2.25	9.7	66.25	0.43	19.75	0	0.2	0.4
	42.75	1.47	24.05	3.98	3.2	7.55	89.25	1	17	768260	
	3765320		7	3							
03-3-051	5.33	3.8	0.25	32.5	7	5.25	154.75	37.75	16.75	24.25	
	14.52	5.89	0.82	1.97	9.8	67	0.95	30.75	3	0.24	1.12	81
	1.34	23.2	4.12	2.33	31.57	66.1	4	18	287290		3832260	
	7	3										
03-3-052	3.36	4.48	0.43	26.75	7	7	175.25	33.25	9.75	14.5	
	25.67	8.25	0.66	1.96	8.45	55	0.64	54.5	13.25	0.22	1.2	132
	1.31	36.55	5.07	2.7	27.15	70.15	4	18	295390		3836580	
	2	7										
03-3-053	5.24	3.8	0.8	52.83	25.33	10	170	32.67	12.67	15	
	16.07	5.2	0.64	1.29	9.8	67	0.13	336.33	1	0.17	1.3	738
	1.04	23.2	5.17	5.44	28.36	66.2	2	18	313670		3870360	
	13	8										
03-3-054	15.18	4.53	0.38	51	16.25	8.5	1009	84	16.75	25.5	
	33.28	4.62	0.29	0.73	8.35	52.75	0.35	236.75	1.25	1.17	3.05
	527.5	1.21	38.9	12.45	3.04	38.89	58.08	4	18	277710	
	3837080		7	6							

03-3-055	5.23	4.05	0.45	42.25	22	9.25	188	34.75	22.5	24	
17.36	5.91	1.27	2.18	9.3	64	0.47	153.5	1.25	0.36	1.23	
496.75	1.2	26.7	6.01	5.31	55.64	39.05	4	18	293870		
3842430		2	8								
03-3-077	3.62	4.2	0.38	59.88	26	13.25	138.25	31.25	26.5	15.5	
19.07	7.2	1.88	1.87	9	61	0.29	255	1	0.97	1.18	
923.5	0.83	30	4.44	4.88	88.22	6.9	5	18	244990		
3815320		14	9								
03-3-078	9.97	4.43	0.65	58	16	10.5	615.25	38.25	32.25	27.5	
29.11	3.55	0.98	1.32	8.55	56.5	0.33	174.25	0.75	0.35	1.03	
598.5	0.82	34.95	17.99	3.31	80.44	16.25	5	18	254700		
3835050		5	9								
03-3-079	7.12	3.8	0.75	33.88	8.75	5	204.75	57.75	19.75	20.5	
14.43	6.73	0.75	1.3	9.8	67	0.54	18.5	1.25	0.37	1.4	58
1.23	23.2	3.68	2.74	11.56	85.7	1	17	770230		3767260	
9	5										
03-3-082	7.14	4.1	0	45	8	6	297	47	22	12	
20.8	5.49	0.79	0.73	9.2	63	0.33	93	8	0.24	2.5	262
1.12	27.8	6.319	148936	5.2	66.8	28	5	18	252430		
3812460		3	8								
03-3-083	4.26	3.93	0.63	52.67	24	9.33	117	36.33	21	30	
13.69	7.11	1.27	3.07	9.53	65.33	0.24	302.67	1	0.24	1	
1080.33		0.98	25.13	3.19	3.56	45.04	51.4	5	18	252570	
3815480		8	6								
03-3-084	8.61	3.7	3.93	65.67	16	11	200.33	71	77	24	
11.67	6.89	2.22	1.23	10	68	0.17	135.33	2.33	0.26	1.63	453
0.6	22	2.82	3.95	40.39	55.67	5	18	252560		3815390	
8	6										
03-3-101	5.2	3.48	18.38	64.5	43.75	12.5	86.25	32.25	26.75	54.25	8.3
5.1	1.31	4.59	10.45	70.25	0.32	171	0.5	0.3	266.23	855.75	
0.52	19.3	2.77	4.45	76.4	19.15	1	17	748840		3774940	
14	10										
03-3-102	9.33	4.23	5.15	48.13	26.5	8	506	32.75	18.25	12.5	
25.58	3.61	0.58	0.79	8.95	60.5	0.54	206	0.75	0.31	164.38	308
0.93	30.55	14.36	4.04	69.41	26.55	1	17	730610		3780170	
14	9										
03-3-104	4.02	3.78	11.5	59.13	40.25	7.75	82.75	26.25	23.25	43.5	
10.6	5.89	1.62	5.53	9.85	66.5	0.41	350.75	0.5	0.33	403.52	498
0.86	23.65	3.05	4.2	40.6	55.2	1	17	749820		3775390	
3	10										
03-3-105	10.04	3.38	5.2	47.25	14.25	4.75	222.5	63	31.25	22.75	
1.16	5.05	0.85	1.04	10.65	71.25	0.31	48.75	0.5	0.38	41.05	
104.25	1.12	18.1	3.73	3.2	27.1	69.7	1	17	727950		
3767100		7	5								
03-3-107	6.04	3.53	1.78	26	8.25	3	135.75	45.75	14.75	20	
11.33	6.45	0.64	1.47	10.35	69.75	0.38	26.25	0	0.4	14.28	52

	1.44	19.9	3.36	2.7	7.65	89.65	1	17	763050		3759820
	7	5									
03-4-050		11.75	3.63	2.6	63.25	17.25	6.5	280.25	99.75	50	24.25
	11.93	7.18	1.09	0.91	10.15	68.75	0.39	48.5	1	0.1	1.28	162
	0.69	21.1	2.85	3.95	37.6	58.45	2	18	318200		3846160
	10	6									
03-4-053		5.63	3.9	0.17	45.83	16.33	7.33	164.33	48.33	22.67	24
	14.67	7.18	1.04	1.87	9.6	65.67	0.68	31	1	0.57	1.5
	88.67	1.18	24.73	3.4	2.23	56.64	41.14	4	18	286810	
	3831890		11	5							
03-4-056		6.62	3.65	0.33	44.13	13	5.75	168.5	48	22.75	26
	12.74	6.07	0.88	1.72	10.1	68.5	0.38	46.75	1	0.1	0.95	149
	1.23	21.4	3.53	2.29	46.26	51.45	4	18	272400		3831840
	2	5									
03-4-057		4.89	3.85	0.35	31	7.25	5	149.25	32.75	21	20.75
	15.3	5.56	1.1	1.84	9.7	66.5	0.45	20.75	1	0.2	1	52
	1.32	23.8	4.65	2.54	29.46	68	4	18	273950		3834640
	7	3									
03-4-058		3.89	4.15	0.85	33.75	17.5	6.5	149.5	25.75	16.25	17.25
	19.34	6.31	1.25	2.27	9.1	61.75	0.33	217.25	2.25	0.2	0.95
	523.5	1.18	29.15	5.56	2.9	38.35	58.75	4	18	293590	
	3841860		4	7							
03-4-059		6.25	3.8	0.28	42.25	12.75	9	199.5	34.25	25.5	20.5
	15.92	4.71	1.06	1.52	9.8	67	0.35	97.5	2.5	0.1	1.28
	241.5	1.21	23.2	5.74	4.04	50.11	45.85	4	18	294020	
	3842620		2	7							
03-4-060		9.12	3.53	5.68	67.13	35.5	13.75	146	82	63.75	54
	8.16	7.44	1.72	2.58	10.35	69.75	0.28	68.5	1	0.1	1
	513.5	0.62	19.9	1.84	3.2	55.65	41.15	2	18	320560	
	3848130		9	6							
03-4-061		9.1	3.8	0.75	53.13	13	6.75	250	78.75	31.75	39.5
	13.77	7.14	0.89	1.9	9.8	66.5	0.64	48.25	1	0.1	1.03	162
	1.03	23.7	3.27	2.97	41.73	55.3	2	18	320840		3848280
	9	5									
03-4-062		3.98	3.8	0.35	52	39.75	12.75	104.75	25.75	27	27.25
	12.98	5.5	1.73	2.99	9.8	67	0.46	176.25	1	0.17	0.83
	394.75	1	23.2	4.09	2.63	59.82	37.55	4	18	289750	
	3835290		14	13							
03-4-075		3.67	4.18	0.53	37.88	20.5	10	159.25	23.25	17	9.75
	20.8	6.13	1.4	1.4	9.04	61.25	0.32	174.25	4.5	2.64	1.65
	666.75	1.25	29.7	6.61	3.99	78.86	17.15	5	18	249860	
	3813260		3	10							
03-4-076		5.71	3.7	0.25	37.25	8.75	4.75	139.5	46.75	19.75	20.75
	12.45	6.97	0.92	1.67	10	68	0.53	29.5	0.25	0.25	0.95
	70.5	1.31	22	2.99	3.38	13.77	82.85	1	18	224130	
	3767420		7	5							

03-4-077	5.61	3.75	0.48	40.38	8.5	6	168	35.25	22	18.25
14.86	5.28	1.02	1.45	9.9	67.5	0.56	33	1	0.3	1.33
95.25	1.19	22.6	4.73	3.88	49.67	46.45	5	18	253250	
3832630		9	5							
03-4-080	9.8	3.7	1.43	47	12.25	5.75	266.25	75	31.75	25.75
13.02	6.72	0.88	1.39	10	68	0.55	52.75	1	0.23	1.55
135.75	1.08	22	3.3	2.7	23.45	73.85	1	18	223890	
3768700		7	6							
03-4-103	4.43	3.8	11.88	62	48.25	9.5	121	31.75	27.25	20.75
13.68	6.03	1.63	2.12	9.8	66.75	0.33	116.5	1	0.3	0.78
1140.5	0.8	23.45	3.78	3.54	68.31	28.15	1	17	748820	
3775030		3	10							
03-4-104	3.39	4.23	8.4	58.88	41	10.25	136	27.75	24.25	16.5
19.09	7.19	1.92	2.32	8.95	60.5	0.38	159.5	0.75	0.37	0.78
932.75	0.86	30.55	4.77	3.13	73.17	23.7	5	18	254230	
3834400		14	11							
03-4-107	5.37	4.08	8.85	56.38	26	6	181	39.25	24	29
17.26	6.86	1.32	2.56	9.25	62.75	0.4	336.75	1.25	0.26	0.55
739.5	0.96	28	4.62	5.22	35.43	59.35	1	17	750200	
3774700		3	8							
03-4-108	5.4	4.23	6.58	48.38	23.75	7	229.75	34.75	23.75	25.5
21.73	5.94	1.19	2.19	8.95	60	0.33	230.25	2.5	0.43	0.58
860.5	1.04	31.05	7.34	3.95	28.2	67.85	1	17	749700	
3775190		3	8							
03-4-109	4.26	3.9	3.43	40.38	22.25	6.25	137	27.25	15.25	16.25	16
5.91	1.06	1.91	9.6	65.5	0.26	166.75	0.25	0.24	0.4	572.25	
1.21	24.9	4.96	3.72	29.28	67	1	17	767330		3790370	
9	5									
03-4-120	4.26	4.25	4.05	40.5	7.25	1.75	163	46.75	16.5	22
18.88	8.92	1.01	2.31	8.9	60	0.36	29.5	0	0.48	45.38
26.5	1.36	31.3	3.58	3.2	9	87.8	2	18	375690	
3862060		7	5							
03-5-050	8.47	3.68	1.45	58.25	28	11	184.75	82	30.25	36.5
10.93	8.02	0.91	1.85	10.05	68.25	0.94	29.5	1	0.13	1.13
143.25	1.06	21.7	2.32	3.45	50.03	46.53	2	18	318170	
3846220		10	6							
03-5-054	7.73	3.75	0.5	46.63	19.25	10	213.5	57.5	22	32.25
13.82	6.19	0.78	1.82	9.9	67.5	0.96	56.25	1.75	0.42	1.63
160.75	1.27	22.6	3.77	2.52	34.68	62.8	4	18	286900	
3832000		11	5							
03-5-055	5.9	4.02	0.28	40.13	17.5	12.75	228.5	36	18.25	27.25
18.42	5.28	0.85	2.11	9.35	64	0.67	116.25	8.75	0.51	1.73
331.25	1.19	26.65	6.07	2.61	39.19	58.2	4	18	295500	
3836450		2	7							
03-5-056	9.49	3.45	1.05	42.88	14.5	7.75	232.75	51.5	22	35.75
11.91	4.66	0.64	1.79	10.5	70.5	0.91	60.75	0.5	0.57	1.3

	188.5	1.19	19	4.76	4.36	21.99	73.65	2	18	314280	
	3869650		13	5							
03-5-058	4.5	3.67	0.8	16	7.33	3.67	107	28.33	4.67	43	
	11.95	5.27	0.25	4.12	10.07	68.33	1.02	20.33	1	0.28	1.27
	53.67	1.39	21.6	3.78	1.8	31.27	66.93	4	18	273960	
	3834730		6	4							
03-5-059	3.88	3.65	0.25	46	21.75	9.75	103	25.75	12.5	14.5	
	13.26	5.65	0.79	1.71	10.1	68.5	0.1	152.25	0.25	0.36	1.45
	695.25	1.09	21.4	3.98	4.34	62.16	33.5	4	18	294000	
	3841810		2	6							
03-5-060	7.04	3.65	0.43	47.25	11	7.75	205	42.5	19	14.75	
	14.69	5.09	0.69	0.93	10.1	68.5	0.41	94.75	2.5	0.25	1.35	257
	1.13	21.4	4.81	4.61	50.92	44.48	4	18	294000		3841930
	2	7									
03-5-061	7.69	3.78	0.53	56.63	27.75	14.75	251.25	46.5	15.75	17.5	
	16.33	5.03	0.52	1.01	9.85	67.25	0.27	201	1.5	0.23	1.05
	592.25	1.03	22.9	5.4	5.11	55.09	39.8	2	18	310650	
	3847780		11	8							
03-5-062	8.89	3.48	0.48	55.75	28.75	9	186.25	67.25	27	33.5	
	10.4	6.44	0.78	1.68	10.45	70.25	0.48	40.75	0.5	0.13	0.93
	141.25	1.11	19.3	2.77	2.7	51.95	45.35	4	18	290920	
	3832960		7	6							
03-5-063	5.63	3.9	0.45	42.13	16	11.5	187.25	40.75	16.25	14	
	16.52	6.07	0.67	1.14	9.6	66	0.32	93.5	2	0.3	1.08
	179.5	1.19	24.4	4.56	2.86	48.84	48.3	4	18	289510	
	3836050		2	7							
03-5-075	6.68	3.9	0.45	34.5	9	7	238	37	20	20.5	
	17.63	4.65	0.79	1.35	9.6	66	0.57	51.5	0.5	0.15	1.05
	169.5	1.27	24.4	6.4	2.92	50.38	46.7	5	18	248040	
	3825310		12	5							
03-5-077	6.97	3.78	0.65	57.63	22.5	12.25	216.5	39.5	21.75	25	
	15.14	5.13	0.91	1.72	9.85	67.25	0.19	195.75	1	0.23	1.18
	804.25	0.93	22.9	5.24	3.51	81.27	15.22	5	18	249970	
	3813200		3	11							
03-5-078	4.95	3.9	0.33	59.38	32.25	11.25	149.5	34.75	34.75	19.5	
	14.98	5.89	1.8	1.73	9.6	66	0.39	270.25	1	0.36	1.48
	995.5	0.84	24.4	4.32	5.63	88.17	6.2	5	18	244990	
	3815210		14	9							
03-5-079	10.27	3.85	3.65	63.63	17	12.75	350	56.75	41.25	28.25	
	16.89	4.65	1.03	1.25	9.7	66.5	0.29	153.75	1	0.36	1.78
	599.75	0.69	23.8	6.09	3.56	87.14	9.3	5	18	254350	
	3835030		5	11							
03-5-080	8.82	3.7	0.58	39.75	9.25	4.5	252.5	57.25	19.25	22.75	
	15.11	5.38	0.62	1.15	10	67.75	0.64	40.5	1.25	0.35	2.35	125
	1.14	22.25	4.73	2.81	18.79	78.4	1	17	770230		3767310
	9	5									

03-5-081	3.8	4.05	0.28	25.25	7	3	125.25	30.25	8.75	16	
18.25	7.26	0.49	1.98	9.3	62.75	0.64	26.25	0.75	0.13	1.25	54
1.36	27.95	4.16	3.06	14.84	82.1	1	17	770540		3767460	
7	5										
03-5-082	10.6	3.58	0.9	57.75	16.5	8.5	255.75	81.25	39.5	27	
12.02	6.41	0.97	1.11	10.25	69.25	0.42	99.5	1.25	0.2	1.6	
246.75	1.05	20.5	3.19	2.76	63.54	33.7	5	18	252680		
3815540		8	6								
03-5-083	8.88	3.6	1.25	57.75	12.25	5.25	200	78.25	31	27	
11.26	7.32	0.9	1.33	10.2	69	0.49	71	0.75	0.21	1.05	
202.5	0.92	20.8	2.78	1.97	34.68	63.35	1	17	776450		
3767470		9	6								
03-5-084	3.57	3.99	0.49	49.63	26.75	8.25	108.5	26.5	20.5	21	
14.82	6.7	1.61	2.68	9.45	64.75	0.48	325.25	0.5	0.23	0.93	
907.75	1	25.8	4.01	5.31	43.99	50.7	5	18	255480		
3815620		13	10								
03-5-102	4.22	3.83	8.8	59.88	43	10	115	29.75	24.75	18	
14.02	5.97	1.56	1.92	9.75	66.75	0.31	102	0.75	0.25	0.7	
1082.5	0.86	23.5	3.97	4.47	64.88	30.65	1	17	749080		
3774400		3	12								
03-5-103	4.28	4.13	6.4	52.75	29.75	6.5	167.25	29.75	23.25	16.5	
19.63	5.88	1.43	1.68	9.15	62.25	0.41	291	0.25	0.4	0.65	
764.5	0.94	28.6	5.67	3.38	49.77	46.85	5	18	253430		
3836290		14	11								
03-5-107	3.51	4.2	5.7	51.25	32	6	131	30	23.5	15.75	
18.88	7.32	1.78	2.02	9	61	0.38	252.25	1	0.38	0.6	
1001	1	30	4.41	5.54	32.66	61.8	1	17	748870		
3776430		14	10								
03-5-108	3.84	4.1	2	30	9.67	2.67	110.67	43.33	12	26.33	
14.68	9.34	0.82	2.97	9.2	63	0.56	21	0.67	0.2	0.47	
61.33	1.39	27.8	2.64	4.23	12.64	83.13	1	17	766520		
3760930		7	5								
03-5-109	5.02	4.08	2.93	30.38	9.5	4.5	171.75	41.5	16.5	21.5	
17.66	7.5	0.88	1.97	9.25	62.75	0.66	22.75	1.25	0.25	0.68	
65.75	1.41	28	4.55	3.47	7.03	89.5	1	17	762940		
3759810		7	5								
03-5-120	5.15	4.18	2.23	30.4	7	3	190.75	45.5	14	20.75	
19.84	8.11	0.72	2.03	9.05	60.25	0.6	25.75	1	0.2	0.83	59
1.32	30.7	4.11	3.79	3.96	92.25	2	18	381570		3870310	
9	3										
03-5-121	8.54	3.88	3.3	40.25	9	3.25	212.5	88.5	32.75	44.75	
12.55	8.51	0.99	2.3	9.65	66	0.5	50.25	0.75	0.2	0.63	106
1.16	24.35	2.75	3.81	7.24	88.95	2	18	381370		3870490	
9	3										
03-6-052	4.78	3.98	0.43	28.75	6.75	4.25	157.75	29.75	20.25	29.75	
16.37	5.24	1.09	2.86	9.45	65	0.85	28.5	1.75	0.23	1.48	

	88.25	1.34	25.55	5.26	3.02	25.13	71.85	4	18	293830		
	3841750		4	7								
03-6-053		7.98	3.65	0.65	61.5	26.5	12	185.5	65.5	35	28.5	
	11.96	6.63	1.19	1.64	10.1	68.5	0.45	226.5	1	0.27	1.4	716
	0.87	21.4	3.04	7.34	64.26	28.4	2	17	313680		3870470	
	13	14										
03-6-055		4.92	4.08	0.5	35.63	10.75	6.5	168	37.5	21	23.5	
	17.71	6.47	1.23	2.1	9.25	63.25	0.47	96	2	0.13	1.05	
	253.5	1.26	27.5	4.58	3.2	47.75	49.05	4	18	289310		
	3835760		3	7								
03-6-077		8.11	3.6	2	61.13	17.75	6.25	185.75	67.25	32	21.75	
	11.46	7.01	1.03	1.29	10.2	69	0.48	120.5	0.75	0.29	1.18	
	286.25	0.82	20.8	2.74	1.92	86.53	11.55	5	18	255960		
	3830040		8	6								
03-6-100		4.81	3.8	7.23	55.88	38.75	10.75	140	30	29.5	18.75	
	13.98	5.59	1.83	1.82	9.8	67	0.48	211.75	0.75	0.28	0.58	
	752.25	0.87	23.2	4.59	4.56	45.79	49.65	5	18	253310		
	3836260		14	11								
03-6-103		6.85	3.65	13.35	63.25	18.5	4.5	127	73	35.5	27.5	
	9.08	9.14	1.33	1.85	10.1	68.5	0.31	59	1	0.28	0.55	143
	0.86	21.4	1.69	4.56	45.84	49.6	1	17	749680		3775470	
	7	6										
03-6-104		3.92	3.8	10.8	62.75	51.5	8.5	94.5	30	26	25.5	
	12.19	6.45	1.77	2.8	9.8	67	0.47	263	1	0.33	0.55	
	952.5	0.78	23.2	3.15	4.06	70.94	25	1	17	749660		
	3775330		3	12								
03-6-110		4.11	3.9	4.59	32.17	17	3.83	109.42	36.33	18.92	18.17	
	14.02	7.2	1.15	1.95	9.62	66.09	0.45	27	0.5	0.3	0.65	52
	1.43	25.3	3.81	4.06	3.59	92.35	1	17	768290		3765250	
	7	5										
03-7-050		9.16	3.63	0.5	45.25	13.5	5	208	76.5	29	45	
	11.21	6.83	0.81	2.25	10.15	68.75	0.64	76.25	0.75	0.1	0.93	209
	1.19	21.1	2.72	2.31	30.84	66.85	2	18	320480		3848090	
	7	6										
03-7-051		6.14	3.8	0.4	38	13.25	5.25	129	58	28	53.25	
	10.98	7.35	1.14	3.74	9.8	67	0.69	36.25	1	0.1	0.95	
	101.75	1.3	23.2	2.83	3.2	15.63	81.18	2	18	320920		
	3848360		9	5								
03-7-052		8.41	3.9	0.55	55.88	23.5	10.25	201.75	86.5	37	46.75	
	12.03	8.52	1.13	2.44	9.65	66.25	0.64	112.25	1	0.13	1.18	
	417.75	1.08	24.1	2.37	2.27	53.93	43.8	4	18	290830		
	3833000		7	6								
03-7-074		4.62	4.18	0.28	27.75	7.25	5.25	187.5	42.25	15.75	17.25	
	20.2	7.55	0.83	1.62	9.05	60.75	0.57	40	4.5	0.16	2.2	
	112.5	1.33	30.2	4.5	2.81	7.64	89.55	5	18	255880		
	3830090		8	6								

03-7-076	8.85	3.6	0	53	11	4	181	92	22	26	
10.23	8.66	0.64	1.28	10.2	69	0.7	29	1	0.22	1	104
1.18	20.8	1.967391304		2.56	16.64	80.8	3	18	231000		
3770910		7	6								
03-7-079	8.61	3.43	0.4	45	9.5	4.25	149.25	76	19	26.75	
9.66	7.02	0.61	1.41	10.55	70.75	0.7	44	0.25	0.26	0.95	
103.5	1.13	18.7	2.43	2.31	15.69	82	1	17	776510		
3767520		7	5								
03-7-080	9.73	3.73	0.7	48.88	12	5.75	284.25	69.25	25.25	21.5	
14.79	5.87	0.67	0.97	9.95	67.75	0.38	61.75	1	0.27	1.35	
167.5	1.2	22.3	4.33	2.56	22.89	74.55	5	18	252520		
3815410		8	6								
03-R-069	4.24	3.9	1.9	29	8.75	3.5	127.25	35.5	12.25	15.5	
15.45	7.26	0.81	1.64	9.6	65.25	0.5	50.75	1	0.29	1.03	
126.5	1.28	25.15	3.59	4.56	14.87	80.58	2	18	377300		
3862410		7	3								
03-R-070	4.03	4.05	1.25	21.75	7.75	3	127.25	39.25	9.5	20	
16.05	8.15	0.6	2.15	9.3	63.75	0.54	35.5	0	0.22	0.5	
68.75	1.35	26.95	3.28	4.31	13.94	81.75	2	18	377540		
3862300		7	3								
27-1-554	3.56	4.23	5.7	51.83	34.33	14.67	160.33	22	16.33	17.67	
22.33	5.01	1.2	2.16	8.83	60.33	0.28	174	1	0.1	0.31	
537.33	0.8	30.73	7.59	1.2	11.5	87.3	5	18	257184		
3829651		14	15								
27-2-558	0.89	4.45	4.96	48.88	17.5	11.25	36.5	7.5	12	9.75	
20.2	6.86	3.49	4.94	8.5	56	0.17	165.75	1	0.1	0.2	
654.75	0.83	35.5	4.94	1.2	8.9	89.9	5	18	257206		
3829741		14	15								
27-7-565	3.07	4.43	5.58	51.4	29.5	11.5	207.75	13.25	13	11.75	
26.63	4.66	1.4	2.3	8.55	56.5	0.32	202	1	0.1	0.2	
555.25	0.83	34.95	12.94	1.2	9.1	89.7	5	18	257220		
3829509		14	15								
49-1-001	3.08	4.2	7.87	57.0	20	14	110	25	29	21	
17.86	6.76	2.41	2.96	9.00	61.00	0.42	257	0.5	0.44	0.64	826
0.71	30.0	4.40	10.86	50.21	38.92	5	18	226204		3838817	
15	1										
49-1-002	5.29	4.5	7.38	56.0	23	8	306	30	28	19	
28.92	4.73	1.36	1.56	8.40	55.00	0.58	517	0.5	0.44	1.53	784
0.56	36.6	10.20	15.92	43.77	40.3	5	18	226296		3839023	
15	1										
49-1-003	3.96	4.6	5.27	50.5	16	9	230	32	20	16	
29.04	6.73	1.30	1.76	8.20	53.00	0.51	408	0.5	0.42	3.10	782
0.80	38.8	7.19	10.86	48.16	40.97	5	18	226290		3838971	
15	1										
49-1-004	9.99	4.2	10.66	62.5	21	11	491	39	51	20	
24.57	3.25	1.31	0.87	9.00	61.00	0.55	477	0.5	0.46	2.24	

1005	0.61	30.0	12.59	9.6	47.31	43.09	5	18	226311		
3839080		15	1								
49-1-005	10.92	4.2	5.35	51.0	43	11	583	26	28	17	
26.69	1.98	0.66	0.68	9.00	61.00	0.56	503	0.5	0.47	1.01	912
0.81	30.0	22.42	9.19	49.12	41.69	5	18	226352		3839118	
15	1										
49-1-006	2.79	4.3	6.10	53.0	22	11	109	26	23	18	
19.53	7.77	2.11	2.81	8.80	59.00	0.51	325	0.5	0.52	0.85	784
0.75	32.2	4.19	8.76	52.32	38.92	5	18	226346		3839139	
15	1										
49-1-007	3.93	4.3	5.29	50.5	20	9	164	35	28	19	
20.87	7.42	1.83	2.10	8.80	59.00	0.57	389	0.5	0.65	2.86	731
0.78	32.2	4.69	10.03	45.46	44.51	5	18	225680		3839625	
15	1										
49-1-008	3.33	4.2	5.56	51.5	20	6	120	29	31	18	
18.02	7.26	2.39	2.35	9.00	61.00	0.75	713	0.5	0.73	0.87	722
0.79	30.0	4.14	9.19	47.12	43.7	5	18	225678		3839599	
15	1										
49-1-009	4.96	4.2	7.81	57.0	19	9	217	27	30	23	
21.88	4.54	1.55	2.02	9.00	61.00	0.58	404	0.5	0.58	0.69	908
0.72	30.0	8.04	5.4	49.52	45.08	5	18	225555		3839373	
15	1										
49-1-010	2.29	4.5	4.78	49.0	19	7	99	25	26	16	
21.62	9.10	2.91	3.04	8.40	55.00	0.45	409	0.5	0.32	0.44	931
0.72	36.6	3.96	7.92	47.7	44.39	5	18	225575		3839409	
15	1										
49-1-011	11.27	3.9	13.07	63.5	15	9	307	118	41	29	
13.62	8.73	0.93	1.12	9.60	66.00	0.31	195	0.5	0.35	0.63	664
0.67	24.4	2.60	4.14	16.23	79.63	5	18	248465		3812709	
8	2										
49-1-012	4.08	4.1	6.90	55.0	17	9	123	38	25	32	
15.07	7.76	1.57	3.41	9.20	63.00	0.37	188	0.5	0.23	0.44	615
0.75	27.8	3.24	5.4	11.24	83.36	5	18	248417		3812679	
8	2										
49-1-013	4.19	4.1	5.62	51.5	17	14	157	27	23	22	
18.74	5.37	1.41	2.28	9.20	63.00	0.45	325	0.5	0.32	0.20	620
0.76	27.8	5.81	6.66	16.31	77.03	5	18	255017		3813765	
3	2										
49-1-014	6.05	4.1	13.40	63.5	22	10	209	48	36	33	
17.27	6.61	1.53	2.37	9.20	63.00	0.45	291	0.5	0.45	0.64	
1123	0.54	27.8	4.35	5.4	23	71.6	5	18	249873		
3813203		3	2								
49-1-015	3.15	4.5	4.18	46.0	22	6	141	33	29	23	
22.38	8.73	2.36	3.17	8.40	55.00	0.49	233	0.5	0.56	0.44	991
0.86	36.6	4.27	4.54	15.82	79.64	5	18	249830		3813262	
14	2										

49-1-016	4.23	4.2	5.50	51.0	14	6	149	45	22	21	
17.61	8.87	1.33	2.16	9.00	61.00	0.45	227	0.5	0.46	0.20	374
0.86	30.0	3.31	2.25	28.21	69.54	5	18	255021		3813747	
8	2										