Mines and quarries greater than 10 acres in size in the Suwannee River Water Management District

by

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This map illustrates the locations of historic, present, and potential future mineral mines and quarries greater than ten acres in size in the Suwannee River Water Management District (SRWMD). Such open pit mines serve as important windows into the local geology, as well as defining areas of known economic mineral deposits. Many abandoned mines are water-filled, and the larger pits may form significant surface-water features. Some mines, such as abandoned limestone pits, penetrate the regional aquifer systems.

Mine data were derived from several sources, including U.S. Geological Survey (USGS) topographic quadrangle maps, Mark Hurd airphotos, recent Florida Department of Transportation airphotos, and from publications and data on file at the Florida Geological Survey and the Department of Natural Resources, Bureau of Mine Reclamation. A list of data sources used follows this text.

Because of the ever-changing nature of the mineral industry in Florida, current mine status is continually in flux. Mineral companies commonly sell properties among themselves, shut down some locations, and start up others, according to market demand. In addition, many old and abandoned mines, for which there are no location records, may be overgrown, water-filled, or refilled as landfills. This may render them indistinguishable on either topographic quadrangle maps or airphotos. Therefore, the reader should bear in mind that mines may exist which were not identified in this study.

Mines were digitized onto individual county basemap files using the computer aided drafting program AUTOCAD. Mine size was estimated by comparing potential mine sites on the topographic maps to a polygon of known 10 acre size. Mine areas close to, and possibly smaller than the 10-acre size limit were included. In general, the total area disturbed by mining is mapped. Some mapped areas may include total land area owned by the mining company and available for exploitation.

Mineral Commodities

The major mineral commodities mined or proposed to be mined in the SRWMD include dolomite, heavy minerals, limestone, peat, phosphate, and sand. While some of these minerals are utilized locally, most are shipped out of the respective counties for processing and use. The following is a summary of each commodity mined in the District.

Dolomite

Dolomites belonging to the Oligocene age Suwannee Limestone and the Eocene age Avon Park Formation as well as dolomitized Ocala Limestone have been mined in the SRWMD. Three active mines currently produce roadbase and aggregate grade dolomite in northwestern Taylor County, near the Jefferson-Taylor County line. Dolomitized Ocala Limestone and Avon Park Formation have been mined at various times in the past in both Dixie and Levy Counties. One active mine produces roadbase dolomite from the Avon Park Formation in southern Levy County, at Gulf Hammock.

Heavy Minerals

Most of Florida's heavy mineral production occurs from mines in the extensive sands of the Trail Ridge, just east of the SRWMD in Clay County. E.I. duPont de Nemours and Company has proposed plans to mine heavy minerals along the western flank of the Trail Ridge, just inside the SRWMD in northeastern Bradford County. Details on the status of this proposal and the anticipated mining date are currently unknown.

Limestone

Limestone comprises a significant potential mineral commodity in several counties of the SRWMD. It is typically mined in areas where the high purity Eocene age Ocala Limestone or Oligocene age Suwannee Limestone occur at shallow depth. These areas generally lie over the crest and flanks of the structurally-high Ocala Platform, in the west-central portion of the District. Roadbase and construction lime was mined historically in Alachua, Columbia, Dixie, Gilchrist, Lafayette, Levy, Suwannee, and Taylor Counties. Active mines are in operation in western Alachua County, southern Columbia County, Suwannee County, and Levy County. The limerock produced from these pits is used primarily as roadbase and in asphalt mix.

Peat

Two mines in the SRWMD, both in Madison County, have commercially mined peat. Of these, only one is currently active. The peat is utilized for horticultural purposes.

Phosphate

Pebble phosphate occurs as a granular component of the Miocene Hawthorn Group sediments in the SRWMD. The largest producer is Occidental Chemical Corporation, which operates the large Swift Creek and Suwannee River mines in Hamilton County.

Numerous hard rock phosphate pits were mined in the past in portions of Alachua, Columbia, Levy, Gilchrist, and Suwannee Counties. Hard rock phosphate occurs as a replacement of limestone, and is generally developed in localized deposits on the top of the Ocala Limestone, often in paleokarst features. Historic mining often occurred as scattered operations in small pits. Many such pits are difficult to recognize today. Hard rock mines larger than ten acres were situated primarily in Alachua and Gilchrist Counties. Data on these larger pits was derived from Epenshade and Spencer (1963), and mines are indicated as circles on the mine maps. No hard rock phosphate mines in the District are currently in operation.

Sand

Numerous sand pits occur in all counties within the SRWMD. By far, the vast majority of these pits supply local fill, and most are smaller than 10 acres in size. The exceptions typically include large borrow pits whose fill was used in highway and overpass construction, or construction company sand pits, such as the inactive Craggo Company pit in east-central Alachua County.

While mines labeled "borrow pit" on the topographic maps are probably sand or gravel pits, the actual commodity extracted is not known, and they are designated separately on the map legend. Several mines were labeled as "gravel pit" on the USGS topographic maps. The actual material mined is uncertain, but portions of the topographically high ridges in the northern highlands do contain quartz pebble-bearing fluvial and marine sediments.

Data Sources

A number of information sources were utilized in the construction of these mine maps. Initially, USGS topographic maps covering the entire district were reviewed for mining activity. Mark Hurd airphotos and recent airphotos from the Florida Department of Transportation airphoto library in Tallahassee were then checked, and any new mining activity transferred to the corresponding topographic maps. The authors also coordinated with DNR Bureau of Mine Reclamation staff to obtain any information from their files, and unpublished historic mining data on file at the FGS was incorporated into the study. Finally, published literature on the geology and mineral resources of each county in the SRWMD was perused for mine location information. The following is a list of publications which provided mine location data which were used in this study.

Bond, P., Hoenstine, R., and Lane, B. E., 1989, Mineral Resources of Jefferson County, Florida: Florida Geological Survey Map Series n. 129.

Epenshade, G., and Spencer, C., 1963, Geology of phosphate deposits of northern peninsular Florida: U.S. Geological Survey Bulletin 1118, 115 p.

Hoenstine, R., Yon, W., Lane, B.E., and Spencer, S., 1990, Mineral Resources of Alachua County, Florida: Florida Geological Survey Map Series n. 131.

Hoenstine, R., Spencer, S., and O'Carroll, 1990, Geology and groundwater resources of Madison County, Florida: Florida Geological Survey Bulletin n. 61, 98 p.

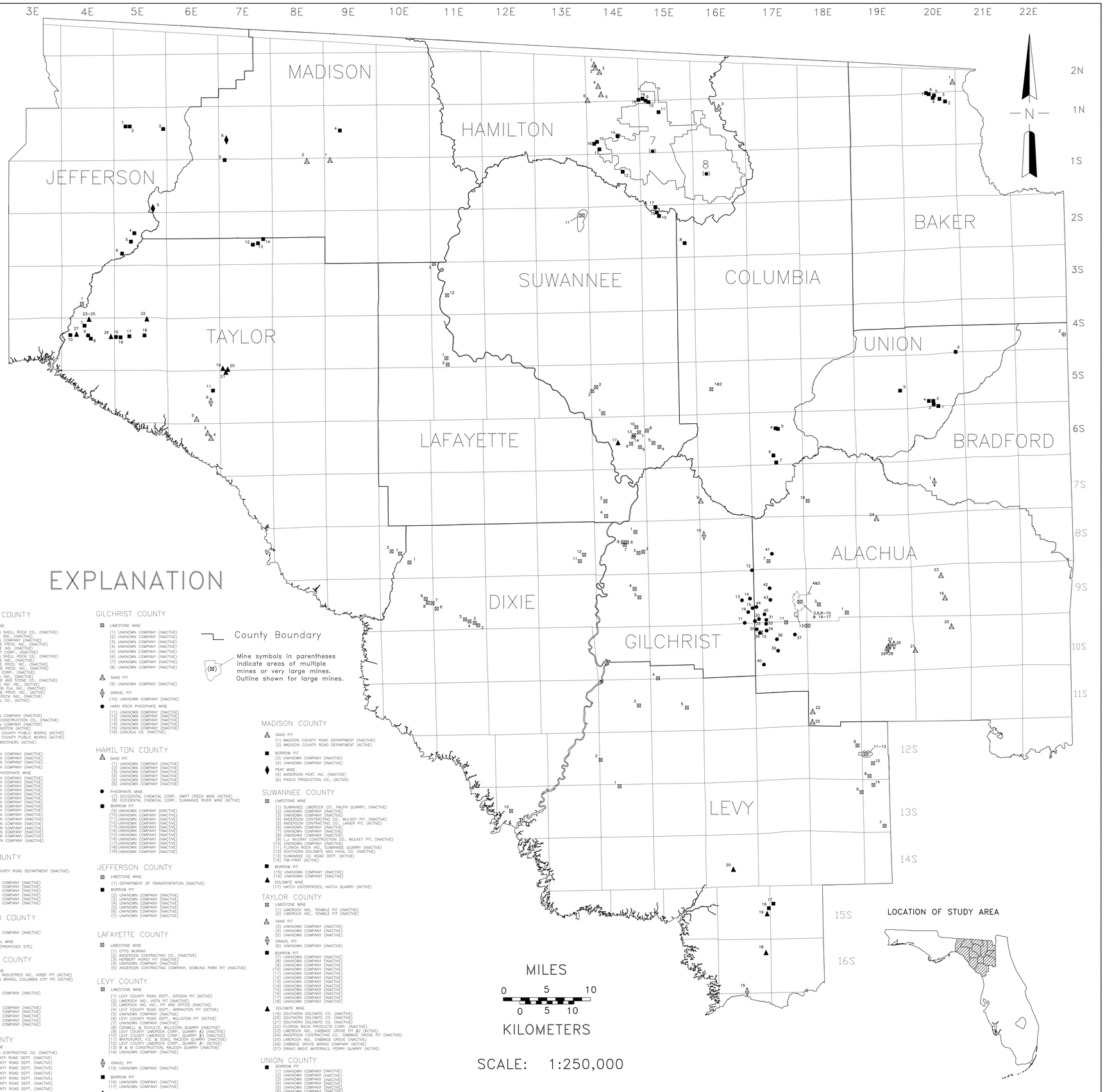
Lane, B.E., Hoenstine, R., Yon, J.W., and Spencer, S., 1988, Mineral Resources of Levy County, Florida: Florida Geological Survey Map Series n. 116.

Lane , B.E., Hoenstine, R., Rupert, F., and Spencer, S., 1991, Mineral Resources of Union and Bradford Counties, Florida: Florida Geological Survey Map Series n. 134.

Puri, H., Yon, J.W., and Oglesby, W., 1967, Geology of Dixie and Gilchrist Counties, Florida: Florida Geological Survey Bulletin n. 49, 155 p.

Vernon, R., 1951, Geology of Citrus and Levy Counties, Florida: Florida Geological Survey Bulletin n. 33, 256 p.

Yon, J.W., 1966, Geology of Jefferson County, Florida: Florida Geological Survey Bulletin n. 48, 119 p.



EXPLANATION

County Boundary

Mine symbols in parentheses indicate areas of multiple mines or very large mines. Outline shown for large mines.

ALACHUA COUNTY

LIMESTONE MINE
(1) WILLISTON SHELL ROCK CO., (INACTIVE)
(2) LIMEROCK IND., (INACTIVE)
(3) UNKNOWN COMPANY (INACTIVE)
(4) LIMESTONE PROD. INC., (INACTIVE)
(5) HOLDALLE IND. (INACTIVE)
(6) NEWBERRY CORP., (INACTIVE)
(7) CONRAIL & SCHULTZ, GAINESVILLE, (INACTIVE)
(8) HOLDALLE IND., (INACTIVE)
(9) LIMESTONE PROD. INC., (INACTIVE)
(10) LIMESTONE PROD. INC., (INACTIVE)
(11) ALACHUA CORP., (INACTIVE)
(12) LIMEROCK IND., (ACTIVE)
(13) DIXIE LIME AND STONE CO., (INACTIVE)
(14) LIMEROCK IND. INC., (ACTIVE)
(15) DICKERSON FLA. INC., (INACTIVE)
(16) LIMEROCK IND. INC., (ACTIVE)
(17) FLORIDA ROCK IND., (ACTIVE)
(18) S.M. WALL CO., (ACTIVE)

SAND PIT
(19) UNKNOWN COMPANY (INACTIVE)
(20) CRAGGO CONSTRUCTION CO., (INACTIVE)
(21) UNKNOWN COMPANY (INACTIVE)
(22) DAM JOHNSTON (ACTIVE)
(23) ALACHUA COUNTY PUBLIC WORKS (ACTIVE)
(24) ALACHUA COUNTY PUBLIC WORKS (ACTIVE)
(25) OSTEEN BROTHERS (ACTIVE)

GRAVEL PIT
(26) UNKNOWN COMPANY (INACTIVE)
(27) UNKNOWN COMPANY (INACTIVE)
(28) UNKNOWN COMPANY (ACTIVE)
(29) UNKNOWN COMPANY (ACTIVE)

HARD ROCK PHOSPHATE MINE
(30) UNKNOWN COMPANY (INACTIVE)
(31) UNKNOWN COMPANY (INACTIVE)
(32) UNKNOWN COMPANY (INACTIVE)
(33) UNKNOWN COMPANY (INACTIVE)
(34) UNKNOWN COMPANY (INACTIVE)
(35) UNKNOWN COMPANY (INACTIVE)
(36) UNKNOWN COMPANY (INACTIVE)
(37) UNKNOWN COMPANY (INACTIVE)
(38) UNKNOWN COMPANY (INACTIVE)
(39) UNKNOWN COMPANY (INACTIVE)
(40) UNKNOWN COMPANY (INACTIVE)
(41) UNKNOWN COMPANY (INACTIVE)
(42) UNKNOWN COMPANY (INACTIVE)
(43) UNKNOWN COMPANY (INACTIVE)
(44) UNKNOWN COMPANY (INACTIVE)
(45) UNKNOWN COMPANY (INACTIVE)

BAKER COUNTY

SAND PIT
(1) BAKER COUNTY ROAD DEPARTMENT (INACTIVE)

BORROW PIT
(2) UNKNOWN COMPANY (INACTIVE)
(3) UNKNOWN COMPANY (INACTIVE)
(4) UNKNOWN COMPANY (INACTIVE)
(5) UNKNOWN COMPANY (INACTIVE)
(6) UNKNOWN COMPANY (INACTIVE)
(7) UNKNOWN COMPANY (INACTIVE)

BRADFORD COUNTY

GRAVEL PIT
(1) UNKNOWN COMPANY (INACTIVE)

HEAVY MINERAL MINE
(2) DUPONT, (PROPOSED SITE)

COLUMBIA COUNTY

LIMESTONE MINE
(1) LIMEROCK INDUSTRIES INC., KIRBY PIT (ACTIVE)
(2) ANDERSON MINING, COLUMBIA CITY PIT (ACTIVE)

SAND PIT
(3) UNKNOWN COMPANY (INACTIVE)

BORROW PIT
(4) UNKNOWN COMPANY (INACTIVE)
(5) UNKNOWN COMPANY (INACTIVE)
(6) UNKNOWN COMPANY (INACTIVE)
(7) UNKNOWN COMPANY (INACTIVE)
(8) UNKNOWN COMPANY (INACTIVE)

DIXIE COUNTY

LIMESTONE MINE
(1) ANDERSON CONTRACTING CO. (INACTIVE)
(2) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(3) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(4) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(5) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(6) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(7) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(8) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(9) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(10) DIXIE COUNTY ROAD DEPT. (INACTIVE)
(11) UNKNOWN COMPANY (INACTIVE)
(12) UNKNOWN COMPANY (INACTIVE)

GILCHRIST COUNTY

LIMESTONE MINE
(1) UNKNOWN COMPANY (INACTIVE)
(2) UNKNOWN COMPANY (INACTIVE)
(3) UNKNOWN COMPANY (INACTIVE)
(4) UNKNOWN COMPANY (INACTIVE)
(5) UNKNOWN COMPANY (INACTIVE)
(6) UNKNOWN COMPANY (INACTIVE)
(7) UNKNOWN COMPANY (INACTIVE)
(8) UNKNOWN COMPANY (INACTIVE)

SAND PIT
(9) UNKNOWN COMPANY (INACTIVE)

GRAVEL PIT
(10) UNKNOWN COMPANY (INACTIVE)

HARD ROCK PHOSPHATE MINE
(11) UNKNOWN COMPANY (INACTIVE)
(12) UNKNOWN COMPANY (INACTIVE)
(13) UNKNOWN COMPANY (INACTIVE)
(14) UNKNOWN COMPANY (INACTIVE)
(15) UNKNOWN COMPANY (INACTIVE)
(16) LONCALA CO. (INACTIVE)

HAMILTON COUNTY

SAND PIT
(1) UNKNOWN COMPANY (INACTIVE)
(2) UNKNOWN COMPANY (INACTIVE)
(3) UNKNOWN COMPANY (INACTIVE)
(4) UNKNOWN COMPANY (INACTIVE)
(5) UNKNOWN COMPANY (INACTIVE)
(6) UNKNOWN COMPANY (INACTIVE)

PHOSPHATE MINE
(7) OCCIDENTAL CHEMICAL CORP., SWIFT CREEK MINE (ACTIVE)
(8) OCCIDENTAL CHEMICAL CORP., SUWANNEE RIVER MINE (ACTIVE)

BORROW PIT
(9) UNKNOWN COMPANY (INACTIVE)
(10) UNKNOWN COMPANY (INACTIVE)
(11) UNKNOWN COMPANY (INACTIVE)
(12) UNKNOWN COMPANY (INACTIVE)
(13) UNKNOWN COMPANY (INACTIVE)
(14) UNKNOWN COMPANY (INACTIVE)
(15) UNKNOWN COMPANY (INACTIVE)
(16) UNKNOWN COMPANY (INACTIVE)
(17) UNKNOWN COMPANY (INACTIVE)
(18) UNKNOWN COMPANY (INACTIVE)
(19) UNKNOWN COMPANY (INACTIVE)

JEFFERSON COUNTY

LIMESTONE MINE
(1) DEPARTMENT OF TRANSPORTATION (INACTIVE)

BORROW PIT
(2) UNKNOWN COMPANY (INACTIVE)
(3) UNKNOWN COMPANY (INACTIVE)
(4) UNKNOWN COMPANY (INACTIVE)
(5) UNKNOWN COMPANY (INACTIVE)
(6) UNKNOWN COMPANY (INACTIVE)
(7) UNKNOWN COMPANY (INACTIVE)

LAFAYETTE COUNTY

LIMESTONE MINE
(1) OTTIS MURRAY
(2) ANDERSON CONTRACTING CO., (INACTIVE)
(3) HERBERT HORST PIT (INACTIVE)
(4) UNKNOWN COMPANY (INACTIVE)
(5) ANDERSON CONTRACTING COMPANY, DOWLING PARK PIT (INACTIVE)

LEVY COUNTY

LIMESTONE MINE
(1) LEVY COUNTY ROAD DEPT., GRISSIN PIT (ACTIVE)
(2) LIMEROCK IND., VISTA PIT (INACTIVE)
(3) LIMEROCK IND. INC., PIT AND OFFICE (INACTIVE)
(4) LEVY COUNTY ROAD DEPT., ARRINGTON PIT (ACTIVE)
(5) UNKNOWN COMPANY (INACTIVE)
(6) LEVY COUNTY ROAD DEPT., WILLISTON PIT (ACTIVE)
(7) UNKNOWN COMPANY (INACTIVE)
(8) CONRELL & SCHULTZ, WILLISTON QUARRY (INACTIVE)
(9) LEVY COUNTY LIMEROCK CORP., QUARRY #2 (INACTIVE)
(10) LEVY COUNTY LIMEROCK CORP., QUARRY #3 (INACTIVE)
(11) WHITEHURST, V.E. & SONS, RALEIGH QUARRY (INACTIVE)
(12) LEVY COUNTY LIMEROCK CORP., QUARRY #1 (ACTIVE)
(13) W & M CONSTRUCTION, RALEIGH QUARRY (INACTIVE)
(14) UNKNOWN COMPANY (INACTIVE)

GRAVEL PIT
(15) UNKNOWN COMPANY (INACTIVE)

BORROW PIT
(16) UNKNOWN COMPANY (INACTIVE)
(17) UNKNOWN COMPANY (INACTIVE)

DOLOMITE MINE
(18) DIXIE LIME PROD. CO., LEBANNON QUARRY (INACTIVE)
(19) DIXIE LIME & STONE CO. (INACTIVE)
(20) FLORIDA ROCK IND., GULF HAMMOCK MINE (ACTIVE)

MADISON COUNTY

SAND PIT
(1) MADISON COUNTY ROAD DEPARTMENT (INACTIVE)
(2) MADISON COUNTY ROAD DEPARTMENT (ACTIVE)

BORROW PIT
(3) UNKNOWN COMPANY (INACTIVE)
(4) UNKNOWN COMPANY (INACTIVE)

PEAT MINE
(5) ANDERSON PEAT, INC. (INACTIVE)
(6) PASCO PRODUCTION CO., (ACTIVE)

SUWANNEE COUNTY

LIMESTONE MINE
(1) SUWANNEE LIMEROCK CO., RALPH QUARRY, (INACTIVE)
(2) UNKNOWN COMPANY (INACTIVE)
(3) UNKNOWN COMPANY (INACTIVE)
(4) ANDERSON CONTRACTING CO., MULKEY PIT, (INACTIVE)
(5) ANDERSON CONTRACTING CO., LANIER PIT, (ACTIVE)
(6) UNKNOWN COMPANY (INACTIVE)
(7) UNKNOWN COMPANY (INACTIVE)
(8) UNKNOWN COMPANY (INACTIVE)
(9) L.J. McCRAY CONSTRUCTION CO., MULKEY PIT, (INACTIVE)
(10) UNKNOWN COMPANY (INACTIVE)
(11) FLORIDA ROCK IND., SUWANEE QUARRY (INACTIVE)
(12) SOUTHERN DOLOMITE AND HICAL CO. (INACTIVE)
(13) SUWANNEE CO. ROAD DEPT. (ACTIVE)
(14) TIM-PRAT (ACTIVE)

BORROW PIT
(15) UNKNOWN COMPANY (INACTIVE)
(16) UNKNOWN COMPANY (INACTIVE)

DOLOMITE MINE
(17) HATCH ENTERPRISES, HATCH QUARRY (ACTIVE)

TAYLOR COUNTY

LIMESTONE MINE
(1) LIMEROCK IND., TENMILE PIT (INACTIVE)
(2) LIMEROCK IND., TENMILE PIT (INACTIVE)

SAND PIT
(3) UNKNOWN COMPANY (INACTIVE)
(4) UNKNOWN COMPANY (INACTIVE)
(5) UNKNOWN COMPANY (INACTIVE)

GRAVEL PIT
(6) UNKNOWN COMPANY (INACTIVE)

BORROW PIT
(7) UNKNOWN COMPANY (INACTIVE)
(8) UNKNOWN COMPANY (INACTIVE)
(9) UNKNOWN COMPANY (INACTIVE)
(10) UNKNOWN COMPANY (INACTIVE)
(11) UNKNOWN COMPANY (INACTIVE)
(12) UNKNOWN COMPANY (INACTIVE)
(13) UNKNOWN COMPANY (INACTIVE)
(14) UNKNOWN COMPANY (INACTIVE)
(15) UNKNOWN COMPANY (INACTIVE)
(16) UNKNOWN COMPANY (INACTIVE)
(17) UNKNOWN COMPANY (INACTIVE)
(18) UNKNOWN COMPANY (INACTIVE)

DOLOMITE MINE
(19) SOUTHERN DOLOMITE CO. (INACTIVE)
(20) SOUTHERN DOLOMITE CO. (INACTIVE)
(21) SOUTHERN DOLOMITE CO. (INACTIVE)
(22) FLORIDA ROCK PRODUCTS CORP. (INACTIVE)
(23) LIMEROCK IND., CABBAGE GROVE PIT #2 (ACTIVE)
(24) ANDERSON CONTRACTING CO., CABBAGE GROVE PIT (INACTIVE)
(25) LIMEROCK IND., CABBAGE GROVE (ACTIVE)
(26) CABBAGE GROVE MINING COMPANY (ACTIVE)
(27) DRAVO BASIC MATERIALS, PIERRY QUARRY (ACTIVE)

UNION COUNTY

BORROW PIT
(1) UNKNOWN COMPANY (INACTIVE)
(2) UNKNOWN COMPANY (INACTIVE)
(3) UNKNOWN COMPANY (INACTIVE)
(4) UNKNOWN COMPANY (INACTIVE)
(5) UNKNOWN COMPANY (INACTIVE)
(6) UNKNOWN COMPANY (INACTIVE)

(MINE OWNERSHIP AND CURRENT STATUS IS BASED ON THE BEST AVAILABLE INFORMATION, BUT IS SUBJECT TO CHANGE.)