LAND APPLICATION OF BIOSOLIDS

LEE JOHNSON

KW 19 (FIELDS 1-6, 20, 21)

KING WILLIAM COUNTY, VIRGINIA

MAY 2013

SYNAGRO

May 14, 2013

Mr. Seth Mullins
Dept. of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

Dear Mr. Mullins:

Transmitted herein for your consideration is land application site for Lee Johnson (designated as KW 19, (fields 1-6, 20-21) located in King William County, Virginia. This submission contains strictly site specific information. Please refer to the operations and maintenance manual submitted under separate cover for all non-site specific information.

Do not hesitate to contact me at (804) 443-2170 should you have any questions or require additional information.

Sincerely,

D. Steve McMahon

D. Steve McMahon
Sr. Technical Services Director

/cmw

10647 Tidewater Trail, Champlain, VA 22438 • Phone (804) 443-2170 • Fax: (804) 223-2214

SYNAGRO

Piedmont Regional Office
JUN 03 2013
RECEIVED

FIELD SUMMARY SHEET

Lee Johnson **KW 19**

SYNAGRO FIELD #	GROSS ACRES	NET ACRES	FSA TRACT #	FSA FIELD #	TOPO QUAD	OWNER
19-1	10.4	9.7	902	3	New Kent	M. V. Johnson, Jr.
19-2	16.9	15.8	902	4	New Kent	M. V. Johnson, Jr.
19-3	27.4	22.6	902	2	New Kent	M. V. Johnson, Jr.
19-4	26.3	23.3	902	NA	New Kent	M. V. Johnson, Jr.
19-5	26.8	26.8	902	1	New Kent	M. V. Johnson, Jr.
19-6	15	15	902	NA	New Kent	M. V. Johnson, Jr.
19-20	62.4	58.9	NA	NA	New Kent	RJ's Drywall, LLC
19-21	18.5	18.5	NA	NA	New Kent	Robert Lee & Robin Johnson
TOTALS:	203.7	190.6				

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 4-15-13 between RJs Drywall, LLC referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in King William, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
55-48			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☑ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids	Water treatment residuals	Food processing waste	Other industrial sludges
X Yes, ☐ No	X Yes ☐ No	X Yes ☐ No	X Yes ☐ No

R. J's Drywall
Robert Lee Johnson, - owner — R Lee Johnson — 1173 Secton Ln West Point VA 23181

Landowner – Printed Name, Title — Signature — Mailing Address

Permittee:

Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

D. Steve McMahon — D. Steve McMahon — 10647 Tidewater Trail Champlain, VA 22560

Permittee – Authorized Representative Printed Name — Signature — Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro **County or City:** King William

Landowner: R. J's Drywall

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.

2. Public Access
   a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
   b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
   c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.

3. Crop Restrictions:
   a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
   b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
   c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
   d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
   e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).

4. Livestock Access Restrictions:
   Following biosolids application to pasture or hayland sites:
   a. Meat producing livestock shall not be grazed for 30 days,
   b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
   c. Other animals shall be restricted from grazing for 30 days;

5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;

6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

R Lee [signature] 4/15/13

Landowner's Signature Date

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 4-15-13 between MY Johnson Jr referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in _____, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
55 49			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☑ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids	Water treatment residuals	Food processing waste	Other industrial sludges
X Yes ☐ No	X Yes ☐ No	X Yes ☐ No	X Yes ☐ No

M Y Johnson, Jr

Landowner – Printed Name, Title | Signature | Mailing Address

Permittee:

Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

D. Steve McMahon | D. Steve McMahon | 10647 Tidewater Trail Champlain, VA 22438

Permittee – Authorized Representative Printed Name | Signature | Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro **County or City:** King William County

Landowner: M. V. Johnson

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.

2. Public Access
   a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
   b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
   c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.

3. Crop Restrictions:
   a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
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   c. Other animals shall be restricted from grazing for 30 days;

5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;

6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

M V J 4/15/13

Landowner's Signature Date

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 4-15-13 between Robert Lee & Robin Johnson referred to here as "Landowner", and Synagro, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

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Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
55 52			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:
☐ The Landowner is the sole owner of the properties identified herein.
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Class B biosolids	Water treatment residuals	Food processing waste	Other industrial sludges
X Yes ☐ No	X Yes ☐ No	X Yes ☐ No	X Yes ☐ No

Robert Lee Johnson
Robin G Johnson — Landowner – Printed Name, Title

Robin G Johnson — Signature

1173 Seaton Ln Westpoint VA 23181 — Mailing Address

Permittee:

Synagro, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

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D. Steve McMahon — Permittee – Authorized Representative Printed Name

D. Steve McMahon — Signature

10647 Tidewater TR. Champlain, VA 22438 — Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Synagro _____ **County or City:** _____

Landowner: _____

Landowner Site Management Requirements:

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6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

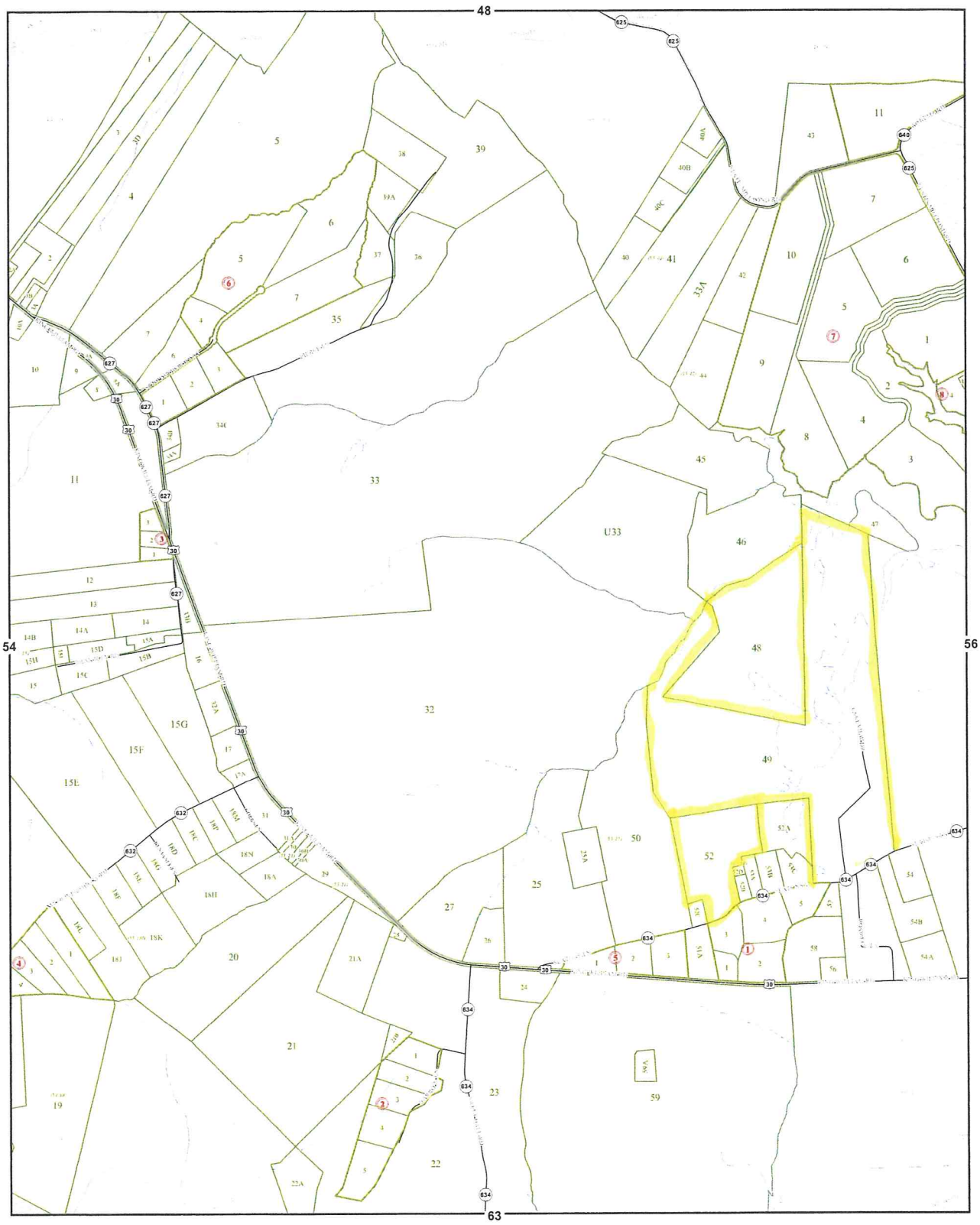
Robin G. 4/15/13

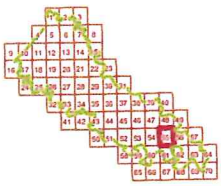
Landowner's Signature Date

KING WILLIAM COUNTY

Last Updated April 2013

Map information is believed to be accurate, but accuracy is not guaranteed. Any errors or omissions should be reported to the Commissioner of Revenue's office. In no event will King William County be liable for any damages or other pecuniary loss that may arise from the use of this data.





WEST POINT DISTRICT

N

600 300 0 600 1,200 1,800 Feet

SECTION 55

LEGEND

County Boundary
Railroads
Routes
Roads / Alleys
Lots
Sections / Blocks
Streams
Water Bodies

Tax ID Landowner Identification Sheet

Landowner	Field #	Tax ID
M. V. Johnson, Jr.	19-01	55-49
M. V. Johnson, Jr.	19-02	55-49
M. V. Johnson, Jr.	19-03	55-49
M. V. Johnson, Jr.	19-04	55-49
M. V. Johnson, Jr.	19-05	55-49
M. V. Johnson, Jr.	19-06	55-49
RJ's Drywall, LLC	19-20	55-48
Robert Lee & Robin Johnson	19-21	55-52

Field #	Latitude (north)	Longitude (west)
19-01	37°35'46"	76°52'50"
19-02	37°36'50"	76°52'42"
19-03	37°36'06"	76°52'43"
19-04	37°36'21"	76°52'46"
19-05	37°35'54"	76°53'12"
19-06	37°36'02"	76°53'13"
19-20	37°36'15"	76°53'00"
19-21		

MAP LEGEND

House/Dwelling with a well

Rock Outcrop

Well

Lake/Pond

Slope which exceeds 15%

Intermittent Stream

Stream/River

Agricultural/Drainage Ditch

Field boundary

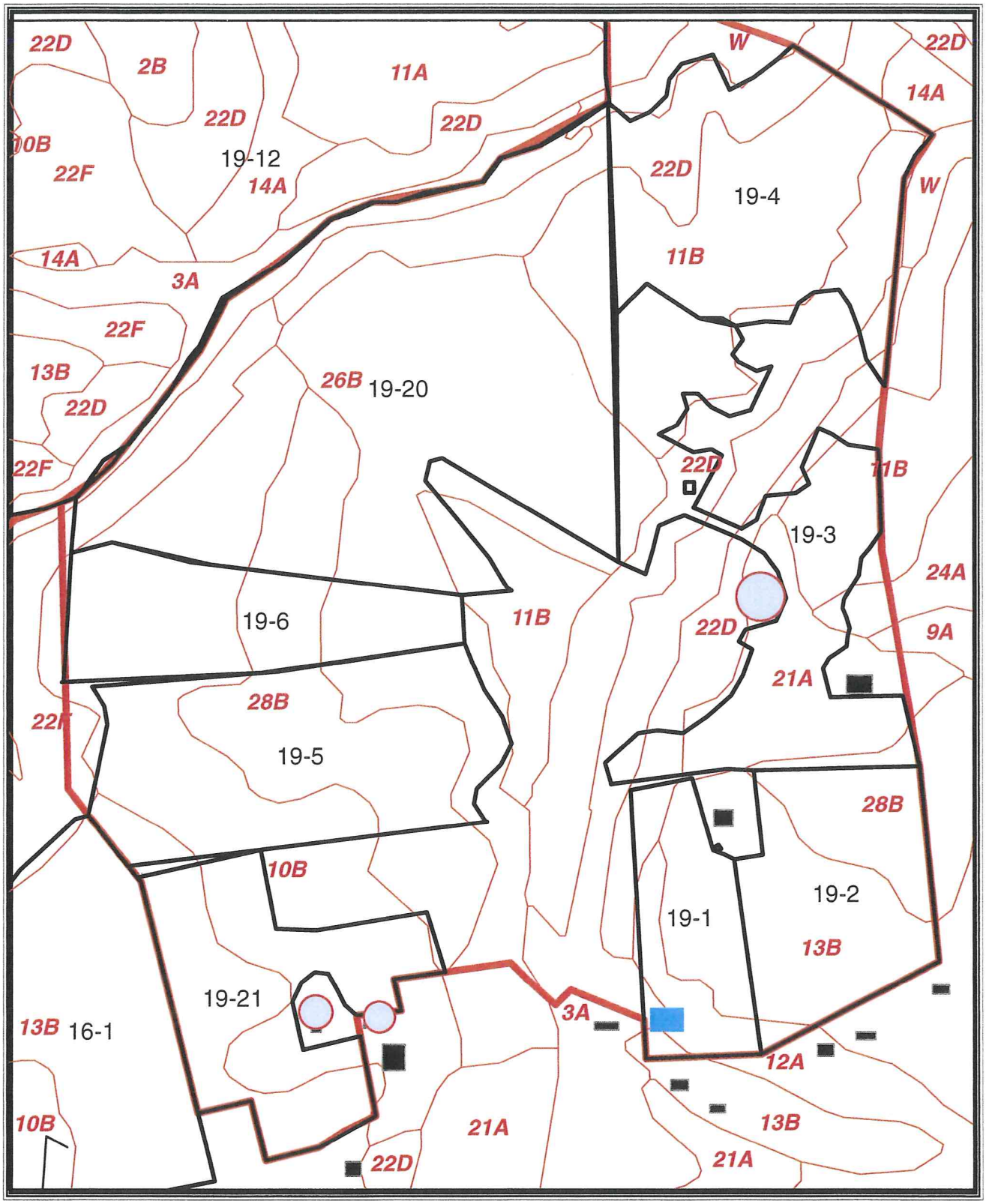
Property Line

SYNAGRO

SYNAGRO

A Residuals Management Company

Lee Johnson
KW 19 (Fields1-6, 20,21)



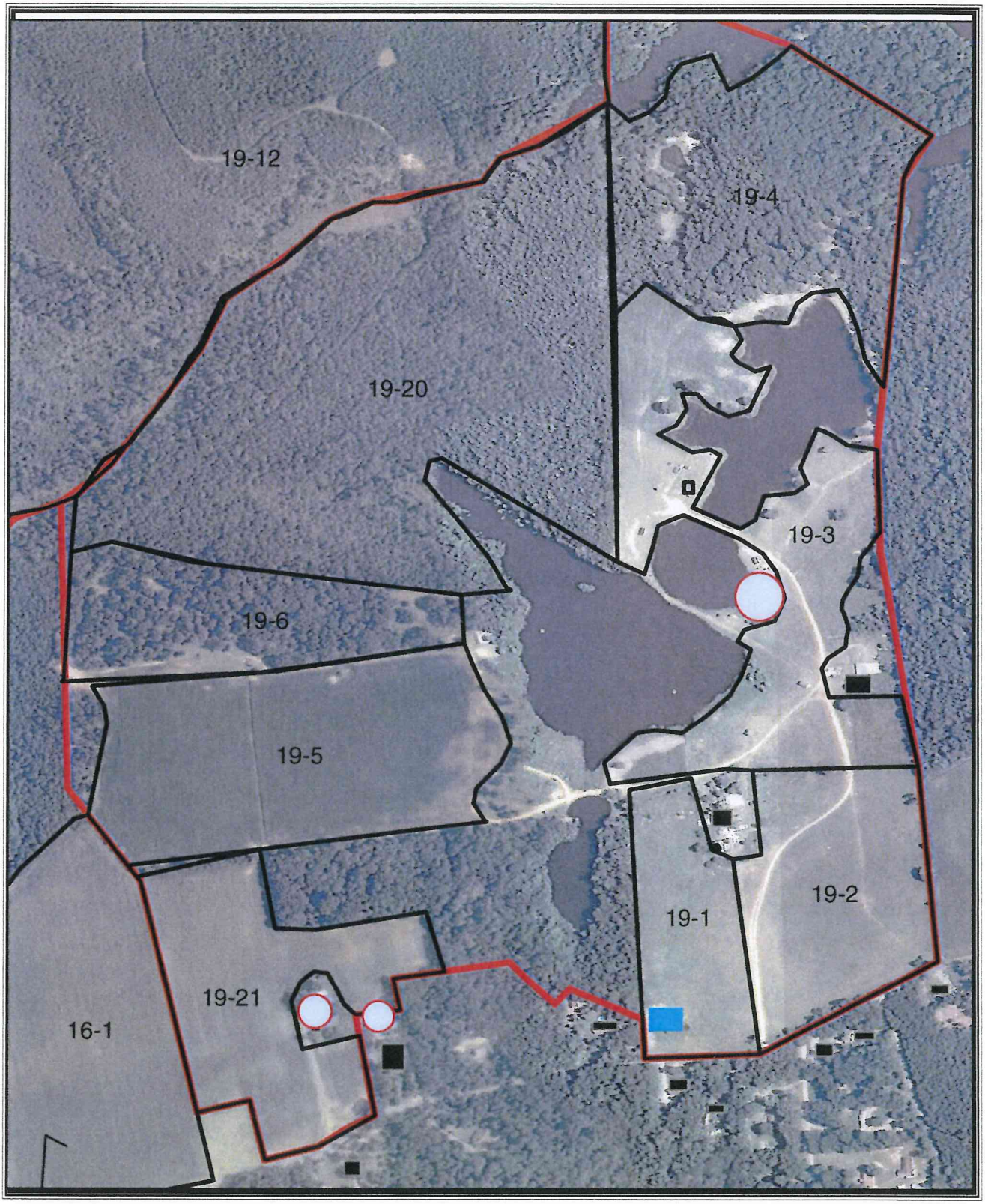
1 inch = 663.333333 feet

1:7,960

SYNAGRO

A Residuals Management Company

Lee Johnson
KW 19 (Fields1-6, 20,21)



N

1 inch = 663.333333 feet

1:7,960

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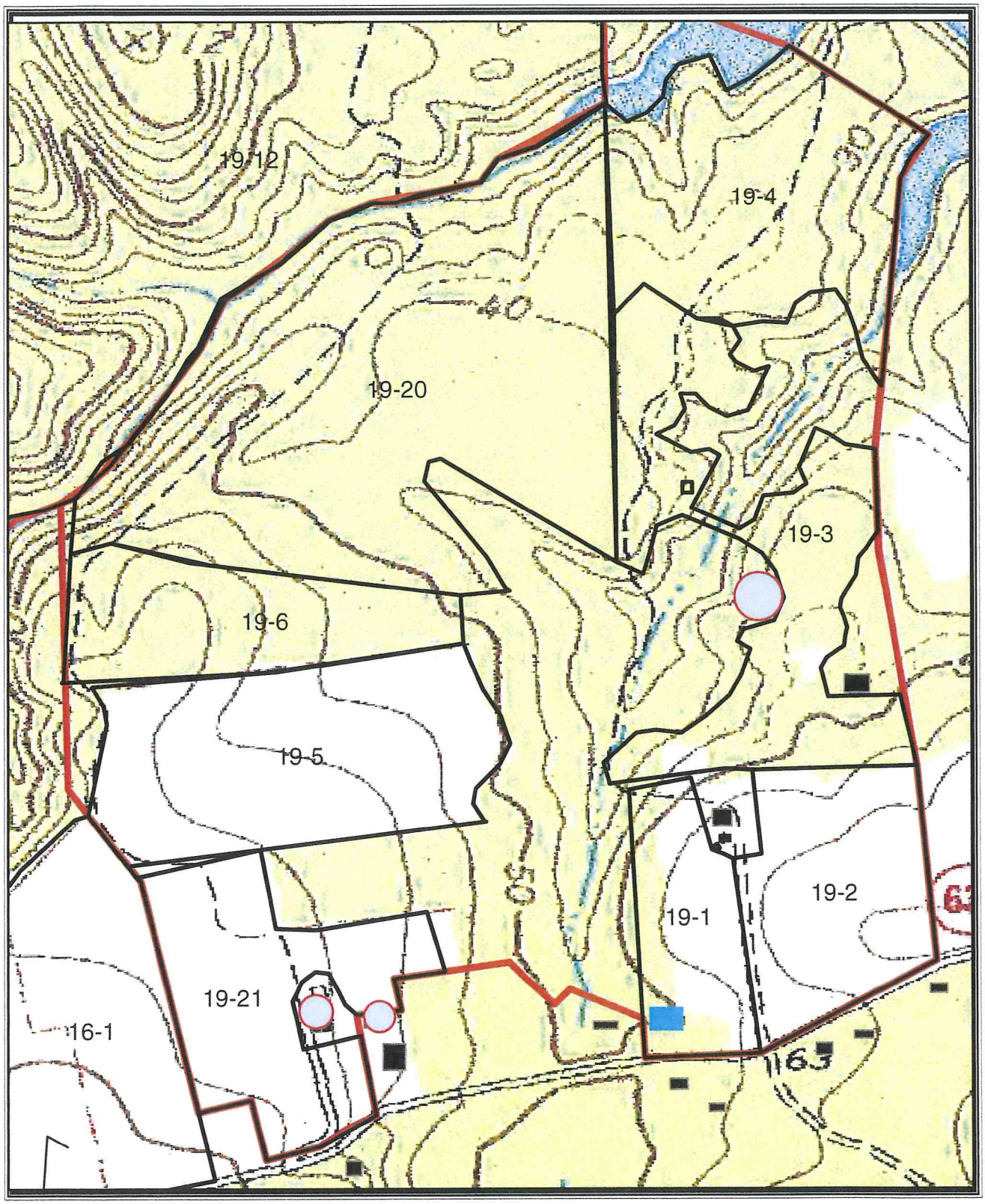
Lee Johnson
KW 19 (Fields1-6, 20,21)



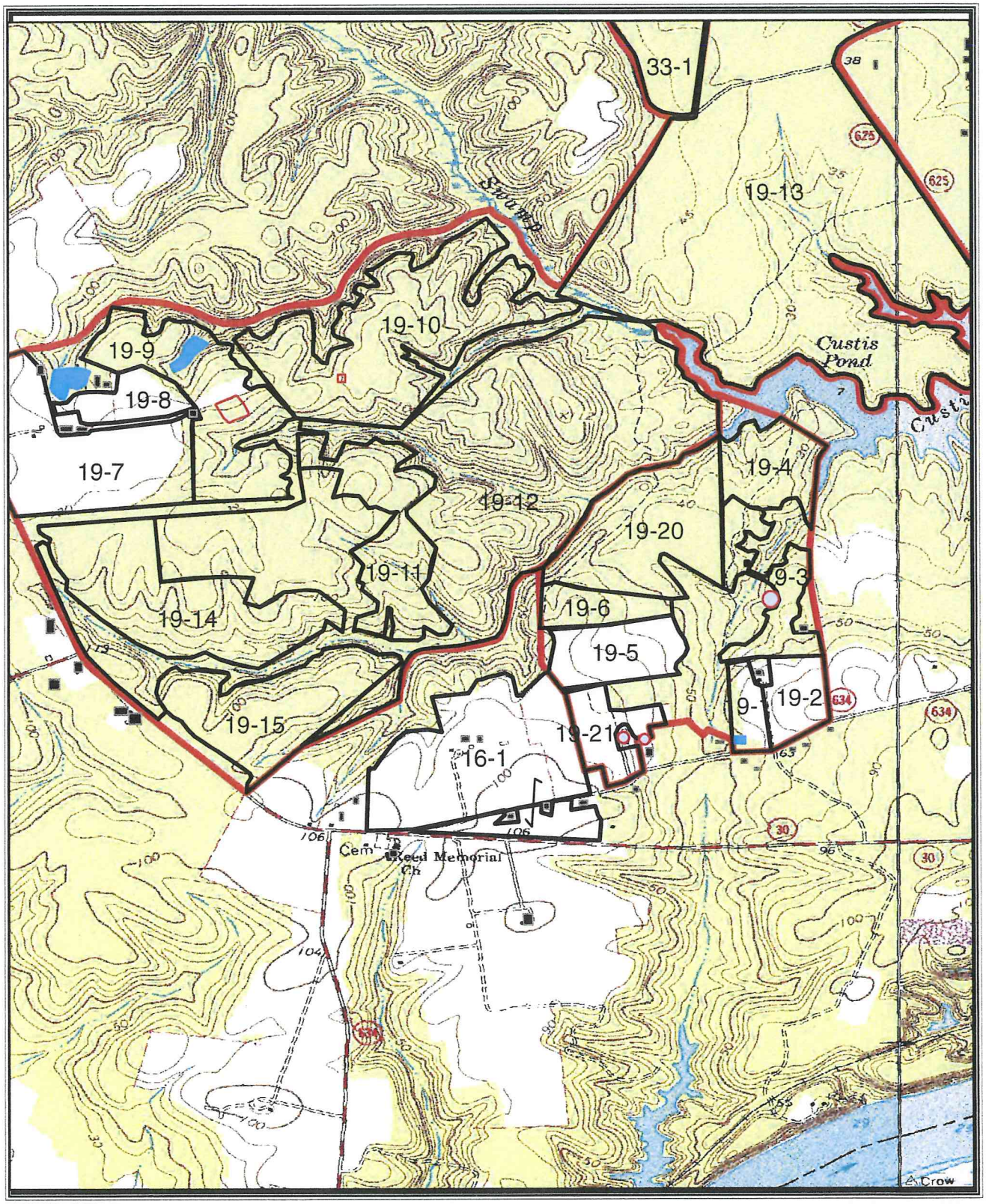
1 inch = 663.333333 feet

1:7,960

SYNAGRO

A Residuals Management Company

Lee Johnson
KW 19 (Fields1-6, 20,21)

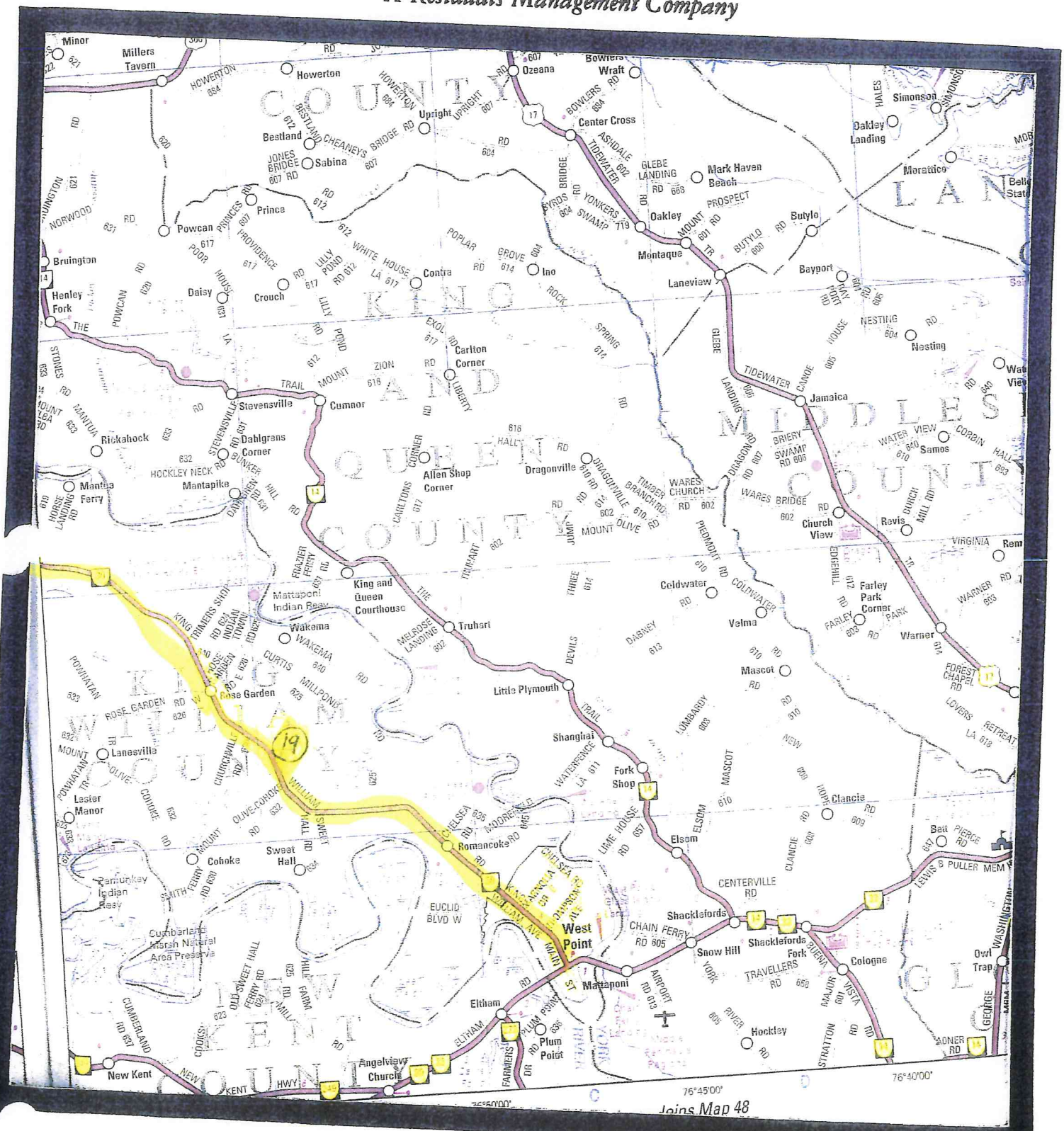


1 inch = 2,000 feet

1:24,000

SYNAGRO

A Residuals Management Company



SCALE 1:150,000

VICINITY MAP