Quasar: Application Rate Calibration Log

All Application Rates must be verified by measurement of distance designated for equipment used for beneficial use application. Calibration should be done upon arrival at each beneficial use land application site.

Date	Desired App Rate (gal/acre)	Respective Distance (ft)	Distance Measured (y/n)	Equipment	Site #	Initials
4/15	10,000	1761	Y	[illegible]	[illegible]	[illegible]

RE BUA Operator Daily Log

Site #: MOQ-05-05 Date: 4-17-16

Hours of Operation: 800 (am) / pm to 430 am / (pm)

Weather Conditions: Sunny & Dry

Are Signs Posted? (yes) / no)

Buffers Flagged? (yes) / no)

Does the field have drainage (tile)? (yes) / no)

Are Tile Outlets Plugged? (yes / (no)

Method of Application? (surface app / (injection)) App Rate (gal/acre): 10000

Next Year's Crop: Corn

Number of Loads to Site: 22

Are Hauling Logs Attached? (yes) / No)

Gallon Applied To Site On This Date: 132,000

Approximate Acres Applied On This Date: 13.2

Notes:

Operator Name: Timothy Dawson

Operator Signature: Timothy R Dawson

RE Operator Signature:

For Assistance:
quasar equate Manager: Samuel Mullins (216) 978-4697
quasar V.P. of Technical Affairs: Bruce Bailey (216) 538-1151
Emergency Spill Hotline: 1-800-282-9378

NATIONAL WEATHER SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

News Headlines

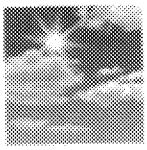
- 2016 Spotter Training Class Schedule
- Latest Snowfall Climatology
- Frost/Freeze Info

En Español Share

Current conditions at

Delaware Municipal Airport (KDLZ)

Lat: 40.40°N Lon: -82.96°W Elev: 945ft



Fair

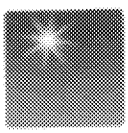
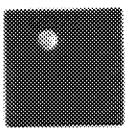
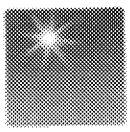
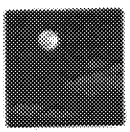
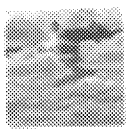
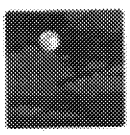
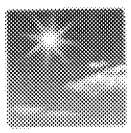
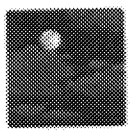
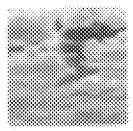
61°F

16°C

Humidity	39%
Wind Speed	Calm
Barometer	30.43 in
Dewpoint	36°F (2°C)
Visibility	10.00 mi
Last update	17 Apr 9:14 am EDT

Extended Forecast for

Ashley OH

Today	Tonight	Monday	Monday Night	Tuesday	Tuesday Night	Wednesday	Wednesday Night	Thursday
								
Sunny	Clear	Sunny	Mostly Clear	Partly Sunny	Partly Cloudy	Sunny	Partly Cloudy	Partly Sunny
High: 79 °F	Low: 49 °F	High: 80 °F	Low: 51 °F	High: 68 °F	Low: 42 °F	High: 67 °F	Low: 46 °F	High: 70 °F

Detailed Forecast

Today
Sunny, with a high near 79. Light east wind.

Tonight
Clear, with a low around 49. Calm wind becoming northeast around 5 mph.

Monday
Sunny, with a high near 80. Calm wind becoming northwest around 6 mph in the afternoon.

Monday Night
Mostly clear, with a low around 51. Northwest wind around 8 mph.

Tuesday
Partly sunny, with a high near 68. North wind 7 to 10 mph.

Tuesday Night
Partly cloudy, with a low around 42.

Wednesday
Sunny, with a high near 67.

Wednesday Night
Partly cloudy, with a low around 46.

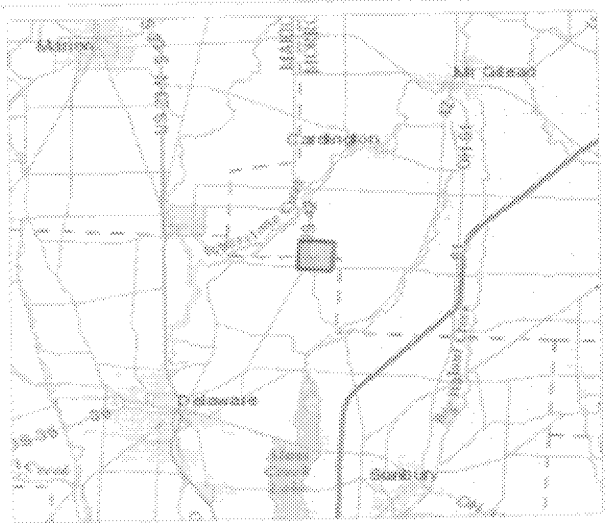
Thursday
Partly sunny, with a high near 70.

Thursday Night
A chance of showers and thunderstorms. Mostly cloudy, with a low around 53. Chance of precipitation is 40%.

Friday
Showers and thunderstorms likely. Mostly cloudy, with a high near 66. Chance of precipitation is 60%.

Friday Night
Mostly cloudy, with a low around 47.

Saturday
Mostly sunny, with a high near 65.



Forecast Area

Point Forecast:
Ashley OH
40.42°N 82.96°W (Elev. 998 ft)

Last Update:
5:51 am EDT Apr 17, 2016

Forecast Valid:
9am EDT Apr 17, 2016-6pm EDT Apr 23, 2016

Additional Resources

Radar & Satellite Image

LTP-001

Quasar Daily Effluent Route Log

5755 Granger Road Suite 320
Cleveland, OH 44131
216-986-9999

Date: 4/17/16
Start Time: 07:30
End Time: 4:30

Quasar Plant:

#	Field ID	Time In (Plant)	Time Out (Plant)	Gallons Hauled	Time In (Field)	Time Out (Field)
1	MOG-05-05	7:30 am	08:15	6000	08:25	08:50
2		09:05	09:18	6000	09:27	09:40
3		09:50	10:05	[illegible]	10:19	10:25
4		10:35	10:48	6000	10:55	11:10
5		11:23	11:36	6000	11:46	12:00
6		12:10	12:18	6000	12:27	12:40
7		12:51	100	6000	1:10	1:34
8		1:35	1:41	6000	1:52	2:06
9		2:17	2:23	6000	2:32	2:45
10		2:56	3:05	6000	3:14	3:28
11		3:39	3:47	6000	3:52	4:10
12						
13						
14						
15						
16						
17						
18						
19						
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21						
22						
23						
24						

Company: Reverqy

Truck Number: 171 / R20

Driver Sig: Ron Beaver

Date: 4/17/16

Plant Operator Sig:

Date:

Comments:

YOU ARE REQUIRED TO CALL IN THIS INFORMATION AND SUBMIT THIS LOG SHEET TO QUASAR
CALL IN #: 216-395-7415
PROVIDE: TOTAL HOURS, NUMBER OF LOADS, QUASAR FACILITY, FIELD I.D.

LTP-001

Quasar Daily Effluent Route Log

5755 Granger Road Suite 320
Cleveland, OH 44131
216-986-9999

Date: 4/17/16
Start Time: 7:30am
End Time: 4:00pm
Quasar Plant: Emerald

#	Field ID	Time In (Plant)	Time Out (Plant)	Gallons Hauled	Time In (Field)	Time Out (Field)
1	MOB-05-05	7:30am	8:15am	6000	8:22am	8:42am
2		8:55am	9:05am		9:13am	9:25am
3		9:39am	9:49am		9:55am	10:10am
4		10:17am	10:27am		10:35am	10:47am
5		10:55am	11:05am		11:11am	11:23am
6		11:38am	11:50am		12:00pm	12:15pm
7		12:27pm	12:35pm		12:45pm	12:55pm
8		1:07pm	1:15pm		1:24pm	1:35pm
9		1:48pm	1:55pm		2:05pm	2:17pm
10		2:32pm	2:38pm		2:46pm	2:57pm
11		3:10pm	3:17pm		3:25pm	3:35pm
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Company: Benesy
Truck Number: 173
Driver Sig: [signature]
Date: 4/17/16

Plant Operator Sig:
Date:

Comments:

YOU ARE REQUIRED TO CALL IN THIS INFORMATION AND SUBMIT THIS LOG SHEET TO QUASAR
CALL IN #: 216-395-7415
PROVIDE: TOTAL HOURS, NUMBER OF LOADS, QUASAR FACILITY, FIELD I.D.

Google earth

feet 500

meters 100

LTP-001

Quasar Daily Effluent Route Log

5755 Granger Road Suite 320
Cleveland, OH 44131
216-986-9999

Date: 4-17-16
Start Time: 7AM
End Time: 6PM
Quasar Plant:

#	Field ID	Time In (Plant)	Time Out (Plant)	Gallons Hauled	Time In (Field)	Time Out (Field)
1	MOQ-OS-07	8:15	9:15	10000	9:45	10:00
2		10:30	11:05	6000	11:20	12:10
3		12:30	1:25	6000	1:05	1:30
4		1:40	2:15	6000	2:35	3:15
5		3:45	4:45	6000	3:55	4:25
6		4:50	5:10	6000	5:20	6:45
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Company: SEERAT LLC
Truck Number: 008
Driver Sig:
Date: 4/17/16
Plant Operator Sig:
Date:

Comments:

YOU ARE REQUIRED TO CALL IN THIS INFORMATION AND SUBMIT THIS LOG SHEET TO QUASAR
CALL IN #: 216-395-7415
PROVIDE: TOTAL HOURS, NUMBER OF LOADS, QUASAR FACILITY, FIELD I.D.

BROOKSIDE LABORATORIES, INC.

** MANURE ANALYSIS REPORT **

Ringler Energy
2279 County Rd 156
Cardington, OH 43315

File Number: 58251
Date Received:04/25/2016
Date Reported:04/27/2016

Submitted By: Brookside Consultants of Ohio, Inc.

Lab Number			3408			3409
Description			L4 Etgen 4/18/16 MOQ-5-5			L4 Etgen 4/18/16 MOQ-5-5
	% Dry Basis	% Wet Basis	lbs/ 1000gal	% Dry Basis	% Wet Basis	lbs/ 1000gal
Moisture		97.83	8195.7		97.04	8194.5
Mineral Matter	36.87	0.80	67.02	37.24	0.73	61.02
Lost By Ign (Org M+)	63.13	1.37	114.77	62.76	1.23	102.81
Total Nitrogen	11.06	0.240	20.11	12.14	0.238	19.89
Ammonium-N (NH4-N)	8.53	0.185	15.50	9.95	0.195	16.30
Nitrate-N (NO3-N)		< 0.010			< 0.010	
Organic-N	2.53	0.055	4.61	2.19	0.043	3.59
Phosphorus (P)	2.67	0.058	4.86	2.75	0.054	4.51
Phos. as (P2O5)	6.13	0.133	11.14	6.33	0.124	9.36
Potassium (K)	3.09	0.067	5.61	3.42	0.067	5.60
Potassium as (K2O)	3.73	0.081	6.79	4.13	0.081	6.77

Reviewed by

OhioEPA
Ohio Environmental Protection Agency
Division of Surface Water

Beneficial Use Site Information

Ohio EPA Site I.D. (Ohio EPA Use Only)

Field site I.D.: MOQ-05-05

Beneficial use site location: NW corner of Heimlich Rd. and Route 746

County: Morrow | **Township:** Westfield

Latitude: 40°28'52.54"N | **Longitude:** 82°57'56.60"W

Total acreage proposed for beneficial use: 19.2

Type of beneficial use to be performed:

Surface application ☐
Injection or immediate incorporation ■

Ground slope percent:

Less than 15%	■	15% to 19.9%	☐
Greater than 20%	☐		

Soil pH (s.u): 7.4

Soil phosphorus (mg/kg): 29

Bray Kurtz P1 ☐
Mehlich 3 ■

Bedrock depth (feet): >3ft

Type of crops to be grown:

Crop Type	Expected Yield
Corn	180 bu
Soybeans	60 bu
Wheat	
Pasture	
Hay	
Other:	

Soil Types:

Soil Unit Symbol	Soil Unit Name	Hydrologic Soil Group	Flooding Frequency Class
Blg1A1	Blount silt loam, ground moraine, 0-2% slopes	D	None
Blg1B1	Blount silt loam, ground moraine, 2-6% slopes	D	None
Gwg1B1	Glynwood silt loam, ground moraine, 2-6% slopes	D	None
Gwg5C2	Glynwood clay loam, ground moraine, 6-12% slopes, eroded	D	None
Pm	Pewamo silty clay loam, 0-1% slopes	C/D	None

Applicable isolation distances:

Type of Isolation Distance			
Surface waters of the state	■	Sinkhole/UIC class V drainage	☐
Occupied building	■	Private potable water source	☐
Medical care facility	☐		

Are any endangered species or endangered species habitats located on the beneficial use site?

☐ Yes	■ No

If "Yes" is marked, list the types of endangered species or endangered species habitat:

Have biosolids been beneficially used on the site since July 20, 1993?

☐ Yes	■ No

If "Yes" is marked, list the biosolids generators and years beneficial use occurred:

Generator	NPDES permit No.	Year of Beneficial Use

The application must also include all of the following:

- ■ A soil map of the proposed beneficial use site.
- ■ A frequency flood class map of the proposed beneficial use site.
- ■ An aerial map of the proposed beneficial use site that clearly identifies the entrance of the beneficial use site from the nearest road and all applicable isolation distances as established in Chapter 3745-40 of the Ohio Administrative Code.
- ■ A vicinity road map at or near the township level that clearly identifies the proposed beneficial use site with all roads labeled.
- ■ A copy of the most recent soil test results identified in this form.

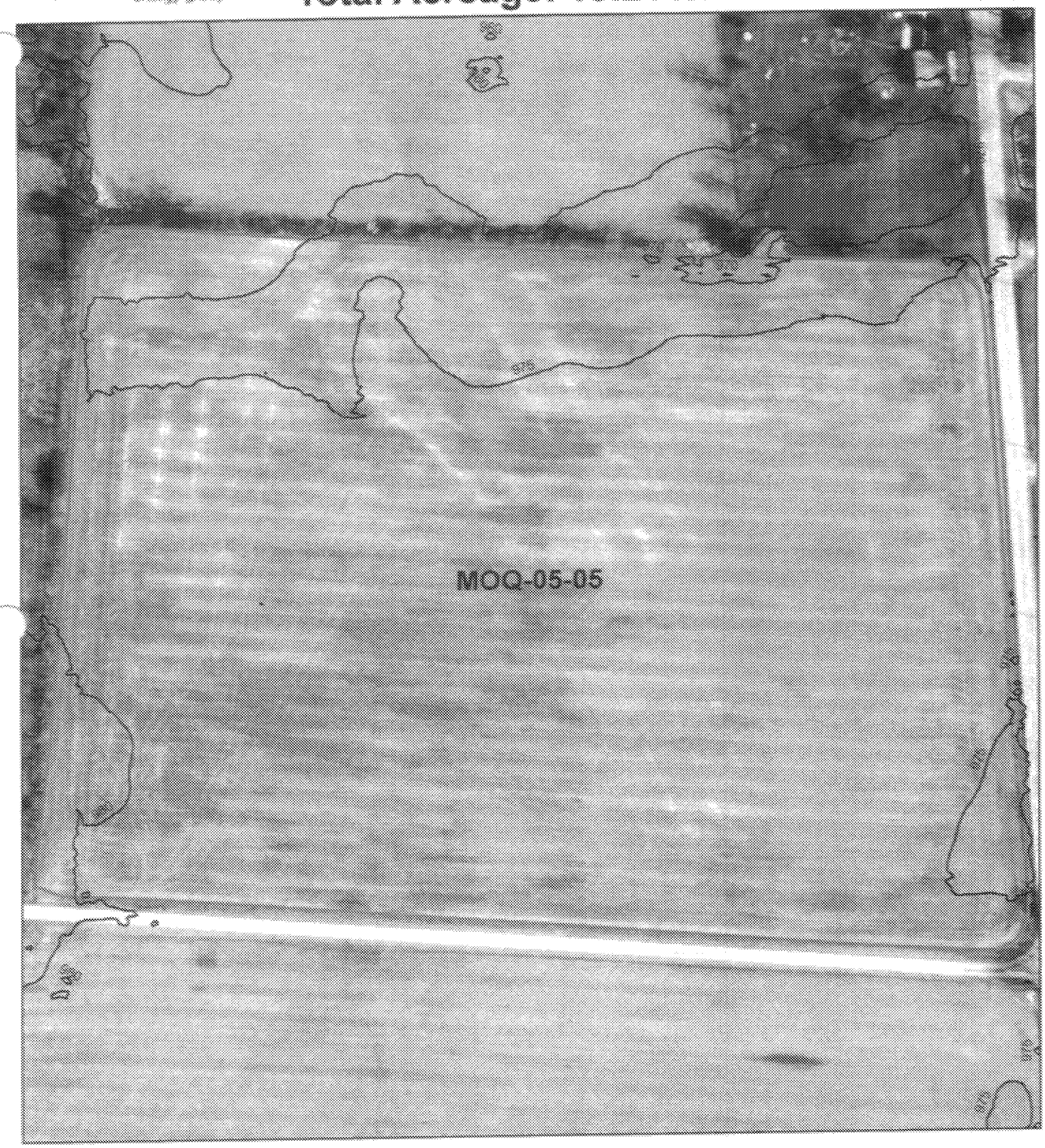
ED_014244_00000708-00010

MOQ-05-05
Total Acreage: 19.2 Acres

0 150 300 600 Feet

Waterways
33ft Water Buffer
Residences
100ft Res Buffer
300ft Res Buffer

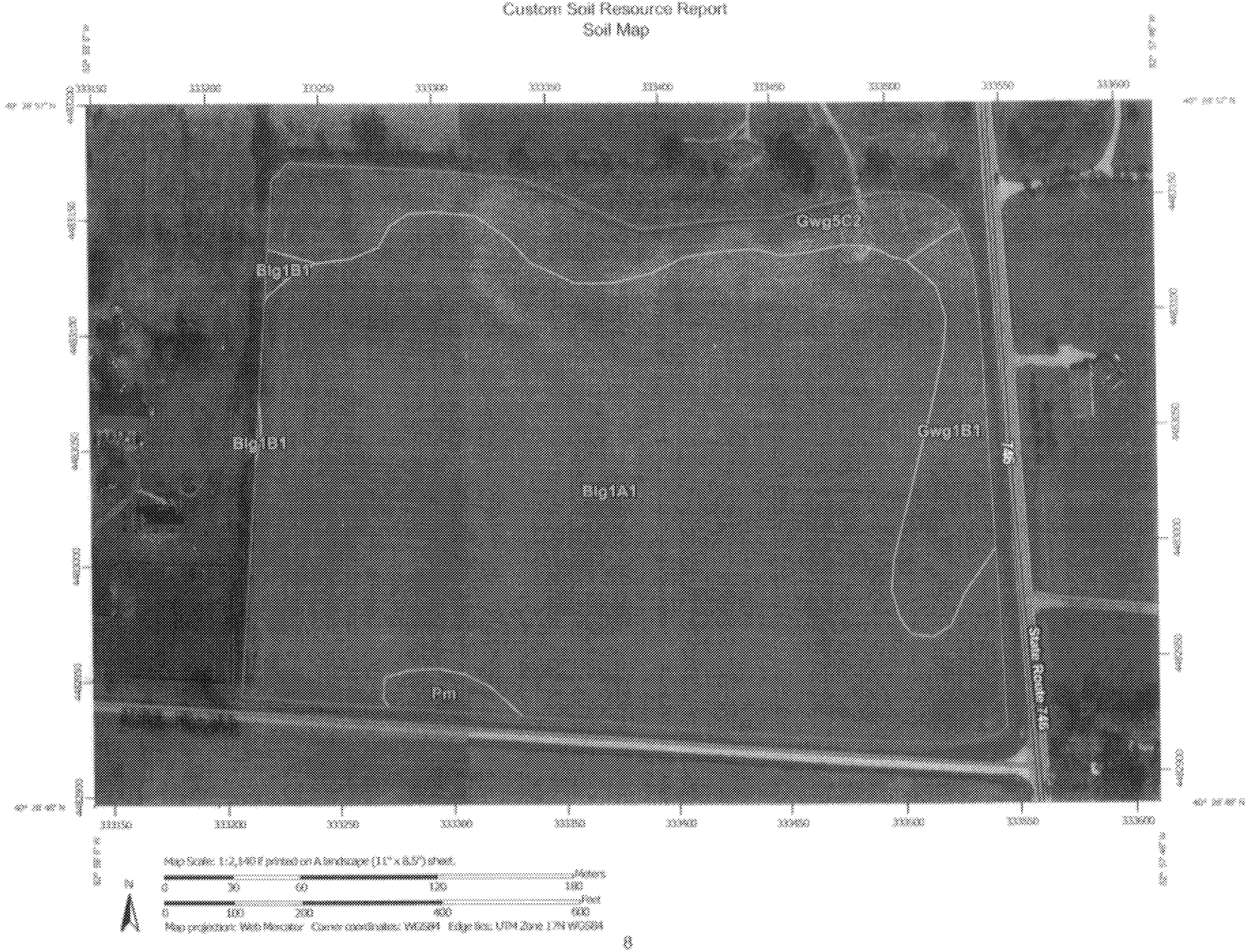
MOQ-05-05
Total Acreage: 19.2 Acres



0 75 150 300 Feet

5ft Contours

Custom Soil Resource Report
Soil Map



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