Nurse Tank start 6 96 gal
End – ≈ 200 gal

2014 KBS LTER Main Site

Main Cropping System Experiment

Treatment Key

- T1 Conventional **corn**/soybean/wheat
- T2 No-till **corn**/soybean/wheat
- T3 Reduced Input **corn**/soybean/wheat with cover crop
- T4 Biologically Based **corn**/soybean/wheat with cover crop
- T5 Poplar
- T6 Alfalfa
- T7 Early Successional community
- T8 Mown Grassland (never tilled) community

r = replicate number

Microplot Treatment Key

- Nitrogen fertilized
- Tillage (T7)
- Herbicide-free
- Nitrogen fertilized and weed-free

March 21, 2014
Apply 28%
T1, T2, T3

Instrumentation Key

- •• Minirhizotrons
- ★ Trace gas flux chambers
- Ψ Low tension suction lysimeters
- ✪ Weather station & weighing lysimeter
- Trace gas shed
- ○ Wireless tower & sun photometer
- ◎ Aphid tower

Storage & Shop
Field Lab

Start 719.6 A
End 772.5

Soil Profile Pit

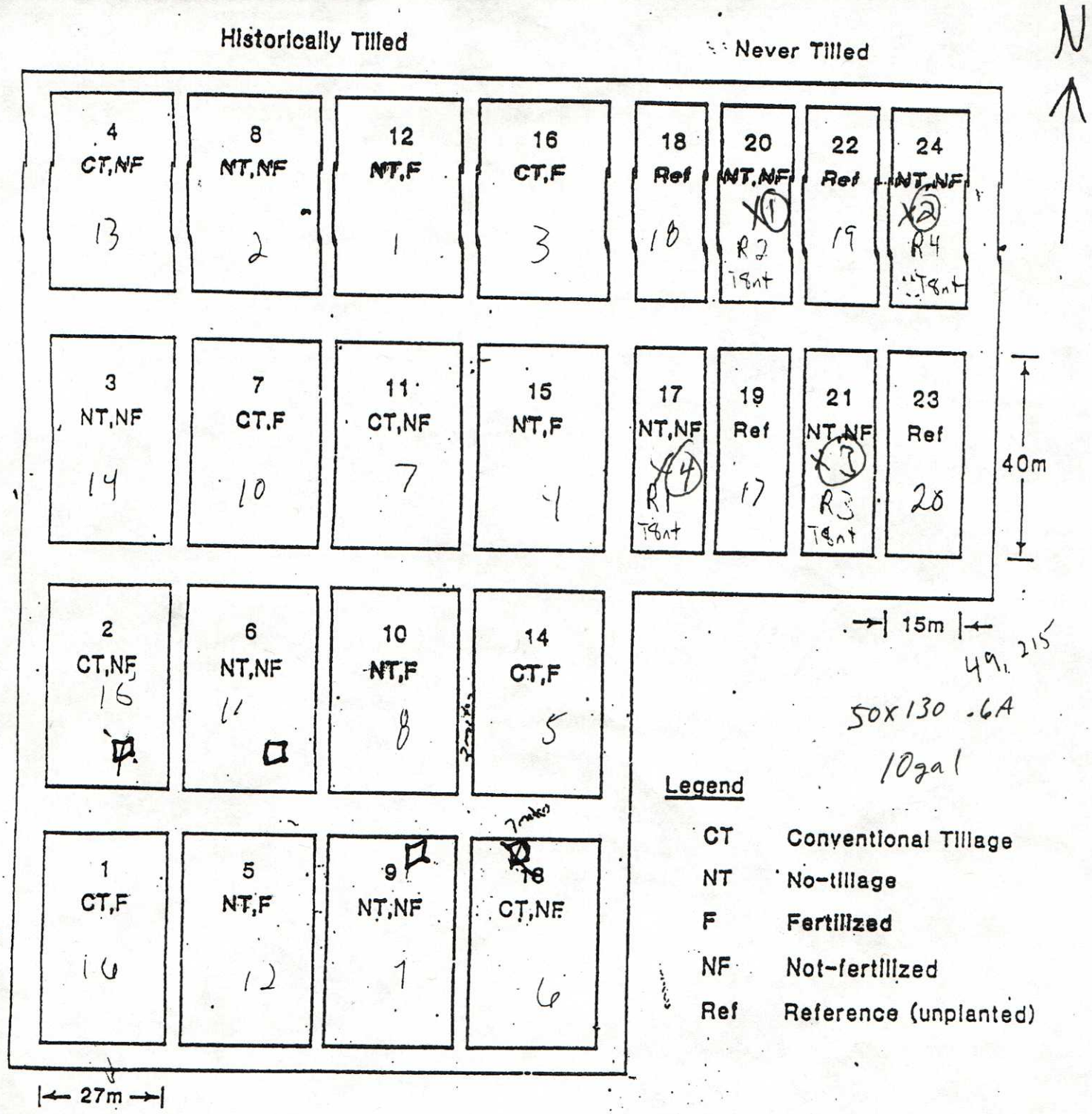
87 m
105 m

T6 r5 Alfalfa | T2 r5 Corn (11) X | T3 r5 Corn (17) X
T5 r5 Poplar | T1 r5 Corn (10) X | T7 r5 Succession | T4 r5 Corn
T1 r1 Corn (9) X | T2 r2 Corn X (8) | T2 r3 Corn X (1) | T3 r4 Corn X (16)
T7 r1 Succession | T3 r2 Corn X (15) | T4 r3 Corn | T2 r4 Corn X (6)
T5 r1 Poplar | T4 r2 Corn | T7 r3 Succession | T1 r4 Corn X (5)
T5 r6 Poplar | T6 r6 Alfalfa | T2 r6 Corn X (1)
T3 r1 Corn (14) X | T5 r2 Poplar | T6 r3 Alfalfa | T4 r4 Corn
T7 r6 Succession | T4 r6 Corn | ✪
T4 r1 Corn | T1 r2 Corn X (4) | T3 r3 Corn (13) X | T6 r4 Alfalfa
T3 r6 Corn (18) X | T1 r6 Corn X (2) | Resource Gradient Experiment
T2 r1 Corn X (3) | T6 r2 Alfalfa | T5 r3 Poplar | T7 r4 Succession
Biodiversity Gradient Experiment | Cellulosic Biofuels Diversity Experiment
T6 r1 Alfalfa | T7 r2 Succession | T1 r3 Corn X (12) | T5 r4 Poplar

Main Driveway
40th Street
B Avenue
Main Entrance (Gate)

52.9 A Applied
496 gal used roughly
– 9.4 gal/A

(200m off-site) T8 r1 | T8 r2 | T8 r3 | T8 r4



49.215

50x130 .6A

10gal

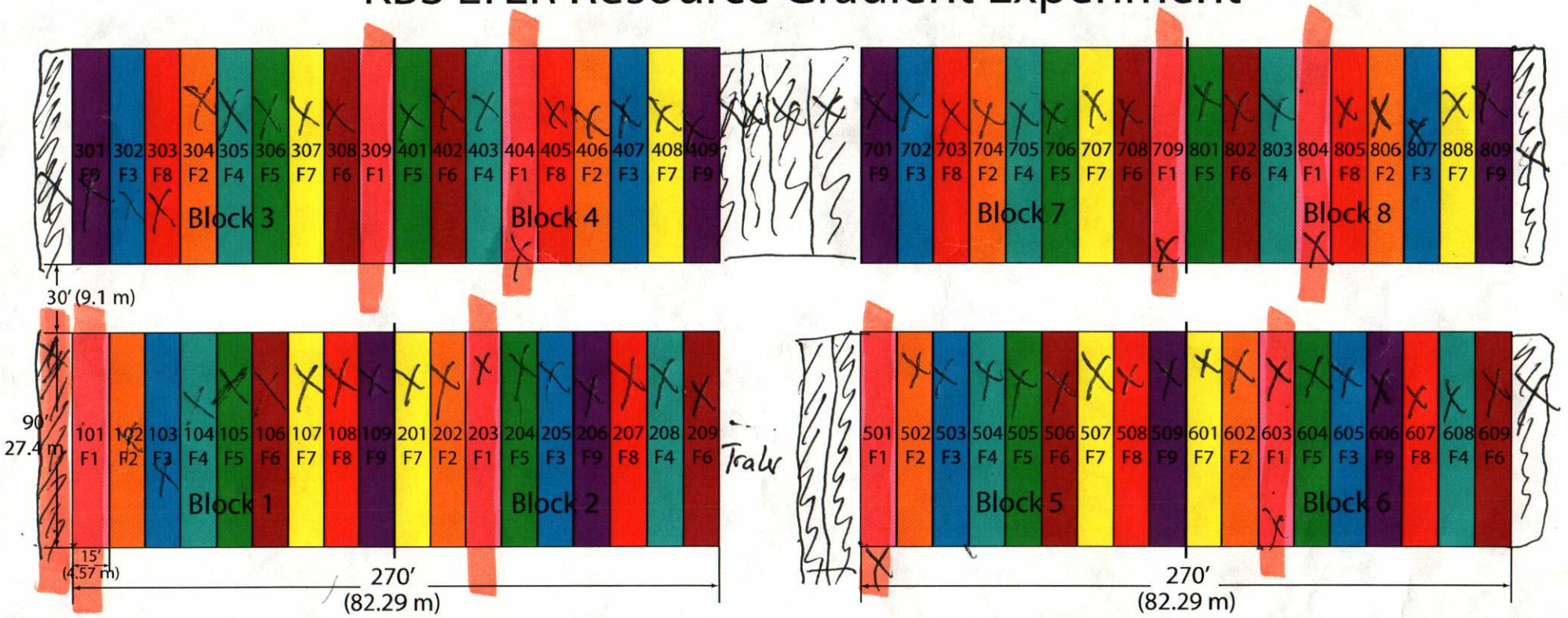
88.587

89

7.25

3/22/16 · Fertilizer T8NT 10gal/A 28%

KBS LTER Resource Gradient Experiment



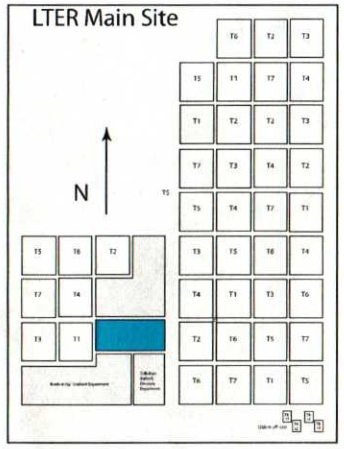
Rainfed

Irrigated

Amount of Nitrogen Applied

Treatment	F1	F2	F3	F4	F5	F6	F7	F8	F9	
Corn										
N (lb/a)	0	30	60	90	120	150	180	220	260	
N (kg/ha)	0	34	67	101	134	168	202	246	291	
Soybean										
N (lb/a)	0	0	0	0	0	0	0	0	0	[typical]
N (lb/a)	0	15	30	45	60	75	90	110	130	[2012 only]
Wheat										
N (lb/a)	0	20	40	60	80	100	120	140	160	
N (kg/ha)	0	23	45	67	90	112	135	157	180	

Each plot is 15' x 90' (4.57 m x 27.4 m)
Established May 2005



3/22/16 Fertilize N-RATE 7gal/A 28%

SAX 7g/A
50gal

load 60-70 gal