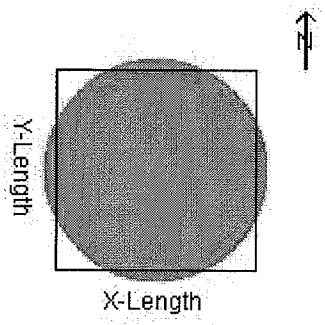
Run Summary

NRCS Natural Resources Conservation Service

Ex1.run1

Run Date:	Monday, March 26, 2012, 09:40 AM		
Client Name:	Ex 1		
Farm No:	Wisconsin	**Tract No:** ---	**Field No:**Run 1
Run Location:	Runs		
Management:	Peas, green,drilled, st pt, disk, fcult,-Bean, green snap, st pt, disk, fcult, CMZ4.man		
Soil:	Mecan_MfB_100_LS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	2342.8 ft	**Mode:**	NRCS
Y-Length:	2342.8 ft	**Soil Loss**	5.0 t/ac/yr
Radius:	1321.9 ft		
Area:	126.0 ac	**Site:**	UNITED STATES WISCONSIN PORTAGE
Elevation:	1108.9 ft		
Orientation:	0.0 °	**Location:**	44.48° N, 89.5° W
		Cligen:	STEVENS POINT
		Windgen:	Interpolated (44.48° N, 89.50°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Peas, green	18.7	18.7	3.9	14.8	0.67
Rot. year: 2	Bean, green snap mech harv	21.9	21.9	4.9	17.0	0.80
Ave. Annual		20.3	20.3	4.4	15.9	0.73

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Aug 02, 02 - Jul 01, 01	Peas, green	16.5	16.5	3.7	12.7	0.58
Jul 02, 01 - Aug 01, 02	Bean, green snap mech harv	24.2	24.2	5.1	19.1	0.89

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 01, 01	Peas, green	3,832	15687.9 lbs/ac	90.0
Aug 01, 02	Bean, green snap mech harv	2,349	7811.2 lb/ac	90.0

Run Summary

NRCS Natural Resources Conservation Service

Ex1.run1

SCI Summary

Soil Conditioning	-1.6		**SCI Subfactors**	
Energy Calculator:	2.9	gal diesel/ac	**OM**	-0.55
Average Annual STIR:	98.0		**FO:**	0.03
Wind Erosion Soil	20.3	t/ac	**ER:**	-7.00
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 05, 01	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
Apr 20, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 25, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
Apr 25, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 15, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 01, 01	Harvest, vine crops, mechanical	Diesel	2.6	42,805	1.22
Sep 15, 01	Chisel, st. pt	Diesel	45.5	122,429	3.50
May 01, 02	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
May 05, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
May 15, 02	Planter, double disk opnr	Diesel	2.4	53,881	1.54
May 15, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 15, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 01, 02	Harvest, vine crops, mechanical	Diesel	2.6	42,805	1.22
Nov 01, 02	Chisel, st. pt	Diesel	45.5	122,429	3.50
		Total / ac		707,786	20.23
		Total	196.0	89,187,151	2,548.96

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Aug 02, 02 - Jul 01, 01	Peas, green	99.9	349,029	9.98
Jul 02, 01 - Aug 01, 02	Bean, green snap mech harv	96.0	358,757	10.25

Notes

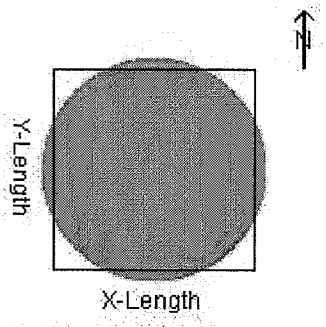
Run Summary

NRCS Natural Resources Conservation Service

Ex1.run2.cal

Run Date:	Monday, March 26, 2012, 10:22 AM		
Client Name:	Ex 1		
Farm No:	Wisconsin	**Tract No:** ---	**Field No:**Run 2
Run Location:	Runs		
Management:	Peas, green,drilled, st pt, disk, fcult,-Bean, green snap, st pt, disk, fcult, CMZ4.man		
Soil:	Mecan_MfB_100_LS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	2342.8 ft	**Mode:**	NRCS
Y-Length:	2342.8 ft	**Soil Loss**	5.0 t/ac/yr
Radius:	1321.9 ft		
Area:	126.0 ac	**Site:**	UNITED STATES WISCONSIN PORTAGE
Elevation:	1108.9 ft		
Orientation:	0.0 °	**Location:**	44.48° N, 89.5° W
		Cligen:	STEVENS POINT
		Windgen:	Interpolated (44.48° N, 89.50°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Peas, green	32.8	32.8	6.5	26.3	1.17
Rot. year: 2	Bean, green snap mech harv	45.1	45.1	8.5	36.6	1.58
Ave. Annual		38.9	38.9	7.5	31.4	1.37

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Aug 02, 02 - Jul 01, 01	Peas, green	18.6	18.6	4.2	14.4	0.66
Jul 02, 01 - Aug 01, 02	Bean, green snap mech harv	59.3	59.3	10.8	48.5	2.09

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 01, 01	Peas, green	871	3342.4 lbs/ac	90.0
Aug 01, 02	Bean, green snap mech harv	2,345	7796.9 lb/ac	90.0

Run Summary

NRCS Natural Resources Conservation Service

Ex1.run2.cal

SCI Summary

Soil Conditioning	-3.1		**SCI Subfactors**	
Energy Calculator:	2.9	gal diesel/ac	**OM**	-0.74
Average Annual STIR:	98.0		**FO:**	0.03
Wind Erosion Soil	38.9	t/ac	**ER:**	-14.32
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 05, 01	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
Apr 20, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 25, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
Apr 25, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 15, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 01, 01	Harvest, vine crops, mechanical	Diesel	2.6	42,805	1.22
Sep 15, 01	Chisel, st. pt	Diesel	45.5	122,429	3.50
May 01, 02	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
May 05, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
May 15, 02	Planter, double disk opnr	Diesel	2.4	53,881	1.54
May 15, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 15, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 01, 02	Harvest, vine crops, mechanical	Diesel	2.6	42,805	1.22
Nov 01, 02	Chisel, st. pt	Diesel	45.5	122,429	3.50
		Total / ac		707,786	20.23
		Total	196.0	89,187,151	2,548.96

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Aug 02, 02 - Jul 01, 01	Peas, green	99.9	349,029	9.98
Jul 02, 01 - Aug 01, 02	Bean, green snap mech harv	96.0	358,757	10.25

Notes

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25/ 4/ 1 Peas, green            0.3174
  15/ 5/ 2       Bean, green snap mech harv            1.000

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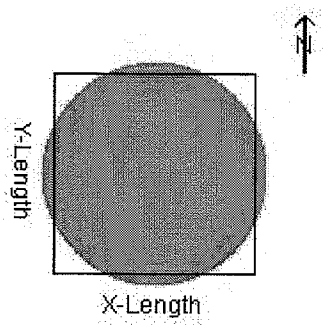
Run Summary

NRCS Natural Resources Conservation Service

Ex1.run3.cal

Run Date:	Monday, March 26, 2012, 10:57 AM		
Client Name:	Ex 1		
Farm No:	Wisconsin	**Tract No:** ---	**Field No:**Run 3
Run Location:	Runs		
Management:	Peas, green,drilled, st pt, disk, fcult,-Bean, green snap, st pt, disk, fcult, Both w Rye		
Soil:	Mecan_MfB_100_LS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	2342.8 ft	**Mode:**	NRCS
Y-Length:	2342.8 ft	**Soil Loss**	5.0 t/ac/yr
Radius:	1321.9 ft		
Area:	126.0 ac	**Site:**	UNITED STATES WISCONSIN PORTAGE
Elevation:	1108.9 ft		
Orientation:	0.0 °	**Location:**	44.48° N, 89.5° W
		Cligen:	STEVENS POINT
		Windgen:	Interpolated (44.48° N, 89.50°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Peas, green	0.4	0.4	0.1	0.3	0.02
Rot. year: 2	Bean, green snap mech harv	0.2	0.2	0.1	0.1	Trace
Ave. Annual		0.3	0.3	0.1	0.2	0.01

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Aug 02, 02 - Jul 01, 01	Peas, green	0.3	0.3	0.1	0.2	0.01
Jul 02, 01 - Aug 01, 02	Bean, green snap mech harv	0.3	0.3	0.1	0.2	0.01

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 01, 01	Peas, green	872	3342.7 lbs/ac	90.0
Aug 01, 02	Bean, green snap mech harv	2,373	7898.1 lb/ac	90.0

Run Summary

NRCS Natural Resources Conservation Service

Ex1.run3.cal

SCI Summary

Soil Conditioning	0.4		**SCI Subfactors**	
Energy Calculator:	2.4	gal diesel/ac	**OM**	0.23
Average Annual STIR:	68.6		**FO:**	0.32
Wind Erosion Soil	0.3	t/ac	**ER:**	0.87
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 05, 01	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
Apr 20, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 25, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
Apr 25, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 15, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 01, 01	Harvest, vine crops, mechanical	Diesel	2.6	42,805	1.22
Jul 05, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
May 01, 02	Disk, tandem heavy primary op	Diesel	39.0	91,897	2.63
May 05, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
May 15, 02	Planter, double disk opnr	Diesel	2.4	53,881	1.54
May 15, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 15, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 01, 02	Harvest, vine crops, mechanical	Diesel	2.6	42,805	1.22
Aug 05, 02	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
		Total / ac		594,187	16.98
		Total	137.2	74,872,698	2,139.85

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Aug 02, 02 - Jul 01, 01	Peas, green	54.4	226,599	6.48
Jul 02, 01 - Aug 01, 02	Bean, green snap mech harv	76.4	323,435	9.24

Notes

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25/ 4/ 1 Peas, green            0.3174
  15/ 5/ 2        Bean, green snap mech harv              1.000

P
```

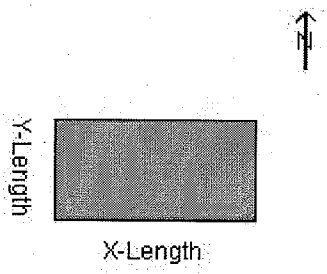
Run Summary

NRCS Natural Resources Conservation Service

E2

Run Date:	Tuesday, April 17, 2012, 08:12 AM		
Client Name:	Ex 2		
Farm No:	---	**Tract No:** ---	**Field No:**Run1
Run Location:	Runs		
Management:	Cotton, stripper; FC, SCsweep, Bed.man		
Soil:	Amarillo_4_100_LFS.ifc		

Simulation & Site Information



X-Length:	5279.9 ft	**Mode:**	NRCS
Y-Length:	2640.1 ft	**Soil Loss**	5.0 t/ac/yr
Area:	320.0 ac	**Site:**	UNITED STATES TEXAS LUBBOCK
Elevation:	3238.2 ft		
Orientation:	0.0 °	**Location:**	33.61° N, 101.82° W
		Cligen:	LUBBOCK WB AP
		Windgen:	Interpolated (33.61° N, 101.82°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Cotton, stripper	42.3	42.3	11.3	31.0	0.75
Ave. Annual		42.3	42.3	11.3	31.0	0.75

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 21, 01 - Oct 20, 01	Cotton, stripper	42.3	42.3	11.3	31.0	0.75

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Oct 20, 01	Cotton, stripper	1,483	378.6 lb/ac lint	7.5

SCI Summary

Soil Conditioning	-3.7	**SCI Subfactors**	
Energy Calculator:	6.3 gal diesel/ac	**OM**	-0.78
Average Annual STIR:	154.8	**FO:**	-0.53
Wind Erosion Soil	42.3 t/ac	**ER:**	-15.66
Water Erosion Soil	0.0 t/ac		

Run Summary

NRCS Natural Resources Conservation Service

E2

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Feb 15, 01	Chisel, sweep shovel	Diesel	45.5	134,702	3.85
Mar 15, 01	Bedder, hipper, disk hiller	Diesel	26.0	55,078	1.57
May 15, 01	Planter, double disk opener on 8 inch high beds	Diesel	2.4	53,881	1.54
Jun 20, 01	Cultivator, row 3 in ridge	Diesel	17.6	75,882	2.17
Jul 15, 01	Cultivator, row 3 in ridge	Diesel	17.6	75,882	2.17
Oct 20, 01	Harvest, cotton	Diesel	0.2	165,385	4.73
Dec 01, 01	Shredder, flail or rotary	Diesel	0.2	89,353	2.55
Dec 15, 01	Chisel, st. pt	Diesel	45.5	122,429	3.50
		Total / ac		772,593	22.08
		Total	154.8	247,231,568	7,065.84

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 21, 01 - Oct 20, 01	Cotton, stripper	154.8	772,593	22.08

Notes

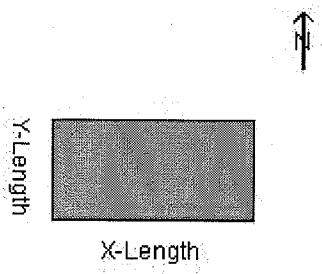
Run Summary

NRCS Natural Resources Conservation Service

E2_R2

Run Date:	Monday, April 23, 2012, 11:15 AM		
Client Name:	Ex 2		
Farm No:	---	**Tract No:** ---	**Field No:**Run2
Run Location:	Runs		
Management:	E2_Run2.man		
Soil:	Amarillo_4_100_LFS.ifc		

Simulation & Site Information



X-Length:	5279.9 ft	**Mode:**	NRCS
Y-Length:	2640.1 ft	**Soil Loss**	5.0 t/ac/yr
Area:	320.0 ac	**Site:**	UNITED STATES TEXAS LUBBOCK
Elevation:	3238.2 ft		
Orientation:	0.0 °	**Location:**	33.61° N, 101.82° W
		Cligen:	LUBBOCK WB AP
		Windgen:	Interpolated (33.61° N, 101.82°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Cotton, stripper	22.6	22.6	7.1	15.5	0.38
Rot. year: 2	Sorghum, grain	57.3	57.3	14.8	42.6	1.10
Ave. Annual		40.0	40.0	11.0	29.0	0.74

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 11, 02 - Oct 20, 01	Cotton, stripper	22.0	22.0	7.0	15.0	0.37
Oct 21, 01 - Oct 10, 02	Sorghum, grain	58.0	58.0	14.9	43.0	1.11

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Oct 20, 01	Cotton, stripper	1,658	423.4 lb/ac lint	7.5
Oct 10, 02	Sorghum, grain	2,821	49.3 bu/ac	14.0

Run Summary

NRCS Natural Resources Conservation Service

E2_R2

SCI Summary

Soil Conditioning	-3.1		**SCI Subfactors**	
Energy Calculator:	4.9	gal diesel/ac	**OM**	-0.54
Average Annual STIR:	95.4		**FO:**	0.06
Wind Erosion Soil	40.0	t/ac	**ER:**	-14.74
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Feb 15, 01	Chisel, sweep shovel	Diesel	45.5	134,702	3.85
Mar 15, 01	Bedder, hipper, disk hiller	Diesel	26.0	55,078	1.57
May 15, 01	Planter, double disk opener on 8 inch high beds	Diesel	2.4	53,881	1.54
Jun 20, 01	Cultivator, row 3 in ridge	Diesel	17.6	75,882	2.17
Jul 15, 01	Cultivator, row 3 in ridge	Diesel	17.6	75,882	2.17
Oct 20, 01	Harvest, cotton	Diesel	0.2	165,385	4.73
Dec 01, 01	Shredder, flail or rotary	Diesel	0.2	89,353	2.55
Dec 15, 01	Chisel, st. pt	Diesel	45.5	122,429	3.50
Apr 15, 02	Sweep plow, wider than 40 in	Diesel	7.8	98,033	2.80
May 20, 02	Planter, ridge till	Diesel	10.6	75,882	2.17
Jun 25, 02	Cultivator, row - 1st pass ridge till	Diesel	17.6	75,882	2.17
Oct 10, 02	Harvest, killing crop 50pct standing stubble	Diesel	0.2	187,386	5.36
		Total / ac		1,209,777	34.58
		Total	190.9	387,131,493	11,064.16

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 11, 02 - Oct 20, 01	Cotton, stripper	109.2	560,811	16.03
Oct 21, 01 - Oct 10, 02	Sorghum, grain	81.7	648,966	18.55

Notes

Cotton, Sorghum Rotation- Dryland|Cotton 375 lbs/ax|Sorghum 25 bu/ac

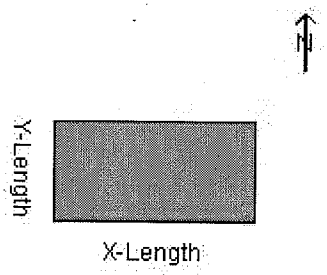
Run Summary

NRCS Natural Resources Conservation Service

E2_R3cal

Run Date:	Monday, April 23, 2012, 11:43 AM		
Client Name:	Ex 2		
Farm No:	---	**Tract No:** ---	**Field No:**Run 3
Run Location:	Runs		
Management:	E2_R3cal.man		
Soil:	Amarillo_4_100_LFS.ifc		

Simulation & Site Information



X-Length:	5279.9 ft	**Mode:**	NRCS
Y-Length:	2640.1 ft	**Soil Loss**	5.0 t/ac/yr
Area:	320.0 ac	**Site:**	UNITED STATES TEXAS LUBBOCK
Elevation:	3238.2 ft		
Orientation:	0.0 °	**Location:**	33.61° N, 101.82° W
		Cligen:	LUBBOCK WB AP
		Windgen:	Interpolated (33.61° N, 101.82°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Cotton, stripper	38.1	38.1	11.8	26.4	0.65
Rot. year: 2	Sorghum, grain	81.2	81.2	21.1	60.1	1.55
Ave. Annual		59.7	59.7	16.4	43.2	1.10

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 11, 02 - Oct 20, 01	Cotton, stripper	36.7	36.7	11.4	25.3	0.62
Oct 21, 01 - Oct 10, 02	Sorghum, grain	82.6	82.6	21.4	61.2	1.57

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Oct 20, 01	Cotton, stripper	1,443	368.3 lb/ac lint	7.5
Oct 10, 02	Sorghum, grain	1,638	25.8 bu/ac	14.0

Run Summary

NRCS Natural Resources Conservation Service

E2_R3cal

SCI Summary

Soil Conditioning	-4.8		**SCI Subfactors**	
Energy Calculator:	4.9	gal diesel/ac	**OM**	-0.69
Average Annual STIR:	95.4		**FO:**	0.06
Wind Erosion Soil	59.7	t/ac	**ER:**	-22.49
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Feb 15, 01	Chisel, sweep shovel	Diesel	45.5	134,702	3.85
Mar 15, 01	Bedder, hipper, disk hiller	Diesel	26.0	55,078	1.57
May 15, 01	Planter, double disk opener on 8 inch high beds	Diesel	2.4	53,881	1.54
Jun 20, 01	Cultivator, row 3 in ridge	Diesel	17.6	75,882	2.17
Jul 15, 01	Cultivator, row 3 in ridge	Diesel	17.6	75,882	2.17
Oct 20, 01	Harvest, cotton	Diesel	0.2	165,385	4.73
Dec 01, 01	Shredder, flail or rotary	Diesel	0.2	89,353	2.55
Dec 15, 01	Chisel, st. pt	Diesel	45.5	122,429	3.50
Apr 15, 02	Sweep plow, wider than 40 in	Diesel	7.8	98,033	2.80
May 20, 02	Planter, ridge till	Diesel	10.6	75,882	2.17
Jun 25, 02	Cultivator, row - 1st pass ridge till	Diesel	17.6	75,882	2.17
Oct 10, 02	Harvest, killing crop 50pct standing stubble	Diesel	0.2	187,386	5.36
		Total / ac		1,209,777	34.58
		Total	190.9	387,131,493	11,064.16

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 11, 02 - Oct 20, 01	Cotton, stripper	109.2	560,811	16.03
Oct 21, 01 - Oct 10, 02	Sorghum, grain	81.7	648,966	18.55

Notes

```
15/ 5/ 1 Cotton, stripper          0.9531
  20/ 5/ 2       Sorghum, grain    0.6484

Cotton, Sorghum Rotation- Dryland|Cotton 375 lbs/ax|Sorghum 25 bu/ac
```

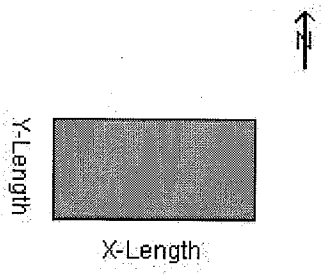
Run Summary

NRCS Natural Resources Conservation Service

E2_R4cal

Run Date:	Monday, April 23, 2012, 12:15 PM		
Client Name:	Ex 2		
Farm No:	---	**Tract No:** ---	**Field No:** Run 4
Run Location:	Runs		
Management:	E2_R4cal.man		
Soil:	Amarillo_4_100_LFS.ifc		

Simulation & Site Information



X-Length:	5279.9 ft	**Mode:**	NRCS
Y-Length:	2640.1 ft	**Soil Loss**	5.0 t/ac/yr
Area:	320.0 ac	**Site:**	UNITED STATES TEXAS LUBBOCK
Elevation:	3238.2 ft		
Orientation:	0.0 °	**Location:**	33.61° N, 101.82° W
		Cligen:	LUBBOCK WB AP
		Windgen:	Interpolated (33.61° N, 101.82°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Cotton, stripper	2.2	2.2	0.6	1.6	0.04
Rot. year: 2	Sorghum, grain	12.8	12.8	3.0	9.7	0.25
Ave. Annual		7.5	7.5	1.8	5.7	0.14

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 11, 02 - Oct 20, 01	Cotton, stripper	1.9	1.9	0.6	1.4	0.04
Oct 21, 01 - Oct 10, 02	Sorghum, grain	13.1	13.1	3.1	10.0	0.25

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Oct 20, 01	Cotton, stripper	992	367.3 lb/ac lint	7.5
Oct 10, 02	Sorghum, grain	1,577	23.9 bu/ac	14.0

Run Summary

NRCS Natural Resources Conservation Service

E2_R4cal

SCI Summary

Soil Conditioning	-0.3		**SCI Subfactors**	
Energy Calculator:	2.5	gal diesel/ac	**OM**	-0.73
Average Annual STIR:	15.7		**FO:**	0.84
Wind Erosion Soil	7.5	t/ac	**ER:**	-1.96
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
May 15, 01	Strip till bed conditioner	Diesel	4.9	39,213	1.12
May 15, 01	Planter, ridge till	Diesel	10.6	75,882	2.17
Oct 15, 01	Sprayer, defoliant	Diesel	0.2	15,865	0.45
Oct 20, 01	Harvest, cotton	Diesel	0.2	165,385	4.73
May 20, 02	Strip till bed conditioner	Diesel	4.9	39,213	1.12
May 20, 02	Planter, ridge till	Diesel	10.6	75,882	2.17
Jun 25, 02	Sprayer, post emergence	Diesel	0.2	15,865	0.45
Oct 10, 02	Harvest, killing crop 50pct standing stubble	Diesel	0.2	187,386	5.36
		Total / ac		614,692	17.57
		Total	31.5	196,702,838	5,621.74

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 11, 02 - Oct 20, 01	Cotton, stripper	15.7	296,345	8.47
Oct 21, 01 - Oct 10, 02	Sorghum, grain	15.7	318,347	9.10

Notes

```
15/ 5/ 1 Cotton, stripper          0.9531
  20/ 5/ 2       Sorghum, grain    0.6484

Cotton, Sorghum Rotation- Dryland|Cotton 375 lbs/ax|Sorghum 25 bu/ac
```

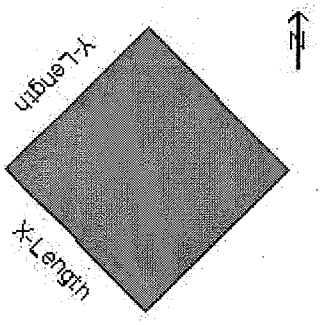
Run Summary

NRCS Natural Resources Conservation Service

WWfallow conv cmz5cal_1

Run Date:	Monday, June 18, 2012, 04:00 PM		
Client Name:	Ex 3 Run 1		
Farm No:	---	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Wheat, winter; fallow; Conv, CMZ5.man		
Soil:	CRAFT_Cv_85_VFSL.ifc		

Simulation & Site Information



X-Length:	2640.1 ft	**Mode:**	NRCS
Y-Length:	2640.1 ft	**Soil Loss**	5.0 t/ac/yr
Area:	160.0 ac	**Site:**	UNITED STATES SOUTH DAKOTA HAAKON
Elevation:	2339.2 ft		
Orientation:	45.0 °	**Location:**	44.29° N, 101.54° W
		Cligen:	MILESVILLE
		Windgen:	Interpolated (44.29° N, 101.54°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1		68.8	68.8	16.9	51.9	1.52
Rot. year: 2	Wheat, winter	7.1	7.1	1.5	5.7	0.17
Ave. Annual		38.0	38.0	9.2	28.8	0.84

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Jul 11, 02 - Jul 10, 02	Wheat, winter	75.9	75.9	18.4	57.6	1.69

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 10, 02	Wheat, winter	3,940	38.4 bu/ac	10.9

Run Summary

NRCS Natural Resources Conservation Service

WWfallow conv cmz5cal_1

SCI Summary

Soil Conditioning	-3.0		**SCI Subfactors**	
Energy Calculator:	3.4	gal diesel/ac	**OM**	-0.43
Average Annual STIR:	101.6		**FO:**	-0.01
Wind Erosion Soil	38.0	t/ac	**ER:**	-13.95
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
May 01, 01	Chisel, sweep shovel	Diesel	45.5	138,594	3.96
Jun 01, 01	Chisel, sweep shovel	Diesel	45.5	138,594	3.96
Jul 01, 01	Rodweeder	Diesel	17.1	57,922	1.66
Aug 15, 01	Rodweeder	Diesel	17.1	57,922	1.66
Sep 01, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	93,244	2.66
Sep 10, 01	Drill or airseeder, double disk	Diesel	6.3	45,350	1.30
Dec 01, 01	Winter kill, leaf removal	Diesel	0.0	-13,470	-0.38
Jul 10, 02	Harvest, killing crop 50pct standing stubble	Diesel	0.2	192,774	5.51
Oct 20, 02	Chisel, sweep shovel	Diesel	45.5	138,594	3.96
		Total / ac		849,523	24.28
		Total	203.1	135,933,125	3,884.95

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Jul 11, 02 - Jul 10, 02	Wheat, winter	203.1	849,523	24.28

Notes

10/ 9/ 1 Wheat, winter 0.7656

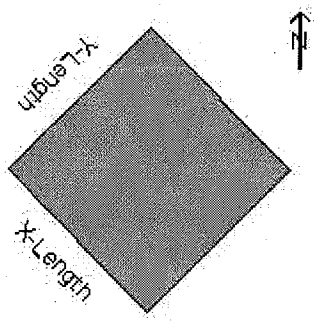
Run Summary

NRCS Natural Resources Conservation Service

E3R2

Run Date:	Thursday, June 14, 2012, 11:36 AM		
Client Name:	Ex 3		
Farm No:	run 2	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Wheat, winter-SUDAN GRASS FORAGE; Conv, CMZ5.man		
Soil:	CRAFT_Cv_85_VFSL.ifc		

Simulation & Site Information



X-Length:	2640.1 ft	**Mode:**	NRCS
Y-Length:	2640.1 ft	**Soil Loss**	5.0 t/ac/yr
Area:	160.0 ac	**Site:**	UNITED STATES SOUTH DAKOTA HAAKON
Elevation:	2339.2 ft		
Orientation:	45.0 °	**Location:**	44.29° N, 101.54° W
		Cligen:	MILESVILLE
		Windgen:	Interpolated (44.29° N, 101.54°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Wheat, winter	57.3	57.3	13.6	43.7	1.30
Rot. year: 2	Sorghum, forage	103.0⚠	103.0⚠	24.9	78.1 ⚠	2.28
Ave. Annual		80.1	80.1	19.2	60.9	1.79

⚠ WARNING: Erosion values exceeded the science model accuracy thresholds.

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Sep 02, 02 - Jul 10, 01	Wheat, winter	62.3	62.3	16.7	45.6	1.36
Jul 11, 01 - Sep 01, 02	Sorghum, forage	98.0	98.0	21.7	76.2	2.22

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 10, 01	Wheat, winter	959	5.2 bu/ac	10.9
Sep 01, 02	Sorghum, forage	1,244	4.5 ton/ac	0.0

Run Summary

NRCS Natural Resources Conservation Service

E3R2

SCI Summary

Soil Conditioning	-6.1	**SCI Subfactors**	
Energy Calculator:	4.8 gal diesel/ac	**OM**	-0.24
Average Annual STIR:	78.0	**FO:**	0.23
Wind Erosion Soil	80.1 t/ac	**ER:**	-30.54
Water Erosion Soil	0.0 t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Jul 10, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	192,774	5.51
Oct 20, 01	Chisel, sweep shovel	Diesel	45.5	138,594	3.96
Apr 11, 02	Chisel, sweep shovel	Diesel	45.5	138,594	3.96
Apr 13, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	93,244	2.66
Apr 13, 02	Drill or airseeder, double disk	Diesel	6.3	45,350	1.30
Sep 01, 02	Harvest, hay, no regrowth	Diesel	0.2	453,648	12.97
Sep 05, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	93,244	2.66
Sep 10, 02	Drill or airseeder, double disk	Diesel	6.3	45,350	1.30
Dec 01, 02	Winter kill, leaf removal	Diesel	0.0	-13,470	-0.38
		Total / ac		1,187,327	33.93
		Total	156.0	189,985,462	5,429.76

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Sep 02, 02 - Jul 10, 01	Wheat, winter	123.5	869,429	24.85
Jul 11, 01 - Sep 01, 02	Sorghum, forage	32.5	317,898	9.09

This WEPS Run generated one or more Warning messages. For detailed information about these Warnings, see this run's 'warnings.txt' output file.

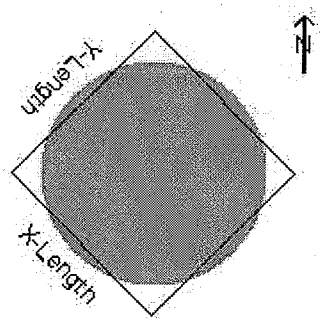
Run Summary

NRCS Natural Resources Conservation Service

E3R3_cal

Run Date:	Thursday, June 14, 2012, 11:57 AM		
Client Name:	Ex 3		
Farm No:	run 3	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Wheat, winter-SUDAN GRASS FORAGE; Conv, irr supplimental CMZ5.man		
Soil:	CRAFT_Cv_85_VFSL.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	2286.4 ft
Y-Length:	2286.4 ft
Radius:	1290.0 ft
Area:	120.0 ac
Elevation:	2339.2 ft
Orientation:	45.0 °

Mode:	NRCS
Soil Loss	5.0 t/ac/yr
Site:	UNITED STATES SOUTH DAKOTA HAAKON
Location:	44.29° N, 101.54° W
Cligen:	MILESVILLE
Windgen:	Interpolated (44.29° N, 101.54°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Wheat, winter	0.0	0.0	0.0	0.0	0.00
Rot. year: 2	Sorghum, forage	0.2	0.2	0.1	0.2	Trace
Ave. Annual		0.1	0.1	Trace	0.1	Trace

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Sep 02, 02 - Jul 10, 01	Wheat, winter	0.1	0.1	0.0	0.1	0.00
Jul 11, 01 - Sep 01, 02	Sorghum, forage	0.1	0.1	0.0	0.1	0.00

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 10, 01	Wheat, winter	5,714	61.1 bu/ac	10.9
Sep 01, 02	Sorghum, forage	2,361	7.8 ton/ac	0.0

Run Summary

NRCS Natural Resources Conservation Service

E3R3_cal

SCI Summary

Soil Conditioning	0.5	**SCI Subfactors**	
Energy Calculator:	4.8 gal diesel/ac	**OM**	0.54
Average Annual STIR:	78.0	**FO:**	0.23
Wind Erosion Soil	0.1 t/ac	**ER:**	0.95
Water Erosion Soil	0.0 t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 01, 01	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
Apr 20, 01	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
May 15, 01	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
Jun 15, 01	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
Jul 10, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	192,774	5.51
Oct 20, 01	Chisel, sweep shovel	Diesel	45.5	138,594	3.96
Apr 11, 02	Chisel, sweep shovel	Diesel	45.5	138,594	3.96
Apr 13, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	93,244	2.66
Apr 15, 02	Drill or airseeder, double disk	Diesel	6.3	45,350	1.30
May 01, 02	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
May 20, 02	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
Jun 15, 02	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
Jul 15, 02	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
Sep 01, 02	Harvest, hay, no regrowth	Diesel	0.2	453,648	12.97
Sep 05, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	93,244	2.66
Sep 10, 02	Drill or airseeder, double disk	Diesel	6.3	45,350	1.30
Sep 15, 02	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
Dec 01, 02	Winter kill, leaf removal	Diesel	0.0	-13,470	-0.38
		Total / ac		1,187,327	33.93
		Total	156.0	142,492,923	4,072.43

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Sep 02, 02 - Jul 10, 01	Wheat, winter	123.5	869,429	24.85

Run Summary

NRCS Natural Resources Conservation Service

E3R3_cal

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Jul 11, 01 - Sep 01, 02	Sorghum, forage	32.5	317,898	9.09

This WEPS Run generated one or more Warning messages. For detailed information about these Warnings, see this run's 'warnings.txt' output file.

10/ 9/ 2	Wheat, winter	1.037

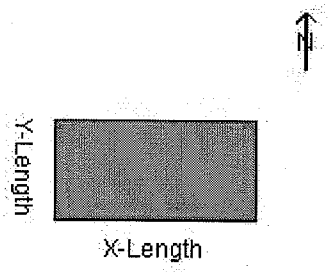
Run Summary

NRCS Natural Resources Conservation Service

E4 Run 1

Run Date:	Friday, April 27, 2012, 09:18 AM		
Client Name:	E4		
Farm No:	---	**Tract No:** ---	**Field No:**Run 1
Run Location:	Runs		
Management:	E4 Run 1cal.man		
Soil:	Foldahl_426_90_LFS.ifc		

Simulation & Site Information



X-Length:	2640.1 ft	**Mode:**	NRCS
Y-Length:	1319.9 ft	**Soil Loss**	5.0 t/ac/yr
Area:	80.0 ac	**Site:**	UNITED STATES MINNESOTA CLAY
Elevation:	899.0 ft		
Orientation:	0.0 °	**Location:**	46.89° N, 96.49° W
		Cligen:	FARGO WB AIRPORT
		Windgen:	Interpolated (46.89° N, 96.49°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Wheat, spring 7in rows	0.7	0.7	0.2	0.5	0.02
Rot. year: 2	Sugarbeet, sugar	25.2	25.2	7.3	17.9	0.58
Rot. year: 3	Soybean, group 0 and I	39.8	39.8	10.9	28.9	0.97
Ave. Annual		21.9	21.9	6.1	15.7	0.52

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 11, 03 - Aug 01, 01	Wheat, spring 7in rows	0.7	0.7	0.3	0.5	0.02
Aug 02, 01 - Oct 10, 02	Sugarbeet, sugar	1.6	1.6	0.5	1.0	0.04
Oct 11, 02 - Oct 10, 03	Soybean, group 0 and I	63.4	63.4	17.6	45.7	1.51

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Aug 01, 01	Wheat, spring 7in rows	3,294	43.6 bu/ac	13.5
Oct 10, 02	Sugarbeet, sugar	0	19.9 ton/ac	82.0
Oct 10, 03	Soybean, group 0 and I	2,219	38.9 bu/ac	13.0

Run Summary

NRCS Natural Resources Conservation Service

E4 Run 1

SCI Summary

Soil Conditioning	-1.5		**SCI Subfactors**	
Energy Calculator:	3.8	gal diesel/ac	**OM**	-0.22
Average Annual STIR:	68.7		**FO:**	0.32
Wind Erosion Soil	21.9	t/ac	**ER:**	-7.62
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 20, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
Aug 01, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	187,386	5.36
Nov 01, 01	Chisel, st. pt	Diesel	45.5	122,429	3.50
Apr 20, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 23, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 24, 02	Fert applic. surface broadcast	Diesel	0.1	19,607	0.56
May 01, 02	Planter, small veg seed	Diesel	0.6	44,152	1.26
Oct 09, 02	Shredder, flail or rotary	Diesel	0.2	89,353	2.55
Oct 10, 02	Harvest, dig root crops res. buried	Diesel	27.3	229,144	6.55
May 20, 03	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
May 25, 03	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
May 25, 03	Planter, double disk opnr	Diesel	2.4	53,881	1.54
Oct 10, 03	Harvest, killing crop 20pct standing stubble	Diesel	0.2	187,386	5.36
Oct 15, 03	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
		Total / ac		1,389,230	39.70
		Total	206.2	111,132,353	3,176.15

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 11, 03 - Aug 01, 01	Wheat, spring 7in rows	32.5	322,238	9.21
Aug 02, 01 - Oct 10, 02	Sugarbeet, sugar	125.6	686,084	19.61
Oct 11, 02 - Oct 10, 03	Soybean, group 0 and I	48.1	380,908	10.89

Notes

```
20/ 4/ 1 Wheat, spring 7in rows          1.225
   1/ 5/ 2        Sugarbeet, sugar                 1.075
  25/ 5/ 3        Soybean, group 0 and I           1.150

Yield Goal Inventory|Spring Wheat 45 bu|Sugar Beet 20 ton|Soys: 40 bu|
```

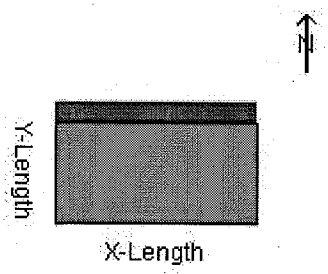
Run Summary

NRCS Natural Resources Conservation Service

E4 Run 2_wiindbreakcal

Run Date:	Friday, April 27, 2012, 09:49 AM		
Client Name:	E4		
Farm No:	---	**Tract No:** ---	**Field No:**Run2
Run Location:	Runs		
Management:	E4 Run 2cal Wbreak.man		
Soil:	Foldahl_426_90_LFS.ifc		

Simulation & Site Information



X-Length:	2640.1 ft	**Mode:**	NRCS
Y-Length:	1319.9 ft	**Soil Loss**	5.0 t/ac/yr
Area:	80.0 ac	**Site:**	UNITED STATES MINNESOTA CLAY
Elevation:	899.0 ft		
Orientation:	0.0 °	**Location:**	46.89° N, 96.49° W
		Cligen:	FARGO WB AIRPORT
		Windgen:	Interpolated (46.89° N, 96.49°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Wheat, spring 7in rows	0.5	0.4	0.1	0.3	0.01
Rot. year: 2	Sugarbeet, sugar	16.5	15.5	5.0	10.5	0.35
Rot. year: 3	Soybean, group 0 and I	27.9	24.5	6.7	17.8	0.66
Ave. Annual		15.0	13.5	3.9	9.6	0.34

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 11, 03 - Aug 01, 01	Wheat, spring 7in rows	0.5	0.4	0.1	0.3	0.01
Aug 02, 01 - Oct 10, 02	Sugarbeet, sugar	1.2	0.9	0.2	0.7	0.03
Oct 11, 02 - Oct 10, 03	Soybean, group 0 and I	43.2	39.1	11.5	27.6	0.98

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Aug 01, 01	Wheat, spring 7in rows	3,294	43.6 bu/ac	13.5
Oct 10, 02	Sugarbeet, sugar	0	19.9 ton/ac	82.0
Oct 10, 03	Soybean, group 0 and I	2,219	38.9 bu/ac	13.0

Barriers

Location	Type	Height ft	Width ft	Porosity %

Run Summary

NRCS Natural Resources Conservation Service

E4 Run 2_wiindbreakcal

Barriers

Location	Type	Height ft	Width ft	Porosity %
North	<mod> Trees 1r decd 1yr leafon	25.0	20.0	50.0

SCI Summary

Soil Conditioning	-0.8		**SCI Subfactors**	
Energy Calculator:	3.8	gal diesel/ac	**OM**	-0.22
Average Annual STIR:	68.7		**FO:**	0.32
Wind Erosion Soil	13.5	t/ac	**ER:**	-4.31
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 20, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
Aug 01, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	187,386	5.36
Nov 01, 01	Chisel, st. pt	Diesel	45.5	122,429	3.50
Apr 20, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 23, 02	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 24, 02	Fert applic. surface broadcast	Diesel	0.1	19,607	0.56
May 01, 02	Planter, small veg seed	Diesel	0.6	44,152	1.26
Oct 09, 02	Shredder, flail or rotary	Diesel	0.2	89,353	2.55
Oct 10, 02	Harvest, dig root crops res. buried	Diesel	27.3	229,144	6.55
May 20, 03	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
May 25, 03	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
May 25, 03	Planter, double disk opnr	Diesel	2.4	53,881	1.54
Oct 10, 03	Harvest, killing crop 20pct standing stubble	Diesel	0.2	187,386	5.36
Oct 15, 03	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
		Total / ac		1,389,230	39.70
		Total	206.2	111,132,353	3,176.15

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 11, 03 - Aug 01, 01	Wheat, spring 7in rows	32.5	322,238	9.21
Aug 02, 01 - Oct 10, 02	Sugarbeet, sugar	125.6	686,084	19.61
Oct 11, 02 - Oct 10, 03	Soybean, group 0 and I	48.1	380,908	10.89

Notes

```
20/ 4/ 1 Wheat, spring 7in rows          1.225
   1/ 5/ 2       Sugarbeet, sugar                 1.075
```

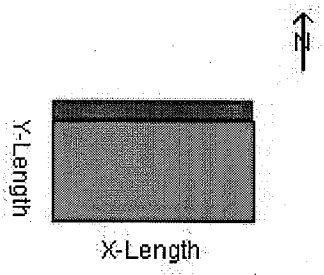
Run Summary

NRCS Natural Resources Conservation Service

E4 Run 3_wbreak ryecc. cal_1

Run Date:	Friday, April 27, 2012, 11:27 AM		
Client Name:	E4		
Farm No:	---	**Tract No:** ---	**Field No:** Run3
Run Location:	Runs		
Management:	E4 Run3 Cover Crop.man		
Soil:	Foldahl_426_90_LFS.ifc		

Simulation & Site Information



X-Length:	2640.1 ft	**Mode:**	NRCS
Y-Length:	1319.9 ft	**Soil Loss**	5.0 t/ac/yr
Area:	80.0 ac	**Site:**	UNITED STATES MINNESOTA CLAY
Elevation:	899.0 ft		
Orientation:	0.0 °	**Location:**	46.89° N, 96.49° W
		Cligen:	FARGO WB AIRPORT
		Windgen:	Interpolated (46.89° N, 96.49°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Wheat, spring 7in rows	0.8	0.7	0.2	0.4	0.02
Rot. year: 2	Sugarbeet, growing after covercrop kill	4.0	3.7	1.3	2.4	0.08
Rot. year: 3	Soybean, group 0 and I	9.1	7.8	2.3	5.5	0.22
Ave. Annual		4.6	4.1	1.3	2.8	0.11

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 11, 03 - Aug 01, 01	Wheat, spring 7in rows	0.4	0.3	0.1	0.2	0.01
Aug 02, 01 - Oct 10, 02	Sugarbeet, growing after covercrop kill	0.5	0.5	0.2	0.3	0.01
Oct 11, 02 - Oct 10, 03	Soybean, group 0 and I	12.9	11.4	3.5	7.9	0.30

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Aug 01, 01	Wheat, spring 7in rows	3,306	43.8 bu/ac	13.5
Oct 10, 02	Sugarbeet, growing after covercrop kill	0	20.5 ton/ac	82.0
Oct 10, 03	Soybean, group 0 and I	2,237	39.2 bu/ac	13.0

Barriers

Run Summary

NRCS Natural Resources Conservation Service

E4 Run 3_wbreak ryecc. cal_1

Barriers

Location	Type	Height ft	Width ft	Porosity %
North	<mod> Trees 1r decd 1yr leafon	25.0	20.0	50.0

SCI Summary

Soil Conditioning	0.1	**SCI Subfactors**	
Energy Calculator:	3.7 gal diesel/ac	**OM**	0.14
Average Annual STIR:	62.8	**FO:**	0.38
Wind Erosion Soil	4.1 t/ac	**ER:**	-0.60
Water Erosion Soil	0.0 t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 20, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
Aug 01, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	187,386	5.36
Sep 17, 01	Chisel, st. pt	Diesel	45.5	122,429	3.50
Sep 18, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Sep 19, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
May 01, 02	Planter, into growing cover	Diesel	2.4	53,881	1.54
Jun 10, 02	Sprayer, kill cover in growing crop	Diesel	0.2	15,865	0.45
Oct 09, 02	Shredder, flail or rotary	Diesel	0.2	89,353	2.55
Oct 10, 02	Harvest, dig root crops res. buried	Diesel	27.3	229,144	6.55
May 20, 03	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
May 25, 03	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
May 25, 03	Planter, double disk opnr	Diesel	2.4	53,881	1.54
Oct 10, 03	Harvest, killing crop 20pct standing stubble	Diesel	0.2	187,386	5.36
Oct 15, 03	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
		Total / ac		1,348,670	38.54
		Total	188.5	107,887,700	3,083.42

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 11, 03 - Aug 01, 01	Wheat, spring 7in rows	32.5	322,238	9.21
Aug 02, 01 - Oct 10, 02	Sugarbeet, growing after covercrop kill	107.9	645,524	18.45
Oct 11, 02 - Oct 10, 03	Soybean, group 0 and I	48.1	380,908	10.89

Notes

```
20/ 4/ 1 Wheat, spring 7in rows          1.225
  10/ 6/ 2       Sugarbeet, growing after covercrop kill          1.478
```

Run Summary

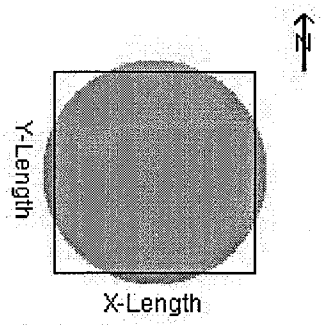
new.

NRCS Natural Resources Conservation Service

E5R1_cal

Run Date:	Thursday, August 02, 2012, 10:33 AM
Client Name:	Exercise 5
Farm No:	Run 1 **Tract No:** --- **Field No:**---
Run Location:	Runs
Management:	Alfalfa, fall seed, 3yr-Potato-WWheat, circle irr CMZ49.man
Soil:	Quincy_97_100_FS.ifc

Simulation & Site Information



Field shape approximate

X-Length:	2379.6 ft
Y-Length:	2379.6 ft
Radius:	1342.5 ft
Area:	130.0 ac
Elevation:	1259.8 ft
Orientation:	0.0 °

Mode:	NRCS
Soil Loss	5.0 t/ac/yr
Site:	UNITED STATES WASHINGTON GRANT
Location:	47.21° N, 119.45° W
Cligen:	EPHRATA CAA AP
Windgen:	MOSES LAKE/GRANT CO

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Wheat, winter, CMZ 50 hi ppt 7-10in spac	47.6	47.6	11.6	36.1	2.14
Rot. year: 2	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 3	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 4	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 5	Potato, late, harvest	50.9	50.9	12.6	38.3	2.25
Ave. Annual		19.7	19.7	4.8	14.9	0.88

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 01, 05 - Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	93.6	93.6	23.2	70.4	4.21

Run Summary

NRCS Natural Resources Conservation Service

E5R1_cal

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Aug 02, 01 - Sep 15, 04	Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Sep 16, 04 - Sep 30, 05	Potato, late, harvest	4.8	4.8	1.0	3.9	0.18

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	7,741	101.4 bu/ac	10.9
May 15, 02	Alfalfa, hay	1,435	1.7 ton/ac	15.0
Jun 15, 02	Alfalfa, hay	629	1.1 ton/ac	15.0
Jul 15, 02	Alfalfa, hay	529	0.8 ton/ac	15.0
Aug 15, 02	Alfalfa, hay	681	1.1 ton/ac	15.0
Sep 15, 02	Alfalfa, hay	580	0.9 ton/ac	15.0
May 15, 03	Alfalfa, hay	1,650	1.3 ton/ac	15.0
Jun 15, 03	Alfalfa, hay	963	1.8 ton/ac	15.0
Jul 15, 03	Alfalfa, hay	696	1.1 ton/ac	15.0
Aug 15, 03	Alfalfa, hay	728	1.3 ton/ac	15.0
Sep 15, 03	Alfalfa, hay	599	0.9 ton/ac	15.0
May 15, 04	Alfalfa, hay	1,437	1.9 ton/ac	15.0
Jun 15, 04	Alfalfa, hay	865	1.4 ton/ac	15.0
Jul 15, 04	Alfalfa, hay	627	0.9 ton/ac	15.0
Aug 15, 04	Alfalfa, hay	747	1.3 ton/ac	15.0
Sep 15, 04	Alfalfa, hay	602	0.9 ton/ac	15.0
Sep 30, 05	Potato, late, harvest	0	571.1 cwt/ac	79.0

SCI Summary

Soil Conditioning	-1.5		**SCI Subfactors**	
Energy Calculator:	13.2	gal diesel/ac	**OM**	-0.52
Average Annual STIR:	75.9		**FO:**	0.25
Wind Erosion Soil	19.7	t/ac	**ER:**	-6.76
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Mar 15, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00

E5R1_cal

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Jul 15, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 01, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	181,998	5.20
Aug 15, 01	Disk, tandem heavy primary op	Diesel	39.0	89,203	2.55
Aug 17, 01	Disk, tandem secondary op	Diesel	32.5	57,174	1.63
Aug 20, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	88,006	2.52
Aug 24, 01	Drill or airseeder, double disk	Diesel	6.3	42,805	1.22
Aug 25, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00

E5R1_cal

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Aug 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Apr 10, 05	Disk, tandem heavy primary op	Diesel	39.0	89,203	2.55
Apr 15, 05	Chisel, twisted shovel	Diesel	65.0	130,961	3.74
Apr 16, 05	Disk, tandem light finishing	Diesel	19.5	47,595	1.36
Apr 19, 05	Bedder, hipper, disk hiller	Diesel	26.0	53,582	1.53
Apr 20, 05	Planter, double disk opener on 8 inch high beds	Diesel	2.4	52,384	1.50
Apr 21, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 12, 05	Cultivator, rotary	Diesel	6.6	64,208	1.84
Jun 11, 05	Cultivator, rotary	Diesel	6.6	64,208	1.84
Sep 16, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 30, 05	Harvest, dig root crops res. buried	Diesel	27.3	222,558	6.36
Oct 01, 05	Disk, offset, heavy	Diesel	39.0	107,163	3.06
Oct 01, 05	Cultipacker, roller	Diesel	35.6	73,787	2.11

Run Summary

NRCS Natural Resources Conservation Service

E5R1_cal

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Oct 01, 05	Drill or airseeder, double disk	Diesel	6.3	42,805	1.22
Oct 02, 05	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
		Total / ac		7,832,942	223.86
		Total	379.7	1,018,222,04	29,100.64

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 01, 05 - Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	106.1	6,702,490	191.56
Aug 02, 01 - Sep 15, 04	Alfalfa, hay	192.5	724,699	20.71
Sep 16, 04 - Sep 30, 05	Potato, late, harvest	81.1	405,753	11.60

Notes

1/10/ 5	Wheat, winter, CMZ 50 hi ppt 7-10in spac	1.225
1/10/ 5	Wheat, winter, CMZ 50 hi ppt 7-10in spac	1.225

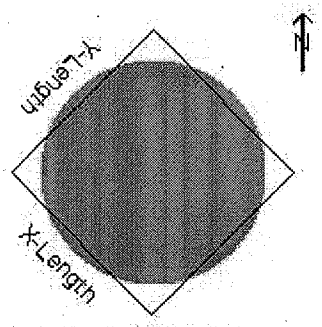
Run Summary

NRCS Natural Resources Conservation Service

E5R2_cal_adj

Run Date:	Thursday, June 14, 2012, 02:14 PM		
Client Name:	E5		
Farm No:	run 2	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Alfalfa, fall seed, 3yr-Potato-W Wheat, circle irr CMZ49.man		
Soil:	Quincy_97_100_FS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	2379.6 ft
Y-Length:	2379.6 ft
Radius:	1342.5 ft
Area:	130.0 ac
Elevation:	1259.8 ft
Orientation:	45.0 °

Mode:	NRCS
Soil Loss	5.0 t/ac/yr
Site:	UNITED STATES WASHINGTON GRANT
Location:	47.2° N, 119.31° W
Cligen:	EPHRATA CAA AP
Windgen:	MOSES LAKE/GRANT CO

Erosion

		Gross Loss	Net Soil Loss From Field (t/ac)			
Period	**Crop/Residue**	t/ac	**Total**	**Creep/Salt**	**Suspen**	**PM10**
Rot. year: 1	Wheat, winter, CMZ 50 hi ppt 7-10in spac	47.7	47.7	11.5	36.2	2.15
Rot. year: 2	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 3	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 4	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 5	Potato, late, harvest	50.3	50.3	12.5	37.8	2.23
Ave. Annual		19.6	19.6	4.8	14.8	0.88

Crop Interval Erosion

		Gross Loss	Net Soil Loss From Field (t/ac)			
Date Range	**Crop**	t/ac	**Total**	**Creep/Salt**	**Suspen.**	**PM10**
Oct 01, 05 - Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	93.6	93.6	23.1	70.5	4.21

Run Summary

NRCS Natural Resources Conservation Service

E5R2_cal_adj

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Aug 02, 01 - Sep 15, 04	Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Sep 16, 04 - Sep 30, 05	Potato, late, harvest	4.3	4.3	0.9	3.4	0.17

Harvests

Date	Crop
Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac
May 15, 02	Alfalfa, hay
Jun 15, 02	Alfalfa, hay
Jul 15, 02	Alfalfa, hay
Aug 15, 02	Alfalfa, hay
Sep 15, 02	Alfalfa, hay
May 15, 03	Alfalfa, hay
Jun 15, 03	Alfalfa, hay
Jul 15, 03	Alfalfa, hay
Aug 15, 03	Alfalfa, hay
Sep 15, 03	Alfalfa, hay
May 15, 04	Alfalfa, hay
Jun 15, 04	Alfalfa, hay
Jul 15, 04	Alfalfa, hay
Aug 15, 04	Alfalfa, hay
Sep 15, 04	Alfalfa, hay
Sep 30, 05	Potato, late, harvest

SCI Summary

Soil Conditioning	-1.4	**SCI Subfactors**	
Energy Calculator:	13.2 gal diesel/ac	**OM**	-0.50
Average Annual STIR:	75.9	**FO:**	0.25
Wind Erosion Soil	19.6 t/ac	**ER:**	-6.72
Water Erosion Soil	0.0 t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Mar 15, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00

E5R2_cal_adj

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Jul 15, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 01, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	181,998	5.20
Aug 15, 01	Disk, tandem heavy primary op	Diesel	39.0	89,203	2.55
Aug 17, 01	Disk, tandem secondary op	Diesel	32.5	57,174	1.63
Aug 20, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	88,006	2.52
Aug 24, 01	Drill or airseeder, double disk	Diesel	6.3	42,805	1.22
Aug 25, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00

E5R2_cal_adj

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Aug 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Apr 10, 05	Disk, tandem heavy primary op	Diesel	39.0	89,203	2.55
Apr 15, 05	Chisel, twisted shovel	Diesel	65.0	130,961	3.74
Apr 16, 05	Disk, tandem light finishing	Diesel	19.5	47,595	1.36
Apr 19, 05	Bedder, hipper, disk hiller	Diesel	26.0	53,582	1.53
Apr 20, 05	Planter, double disk opener on 8 inch high beds	Diesel	2.4	52,384	1.50
Apr 21, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 12, 05	Cultivator, rotary	Diesel	6.6	64,208	1.84
Jun 11, 05	Cultivator, rotary	Diesel	6.6	64,208	1.84
Sep 16, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 30, 05	Harvest, dig root crops res. buried	Diesel	27.3	222,558	6.36
Oct 01, 05	Disk, offset, heavy	Diesel	39.0	107,163	3.06
Oct 01, 05	Cultipacker, roller	Diesel	35.6	73,787	2.11

Run Summary

NRCS Natural Resources Conservation Service

E5R2_cal_adj

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Oct 01, 05	Drill or airseeder, double disk	Diesel	6.3	42,805	1.22
Oct 02, 05	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
		Total / ac		7,832,942	223.86
		Total	379.7	1,018,222,04	29,100.64

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 01, 05 - Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	106.1	6,702,490	191.56
Aug 02, 01 - Sep 15, 04	Alfalfa, hay	192.5	724,699	20.71
Sep 16, 04 - Sep 30, 05	Potato, late, harvest	81.1	405,753	11.60

1/10/ 5 Wheat, winter, CMZ 50 hi ppt 7-10in spac 1.225
20/ 4/ 5 Potato, late, harvest 1.000

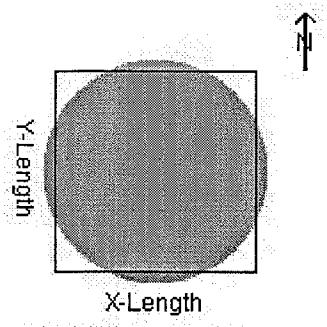
Run Summary

NRCS Natural Resources Conservation Service

E5R3

Run Date:	Thursday, August 02, 2012, 11:09 AM		
Client Name:	Exercise 5		
Farm No:	Run 3	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Alfalfa, fall seed, 3yr-Potato-WWheat, circle irr CMZ49.man		
Soil:	Quincy_97_100_FS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	2379.6 ft
Y-Length:	2379.6 ft
Radius:	1342.5 ft
Area:	130.0 ac
Elevation:	1259.8 ft
Orientation:	0.0 °

Mode:	NRCS
Soil Loss	5.0 t/ac/yr
Site:	UNITED STATES WASHINGTON GRANT
Location:	47.21° N, 119.45° W
Cligen:	EPHRATA CAA AP
Windgen:	MOSES LAKE/GRANT CO

Erosion

		Gross Loss	Net Soil Loss From Field (t/ac)			
Period	**Crop/Residue**	t/ac	**Total**	**Creep/Salt**	**Suspen**	**PM10**
Rot. year: 1	Wheat, winter, CMZ 50 hi ppt 7-10in spac	37.5	37.5	9.5	27.9	1.66
Rot. year: 2	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 3	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 4	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 5	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 6	Potato, late, harvest	46.6	46.6	11.3	35.4	2.02
Ave. Annual		14.0	14.0	3.5	10.6	0.61

Crop Interval Erosion

Run Summary

NRCS Natural Resources Conservation Service

E5R3

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 01, 06 - Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	77.6	77.6	19.5	58.1	3.45
Aug 02, 01 - Sep 15, 05	Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Sep 16, 05 - Sep 30, 06	Potato, late, harvest	6.4	6.4	1.2	5.2	0.22

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	7,706	100.8 bu/ac	10.9
May 15, 02	Alfalfa, hay	1,471	1.9 ton/ac	15.0
Jun 15, 02	Alfalfa, hay	678	1.2 ton/ac	15.0
Jul 15, 02	Alfalfa, hay	554	0.8 ton/ac	15.0
Aug 15, 02	Alfalfa, hay	726	1.2 ton/ac	15.0
Sep 15, 02	Alfalfa, hay	629	1.0 ton/ac	15.0
May 15, 03	Alfalfa, hay	1,816	1.6 ton/ac	15.0
Jun 15, 03	Alfalfa, hay	1,060	2.0 ton/ac	15.0
Jul 15, 03	Alfalfa, hay	722	1.1 ton/ac	15.0
Aug 15, 03	Alfalfa, hay	789	1.4 ton/ac	15.0
Sep 15, 03	Alfalfa, hay	638	1.0 ton/ac	15.0
May 15, 04	Alfalfa, hay	1,575	2.2 ton/ac	15.0
Jun 15, 04	Alfalfa, hay	902	1.3 ton/ac	15.0
Jul 15, 04	Alfalfa, hay	704	1.1 ton/ac	15.0
Aug 15, 04	Alfalfa, hay	788	1.4 ton/ac	15.0
Sep 15, 04	Alfalfa, hay	636	1.0 ton/ac	15.0
May 15, 05	Alfalfa, hay	1,435	1.9 ton/ac	15.0
Jun 15, 05	Alfalfa, hay	932	1.5 ton/ac	15.0
Jul 15, 05	Alfalfa, hay	690	1.0 ton/ac	15.0
Aug 15, 05	Alfalfa, hay	794	1.4 ton/ac	15.0
Sep 15, 05	Alfalfa, hay	644	1.0 ton/ac	15.0
Sep 30, 06	Potato, late, harvest	0	564.6 cwt/ac	79.0

SCI Summary

Soil Conditioning	-1.0		**SCI Subfactors**	
Energy Calculator:	14.0	gal diesel/ac	**OM**	-0.55
Average Annual STIR:	63.4		**FO:**	0.37
Wind Erosion Soil	14.0	t/ac	**ER:**	-4.52
Water Erosion Soil	0.0	t/ac		

E5R3

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Mar 15, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 15, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 01, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	181,998	5.20
Aug 15, 01	Disk, tandem heavy primary op	Diesel	39.0	89,203	2.55
Aug 17, 01	Disk, tandem secondary op	Diesel	32.5	57,174	1.63
Aug 20, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	88,006	2.52
Aug 24, 01	Drill or airseeder, double disk	Diesel	6.3	42,805	1.22
Aug 25, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24

E5R3

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Jul 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00

Run Summary

NRCS Natural Resources Conservation Service

E5R3

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Aug 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Apr 10, 06	Disk, tandem heavy primary op	Diesel	39.0	89,203	2.55
Apr 15, 06	Chisel, twisted shovel	Diesel	65.0	130,961	3.74
Apr 16, 06	Disk, tandem light finishing	Diesel	19.5	47,595	1.36
Apr 19, 06	Bedder, hipper, disk hiller	Diesel	26.0	53,582	1.53
Apr 20, 06	Planter, double disk opener on 8 inch high beds	Diesel	2.4	52,384	1.50
Apr 21, 06	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 12, 06	Cultivator, rotary	Diesel	6.6	64,208	1.84
Jun 11, 06	Cultivator, rotary	Diesel	6.6	64,208	1.84
Sep 16, 06	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 30, 06	Harvest, dig root crops res. buried	Diesel	27.3	222,558	6.36
Oct 01, 06	Disk, offset, heavy	Diesel	39.0	107,163	3.06
Oct 01, 06	Cultipacker, roller	Diesel	35.6	73,787	2.11
Oct 01, 06	Drill or airseeder, double disk	Diesel	6.3	42,805	1.22
Oct 02, 06	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
		Total / ac		9,974,710	285.08
		Total	380.4	1,296,635,29	37,057.65

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 01, 06 - Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	106.8	8,844,258	252.77
Aug 02, 01 - Sep 15, 05	Alfalfa, hay	192.5	724,699	20.71
Sep 16, 05 - Sep 30, 06	Potato, late, harvest	81.1	405,753	11.60

Notes

1/10/ 5	Wheat, winter, CMZ 50 hi ppt 7-10in spac	1.225
1/10/ 5	Wheat, winter, CMZ 50 hi ppt 7-10in spac	1.225

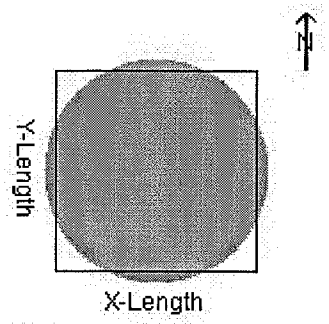
Run Summary

NRCS Natural Resources Conservation Service

E5R3_-45

Run Date:	Thursday, August 02, 2012, 11:22 AM		
Client Name:	Exercise 5		
Farm No:	Run 4	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Alfalfa, fall seed, 4yr-Potato-WWheat, circle irr-45 deg CMZ49.man		
Soil:	Quincy_97_100_FS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	2379.6 ft
Y-Length:	2379.6 ft
Radius:	1342.5 ft
Area:	130.0 ac
Elevation:	1259.8 ft
Orientation:	0.0 °

Mode:	NRCS
Soil Loss	5.0 t/ac/yr
Site:	UNITED STATES WASHINGTON GRANT
Location:	47.21° N, 119.45° W
Cligen:	EPHRATA CAA AP
Windgen:	MOSES LAKE/GRANT CO

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Wheat, winter, CMZ 50 hi ppt 7-10in spac	11.9	11.9	2.9	9.0	0.51
Rot. year: 2	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 3	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 4	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 5	Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Rot. year: 6	Potato, late, harvest	16.2	16.2	3.8	12.4	0.66
Ave. Annual		4.7	4.7	1.1	3.6	0.19

Crop Interval Erosion

Run Summary

NRCS Natural Resources Conservation Service

E5R3_-45

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Oct 01, 06 - Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	20.8	20.8	5.2	15.6	0.91
Aug 02, 01 - Sep 15, 05	Alfalfa, hay	0.0	0.0	0.0	0.0	0.00
Sep 16, 05 - Sep 30, 06	Potato, late, harvest	7.2	7.2	1.4	5.8	0.26

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	7,659	100.1 bu/ac	10.9
May 15, 02	Alfalfa, hay	1,470	1.9 ton/ac	15.0
Jun 15, 02	Alfalfa, hay	679	1.2 ton/ac	15.0
Jul 15, 02	Alfalfa, hay	562	0.8 ton/ac	15.0
Aug 15, 02	Alfalfa, hay	731	1.2 ton/ac	15.0
Sep 15, 02	Alfalfa, hay	631	1.0 ton/ac	15.0
May 15, 03	Alfalfa, hay	1,810	1.6 ton/ac	15.0
Jun 15, 03	Alfalfa, hay	1,055	2.0 ton/ac	15.0
Jul 15, 03	Alfalfa, hay	724	1.1 ton/ac	15.0
Aug 15, 03	Alfalfa, hay	790	1.4 ton/ac	15.0
Sep 15, 03	Alfalfa, hay	644	1.0 ton/ac	15.0
May 15, 04	Alfalfa, hay	1,563	2.2 ton/ac	15.0
Jun 15, 04	Alfalfa, hay	901	1.3 ton/ac	15.0
Jul 15, 04	Alfalfa, hay	705	1.1 ton/ac	15.0
Aug 15, 04	Alfalfa, hay	787	1.4 ton/ac	15.0
Sep 15, 04	Alfalfa, hay	633	1.0 ton/ac	15.0
May 15, 05	Alfalfa, hay	1,294	1.5 ton/ac	15.0
Jun 15, 05	Alfalfa, hay	843	1.5 ton/ac	15.0
Jul 15, 05	Alfalfa, hay	749	1.1 ton/ac	15.0
Aug 15, 05	Alfalfa, hay	787	1.3 ton/ac	15.0
Sep 15, 05	Alfalfa, hay	644	1.0 ton/ac	15.0
Sep 30, 06	Potato, late, harvest	0	622.4 cwt/ac	79.0

SCI Summary

Soil Conditioning	-0.3	**SCI Subfactors**	
Energy Calculator:	14.1 gal diesel/ac	**OM**	-0.54
Average Annual STIR:	73.0	**FO:**	0.28
Wind Erosion Soil	4.7 t/ac	**ER:**	-0.84
Water Erosion Soil	0.0 t/ac		

E5R3_-45

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Mar 15, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 15, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 01, 01	Harvest, killing crop 50pct standing stubble	Diesel	0.2	181,998	5.20
Aug 15, 01	Disk, tandem heavy primary op	Diesel	39.0	89,203	2.55
Aug 17, 01	Disk, tandem secondary op	Diesel	32.5	57,174	1.63
Aug 20, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	88,006	2.52
Aug 24, 01	Drill or airseeder, double disk	Diesel	6.3	42,805	1.22
Aug 25, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 02	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 02	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 02	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24

E5R3_-45

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Jul 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 03	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 03	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 03	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Mar 15, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
May 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Aug 16, 04	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 04	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 04	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
May 16, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jun 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jun 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jun 23, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Jul 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Jul 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Jul 16, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Aug 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Aug 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24

Run Summary

NRCS Natural Resources Conservation Service

E5R3_-45

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Aug 16, 05	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 08, 05	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 15, 05	Harvest, hay, legume	Diesel	0.2	428,354	12.24
Apr 10, 06	Disk, tandem heavy primary op	Diesel	39.0	89,203	2.55
Apr 15, 06	Chisel, twisted shovel	Diesel	65.0	130,961	3.74
Apr 16, 06	Disk, tandem light finishing	Diesel	19.5	47,595	1.36
Apr 19, 06	Bedder, hipper, disk hiller	Diesel	26.0	53,582	1.53
Apr 20, 06	Planter, double disk opener on 8 inch high beds	Diesel	2.4	52,384	1.50
Apr 21, 06	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
May 12, 06	Cultivator, rotary	Diesel	6.6	64,208	1.84
Jun 11, 06	Cultivator, rotary	Diesel	6.6	64,208	1.84
Sep 16, 06	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 30, 06	Harvest, dig root crops res. buried	Diesel	27.3	222,558	6.36
Oct 01, 06	Chisel, st. pt. 15 in deep	Diesel	78.0	154,758	4.42
Oct 01, 06	Cultipacker, roller	Diesel	35.6	73,787	2.11
Oct 02, 06	Drill, deep furrow 7 to 10 in spacing	Diesel	24.7	88,006	2.52
Oct 03, 06	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
		Total / ac		10,067,505	287.73
		Total	437.8	1,308,697,92	37,402.40

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Oct 01, 06 - Aug 01, 01	Wheat, winter, CMZ 50 hi ppt 7-10in spac	106.8	8,844,258	252.77
Aug 02, 01 - Sep 15, 05	Alfalfa, hay	192.5	724,699	20.71
Sep 16, 05 - Sep 30, 06	Potato, late, harvest	138.4	498,548	14.25

Notes

```
2/10/ 6  Wheat, winter, CMZ 50 hi ppt 7-10in spac          1.225
  20/ 4/ 6        Potato, late, harvest            1.075

1/10/ 5  Wheat, winter, CMZ 50 hi ppt 7-10in spac          1.225

1/10/ 5  Wheat, winter, CMZ 50 hi ppt 7-10in spac          1.225
```

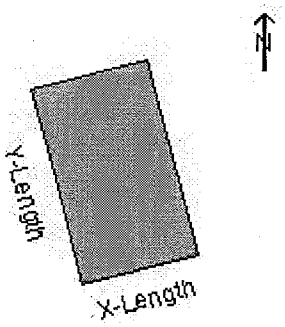
Run Summary

NRCS Natural Resources Conservation Service

E6R1_-15

Run Date:	Thursday, August 02, 2012, 11:51 AM		
Client Name:	Exercise 6		
Farm No:	Run1	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Tomato, conv no plastic, z65.man		
Soil:	Plymouth_PlA_85_LS.ifc		

Simulation & Site Information



X-Length:	600.1 ft	**Mode:**	NRCS
Y-Length:	1000.0 ft	**Soil Loss**	4.0 t/ac/yr
Area:	13.8 ac	**Site:**	UNITED STATES NEW YORK SUFFOLK
Elevation:	98.4 ft		
Orientation:	-15.0 °	**Location:**	40.87° N, 72.85° W
		Cligen:	RIVERHEAD RESEARCH
		Windgen:	Interpolated (40.87° N, 72.85°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Tomato, fresh mkt	9.4	9.4	4.7	4.7	0.15
Ave. Annual		9.4	9.4	4.7	4.7	0.15

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Jul 16, 01 - Jul 15, 01	Tomato, fresh mkt	9.4	9.4	4.7	4.7	0.15

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 15, 01	Tomato, fresh mkt	2,335	290.5 cwt/ac	94.0

SCI Summary

Soil Conditioning	-1.0	**SCI Subfactors**	
Energy Calculator:	3.5 gal diesel/ac	**OM**	-0.59
Average Annual STIR:	152.8	**FO:**	-0.51
Wind Erosion Soil	9.4 t/ac	**ER:**	-2.70
Water Erosion Soil	0.0 t/ac		

Run Summary

NRCS Natural Resources Conservation Service

E6R1_-15

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 15, 01	Chisel, twisted shovel	Diesel	65.0	134,702	3.85
Apr 25, 01	Disk, tandem heavy primary op	Diesel	39.0	91,897	2.63
Apr 30, 01	Bedder, hipper, disk hiller	Diesel	26.0	55,078	1.57
Apr 30, 01	Bed shaper	Diesel	19.5	46,547	1.33
May 01, 01	Planter, transplanter, vegetable	Diesel	3.1	98,033	2.80
Jul 15, 01	Harvest, hand pick	Diesel	0.2	0	0.00
Oct 01, 01	Killing Frost	Diesel	0.0	0	0.00
		Total / ac		426,258	12.18
		Total	152.8	5,871,966	167.82

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Jul 16, 01 - Jul 15, 01	Tomato, fresh mkt	152.8	426,258	12.18

Notes

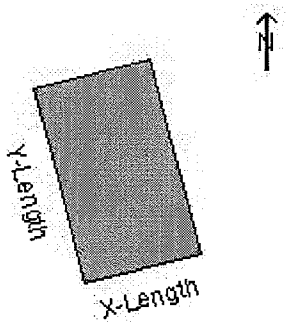
Run Summary

NRCS Natural Resources Conservation Service

E6R2_-15

Run Date:	Thursday, August 02, 2012, 12:01 PM		
Client Name:	Exercise 6		
Farm No:	Run2	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Tomato, Rye Cover, z65.man		
Soil:	Plymouth_PlA_85_LS.ifc		

Simulation & Site Information



X-Length:	600.1 ft	**Mode:**	NRCS
Y-Length:	1000.0 ft	**Soil Loss**	4.0 t/ac/yr
Area:	13.8 ac	**Site:**	UNITED STATES NEW YORK SUFFOLK
Elevation:	98.4 ft		
Orientation:	-15.0 °	**Location:**	40.87° N, 72.85° W
		Cligen:	RIVERHEAD RESEARCH
		Windgen:	Interpolated (40.87° N, 72.85°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Tomato, fresh mkt	1.8	1.8	1.0	0.9	0.03
Ave. Annual		1.8	1.8	1.0	0.9	0.03

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Jul 16, 01 - Jul 15, 01	Tomato, fresh mkt	1.8	1.8	1.0	0.9	0.03

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 15, 01	Tomato, fresh mkt	2,393	298.0 cwt/ac	94.0

SCI Summary

Soil Conditioning	-0.2		**SCI Subfactors**	
Energy Calculator:	4.2	gal diesel/ac	**OM**	0.24
Average Annual STIR:	178.6		**FO:**	-0.77
Wind Erosion Soil	1.8	t/ac	**ER:**	0.27
Water Erosion Soil	0.0	t/ac		

Run Summary

NRCS Natural Resources Conservation Service

E6R2_-15

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 15, 01	Chisel, twisted shovel	Diesel	65.0	134,702	3.85
Apr 25, 01	Disk, tandem heavy primary op	Diesel	39.0	91,897	2.63
Apr 30, 01	Bedder, hipper, disk hiller	Diesel	26.0	55,078	1.57
Apr 30, 01	Bed shaper	Diesel	19.5	46,547	1.33
May 01, 01	Planter, transplanter, vegetable	Diesel	3.1	98,033	2.80
Jul 15, 01	Harvest, hand pick	Diesel	0.2	0	0.00
Jul 20, 01	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
Aug 01, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
		Total / ac		519,352	14.84
		Total	178.6	7,154,397	204.47

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Jul 16, 01 - Jul 15, 01	Tomato, fresh mkt	152.8	426,258	12.18

Notes

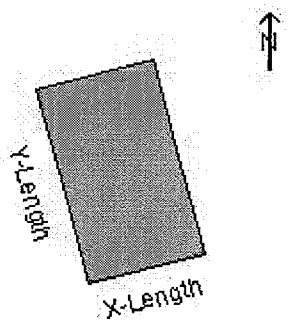
Run Summary

NRCS Natural Resources Conservation Service

E6R3_-15

Run Date:	Thursday, August 02, 2012, 12:12 PM		
Client Name:	Exercise 6		
Farm No:	Run3	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Tomato, Rye Cover,Plastic Mulch z65.man		
Soil:	Plymouth_PlA_85_LS.ifc		

Simulation & Site Information



X-Length:	600.1 ft	**Mode:**	NRCS
Y-Length:	1000.0 ft	**Soil Loss**	4.0 t/ac/yr
Area:	13.8 ac	**Site:**	UNITED STATES NEW YORK SUFFOLK
Elevation:	98.4 ft		
Orientation:	-15.0 °	**Location:**	40.87° N, 72.85° W
		Cligen:	RIVERHEAD RESEARCH
		Windgen:	Interpolated (40.87° N, 72.85°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Tomato, fresh mkt	0.9	0.9	0.5	0.4	0.02
Ave. Annual		0.9	0.9	0.5	0.4	0.02

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Jul 16, 01 - Jul 15, 01	Tomato, fresh mkt	0.9	0.9	0.5	0.4	0.02

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Jul 15, 01	Tomato, fresh mkt	2,429	302.8 cwt/ac	94.0

SCI Summary

Soil Conditioning	0.1	**SCI Subfactors**	
Energy Calculator:	4.9 gal diesel/ac	**OM**	0.60
Average Annual STIR:	180.5	**FO:**	-0.79
Wind Erosion Soil	0.9 t/ac	**ER:**	0.66
Water Erosion Soil	0.0 t/ac		

Run Summary

NRCS Natural Resources Conservation Service

E6R3_-15

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 15, 01	Chisel, twisted shovel	Diesel	65.0	134,702	3.85
Apr 25, 01	Disk, tandem heavy primary op	Diesel	39.0	91,897	2.63
Apr 30, 01	Bedder, hipper, disk hiller	Diesel	26.0	55,078	1.57
Apr 30, 01	Bed shaper	Diesel	19.5	46,547	1.33
May 01, 01	Plastic mulch applic. 48 inch beds 80 percent cover	Diesel	1.3	33,077	0.95
May 01, 01	Planter, transplanter, vegetable	Diesel	3.1	98,033	2.80
Jul 15, 01	Harvest, hand pick	Diesel	0.2	0	0.00
Jul 18, 01	Plastic mulch, remove	Diesel	0.5	47,745	1.36
Jul 20, 01	Disk, tandem light finishing	Diesel	19.5	48,942	1.40
Aug 01, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
		Total / ac		600,174	17.15
		Total	180.5	8,267,762	236.29

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Jul 16, 01 - Jul 15, 01	Tomato, fresh mkt	154.1	459,335	13.13

Notes

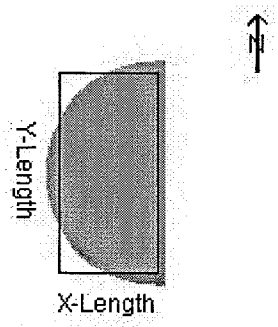
Run Summary

NRCS Natural Resources Conservation Service

E7R1

Run Date:	Thursday, August 02, 2012, 01:23 PM		
Client Name:	Exercise 7		
Farm No:	Run 1	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Corn, silage, no manure, no fall till, pivot CMZ19.man		
Soil:	Amarillo_AnB_85_LFS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	826.4 ft
Y-Length:	1652.6 ft
Radius:	932.4 ft
Area:	31.4 ac
Elevation:	4439.0 ft
Orientation:	0.0 °

Mode:	NRCS
Soil Loss	5.0 t/ac/yr
Site:	UNITED STATES NEW MEXICO CURRY
Location:	34.57° N, 103.35° W
Cligen:	CLOVIS 13N
Windgen:	Interpolated (34.57° N, 103.35°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Corn, silage	124.6⚠	124.6⚠	58.2	66.3	1.89
Ave. Annual		124.6⚠	124.6⚠	58.2	66.3	1.89

⚠ WARNING: Erosion values exceeded the science model accuracy thresholds.

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Sep 21, 01 - Sep 20, 01	Corn, silage	124.6	124.6	58.2	66.3	1.89

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Sep 20, 01	Corn, silage	283	19.5 ton/ac	65.0

Run Summary

NRCS Natural Resources Conservation Service

E7R1

SCI Summary

Soil Conditioning	-9.8		**SCI Subfactors**	
Energy Calculator:	3.8	gal diesel/ac	**OM**	-0.47
Average Annual STIR:	106.6		**FO:**	-0.06
Wind Erosion Soil	124.6	t/ac	**ER:**	-48.05
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 15, 01	Disk, offset, heavy	Diesel	39.0	110,306	3.15
Apr 18, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 20, 01	Planter, double disk opnr	Diesel	2.4	53,881	1.54
Apr 21, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 01, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 20, 01	Harvest, silage, kill crop	Diesel	0.2	116,443	3.33
Sep 25, 01	Disk, tandem heavy primary op	Diesel	39.0	91,897	2.63
		Total / ac		463,226	13.24
		Total	106.6	14,523,647	415.08

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Sep 21, 01 - Sep 20, 01	Corn, silage	106.6	463,226	13.24

Notes

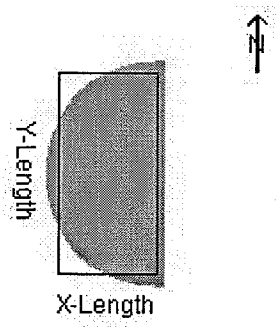
Run Summary

NRCS Natural Resources Conservation Service

E7R2

Run Date:	Thursday, August 02, 2012, 01:38 PM		
Client Name:	Exercise 7		
Farm No:	Run 2	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Corn, silage, manure, no fall till, pivot CMZ19.man		
Soil:	Amarillo_AnB_85_LFS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	826.4 ft
Y-Length:	1652.6 ft
Radius:	932.4 ft
Area:	31.4 ac
Elevation:	4439.0 ft
Orientation:	0.0 °

Mode:	NRCS
Soil Loss	5.0 t/ac/yr
Site:	UNITED STATES NEW MEXICO CURRY
Location:	34.57° N, 103.35° W
Cligen:	CLOVIS 13N
Windgen:	Interpolated (34.57° N, 103.35°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Corn, silage	20.6	20.6	10.1	10.4	0.31
Ave. Annual		20.6	20.6	10.1	10.4	0.31

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Sep 21, 01 - Sep 20, 01	Corn, silage	20.6	20.6	10.1	10.4	0.31

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Sep 20, 01	Corn, silage	290	21.2 ton/ac	65.0

SCI Summary

Soil Conditioning	-1.0		**SCI Subfactors**	
Energy Calculator:	5.0	gal diesel/ac	**OM**	1.17
Average Annual STIR:	106.8		**FO:**	-0.06
Wind Erosion Soil	20.6	t/ac	**ER:**	-7.09
Water Erosion Soil	0.0	t/ac		

Run Summary

NRCS Natural Resources Conservation Service

E7R2

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Apr 15, 01	Manure spreader	Diesel	0.2	150,717	4.31
Apr 15, 01	Disk, offset, heavy	Diesel	39.0	110,306	3.15
Apr 18, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 20, 01	Planter, double disk opnr	Diesel	2.4	53,881	1.54
Apr 21, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 01, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 20, 01	Harvest, silage, kill crop	Diesel	0.2	116,443	3.33
Sep 25, 01	Disk, tandem heavy primary op	Diesel	39.0	91,897	2.63
		Total / ac		613,943	17.55
		Total	106.8	19,249,111	550.14

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Sep 21, 01 - Sep 20, 01	Corn, silage	106.8	613,943	17.55

Notes

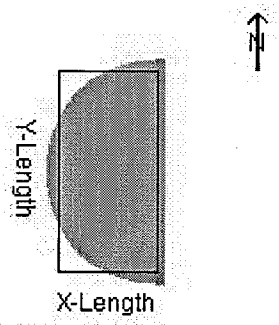
Run Summary

NRCS Natural Resources Conservation Service

E7R3

Run Date:	Thursday, August 02, 2012, 02:03 PM		
Client Name:	Exercise 7		
Farm No:	Run 3	**Tract No:** ---	**Field No:**---
Run Location:	Runs		
Management:	Silage WWheat, Corn, silage, manure, pivot CMZ19.man		
Soil:	Amarillo_AnB_85_LFS.ifc		

Simulation & Site Information



Field shape approximate

X-Length:	826.4 ft
Y-Length:	1652.6 ft
Radius:	932.4 ft
Area:	31.4 ac
Elevation:	4439.0 ft
Orientation:	0.0 °

Mode:	NRCS
Soil Loss	5.0 t/ac/yr
Site:	UNITED STATES NEW MEXICO CURRY
Location:	34.57° N, 103.35° W
Cligen:	CLOVIS 13N
Windgen:	Interpolated (34.57° N, 103.35°

Erosion

Period	Crop/Residue	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen	PM10
Rot. year: 1	Wheat, winter silage Corn, silage	2.3	2.3	1.2	1.2	0.03
Ave. Annual		2.3	2.3	1.2	1.2	0.03

Crop Interval Erosion

Date Range	Crop	Gross Loss t/ac	Net Soil Loss From Field (t/ac) Total	Creep/Salt	Suspen.	PM10
Sep 21, 01 - Apr 12, 01	Wheat, winter silage	2.1	2.1	1.0	1.1	0.03
Apr 13, 01 - Sep 20, 01	Corn, silage	0.2	0.2	0.1	0.1	0.00

Harvests

Date	Crop	Residue lb/ac	Harvest Yield	Yield % Moisture
Apr 12, 01	Wheat, winter silage	693	8.5 ton/ac	65.0
Sep 20, 01	Corn, silage	277	18.2 ton/ac	65.0

Run Summary

NRCS Natural Resources Conservation Service

E7R3

SCI Summary

Soil Conditioning	0.5		**SCI Subfactors**	
Energy Calculator:	6.3	gal diesel/ac	**OM**	1.24
Average Annual STIR:	113.3		**FO:**	-0.12
Wind Erosion Soil	2.3	t/ac	**ER:**	0.09
Water Erosion Soil	0.0	t/ac		

Rotation Stir Energy

Date	Operation	Fuel	Stir	Energy Btu/ac	Cost USD/ac
Mar 10, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Apr 08, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Apr 12, 01	Harvest, silage, no kill crop	Diesel	0.2	116,443	3.33
Apr 15, 01	Manure spreader	Diesel	0.2	150,717	4.31
Apr 15, 01	Disk, offset, heavy	Diesel	39.0	110,306	3.15
Apr 18, 01	Cultivator, field 6-12 in sweeps	Diesel	26.0	90,700	2.59
Apr 20, 01	Planter, double disk opnr	Diesel	2.4	53,881	1.54
Apr 21, 01	Irrigation, Start Monitor (pivot, linear, wheelline)	Diesel	0.0	0	0.00
Sep 01, 01	Irrigation, Stop Monitor	Diesel	0.0	0	0.00
Sep 20, 01	Harvest, silage, kill crop	Diesel	0.2	116,443	3.33
Sep 25, 01	Disk, tandem heavy primary op	Diesel	39.0	91,897	2.63
Oct 03, 01	Drill or airseeder, double disk	Diesel	6.3	44,152	1.26
Oct 05, 01	Irrigation (2 inch, Pivot, Linear, Wheelline)	Diesel	0.0	0	0.00
		Total / ac		774,539	22.14
		Total	113.3	24,284,289	694.04

Crop Interval Stir Energy

Date Range	Crop	Stir	Energy Btu/ac	Cost USD/ac
Sep 21, 01 - Apr 12, 01	Wheat, winter silage	67.8	522,046	14.92
Apr 13, 01 - Sep 20, 01	Corn, silage	45.5	252,492	7.22

Notes