

**APPENDIX A-2**

Overburden Analyses Spreadsheets  
DH-1 through DH-6

OPERATOR: Growing Greener  
 COUNTY: Centre  
 TOWNSHIP: Snowshoe  
 PERMIT NO.: Contrary Run  
 DRILL HOLE: DH-1

THRESHOLD VALUES	SULFUR	NP	FIZZ
	0.5	60	1

ALK ADD (TONS/AC CaCO3)  
 LATITUDE: 41° 04' 34.2"  
 LONGITUDE: 77° 56' 43.5"  
 COAL SEAMS: Clanton, Brookville  
 STATE PLANE ZONE  
 FEET (NORTH/SOUTH)  
 FEET (EAST/WEST)  
 SURFACE ELEV.(FT.): 1610

TOTAL DEPTH DEPTH(FT)	BOTTOM DEPTH(FT)	THICKNESS FEET	ROCK TYPE	ACREAGE PERCENT	SULFUR	FIZZ RATING	NEUTRAL POTENT.	ACREAGE	UNIT WT. TONS/AC-FT	FRACTION SPOILED	TONS		NET NP		TONS OF	
											MPA	NP	TH	TH	TH	OB
4.00	3.00	SOIL	0.04	0	0.04	0	-1.50	1.00	2000	1.00	0.00	7.50	0.00	0.00	-16.50	6000.00
6.00	2.00	SNDS	0.04	0.00	0.04	0.00	-2.25	1.00	3670	1.00	0.00	9.18	0.00	0.00	-16.52	7340.00
8.00	2.00	SNDS	0.04	0.00	0.04	0.00	-1.25	1.00	3670	1.00	0.00	9.18	0.00	0.00	-18.35	7340.00
10.00	2.00	SNDS	0.04	0.00	0.04	0.00	-1.25	1.00	3670	1.00	0.00	9.18	0.00	0.00	-18.35	7340.00
12.00	2.00	SHLE	0.04	0.00	0.04	0.00	-0.50	1.00	3700	1.00	0.00	9.25	0.00	0.00	-3.70	7400.00
15.00	3.00	SNDS	0.04	0.00	0.04	0.00	-1.00	1.00	3670	1.00	0.00	13.76	0.00	0.00	-11.01	11010.00
18.00	3.00	SHLE	0.04	0.00	0.04	0.00	0.25	1.00	3700	1.00	0.00	13.88	0.00	0.00	2.78	11100.00
20.00	2.00	SLSN	0.04	0.00	0.04	0.00	0.25	1.00	3750	1.00	0.00	9.38	0.00	0.00	1.88	7500.00
22.00	2.00	SHLE	0.08	0.00	0.08	0.00	-0.75	1.00	3700	1.00	0.00	18.50	0.00	0.00	-5.55	7400.00
24.00	2.00	SLSN	0.12	0.00	0.12	0.00	-0.25	1.00	3750	1.00	0.00	28.13	0.00	0.00	-1.88	7500.00
27.00	3.00	SHLE	0.06	0.00	0.06	0.00	2.50	1.00	3700	1.00	0.00	20.81	0.00	0.00	27.75	6.94
29.00	2.00	SHLE	0.04	0.00	0.04	0.00	0.75	1.00	3700	1.00	0.00	9.25	0.00	0.00	5.55	7400.00
31.00	2.00	SHLE	0.26	0.00	0.26	0.00	21.75	1.00	3700	1.00	0.00	60.13	0.00	0.00	160.95	7400.00
33.00	2.00	SHLE	0.42	0.00	0.42	0.00	19.75	1.00	3700	1.00	0.00	97.13	0.00	0.00	146.15	7400.00
34.00	1.00	SHLE	0.70	0.00	0.70	0.00	-0.50	1.00	3700	1.00	0.00	80.94	0.00	0.00	-1.85	3700.00
35.00	1.00	COAL	0.88	0.00	0.88	0.00	-0.75	1.00	1800	0.10	0.00	4.95	0.00	0.00	-0.14	180.00
36.00	1.00	SHLE	1.02	0.00	1.02	0.00	-1.50	1.00	3700	1.00	0.00	117.94	0.00	0.00	-5.55	3700.00
39.00	3.00	SNDS	0.32	0.00	0.32	0.00	-1.50	1.00	3670	1.00	0.00	110.10	0.00	0.00	-16.52	11010.00
42.00	3.00	SNDS	0.20	0.00	0.20	0.00	-1.25	1.00	3670	1.00	0.00	68.81	0.00	0.00	-13.76	11010.00
45.00	3.00	SNDS	0.06	0.00	0.06	0.00	-0.75	1.00	3670	1.00	0.00	20.64	0.00	0.00	-8.26	11010.00
49.00	4.00	SNDS	0.08	0.00	0.08	0.00	0.00	1.00	3670	1.00	0.00	36.70	0.00	0.00	0.00	14680.00
50.00	1.00	SNDS	0.06	0.00	0.06	0.00	-1.50	1.00	3670	1.00	0.00	6.88	0.00	0.00	-5.51	3670.00
53.00	3.00	SNDS	0.04	0.00	0.04	0.00	1.00	1.00	3670	1.00	0.00	13.76	0.00	0.00	11.01	11010.00
55.00	2.00	SNDS	0.04	0.00	0.04	0.00	4.75	1.00	3670	1.00	0.00	9.18	0.00	0.00	34.87	7340.00
57.00	2.00	SNDS	0.22	0.00	0.22	0.00	1.25	1.00	3670	1.00	0.00	50.46	0.00	0.00	9.18	7340.00
59.00	2.00	SHLE	0.82	0.00	0.82	0.00	3.25	1.00	3700	1.00	0.00	189.63	0.00	0.00	24.05	7400.00
60.00	1.00	COAL	1.52	0.00	1.52	0.00	1.00	1.00	1800	0.10	0.00	8.55	0.00	0.00	0.18	180.00
62.00	2.00	SHLE	0.06	0.00	0.06	0.00	-0.75	1.00	3700	0.50	0.00	6.94	0.00	0.00	-2.78	3700.00

TOTAL (TONS): 402.00 1040.70 0.00 303.98 -402.00 -736.72 209160.00  
 TOTAL (TONS/THOUSAND): 1.92 4.98 0.00 1.45 -1.92 -3.52

OVERBURDEN ANALYSIS SPREAD SHEET CALCULATION SUMMARY

OPERATOR Growing Greener COUNTY Centre  
 PERMIT NO. Contrary Run TOWNSHIP Snowshoe  
 DRILL HOLE DH-1 COAL SEAMS: Clarion, Brookville

TOTAL DEPTH	62	TOP ACREAGE	1	BOTTOM ACREAGE	1
			THRESHOLD VALUES		
			SULFUR	NP	FIZZ
			0.5	60	1

MPA, NP -TH = With Thresholds

TOTAL (TONS):	TONS		TONS		NET NP		NET NP		TONS OF OB
	MPA -TH	MPA	NP -TH	NP	TONS -TH	TONS	TONS	TONS	
402	1041	0	0	304	-402	-737	209160		
TOTAL (TONS/THOUSAND):	2	5	0	1	-2	-4			

With Thresholds @ 31.25

MPA (Total Tons)	402	Tons/1000 tons	2
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-402	Tons/1000 tons	-2
NP/MPA Ratio	0		
Available NP (Tons per acre)	402		
NP Available to achieve 0.6% NNP (Tons per acre)	1657		
	<b>DEFICIENT</b>		

Without Thresholds @ 31.25

MPA (Total Tons)	1041	Tons/1000 tons	5
NP (Total Tons)	304	Tons/1000 tons	1
Net Tons NP	-737	Tons/1000 tons	-4
NP/MPA Ratio	0		
Available NP (Tons per acre)	737		
NP Available to achieve 1.2% NNP (Tons per acre)	3247		
	<b>DEFICIENT</b>		

With Thresholds @ 62.50

MPA (Total Tons)	804	Tons/1000 tons	4
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-804	Tons/1000 tons	-4
NP/MPA Ratio	0		
Available NP (Tons per acre)	804		
	<b>DEFICIENT</b>		

Without Thresholds @ 62.50

MPA (Total Tons)	2081	Tons/1000 tons	10
NP (Total Tons)	304	Tons/1000 tons	1
Net Tons NP	-1777	Tons/1000 tons	-8
NP/MPA Ratio	0		
Available NP (Tons per acre)	1777		
	<b>DEFICIENT</b>		

OPERATOR Growing Greener  
 COUNTY Centre  
 TOWNSHIP Snowshoe  
 DRILL HOLE DH-2

THRESHOLD VALUES	SULFUR	NP	FIZZ
	0.5	60	1

OVERBURDEN ANALYSIS SPREAD SHEET  
 ALK ADD (TONS/AC CaCO3) \_\_\_\_\_  
 LATITUDE 41° 04' 31"  
 LONGITUDE 77° 56' 21.6"  
 COAL SEAMS: Lower Kittanning, Clanton  
 STATE PLANE ZONE  
 FEET (NORTH/SOUTH)  
 FEET (EAST/WEST)  
 SURFACE ELEV.(FT.) 1640

TOTAL DEPTH DEPTH (FT)	BOTTOM DEPTH (FT)	THICKNESS FEET	ROCK TYPE	SULFUR PERCENT	ACREAGE	FIZZ RATING	NEUTRAL POTENTIAL	UNIT WT. TONS/AC-FT	FRACTION SPOILED	MPA, NP -TH = With Thresholds		NET NP		TONS OF OB	
										MPA	NP	MPA	NP	TONS	TONS
4.00		2.00	SOIL	0.06	0	0	-3.00	1.00	1.00	0.00	0.00	-12.00	0.00	-19.50	4000.00
7.00		3.00	SHLE	0.06	0.00	0.00	-2.50	1.00	1.00	20.81	0.00	-27.75	0.00	-48.56	11100.00
9.00		2.00	SHLE	0.12	0.00	0.00	-1.75	1.00	1.00	27.75	0.00	-12.95	0.00	-40.70	7400.00
10.00		1.00	SHLE	0.26	0.00	0.00	-4.25	1.00	1.00	30.06	0.00	-15.73	0.00	-45.79	3700.00
11.00		1.00	COAL	0.10	0.00	0.00	-1.50	1.00	1.00	0.56	0.00	-0.27	0.00	-0.83	180.00
12.00		1.00	SNDS	0.56	0.00	0.00	-2.25	1.00	1.00	64.23	0.00	-8.26	-64.23	-72.48	3670.00
14.00		2.00	SNDS	0.14	0.00	0.00	-2.00	1.00	1.00	32.11	0.00	-14.68	0.00	-46.79	7340.00
17.00		3.00	SNDS	0.04	0.00	0.00	-3.00	1.00	1.00	13.76	0.00	-33.03	0.00	-46.79	11010.00
20.00		3.00	SHLE	0.12	0.00	0.00	-3.50	1.00	1.00	0.00	0.00	-38.54	0.00	-79.82	11010.00
22.00		2.00	SHLE	0.04	0.00	0.00	-2.25	1.00	1.00	9.25	0.00	-16.65	0.00	-25.90	7400.00
25.00		3.00	SLSN	1.24	0.00	0.00	-1.50	1.00	1.00	435.94	0.00	-16.88	-435.94	-452.81	11250.00
28.00		3.00	SHLE	6.02	0.00	0.00	-2.00	1.00	1.00	2088.19	0.00	-22.20	-2088.19	-2110.39	11100.00
29.00		1.00	COAL	6.06	0.00	0.00	-2.00	1.00	1.00	34.09	0.00	-0.36	-34.09	-34.45	180.00
31.00		2.00	SHLE	0.74	0.00	0.00	-1.75	1.00	1.00	171.13	0.00	-12.95	-171.13	-184.08	7400.00
32.00		1.00	COAL	0.64	0.00	0.00	-3.25	1.00	1.00	3.60	0.00	-0.59	-3.60	-4.19	180.00
34.00		2.00	SHLE	0.24	0.00	0.00	-2.75	1.00	1.00	27.75	0.00	-10.18	0.00	-37.93	3700.00
36.00		2.00	SHLE	0.32	0.00	0.00	-1.50	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
38.00		2.00	SNDS	0.16	0.00	0.00	-0.75	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00

TOTAL (TONS): 2797.16 3008.01 0.00 -242.99 -2797.16 -3251.01 100620.00  
 TOTAL (TONS/THOUSAND): 27.80 29.89 0.00 -2.41 -27.80 -32.31



OVERBURDEN ANALYSIS SPREAD SHEET CALCULATION SUMMARY

OPERATOR Growing Greener COUNTY Centre COAL SEAMS: Lower Kittanning, Clarion  
 PERMIT NO. Contrary Run TOWNSHIP Snowshoe  
 DRILL HOLE DH-2

TOTAL DEPTH	TOP ACREAGE	BOTTOM ACREAGE	SULFUR	NP	FIZZ
38	1	1	0.5	60	1

MPA, NP -TH = With Thresholds

TOTAL (TONS):	TONS		TONS		NET NP		NET NP		TONS OF OB
	MPA -TH	MPA	NP -TH	NP	TONS -TH	TONS	TONS	TONS	
2797	2797	3008	0	-243	-2797	-3251	-3251	100620	
28	28	30	0	-2	-28	-32	-32		
TOTAL (TONS/THOUSAND):									

With Thresholds @ 31.25

MPA (Total Tons)	2797	Tons/1000 tons	28
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-2797	Tons/1000 tons	-28
NP/MPA Ratio	0		
Available NP	2797		
(Tons per acre)	<b>DEFICIENT</b>		
NP Available to achieve 0.6% NNP	3401		
(Tons per acre)	<b>DEFICIENT</b>		

Without Thresholds @ 31.25

MPA (Total Tons)	3008	Tons/1000 tons	30
NP (Total Tons)	-243	Tons/1000 tons	-2
Net Tons NP	-3251	Tons/1000 tons	-32
NP/MPA Ratio	0		
Available NP	3251		
(Tons per acre)	<b>DEFICIENT</b>		
NP Available to achieve 1.2% NNP	4458		
(Tons per acre)	<b>DEFICIENT</b>		

With Thresholds @ 62.50

MPA (Total Tons)	5594	Tons/1000 tons	56
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-5594	Tons/1000 tons	-56
NP/MPA Ratio	0		
Available NP	5594		
(Tons per acre)	<b>DEFICIENT</b>		

Without Thresholds @ 62.50

MPA (Total Tons)	6016	Tons/1000 tons	60
NP (Total Tons)	-243	Tons/1000 tons	-2
Net Tons NP	-6259	Tons/1000 tons	-62
NP/MPA Ratio	0		
Available NP	6259		
(Tons per acre)	<b>DEFICIENT</b>		

OPERATOR: OVERBURDEN ANALYSIS SPREAD SHEET  
 PERMIT NO.: Growing Greener  
 DRILL HOLE: Contrary Run  
 DH-3

THRESHOLD VALUES	SULFUR	NP	FIZZ
	0.5	60	1

CARBONOLITH: 2580  
 CLAY: 3450  
 COAL: 1800  
 LIMESTONE: 3670  
 OTHER: 3670  
 SANDSTONE: 3670  
 SHALE: 3700  
 SILTSTONE: 3750  
 SOIL: 2000  
 TILL: 3600

ALK.ADD (TONS/AC CaCO3): 41'04" 11.6"  
 LATITUDE: 77° 58' 16.4"  
 COAL SEAMS: Clarion, Brookville  
 STATE PLANE ZONE: FEET (NORTH/SOUTH)  
 FEET (EAST/WEST): 1520  
 SURFACE ELEV.(FT.):

TOTAL DEPTH DEPTH (FT)	BOTTOM DEPTH (FT)	THICKNESS FEET	ROCK TYPE	ACREAGE	SULFUR PERCENT	FIZZ RATING	NEUTRAL POTENT.	UNIT WT. FRACTION		TONS		NET NP		TONS OF		
								ACREAGE	TONS/AC-FT	MPA	NP	MPA	NP	MPA	NP	MPA
4.00	3.00	3.00	SOIL	1.00	0.14	0	-3.50	2000	1.00	0.00	26.25	0.00	0.00	-21.00	0.00	6000.00
8.00	4.00	4.00	SNDS	1.00	0.08	0.00	-1.00	3670	1.00	0.00	36.70	0.00	0.00	-14.68	0.00	14680.00
10.00	2.00	2.00	SHLE	1.00	0.04	0.00	-1.00	3700	1.00	0.00	9.25	0.00	0.00	-7.40	0.00	7400.00
14.00	4.00	4.00	SNDS	1.00	0.04	0.00	-0.75	3670	1.00	0.00	18.35	0.00	0.00	-11.01	0.00	14680.00
16.00	2.00	2.00	SHLE	1.00	0.06	0.00	-1.00	3700	1.00	0.00	13.88	0.00	0.00	-7.40	0.00	7400.00
20.00	4.00	4.00	SLSN	1.00	0.04	0.00	-1.00	3750	1.00	0.00	18.75	0.00	0.00	-15.00	0.00	15000.00
22.00	2.00	2.00	SHLE	1.00	0.12	0.00	7.00	3700	1.00	0.00	27.75	0.00	0.00	51.80	0.00	7400.00
24.00	2.00	2.00	SLSN	1.00	0.16	0.00	5.75	3750	1.00	0.00	37.50	0.00	0.00	43.13	0.00	7500.00
25.00	1.00	1.00	SHLE	1.00	0.64	0.00	0.25	3700	1.00	74.00	74.00	0.00	0.00	-74.00	0.00	3700.00
27.00	2.00	2.00	COAL	1.00	3.52	0.00	0.50	1800	0.10	39.60	39.60	0.00	0.18	-39.60	-39.42	360.00
29.00	2.00	2.00	CLAY	1.00	1.28	0.00	-0.75	3450	1.00	276.00	276.00	0.00	0.00	-5.18	-276.00	6900.00
30.00	1.00	1.00	SHLE	1.00	1.20	0.00	0.00	3700	1.00	138.75	138.75	0.00	0.00	-138.75	-138.75	3700.00
32.00	2.00	2.00	SNDS	1.00	0.20	0.00	-0.25	3670	1.00	0.00	45.88	0.00	0.00	-1.84	0.00	7340.00
34.00	2.00	2.00	SNDS	1.00	0.16	0.00	-0.25	3670	1.00	0.00	36.70	0.00	0.00	-1.84	0.00	7340.00
37.00	3.00	3.00	SNDS	1.00	0.06	0.00	0.75	3670	1.00	0.00	20.64	0.00	0.00	8.26	0.00	11010.00
40.00	3.00	3.00	SHLE	1.00	0.06	0.00	-0.25	3700	1.00	0.00	20.81	0.00	0.00	-2.78	0.00	11000.00
42.00	2.00	2.00	SNDS	1.00	0.16	0.00	-0.50	3670	1.00	0.00	36.70	0.00	0.00	-3.67	0.00	7340.00
44.00	2.00	2.00	SHLE	1.00	6.02	0.00	0.00	3700	1.00	1392.13	1392.13	0.00	0.00	-1392.13	-1392.13	7400.00
45.00	1.00	1.00	COAL	1.00	6.82	0.00	0.75	1800	0.10	38.36	38.36	0.00	0.14	-38.36	-38.23	180.00
48.00	3.00	3.00	CLAY	1.00	2.12	0.00	1.25	3450	0.33	226.28	226.28	0.00	4.27	-226.28	-222.01	3415.50
49.00	1.00	1.00	CLAY	1.00	0.06	0.00	0.00	3450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TOTAL (TONS): 2185.11 2534.27 0.00 16.91 -2185.11 -2517.36 149845.50  
 TOTAL (TONS/THOUSAND): 14.58 16.91 0.00 0.11 -14.58 -16.80

OVERBURDEN ANALYSIS SPREAD SHEET CALCULATION SUMMARY

OPERATOR Growing Greener COUNTY Centre  
 PERMIT NO. Contrary Run TOWNSHIP Snowshoe  
 DRILL HOLE DH-3

COAL SEAMS: Clarion, Brookville

TOTAL DEPTH	TOP ACREAGE	BOTTOM ACREAGE	THRESHOLD VALUES		
			SULFUR	NP	FIZZ
49	1	1	0.5	60	1

MPA, NP -TH = With Thresholds

TOTAL (TONS): TOTAL (TONS/THOUSAND):	TONS MPA		TONS NP -TH		NET NP TONS -TH		NET NP TONS		TONS OF OB	
	MPA -TH	MPA	NP -TH	NP	TONS -TH	TONS	TONS	TONS	TONS	TONS
2185	2185	2534	0	17	-2185	17	-2517	-2517	149846	17
15	15	17	0	0	-15	0	-17	-17		0

With Thresholds @ 31.25

MPA (Total Tons)	2185	Tons/1000 tons	15
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-2185	Tons/1000 tons	-15
NP/MPA Ratio	0		
Available NP (Tons per acre)	2185		
NP Available to achieve 0.6% NNP (Tons per acre)	3084		
	<b>DEFICIENT</b>		

Without Thresholds @ 31.25

MPA (Total Tons)	2534	Tons/1000 tons	17
NP (Total Tons)	17	Tons/1000 tons	0
Net Tons NP	-2517	Tons/1000 tons	-17
NP/MPA Ratio	0		
Available NP (Tons per acre)	2517		
NP Available to achieve 1.2% NNP (Tons per acre)	4316		
	<b>DEFICIENT</b>		

With Thresholds @ 62.50

MPA (Total Tons)	4370	Tons/1000 tons	29
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-4370	Tons/1000 tons	-29
NP/MPA Ratio	0		
Available NP (Tons per acre)	4370		
	<b>DEFICIENT</b>		

Without Thresholds @ 62.50

MPA (Total Tons)	5069	Tons/1000 tons	34
NP (Total Tons)	17	Tons/1000 tons	0
Net Tons NP	-5052	Tons/1000 tons	-34
NP/MPA Ratio	0		
Available NP (Tons per acre)	5052		
	<b>DEFICIENT</b>		



OPERATOR Growing Greener  
 COUNTY Centre  
 TOWNSHIP Snowshoe  
 PERMIT NO. Contrary Run  
 DRILL HOLE DH-4

THRESHOLD VALUES	SULFUR	NP	FIZZ
	0.5	60	1

CARBONLITH CARB 2580  
 CLAY CLAY 3450  
 COAL COAL 1800  
 LIMESTONE LMSN 3670  
 OTHER OTHR 3670  
 SANDSTONE SNDS 3670  
 SHALE SHLE 3700  
 SILTSTONE SLSN 3750  
 SOIL SOIL 2000  
 TILL TILL 3600

ALK ADD (TONS/AC CaCO3) \_\_\_\_\_  
 LATITUDE 41°04' 6.7"  
 LONGITUDE 77° 55' 55.3"  
 COAL SEAMS: Clanton, Brookville  
 STATE PLANE ZONE  
 FEET (NORTH/SOUTH)  
 FEET (EAST/WEST)  
 SURFACE ELEV.(FT.), 1510

TOTAL DEPTH DEPTH(FT)	BOTTOM DEPTH(FT)	THICKNESS FEET	ROCK TYPE	SULFUR PERCENT	FIZZ RATING	ACREAGE POTENTIAL	NEUTRAL	AGCREAGE TONS/AC-FT	UNIT WT. TONS/AC-FT	FRACTION SPOILED	TONS		NET NP		TONS OF		
											MPA-TH	MPA	NP-TH	NP	TONS-TH	TONS	NET NP TONS
3.00	3.00	2.00	SOIL	0.04	0	2.50		1.00	2000	1.00	0.00	5.00	0.00	10.00	0.00	5.00	4000.00
6.00	3.00	3.00	SNDS	0.04	0.00	-2.50		1.00	3670	1.00	0.00	13.76	0.00	-27.53	0.00	-41.29	11010.00
8.00	2.00	2.00	SNDS	0.04	0.00	2.50		1.00	3670	1.00	0.00	9.18	0.00	18.35	0.00	9.18	7340.00
11.00	3.00	3.00	SLSN	0.04	0.00	-2.50		1.00	3750	1.00	0.00	14.06	0.00	-28.13	0.00	-42.19	11250.00
14.00	3.00	3.00	SHLE	0.04	0.00	-2.50		1.00	3700	1.00	0.00	13.86	0.00	-27.75	0.00	-41.63	11100.00
17.00	3.00	3.00	SNDS	0.04	0.00	2.50		1.00	3670	1.00	0.00	13.76	0.00	27.53	0.00	13.76	11010.00
19.00	2.00	2.00	SNDS	0.04	0.00	-2.50		1.00	3670	1.00	0.00	9.18	0.00	-18.35	0.00	-27.53	7340.00
22.00	3.00	3.00	SNDS	0.04	0.00	0.00		1.00	3670	1.00	0.00	13.76	0.00	0.00	0.00	-13.76	11010.00
25.00	3.00	3.00	SNDS	0.04	0.00	-2.50		1.00	3670	1.00	0.00	13.76	0.00	-27.53	0.00	-41.29	11010.00
28.00	3.00	3.00	SHLE	0.04	0.00	0.00		1.00	3670	1.00	0.00	13.76	0.00	0.00	0.00	-13.76	11010.00
30.00	2.00	2.00	SHLE	0.04	0.00	0.00		1.00	3700	1.00	0.00	9.25	0.00	0.00	0.00	-9.25	7400.00
32.00	2.00	2.00	SNDS	0.04	0.00	0.00		1.00	3670	1.00	0.00	9.18	0.00	0.00	0.00	-9.18	7340.00
33.00	1.00	1.00	SNDS	0.06	1.00	55.00		1.00	3670	1.00	0.10	6.88	0.00	201.85	0.00	194.97	3670.00
34.00	1.00	1.00	COAL	2.84	0.00	2.50		1.00	1800	0.10	15.98	15.98	0.00	0.45	-15.98	-15.53	180.00
36.00	2.00	2.00	CLAY	0.52	0.00	0.00		1.00	3450	1.00	0.00	112.13	0.00	0.00	-112.13	-112.13	6900.00
38.00	2.00	2.00	CLAY	0.22	0.00	0.00		1.00	3450	1.00	0.00	47.44	0.00	0.00	0.00	-47.44	6900.00
40.00	2.00	2.00	SNDS	0.50	0.00	0.00		1.00	3670	1.00	0.00	114.69	0.00	0.00	-114.69	-114.69	7340.00
44.00	4.00	4.00	SNDS	0.26	0.00	5.00		1.00	3670	1.00	0.00	119.28	0.00	73.40	0.00	-45.88	14680.00
47.00	3.00	3.00	SHLE	0.06	0.00	5.00		1.00	3700	1.00	0.00	20.81	0.00	55.50	0.00	34.69	11100.00
50.00	3.00	3.00	SLSN	0.06	0.00	7.50		1.00	3750	1.00	0.00	21.09	0.00	84.38	0.00	63.28	11250.00
52.00	2.00	2.00	SNDS	0.06	0.00	6.00		1.00	3670	1.00	0.00	13.76	0.00	44.04	0.00	30.28	7340.00
55.00	3.00	3.00	SHLE	0.14	0.00	22.50		1.00	3700	1.00	0.00	48.56	0.00	249.75	0.00	201.19	11100.00
58.00	3.00	3.00	SHLE	0.14	0.00	22.50		1.00	3700	1.00	0.00	48.56	0.00	249.75	0.00	201.19	11100.00
60.00	2.00	2.00	SHLE	0.12	0.00	22.50		1.00	3700	1.00	0.00	27.75	0.00	186.50	0.00	138.75	7400.00
62.00	2.00	2.00	SHLE	0.24	0.00	25.00		1.00	3700	1.00	0.00	55.50	0.00	185.00	0.00	129.50	7400.00
64.00	2.00	2.00	COAL	1.06	0.00	22.50		1.00	1800	0.10	11.93	11.93	0.00	8.10	-11.93	-3.83	360.00
65.00	1.00	1.00	SHLE	0.20	0.00	17.50		1.00	3700	1.00	0.00	23.13	0.00	64.75	0.00	41.63	3700.00
66.00	1.00	1.00	COAL	0.52	0.00	17.00		1.00	1800	0.10	2.93	2.93	0.00	3.06	-2.93	0.14	180.00
68.00	2.00	2.00	CLAY	0.40	0.00	16.50		1.00	3450	0.50	0.00	43.13	0.00	56.93	0.00	13.80	3450.00

TOTAL (TONS): 257.64 872.05 0.00 1370.05 -257.64 498.00 224870.00  
 TOTAL (TONS/THOUSAND): 1.15 3.88 0.00 6.09 -1.15 2.21



OVERBURDEN ANALYSIS SPREAD SHEET CALCULATION SUMMARY

OPERATOR Growing Greener COUNTY Centre  
 PERMIT NO. Contrary Run TOWNSHIP Snowshoe  
 DRILL HOLE DH-4

COAL SEAMS: Clarion, Brookville

TOTAL DEPTH	TOP ACREAGE	BOTTOM ACREAGE	THRESHOLD VALUES		
			SULFUR	NP	FIZZ
68	1	1	0.5	60	1

MPA, NP -TH = With Thresholds

TOTAL (TONS):	TONS		NET NP		TONS OF OB
	MPA -TH	MPA	TONS NP	TONS -TH	
258	872	0	1370	-258	498
1	4	0	6	-1	2
TOTAL (TONS/THOUSAND):					224870

With Thresholds @ 31.25

MPA (Total Tons)	258	Tons/1000 tons	1
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-258	Tons/1000 tons	-1
NP/MPA Ratio	0		
Available NP (Tons per acre)	258		
NP Available to achieve 0.6% NNP (Tons per acre)	1607		
			<b>DEFICIENT</b>

Without Thresholds @ 31.25

MPA (Total Tons)	872	Tons/1000 tons	4
NP (Total Tons)	1370	Tons/1000 tons	6
Net Tons NP	498	Tons/1000 tons	2
NP/MPA Ratio	2		
Available NP (Tons per acre)	498		
NP Available to achieve 1.2% NNP (Tons per acre)	2200		
			<b>DEFICIENT</b>
			<b>EXCESS</b>

With Thresholds @ 62.50

MPA (Total Tons)	515	Tons/1000 tons	2
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-515	Tons/1000 tons	-2
NP/MPA Ratio	0		
Available NP (Tons per acre)	515		
			<b>DEFICIENT</b>

Without Thresholds @ 62.50

MPA (Total Tons)	1744	Tons/1000 tons	8
NP (Total Tons)	1370	Tons/1000 tons	6
Net Tons NP	-374	Tons/1000 tons	-2
NP/MPA Ratio	1		
Available NP (Tons per acre)	374		
			<b>DEFICIENT</b>

OPERATOR: Growing Greener  
 PERMIT NO.: Contrary Run  
 DRILL HOLE: DH-5

CARBONOLITH: CARB 2580  
 CLAY: CLAY 3450  
 COAL: COAL 1800  
 LIMESTONE: LMSN 3670  
 OTHER: OTHR 3670  
 SANDSTONE: SNDS 3670  
 SHALE: SHLE 3700  
 SILTSTONE: SLSN 3750  
 SOIL: SOIL 2000  
 TILL: TILL 3600

ALK ADD (TONS/AC CaCO3): 41° 04' 16.7"  
 LATITUDE: 77° 55' 30.3"  
 LONGITUDE: Clarion, Brookville  
 COAL SEAMS: Clarion, Brookville  
 STATE PLANE ZONE: FEET (NORTHSOUTH)  
 FEET (EASTWEST): SURFACE ELEV.(FT.): 1590

THRESHOLD VALUES	SULFUR	NP	FIZZ
	0.5	30	1

TOP ACREAGE: 74  
 BOTTOM ACREAGE: 3600

TOTAL DEPTH	BOTTOM DEPTH (FT)	THICKNESS FEET	ROCK TYPE	SULFUR PERCENT	FIZZ RATING	ACREAGE	NEUTRAL POTENT.	UNIT WT. FRACTION		TONS		NET NP		TONS OF	
								TONS/AC-FT	POILED	MPA	NP	TH	NP	TH	OB
2.00		2.00	CARB	0.20	0	1.00	-2.50	2580	1.00	0.00	12.90	0.00	-45.15	5180.00	
8.00		6.00	OTHR	0.04	0.00	1.00	-1.50	3670	1.00	0.00	-33.03	0.00	-60.56	22020.00	
13.00		5.00	OTHR	0.04	0.00	1.00	-1.00	3670	1.00	0.00	-18.35	0.00	-41.29	18350.00	
18.00		5.00	OTHR	0.04	0.00	1.00	-2.00	3670	1.00	0.00	-36.70	0.00	-59.64	18350.00	
20.00		2.00	OTHR	0.04	0.00	1.00	-2.50	3670	1.00	0.00	-18.35	0.00	-27.53	7340.00	
23.00		3.00	SNDS	0.04	0.00	1.00	-0.50	3670	1.00	0.00	-5.51	0.00	-19.27	11010.00	
25.00		2.00	SNDS	0.04	0.00	1.00	-0.50	3670	1.00	0.00	-3.67	0.00	-12.85	7340.00	
28.00		3.00	SNDS	0.04	0.00	1.00	-1.00	3670	1.00	0.00	-11.01	0.00	-24.77	11010.00	
32.00		4.00	SNDS	0.04	0.00	1.00	-0.25	3670	1.00	0.00	-3.67	0.00	-22.02	14680.00	
36.00		4.00	SNDS	0.04	0.00	1.00	-4.25	3670	1.00	0.00	-62.39	0.00	-80.74	14680.00	
40.00		4.00	SNDS	0.04	0.00	1.00	-2.25	3670	1.00	0.00	-33.03	0.00	-51.38	14680.00	
43.00		3.00	SHLE	0.06	0.00	1.00	19.00	3700	1.00	0.00	210.90	0.00	190.09	11100.00	
44.00		1.00	COAL	1.00	0.00	1.00	-1.00	1800	1.00	0.00	-0.18	-5.63	-5.81	180.00	
45.00		1.00	COAL	7.82	0.00	1.00	-3.25	1800	0.10	43.99	-0.59	-43.99	-44.57	180.00	
46.00		1.00	SHLE	2.46	0.00	1.00	-2.50	1800	0.10	284.44	-9.25	-284.44	-293.69	3700.00	
50.00		4.00	SHLE	1.18	0.00	1.00	7.50	3700	1.00	545.75	111.00	-545.75	-434.75	14800.00	
53.00		3.00	SHLE	0.30	0.00	1.00	5.75	3700	1.00	104.06	63.83	0.00	-40.24	11100.00	
55.00		2.00	SHLE	0.10	0.00	1.00	7.50	3700	1.00	23.13	55.50	0.00	32.38	7400.00	
58.00		3.00	SHLE	0.14	0.00	1.00	5.50	3700	1.00	48.56	61.05	0.00	12.49	11100.00	
60.00		2.00	SLSN	0.16	0.00	1.00	16.25	3750	1.00	37.50	121.88	0.00	84.38	7500.00	
64.00		4.00	SHLE	0.14	0.00	1.00	12.00	3750	1.00	64.75	177.60	0.00	112.85	14800.00	
67.00		3.00	SLSN	0.10	0.00	1.00	14.50	3750	1.00	35.16	163.13	0.00	127.97	11250.00	
70.00		3.00	SHLE	0.16	0.00	1.00	25.50	3700	1.00	55.50	283.05	0.00	227.55	11100.00	
71.00		1.00	SHLE	0.22	0.00	1.00	5.50	3700	1.00	25.44	20.35	0.00	-5.09	3700.00	
72.00		1.00	COAL	1.70	0.00	1.00	6.25	1800	0.10	9.56	1.13	-9.56	-8.44	180.00	
73.00		1.00	SLSN	0.58	0.00	1.00	4.50	3750	1.00	67.97	16.88	-67.97	-51.09	3750.00	
74.00		1.00	SNDS	0.76	0.00	1.00	-1.00	3670	0.00	0.00	0.00	0.00	0.00	0.00	

TOTAL (TONS): 957.33 1578.81 0.00 1037.66 -957.33 -541.16 256480.00  
 TOTAL (TONS/THOUSAND): 3.73 6.16 0.00 4.05 -3.73 -2.11



OVERBURDEN ANALYSIS SPREAD SHEET CALCULATION SUMMARY

OPERATOR Growing Greener COUNTY Centre  
 PERMIT NO. Contrary Run TOWNSHIP Snowshoe  
 DRILL HOLE DH-5 COAL SEAMS: Clarion, Brookville

TOTAL DEPTH	TOP ACREAGE	BOTTOM ACREAGE	SULFUR	NP	FIZZ
74	1	1	0.5	30	1

MPA, NP -TH = With Thresholds

TOTAL (TONS):	TONS		NET NP		TONS OF	
	MPA -TH	MPA	TONS NP	TONS -TH	NET NP TONS	TONS OB
TOTAL (TONS/THOUSAND):	957	1579	1038	-957	-541	256460
	4	6	4	-4	-2	

With Thresholds @ 31.25

MPA (Total Tons)	957	Tons/1000 tons	4
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-957	Tons/1000 tons	-4
NP/MPA Ratio	0		
Available NP (Tons per acre)	957		
NP Available to achieve 0.6% NNP (Tons per acre)	2496		
			<b>DEFICIENT</b>

Without Thresholds @ 31.25

MPA (Total Tons)	1579	Tons/1000 tons	6
NP (Total Tons)	1038	Tons/1000 tons	4
Net Tons NP	-541	Tons/1000 tons	-2
NP/MPA Ratio	1		
Available NP (Tons per acre)	541		
NP Available to achieve 1.2% NNP (Tons per acre)	3619		
			<b>DEFICIENT</b>

With Thresholds @ 62.50

MPA (Total Tons)	1915	Tons/1000 tons	7
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-1915	Tons/1000 tons	-7
NP/MPA Ratio	0		
Available NP (Tons per acre)	1915		
			<b>DEFICIENT</b>

Without Thresholds @ 62.50

MPA (Total Tons)	3158	Tons/1000 tons	12
NP (Total Tons)	1038	Tons/1000 tons	4
Net Tons NP	-2120	Tons/1000 tons	-8
NP/MPA Ratio	0		
Available NP (Tons per acre)	2120		
			<b>DEFICIENT</b>





OVERBURDEN ANALYSIS SPREAD SHEET CALCULATION SUMMARY

OPERATOR Growing Greener COUNTY Centre  
 PERMIT NO. Contrary Run TOWNSHIP Snowshoe  
 DRILL HOLE DH-6 COAL SEAMS: Clarion, Brookville, Mercer

TOTAL DEPTH	TOP ACREAGE	BOTTOM ACREAGE	THRESHOLD VALUES		
63	1	1	SULFUR	NP	FIZZ
			0.5	60	1

MPA, NP -TH = With Thresholds

TOTAL (TONS): TOTAL (TONS/THOUSAND):	TONS		TONS		NET NP		NET NP		TONS OF OB
	MPA -TH	MPA	NP -TH	NP	TONS -TH	TONS	TONS	TONS	
75	419	0	744	-75	325	209490			
0	2	0	4	0	2				

With Thresholds @ 31.25

MPA (Total Tons)	75	Tons/1000 tons	0
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-75	Tons/1000 tons	0
NP/MPA Ratio	0		
Available NP (Tons per acre)	75		
NP Available to achieve 0.6% NNP (Tons per acre)	1332		
			<b>DEFICIENT</b>

Without Thresholds @ 31.25

MPA (Total Tons)	419	Tons/1000 tons	2
NP (Total Tons)	744	Tons/1000 tons	4
Net Tons NP	325	Tons/1000 tons	2
NP/MPA Ratio	2		
Available NP (Tons per acre)	325		
NP Available to achieve 1.2% NNP (Tons per acre)	2189		
			<b>DEFICIENT</b>
			<b>EXCESS</b>

With Thresholds @ 62.50

MPA (Total Tons)	150	Tons/1000 tons	1
NP (Total Tons)	0	Tons/1000 tons	0
Net Tons NP	-150	Tons/1000 tons	-1
NP/MPA Ratio	0		
Available NP (Tons per acre)	150		
			<b>DEFICIENT</b>

Without Thresholds @ 62.50

MPA (Total Tons)	838	Tons/1000 tons	4
NP (Total Tons)	744	Tons/1000 tons	4
Net Tons NP	-94	Tons/1000 tons	0
NP/MPA Ratio	1		
Available NP (Tons per acre)	94		
			<b>DEFICIENT</b>