PERMITTEE NAME/ADDRESS (Include Facility Name/Location if [illegible])

NAME [illegible]

ADDRESS [illegible]

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER: [illegible]

(17-19) DISCHARGE NUMBER: [illegible]

F - FINAL
RUNOFF FROM ROADS

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	10	31	TO	92	10	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

MINOR

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE	QUANTITY OR LOADING (54-61) MAXIMUM	UNITS	QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM	QUALITY OR CONCENTRATION (46-53) AVERAGE	QUALITY OR CONCENTRATION (54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible] WASTE [illegible] ASSESSMENT [illegible]	SAMPLE MEASUREMENT	******			******	******	******				
	PERMIT REQUIREMENT	******	0 [illegible] DAILY MX	YES=1 NO=0	******	******	******	****		ONCE/ MONTH	VISUAL
[illegible]	SAMPLE MEASUREMENT	******			******	******					
	PERMIT REQUIREMENT	******	2000 DAILY MX	LBS/D	******	******	REPORT DAILY MX	MG/L		ONCE/ MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Pres.

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
301	659-9580	92	10	22

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS IS LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE BOX.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if [illegible])

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

(2-[illegible]) PERMIT NUMBER

(17-19) 007 DISCHARGE NUMBER

F - FINAL

MONITORING PERIOD

FROM YEAR	MO	DAY	TO YEAR	MO	DAY
[illegible]	1	31	[illegible]	[illegible]	[illegible]
(20-21)	(22-23)	(24-25)	(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	(54-61) AVERAGE	MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	REPORT 30 DA AV	REPORT DAILY MX	GPD	******	******	******	****		ONCE/ MONTH	BASE
[illegible]	SAMPLE MEASUREMENT	******	******			******					
	PERMIT REQUIREMENT	******	******	****	6.5 DAILY MN	******	9.0 DAILY MX	SU		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	******	******		******						
	PERMIT REQUIREMENT	******	******	****	******	25 30 DA AV	70 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	******	******		******	******					
	PERMIT REQUIREMENT	******	******	****	******	******	0.5 DAILY MX	ML/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	******	******		******	******					
	PERMIT REQUIREMENT	******	******	****	******	******	10.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	******	******		******	******					
	PERMIT REQUIREMENT	******	******	****	******	******	2.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	******			******	******	******				
	PERMIT REQUIREMENT	******	0 DAILY MX	VLS=1 MOS=0	******	******	******	****		ONCE/ MONTH	VISUA

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
[illegible] Vaughn Jr.	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*	[illegible] SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	[illegible] AREA CODE	667-9[illegible] NUMBER	92 YEAR	11 MO	[illegible] DA
TYPED OR PRINTED						

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] MILLION PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LIMITED INSTEAD OF TSS. REPORT "NODS NOT APPLY" IN THE APPROPRIATE BOX.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if [illegible])

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-1[illegible])

PERMIT NUMBER

(17-19)

DISCHARGE NUMBER

P - FINAL

MONITORING PERIOD							
	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	1[illegible]	[illegible]	TO	[illegible]	1[illegible]	[illegible]
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]	[illegible]				
[illegible]	PERMIT REQUIREMENT	[illegible]	[illegible] DAILY MX	YES=1 NO=0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ONCE/ MONTH	VISUA
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]					
[illegible]	PERMIT REQUIREMENT	[illegible]	2000 DAILY MX	[illegible]	[illegible]	[illegible]	REPORT DAILY MX	MG/L	[illegible]	ONCE/ MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Vaughn, Pres.

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
601	6[illegible]7[illegible]3	92	10	[illegible]
AREA CODE	NUMBER	YEAR	MO	DA

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LITER INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE BOX.

EPA Form 3320-1 (Rev. 9-92) Previous editions may be used. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if [illegible])*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

PERMIT NUMBER *(2-1[illegible])*	DISCHARGE NUMBER *(17-19)*
[illegible]	[illegible]

[illegible] - FINAL
[illegible] FROM SLEEPY [illegible]

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	[illegible]	[illegible]	TO	[illegible]	[illegible]	[illegible]
	(20-21)	*(22-23)*	*(24-25)*		*(26-27)*	*(28-29)*	*(30-31)*

NOTE: Read instructions before completing this form.

PARAMETER *(32-37)*		*(3 Card Only)* QUANTITY OR LOADING *(46-53)* AVERAGE	*(54-61)* MAXIMUM	UNITS	*(4 Card Only)* QUALITY OR CONCENTRATION *(38-45)* MINIMUM	*(46-53)* AVERAGE	*(54-61)* MAXIMUM	UNITS	NO. EX *(62-63)*	FREQUENCY OF ANALYSIS *(64-68)*	SAMPLE TYPE *(69-70)*
[illegible]	SAMPLE MEASUREMENT				[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	REPORT 30 DAY AV	REPORT DAILY MX	GPD	[illegible]	[illegible]	[illegible]	[illegible]		ONCE/ MONTH	MEASU
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]			[illegible]					
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	6.5 DAILY MN	[illegible]	9.0A DAILY MX	SU		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]		[illegible]						
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	[illegible]	25 30-DAY AV	70 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]		[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.5 DAILY MX	ML/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]		[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]		[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	[illegible]	0 DAILY MX	YS=1 NO=0	[illegible]	[illegible]	[illegible]	[illegible]		ONCE/ MONTH	VISUA

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
[illegible] Rec.	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*	[illegible]	AREA CODE [illegible]	NUMBER [illegible]	YEAR [illegible]	MO [illegible]	DA [illegible]
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] VISUAL INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location [illegible])

NAME [illegible] FOR COAL CLEANING PLANT

ADDRESS [illegible]

[illegible]

FACILITY

LOCATION [illegible] CANDY MANZANARES

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-[illegible])

PERMIT NUMBER: [illegible]

(17-19)

DISCHARGE NUMBER: 001 A

F - FINAL

DSCHRG FROM SLRRY [illegible] & RNOFF

MONITORING PERIOD

FROM YEAR	MO	DAY	TO YEAR	MO	DAY
92	10	01	93	10	31
(20-21)	(22-23)	(24-25)	(26-27)	(28-29)	(30-31)

MINOR

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible] WASTE [illegible] HARDED-ASSESSMN [illegible] 1 0 0 [illegible] CROSS VALU	SAMPLE MEASUREMENT	******			******	******	******				
	PERMIT REQUIREMENT	******	0 DAILY MX	YES=1 NO=0	******	******	******	******		ONCE/MONTH	VISUA
[illegible], TOTAL SOLVED [illegible] 0 0 [illegible] CONCENTR BELOW	SAMPLE MEASUREMENT	******			******	******					
	PERMIT REQUIREMENT	******	2000 DAILY MX	LBS/DY	******	******	REPORT DAILY MX	MG/L		ONCE/MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: [illegible] Vaughn, Pres.

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 801 NUMBER 487-9813

DATE: YEAR 92 MO 11 DA 2

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

EPA Form 3320-1 (Rev. 9-92) Previous editions may be used. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED) PAGE OF

COAL SYSTEM, INC.
WELLINGTON PREPERATION PLANT

DISCHARGE WATER MONITORING

LOCATION	SAMPLE NO.	DATE	TIME	SAMPLER	TEMP (C)	FLOW (GPM)	pH	COMMENTS
EMERGENCY SPILLWAY & SEEPAGE	DW 001	12-31-92	10:05A	OM				DRY
CEMENT FLUME-PUMP HOUSE	DW 002	12-31-92	10:20A	OM				DRY
PIPELINE - SLURRY POND	DW 003	12-31-92	10:45A	OM				DRY
HEAT DRIER DISCHARGE	DW 004	12-31-92	11:15A	OM				DRY
DISCHG TO PRICE RIVER-CULVERT	DW 005	12-31-92	9:50A	OM				DRY
CULVERT UNDER RR/HEAD OF YARD	DW 006	12-31-92	11:30A	OM				DRY
CULVERT UNDER RR/NW OF HOPPER	DW 007	12-31-92	11:45A	OM				DRY
. POND SEEPAGE	DW 008	12-31-92	9:20A	OM				DRY

NED 136 10

PERMITTEE NAME/ADD[illegible] (Include Facility Name/Location [illegible])

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT [illegible]CHARGE ELIMINATION SYSTEM (NPDES)
DISCHA[illegible]NITORING REPORT (DMR)

(2-[illegible])

PERMIT NUMBER

(17-19)

DISCHARGE NUMBER

E - FINAL
DISCHARGE FROM SLUDGE POND

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	1	1	TO	[illegible]	12	1
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	(54-61) AVERAGE	MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	REPORT 30 DA AV	REPORT DAILY MX	GPD						NCE/ MONTH	EASRE
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT				6.5 DAILY MN		9.0 DAILY MX	SU		NCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					25 30 DA AV	70 DAILY MX	MG/L		NCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						0.5 DAILY MX	ML/L		NCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						10 DAILY MX	MG/L		NCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						2.0 DAILY MX	MG/L		NCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT		0 DAILY MX	YES=1 NO=0						NCE/ MONTH	ISUA

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] President

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DA
501	607-9513	93	1	21

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LIMITS LISTED OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location [illegible])*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

PERMIT NUMBER (2-[illegible])	DISCHARGE NUMBER (17-19)

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	1	[illegible]	TO	[illegible]	1	[illegible]
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	[illegible]	0 DAILY MX	YES=1 NO=0	[illegible]	[illegible]	[illegible]	[illegible]		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	2000 DAILY MX	MG/L	[illegible]	[illegible]	REPORT DAILY MX	MG/L		ONCE/ MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
[illegible] President	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*	[signature]	501	657-9813	93	12	21
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE BOX.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if [illegible])

NAME [illegible]

ADDRESS [illegible]

FACILITY [illegible]

LOCATION [illegible]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-1[illegible]) PERMIT NUMBER [illegible]

(17-19) DISCHARGE NUMBER 001

F - FINAL
DISCHARGE FROM SLUDGE TANKS

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	[illegible]	[illegible]	TO	[illegible]	12	[illegible]
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NEW

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT	REPORT 30 DA AV	REPORT DAILY MX	GPD						ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT				6.5 DAILY MN		9.0 DAILY MX	SU		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT					25 30 DA AV	70 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT						0.5 DAILY MX	ML/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT						10 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT						2.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT		0 DAILY MX	ES=1 NO=0						ONCE/ MONTH	VISUA

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Vaughn [illegible]

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE 501	NUMBER 407-703	YEAR 92	MO 12	DAY 2

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] BE LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if [illegible])

NAME [illegible] COAL CLEANING PLANT

ADDRESS [illegible]

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-1[illegible]) PERMIT NUMBER: [illegible]

(17-19) DISCHARGE NUMBER: 001 A

F - FINAL

DISCHARGE FROM SLURRY LINES

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	92	12	01	TO	92	12	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

MINOR

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible] RATE [illegible] ASSESSMENT [illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	[illegible]	0 DAILY MX	YES=1 NO=0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]NCE/ MONTH	VISUAL
[illegible] TOTAL [illegible] [illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	2000 DAILY MX	LBS/DY	[illegible]	[illegible]	REPORT DAILY MX	MG/L	[illegible]	[illegible]NCE/ MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Pres.

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

[illegible] Montgomery

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
501	457 9512	92	12	2[illegible]

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] BE LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if [illegible])*

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

PERMIT NUMBER *(2-16)*	DISCHARGE NUMBER *(17-19)*
[illegible]	[illegible]

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	[illegible]	[illegible]	TO	[illegible]	[illegible]	[illegible]
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read Instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT				[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	REPORT 30 DA AV	REPORT DAILY MX	GPD	[illegible]	[illegible]	[illegible]	[illegible]		ONCE/ MONTH	EASRE
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]			[illegible]					
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	6.5 DAILY MN	[illegible]	9.0 DAILY MX	SU		TWICE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]		[illegible]						
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	[illegible]	25 30 DA AV	70 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]		[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.5 DAILY MX	ML/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]		[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]	[illegible]		[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	[illegible]	0 DAILY MX	PS=1 NO=0	[illegible]	[illegible]	[illegible]	[illegible]		ONCE/ MONTH	VISUA

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
[illegible]	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*	[illegible] SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	01 AREA CODE	457902 NUMBER	92 YEAR	12 MO	31 DA
TYPED OR PRINTED						

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] EXCEED 50 TONS. "REPORT" MEANS NOT APPLY" IN THE APPROPRIATE BOX.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location i[illegible]nt)

NAME [illegible]

ADDRESS [illegible]

FACILITY [illegible]

LOCATION [illegible]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-1[illegible]) PERMIT NUMBER [illegible]

(17-19) DISCHARGE NUMBER [illegible]

[illegible] - POINT DISCHARGE FROM THE [illegible] POND

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	1	[illegible]	TO	[illegible]	1	1
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read Instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	(54-61) AVERAGE	MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	[illegible]	0 DAILY MX	YES=1 NO=0	[illegible]	[illegible]	[illegible]	[illegible]		ONCE/ MONTH	VISUAL
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	2000 DAILY MX	LBS/D[illegible]	[illegible]	[illegible]	REPORT DAILY MX	MG/L		ONCE/ MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NO DISCHARGE

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
[illegible]	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*	[illegible] SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	5[illegible] AREA CODE	[illegible] 98.3 NUMBER	92 YEAR	12 MO	2[illegible] DAY
TYPED OR PRINTED						

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] LIMITED TO [illegible] MGD PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE BOX.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if [illegible])

NAME [illegible]

ADDRESS [illegible]

FACILITY [illegible]

LOCATION [illegible]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER [illegible]

(17-19) DISCHARGE NUMBER [illegible]

F - FINAL

DISCHARGE FROM SEDIMENT POND

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	[illegible]	[illegible]	TO	[illegible]	[illegible]	[illegible]
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	REPORT 30 DA AV	REPORT DAILY MX	CFS						ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT				6.5 DAILY MN		9.0 DAILY MX	SU		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					25 30 DA AV	70 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						0.5 DAILY MX	ML/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						10 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						2.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT		0 DAILY MX	1.5=1 0.2=0						ONCE/ MONTH	VISUAL

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible]

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] FOR PH DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] OF [illegible]. REPORT "NOT APPLY" IN THE APPROPRIATE BOX.

(REPLACES EPA FORM 3320-1 WHICH MAY NOT BE USED)

PAGE OF

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if [illegible])

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMIT NUMBER (2-16)	DISCHARGE NUMBER (17-19)
[illegible]	[illegible]

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	[illegible]	[illegible]	TO	[illegible]	[illegible]	[illegible]
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	[illegible]	0 DAILY MX	YES=1 NO=0	[illegible]	[illegible]	[illegible]	[illegible]		ONCE/ MONTH	VISUAL
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	2000 DAILY MX	LBS/DY	[illegible]	[illegible]	REPORT DAILY MX	MG/L		ONCE/ MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible]

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
[illegible]	667-9513	93	12	21

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] TO 0.0 TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] TICK INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location [illegible])

NAME [illegible]

ADDRESS [illegible]

FACILITY [illegible]

LOCATION [illegible]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER [illegible]

(17-19) DISCHARGE NUMBER [illegible]

P - FINAL
EUROPE PROPERTIES

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	[illegible]	12	01	TO	92	12	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

MINOR

NOTE: Read Instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE	QUANTITY OR LOADING (54-61) MAXIMUM	UNITS	QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM	QUALITY OR CONCENTRATION (46-53) AVERAGE	QUALITY OR CONCENTRATION (54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT	REPORT 30 DA AV	REPORT DAILY MX	GPD						ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT				6.5 DAILY MN		9.0 DAILY MX	SU		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT					25 30 DA AV	70 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT						0.5 DAILY MX	ML/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT						100 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT						2.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
[illegible]	PERMIT REQUIREMENT		0.[illegible] DAILY MX	YES=1 NO=0						ONCE/ MONTH	VISUAL

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Pres.

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
904	667 9[illegible]	92	12	21

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

IS LIMITED TO ONE FLOW PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] ENTERED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location [illegible])

NAME [illegible]

ADDRESS [illegible]

FACILITY [illegible]

LOCATION [illegible]

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHAR[illegible] [illegible]ONITORING REPORT (DMR)

(2-1[illegible]) PERMIT NUMBER

(17-19) DISCHARGE NUMBER

F - FINAL

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	92	12	01	TO	92	12	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT	*****			*****	*****	*****				
[illegible]	PERMIT REQUIREMENT	*****	[illegible] DAILY MX	YES=1 NO=0	*****	*****	*****	****		ONCE/ MONTH	VISUAL
[illegible]	SAMPLE MEASUREMENT	*****			*****	*****					
[illegible]	PERMIT REQUIREMENT	*****	2000 DAILY MX	LBS/DY	*****	*****	REPORT DAILY MX	MG/L		ONCE/ MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Vaughn, Pres.

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
601	607-9611	93	12	2
AREA CODE	NUMBER	YEAR	MO	DA

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE BOX.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location [illegible])

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-1[illegible]) PERMIT NUMBER

(17-19) DISCHARGE NUMBER

F - FINAL

MONITORING PERIOD

FROM YEAR	MO	DAY	TO YEAR	MO	DAY
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
(20-21)	(22-23)	(24-25)	(26-27)	(28-29)	(30-31)

MINOR

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	(54-61) AVERAGE	MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	REPORT 30 DA AV	REPORT DAILY MX	GPD						ONCE/ MONTH	MEASRD
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT				6.5 DAILY MN		9.0 DAILY MX	SU		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					25 30 DA AV	70 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						0.5 DAILY MX	ML/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						10 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						2.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible]	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT		0 DAILY MX	YES=1 NO=0						ONCE/ MONTH	VISUAL

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
[illegible]	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE [illegible]	NUMBER [illegible]	YEAR 92	MO 12	DAY [illegible]
TYPED OR PRINTED						

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE BOX.

EPA Form 3320-1 (Rev. 9-89) Previous editions may be used. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location [illegible])

NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER

(17-19) DISCHARGE NUMBER

MONITORING PERIOD

FROM YEAR	MO	DAY	TO YEAR	MO	DAY
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
(20-21)	(22-23)	(24-25)	(26-27)	(28-29)	(30-31)

NOTE: Read Instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	(54-61) AVERAGE	MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]	[illegible]				
	PERMIT REQUIREMENT	[illegible]	0 DAILY MX	YES=1 NO=0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NCE/ MONTH	IGUAL
[illegible]	SAMPLE MEASUREMENT	[illegible]			[illegible]	[illegible]					
	PERMIT REQUIREMENT	[illegible]	2000 DAILY MX	LBS/D	[illegible]	[illegible]	REPORT DAILY MX	MG/L	[illegible]	NCE/ MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Pres.

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE AREA CODE	NUMBER	DATE YEAR	MO	DAY
[illegible]	657-4913	93	12	21

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] LITERS TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LITERS INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

EPA Form 6320-1 (Rev. 9-92) Previous editions may be used. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location)

NAME [illegible]

ADDRESS [illegible]

[illegible] OH [illegible]

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER: [illegible]

(17-19) DISCHARGE NUMBER: [illegible]

F - FINAL

DSCRBG FROM SLRRY [illegible] KNOFF

MONITORING PERIOD

FROM YEAR	MO	DAY	TO YEAR	MO	DAY
92	12	01	[illegible]	12	31
(20-21)	(22-23)	(24-25)	(26-27)	(28-29)	(30-31)

MINOR

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT				******	******	******				
[illegible]	PERMIT REQUIREMENT	REPORT 30 DAY AV	REPORT DAILY MX	GPD	******	******	******	*****		ONCE/ MONTH	MEASR
[illegible]	SAMPLE MEASUREMENT	******	******			******					
[illegible]	PERMIT REQUIREMENT	******	******	*****	6.5 DAILY MN	******	9.0 DAILY MX	SU		ONCE/ MONTH	GRAB
[illegible] TOTAL [illegible]	SAMPLE MEASUREMENT	******	******		******						
[illegible]	PERMIT REQUIREMENT	******	******	*****	******	25 30 DA AV	75 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible] SETTLEABLE [illegible]	SAMPLE MEASUREMENT	******	******		******	******					
[illegible]	PERMIT REQUIREMENT	******	******	*****	******	******	0.5 DAILY MX	ML/L		ONCE/ MONTH	GRAB
[illegible] OIL AND GREASE [illegible]	SAMPLE MEASUREMENT	******	******		******	******					
[illegible]	PERMIT REQUIREMENT	******	******	*****	******	******	10 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible] TOTAL [illegible] (5 DAY) [illegible]	SAMPLE MEASUREMENT	******	******		******	******					
[illegible]	PERMIT REQUIREMENT	******	******	*****	******	******	2.0 DAILY MX	MG/L		ONCE/ MONTH	GRAB
[illegible] SOLIDS OR [illegible] FOAM-VISUAL [illegible]	SAMPLE MEASUREMENT	******			******	******	******				
[illegible]	PERMIT REQUIREMENT	******	0 DAILY MX	YES=1 NO=0	******	******	******	*****		ONCE/ MONTH	VISUA

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Plants Pres

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

[illegible]

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE AREA CODE	NUMBER	DATE YEAR	MO	DAY
614	652 9813	92	12	31

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

[illegible] LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE BOX.

(REPLACES EPA FORM 40 WHICH MAY NOT BE USED)

PAGE OF

PERMITTEE NAME/ADDRESS (Include Facility Name/Location)

NAME [illegible]

ADDRESS [illegible]

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-[illegible]) PERMIT NUMBER: [illegible]

(17-19) DISCHARGE NUMBER: 001 A

F - FINAL

DSCHRG FROM SLRRY [illegible] & WDPF

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	92	12	01	TO	92	12	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

MINOR

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	(54-61) AVERAGE	MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
[illegible]	SAMPLE MEASUREMENT	******			******	******	******				
	PERMIT REQUIREMENT	******	0 DAILY MX	ES=1 NO=0	******	******	******	**** ****		ONCE/MONTH	VISUA
[illegible] TAL	SAMPLE MEASUREMENT	******			******	******					
	PERMIT REQUIREMENT	******	2000 DAILY MX	LBS/DA	******	******	REPORT DAILY MX	MG/L		ONCE/MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

[illegible] Daughty, Pres.

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

[illegible]

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
901	682-9[illegible]	92	12	1[illegible]
AREA CODE	NUMBER	YEAR	MO	DA

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS [illegible] LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

EPA Form 3320-1 (Rev. 9-89) Previous editions may be used. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL CORP.
MONTH OF JANUARY
YEAR OF 1992

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD	EQUIPMENT BREAKDOWN (BRIEF NOTES)
02-Jan	2262.70	0	0	29.15	0.00	0	0	4	TR	0	0	0	0	0	0	0 0 0 0	0	0	
03-Jan	44.20	0	0	29.55	0.00	0	0	6	TR	0	0	0	0	0	0	0 0 0 0	0	0	
04-Jan	0.00	0	0	0.00	0.00	0	0	9	TR	0	0	0	0	0	0	0 0 0 0	0	0	
06-Jan	2934.30	0	0	0.00	2955.30	0	0	2	TR	0	0	0	0	0	0	0 0 0 0	0	0	
07-Jan	483.31	0	0	0.00	2169.40	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0	
08-Jan	393.63	0	0	0.00	0.00	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0	
09-Jan	450.60	0	0	30.60	0.00	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0	
10-Jan	1253.36	0	0	0.00	0.00	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0	
13-Jan	258.00	0	0	0.00	0.00	0	0	0	NO	0	0	0	0	0	0	0 0 0 0	0	0	
14-Jan	45.00	0	0	0.00	0.00	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0	
15-Jan	131.00	0	0	0.00	0.00	0	0	0	X	0	0	0	0	0	0	0 0 0 0	0	0	
16-Jan	0.00	0	0	0.00	0.00	0	0	0	X	0	0	0	0	0	0	0 0 0 0	0	0	
17-Jan	171.50	0	0	0.00	0.00	0	0	0	X	0	0	0	0	0	0	0 0 0 0	0	0	
20-Jan	86.00	0	0	0.00	0.00	0	0	0	X	0	0	0	0	0	0	0 0 0 0	0	0	
21-Jan	0.00	0	0	0.00	0.00	0	3	3	NO	0	0	0	0	0	0	0 0 0 0 0	0	0	
22-Jan	0.00	0	0	0.00	0.00	0	5	5	NO	0	0	0	0	0	0	0 0 0 0 0	0	0	
23-Jan	0.00	0	0	0.00	0.00	0	13	13	NO	0	0	0	0	0	0	0 0 0 0	0	0	
24-Jan	779.04	0	0	0.00	0.00	0	10	14	NO	0	0	0	0	0	0	0 0 0 0	0	0	
27-Jan	306.20	0	0	0.00	0.00	0	0	9	NO	0	0	0	0	0	0	0 0 0 0	0	0	
28-Jan	826.63	0	0	0.00	0.00	0	8	10	NO	0	0	0	0	0	0	0 0 0 0	0	0	
29-Jan	0.00	0	0	28.90	0.00	0	0	8	NO	0	0	0	0	0	0	0 0 0 0	0	0	
30-Jan	0.00	0	0	0.00	4127.85	0	0	8	NO	0	0	0	0	0	0	0 0 0 0	0	0	

31-Jan	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL COMP.
MONTH OF FEBRUARY
YEAR OF 1992

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /MO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD	EQUIPMENT BREAKDOWNS (BRIEF NOTES)
03-Feb	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
04-Feb	135.40	0	0	29.15	0.00	0	6	6	0	0	0	0	0	0	0	0 0 0 0	0	0	
05-Feb	49.10	0	0	0.00	2172.00	0	0	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
06-Feb	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
07-Feb	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
10-Feb	0.00	0	0	0.00	0.00	0	0	0	SN/RW	0	0	0	0	0	0	0 0 0 0	0	0	
11-Feb	531.00	0	0	0.00	0.00	0	0	2	SN/RW	0	0	0	0	0	0	0 0 0 0	0	0	
12-Feb	178.10	0	0	29.15	2178.00	0	0	14	SN/RW	0	0	0	0	0	0	0 0 0 0	0	0	
13-Feb	214.70	2648.79	0	0.00	986.95	0	0	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
14-Feb	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
17-Feb	352.10	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
18-Feb	1019.71	0	0	30.10	2170.80	0	3	14	0	0	0	0	0	0	0	0 0 0 0	0	0	
19-Feb	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
20-Feb	1098.80	0	0	0.00	0.00	0	0	14	0	0	0	0	0	0	0	0 0 0 0	0	0	
21-Feb	928.70	0	0	0.00	0.00	0	10	10	0	0	0	0	0	0	0	0 0 0 0 0	0	0	
24-Feb	1379.20	0	0	0.00	0.00	0	12	12	0	0	0	0	0	0	0	0 0 0 0 0	0	0	
25-Feb	1117.30	0	0	0.00	2171.10	0	13	13	0	0	0	0	0	0	0	0 0 0 0	0	0	
26-Feb	697.00	0	0	28.25	0.00	0	12	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
27-Feb	2197.58	0	0	0.00	0.00	0	12	14	0	0	0	0	0	0	0	0 0 0 0	0	0	
28-Feb	0.00	0	0	0.00	0.00	0	8	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
	0.00	0	0	0.00	0.00	0	0	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
	0.00	0	0	0.00	0.00	0	0	8	0	0	0	0	0	0	0	0 0 0 0	0	0	

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL COMP.
MONTH OF MARCH
YEAR OF 1992

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD	EQUIPMENT BREAKDOWNS (BRIEF NOTES)
02-Mar	610.90	0	0	0.00	0.00	0	0	14	0	0	0	0	0	0	0	0 0 0 0	0	0	
03-Mar	545.64	0	0	0.00	2163.60	0	0	10	0	0	0	0	0	0	0	0 0 0 0	0	0	
04-Mar	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
05-Mar	393.11	0	0	0.00	0.00	0	0	4	0	0	0	0	0	0	0	0 0 0 0	0	0	
06-Mar	988.60	0	0	0.00	0.00	0	8	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
09-Mar	1879.08	0	0	0.00	2158.60	0	8	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
10-Mar	2200.10	0	0	0.00	2936.10	0	0	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
11-Mar	442.30	0	0	0.00	0.00	0	4	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
12-Mar	132.90	0	0	0.00	0.00	0	0	2	0	0	0	0	0	0	0	0 0 0 0	0	0	
13-Mar	707.10	0	0	0.00	0.00	0	3	4	0	0	0	0	0	0	0	0 0 0 0	0	0	
16-Mar	615.00	0	0	0.00	0.00	0	2	2	0	0	0	0	0	0	0	0 0 0 0	0	0	
17-Mar	1004.43	0	0	0.00	0.00	0	4	9	0	0	0	0	0	0	0	0 0 0 0	0	0	
18-Mar	173.50	1111.99	0	0.00	2184.00	0	12	12	0	0	0	0	0	0	0	0 0 0 0	0	0	
19-Mar	1317.70	1131.76	0	0.00	0.00	0	16	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
20-Mar	1423.10	0	0	0.00	0.00	0	10	16	0	0	0	0	0	0	0	0 0 0 0 0	0	0	
21-Mar	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0 0	0	0	
22-Mar	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
23-Mar	45.30	0	0	0.00	0.00	0	7	7	0	0	0	0	0	0	0	0 0 0 0	0	0	
24-Mar	3245.39	0	0	0.00	0.00	0	4	6	0	0	0	0	0	0	0	0 0 0 0	0	0	
25-Mar	2992.10	1561.74	0	0.00	2150.55	0	8	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
26-Mar	220.90	1621.65	0	0.00	0.00	0	8	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
27-Mar	353.60	0	0	0.00	0.00	0	8	8	0	0	0	0	0	0	0	0 0 0 0	0	0	

28-Mar	3698.58	0	0	0.00	0.00	0	0	12	0	0	0	0	0	0	0	0 0 0 0	0	0	
29-Mar	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
30-Mar	0.00	1567.22	0	0.00	2915.80	0	8	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
31-Mar	0.00	1664.95	0	0.00	0.00	0	8	8	0	0	0	0	0	0	0	0 0 0 0	0	0	

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL COMP.
MONTH OF APRIL
YEAR OF 1992

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG/ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD	EQUIPMENT BREAKDOWNS (BRIEF NOTES)
01-Apr	0.00	0	0	0.00	0.00	0	8	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
02-Apr	2054.00	0	0	0.00	0.00	0	8	8	0	0	0	0	0	4000	0	9 10 0 0	0	0	
03-Apr	2063.60	0	0	0.00	0.00	0	8	8	0	0	0	0	0	0	0	0 0 0 0	0	4000	
04-Apr	4239.30	0	0	0.00	0.00	0	0	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
05-Apr	1756.20	0	0	0.00	0.00	0	0	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
07-Apr	2175.40	0	0	0.00	0.00	916.5	0	8	0	0	0	0	0	4000	0	10 11 0 0	0	0	
08-Apr	1298.50	0	0	0.00	0.00	0.00	0	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
09-Apr	936.80	0	0	0.00	2953.20	0	0	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
10-Apr	1616.70	0	0	30.90	0.00	0	0	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
11-Apr	3380.24	0	0	0.00	0.00	0	0	10	0	0	0	0	0	2000	0	12 1 0 0	0	5000	
13-Apr	2246.30	1121.60	0	0.00	0.00	0	0	16	0	0	0	0	0	2000	0	12 1 0 0	0	0	
14-Apr	2175.40	1114.19	0	0.00	0.00	0	0	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
15-Apr	1077.60	1225.95	0	0.00	0.00	0	0	16	0	0	0	0	0	0	0	0 0 0 0	0	0	
16-Apr	1349.50	1639.72	0	0.00	0.00	0	0	8	0	0	0	0	0	0	0	0 0 0 0	0	0	
17-Apr	940.50	0	0	0.00	0.00	0	0	8	0	0	0	0	0	0	0	0 0 0 0 0	0	0	
20-Apr	2386.10	0	0	0.00	0.00	0	0	16	0	0	0	0	0	4000	0	11 12 1 2 0	0	0	
21-Apr	724.70	0	0	0.00	0.00	0	0	8	0	0	0	0	0	4000	0	11 12 1 2	0	4000	
22-Apr	2863.25	0	0	0.00	0.00	0	0	16	0	0	0	0	0	4000	0	11 12 1 2	0	0	
23-Apr	3494.00	0	0	0.00	0.00	0	0	16	0	0	0	0	0	4000	0	11 12 1 2	0	0	
24-Apr	3548.69	0.00	0	0.00	2965.00	0	0	16	0	0	0	0	0	4000	0	11 12 1 2	0	0	
27-Apr	3228.98	0.00	0	0.00	2170.70	0	0	16	0	0	0	0	0	4000	0	11 12 1 2	0	0	
28-Apr	3219.50	0	0	0.00	2965.00	0	0	16	0	0	0	0	0	4000	0	11 12 1 2	0	0	

Apr	0.00	0	0	0.00	2170.70	0	0	16	0	0	0	0	0	4000	0	11 12 1 2	0	0	
Apr	0.00		0	0.00	0.00	0	0	16	0	0		0	0	4000	0	11 12 1 2	0	0	

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL CORP.
MONTH OF MAY
YEAR OF 1992

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD	EQUIPMENT BREAKDOWNS (BRIEF NOTES)
01-May	1972.20	0	0	0.00	0.00	0	0	4	NO	0	0	0	0	8000	0	0 0 0 0	0	0	
04-May	316.80	0	0	0.00	0.00	0	0	0	NO	0	0	0	0	4000	0	0 0 0 0	0	5000	
05-May	535.20	0	0.00	23.30	0.00	0	0	4	TR	0	0	0	0	0	0	0 0 0 0	0	0	
06-May	178.10	747.40	0	0.00	2137.89	0	0	2	TR	0	0	0	0	0	0	0 0 0 0	0	0	
07-May	2007.90	0	0	0.00	0.00	0	0	0	NO	0	0	0	0	0	0	0 0 0 0	0	0	
08-May	1135.50	0	0	0.00	0.00	0.0	0	10	NO	0	0	0	0	4000	0	0 0 0 0	0	4000	
11-May	0.00	0	0	0.00	0.00	0.00	0	2	NO	0	0	0	0	6000	0	0 0 0 0	0	0	
12-May	1141.20	0	0	0.00	0.00	0	4	12	NO	0	0	0	0	4000	0	0 0 0 0	0	0	
13-May	2128.50	0	0	0.00	5161.15	1147.03	7	12	NO	0	0	0	0	8000	0	0 0 0 0	0	4000	
14-May	313.04	0	0	0.00	0.00	0	0	4	NO	0	0	0	0	4000	0	0 0 0 0	0	0	
15-May	1016.80	0.00	0	0.00	0.00	0	0	0	TR	0	0	0	0	0	0	0 0 0 0	0	0	
18-May	1081.80	0.00	0	0.00	0.00	0	2	0	NO	0	0	0	0	0	0	0 0 0 0	0	0	
19-May	1076.10	0.00	0	0.00	0.00	6	6	0	TR	0	0	0	0	0	0	0 0 0 0	0	0	
20-May	176.60	0.00	0	0.00	5474.70	1178.00	11	0	TR	0	0	0	0	0	0	0 0 0 0	0	0	
21-May	2231.30	0	0	0.00	0.00	10	10	0	TR	0	0	0	0	0	0	0 0 0 0	0	0	
22-May	3007.20	0	0	0.00	4159.85	0.00	12	0	TR	0	0	0	0	0	0	0 0 0 0	0	0	
26-May	752.75	0	0	0.00	0.00	0	0	0	TR	0	0	0	0	0	0	0 0 0 0	0	0	
27-May	766.19	0	0	0.00	5157.40	1271.95	0	0	TR	0	0	0	0	0	0	0 0 0 0	0	0	
28-May	1492.14	0	0	0.00	0.00	0	0	0	NO	0	0	0	0	0	0	0 0 0 0	0	0	
29-May	1487.19	0.00	0.00	25.35	0.00	0	0	0	TR	0	0	0	0	0	0	0 0 0 0	0	0	
	0.00	0.00	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL COMP.
MONTH OF JUNE
YEAR OF 1992

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAILER	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPLIED	ACRES TREATED WITH CHLORIDE	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATER	GALLONS WATER APPL'D TO ROADWAYS	EQUIPMENT BREAKDOWNS (BRIEF NOTES)
01-Jun	2811.10	0	0	0.00	0.00	0	8	12	NO	0	0	0	0	5000	0	9 11 14 16	0	0	
02-Jun	2434.20	0	0	0.00	2165.30	0	8	14	NO	0	0	0	0	4000	0	10 12 0 0	0	0	
03-Jun	1252.50	0	0.00	0.00	0.00	0	16	16	NO	0	0	0	0	4000	0	10 13 0 0	0	0	
04-Jun	0.00	0.00	0	0.00	0.00	0	16	16	NO	0	0	0	0	4000	0	9 11 0 0	0	4000	
05-Jun	1262.91	0	0	0.00	0.00	903.40	0	9	NO	0	0	0	0	6000	0	10 12 14 0	0	0	
08-Jun	2114.41	0	0	0.00	0.00	0.00	0	14	NO	0	0	0	0	4000	0	11 15 0 0	0	0	
09-Jun	2380.35	0	0	0.00	2166.60	0.00	0	12	NO	0	0	0	0	4000	0	10 12 0 0	0	0	
10-Jun	2294.20	0	0	0.00	0.00	0	0	13	NO	0	0	0	0	4000	0	10 14 0 0	0	6000	
11-Jun	2189.30	0	0	0.00	0.00	0.00	0	13	NO	0	0	0	0	6000	0	9 11 13 0	0	0	
12-Jun	45.00	0	0	0.00	0.00	0	0	13	NO	0	0	0	0	6000	0	10 12 14 0	0	0	
15-Jun	937.65	0.00	0	0.00	0.00	0	0	12	TR	0	0	0	0	4000	0	11 13 0 0	0	0	
16-Jun	940.80	0.00	0	0.00	2165.30	0	0	11	NO	0	0	0	0	6000	0	9 12 15 0	0	0	
17-Jun	2271.12	0.00	0	0.00	2931.70	0	0	12	NO	0	0	0	0	6000	0	9 11 14 0	0	0	
18-Jun	1562.23	0.00	0	0.00	0.00	0.00	0	13	NO	0	0	0	0	8000	0	10 12 14 16	0	4000	
19-Jun	2494.28	0	0	0.00	0.00	0	0	13	NO	0	0	0	0	6000	0	10 12 14 16 0	0	0	
22-Jun	2118.80	0	0	0.00	0.00	0.00	0	13	NO	0	0	0	0	6000	0	9 11 1 3 0	0	0	
23-Jun	2424.20	0	0	0.00	2192.25	0	0	13	NO	0	0	0	0	8000	0	10 11 12 14	0	6000	
24-Jun	3819.00	0	0	0.00	1964.50	0.00	0	13	NO	0	0	0	0	8000	0	10 11 12 14	0	0	
25-Jun	763.70	0	0	28.05	0.00	0	0	0	NO	0	0	0	0	6000	0	10 12 14 0	0	0	
26-Jun	2119.90	0.00	0.00	0.00	0.00	0	0	8	NO	0	0	0	0	6000	0	10 13 15 0	0	0	
29-Jun	0.00	0.00	0	0.00	0.00	0	0	7	NO	0	0	0	0	8000	0	9 10 12 15	0	6000	
30-Jun	810.00	0	0	0.00	0.00	0	0	8	NO	0	0	0	0	6000	0	9 10 12 0	0	0	

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL COMP.
MONTH OF [redacted] July

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD	EQUIPMENT BREAKD (BRIEF NOTES)
01-Jul	1035.00	0	0	0.00	2180.95	0	0	8	NO	0	0	0	0	6000	6	9 11 14	0	0	
02-Jul	540.00	0	0	29.35	0.00	0	0	10	NO	0	0	0	0	4000	6	10 13 0 0	0	0	
03-Jul	0.00	0	0.00	0.00	0.00	0	0	8	NO	0	0	0	0	4000	6	10 12 0 0	0	0	
06-Jul	0.00	0	0	0	5469.60	0	0	8	NO	0	0	0	0	4000	6	10 13 0 0	0	0	
07-Jul	0.00	0	0	0	2973.20	0.00	0	6	TR	0	0	0	0	0	0	0 0 0 0	0	0	
08-Jul	0.00	0	0	0	2381.85	0.0	0	4	TR	0	0	0	0	2000	6	9 0 0 0	0	0	
09-Jul	0.00	0	0	0	0.00	0.00	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0	
10-Jul	0.00	0	0	0	4180.85	0	0	7	NO	0	0	0	0	0	0	0 0 0 0	0	6000	
13-Jul	799.72	0	0	0	0.00	0.00	0	6	TR	0	0	0	0	0	0	0 0 0 0	0	0	
14-Jul	2151.40	0	0	0	2958.20	0	0	14	NO	0	0	0	0	0	0	0 0 0 0	0	0	
15-Jul	313.40	0	0	0	2384.85	0	0	6	NO	0	0	0	0	0	0	0 0 0 0	0	0	
16-Jul	0.00	0	0	0	0.00	0	0	5	NO	0	0	0	0	4000	6	9 11 0 0	0	4000	
17-Jul	2361.40	0	0	0	0.00	0	0	8	NO	0	0	0	0	0	0	0 0 0 0	0	0	
20-Jul	0.00	0	0	0	0.00	0.00	0	8	TR	0	0	0	0	0	0	0 0 0 0	0	0	
21-Jul	452.10	0	0	0	5360.20	0	0	0	NO	0	0	0	0	2000	6	11 0 0 0 0	0	0	
22-Jul	43.50	0	0	0	2367.30	0.00	0	0	NO	0	0	0	0	2000	6	14 0 0 0 0	0	6000	
23-Jul	0.00	0	0	0	0.00	0	0	5	TR	0	0	0	0	0	0	0 0 0 0	0	0	
24-Jul	0.00	0	0	0	2949.60	0.00	0	4	TR	0	0	0	0	0	0	0 0 0 0	0	0	
27-Jul	44.80	0	0	0	0.00	0	0	2	0	0	0	0	0	0	0	0 0 0 0	0	0	
28-Jul	0.00	0	0	0	2954.40	0	0	9	0	0	0	0	0	2000	6	11 0 0 0	0	4000	
29-Jul	88.60	0	0	0	2354.25	0	0	6	0	0	0	0	0	0	0	0 0 0 0	0	0	
30-Jul	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0	
31-Jul	0.00	0	0	0.00	0.00	0	0	4	0	0	0	0	0	4000	6	10 13 0 0	0	0	

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL CORP.
MONTH OF AUGUST

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD	EQUIPMENT BREAKDOWNS (BRIEF NOTES)
03-Aug	316.50	0	0	0.00	0.00	0	0	6	NO	0	0	0	0	4000	6	10 14 0	0	0	
04-Aug	2411.10	0	0	0.00	2957.60	0	0	8	NO	0	0	0	0	0	0	0 0 0 0	0	0	
05-Aug	3756.00	0	0.00	0.00	2335.95	0	0	8	TR	0	0	0	0	0	0	0 0 0 0	0	0	
06-Aug	3711.60	0	0.00	29.75	0.00	0	0	16	TR	0	0	0	0	0	0	0 0 0 0	0	0	
07-Aug	3226.90	0	0	0.00	5459.80	0.00	0	14	NO	0	0	0	0	0	0	0 0 0 0	0	0	
10-Aug	2552.80	0	0	0.00	0.00	0.0	0	12	TR	0	0	0	0	0	0	0 0 0 0	0	0	
11-Aug	3173.20	0	0	0.00	2944.30	0.00	0	15	TR	0	0	0	0	0	0	0 0 0 0	0	0	
12-Aug	225.10	0	0	0.00	2360.50	0	0	12	NO	0	0	0	0	6000	6	9 12 14 0	0	0	
13-Aug	224.88	651.96	0	0.00	0.00	0.00	0	10	TR	0	0	0	0	0	0	0 0 0 0	0	0	
14-Aug	0.00	1203.66	0	0.00	0.00	0	0	5	TR	0	0	0	0	0	0	0 0 0 0	0	0	
17-Aug	1924.60	0.00	0	0.00	0.00	0	0	14	0	0	0	0	0	0	0	0 0 0 0	0	0	
18-Aug	0.00	0.00	0	0.00	2941.50	0	0	12	0	0	0	0	0	0	0	0 0 0 0	0	0	
19-Aug	0.00	0.00	0	0.00	0.00	0	0	6	0	0	0	0	0	6000	6	10 12 13 0	0	0	
20-Aug	0.00	0.00	0	0.00	0.00	0.00	0	8	TR	0	0	0	0	0	0	0 0 0 0	0	0	
21-Aug	0.00	0.00	0	0.00	5439.90	0	0	4	TR	0	0	0	0	0	0	0 0 0 0 0	0	0	
24-Aug	0.00	0.00	0	0.00	0.00	0.00	0	8	0	0	0	0	0	6000	6	10 12 14 0 0	0	0	
25-Aug	886.00	0.00	0	27.85	2950.10	0	0	4	TR	0	0	0	0	0	0	0 0 0 0	0	0	
26-Aug	578.50	0.00	0	0.00	0.00	0.00	0	4	0	0	0	0	0	6000	6	9 11 13 0	0	4000	
27-Aug	826.90	0.00	0	0.00	0.00	0	0	5	0	0	0	0	0	0	0	0 0 0 0	0	0	
28-Aug	878.00	0.00	0	0.00	0.00	0	0	8	0	0	0	0	0	0	6	0 0 0 0	0	0	
31-Aug	0.00	0.00	0	0.00	0.00	0	0	6	0	0	0	0	0	6000	6	10 12 13 0	0	0	

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL COMP.
MONTH OF SEPTEMBER

DATE	COAL REC'D (S. TONS)	2X0 LOADED IN TRUCKS (S. TONS)	LUMP LOADED IN TRUCKS (S. TONS)	STOKER LOADED IN TRUCKS (S. TONS)	2X0 LOADED IN TRAINS (S. TONS)	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPLIED	AC TREAT W/WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD	EQUIPMENT BREAKI (BRIEF NOTES)
01-Sep	0.00	0	0	28.45	0.00	0	0	4	NO	0	0	0	0	0	0	0 0 0 0	0	0	
02-Sep	0.00	0	0	0.00	0.00	0	0	4	NO	0	0	0	0	0	0	0 0 0 0	0	4000	
03-Sep	3696.40	0	0.00	0.00	0.00	0	0	15	NO	0	0	0	0	6000	6	10 11 14 0	0	0	
04-Sep	43.90	0	0.00	0.00	0.00	0	0	0	NO	0	0	0	0	0	0	0 0 0 0	0	0	
08-Sep	3531.40	0	0	0.00	0.00	0.00	0	15	NO	0	0	0	0	6000	6	10 11 12 0	0	0	
09-Sep	3919.10	0	0	0.00	2172.80	0.0	0	16	NO	0	0	0	0	6000	6	12 14 16 0	0	0	
10-Sep	4222.95	0	0	0.00	0.00	0.00	0	16	NO	0	0	0	0	6000	6	9 11 12 0	0	4000	
11-Sep	5212.60	0	0	0.00	0.00	0	0	15	NO	0	0	0	0	2000	6	0 12 0 0	0	0	
14-Sep	4409.92	0.00	0	29.55	0.00	0.00	0	16	NO	0	0	0	0	6000	6	10 12 13 0	0	0	
15-Sep	4014.30	0.00	0	27.75	0.00	0	0	17	NO	0	0	0	0	6000	6	10 12 14 0	0	0	
16-Sep	4882.53	0.00	0	0.00	2168.10	0	0	16	TR	0	0	0	0	0	0	0 0 0 0	0	0	
17-Sep	634.20	0.00	0	0.00	0.00	0	0	12	NO	0	0	0	0	0	0	0 0 0 0	0	0	
18-Sep	46.00	0.00	0	0.00	0.00	0	0	15	NO	0	0	0	0	4000	6	11 14 0 0	0	4000	
21-Sep	0.00	0.00	0	0.00	0.00	0.00	0	9	TR	0	0	0	0	0	0	0 0 0 0	0	0	
22-Sep	1215.50	0.00	0	0.00	0.00	0	0	6	NO	0	0	0	0	0	0	0 0 0 0 0	0	0	
23-Sep	1157.70	0.00	0	0.00	0.00	0.00	0	5	TR	0	0	0	0	0	0	0 0 0 0 0	0	0	
24-Sep	609.50	0.00	0	0.00	0.00	0	0	10	NO	0	0	0	0	0	0	0 0 0 0	0	0	
25-Sep	135.00	0.00	0	0.00	0.00	0.00	0	4	NO	0	0	0	0	6000	6	10 12 14 0	0	4000	
28-Sep	135.90	0.00	0	0.00	0.00	0	0	5	NO	0	0	0	0	4000	6	10 14 0 0	0	0	
29-Sep	435.70	322.57	0	0.00	1970.80	0	0	8	NO	0	0	0	0	4000	6	12 14 0 0	0	0	
30-Sep	2245.30	0.00	0	0.00	0.00	0	0	14	NO	0	0	0	0	8000	6	10 12 15 17	0	0	
	0.00	0.00	0	0.00	0.00	0	0	0	NO	0	0	0	0	0	6		0	0	
	0.00	0.00	0	0.00	0.00	0	0		0	0	0	0	0	0	0	10 13 0 0	0	0	

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENERAL COAL CORP.
OCTOBER 1992

DATE	COAL REC'D SHORT TONS	2X8 LOADED TRUCKS S. TONS	LUMP LOADED TRUCKS S TONS	STOKER LOADED TRUCKS S TONS	2X8 LOADED TRAINS S. TONS	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPL'D	AC TREAT WITH WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO RAILROAD
10/1	929.80	0.00	0	0	0.00	0	0	2	NO	0	0	0	0	4000	6	10 14 0 0	0	0
10/2	268.80	0.00	0	0	0.00	0	0	8	NO	0	0	0	0	4000	2	10 16 0 0	0	0
10/5	349.70	0.00	0	0	0.00	0	0	6	NO	0	0	0	0	6000	2	10 12 14 0	0	6000
10/6	0.00	0.00	0	0	2955.60	0	0	7	NO	0	0	0	0	0	0	0 0 0 0	0	0
10/7	0.00	0.00	0	0	2176.50	0	0	6	NO	0	0	0	0	4000	2	10 12 0 0	0	0
10/8	0.00	0.00	0	0	0.00	0	0	4	NO	0	0	0	0	0	0	0 0 0 0	0	0
10/9	179.30	0.00	0	0	0.00	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0
10/12	0.00	2163.51	0	0	0.00	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0
10/13	135.00	2789.50	0	0	2956.50	0	0	11	NO	0	0	0	0	6000	2	10 12 13 0	0	4000
10/14	0.00	2925.76	0	0	2169.05	0	0	10	NO	0	0	0	0	4000	2	10 12 0 0	0	0
10/15	0.00	3722.59	0	0	0.00	0	0	10	NO	0	0	0	0	4000	2	9 13 0 0	0	0
10/16	0.00	2914.87	0	0	0.00	0	0	12	NO	0	0	0	0	6000	2	9 11 14 0	0	6000
10/19	0.00	0.00	0	0	0.00	0	0	9	NO	0	0	0	0	4000	2	10 12 0 0	0	0
10/20	0.00	0.00	0	0	2957.80	0	0	8	NO	0	0	0	0	0	0	0 0 0 0	0	4000
10/21	89.90	0.00	0	0	2178.70	0	0	2	NO	0	0	0	0	4000	2	10 12 0 0	0	0
10/22	0.00	0.00	0	0	0.00	0	0	6	NO	0	0	0	0	0	0	0 0 0 0	0	0
10/23	0.00	0.00	0	0	0.00	0	0	2	TR	0	0	0	0	0	0	0 0 0 0	0	0
10/26	0.00	0.00	0	0	0.00	0	0	0	NO	0	0	0	0	6	0	0 0 0 0	0	0
10/27	0.00	0.00	0	0	0.00	0	0	0	NO	0	0	0	0	6	0	0 0 0 0	0	0
10/28	0.00	0.00	0	0	2183.50	0	0	0	TR	0	0	0	0	6	0	0 0 0 0	0	0
10/29	0.00	0.00	0	0	0.00	0	0	0	TR	0	0	0	0	6	0	0 0 0 0	0	0
10/30	0.00	0.00	0	0	4164.30	0	0	0	TR	0	0	0	0	6	0	0 0 0 0	0	0
	0.00	0.00	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0 0 0 0	0	0

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENERAL COAL CORP.
NOVEMBER 1992

DATE	COAL REC'D SHORT TONS	2X0 LOADED TRUCKS S. TONS	LUMP LOADED TRUCKS S TONS	STOKER LOADED TRUCKS S TONS	2X9 LOADED TRAINS S. TONS	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPL'D	AC TREAT WITH WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO RAILROAD
11/2	0.00	0.00	0	0	0.00	0	0	6	TR	0	0	0	0	0	0	0 0 0 0	0	0
11/3	0.00	0.00	0	0	2957.30	0	0	6	TR	0	0	0	0	0	0	0 0 0 0	0	0
11/4	0.00	0.00	0	0	0.00	0	0	4	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/5	0.00	0.00	0	0	0.00	0	0	0	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/6	0.00	0.00	0	0	0.00	0	0	4	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/9	0.00	0.00	0	0	0.00	0	0	6	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/10	0.00	0.00	0	0	0.00	0	0	5	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/11	0.00	0.00	0	0	0.00	0	0	7	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/12	0.00	0.00	0	0	0.00	0	0	6	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/13	0.00	0.00	0	0	0.00	0	0	6	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/16	0.00	1685.63	0	0	0.00	0	0	8	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/17	0.00	909.21	0	0	0.00	0	0	11	NO	0	0	0	0	4000	2	10 12 0 0	0	0
11/18	0.00	4018.62	0	0	0.00	0	0	11	TR	0	0	0	0	4000	2	10 14 0 0	0	0
11/19	0.00	4208.48	0	0	0.00	0	0	3	NO	0	0	0	0	4000	2	9 12 0 0	0	0
11/20	0.00	0.00	0	0	0.00	0	0	4	NO	0	0	0	0	4000	2	9 12 0 0	0	0
11/23	0.00	0.00	0	0	0.00	0	0	6	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/24	0.00	0.00	0	0	2971.00	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/25	0.00	0.00	0	0	0.00	0	0	5	NO	0	0	0	0	0	0	0 0 0 0	0	0
11/30	0.00	0.00	0	0	0.00	0	0	8	NO	0	0	0	0	0	0	0 0 0 0	0	0

LOTUS 123 SPREADSHEET RECORD OF OPERATING
AND AIR QUALITY PARAMETERS
FOR CASTLE VALLEY AND
GENWAL COAL COMP.
DECEMBER 1992

ATE	COAL REC'D SHORT TONS	2X0 LOADED TRUCKS S. TONS	LUMP LOADED TRUCKS S TONS	STOKER LOADED TRUCKS S TONS	2X0 LOADED TRAINS S. TONS	STOKER IN TRAINS	HOURS SCREEN & CRUSH OPERATE	HOURS 320 LOADER USED	RAIN FALL IN/TR /NO	GAL. MAG./ CHLOR APPL'D	ACRES TREATED WITH CHLORID	CONCENT-RATION OF SOLUTION GAL	TIME MAG. APPL'D	GAL. WATER APPL'D	AC TREAT WITH WATER	TIME WATER WAS APPLIED	TONS TREATED LATEX	GALLONS WATER APPL'D TO HAULROAD
2/1	0	0	0	0	2965.50	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0
2/2	0	0	0	0	0	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0
2/3	0	0	0	0	0	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0
2/4	0	0	0	0	0	0	0	4	NO	0	0	0	0	0	0	0 0 0 0	0	0
2/7	0	0	0	0	0	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0
2/8	0	0	0	0	0	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0
2/9	0	0	0	0	0	0	0	2	TR	0	0	0	0	0	0	0 0 0 0	0	0
12/10	0	0	0	28.95	0	0	0	2	TR	0	0	0	0	0	0	0 0 0 0	0	0
12/11	0	0	0	0	0	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0
12/14	0	0	0	0	0	0	0	1	NO	0	0	0	0	0	0	0 0 0 0	0	0
12/15	0	0	0	0	0	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0
12/16	0	0	0	0	0	0	0	2	TR	0	0	0	0	0	0	0 0 0 0	0	0
12/17	0	0	0	0	0	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0
12/21	0	0	0	0	0	0	0	3	TR	0	0	0	0	0	0	0 0 0 0	0	0
12/22	0	0	0	0	0	0	0	3	TR	0	0	0	0	0	0	0 0 0 0	0	0
12/23	0	0	0	0	0	0	0	3	NO	0	0	0	0	0	0	0 0 0 0	0	0
12/29	0	0	0	0	0	0	0	2	NO	0	0	0	0	0	0	0 0 0 0	0	0
12/30	0	0	0	0	0	0	0	2	TR	0	0	0	0	0	0	0 0 0 0	0	0

SUBSIDENCE MONITORING

There is no subsidence monitoring done on this permit. This permit is a coal preparation area and underground mining does not occur.

VEGETATION MONITORING OF THE SURFACE FACILITY TEST PLOT II AT THE WELLINGTON PLANT

- 1992 -

Prepared by

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Patrick D. Collins, Ph.D.

Report Date: March 1993

VEGETATION MONITORING OF THE SURFACE FACILITY TEST PLOT II AT THE WELLINGTON PLANT

- 1992 -

INTRODUCTION

A revegetation test plot was constructed at the Wellington Preparation Plant in December 1990. The plot was designed under the direction and approval of the State of Utah, Division of Oil, Gas & Mining (DOGM). This plot was implemented to replace an earlier test plot that was removed to facilitate operations at the Wellington site.

Potential species to be used at the time of final reclamation of the area were planted on the plot as single species rows and in mixtures. All treatments were replicated three (3) times. An "as-built" drawing of the revegetation test plot is shown on Table 1 of this report. The single species and the number for which they correspond on the "as-built" drawing are shown on Table 2. The seed mixtures planted are shown on Tables 3-6.

METHODS

Qualitative Data

Qualitative information was recorded on data sheets including: estimated precipitation, slope, exposure, animal disturbance and other appropriate notes.

Cover and Composition

It was obvious from the initial assessment of the plot that most of the cover was dominated by "weedy" species, whereas, only a very small percentage of the total cover would be represented by "desirable" species. Because of the obvious dominance of the weedy species and the homogeneity of the cover, a great deal of time was *not* spent recording cover by species. Instead, only one quadrat was placed in the center of each treatment. Cover estimates were made using ocular methods with meter square quadrats. Species composition was also assessed from the quadrats.

Species Density

Species density for *both* woody and herbaceous species were

recorded by counting the total number within each treatment (subplot) and then by taking the mean value of these.

Raw Data

Raw data summary sheets were included in this report to facilitate any additional statistical analyses.

RESULTS

Qualitative Information

Qualitative data and other information are reported on Table 7 of this report.

Cover

As mentioned in the "Methods" section, cover of the plots were very much dominated by "weedy" species. To show this, cover was recorded in each plot (Table 8). The numbers (1-20) and letters (A-D) on the top of the data sheets of Table 8 represent the treatments (species & mixtures) that correspond to Table 1. As one can observe, there is very little variance between subplots.

With little exception, the cover and the species represented are quite homogeneous and almost exclusively weedy, exotic plants. The mean cover of all treatments combined was 46.67% (Std. Dev. = 5.40). Mean total cover and cover by species area shown on the last page of Table 8.

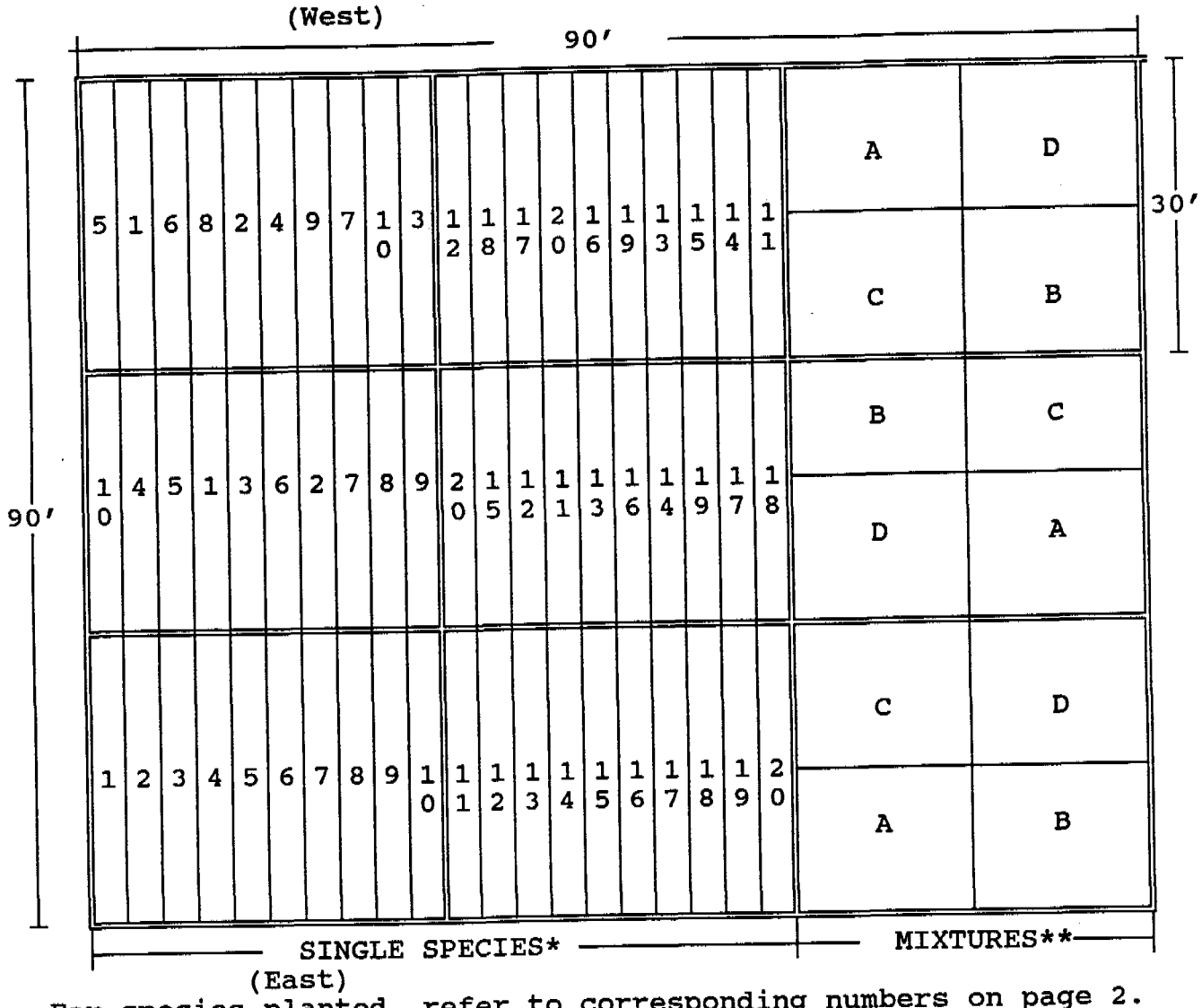
Species Density

Because the cover was represented by so many weedy species, more attention was given to "desirable" species density which was recorded for *both* woody and herbaceous species. Yellow sweetclover followed by alfalfa, Lewis flax, intermediate wheatgrass, blue grama, sunflower and squirrelltail had the greatest densities. Poorest results came from western wheatgrass, galleta, yarrow, Pacific aster, and milkweed. The most successful mixture was "D", which had 1,546.87 individuals per acre. Table 9 shows the mean densities for each treatment of individual species and Table 10 for the mixtures.

TABLE 1:

"AS-BUILT"
SURFACE FACILITY RECLAMATION TEST PLOTS: II
WELLINGTON PREPARATION PLANT

MT. NEBO SCIENTIFIC
December 1990



* For species planted, refer to corresponding numbers on page 2.
** For species in mixtures A - D, refer to pages 3 - 6.

ADDITIONAL NOTES:

- All seeding was calculated @ 60 PLS/ft^2.
- Seed was broadcasted and raked.
- Entire plot was hydromulched.
- Plot fertilized @ 80 lb/ac nitrogen; 160 lb/ac phosphorus.
- Plot was fenced 8′ high and buried to depth of 8".
- Plot was gouged 18" wide X 25" long X 5" deep.

TABLE 2:

SURFACE FACILITY RECLAMATION TEST PLOTS
WELLINGTON PREPARATION PLANT

SINGLE SPECIES PLANTED

SCIENTIFIC NAME	COMMON NAME
Grasses	
1 = Elymus hispidus	Intermediate Wheatgrass
2 = Elymus smithii	Western Wheatgrass
3 = Elymus trachycaulus	Slender Wheatgrass
4 = Boutelous gracilis	Blue Grama
5 = Elymus cinereus	Gt. Basin Wildrye
6 = Hilaria jamesii	Galleta
7 = Stipa hymenoides	Indian Ricegrass
8 = Sitanion hystrix	Squirrelltail
9 = Sporobolus airoides	Alkali Sacaton
10 = Sporobolus cryptandrus	Sand Dropseed
Forbs	
11 = Achillea millefolium	Yarrow
12 = Aster chilensis	Pacific Aster
13 = Asclepias speciosa	Milkweed
14 = Helianthus annuus	Sunflower
15 = Medicago sativa	Alfalfa
16 = Melilotus officinalis	Yellow Sweetclover
17 = Penstemon eatonii	Eaton's Penstemon
18 = Penstemon palmeri	Palmer Penstemon
19 = Linum lewsii	Lewis Flax
20 = Sphaeralcea grossulariaefolia	Globemallow

TABLE 3:

SURFACE FACILITY RECLAMATION TEST PLOTS
WELLINGTON PREPARATION PLANT

MIXTURES PLANTED

Species Mix A

SCIENTIFIC NAME	COMMON NAME
GRASSES	
Elymus smithii	Western Wheatgrass
Elymus trachycaulus	Slender Wheatgrass
Elymus cinereus	Gt. Basin Wildrye
Stipa hymenoides	Indian Ricegrass
Sporobolus airoides	Alkali Sacaton
FORBS	
Achillea millefolium	Yarrow
Aster chilensis	Pacific Aster
Helianthus annua	Sunflower
Medicago sativa	Alfalfa
Penstemon palmeri	Palmer's Penstemon
SHRUBS	
Artemisia tridentata wyo.	Wyoming Big Sagebrush
Atriplex gardneri	Gardner's Saltbush
Atriplex canescens	Four-winged Saltbush
Ceratoides lanata	Winterfat
Chrysothamnus nauseosus	Rubber Rabbitbrush

TABLE 4:

SURFACE FACILITY RECLAMATION TEST PLOTS
WELLINGTON PREPARATION PLANT

MIXTURES PLANTED

Species Mix B

SCIENTIFIC NAME	COMMON NAME
GRASSES	
Elymus hispidus	Intermediate Wheatgrass
Bouteloua gracilis	Blue Grama
Sitanion hystrix	Squirreltail
Sporobolus airoides	Alkali Sacaton
FORBS	
Asclepia speciosus	Milkweed
Linum lewsii	Lewis Flax
Melilotus officinalis	Yellow Sweetclover
Penstemon eatonii	Eaton's Penstemon
Sphaeralcea grossulariaefolia	Globemallow
SHRUBS	
Artemsia nova	Black Sagebrush
Atriplex confertifolia	Shadscale
Chrysothamnus nauseosus	Rubber Rabbitbrush
Kochia prostrata	Summer Cypress

TABLE 5:

SURFACE FACILITY RECLAMATION TEST PLOTS
WELLINGTON PREPARATION PLANT

MIXTURES PLANTED

Species Mix C

SCIENTIFIC NAME	COMMON NAME
GRASSES	
Elymus smithii	Western Wheatgrass
Hilaria jamesii	Galleta
Stipa hymenoides	Indian Ricegrass
Sporobolus crytandrus	Sand Dropseed
FORBS	
Achillea millefolium	Yarrow
Aster chilensis	Pacific Aster
Helianthus annua	Sunflower
Melilotus officinalis	Yellow Sweetclover
SHRUBS	
Atriplex canescens	Four-winged Saltbush
Atriplex confertifolia	Shadscale
Ceratoides lanata	Winterfat
Kochia prostrata	Summer Cypress
Sarcobatus vermiculatus	Greasewood

TABLE 6:

SURFACE FACILITY RECLAMATION TEST PLOTS
WELLINGTON PREPARATION PLANT

MIXTURES PLANTED

Species Mix D

SCIENTIFIC NAME	COMMON NAME
GRASSES	
Elymus hispidus	Intermediate Wheatgrass
Bouteloua gracilis	Blue Grama
Oryzopsis hymenoides	Indian Ricegrass
Sitanion hystrix	Squirreltail
FORBS	
Asclepia speciosus	Milkweed
Linum lewsii	Lewis Flax
Medicago sativa	Alfalfa
Penstemon eatonii	Eaton's Penstemon
Penstemon palmeri	Palmer's Penstemon
Sphaeralcea grossulariaefolia	Globemallow
SHRUBS	
Artemisia tridentata wyo.	Wyoming Big Sagebrush
Artemsia nova	Black Sagebrush
Atriplex confertifolia	Shadscale
Atriplex canescens	Four-wing Saltbush

TABLE 7:

CASTLE VALLEY RESOURCES
QUALITATIVE SAMPLING DATA SHEET AND
QUANTITATIVE/QUALITATIVE NOTES
1992

SITE NAME: (New) Surface Facility Plot

AREA: Wellington Preparation Plant

DATE: 9 September 1992

WORKERS: P. Collins

SLOPE: 0-1 deg.

EXPOSURE: --

AREA: .5 acre

ANIMAL USE/DISTURBANCE: Slight

EROSION: none

COVER: (see quantative data)

DOMINANT PLANT SPECIES OBSERVED: (see quantative data)

NOTES: 1) See report.

TABLE 8: Cover data.

WELLINGTON PREPARATION PLANT							
Slope: 0							
Exposure: 0							
Sample Date: 9 Sept. 1992		1	2	3	4	5	6
SURFACE FACILITY PLOT							
SHRUBS							
FORBS							
Kochia scoparia		0	0	0	0	0	0
Salsola iberica		5	0	15	23	35	10
Halogeton glomeratus		60	55	25	25	10	30
Sphaeralcea grossulariaefolia		0	0	5	0	0	0
Medicago sativa		0	0	0	0	0	0
Melilotus officinalis		0	0	0	0	0	0
GRASSES							
Elymus trachycaulus		0	0	5	0	0	0
Boutelous gracilis		0	0	0	0	2	0
COVER							
Total Living Cover		65	55	50	48	47	40
Litter		5	2	5	10	15	5
Bareground		20	30	30	30	30	35
Rock		10	13	15	12	8	20
% COMPOSITION							
Shrubs		0.00	0.00	0.00	0.00	0.00	0.00
Forbs		100.00	100.00	90.00	100.00	95.74	100.00
Grasses		0.00	0.00	10.00	0.00	4.26	0.00

TABLE 8: (continued)

7	8	9	10	11	12	13	14	15
0	0	0	0	0	0	0	0	0
25	25	35	25	35	25	30	20	15
20	15	5	15	10	20	15	30	20
0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	5	0	0	0
45	40	40	40	45	50	45	50	40
5	15	10	15	5	15	15	15	15
35	30	30	20	20	10	20	20	25
15	15	20	25	30	25	20	15	20
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00	100.00
0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00

TABLE 8: (continued)

16	17	18	19	20	A	B	C	D
0	0	10	0	0	0	0	0	0
20	5	30	25	25	25	35	35	25
10	30	5	25	25	25	5	10	25
0	0	0	0	0	0	0	0	0
10	0	5	0	0	0	0	0	0
0	0	0	0	0	0	0	10	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
40	35	50	50	50	50	40	55	50
5	10	15	10	20	5	10	15	10
25	25	20	20	10	20	30	10	20
30	30	15	20	20	25	20	20	20
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 8: (continued)

		WELLINGTON PREPARATION PLANT		
		Slope: 0		
		Exposure: 0		
MEAN	STD.DEV.	Sample Date: 9 Sept. 1992		
		SHRUBS		
		FORBS		
0.42	2.04	Kochia scoparia		
22.83	9.35	Salsola iberica		
21.46	11.08	Halogeton glomeratus		
0.42	1.41	Sphaeralcea grossulariaefolia		
0.63	2.24	Medicago sativa		
0.42	2.04	Melilotus officinalis		
		GRASSES		
0.21	1.02	Elymus trachycaulus		
0.29	1.08	Boutelous gracilis		
		COVER		
46.67	5.40	Total Living Cover		
10.50	4.78	Litter		
23.54	7.26	Bareground		
19.29	5.73	Rock		
		% Composition		
0.00	0.00	Shrubs		
98.99	2.89	Forbs		
1.01	2.89	Grasses		

TABLE 9:

PLOT SUMMARY OF SINGLE SPECIES DENSITY (1992)
for the
Wellington Surface Facility Revegetation Test Plot

PLOT NO.*	MEAN DENSITY [90 ft^2 (n=3)]	MEAN DENSITY [Acre (n=3)]
1	3.67	1776.28
2	0.00	0.00
3	2.00	968.00
4	3.00	1452.00
5	0.33	159.72
6	0.00	0.00
7	2.00	968.00
8	2.33	1127.72
9	1.00	484.00
10	0.33	159.72
11	0.00	0.00
12	0.00	0.00
13	0.00	0.00
14	3.00	1452.00
15	8.00	3872.00
16	9.67	4680.28
17	0.67	324.28
18	2.00	968.00
19	0.67	324.28
20	4.67	2260.28

* Plot numbers and species planted in that plot are listed below.

1 = Elymus hispidus	Intermediate Wheatgrass
2 = Elymus smithii	Western Wheatgrass
3 = Elymus trachycaulus	Slender Wheatgrass
4 = Boutelous gracilis	Blue Grama
5 = Elymus cinereus	Gt. Basin Wildrye
6 = Hilaria jamesii	Galleta
7 = Stipa hymenoides	Indian Ricegrass
8 = Sitanion hystrix	Squirrelltail
9 = Sporobolus airoides	Alkali Sacaton
10 = Sporobolus cryptandrus	Sand Dropseed
11 = Achillea millefolium	Yarrow
12 = Aster chilensis	Pacific Aster
13 = Asclepias speciosa	Milkweed
14 = Helianthus annuus	Sunflower
15 = Medicago sativa	Alfalfa
16 = Melilotus officinalis	Yellow Sweetclover
17 = Penstemon eatonii	Eaton's Penstemon
18 = Penstemon palmeri	Palmer Penstemon
19 = Linum lewsii	Lewis Flax
20 = Sphaeralcea grossulariaefolia	Globemallow

TABLE 10:

PLOT SUMMARY OF MIXTURE DENSITIES (1992)
for the
Wellington Surface Facility Revegetation Test Plot

PLOT NO.	SPECIES	MEAN DENSITY [225 ft^2 (n=3)]	MEAN DENSITY [Acre (n=3)]
A	Atriplex canescens	3.67	709.87
	Gutierrezia sarothae	0.33	63.89
	Penstemon eatonii	0.33	63.89
	Sphraeralcea grossulari.	0.33	63.89
Tot.		4.66	901.54
B	Atriplex canescens	0.67	129.71
	Melilotus officinalis	0.33	63.89
	Sphraeralcea grossulari.	1.00	193.60
	Elymus hispidus	0.33	63.89
Tot.		2.33	451.09
C	Atriplex canescens	0.83	160.69
	Aster chilensis	0.33	63.89
	Melilotus officinalis	0.67	129.71
	Penstemon eatonii	0.33	63.89
	Agropyron cristatum	0.33	63.89
	Elymus hispidus	0.33	63.89
	Sitanion hystrix	1.00	193.60
Tot.		3.82	739.56
D	Atriplex canescens	3.67	710.51
	Melilotus officinalis	3.33	644.69
	Sphraeralcea grossulari.	0.33	63.89
	Elymus hispidus	0.33	63.89
	Stipa hymenoides	0.33	63.89
Tot.		7.99	1546.87

SAMPLE AREA

Surface Facility Plot: Single Species Plots

Surface Facility Plot: Mixture Plots

QUARTERLY IMPOUNDMENT INSPECTION CERTIFICATIONS

The impoundments at Wellington has been done by a qualified professional engineer. These inspections have been incorporated into the 1992 quarterly reports and are shown on the following pages.

Structural Stability Inspection:

POND	COMMENT
Sediment	There are four areas of erosion cuts approximately 5 feet deep, 8 feet wide and 50 feet long on the down slope just west of the dike between the upper refuse pond and the lower refuse pond. The erosion cuts will be filled immediately and inspected monthly for further erosion. - No significant erosion or structural failure indications are apparent on any of the pond embankments. Upper and Lower Refuse and Clear Water Ponds have been inactive since 1985.
Roadside	
Auxiliary	
Dryer	
Pipeline Slurry	
Upper Refuse	
Lower Refuse	
Clear Water	

REGISTERED PROFESSIONAL ENGINEER
No. 7101
RICHARD M. NOBLE
STATE OF UTAH

Richard M. Noble 3/25/92
Name Date

Franson-Noble & Associates, Inc.

cc: C. Manzanares (Plant File)

Structural Stability Inspection:

POND	COMMENT
Sediment	The four areas of erosion cuts on the down slope just west of the dike between the upper refuse pond and the lower refuse pond which were described in the last quarterly report have been repaired and are now in good condition. No further erosion in that area was observed. No significant erosion or structural failure indications are apparent on any of the pond embankments. Upper and Lower Refuse and Clear Water Ponds have been inactive since 1985.
Roadside	
Auxiliary	
Dryer	
Pipeline Slurry	
Upper Refuse	
Lower Refuse	
Clear Water	

REGISTERED PROFESSIONAL ENGINEER
No. 7101
RICHARD M. NOBLE
STATE OF UTAH

Richard M. Noble 6/20/92
Name Date

Franson-Noble & Associates, Inc.

cc: C. Manzanares (Plant File)

Structural Stability Inspection:

POND	COMMENT
Sediment	All Ponds were dry and in good order. No significant erosion or structural failure indications are apparent on any of the pond embankments. Upper and lower Refuse and Clear Water Ponds have been inactive since 1985.
Roadside	
Auxiliary	
Dryer	
Pipeline Slurry	
Upper Refuse	
Lower Refuse	
Clear Water	

R.J. Marshall
Chief Engineer
Genwal Coal Company

REGISTERED PROFESSIONAL ENGINEER
#17838
RAY MARSHALL
STATE OF UTAH

28 Sept 92
Date

cc: L.W. Johnson

Structural Stability Inspection:

POND	COMMENT
Sediment	All Ponds were dry and in good order. No significant erosion or structural failure indications are apparent on any of the pond embankments. Upper and lower Refuse and Clear Water Ponds have been inactive since 1985.
Roadside	
Auxiliary	
Dryer	
Pipeline Slurry	
Upper Refuse	
Lower Refuse	
Clear Water	

REGISTERED PROFESSIONAL ENGINEER #7933 STATE OF UTAH

R.A. Marshall
Chief Engineer
Genwal Coal Company

25 NOV 92
Date

cc: L.W. Johnson

ANNUAL IMPOUNDMENT INSPECTION CERTIFICATIONS

The impoundements at Wellington has been done by a qualified professional engineer. These inspections are shown on the following pages.

ANNUAL MAINTENANCE INSPECTION CERTIFICATION

1. I hereby certify, in accordance with R614-301-514.310 through R614-301-514.313 and others as applicable, that with respect to the following facility.

Name of Permittee Castle Valley Resources Permit No. ACT/007/012

Mine Name Wellington Preparation Plant

which is a (check one)

X temporary water impoundment (8 separate impoundments)
____ permanent water impoundment
____ processing waste impoundment

2. I or persons under my supervision, have conducted adequate inspections of the maintenance of the structure; and

3. The maintenance has been performed in accordance with the Utah State Coal Program; and

4. The attached report is certified in accordance with the rules of professional conduct promulgated by the Utah Board of Examiners for Engineers; and

5. The attached report addresses the following points:

   a. any appearances of instability, structural weaknesses or other hazardous conditions.

   b. depth and elevation of impoundment water;

   c. existing storage capacity;

   d. existing or required monitoring procedures and instrumentation; and

   e. any other aspects of the structures affecting stability.

REGISTERED PROFESSIONAL ENGINEER
#7833
STATE OF UTAH

Signed

2 March 93
Date

CERTIFICATION REPORT

On 2 March 93, 1993, an inspection of CUR Preparation Plant, Auxilary sedimentation pond revealed the following:

A. The pond has been constructed and maintained in accordance with the approved plan.

B. The pond's dam appeared sound with no signs of instability or hazardous conditions.

C. The water elevation was unknown feet. The water depth was less than 2 feet.

D. The existing storage capacity is .79 acre-feet which is greater than the N/A acre-feet required by the approved plan. NOTE: Pond is being redesigned to serve as a sedimentation Pond

E. Pond is inspected quarterly for structural problems.

Based on this field inspection Aux illary sedimentation pond has been certified as required by R614-301-514.310 through R614-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

REGISTERED PROFESSIONAL ENGINEER #7933 STATE OF UTAH

Signed

2 March 93
Date

CERTIFICATION REPORT

On 2 March, 1993, an inspection of CVR Preparation Plant, Roadside sedimentation pond revealed the following:

A. The pond has been constructed and maintained in accordance with the approved plan.

B. The pond's dam appeared sound with no signs of instability or hazardous conditions.

C. The water elevation was dry feet. The water depth was less than ~~2~~ dry feet.

D. The existing storage capacity is .56 acre-feet which is greater than the N/A acre-feet required by the approved plan. NOTE: Pond is currently being redesigned to serve as a sedimentation pond.

E. Pond is inspected quarterly for structural problems.

Based on this field inspection Roadside sedimentation pond has been certified as required by R614-301-514.310 through R614-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

R. Jay Marshall
Signed

REGISTERED PROFESSIONAL ENGINEER
#17933
R. JAY MARSHALL
STATE OF UTAH

2 March 93
Date

CERTIFICATION REPORT

On 2 March, 1993, an inspection of CVR Preparation Plant, Dryer sedimentation pond revealed the following:

A. The pond has been constructed and maintained in accordance with the approved plan.

B. The pond's dam appeared sound with no signs of instability or hazardous conditions.

C. The water elevation was dry feet. The water depth was less than ~~2~~ dry feet.

D. The existing storage capacity is .22 acre-feet which is greater than the N/A acre-feet required by the approved plan. NOTE: Pond is currently being redesigned to serve as a sedimentation pond.

E. Pond is inspected quarterly for structural problems.

Based on this field inspection Dryer sedimentation pond has been certified as required by R614-301-514.310 through R614-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

REGISTERED PROFESSIONAL ENGINEER #7933 R. JAY MARSHALL STATE OF UTAH

Signed

2 March 93
Date

CERTIFICATION REPORT

On 2 march, 1993, an inspection of CVR Preparation plant, Pipeline slurry sedimentation pond revealed the following:

A. The pond has been constructed and maintained in accordance with the approved plan.

B. The pond's dam appeared sound with no signs of instability or hazardous conditions.

C. The water elevation was dry feet. The water depth was less than ~~2~~ dry feet.

D. The existing storage capacity is 1.08 acre-feet which is greater than the .40 acre-feet required by the approved plan.

E. Pond is inspected quarterly for structural problems.

Based on this field inspection Pipeline slurry sedimentation pond has been certified as required by R614-301-514.310 through R614-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

REGISTERED PROFESSIONAL ENGINEER #7933 STATE OF UTAH

Signed

2 March 93
Date

CERTIFICATION REPORT

On 2 March, 1993, an inspection of CVR Wellington Preparation Plant, plant sedimentation pond revealed the following:

A. The pond has been constructed and maintained in accordance with the approved plan.

B. The pond's dam appeared sound with no signs of instability or hazardous conditions.

C. The water elevation was unknown feet. The water depth was less than 2 feet.

D. The existing storage capacity is 1.71 acre-feet which is greater than the 1.41 acre-feet required by the approved plan.

E. Pond is inspected quarterly for structural problems.

Based on this field inspection plant sedimentation pond has been certified as required by R614-301-514.310 through R614-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

REGISTERED PROFESSIONAL ENGINEER
#7933
R. JAY MARSHALL
STATE OF UTAH

R. Jay Marshall
Signed

2 March 93
Date

CERTIFICATION REPORT

On 2 March, 1993, an inspection of CVR Preparation Plant, Lower Refuse sedimentation pond revealed the following:

A. The pond has been constructed and maintained in accordance with the approved plan.

B. The pond's dam appeared sound with no signs of instability or hazardous conditions.

C. The water elevation was dry feet. The water depth was less ~~than~~ dry feet.

D. The existing storage capacity is 1200 acre-feet which is greater than the 48.6 acre-feet required by the approved plan.

E. Pond is inspected quarterly for structural problems.

Based on this field inspection Lower Refuse sedimentation pond has been certified as required by R614-301-514.310 through R614-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

REGISTERED PROFESSIONAL ENGINEER #7933 R. JAY MARSHALL STATE OF UTAH

Signed

2 March 93
Date

CERTIFICATION REPORT

On 2 March, 1993, an inspection of C.V.R. Preparation Plant, upper Refuse sedimentation pond revealed the following:

A. The pond has been constructed and maintained in accordance with the approved plan.

B. The pond's dam appeared sound with no signs of instability or hazardous conditions.

C. The water elevation was dry feet. The water depth was less than ~~2~~ dry feet.

D. The existing storage capacity is unknown acre-feet which is greater than the N/A acre-feet required by the approved plan.

E. Pond is inspected quarterly for structural problems.

Based on this field inspection upper Refuse sedimentation pond has been certified as required by R614-301-514.310 through R614-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

REGISTERED PROFESSIONAL ENGINEER
#7933
R. JAY MARSHALL
STATE OF UTAH

R. Jay Marshall
Signed

2 March 93
Date

CERTIFICATION REPORT

On 2 March, 1993, an inspection of Castle Valley Resources Wellington Prep Plant, clear water sedimentation pond revealed the following:

A. The pond has been constructed and maintained in accordance with the approved plan.

B. The pond's dam appeared sound with no signs of instability or hazardous conditions.

C. The water elevation was dry feet. The water depth was less than 2' dry feet.

D. The existing storage capacity is 185 acre-feet which is greater than the N/A acre-feet required by the approved plan.

E. Pond is inspected quarterly for structural problems.

Based on this field inspection clear water sedimentation pond has been certified as required by R614-301-514.310 through R614-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

REGISTERED PROFESSIONAL ENGINEER #7933 JAY MARSHALL STATE OF UTAH

By Jay Marshall
Signed

2 March 93
Date

QUARTERLY REFUSE PILE INSPECTION CERTIFICATIONS

The refuse piles at Wellington have been done by a qualified professional engineer. These inspections have been incorporated into the 1992 quarterly reports and are shown on the following pages.

Castle Valley Resources, Inc.
Wellington Preparation Plant

MSHA I.D. #42-00099

Coal Refuse Piles

Quarterly Report

SITE NAME: Wellington Preparation Plant
P.O. Box 766
Wellington, UT 84542

Refuse Pile	Pile ID #
Pond Refuse Pile	1211-UT-09-00099-05
Plant Refuse Pile	1211-UT-09-00099-01

Water impounding against toe: None

Fires on piles: None

Seepage, cracks, erosion problems or any other comments pertaining to the stability of the pile: No significant* erosion problems noted at this time. Facilities appear to be stable.
*Deeper than 9 inches

I do hereby certify that all work and maintenance performed on the above refuse piles were done according to the approved design and plans.

REGISTERED PROFESSIONAL ENGINEER
No. 7101
RICHARD M. NOBLE
STATE OF UTAH

Richard M. Noble 3/25/92
Name Date

Franson-Noble & Associates, Inc.

cc: C. Manzanares (Plant File)

Castle Valley Resources, Inc.
Wellington Preparation Plant

MSHA I.D. #42-00099

Coal Refuse Piles

Quarterly Report

SITE NAME: Wellington Preparation Plant
P.O. Box 766
Wellington, UT 84542

Refuse Pile	Pile ID #
Pond Refuse Pile	1211-UT-09-00099-05
Plant Refuse Pile	1211-UT-09-00099-01

Water impounding against toe: None

Fires on piles: None

Seepage, cracks, erosion problems or any other comments pertaining to the stability of the pile: No significant* erosion problems noted at this time. Facilities appear to be stable.
*Deeper than 9 inches

I do hereby certify that all work and maintenance performed on the above refuse piles were done according to the approved design and plans.

REGISTERED PROFESSIONAL ENGINEER
No. 7101
RICHARD M. NOBLE
STATE OF UTAH

Richard M. Noble 6/20/92
Name Date

Franson-Noble & Associates, Inc.

cc: C. Manzanares (Plant File)

note: See comment under Pond inspection form in ref: to Refuse pile maintenance;
RJN 7/24/92

Castle Valley Resources, Inc.
P.O. Box 1282
Huntington, Utah 84528

MSHA I.D. #42-00099

Coal Refuse Piles

Quarterly Report

SITE NAME: Wellington Preparation Plant

Refuse Pile	Pile ID#
Pond Refuse Pile	1211-UT-09-00099-05
Plant Refuse Pile	1211-UT-09-00099-01

Water impounding against toe: None

Fires on piles: None

Seepage, cracks, erosion problems or any other comments pertaining to the stability of the pile: No significant erosion problems noted at this time. Facilities appear to be stable.

I do hereby certify that all work and maintenance performed on the above refuse piles were done according to the approved design and plans.

R. J. Marshall
R.J. Marshall
Chief Engineer
Genwal Coal Company

REGISTERED PROFESSIONAL ENGINEER
#7933
R. JAY MARSHALL
STATE OF UTAH

29 Sept 92
Date

cc: L.W. Johnson

Castle Valley Resources, Inc.
P.O. Box 1282
Huntington, Utah 84528

MSHA I.D. #42-00099

Coal Refuse Piles

Quarterly Report

SITE NAME: Wellington Preparation Plant

Refuse Pile	Pile ID#
Pond Refuse Pile	1211-UT-09-00099-05
Plant Refuse Pile	1211-UT-09-00099-01

Water impounding against toe: None

Fires on piles: None

Seepage, cracks, erosion problems or any other comments pertaining to the stability of the pile: No significant erosion problems noted at this time. Facilities appear to be stable.

I do hereby certify that all work and maintenance performed on the above refuse piles were done according to the approved design and plans.

REGISTERED PROFESSIONAL ENGINEER
#7935
RAY MARSHALL
STATE OF UTAH

R. J. Marshall
R.J. Marshall
Chief Engineer
Genral Coal Company

25 Nov 92
Date

cc: L.W. Johnson

CASTLE VALLEY RESOURCES, INC.
A NEVADA CORPORATION INCORPORATED ON APR 23, 1979.
THIS LIST IS FOR THE PERIOD APR 1993 TO 1994. DUE BY APR 30, 1993.

2170-1

THE CORPORATION'S DULY APPOINTED RESIDENT AGENT IN CHARGE OF SAID PRINCIPAL OFFICE IN THE STATE OF NEVADA UPON WHOM PROCESS CAN BE SERVED IS:

CHARLIE F. VAUGHN
2835 SOUTH JONES BLVD.
LAS VEGAS NV 89102

Do not change information in this area before reading #5 below.

FOR OFFICE USE ONLY
FILED (Date)

RETURN TO: SECRETARY OF STATE CAPITOL COMPLEX, CARSON CITY, NV. 89710

We want to help you get your business with the Office of the Secretary of State completed in the fastest, most efficient manner. TO AVOID DELAYS, RETURNS AND LATE CHARGES, PLEASE BE SURE YOU HAVE:

1. Included names and mailing addresses for ALL officers and directors. - **A President, Secretary, Treasurer and Directors must be named.**
2. Returned ALL COPIES of this form with the $85.00 filing fee. A $15.00 penalty must be added if this form is not filed by the deadline listed at the top of this form.
3. Included the signature of an officer of the corporation at the bottom of this form.
4. If there are additional officers and directors, attach a listing of them to this form. Last year's information has been preprinted. If you need to make changes, line out the outdated information and insert new information above it.
5. If you have changed the resident agent or principal place of business (agent's address), please contact our office for the proper forms to make the change before filing this annual list.
6. Signed your check and have made it payable to the Secretary of State. - If you need a receipt, please enclose a self-addressed, stamped envelope.

NAME	TITLE(S)	STREET ADDRESS	CITY	ST	ZIP
CHARLIE F. VAUGHN	PRESIDENT	2835 SOUTH JONES	LAS VEGAS	NV	89102
RICHARD L. HINCKLEY	SECRETARY	6226 W. SAHARA AVE.	LAS VEGAS	NV	89102
Denise Dawood ~~SHERYL SCHMALZ~~	TREASURER	2835 SOUTH JONES	LAS VEGAS	NV	89102
	DIRECTOR				
	DIRECTOR				
	DIRECTOR				

Signature of Officer: Charlie F. Vaughn President 3-24-93
Title(s) Date

CERTIFICATE STATE OF NEVADA - SECRETARY OF STATE File Number

CASTLE VALLEY RESOURCES, INC.
A NEVADA CORPORATION INCORPORATED ON APR 23, 1979.
THIS LIST IS FOR THE PERIOD APR 1993 TO 1994. DUE BY APR 30, 1993.

2170-79

CHARLIE F. VAUGHN
2835 SOUTH JONES BLVD.
LAS VEGAS NV 89102

The Secretary of State of Nevada does hereby certify that the above corporation after having paid the annual fee of $85.00 for filing in this office a list of its officers and directors and designation of resident agent for the above filing period, together with penalty in the sum of and having also filed the aforesaid list as required by Nevada Revised Statutes Sections 78.150-78.165 and 80.110-80.140, as amended, is hereby authorized to transact and conduct its business within this state for the aforesaid period.

THIS CERTIFICATE BECOMES A RECEIPT UPON BEING VALIDATED BY THE OFFICE OF SECRETARY OF STATE

CHERYL A. LAU
Secretary of State

SLOT A

IMPORTANT: To avoid paper jams when printing the Title Page and Table of Contents, use the paper path recommended for heavy paper stock. Refer to operator's manual for location.

SLOT B

1 WATER MONITORING

2 CLIMATOLOGICAL DATA

3 SUBSIDENCE MONITORING

4 VEGETATION DATA

5 IMPOUNDMENT CERTIFICATION

6 SAMPLE DATA

7 MISCELLANEOUS

8

9

10

TABLE OF CONTENTS

Wilson Jones

WELLINGTON PREP PLANT ACT/007/012
SOIL BORROW MATERIAL INVESTIGATION

SOIL BORROW MATERIAL INVESTIGATION
WELLINGTON PREPARATION PLANT
WELLINGTON, UTAH

Prepared by

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RECEIVED
JUN 12 1995
DIV. OF OIL, GAS & MINING

for

NEVADA ELECTRIC INVESTMENT COMPANY
P.O. Box 230
Las Vegas, Nevada 89151

by

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May 1995

TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1
2.0	METHODS - SCOPE OF WORK	2
2.1	DATA REVIEW AND EVALUATION	2
2.2	SELECTION OF SOIL DESCRIPTION/SAMPLE SITES	2
2.3	SOIL PROFILE DESCRIPTION AND SAMPLING	3
2.4	SOIL LABORATORY ANALYSIS	4
2.5	SOIL SALVAGE SUITABILITY	6
3.0	RESULTS AND DISCUSSION	7
3.1	NEICO 1 - RAVOLA	7
3.2	NEICO 2 - BILLINGS	9
3.3	NEICO 3 - BILLINGS	10
3.4	NEICO 4 - BILLINGS	11
3.5	NEICO 5 - MOFFAT	12
3.6	NEICO 6 - GREYBULL, DEEP	12
3.7	NEICO 7 - GERST, MODERATELY DEEP	13
3.8	SUMMARY OF SUITABLE SOIL SALVAGE DEPTHS	14
4.0	REFERENCES	15
APPENDIX A - FIELD SOIL PROFILE DESCRIPTIONS		A-1
APPENDIX B - SOIL PROFILE/SOIL LANDSCAPE PHOTOGRAPHS		B-1
APPENDIX C - SOIL LABORATORY DATA		C-1

1.0 INTRODUCTION

A soil borrow material investigation was conducted at the Nevada Electric Investment Corporation (NEICO) Wellington Preparation Plant, Wellington, Utah during late April, 1995. A previous investigation of native soils and coal waste materials was conducted by Mt. Nebo Scientific, Inc. one year earlier during April, 1994. That investigation characterized coal waste materials including the coarse refuge and coarse slurry piles, the slurry ponds, as well as native soils in the agricultural fields potential soil borrow area and in the Mancos shale hills adjacent to the slurry ponds.

The current study was conducted to describe and sample the native soils in more detail, to a greater depth, and in more locations than had been done previously. The purpose was to determine the quantity and quality of soil materials present on the NEICO property that could potentially be salvaged, if necessary, for use as a reclamation cap on the various coal waste disturbance area components. These disturbance areas total about 356 acres. The current study did not sample the coal waste materials, nor quantify, in terms of cubic yards, the maximum amount of potentially available salvageable soil present on the NEICO permit area. Soil volume could be quickly calculated if requested.

The State of Utah Department of Natural Resources, Division of Oil, Gas and Mining (DOGM) has previously recommended issuance of Permit Stipulation N0.1 (Henry Sauer Letter to File dated March 16, 1995) which would require the permittee to submit a plan "which commits to covering all coal mine waste with a minimum of four feet of the best available nontoxic, nonacid forming and noncombustible material".

2.0 METHODS - SCOPE OF WORK

2.1 Data Review and Evaluation

All existing soils and related discipline information for the NEICO study area was compiled, reviewed, and evaluated prior to initiation of the soils field work. This review included: (1) the existing soils information contained in the NEICO permit application as well as the soils and coal waste data obtained by Mt. Nebo Scientific in 1994, and (2) the Natural Resources Conservation Service (formerly the USDA Soil Conservation Service) soils information for the study area as contained in the Soil Survey of Carbon Area, Utah (Jensen and Borchert, 1988). Project maps and air photos were also reviewed.

2.2 Selection of Soil Description/Sample Sites

Seven soil description/sample sites (NEICO 1 through 7) were selected for characterization. Two sites (NEICO 1 and 2) were selected within the agricultural fields area NNW of the preparation plant. These fields were previously sampled as a possible soil borrow area in the 1994 Mt. Nebo Scientific study. One additional site (NEICO 3) was selected in the smaller agricultural field east of the main fields and closer to the Price River. This field was not part of the original potential soil borrow area but was selected for characterization because it was actively being farmed and potentially had suitable soil that might qualify as additional soil borrow material.

A fourth site (NEICO 4) was selected that was still within the main agricultural fields area but on the far SE end in an area that was currently being grazed, not farmed. It was immediately adjacent to a native area that was dominated by greasewood. Two sites (NEICO 5 and 6) were selected on the native alluvial fan or old terrace positions NW of the preparation plant. Based on a few artificial-cut exposures as well as soils information in the Carbon County survey, there is a variable thickness of depositional soil material above the Mancos Shale bedrock in this area. The intent of these two sites was to determine the depth and quality of this depositional material. NEICO 5 was in a slightly concave bowl area with sagebrush vegetation. NEICO 6 was downslope in an area that had been used as a lay-down area during previous transmission line construction. As such, the surface had been previously disturbed with some soil removal during vegetation grubbing as well as some subsequent surface compaction. Very little vegetation was

currently present and it consisted primarily of weedy species. A seventh site (NEICO 7) was selected in the Mancos Shale uplands adjacent to the slurry ponds on the east side of the study area.

2.3 Soil Profile Description and Sampling

At each site, a backhoe pit was dug to the deepest possible depth. This provided the best view and opportunity to deep sample the soil. Once the backhoe pit was dug and the pit walls cleaned off, each soil pedon was described and sampled according to current methods and standards of the National Cooperative Soil Survey as described in: the recently revised Soil Survey Manual (Soil Survey Staff, 1993); the National Soil Survey Handbook, also recently revised (Soil Survey Staff, 1993); and Keys to Soil Taxonomy, sixth edition (Soil Survey Staff, 1994).

Descriptions and sampling were completed to as deep a depth as possible depending largely on the backhoe and operator's ability, which generally could not exceed about 11 to 12 feet, as well as on such factors as depth to shale or sandstone bedrock, high rock fragment content of the soil substratum, or free water of a annually fluctuating water table which was encountered at various depths in the agricultural fields area.

The following parameters were described, by natural soil horizon, for each soil pedon description:

- horizon symbol, including depth, thickness, and relative position;
- type and nature of horizon boundaries;
- soil color (Munsell), both moist and dry;
- texture (fine earth fraction - <2mm);
- rock fragment content [type and size - (gravel - 2mm to 3"), (cobble - 3" to 10"), (stone - 10" to 2'), (boulder - >2'), and amount - % by volume;
- soil structure (type, size, and grade);
- soil consistence (dry, moist, and wet);
- roots (number, size, and depth);
- clay films, if present (number, thickness, location);
- effervescence with 0.1N HCl (none, slight, moderate, strong, violent);

- mottles (redoximorphic features), if present (number, size, distinctness, color); and
- soil moisture characteristics at the time of sampling.

In addition, at each sampling site, the following soil and general site features were also described:

- existing dominant vegetation
- parent material
- physiography-landform
- relief, if significant
- elevation (obtainable from topographic maps)
- slope
- aspect
- erosion condition
- permeability
- drainage class
- depth to a saturated zone or ground water if encountered
- salts or alkali if present
- surface stoniness

The description/sampling site number and location were plotted on the topographic base field map.

An adequate amount of representative soil material (about 2 quarts) was collected from each major soil horizon at the sampling locations of the described soil pedons. These soil samples were placed in clean, labeled, polyethylene plastic bags, and kept cool and as dry as possible to limit chemical changes. They were then submitted to the laboratory for the requested soil characterization. Subsequent to soil laboratory analysis, the remaining soil sample material was archived should any future analysis be required.

2.4 Soil Laboratory Analysis

Because the current study was a special investigation designed to sample potential soil borrow materials, it was decided to have the laboratory analyze only those parameters that can have

unsuitable values according to DOGM soil Table 2 (Overburden Evaluation for Vegetative Root Zone). As such, only pH, EC, SAR, Selenium, and Boron were analyzed in the soil laboratory.

Soil texture, rock fragment content (% by volume), Munsell color, and qualitative calcium carbonate content were determined in the field by James Nyenhuis, Certified Professional Soil Scientist/Soil Classifier. Soil texture was determined by the hand-textural feel method. Relative calcium carbonate content was based on effervescence in .1N HCl, and reported as none, slight, moderate, strong, and violent. Rock fragment percent was based on the percent gravels (2mm-3"), cobbles (3-10"), and stones and boulders (>10"). It was determined by hand-screening with a #10 2mm screen for gravels and ocular estimates for cobbles, stones, and boulders.

Based on the 1994 Mt. Nebo Scientific study, Acid/Base Potential was previously determined not to be a problem with either the coal waste materials or the native soils (all ABP values were highly positive), and therefore the ABP test was not run on the current set on soil samples.

Thirty-nine soil samples to Colorado State University's Soil Testing Laboratory in Fort Collins, Colorado for the selected set of analyses listed above. Methods for analysis were taken from Table 1 (Analytical Methods for Baseline Soils Data) and Table 6 (Recommended Laboratory Methods) of the DOGM soils guideline (Leatherwood and Duce, 1988). Specified parameters include:

- pH (standard units based on saturated paste)
- Electrical Conductivity (EC) - mmhos/cm @ 25 degrees C
- Soluble Potassium, Magnesium, Calcium & Sodium (meq/liter)
- Sodium Adsorption Ratio (SAR) - calculated from soluble K, Mg, Ca, and Na (meq/l)
- Selenium - Hot Water mg/kg
- Boron - Hot Water mg/kg

2.5 Soil Salvage Suitability

Criteria to establish suitability of soil (topsoil) or soil substitute material were those contained in Table 2 of DOGM "Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining" (Leatherwood and Duce 1988). Potential maximum salvage depths were generated for each sampled soil based on an evaluation of all of the field and laboratory data. Potential salvage depths were determined following a detailed evaluation of pH, electrical conductivity (EC), soil texture, sodium adsorption ratio (SAR), calcium carbonate content, rock fragment content, Boron, and Selenium. All poor and unsuitable soil horizons have been noted and the limitations described.

3.0 RESULTS AND DISCUSSION

Soil profile descriptions for the seven native soil pedons (NEICO 1 through 7), as recorded on standard NRCS "232" forms, are provided as Appendix A. An accompanying set of footnotes describes the abbreviated terminology used on the field sheets. Soil profile/soil landscape photographs are provided as Appendix B. It should be noted that recently applied irrigation moistened and thereby darkened the surface layer of NEICO 1, 2, and 3. Soil laboratory data are provided as Appendix C. The locations of the seven soil description/sample sites are provided on the Draft Soil Borrow Material Map, which also includes potential borrow area delineations.

Based on the site-specific field and laboratory data, each of the seven sampled soils (NEICO 1 through 7) have been classified by James Nyenhuis according to current NRCS soil taxonomy. In addition to being important to properly classify and name soils found on a particular study area, correlation of site-specific soils with NRCS soil series criteria allows for subsequent reference to and use of established NRCS soil interpretation values for these soils (such as hydrologic group number, for runoff modeling; "K" factors, for use in water erosion hazard evaluation; "WEG" group number, for wind erodibility group status for wind erosion hazard evaluation; as well as many other parameter values listed on a soil series "Form 5" Soil Interpretation Record.

All site-specific soils found at the NEICO 1 through 7 sample locations were associated with established Utah soil series, with certain differences noted.

The integrated results of the current study are summarized and discussed by sample location (NEICO 1 through 7).

3.1 NEICO 1 - Ravola silty clay loam, 1 to 3% slopes

3.1.1 Soil Classification

NEICO 1 is located in the northern portion of the agricultural fields area. This very deep soil is classified as a fine-silty, mixed (calcareous), mesic Typic Torrifluvent, and meets criteria for the

Ravola soil series. Ravola is listed as an inclusion in Carbon County soil survey map unit 41 (Green River-Juva Variant complex) which is delineated in a long, somewhat wide band just south and west of the Price River in the study area. Both Green River and Juva Variant soils are classified as "coarse-loamy" with stratified loamy fine sand, fine and very fine sandy loam (Green River), or loam with thin strata of gravelly loam and sandy loam (Juva Variant) between about 10 and 60 inches in depth.

Neither NEICO 1 nor NEICO 2 or 3 (the three sample sites in the main agricultural fields area which is all mapped by NRCS as Green River-Juva Variant) have soils with coarse-textured substrata as typical of either Green River or Juva Variant. Rather, they have fine-silty textured substrata with dominantly silty clay loam or silt loam textures. In addition, the sample locations for NEICO 1, 2, and 3 were selected as typical locations within the fields and were not near field edges, irrigation ditches, or any other features that might not typify the dominant soils in the fields.

As such, it is suggested that the Carbon County soil map unit for the agricultural fields should not be map unit 41 (Green River-Juva Variant complex), but rather map unit 90 (Ravola, 1 to 3% slopes) in the vicinity of NEICO 1 and map unit 8 (Billings silty clay loam, 1 to 3% slopes) in the vicinity of NEICO 2, 3 and 4.

3.1.2 Soil Description and Salvage Suitability

NEICO 1 has a 12 inch surface plow layer (Ap) with silty clay loam texture. Below the plow layer to a depth of 52 inches is a somewhat stratified, generally similar depth of soil material with silt loam texture and <2% rock fragments. Between 52 and 59 inches is a finer textured lense with silty clay loam texture, some old organic matter streaks, and an EC value of 4.3, high enough to be considered saline. Almost all roots ended above this lense. Another stratum of silt loam material existed between 59 and 72 inches. A clay textured stratum exists between 72 and 91 inches and this material was slightly moist at 72 inches with free water encountered at about 91 inches. This soil is considered moderately well drained with only a few medium, distinct, 10YR 5/6 mottles present between 38 and 72 inches. The soil has a fluctuating water table throughout the year but probably does not get above 72 inches based on soil morphology. The

moderately well drainage class for NEICO 1 is the only variance with the Ravola series which is well drained.

The entire profile of NEICO 1 is suitable for salvage. There are no poor or unsuitable rated parameters in any of the soil horizons. Boron and selenium values are acceptable. Rock fragment content is below 2% throughout the profile. The level of the fluctuating water table on May 26, 1995 was 91 inches. This should be about the upper level given that it was late spring at the time of sampling, and it has been a wet winter and spring in the Wellington area. Assuming that about 1.5 feet of soil material should be left when salvaging to allow for sufficient growth medium for revegetation at the salvage site, then about 72 inches (6 feet) are available for salvage in the vicinity of NEICO 1.

3.2 NEICO 2 - Billings silty clay loam, 1 to 3% slopes

3.2.1 Soil Classification

NEICO 2 is located SE of NEICO 1 in the same agricultural fields area. NEICO 2 is very similar to NEICO 1 with a fine-silty family texture control section. It has, however, higher EC and SAR values below the silty clay loam surface layer. NEICO 2 is classified as a fine-silty, mixed, calcareous, mesic Typic Torrifluvent. It is very deep, well drained, and meets criteria for the Billings soil series.

3.2.2 Soil Description and Salvage Suitability

NEICO 2 has a 12 inch surface plow layer (Ap) with silty clay loam texture. Between 12 and 29 inches is a substratum layer with silt loam texture and poor rated EC (12.9) and SAR (11.7) values. The next substratum layer is between 29 and 50 inches and is finer with silty clay loam texture. It also has poor rated EC (13.6) and SAR (13.2) values. The remaining portion of the profile from 50 to 118 inches has loam texture and poor rated EC (14.0 for 50 to 85 inches, and 10.4 for 85 to 118 inches) and a slightly unsuitable rated SAR value (16.1) for the 50 to 85 inch depth and a poor rated SAR (13.0) for the 85 to 118 inch depth. NEICO 2 is considered saline below the surface layer, with the 50 to 85 inch depth saline-alkaline.

NEICO 2 was moist at 50 inches, very moist at 85 inches, and free water of a fluctuating water table was encountered at 118 inches. No significant soil mottling was observed, and it is considered well drained.

NEICO 2 has poor rated EC and SAR values below the surface layer, with the 50 to 85 inch depth exhibiting a slightly unsuitable SAR value of 16.1, which should dilute upon salvage and natural soil mixing. All other parameters including Boron and Selenium are acceptable. Rock fragment content is below 2% throughout the profile. As such, the entire profile of NEICO 2 should be considered salvageable. Allowing for 1.5 feet of remaining soil growth medium, about 100 inches (8.3 feet) could be salvaged in the vicinity of NEICO 2.

3.3 NEICO 3 - Billings silt loam, 1 to 3% slopes

3.3.1 Soil Classification

NEICO 3 is located in the field extension east of NEICO 2 and is closer to the Price River. NEICO 3 is very similar to NEICO 2, and is classified as a fine-silty, mixed, calcareous, mesic Typic Torrifluvent. It is very deep and well drained. NEICO 3 also has poor rated EC and SAR values, but starting lower in the profile (below 38 inches) than NEICO 2 (below 12 inches).

3.3.2 Soil Description and Salvage Suitability

NEICO 3 has a 13 inch surface plow layer (Ap) with silt loam texture. Silt loam texture continues between 13 and 38 inches. A finer horizon exists between 38 and 47 inches with silty clay loam texture. Below 24 inches, the profile is considered saline. Between 47 and 73 inches, a lighter silt loam texture exists which was slightly moist at the time of sampling. The lowest horizon, between 73 and 140 inches, has clay texture. The soil was very moist below 73 inches, but free water of the fluctuating water table was not encountered until 140 inches (11.7).

NEICO 3 has poor rated EC and SAR values below 38 inches, but no unsuitable values. Boron and selenium are acceptable. Rock fragment content is <2% throughout the profile. As such, the entire profile is suitable for salvage. Allowing for 1.5 feet of remaining soil growth medium material, about 122 inches (10.2 feet) of soil material could be salvaged.

3.4 NEICO 4 - Billings sandy loam, 1 to 3% slopes

3.4.1 Soil Classification

NEICO 4 is located near the far SE end of the agricultural fields area, in an area of grazing not farming. NEICO 4 has similar profile morphology to NEICO 2 and 3, including a portion of the profile (between 7 and 42 inches) that has high EC and SAR values. NEICO 4 is also classified as a fine-silty, mixed, calcareous, mesic Typic Torrifluvent. It is very deep, well drained, and meets criteria for the Billings soil series.

3.4.2 Soil Description and Salvage Suitability

NEICO 4 has a 7 inch surface plow layer (Ap) with sandy loam texture. A saline-alkaline layer exists between 7 and 22 inches with silty clay loam texture, and slightly unsuitable rated EC (15.9) and SAR (16.0) values. A saline, clay textured horizon exists between 22 and 42 inches with a slightly unsuitable rated EC (15.5) value, and a poor rated SAR (12.8) value. The Selenium value for this horizon (0.12 ppm) was the highest of all samples in the current study and is considered unsuitable. The two horizons between 42 and 114 inches have loam texture and are neither saline nor alkaline.

If one assumes that the slightly unsuitable EC values between 7 and 42 inches (15.9 and 15.5), the slightly unsuitable SAR value between 7 and 22 inches (16.0), and the slightly unsuitable Selenium value between 22 and 42 inches (0.12 ppm) would dilute to an acceptable level upon salvaging and natural soil mixing with the rest of the profile, then the entire profile could be considered suitable for salvaging. All other parameters than those just noted are suitable. Rock fragment content is <2% throughout the profile. Allowing for 1.5 feet of remaining soil growth medium, about 96 inches (8 feet) of soil material is available for salvage in the vicinity of NEICO 4. It is possible that similar soil conditions exist in the greasewood dominated area just SSE of NEICO 4.

3.5 NEICO 5 - Moffat loam, 1 to 6% slopes

3.5.1 Soil Classification

NEICO 5 is located NW of the coal preparation plant on a low angle fan. The Moffat soil is classified as a coarse-loamy, mixed, mesic Typic Calciorthid. The soil is very deep and well drained, and meets criteria for the Moffat soil series which is mapped primarily in the Sunnyside Junction area.

3.5.2 Soil Description and Salvage Suitability

NEICO 5 is on undisturbed rangeland under big sagebrush vegetation. The upper part of the surface layer is 2.5 inches thick and is loam texture. The lower part is between 2.5 and 6 inches and is sandy loam. A calcic (Bk) horizon exists between 6 and 16 inches with loam texture. A gravelly sandy loam upper substratum exists between 16 and 32 inches. It has about 25% rock fragments on average. A gravelly loamy sand stratum exists between 32 and 123 inches, with about 30% rock fragments on average. Shale bedrock was encountered at 123 inches.

NEICO 5 is entirely suitable for salvage. Soil pH's are poor rated with values between 8.7 and 8.9 below 16 inches. The SAR value is poor rated (10.9) below 42 inches. All other parameters are acceptable, including Boron and Selenium. Allowing for 1.5 feet of remaining soil growth medium, about 105 inches (8.75 feet) of soil material could be salvaged in the vicinity of NEICO 5.

3.6 NEICO 6 - Greybull, deep, silty clay loam, 1 to 6% slopes

3.6.1 Soil Classification

NEICO 6 is located downslope to the east of NEICO 5 on a low angle fan. Greybull, deep, is classified as a fine-loamy, mixed, calcareous, mesic Typic Torriorthent. It is deep, well drained and meets criteria for the Greybull soil series except Greybull is moderately deep (20 to 40 inches) to shale bedrock.

3.6.2 Soil Description and Salvage Suitability

NEICO 6 has a 9 inch surface layer (slightly truncated from its original surface) of silty clay loam texture. Two gravelly clay loam substrata exist between 9 and 43 inches. Another substratum layer, of gravelly silt loam texture, exists between 43 and 93 inches. A very cobbly loamy sand lense was encountered at 93 inches, and the backhoe operator could dig no further even though probable shale bedrock was not yet encountered.

NEICO 6 is entirely suitable for salvage. There are no limiting parameters. Boron and Selenium values are low, and rock fragment content is not too high. Allowing for 1.5 feet of remaining soil growth medium, about 75 inches (6.25 feet) of soil material could be salvaged in the vicinity of NEICO 6.

3.7 NEICO 7 - Gerst, moderately deep, gravelly loam, 10 to 40% slopes

3.7.1 Soil Classification

NEICO 7 is located on Mancos shale hills east of the slurry ponds. It is classified as a loamy-skeletal, mixed, calcareous, mesic Typic Torriorthent. It is well drained and meets all criteria for the Gerst soil except depth. NEICO 7 is moderately deep (20 to 40 inches to shale) as opposed to shallow for the typical Gerst soil (less than 20 inches to shale).

3.7.2 Soil Description and Salvage Suitability

NEICO 7 has a 33 inch "cap" of brown soil above the Mancos shale bedrock. At the NEICO 7 sample site, the texture of this cap was gravelly loam (0 to 7 inches), loam (7 to 18 inches), and gravelly loam (18 to 33 inches). The pH value was poor rated between 7 and 33 inches (pH 8.7, 8.5). The SAR value was poor rated between 7 and 18 inches (SAR 11.5). Between 33 and 39 inches an upper, weathered Mancos shale layer was encountered. This layer is saline with a poor rated EC value of 11.6. Another weathered Mancos shale layer was encountered between 39 and 69 inches. It also is saline but without any poor rated parameter values. A highly fractured but largely unweathered upper Mancos shale bedrock layer was sampled from 69 to 84 inches. It also is considered saline, but without any poor rated parameter values.

The "brown soil" cap of NEICO 7 is entirely suitable for salvage. Allowing for 1.5 feet of remaining soil growth medium, about 15 inches (1.25 feet) could be salvaged on the hills east of the slurry ponds.

3.8 Summary of Suitable Soil Salvage Depths

The following list summarizes the maximum depth of suitable soil that could be salvaged in the vicinity of NEICO 1 through 7:

- NEICO 1 - 72 inches (6 feet)
- NEICO 2 - 100 inches (8.3 feet)
- NEICO 3 - 122 inches (10.2 feet)
- NEICO 4 - 96 inches (8 feet)
- NEICO 5 - 105 inches (8.75 feet)
- NEICO 6 - 75 inches (6.25 feet)
- NEICO 7 - 15 inches (1.25 feet)

The above listed depths assumes that a minimum of 1.5 feet of soil material should remain in place for use as a revegetation growth medium at the salvage sites, and that the small amount of unsuitable rated soil material encountered in NEICO 2 and 4 should dilute to acceptable levels upon natural soil mixing during salvaging and reapplication activities.

4.0 REFERENCES

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APPENDIX A

FIELD SOIL PROFILE DESCRIPTIONS

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL DESCRIPTION

SCS - SOI - 232G
Rev. 2 - 81

Soil type: Ravola

File No.:

Site: NEICO Wellington Coal Preparation Plant property | Date: 4-26-95 | Stop No.: NEICO 1

Classification: Fine-silty, mixed, calcareous, mesic Typic Torrifluvent

Location: in plowed field, in "Barrow Area"

N. veg. (or crop): in annual crops - alfalfa | Climate: mesic temp.

Parent material: mixed streamlain alluvium

Physiography: Price River

Relief | Drainage: mod well | Salt or alkali

Elevation | Gr. water: free water @ 91" | Stoniness

Slope: 1% | Moisture: sl. moist @ 72" | Root distrib.: many M, F, CO 0-12" Few F, VF 12-55" | % Clay *

Aspect: NE

Erosion: none | % Coarse fragments *: < 2% entire profile | % Coarser than V.F.S. *

Permeability: slow

Additional notes

C2 } slight mottling
C3 }

2C4 finer text. lenses w a few coal chips & gypsum streaks

* Control section average

Horizon	Depth	Color Dry	Color Moist	Texture	Structure	Consistence Dry	Consistence Moist	Consistence Wet	Reaction	Boundary		other		
Ap	0-12	10YR 6/2	10YR 4/2	SICL	MM SBK / MM GR	SH	FR	S/P	EM	CS				
C1	12-26	10YR 6/3	10YR 4/3	SIL	MM SBK	H	FR	S/SP	ES	CW				
C2	26-38	10YR 6/3, 6/4	10YR 4/3	SIL	WM SBK	H	FR	SS/NP	ES	GW				
C3	38-52	10YR 6/3	10YR 4/3	SIL	Massive	H	FR	SS/NP	EM	CW	(few, med, distinct 10YR 5/6 mottles)			
2C4	52-59	10YR 6/2	10YR 4/2	SICL	Massive	VH	FR	VS/P	EM	CW	(some black organic matter, streaks and chips)			
3C5	59-72	10YR 6/4	10YR 4/2, 4/3	SIL	Massive	H	FR	SS/SP	ES	GW	(few also 10YR 5/6 mottles, med distinct)			
3C6	72-91	2.5Y 7/2	2.5Y 5/2, 4/2	clay	Massive	H	FI	VS/VP	ES	-				
	91	free water												

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL DESCRIPTION

SCS - SOI - 232G
Rev. 2 - 81

Soil type: Billings

File No:

Area: NEICO Wellington Coal Preparation Plant property | Date: 4-26-95 | Stop No. NEICO-2

Classification: Fine-silty, mixed calcareous, mesic Typic Torrifluvent

Location: at SE corner area of same field as NEICO-1

N. veg. (or crop): agricultural field | Climate: mesic temp

Parent material: mixed streamlain alluv.

Physiography: Price River terrace

Relief | Drainage: Mod well | Salt or alkali

Elevation | Gr. water: moist at 50" free water at 118" | Stoniness

Slope: 1% | Moisture: ↓

Aspect: NE | Root distrib.: Many Co, M, F 0-12, Few Co, M, F 12 to 29 VF | % Clay *

Erosion: none | % Coarse fragments *: < 2% entire profile | % Coarser than V.F.S. *

Permeability: slow

Additional notes

* Control section average

Horizon	Depth	Color Dry	Color Moist	Texture	Structure	Consistence Dry	Consistence Moist	Consistence Wet	Reaction	Boundary
Ap	0-12	10YR 6/2	10YR 4/2	SICL	M CoGR over M MSBK	SH	FR	S/SP	ES	CW
C1	12-29	10YR 6/3	10YR 4/3	SIL	M M SBK	SH	FR	SS/SP	ES	CW
2C2	29-50	10YR 6/2	10YR 4/2	SICL	Massive	Hard	FI	VS/P	ES	CW
3C3	50-85	10YR 6/4 moist	10YR 4/3	Loam	Massive	SH	FR	SS/P	ES	GW
3C4	85-118	10YR 6/3 very moist	10YR 4/3	Loam	Massive	SH	FR	SS/P	ES	GW
free water	118+				Massive					-

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL DESCRIPTION

SCS - SOI - 232G
Rev. 2 - 81

Soil type: Billings

File No:

NEICO Wellington Coal Preparation Plant property

Date: 4-26-95

Stop No.: NEICO-3

Classification: Fine-silty, mixed, calcareous, mesic Typic Torrifluvent

Location: magricultural field

N. veg. (or crop): Field crops

Climate: mesic temp.

Parent material: mixed streamlain alluvium

Physiography: Price River terrace

Relief

Drainage: Mod well

Salt or alkali

Elevation

Gr. water: deep 73-140"

Stoniness

Slope: 1%

Moisture: sl. moist 47-73" very moist ↓ [few F VF 24-47"

Aspect: NE

Root distrib.: Many M, F, VF 0-13 [Few Co; Com M, F, VF 13-24

% Clay *

Erosion: none

% Coarse fragments *: <2% entire profile

% Coarser than V.F.S. *

Permeability: slow

Additional notes

* Control section average

Horizon	Depth	Color Dry	Color Moist	Texture	Structure	Consistence Dry	Consistence Moist	Consistence Wet	Reaction	Boundary				
Ap	0-13	10YR 5/2	10YR 4/2	SIL	M CO GR over M M SBK	SH	FR	SS/SP	EM	GS				
C1	13-24	10YR 6/3	10YR 4/3	SIL	MM SBK	SH	FR	S/SP	ES	GW				
C2	24-38	10YR 6/3	10YR 4/3	SIL	Massive	H	FR	SS/SP	EM	CW				
few 2C3	38-47	10YR 6/2	10YR 4/2	SICL	Massive	H	FI	S/P	ES	CW				
3C4	47-73	sl. moist 2.5Y 6/2	2.5Y 4/2	SIL	Massive	H	FI	SS/SP	ES	GW				
4C5	73-140	10YR 6/2 very moist	10YR 4/2	Clay	Massive	VH	FI	VS/VP	ES	GW				
free water at 140"					Massive									

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL DESCRIPTION

SCS - SOI - 232G
Rev. 2 - 81

Soil type: Billings

File No:

Site: NEICO Wellington Coal Preparation Plant property | Date: 4-26-95 | Stop No.: NEICO-4

Classification: Fine-silty, mixed, calcareous, mesic Typic Torrifluvent

Location: at end of field adjacent to grease wood

N. veg. (or crop): cropped very near to greasewood in noncropped area | Climate: mesic temp

Parent material: mixed streamlain alluvium

Physiography: Price River terrace

Relief	Drainage: well	Salt or alkali
Elevation	Gr. water: deep free water @ 114"	Stoniness
Slope: 1%	Moisture: moist to very moist 66-114"	
Aspect: E	Root distrib.: Com M, F & few CO 0-14"; Few CO M F, VF 14-22; Few F, VF 22-42"	% Clay *
Erosion: none	% Coarse fragments *: <2% entire profile	% Coarser than V.F.S. *
Permeability: very slow		

Additional notes

* Control section average

Horizon	Depth	Color Dry	Color Moist	Texture	Structure	Consistence Dry	Consistence Moist	Consistence Wet	Reaction	Boundary				
Ap	0-7	10YR 6/4	10YR 4/3	SL	M MGR over M MSBK	SH	FR	SS/SP	EM	CW				
C1	7-22	10YR 6/2	10YR 4/2	SICL	M M SBK	SH-H	FI	S/P	ES	CW				
C2	22-42	10YR 6/2	10YR 4/3	CLAY	S M ABK	H	FI	S/P	ES	GW				
2C3	42-66	7.5YR 6/2	10YR 4/3	Loam	Massive	H	FR	SS/SP	ES	GW				
2C4	66-114	10YR 5/3 moist, very moist at bottom	10YR 4/3	Loam	Massive	SH	FR	SS/SP	ES	GW				
	114+	Free water												

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL DESCRIPTION

SCS - SOI - 232G
Rev. 2 - 81

Soil type: Moffat

File No:

NEICO Wellington Coal Preparation Plant property | Date 4-27-95 | Stop No. NEICO-5

Classification: Coarse-loamy, mixed, mesic Typic Calciorthid

Location: on alluvial fan

N. veg. (or crop): sagebrush, shadscale, dwarf sap., mustard, snakeweed | Climate: mesic temp.

Parent material: c1 & below terrace deposit

Physiography: in Gowl on alluvial fan general area

Relief | Drainage: well | Salt or alkali

Elevation | Gr. water: deep not encountered | Stoniness

Slope: 2% | Moisture: 2½-24 moist dry below

Aspect: E | Root distrib.: Com co, m, F 2½-16, Few co m, F VF 16-32 | % Clay *

Erosion: none | % Coarse fragments *: see below | % Coarser than V.F.S. *

Permeability: moderate to mod rapid

Additional notes:

A1 includes 0-3/4" surface crust
6-16 calcic but not carbonatic
16-32 one sample
16-24 lo-shel stratum
24-32 sandy shel? stratum

C32 no change until ~82 get sl. darker color

* Control section average

Horizon	Depth	Color Dry	Color Moist	Texture	Structure	Consistence Dry	Consistence Moist	Consistence Wet	Reaction	Boundary	Co Frag			
A1	0-2½	7.5YR 6/3	7.5YR 5/4	Loam	MCO PL	SO	VFR	SS/SP	EM	CS	10% GR			
A2	2½-6	7.5YR 6/3	7.5YR 5/4	SL	MC PL	SH-H	FR	SS/SP	EM	CW	3% GR			
Bk	6-16	7.5YR 6/4	7.5YR 5/4	Loam	MM SBK	H	FR	S/P	EV	CW	5% GR 5% CB			
C1	16-24	10YR 6/4	10YR 4/3	SL	Massive	VH	FR	SS/SP	ES	GW	← 15% GR 20% CB			
C2	24-32	10YR 6/4	10YR 4/3	SL	Massive	H	FR	SS/SP	ES	GW	← 15% GR 5% CB			
C31	32-42	10YR 6/4	10YR 4/3	Loamy Sand	Massive	H	FR	NS/NP	ES	GW	15% VFG			
C32	42-123	10YR 6/4	10YR 5/4	Loamy Sand	Massive	H	FR	NS/NP	ES	CW	40% GR 5% CB			
shale at 123"														

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL DESCRIPTION

SCS - SOI - 232G
Rev. 2 - 81

Soil type: Greybull, deep

File No:

NEICO Wellington Coal Preparation Plant property | Date: 4-27-95 | Stop No.: NEICO-6

Classification: Fine-loamy, mixed, calcareous, mesic Typic Torriorthent

Location: disturbed area - has been scraped (~1')

N. veg. (or crop): annual weeds halogeton, Russian thistle, rabbitbrush, some sage | Climate: mesic temp

Parent material: mixed slope wash alluvium

Physiography: alluvial fan

Relief	Drainage: well	Salt or alkali
Elevation	Gr. water: deep not encountered	Stoniness
Slope: 4%	Moisture: 9-25 sl. moist	
Aspect: NE	Root distrib.: Few M F VF 0-25" Few F VF 25-43"	% Clay *
Erosion: slight	% Coarse fragments *: see below	% Coarser than V.F.S. *
Permeability: slow		

Additional notes

* Control section average

Horizon	Depth	Color Dry	Color Moist	Texture	Structure	Consistence Dry	Consistence Moist	Consistence Wet	Reaction	Boundary	C. frag			
AC	0-9	10YR 6/2	10YR 4/2	SICL	MM PL over WM SBK	SH	FR	VS/P	EM	GW	10% GR			
C1	9-25	10YR 5/3	10YR 4/3	Clay Loam	Massive	H	FI	S/P	ES	GW	15% GR 5% CB			
C2	25-43	10YR 5/2	10YR 4/2	Clay Loam	Massive	H	FI	S/P	EM	GW	15% GR			
C3	43-93	10YR 6/2	10YR 5/2	SIL	Massive	H	FI	S/SP	ES	GW	15% GR			
2C4	93+	very cobbly stratum	sandy clod								50% GR & CB			

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL DESCRIPTION

SCS-SOI-232G
Rev. 2-81

Soil type: GERST, moderately deep

File No:

Area: NEICO Wellington Coal Preparation Plant property | Date: 4-27-95 | Stop No.: NEICO-7

Classification: loamy-skeletal, mixed, calcareous, mesic Typic Torriorthent

Location: on shale hills

N. veg. (or crop): shadscale (near shadscale reference area) | Climate: mesic temp

Parent material: mixed alluvium over residuum from shale at depth

Physiography: upland Mancos shale hills

Relief	Drainage: well	Salt or alkali
Elevation	Gr. water: deep (not encountered)	Stoniness
Slope: 10%	Moisture: 7-18 d. moist	
Aspect: west	Root distrib.: Com M, F, & Few Co 0-18, Few M, F, VF 18-33	% Clay *
Erosion: slight	% Coarse fragments *: see below	% Coarser than V.F.S. *

Permeability: moderate over slow

Additional notes:

* Control section average

Horizon	Depth	Color Dry	Color Moist	Texture	Structure	Consistence Dry	Consistence Moist	Consistence Wet	Reaction	Boundary	C. Frag %
A	0-7	10YR 6/3	10YR 4/4	Loam	M co Pl over MM SBK	SH	FR	SS/SP	EM	CW	15% GR 5% CB
C1	7-18	10YR 7/4	10YR 5/4	Loam+	MM SBK	H	FR	S/P	ES	CW	5% GR 5% CB
C2k	18-33	10YR 7/2 cobbly	10YR 5/4	Loam+	Massive	H	FI	S/SP	EV	GW	25% GR 25% CB
2Cr1	33-39	10YR 5/2 Mancos shale	10YR 4/2	clay	Massive	H	FI	S/P	EM	GW	<3% shale fragments & SS gravel
2Cr2	39-69	10YR 5/1, 5/2 Mancos shale	10YR 4/2	clay	Massive	H	FI	S/P	EM	GW	40% shale fragments (many shale)
2Cr3	69-94	10YR 5/1 Mancos shale	10YR 4/2	clay	Massive	H	FI	S/P	EM	-	fractured shale bedrock

SOIL PROFILE DESCRIPTION FOOTNOTES - LEGEND

Soil type		Date	Step No.
Classification 1			Area
Location			Elev.
N. veg. (or crop)			Climate
Parent material			
Physiography			
Relief	Drainage	Salt or alkali	
Elevation	Gr. water	Stoniness	
Slope	Moisture		
Aspect	Root distrib. 7		
Erosion			
Permeability			
Additional notes			

SCS-232A-Soil Description—Rev.

2 Horizon	Depth	4 Color Dry	Color Moist	8 Co.Frag. Texture 3	5 Structure	6 Consistence Dry	Consistence Moist	Consistence Wet	9 Reaction	10 Boundary

SOIL PROFILE DESCRIPTIONS FOOTNOTES

[1] Soil Series, and Soil Classification according to current SCS information. Soil classification based on Keys to Soil Taxonomy, fifth edition (Soil Survey Staff 1992).

[2] Horizon and Depth based on site-specific conditions at the sample location.

[3] Texture and texture modifier abbreviations:

S	Sand	SCL	Sandy Clay Loam	CB	Cobbly	GR	Gravely
LS	Loamy Sand	CL	Clay Loam	CBV	Very Cobbly	GRV	Very Gravely
SL	Sandy Loam	SICL	Silty Clay Loam	CBX	Extremely Cobbly	GRX	Extremely Gravely
L	Loam	SIC	Silty Clay	CN	Channery	SH	Shaley
SIL	Silt Loam	C	Clay	CNV	Very Channery	SR	Stratified
SI	Silt			CNX	Extremely Channery		

[4] Color, Dry and Moist: Munsell Soil Color Chart, 1975 Edition.

[5] Structure:

Grade	Size	Type
W Weak	VF Very Fine	PL Platy
M Moderate	F Fine	GR Granular
S Strong	M Medium	SBK Subangular Blocky
	CO Coarse	ABK Angular Blocky
	VCO Very Coarse	PR Prismatic
		W Massive Weak Massive
		Massive
		S Massive Strong Massive
		SG Single Grained
		Cloddy

[6] Consistency:

Dry		Moist		Wet	
LO	Loose	LO	Loose	NS	Non Sticky
SO	Soft	VFR	Very Friable	SS	Slightly Sticky
SH	Slightly Hard	FR	Friable	S	Sticky
H	Hard	FI	Firm	VS	Very Sticky
VH	Very Hard	VFI	Very Firm	NP	Non Plastic
EH	Extremely Hard	EFI	Extremely Firm	SP	Slightly Plastic
				P	Plastic
				VP	Very Plastic

[7] Roots:

Number	Type	
Very Few	VF	Very Fine
Few	F	Fine
Com (Common)	M	Medium
Many	CO	Coarse

Roots are described in terms of a specified size (type) and quantity (number). The size classes are:

Very Fine: Less than 1 mm in diameter
Fine: 1 to 2 mm in diameter
Medium: 2 to 5 mm in diameter
Coarse: 5 mm or larger in diameter
Roots larger than 10 mm in diameter may be described separately.

Quantity classes or roots are defined in terms of numbers of each size per unit area--1 square centimeter for very fine and fine roots, and 1 square decimeter for medium and coarse roots. All roots smaller than 10 mm in diameter are described in terms of the following quantity classes:

Few: Less than 1 per unit area of the specified size
Common: 1 to 5 per unit area of the specified size
Many: More than 5 per unit area of the specified size
Roots are described as to number first, and type second.

FOOTNOTES continued

arse Fragments: All coarse fragment percentages (% by volume) are taken from the field soil profile descriptions. logic modifier types (gravelly, channery, etc.) are also taken from the field soil profile description forms for each sampled profile.

[9] Reaction:

Effervescence	
EO	Non-Effervescent
SE	Slightly Effervescent
EM	Moderately Effervescent
ES	Strongly Effervescent
EV	Violently Effervescent

Reaction		pH
Str. Acid	Strongly Acid	5.1 - 5.5
Mod. Acid	Moderately Acid	5.6 - 6.0
Sl. Acid	Slightly Acid	6.1 - 6.5
Neutral	Neutral	6.6 - 7.3
Mild. Alk.	Mildly Alkaline	7.4 - 7.8
Mod. Alk.	Moderately Alkaline	7.9 - 8.4
Strong Alk.	Strongly Alkaline	8.5 - 9.0
Very Strong Alk.	Very Strongly Alkaline	>9.0

[10] Horizon Boundaries:

Distinctness	
A	Abrupt (<2 cm thick)
C	Clear (2 to 5 cm thick)
G	Gradual (5 to 15 cm thick)
D	Diffuse (>15 cm thick)

Topography	
S	Smooth (the boundary is a plane with few or no irregularities)
W	Wavy (the boundary has undulations in which depressions are wider than they are deep)
I	Irregular (the boundary has pockets that are deeper than they are wide)
B	Broken (at least one of the horizons or layers separated by the boundary is discontinuous and the boundary is interrupted).

APPENDIX B

SOIL PROFILE/SOIL LANDSCAPE PHOTOGRAPHS

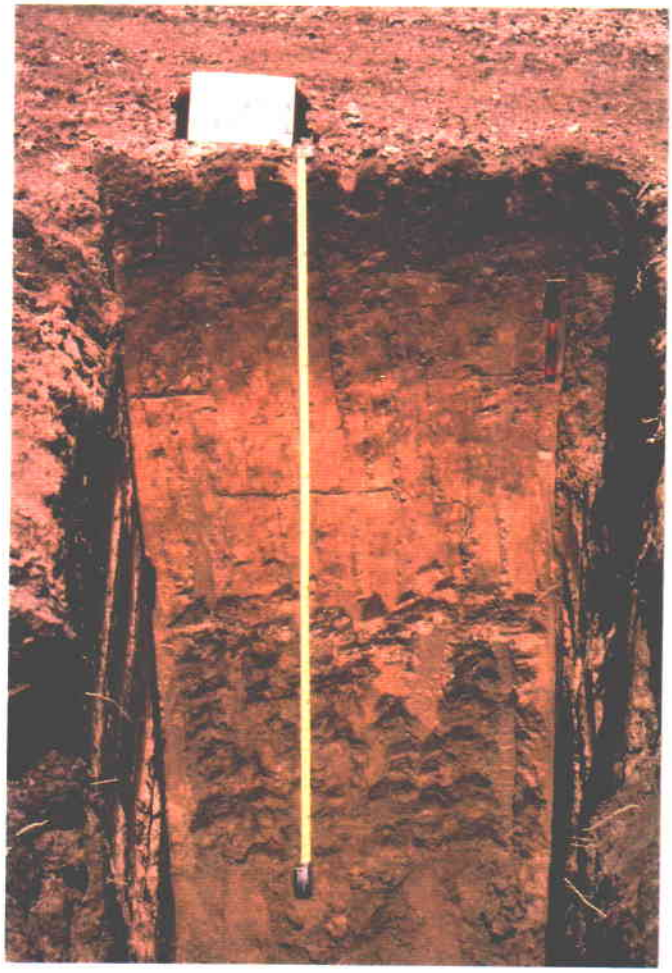

Figure 1. NEICO-1, Ravola silty clay loam, profile description/sample site in agricultural field potential soil borrow area. Top of red-handled pick at 12 inches (base of Ap horizon). Bottom of tape measure at 77 inches.

Figure 2. Soil landscape of NEICO-1, in agricultural field looking south toward inactive Wellington Coal Preparation Plant on right and Price River in rear left at base of cliff.

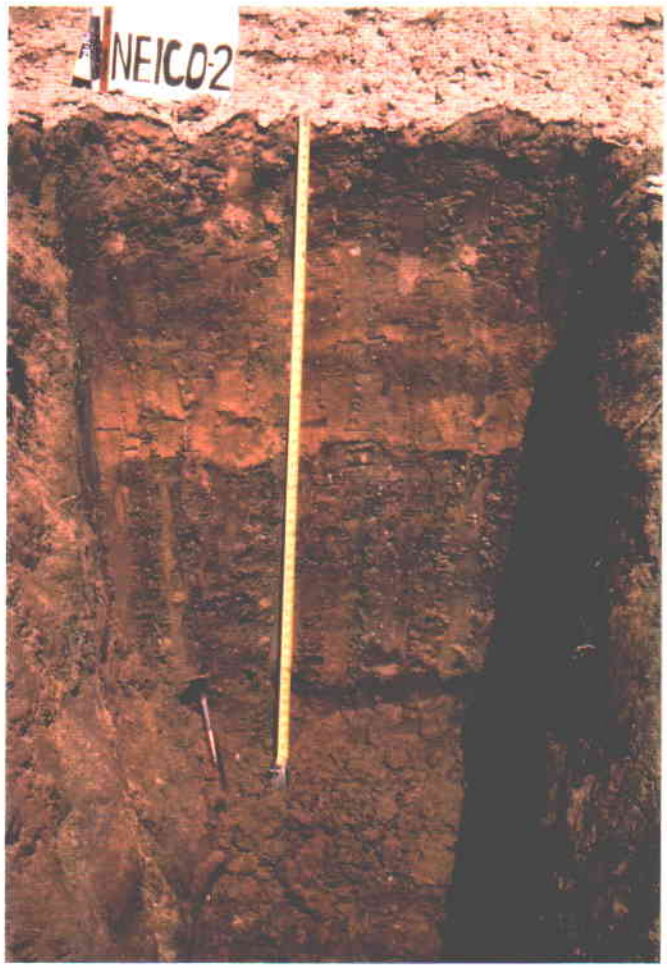

Figure 3

Figure 4

Figure 3. NEICO-2, Billings silty clay loam, profile description/sample site in agricultural fields potential soil borrow area. Top of red-handled pick at 50 inches at base of 2C2 horizon.

Figure 4. NEICO-3, Billings silt loam profile description/sample site in agricultural fields potential soil borrow area. Top of red-handled pick at 38 inches at top of 2C3 horizon.

Figure 5. NEICO-4, Billings sandy loam, profile description/sample site in south end of agricultural field currently being grazed not farmed. Base of red-handled pick at top of clay texture C2 horizon.

Figure 6. Soil landscape of NEICO-4, in foreground in grazed agricultural field. View to south on other side of fence is dominated by greasewood.

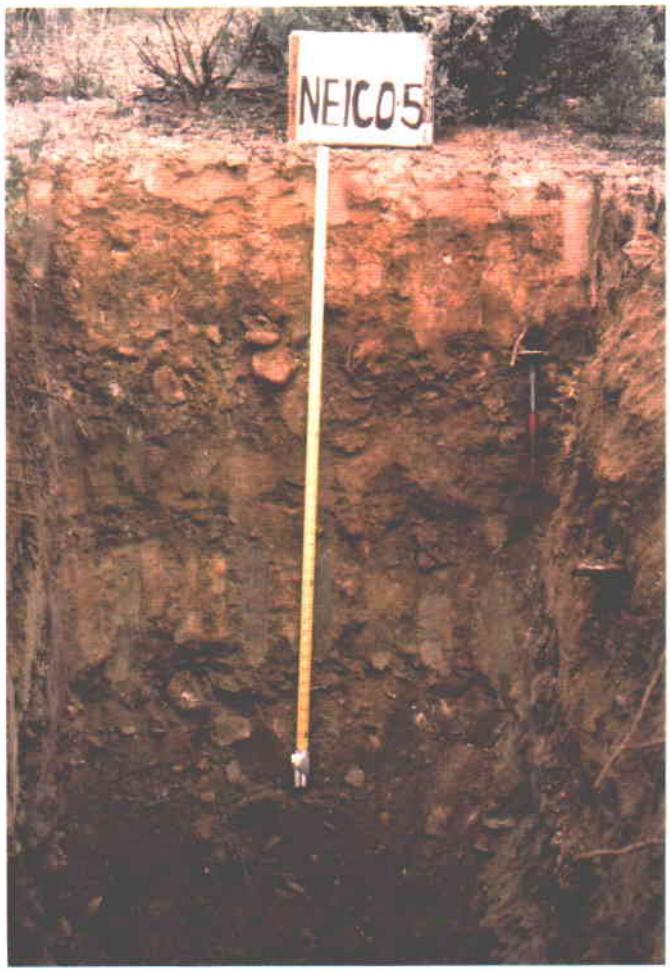

Figure 7. NEICO-5, Moffat loam, profile description/sample site on undisturbed 2% slope alluvial fan NW of coal preparation plant. Top of red-handled pick at 16 inches at base of Bk horizon. Tape measure at 49 inches. Backhoe pit was dug to 123 inches.

Figure 8. Soil landscape of NEICO-5 in sagebrush. Rick Collins reading map. View is to NW.

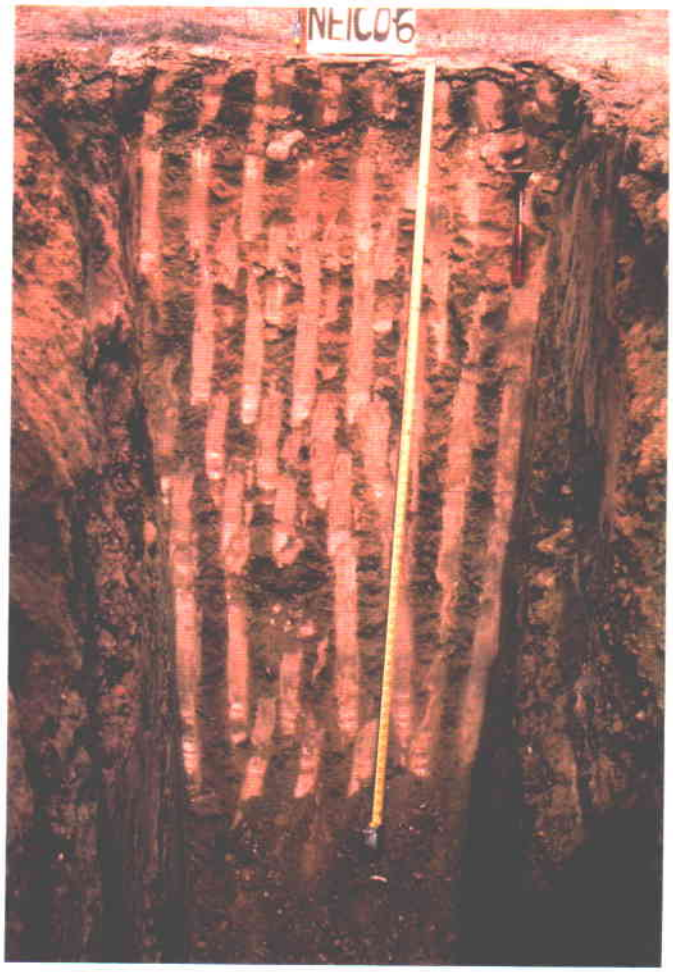

Figure 9

Figure 10

Figure 9. NEICO-6, Greybull, deep, silty clay loam, profile description/sample site in surface disturbed area (former transmission line construction lay down area) north of coal preparation plant. Top of red-handled pick at 9 inches at base of AC horizon. Bottom of tape measure at 73 inches. Pit was dug to 93 inches.

Figure 10. Close up of NEICO-6 showing effects of surface disturbance.

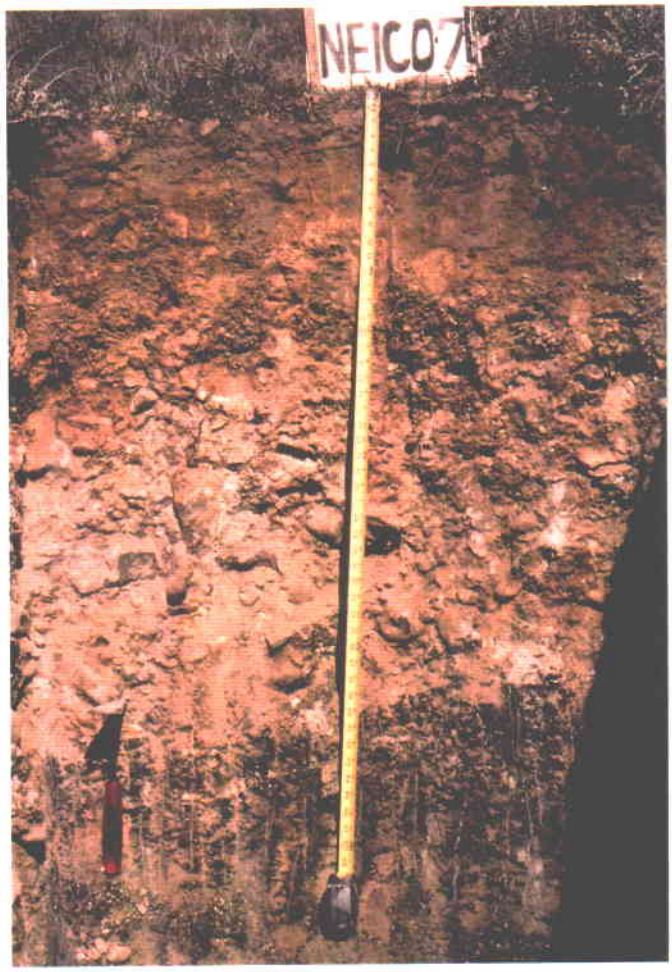

Figure 11. NEICO-7, Gerst, moderately deep, loam, profile description/sample site in undisturbed uplands on Mancos Shale east of tailings ponds. Top of red-handled pick at boundary between "brown soil" above and underlying Mancos Shale.

APPENDIX C

SOIL LABORATORY DATA

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BILLING: S18967

DATE RECEIVED: 05/04/95
DATE REPORTED: 05/17/95

RESEARCH SOIL ANALYSIS

Lab #	Sample ID #	pH	EC mmhos/cm	meq/l Ca	meq/l Mg	meq/l Na	meq/l K	SAR	mg/kg Hot Water B	mg/kg Hot Water Se
R8763	Profile 1 0–12"	8.0	2.2	8.5	6.8	8.0	0.7	2.9	1.86	0.06
8764	Profile 1 12–26"	8.1	4.0	14.5	14.0	16.0	0.5	4.2	1.00	0.03
8765	Profile 1 26–38"	8.3	1.9	6.0	6.5	8.4	0.5	3.4	0.92	0.02
8766	Profile 1 38–52"	8.3	2.1	6.0	6.5	8.4	0.5	3.4	1.06	0.01
8767	Profile 1 52–59"	7.9	4.3	22.5	19.7	12.5	0.6	2.7	1.79	0.02
8768	Profile 1 59–72"	7.9	3.6	23.0	17.3	11.5	0.4	2.6	1.31	0.01
8769	Profile 1 72–91"	8.1	2.4	10.0	9.0	11.5	0.5	3.7	1.34	0.04
8770	Profile 2 0–12"	8.1	7.8	23.5	33.7	44.3	7.7	8.3	3.89	0.04
8771	Profile 2 12–29"	8.3	12.9	20.0	54.3	71.4	3.1	11.7	2.51	0.03
8772	Profile 2 29–50"	8.3	13.6	19.0	61.7	84.0	1.4	13.2	3.44	0.06
8773	Profile 2 50–85"	8.4	14.0	24.0	69.1	109.6	1.4	16.1	1.98	0.07
8774	Profile 2 85–118"	8.4	10.4	19.0	49.3	76.1	1.1	13.0	1.43	0.04
8775	Profile 3 0–13"	8.0	2.9	12.0	10.7	10.0	1.0	3.0	1.67	0.04
8776	Profile 3 13–24"	7.9	3.2	16.5	15.6	13.6	0.9	3.4	1.27	0.02
8777	Profile 3 24–38"	8.0	5.8	18.5	31.3	22.5	0.4	4.5	1.36	0.02
8778	Profile 3 38–47"	8.2	11.2	24.0	60.9	71.6	0.4	11.0	2.15	0.07
8779	Profile 3 47–73"	8.1	11.2	22.0	54.3	82.2	0.5	13.3	1.75	0.04
8780	Profile 3 73–140"	8.1	10.4	21.5	49.3	65.8	0.8	11.1	1.85	0.07
8781	Profile 4 0–7"	8.2	6.8	18.5	27.1	28.9	0.7	6.1	0.92	0.03
8782	Profile 4 7–22"	8.3	15.9	21.5	72.4	109.7	0.9	16.0	1.67	0.06
8783	Profile 4 22–42"	8.2	15.5	23.5	82.2	93.3	0.5	12.8	1.88	0.12
8784	Profile 4 42–66"	8.2	2.8	11.5	9.9	11.3	0.9	3.5	0.95	0.02
8785	Profile 4 66–114"	8.2	2.1	7.5	6.7	8.9	1.8	3.3	1.50	0.05

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RESEARCH SOIL ANALYSIS

Lab #	Sample ID #	pH	EC mmhos/cm	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	SAR	B (mg/kg Hot Water)	Se (mg/kg Hot Water)
R8786	Profile 5 0–2.5"	8.2	0.8	4.3	1.8	2.4	0.2	1.4	0.27	0.02
8787	Profile 5 2.5–6"	8.4	0.4	2.4	0.9	1.4	0.2	1.1	0.45	0.02
8788	Profile 5 6–16"	8.2	0.7	1.9	0.9	5.1	<0.1	4.3	0.92	0.02
8789	Profile 5 16–32"	8.7	0.6	1.0	0.5	4.0	<0.1	4.5	0.44	0.01
8790	Profile 5 32–42"	8.9	0.7	0.6	0.4	6.1	<0.1	8.9	0.59	0.03
8791	Profile 5 42–123"	8.8	1.1	1.0	0.6	9.9	<0.1	10.9	0.51	0.02
8792	Profile 6 0–9"	7.9	2.9	24.0	3.5	8.0	0.7	2.2	1.05	0.01
8793	Profile 6 9–25"	8.1	2.8	28.4	7.2	3.6	<0.1	0.8	0.79	0.01
8794	Profile 6 25–43"	7.9	2.9	27.9	6.2	5.3	<0.1	1.3	0.91	0.01
8795	Profile 6 43–93"	8.1	1.0	6.0	1.5	2.7	<0.1	1.4	0.63	0.02
8796	Profile 7 0–7"	8.2	0.6	2.8	1.2	2.5	0.4	1.8	0.74	0.02
8797	Profile 7 7–18"	8.7	3.2	7.0	3.9	26.8	1.1	11.5	1.48	0.05
8798	Profile 7 18–33"	8.5	1.4	2.1	2.1	12.2	<0.1	8.4	1.24	0.02
8799	Profile 7 33–39"	7.9	11.6	31.9	75.7	65.8	<0.1	9.0	3.71	0.07
8800	Profile 7 39–69"	7.8	7.8	25.0	46.1	25.3	<0.1	4.2	3.06	0.08
8801	Profile 7 69–84"	7.8	4.8	7.5	18.1	25.8	0.1	7.2	2.57	0.09
	Duplicates									
R8765d		8.3	1.9	7.0	7.2	9.3	0.6	3.5	0.91	0.01
8775d		8.0	2.9	13.5	11.5	12.0	0.7	3.4	1.57	0.04
8785d		8.2	2.1	7.0	6.3	8.6	1.7	3.4	1.70	0.04
8795d		8.1	0.8	5.5	1.3	2.6	<0.1	1.4	0.71	0.01
8800d		7.8	7.9	26.4	46.9	33.9	<0.1	5.6	2.85	0.08

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