

0037

UNITED STATES FUEL COMPANY

*mining file permit*

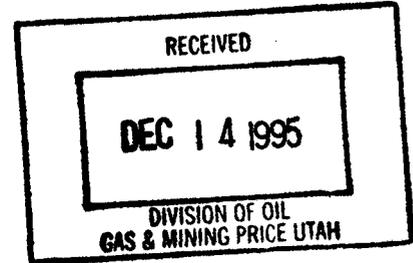
P.O. Box 887  
PRICE, UTAH 84501



(801) 472-3372  
FAX (801) 472-3384

December 12, 1995

Pete Hess  
Division of Oil, Gas & Mining  
College of Eastern Utah  
451 East 400 North  
Price, UT 84501



Dear Pete,

Included are the certified drawings (as prepared by Gary Gray of American Fuel Corp.) of sediment ponds D003, D004, D005, D006 and D007 which were cleaned this year. D008 has also been cleaned, however the survey for that pond has not yet been completed.

Please give me a call if you have any questions.

Sincerely,

*Michael P. Watson*

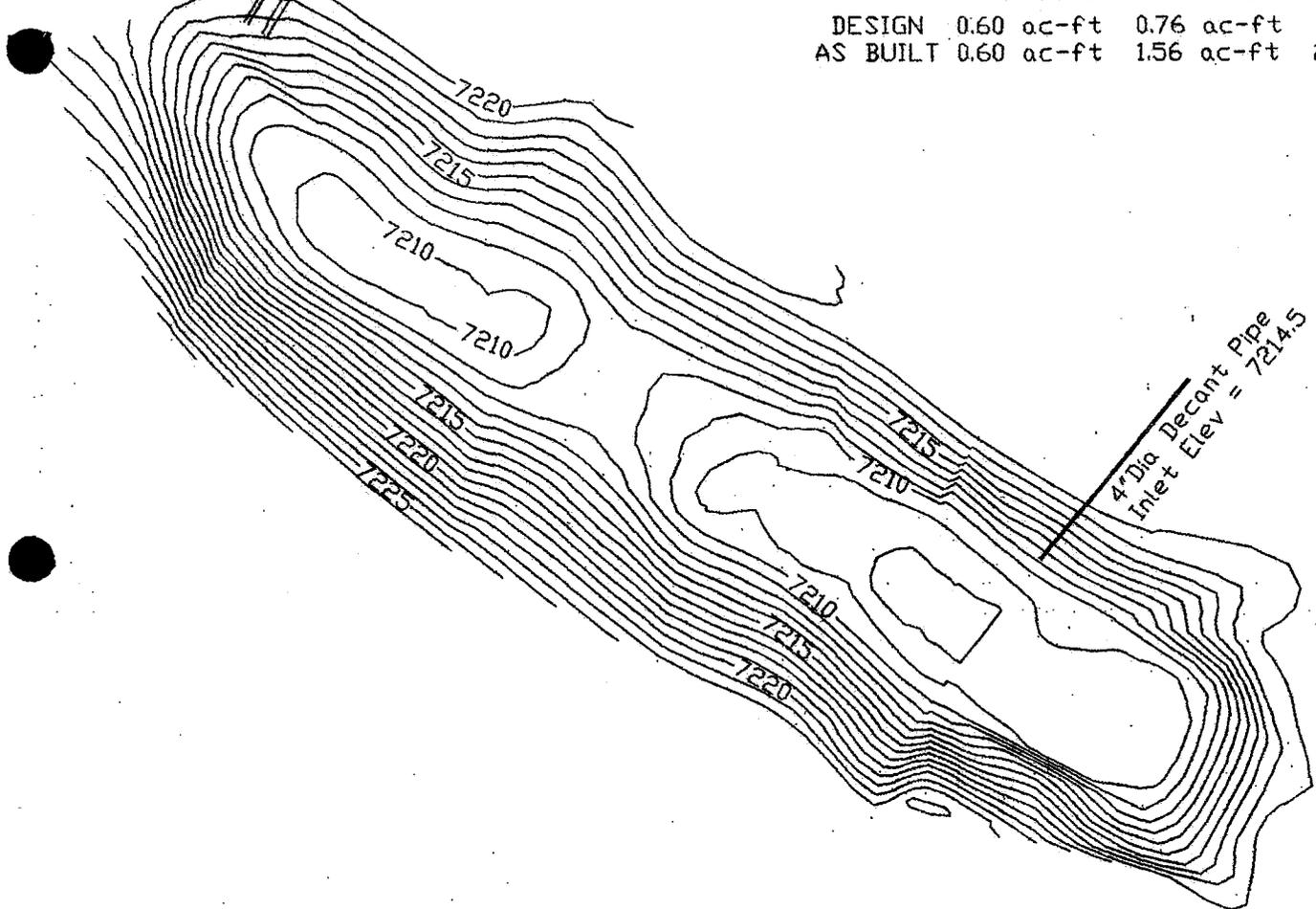
Michael P. Watson  
President

# POND D003



12" Dia. Primary Spillway  
7217.7 El.  
18" Dia. Secondary Spillway  
7217.8 El.

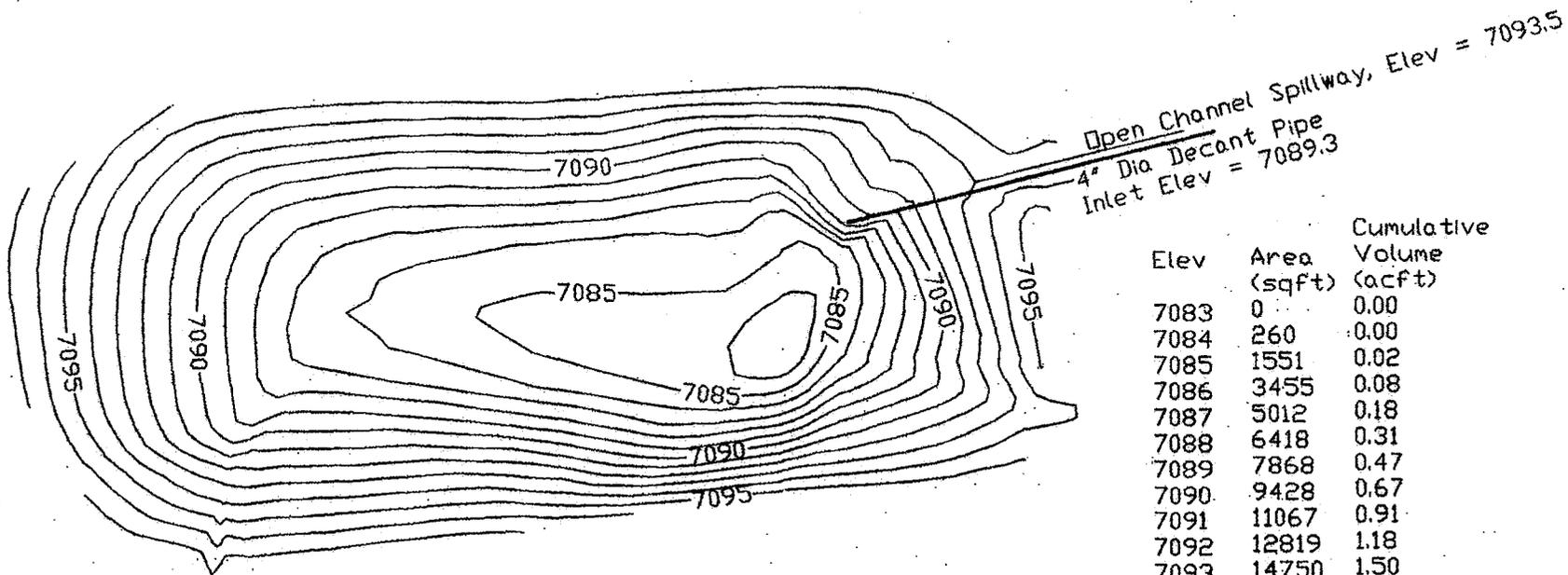
	VOLUMES			ELEVATIONS	
	SEDIMENT	RUNOFF	TOTAL	SEDIMENT	RUNOFF
DESIGN	0.60 ac-ft	0.76 ac-ft	1.36 ac-ft	-----	-----
AS BUILT	0.60 ac-ft	1.56 ac-ft	2.16 ac-ft	7217.7	7217.8



ELEV	AREA (sqft)	CUMULATIVE VOLUME (acft)
7207	0	0.00
7208	356	0.00
7209	2643	0.04
7210	4775	0.12
7211	6828	0.26
7212	8802	0.44
7213	10269	0.66
7214	11646	0.91
7215	13020	1.19
7216	14407	1.50
7217	15912	1.85
7217.8	17486	2.16
7218	17880	2.24

U.S. Fuel Co.  
GEG 11/16/95  
Scale: 1" = 40'

# POND D004



Elev	Area (sqft)	Cumulative Volume (acft)
7083	0	0.00
7084	260	0.00
7085	1551	0.02
7086	3455	0.08
7087	5012	0.18
7088	6418	0.31
7089	7868	0.47
7090	9428	0.67
7091	11067	0.91
7092	12819	1.18
7093	14750	1.50
7093.5	14758	1.68
7094	16766	1.86

	Volumes			Elevations	
	Sediment	Runoff	Total	Sediment	Runoff
Design	0.48 ac-ft	0.54 ac-ft	1.02 ac-ft	-----	-----
As Built	0.48 ac-ft	1.20 ac-ft	1.68 ac-ft	7089.05	7093.5

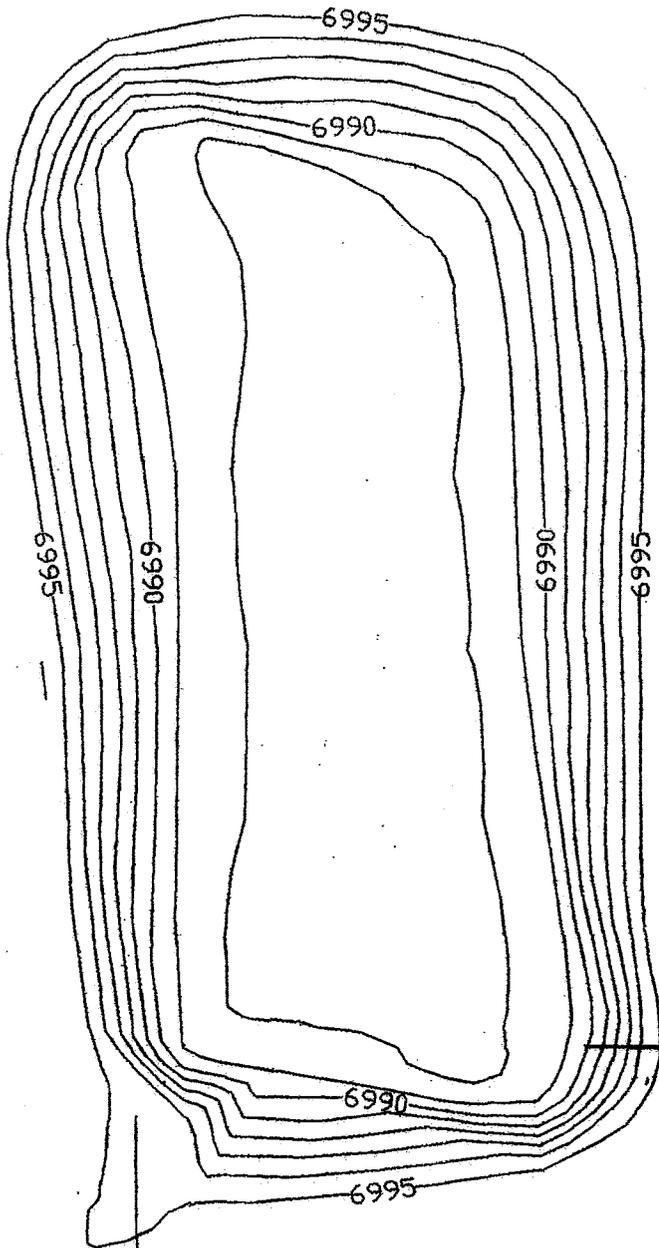
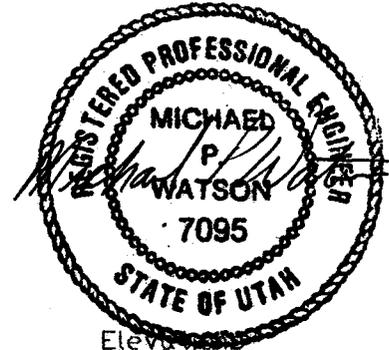
U.S. Fuel Co.

GEG 11/16/95

Scale 1" = 40'



# POND D006



	Sediment	Volumes Runoff	Total	Elev Sediment	Runoff
Design	1.21 ac-ft	1.32 ac-ft	2.53 ac-ft	-----	-----
As Built	1.21 ac-ft	1.79 ac-ft	3.00 acft	6991.1	6994.5

Elev	Area (sqft)	Cumulative Volume (acft)
6987	0	0.00
6988	8816	0.10
6989	14503	0.37
6990	17034	0.73
6991	19241	1.15
6992	21386	1.61
6993	23520	2.13
6994	25640	2.70
6994.5	27288	3.00
6995	28736	3.32

4" Dia Decant Pipe  
Inlet Elev = 6993.1

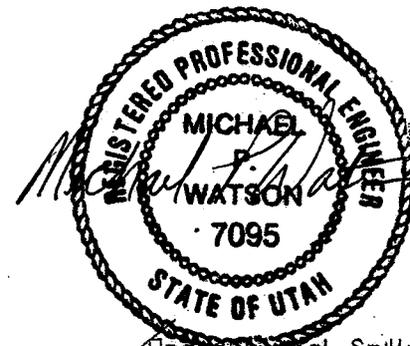
Open Channel Spillway  
Discharge Elev = 6994.5

U.S. Fuel Co.

GEG 11/16/95

Scale 1" = 40'

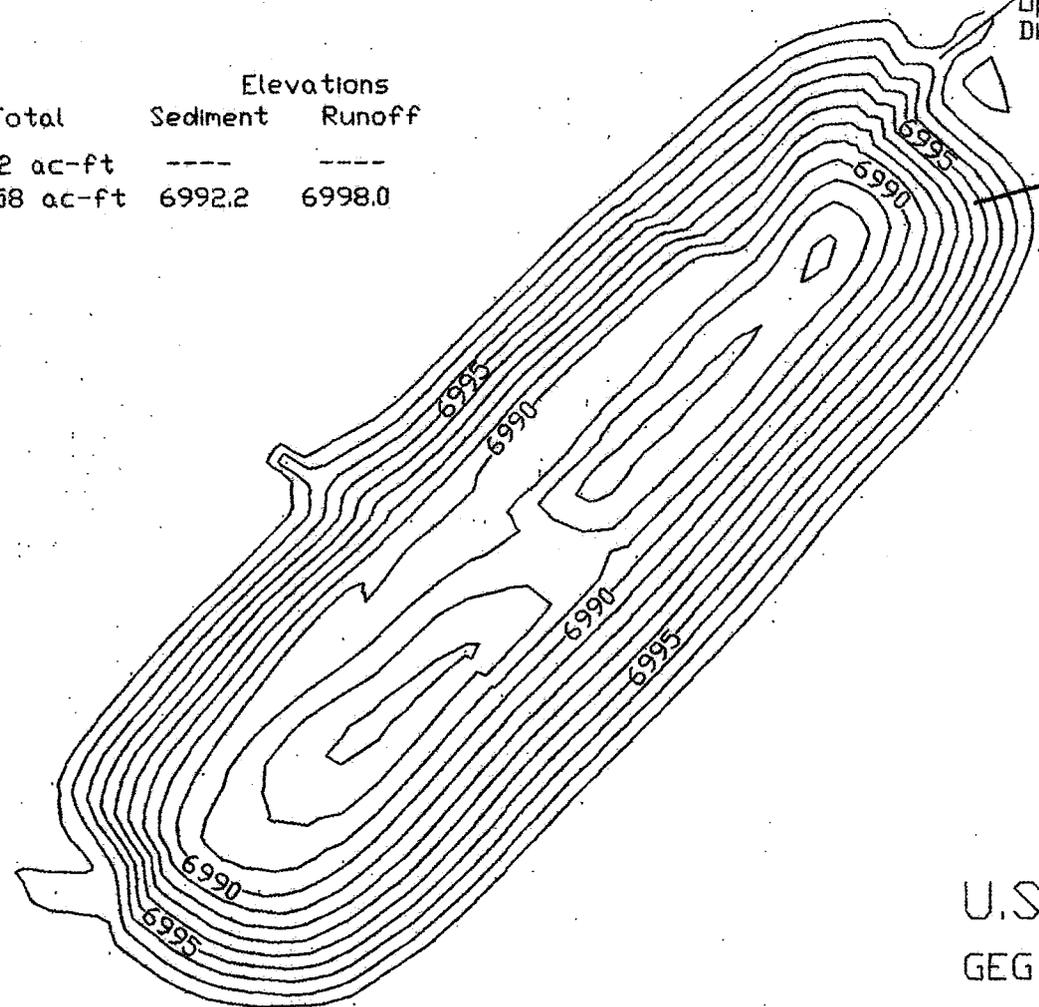
# POND D007



Open Channel Spillway  
Discharge Elev = 6998.0

	Volumes			Elevations	
	Sediment	Runoff	Total	Sediment	Runoff
Sign	0.68 ac-ft	0.74 ac-ft	1.42 ac-ft	----	----
Built	0.68 ac-ft	1.90 ac-ft	2.58 ac-ft	6992.2	6998.0

4" Dia Decant Pipe  
Inlet Elev = 6992.5

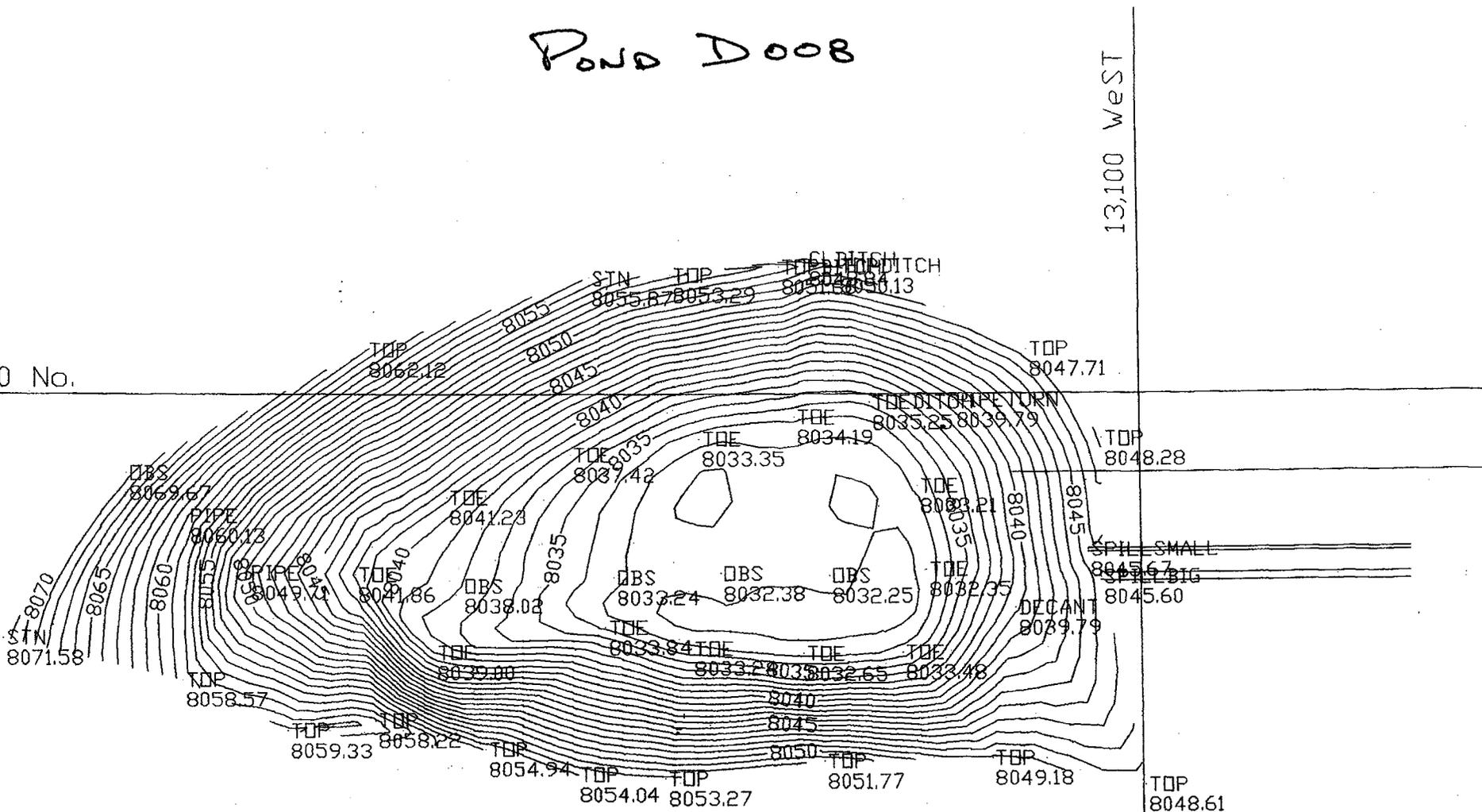


Elev	Area (sqft)	Cumulative Volume (acft)
6986	0	0.00
6987	389	0.00
6988	2367	0.04
6989	4399	0.11
6990	6859	0.24
6991	8382	0.42
6992	9802	0.63
6993	11175	0.87
6994	12585	1.14
6995	14023	1.45
6996	15514	1.78
6997	17412	2.16
6998	19159	2.58

U.S. Fuel Co.  
GEG 11/16/95  
Scale 1" = 40'

# Pond Door

2,500 No.



Design	Volumes			Elevations	
	Sediment	Runoff	Total	Sediment	Runoff
As Built	0.48	0.92	1.40	8036.11	8045.6
	0.48	2.68	3.16		

U.S. Fur Co.  
 GEG 12/15/85  
 Scale: 1" = 40'

# UNITED STATES FUEL COMPANY

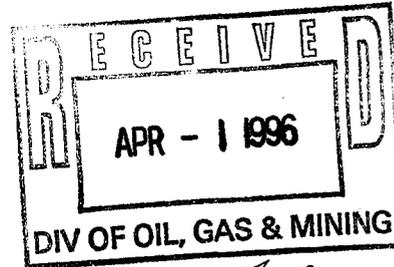


P.O. Box 887  
PRICE, UTAH 84501

(801) 472-3372  
FAX (801) 472-3384

March 28, 1996

Division of Oil, Gas & Mining  
Utah Department of Natural Resources  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180



Dear Pam,

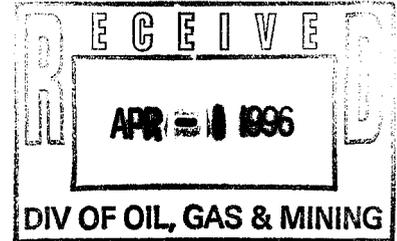
*File ACT/007/011  
#6*

Enclosed is the annual report for United States Fuel Company. The requested computer disk will be sent separately. If we can provide any additional information, please let me know.

Sincerely,

Michael P. Watson

1995 ANNUAL REPORT  
of  
COAL MINING AND RECLAMATION OPERATIONS  
at  
UNITED STATES FUEL COMPANY  
for  
DIVISION OF OIL, GAS AND MINING



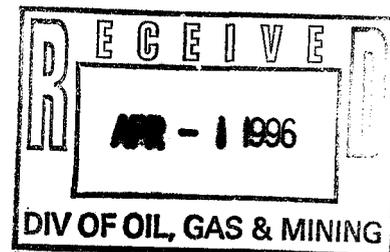
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UNITED STATES FUEL COMPANY  
Hiawatha, Utah

COAL MINING AND RECLAMATION OPERATIONS FOR 1995

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
3 Triad Center, Suite 350  
355 West North Temple  
Salt Lake City, Utah 84180-1203  
(801) 538-5340



Permittee: U.S. Fuel Company  
Mine Name: Hiawatha Complex, King 4 Mine  
Mailing Address: P.O. Box 887, Price, UT 84501  
Company Representative: Dean Davis, Rod Davis & K.C. Jones  
Resident Agent: Michael P. Watson  
Permit Number: ACT/007/011  
MSHA ID Number: 42 00098  
Date of Initial Permanent Program Permit: March 13, 1987  
Date of Permit Renewal: March 13, 1992  
Quantity of Coal Mined (tonnage) 1995: None Mined  
56,378 tons of fines loaded

## GENERAL

During its third year of ceased <sup>underground</sup> mining operations, U.S. Fuel continued its reclamation activities. The activities became focused on the Hiawatha Area rather than the South Fork and Middle Fork Portal Areas because of the purchase agreement with American Fuel Corp. The completion of the agreement, posting of bond by American Fuel Corp. and transfer of the permit should be done by the end of the 1st quarter of 1996 or early in the 2nd quarter of 1996.

Slurry Pond No. 4 was completely regraded to final contour in 1994. Topsoil placement of the final surface is approximately 40% completed by year end 1995.

Slurry Pond No. 5 top surface has been regraded to final elevation, however the grading of the side slopes to 5 to 1 grade is only approximately 30% completed. At the end of the year an estimated 2 months work is needed to finish the regrading.

The bond amount was established at \$2,838,000 at the conclusion of the Mid-Term Permit Review. The self-bond portion of the bond amount (\$1,388,000) is guaranteed by the parent company, Mueller Industries, Inc. which has met the financial qualifications for self-bonding (approval dated November 1, 1995).

An update of Identification of Interests was made at the beginning of the year in the Annual Report to reflect the new officers and directors of U.S. Fuel Company and Arava Natural Resources (the parent company).

A permit change was submitted and approved in the Hydrology Operation Plan. The change was made to ensure compliance with the UPDES Permit. Associated with this was a change in the UPDES Permit changing the Total Dissolved Solids parameter limit to 1700 mg/l effective September 1, 1995.

A permit change was made and approved allowing the disposal of Coal Waste Material from the AML Project at Mohrland.

The subsidence survey was conducted on October 20, 1995. The results were received in early December 1995.

All of the sediment ponds (except South Fork ponds) were cleaned out during the summer and fall of 1995. The ponds were surveyed, capacities calculated and recertified.

One NOV was received in connection with the TDS amount at D001 Discharge point at Mohrland.

**UPDATED MINE SEQUENCE MAP**

Updated Mine Sequence Map

No underground mining occurred during 1995 requiring the updating of the mine map.

**WATER MONITORING**

**UNITED STATES FUEL COMPANY  
Hiawatha, Utah**

Water monitoring (sampling and analyzing) was conducted during the year as specified in the permit. The results showed no significant changes or trends except in the D001 Discharge point at Mohrland.

At the D001 Discharge point the TDS parameter continued to hover at just above the 1000 mg/l level (the original UPDES Permit level prior to amending the permit to 1700 mg/l) for most of the year. However, in October the TDS level returned to levels below 1000 mg/l. In the permit amendment application to DWQ, a discussion on the possible causes of the change in water quality was included. Nothing definitive could be concluded because of the mines being sealed, allowing physical investigations.

**UPDES MONITORING**

**UNITED STATES FUEL COMPANY  
Hiawatha, Utah**

MINE WATER DISCHARGE REPORT  
1995  
DISCHARGE STATUS

DISCHARGE POINT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
D001	IA	IA	D	D	D	D	D	D	D	D	D	D
	IA	IA	D	D	D	D	D	D	D	D	D	D
D002	ND	D	D	D	D							
	ND	D	D	D	D							
D003	ND											
D004	ND											
D005	ND											
D006	ND											
D007	ND											
D008	ND											
D009	IA	IA	IA	ND								
D010	IA	IA	IA	ND								
D011	IA	IA	IA	ND								
D012	IA	IA	IA	ND								
D013	IA	IA	IA	ND								

D=DISCHARGE

ND=NO DISCHARGE

IA=INACCESSIBLE

**MINE WATER DISCHARGE REPORT**

**STATION D001**

1995

Parameters	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.	Min.	Max.
Date	IA	IA	03-09	04-11	05-10	06-13	07-13	08-08	09-13	10-20	11-13	12-11			
	IA	IA	03-31	04-25	05-24	06-29	07-26	08-22	09-27	10-30	11-29	12-28			
Time			8:25	10:50	13:50	14:10	8:55	12:10	11:58	8:40	14:25	12:20			
			13:50	8:25	10:40	12:25	9:50	8:55	9:20	12:25	11:20	12:10			
Flow Rate (gpm)			1010	930	969	969	969	889	346	435	400	150			
			1010	1010	1135	889	848	171	435	215	150	171	655	150	1135
PH			6.9	6.80	6.90	6.80	6.65	6.75	6.70	8.20	6.50	6.85			
			6.9	6.90	6.90	6.70	6.75	6.90	6.60	6.70	6.95	6.70	6.85	6.5	8.2
Conductivity (umhos/cm)			1244	1275	1142	1098	1216	1233	1230	1329	1106	1095			
			1276	1240	1097	1024	1227	1196	1116	1145	1096	1120	1175	1024	1329
Oil&Grease (mg/l)			NT												
			<5	NT	NT	<5	NT	NT	NT	NT	NT	NT			
T.D.S. (mg/l)			1190	1200	1150	1120	1060	1120	980	960	990	960			
			1200	1170	1150	1010	1020	1000	1000	920	940	970	1056	920	1200
T.S.S. (mg/l)			<5	<5	10.0	<5	<5	<5	<5	<5	<5	<5			
			<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<6	<5	10
Total Iron (mg/l)			<.1	<.1	0.3	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
			0.1	<.1	<.1	<.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<.1	<.1	0.3

IA = Inaccessible  
 NT = Not Tested

STATION D002

1995

Parameters	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.	Min.	Max.
Date	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	09-13	10-20	11-13	12-11			
	Dry	Dry	Dry	Dry	Dry	Dry	Dry	08-22	09-26	10-30	11-29	12-28			
Time									11:38	8:10	13:50	12:20			
								8:35	13:40	12:03	11:00	11:50			
Flow Rate (gpm)									320	265	300	450			
								758	494	633	300	404	436	265	758
PH									6.90	7.90	7.10	7.10			
								6.90	6.60	7.50	7.20	6.70	7.10	6.6	7.9
Conductivity (umhos/cm)									1130	1338	1110	1080			
								1199	1126	1141	1109	1114	1150	1080	1338
Oil&Grease (mg/l)									NT	NT	NT	NT			
								NT	NT	NT	NT	NT			
T.D.S. (mg/l)									1010	940	980	950.0			
								980	980	940	950	950	964	940	1010
T.S.S. (mg/l)									<5	<5	<5	<5			
								<5	<5	<5	<5	5	<5	<5	5
Total Iron (mg/l)									<0.1	<0.1	<0.1	<0.1			
								<0.1	<0.1	<0.1	<0.1	<0.1	<.1	<.1	0.1

IA = Inaccessible  
 NT = Not Tested

**STREAM MONITORING**

**UNITED STATES FUEL COMPANY  
Hiawatha, Utah**

QUARTERLY STREAM MONITORING REPORT

2nd Quarter 1995

		ST-1	ST-2	ST-2B	ST-3A	ST-3B	ST-3
Sample Date		5/5/94	5/5/94	5/5/94	5/5/94	5/5/94	5/5/94
Sample Time		1214	1133	1155	0943	950	1241
Sampled By		GRAY	GRAY	GRAY	GRAY	GRAY	GRAY
Flow Rate	gpm	103	171	377	DRY	5	31
Air Temperature	deg. F	66	69	66		68	72
Water Temperature	deg. F	50	45	47		47	55
pH	units	7.80	8.10	8.30		8.10	7.80
Conductivity	umhos/cm	2240	650	1172		4590	3460
Dissolved Oxygen	ppm	6.3	6.8	6.8		5.6	5.9
Total Dissolved Solids	mg/l	1990	400	750		2880	2120
Total Settleable Solids	mg/l	<.5	<.5	<.5		<.5	<.5
Total Suspended Solids	mg/l	4	10	4		5	4
Total Hardness (CaCo3)	mg/l	1489	335	632		482	1244
Acidity	mg/l	<10	<10	<10		<10	<10
Aluminum (Al)	mg/l						
Arsenic (As)	mg/l						
Barium (Ba)	mg/l						
Bicarbonate (HCO3)	mg/l	390	313	384		482	464
Boron (B)	mg/l						
Carbonate (CO3)	mg/l	<1	<1	<1		<1	<1
Cation-Anion Balance	%	1.1	6.7	0.4		8.5	0.8
Cadmium (Cd)	mg/l						
Calcium (Ca)	mg/l	232	73	113		309	203
Chloride (Cl-1)	mg/l	17	5	7		790	639
Chromium (Cr)	mg/l						
Copper (Cu)	mg/l						
Fluoride (Fl)	mg/l						
Iron (Fe) Dissolved	mg/l	<.2	<.2	<.2		<.2	<.2
Lead (Pb)	mg/l						
Sulfate (SO4-2)	mg/l	1100	120	300		600	500
Sulfide (SO2-1)	mg/l						
Magnesium (Mg)	mg/l	221	37	85		146	179
Manganese (Mn)	mg/l	<.1	<.1	<.1		0.1	<.1
Mercury (Hg)	mg/l						
Molybdenum (Mo)	mg/l						
Nickel (Ni)	mg/l						
Nitrogen: Ammonia (NH3)	mg/l						
Nitrate (NO3-1)	mg/l						
Nitrite (NO2)	mg/l						
Oil and Grease	mg/l	<5	<5	<5		<5	<5
Potassium (K)	mg/l	14.00	<2	4.00		9.00	8.00
Phosphate Total (PO4-3)	mg/l						
Selenium (Se)	mg/l						
Sodium (Na)	mg/l	17	4	8		544	272
Zinc (Zn)	mg/l						

I/A = Inaccessible

QUARTERLY STREAM MONITORING REPORT

2nd Quarter 1995

		ST-4A	ST-4B	ST-4	ST-5
Sample Date		5/5/94	5/5/94	5/5/94	5/5/94
Sample Time		0902	0922	1325	1338
Sampled By		GRAY	GRAY	GRAY	GRAY
Flow Rate	gpm	DRY	DRY	DRY	498
Air Temperature	deg. F				75
Water Temperature	deg. F				56
PH	units				7.30
Conductivity	umhos/cm				1585
Dissolved Oxygen	ppm				7.0
Total Dissolved Solids	mg/l				1170
Total Settleable Solids	mg/l				<.5
Total Suspended Solids	mg/l				15
Total Hardness (CaCo3)	mg/l				879
Acidity	mg/l				<10
Aluminum (Al)	mg/l				
Arsenic (As)	mg/l				
Barium (Ba)	mg/l				
Bicarbonate (HCO3)	mg/l				345
Boron (B)	mg/l				
Carbonate (CO3)	mg/l				<1
Cation-Anion Balance	%				1.7
Cadmium (Cd)	mg/l				
Calcium (Ca)	mg/l				141
Chloride (Cl-1)	mg/l				43
Chromium (Cr)	mg/l				
Copper (Cu)	mg/l				
Fluoride (Fl)	mg/l				
Iron (Fe) Dissolved	mg/l				<.2
Lead (Pb)	mg/l				
Sulfate (SO4-2)	mg/l				600
Sulfide (SO2-1)	mg/l				
Magnesium (Mg)	mg/l				128
Manganese (Mn)	mg/l				<.1
Mercury (Hg)	mg/l				
Molybdenum (Mo)	mg/l				
Nickel (Ni)	mg/l				
Nitrogen: Ammonia (NH3)	mg/l				
Nitrate (NO3-1)	mg/l				
Nitrite (NO2)	mg/l				
Oil and Grease	mg/l				<5
Potassium (K)	mg/l				6.00
Phosphate Total (PO4-3)	mg/l				
Selenium (Se)	mg/l				
Sodium (Na)	mg/l				26
Zinc (Zn)	mg/l				

I/A = Inaccessible

QUARTERLY STREAM MONITORING REPORT

3rd Quarter 1995

		ST-1	ST-2	ST-2B	ST-3A	ST-3B	ST-3
Sample Date		9/26/95	9/26/95	9/26/95	9/26/95	9/26/95	9/26/95
Sample Time		1125	1100	1115	1255	1245	1205
Sampled By		GRAY	GRAY	GRAY	GRAY	GRAY	GRAY
Flow Rate	gpm	62	74	162	DRY	DRY	41
Air Temperature	deg. F	58	52	58			59
Water Temperature	deg. F	47	45	45			47
pH	units	8.10	8.00	8.25			8.20
Conductivity	umhos/cm	1762	798	1195			3020
Dissolved Oxygen	ppm	7.7	6.8	8.4			7.2
Total Dissolved Solids	mg/l	1000	210	1200			950
Total Settleable Solids	mg/l	<.5	<.5	<.5			<.5
Total Suspended Solids	mg/l	65	10	40			85
Total Hardness (CaCo3)	mg/l	1409	507	893			1379
Acidity	mg/l	60	30	50			50
Aluminum (Al)	mg/l						
Arsenic (As)	mg/l						
Barium (Ba)	mg/l						
Bicarbonate (HCO3)	mg/l	363	349	367			376
Boron (B)	mg/l						
Carbonate (CO3)	mg/l	13	12	7			10
Cation-Anion Balance	%	0.7	-1.5	-2			2.4
Cadmium (Cd)	mg/l						
Calcium (Ca)	mg/l	218	109	150			239
Chloride (Cl-1)	mg/l	29	6	10			800
Chromium (Cr)	mg/l						
Copper (Cu)	mg/l						
Fluoride (Fl)	mg/l						
Iron (Fe) Dissolved	mg/l	<.1	0.03	<.1			<.1
Lead (Pb)	mg/l						
Sulfate (SO4-2)	mg/l	1040	214	598			559
Sulfide (SO2-1)	mg/l						
Magnesium (Mg)	mg/l	210	57	126			190
Manganese (Mn)	mg/l	<.1	<.1	<.1			6.2
Mercury (Hg)	mg/l						
Molybdenum (Mo)	mg/l						
Nickel (Ni)	mg/l						
Nitrogen: Ammonia (NH3)	mg/l						
Nitrate (NO3-1)	mg/l						
Nitrite (NO2)	mg/l						
Oil and Grease	mg/l	<5	<5	<5			<5
Potassium (K)	mg/l	15.00	2.00	4.00			9.00
Phosphate Total (PO4-3)	mg/l						
Selenium (Se)	mg/l						
Sodium (Na)	mg/l	19	7	9			349
Zinc (Zn)	mg/l						

I/A = Inaccessible

QUARTERLY STREAM MONITORING REPORT

3rd Quarter 1995

		ST-4A	ST-4B	ST-4	ST-5
Sample Date		9/26/95	9/26/95	9/26/95	9/26/95
Sample Time		1305	1310	1315	1325
Sampled By		GRAY	GRAY	GRAY	GRAY
Flow Rate	gpm	DRY	DRY	41	664
Air Temperature	deg. F			62	62
Water Temperature	deg. F			50	56
PH	units			8.30	8.30
Conductivity	umhos/cm			1482	1235
Dissolved Oxygen	ppm			6.5	9.1
Total Dissolved Solids	mg/l			290	570
Total Settleable Solids	mg/l			<0.5	<.5
Total Suspended Solids	mg/l			<5	185
Total Hardness (CaCo3)	mg/l			926	850
Acidity	mg/l			50	60
Aluminum (Al)	mg/l				
Arsenic (As)	mg/l				
Barium (Ba)	mg/l				
Bicarbonate (HCO3)	mg/l			295	330
Boron (B)	mg/l				
Carbonate (CO3)	mg/l			10	5
Cation-Anion Balance	%			1.8	0.8
Cadmium (Cd)	mg/l				
Calcium (Ca)	mg/l			140	177
Chloride (Cl-1)	mg/l			220	31
Chromium (Cr)	mg/l				
Copper (Cu)	mg/l				
Fluoride (Fl)	mg/l				
Iron (Fe) Dissolved	mg/l			<.1	<.1
Lead (Pb)	mg/l				
Sulfate (SO4-2)	mg/l			439	532
Sulfide (SO2-1)	mg/l				
Magnesium (Mg)	mg/l			140	99
Manganese (Mn)	mg/l			<.1	<.1
Mercury (Hg)	mg/l				
Molybdenum (Mo)	mg/l				
Nickel (Ni)	mg/l				
Nitrogen: Ammonia (NH3)	mg/l				
Nitrate (NO3-1)	mg/l				
Nitrite (NO2)	mg/l				
Oil and Grease	mg/l			<5	<5
Potassium (K)	mg/l			5.00	5.00
Phosphate Total (PO4-3)	mg/l				
Selenium (Se)	mg/l				
Sodium (Na)	mg/l			63	19
Zinc (Zn)	mg/l				

I/A = Inaccessible

STREAM MONITORING STATIONS											
MONTHLY FIELD & FLOW MEASUREMENTS											
QUARTERLY REPORT FOR 2nd QUARTER 1995											
STATION		ST-1	ST-2	ST-2B	ST-3A	ST-3B	ST-3	ST-4A	ST-4B	ST-4	ST-5
DATE		4/25/95	4/25/95	4/25/95	4/25/95	4/25/95	4/25/95	4/25/95	4/25/95	4/25/95	4/25/95
TIME											
SAMPLED BY		GRAY									
FLOW	gpm	I/A	736								
AIR TEMP	deg.F										45
H2O TEMP	deg.F										47
pH	std units										8.3
CONDCTY	umhos/cm										1490
DISS. O2	ppm										7.8
STATION		ST-1	ST-2	ST-2B	ST-3A	ST-3B	ST-3	ST-4A	ST-4B	ST-4	ST-5
DATE		5/4/95	5/10/95	5/4/95	5/4/95	5/4/95	5/4/95	5/4/95	5/4/95	5/4/95	5/4/95
TIME		14:20	9:55	13:55	15:25	15:15	12:41	15:45	15:50	16:05	12:50
SAMPLER		GRAY									
FLOW	gpm	269	242	444	DRY	17	72	DRY	DRY	DRY	929
AIR TEMP	deg.F	52	47	52		59	59				59
H2O TEMP	deg.F	45	39	46		46	53				49
pH	std units	7.7	8	8.25		7.7	8.3				8.35
CONDCTY	umhos/cm	1783	640	1003		2990	2840				1479
DISS. O2	ppm	8.2	7.8	7.9		5.2	7.5				8.7
STATION		ST-1	ST-2	ST-2B	ST-3A	ST-3B	ST-3	ST-4A	ST-4B	ST-4	ST-5
DATE		6/16/95	6/16/95	6/16/95	6/16/95	6/16/95	6/16/95	6/16/95	6/16/95	6/16/95	6/16/95
TIME		13:30	13:45	13:20	14:20	14:35	13:05	14:55	15:15	12:45	12:28
SAMPLER		GRAY									
FLOW	gpm	619	2018	1772	130	155	1200	200	470	1032	4021
AIR TEMP	deg.F	59	61	59	56	58	64	60	60	66	68
H2O TEMP	deg.F	45	45	45	44	51	51	44	45	48	47
pH	std units	8.1	8.2	8.3	8.3	8	8.4	8.2	8.25	8.4	8.3
CONDCTY	umhos/cm	705	368	432	377	1125	1343	404	469	567	601
DISS. O2	ppm	7.4	7.2	7.9	7.3	8.8	7.5	13	8.5	7	6.7

STREAM MONITORING STATIONS											
MONTHLY FIELD & FLOW MEASUREMENTS											
QUARTERLY REPORT FOR 3rd QUARTER 1995											
STATION		ST-1	ST-2	ST-2B	ST-3A	ST-3B	ST-3	ST-4A	ST-4B	ST-4	ST-5
DATE		7/7/95	7/7/95	7/7/95	7/7/95	7/7/95	7/7/95	7/7/95	7/7/95	7/7/95	7/7/95
TIME		9:50	10:00	10:15	10:55	11:15	9:30	11:35	11:45	9:15	8:55
SAMPLED BY		GRAY									
FLOW	gpm	130	758	1091	60	90	117	101	108	251	1351
AIR TEMP	deg.F	66	66	72	73	74	74	76	76	75	74
H2O TEMP	deg.F	54	49	49	54	58	54	53	54	51	51
pH	std units	8.0	8.3	8.15	8.15	8.05	8.3	8.4	8.35	8.35	8.2
CONDCTY	umhos/cm	1547	596	436	400	1750	2330	456	560	940	907
DISS. O2	ppm	7.3	7.7	7.8	7.0	7.6	6.8	7.0	6.9	6.8	7.5
STATION		ST-1	ST-2	ST-2B	ST-3A	ST-3B	ST-3	ST-4A	ST-4B	ST-4	ST-5
DATE		8/18/95	8/18/95	8/18/95	8/18/95	8/18/95	8/18/95	8/18/95	8/18/95	8/18/95	8/18/95
TIME		10:15	10:30	10:20	11:25	11:15	9:55	11:45	11:55	9:45	9:35
SAMPLER		GRAY									
FLOW	gpm	72	118	229	DRY	5	52	15	18	72	969
AIR TEMP	deg.F	67	67	67		70	69	66	67	65	65
H2O TEMP	deg.F	55	53	51		60	55	56.5	57	55	56
pH	std units	8.1	8.2	8.2		7.9	8.1	8.3	8.3	8.2	8.1
CONDCTY	umhos/cm	1877	678	1059		3950	3120	613	688	1543	1278
DISS. O2	ppm	6.6	7.2	7.5		5.9	6.4	6.6	6.5	12.1	6.8
STATION		ST-1	ST-2	ST-2B	ST-3A	ST-3B	ST-3	ST-4A	ST-4B	ST-4	ST-5
DATE		9/26/95	9/26/95	9/26/95	9/26/95	9/26/95	9/26/95	9/26/95	9/26/95	9/26/95	9/26/95
TIME		11:25	11:00	11:15	12:55	12:45	12:05	13:05	13:10	13:15	13:25
SAMPLER		GRAY									
FLOW	gpm	62	74	162	DRY	DRY	41	DRY	DRY	41	664
AIR TEMP	deg.F	58	52	58			59			62	62
H2O TEMP	deg.F	47	45	45			47			50	56
pH	std units	8.1	8.0	8.25			8.2			8.3	8.3
CONDCTY	umhos/cm	1762	798	1195			3020			1482	1235
DISS. O2	ppm	7.7	6.8	8.4			7.2			6.5	9.1



**SPRING MONITORING**



**HIAWATHA NO. 2 MINE**  
**UNDERGROUND RESERVOIR**

The underground reservoir in the Hiawatha No. 2 Mine was not in service in 1995. No bulkhead inspections or photographs were made.

**CLIMATOLOGICAL DATA**

**UNITED STATES FUEL COMPANY  
Hiawatha, Utah**

## CLIMATOLOGICAL DATA

The automated weather station located in the lower yard at Hiawatha is operating and is used for the Upper Colorado River Project for flood control. The data for 1995 is not available to the public. Discussions are being conducted with the goal of providing this information to the mine for 1996.

**SUBSIDENCE MONITORING REPORT**

**UNITED STATES FUEL COMPANY  
Hiawatha, Utah**

Subsidence monitoring is accomplished through aerial photography. The aerial survey was made on October 20, 1995. The surface survey was done in the same time period. The results of the survey were delivered to U.S. Fuel in early December 1995.

A review of the data shows the following:

1. The maximum subsidence was 4.56 feet; the average was 0.99 feet and the median was 0.50 feet.
2. 60% of the points showed subsidence
3. 17% of the points showed uplifting
4. 23% of the points were unchanged or unclear
5. The maximum uplift was 1.61 feet; the average 0.41 feet and the median 0.20 feet.

Olympus Aerial Surveys, Inc.  
 Subsidence Study Report  
 using elevation readings from photography dated  
 October 20, 1995 versus those of September 28, 1988  
 FOR  
 U. S. FUEL Co.

1995 HIAWATHA SUBSIDENCE STUDY

USING SEPT 1993 RE-SURVEYED CONTROL  
 WITH 1995 REVISED ELEVATIONS:

POINT	EASTING	NORTHING	1988 ELEVATION	1995 DIFFERENCE	POINT
331	-19057.04	9390.63	9480.81	+0.01	331
332	-18770.99	9358.94	9450.32	-0.51	332
333	-18429.55	9256.83	9293.85	+0.09	333
334	-17992.74	9296.12	9004.63	-0.03	334
335	-17505.63	9482.54	9272.66	+1.61	335
336	-17290.22	8829.29	8940.62	+0.14	336
349	-19032.93	8822.29	9267.53	-0.08	349
350	-18890.63	8447.55	9009.19	+0.23	350
351	-19344.28	8372.53	9011.03	+0.44	351
352	-19439.16	7927.91	9252.92	-0.02	352
353	-18801.99	7864.43	8831.27	-0.02	353
354	-18818.43	7465.64	8863.47	-0.35	354
355	-19385.66	7463.43	9253.96	+0.02	355
356	-19380.47	7271.07	9182.23	-0.48	356
369	-20166.08	9321.90	9568.12	+0.01	369
370	-19829.94	9318.36	9647.95	-0.48	370
371	-21680.93	9106.98	9826.20	-0.47	371
372	-21298.94	9057.08	9817.95	-0.08	372
373	-20819.75	8986.88	9753.99	-0.02	373
374	-20367.54	9121.52	9580.42	-0.08	374
375	-20036.82	8969.18	9459.61	+0.06	375
376	-19815.99	8907.58	9469.49	-1.11	376
377	-19490.49	9064.17	9436.42	+0.19	377
378	-21666.05	8764.28	9801.68	+0.18	378
379	-21356.45	8757.05	9813.42	+0.36	379
380	-20916.70	8591.22	9783.38	+0.41	380
381	-20318.90	8603.66	9604.82	-0.80	381
382	-20069.16	8380.79	9531.26	-0.28	382
383	-19859.97	8756.37	9383.86	+0.21	383
384	-19459.87	8502.21	9136.19	-4.56	384
385	-21704.69	8452.24	9791.02	+0.15	385
386	-21286.26	8301.75	9845.03	-0.26	386
387	-20935.16	8329.74	9807.50	0.0	387
388	-20678.22	8266.42	9743.60	-0.13	388
389	-20436.99	8163.26	9686.01	-0.08	389
390	-20045.44	8071.42	9563.40	0.0	390
391	-19591.36	7908.10	9329.55	-1.99	391
392	-20940.17	8042.87	9830.37	+0.02	392
393	-20514.77	7860.31	9765.70	+0.03	393
394	-20298.03	7698.64	9712.00	+0.03	394
395	-19343.99	7458.34	9226.76	-0.68	395
396				[off photos]	396
397				[off photos]	397
398				[off photos]	398

399	-18623.10	8438.53	8962.70	+0.24	399
400	-18300.56	8438.86	8935.10	-0.01	400
401	-18085.67	8396.12	8872.62	-0.34	401
402	-17712.05	8476.90	8659.57	-0.34	402
403	-17465.94	8461.25	8713.42	-0.45	403
404	-17162.72	8423.47	8801.87	+0.13	404

**VEGETATION MONITORING**

**UNITED STATES FUEL COMPANY  
Hiawatha, Utah**

## VEGETATION MONITORING

The vegetation reference areas and test plots were inspected by company personnel in 1995 as to their general conditions. No significant changes were visible or apparent. The test plots appeared in excellent condition.

The disturbed area at the North Fork Portal Area was seeded in the fall of 1994, and the growth of the vegetation in June was very good.

**ANNUAL IMPOUNDMENT CERTIFICATION**

**UNITED STATES FUEL COMPANY**

**Annual Impoundment Report**

**1995**

# United States Fuel Company 1995 Slurry Impoundment Report

## Slurry Impoundment #1 (1211-UT-09-00098-01)

Slurry Pond #1 remained inactive in 1995. No slurry was added (the preparation plant has been scrapped) and no coal fines were removed. No fires occurred. No signs of embankment instability were observed.

## Slurry Impoundment #4 and Refuse Pile #2 (1211-UT-09-00098-02 & 1211-UT-09-00098-04)

Slurry Pond #4 and Refuse Pile #2 have been totally regraded and topsoil has been placed on approximately 40% of the surface area. No fires occurred. No signs of embankment instability were observed.

## Slurry Impoundment #5 (1211-UT-09-00098-03)

### Main Cell

Approximately 56,378 tons of coal fines were recovered from the main cell of Pond #5 during 1995. The regrading of this cell is approximately 90% complete with surface elevations of roughly 7065 feet. The out slopes have been benched but not rough graded.

### North Cell

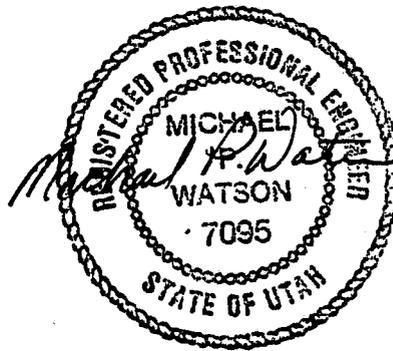
No slurry was added or removed from this cell in 1995. The approximate elevations of the embankment and coal fines are 7068 and 7055 respectively. No fires occurred. No signs of embankment instability were observed.

## Refuse Pile #1 (1211-UT-09-00098-04)

Refuse Pile #1 remains inactive. No fires occurred. No signs of embankment instability were observed.

## Certification

To the best of my knowledge, the foregoing report regarding the impoundments and refuse piles at United States Fuel Company is an accurate representation of both the work performed during 1995 and the current status of the ponds.



UNITED STATES FUEL COMPANY

Hiawatha Mines ACT #007/001

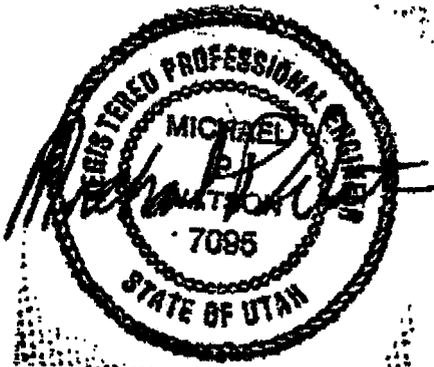
Quarterly Sediment Pond Inspection Sheet

Inspector's Name K. C. Jones  
 Sediment Pond Name see below  
 and Location see below

Date 12-7-95  
 Date Last Inspected 9-6-95

Observations Made

- |  |             |
|--|-------------|
| 1) Seepage (specify location, color and approximate volume):                           | <u>none</u> |
| - at isolated spots on embankment slopes   | <u>none</u> |
| - at natural hillside  | <u>none</u> |
| - over sidespread areas  | <u>none</u> |
| 2) Cracks or scarps on crest   | <u>no</u>   |
| 3) Cracks or scarps on slope   | <u>no</u>   |
| 4) Sloughing or bulging on slope   | <u>no</u>   |
| 5) Major erosional problems:   |             |
| - spillway   | <u>no</u>   |
| - embankments  | <u>no</u>   |
| - diversion ditches  | <u>no</u>   |
| 6) Existing embankment freeboard:  |             |
| Water _____ Increase _____ Decrease <input checked="" type="checkbox"/> No Water _____ |             |
| 7) Visible sumps or sinkholes  | <u>no</u>   |
| 8) Clogging:   |             |
| - spillway channels and pipes  | <u>no</u>   |
| - decant system  | <u>no</u>   |
| - diversion ditches  | <u>no</u>   |
| 9) Cracking or crushing of pipes:  |             |
| - spillway pipes   | <u>no</u>   |
| - decant system  | <u>no</u>   |



Note additional comments below:

Pond No	Comments	Location
D003	cleaned & recertified (wet)	Upper Railroad #1
D004	cleaned & recertified (wet)	North Slurry pond #1
D005	wet & clean	East slurry pond #14
D006	wet & clean	NE slurry pond #5
D007	wet & clean	S.E. slurry pond #5
D008	wet & clean	M.E. Mine yard
D009	Snow 4"	S.F. Mine yard
D0011	ICE & snow appears 1'	SF truck load out
See Catch Basins on Reverse Side		

Rain & Snow last two days

Catch Basin

Comments

#1 OK

Wet

#2 OK

wet

#3 OK

wet

#4 OK

Wet

#5 OK

wet

#6 OK

wet



**OVERBURDEN, REFUSE AND SOIL DATA**

**UNITED STATES FUEL COMPANY  
Hiawatha, Utah**

### **SOIL and OVERBURDEN ANALYSES**

No soil or overburden samples were taken for analyses during the year 1995.

**OWNERSHIP AND CONTROL INFORMATION**

**UNITED STATES FUEL COMPANY  
Hiawatha, Utah**

Ownership and control information was updated early in the year 1995. A copy of the portion of the permit containing this updated information is included.

**R645-301-100 GENERAL CONTENTS**

**R645-301-112 IDENTIFICATION OF INTERESTS**

**112.100 A STATEMENT AS TO WHETHER THE APPLICANT IS A CORPORATION, PARTNERSHIP, SINGLE PROPRIETORSHIP, ASSOCIATION, OR OTHER BUSINESS ENTITY:**

United States Fuel Company is a corporation and is incorporated in the state of Nevada.

**112.200 NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF THE APPLICANT, THE OPERATOR (IF DIFFERENT FROM THE APPLICANT) AND THE APPLICANT'S RESIDENT AGENT WHO WILL ACCEPT SERVICE OF PROCESS:**

**Applicant:** United States Fuel Company  
P.O. Box 887 Price, Utah 84501  
(801)-637-2252

**Resident Agent:** Michael P. Watson, President/Director  
P.O. Box 887, Price, Utah 84501  
(801)-637-2252

**112.300 FOR APPLICANTS OTHER THAN SINGLE PROPRIETORSHIPS:**

**112.310 NAME AND ADDRESS OF EACH OFFICER, PARTNER, PRINCIPAL, PRINCIPAL SHAREHOLDER, AND DIRECTOR OR OTHER PERSON PERFORMING A FUNCTION SIMILAR TO A DIRECTOR:**

United States Fuel Company is a wholly owned subsidiary of Arava Natural Resources Company Inc. Arava Natural Resources is a wholly owned subsidiary of Muller Industries Inc.

**Officers authorized to act on behalf of United States Fuel Company are:**

Michael P. Watson, President/Director (12/17/93)  
Richard W. Corman, Vice President Finance and  
Treasurer/Director (8/31/93)  
Dean Davis, Secretary/Director (12/17/93)  
Gary L. Barker, Director (1/3/94)  
**James E. Browne, Ass't Secretary (12/31/94)**

**Corporate Office Address:** United States Fuel Company  
P.O. Box 887  
Price, Utah 84501

**Officers authorized to act on behalf of Arava Natural Resources Company:**

Harvey L. Karp, Chairman  
Gary L. Barker, President/Director  
William H. Hensley, Vice-President/Director  
Martin Tos, Treasurer  
**Michael P. Watson, Vice-President**  
Kent A. McKee, Assistant Secretary

**Corporate Office Address:** Arava Natural Resources Co.  
Administrative Office  
P.O. Box 887  
Price, Utah 84501

**Officers authorized to act on behalf of Muller Industries Incorporated:**

Harvey L. Karp, Chairman of the Board  
William D. O'Hagan, President and CEO  
Earl W. Bunkers, Executive Vice President and CFO  
William H. Hensley, Vice President, General Counsel and Secretary  
Roy C. Harris, Corporate Controller  
Kent A. McKee, Treasurer and Assistant Secretary

**Corporate Office Address:** Muller Industries Incorporated  
555 North Woodlawn  
Wichita, Kansas 67208

**112.320 ALL NAMES UNDER WHICH THE APPLICANT, PARTNER, OR PRINCIPAL SHAREHOLDER OPERATES OR PREVIOUSLY OPERATED A COAL MINE AND RECLAMATION OPERATION IN THE UNITED STATES WITHIN THE 5 YEARS PRECEDING THE DATE OF APPLICATION:**

United States Fuel Company and Carpentertown Coal and Coke Company.

**112.400 PENDING, CURRENT AND PREVIOUS COAL MINING AND RECLAMATION OPERATION PERMIT APPLICATIONS:**

U.S. Fuel Company and Carpentertown Coal and Coke both held coal mining permits subsequent to 1970. Listed on Table I-1 are permits presently or previously held by Carpentertown Coal and Coke. U.S. Fuel Company's mining permits have been listed in Table I-2.

**112.500** Surface and subsurface ownership can be referenced on Exhibits IV-1 and IV-2. Appendix I-1 lists the ownership of surface coal and mineral rights in the permit area. The area is broken into five categories based on ownership and lease status. Refer to the legend and summary on page 8 of Appendix I-1 for acreages involved.