0013

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

September 12, 1983

Mr. Steven R. McNeal
Public Health Engineer
Bureau of Water Pollution Control
150 West North Temple
Salt Lake City, Utah 84101

RE: Beaver Creek Coal Company
C V Spur Water Analysis
ACT/007/022, Folder No. 7
Carbon County, Utah

Dear Mr. McNeal;

In response to your letter of August 11, 1983, please find enclosed the results from two water samples taken from the Beaver Creek Coal Company, C V Spur Coal Preparation Plant drainage control system.

On July 29, 1983 a sample was obtained of effluent discharging from the No. 6 pond. Cresols were present in the water being discharged. In addition, total suspended solids limits were exceeded. Violation N83-6-7-1 was issued by our inspector Bart Kale on July 29, 1983 for this discharge.

The second sample, taken on August 11, 1983, indicates phenols are present in the sediment pond system.

After reviewing the results of the samples please advise me of how to proceed. Thank you for your cooperation in this matter.

Sincerely

John J. Whitehead

JOHN J. WHITEHEAD
RECLAMATION HYDROLOGIST

JJW/jvb

cc: Bart Kale, DOGM

Enclosures

Rev. 3/82

Field No. 1

TC [ ] TM [ ] Nut [ ]
PC [X] PM [X] BOD [ ]

Pest. [X]
Rad. [ ]
Bact. [ ]
Spec. [X]

RECEIVED

Date Rec'd.

Received By: AUG 29 1983

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. 002656 701

Storet No. [ ]

Water Syst. No. Source No. [ ]

Date Collected 830729 702 (yr. mo. dy.)

Time Collected 1550 710 (24-hour clock)

Water Rights No. 710 [ ] DIVISION OF OIL, GAS & MINING

Exact Description of sampling Point: DISCHARGE CUSPUE AND 646

Supply Owned by: BEAVER CREEK 712

Sample Type: 04 710

Sample Collected by: R. KALE 713

SEND REPORT TO: Phone 533571

Ralph Kale 715
4241 ST OFFICE BLD. 648
SLC UT 84108 717
zip code

Sample Source 716: 14
01 Spring, 02 Well, 03 Stream, 04 Lake, 06 Dist. syst., 07 Effluent, 08 Storm sewer, 14 Other, 15 Tunnel, 18 Artesian well, 19 Swimming pool

County 611: 04
01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use [ ] 708
Proposed use 14 709
1. Culinary
2. Agriculture
3. Industrial
4. Other

Cost Code 900 B 770

1 FIELD TESTS

Temperature (°C)	792	CO_2, mg/l	572
D.O., mg/l	793	Depth, m	609
Sp. Cond. µ mhos	653	Cl Resid., mg/l	753
pH	651	Flow, MGD	652
Sp. Gravity	608	Flow, GPM	604
Transparency, m	649	Flow, cfs	659

2 WASTEWATER ANALYSIS

Temperature (°C) 650 pH 782 BACT. LAB. No.

	mg/l		mg/l		
B.O.D.$_5$	794	T.O.C.	671	M.P.N. Total Coliforms/100ml	658
Tot. Sus. Solids	787 (70)	C.O.D.	777	M.P.N. Fecal Coliforms/100ml	657
NO_2+NO_3.N	602	Cyanide	775	Fecal Strep C/100ml.	656
T.K.N.	778	Phenolics	783	M.F. Total Coliforms/100ml.	654
Oil & Grease [X] < 5	780	Sulfide	672	M.F. Fecal Coliforms/100ml.	655
				Plate Count-Org./ml.	599

3 Filtered / Unfiltered

me/l	CATIONS	mg/l	ug/l (ppb)
	Ammonia as N	722	
	Arsenic		723
	Barium		724
	Boron		725
	Cadmium		727
	Calcium	728	
	Chromium		729
	Chromium, Hex. as Cr		730
	Copper		732
	Iron, dissolved		733
	Lead		734
	Magnesium	737	
	Manganese		738
	Nickel		740
	Potassium	742	
	Selenium		743
	Silver		744
	Sodium	745	
	Zinc		749
	TOTAL CATIONS		

[X] Sp. Cond. µmhos/cm. 5430 762
[X] TDS @ 180°C 4376 786

4 CHEMICAL ANALYSIS

pH, units 8.1

me/l	ANIONS	mg/l
	Bicarbonate	758
	Carbon Dioxide	759
	Carbonate	760
	Chloride	763
	CO_3 Solids	
	Fluoride	765
	Hydroxide	767
	Nitrate as N	605
	Nitrite as N	606
	Phosphorus, Ortho as P	607
	Silica, dissolved as SiO_2	750
	Sulfate	772
	TOTAL ANIONS	
	GRAND TOTAL	

Tot. Phosphorus	785
Total Alk. as $CaCO_3$	752
T. Hdns. as $CaCO_3$	754
Surfactant as MBAS	773
Turbidity, as NTU	757
Sp. Gravity	608

TOTAL METALS ANALYSIS

5

CATIONS	mg/l	ug/l (ppb)
Aluminum		800
Arsenic		660
Barium		661
Beryllium		801
Cadmium		662
Chromium		663
Cobalt		804
Copper		664
Gold		700
Iron	755	
Lead		665
[X] Manganese	55	666
Mercury		739
Molybdenum		802
[X] Nickel	10	667
Selenium		668
Silver		669
Uranium		601
Vanadium		803
Zinc		670

6 RADIOLOGICS

	pc/l-g		pc/l-g
Alpha, gross	621	^{89}Sr	633
Beta, gross	623	^{131}I	635
Tritium, ^3H	625	^{134}Cs	637
^{226}Radium	627	^{137}Cs	639
^{228}Radium	629		
^{90}Sr	631		

Analyses Approved By: KZH Date: 830818

INTERPRETATION OF ANALYSES:
Remarks:

Based on State Standards, this sample was:

	Satisfactory	Conditional	Unsatisfactory
B.O.D.$_5$			
Tot. Sus. Solids			
M.P.N. Total Coliform.			
M.P.N. Fecal Coliform.			

By ENVIRONMENTAL HEALTH

v. 7/80

Date Recd.: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH

ORGANIC RESIDUE ANALYSES

Sample No. 701

ld No. _____ Received By: _____

Storet No. _____ 702

Water Syst. No. Source No. _____ 703 704

Date Collected 8 3 0 7 2 9 (yr. mo. dy.) 714

Time Collected 1 5 5 0 (24-hour clock) 430

Water Rights No. _____ 707

Exact Description of sampling Point: DISCHARGE FROM SPUR HG SEDIMENT POND 646

Supply Owned by _____ 712

Sample Type 04 710

Sample Collected by _____ 713

SEND REPORT TO: _____ 715

Phone _____ 648

zip code _____ 717

Sample Source 719: 01 Spring, 02 Well, 03 Stream, 04 Lake, 06 Dist. syst., 07 Effluent, 08 Storm sewer, 14 Other, 15 Tunnel, 18 Artesian well, 19 Swimming pool

County 611: 01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use — 702

Proposed use — 709

1. Culinary
2. Agriculture
3. Industrial
4. Other 900B

INTERPRETATION OF ANALYSES:

Remarks:

Based on State Standards, this sample was: Satisfactory / Conditional / Unsatisfactory

By _____ ENVIRONMENTAL HEALTH

CHLORINATED HYDROCARBONS	ug/l(ppb)
Dichloropropane	574
Dichloropropene	575
Chlordane	516
Toxaphene	618
Endosulfan	576
Lindane	616
Dicofol	577
Methoxychlor	617
Dieldrin	643
Heptachlor	536
Heptachlor epoxide	615
Beta, BHC	520
Perchlorobenzene, HCB	735
Aldrin	699
Endrin	613
p.p. DDT	515
p.p. DDE	511
p.p. DDD	513
Mirex	580

ORGANOPHOSPHATES	ug/l(ppb)
Ethyl Parathion	510
Malathion	578
Ethyl Azinphos	512
Methyl Azinphos	534
Diazinon	514
Disulfoton	535
Methyl Parathion	517
Fonofos	518
Phosalone	519
Phosmet	520
Coumaphos	521
Fenthion	522
Phorate	523
Demeton	524
Fensulfothion	525
Dichlorvos	526
Trichlorfon	527
Methyl Oxydemeton	528
Ronnel	529
Crufomate	530
Ethion	531

10 HERBICIDES - GRP1	ug/l(ppb)
2,4-D	619
Atrazine	582
Sulfur	532
Sodium Polysulfide	583
Bromacil	584
Simazine	585
Pronamide	586
DCPA	587
EPTC	588
Dinocap	589
Dicamba	590
Diuron	591
Monuron	592
Dinoseb	593
Alachlor	594
Cycloate	595
Cyanazine	596
Nitrofen	597
Copper Sulfate	533
Trifluralin	598
2,4-DB	675
Terbutryn	676
Maleic Hydrazide	678
Dacthal	679

11 HERBICIDES - GRP2	ug/l(ppb)
2, 4, 5-T	681
Pyrazon	682
Prometon	683
Metaborate	684
Dalapon	685
2,4,5-TP	620
Chlorate-Borate	686
Aminozide	687
Captan	688
Glyphosate	689
Picloram	690
Methyl Bromide	691
Methyl Chloride	692
Amm. Methanarsonate	736
Terbacil	741
Paraquat	746
Acrolein	747
Xylene	748
Diquat	751
Amitrole	756

11 HERBCIDES - GRP2 Cont.	ug/l(ppb)
Prometryn	761
Propazine	764

12 CARBAMATES	ug/l(ppb)
Carbofuran	768
Carbaryl	769
Maneb	771
Metalkamate	776
Aldicarb	779
Propoxur	781
Bendiocarb	784
Benomyl	788

13 ORGANOHALOCARBONS	ug/l(ppb)
Chloroform	790
Bromoform	791
Bromodichloromethane	795
Dibromochloromethane	796
Bromomethane	797
Carbon Tetrachloride	798
Chloroethane	799
Chloromethane	500
Dichlorobenzene	501
Dichloroethane	502
Methylene Chloride	503
Vinyl Chloride	504
CRESOLS <	100 ppm

14 OTHER	ug/l(ppb)
PCB 1254	674
PCB 1260	581

Analyses Approved By: [illegible]

Date: 8-15-83

Rev. 3/82
Field No.

TC | TM | Nut
PC | PM | BOD

Pest. | Rad. | Bact. | Spec.

Date Rec'd.
Received By:

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. 701

Storet No. | Water Syst. No. | Source No. (703, 704)

Date Collected (702): yr. 83 mo. 08 dy. 11
Time Collected: 1400 (24-hour clock)
Water Rights No. 707

Exact Description of sampling Point: Lower end of cul de sac on Ward Road 646

Supply Owned by: Regular CK 712
Sample Type 710

Sample Collected by: BART KALE 713

SEND REPORT TO: Phone
Utah State Dept. of Health 715
Attn: Mrs. Ida Stoffel 648
Salt Lake City, UT 84111 717
zip code

Sample Source (719): 14
01 Spring, 02 Well, 03 Stream, 04 Lake, 06 Dist. syst., 07 Effluent, 08 Storm sewer, 14 Other, 15 Tunnel, 18 Artesian well, 19 Swimming pool

County (611): 07
01 Beaver, 02 Box Elder, 03 Cache, 04 Carbon, 05 Daggett, 06 Davis, 07 Duchesne, 08 Emery, 09 Garfield, 10 Grand, 11 Iron, 12 Juab, 13 Kane, 14 Millard, 15 Morgan, 16 Piute, 17 Rich, 18 Salt Lake, 19 San Juan, 20 Sanpete, 21 Sevier, 22 Summit, 23 Tooele, 24 Uintah, 25 Utah, 26 Wasatch, 27 Washington, 28 Wayne, 29 Weber

Current use: 7 708
Proposed use: 709
1. Culinary
2. Agriculture
3. Industrial
4. Other

Cost Code: 100 770 B

1 FIELD TESTS

Temperature (°C)	792	CO_2, mg/l	572
D.O., mg/l	793	Depth, m	609
Sp. Cond. µmhos	653	Cl Resid., mg/l	753
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T.K.N.	778	Phenolics (X)	783 (6.0.01)	M.F. Total Coliforms/100ml.	654
Oil & Grease	780	Sulfide	672	M.F. Fecal Coliforms/100ml.	655
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	Copper		732
	Iron, dissolved		733
	Lead		734
	Magnesium	737	
	Manganese		738
	Nickel		740
	Potassium	742	
	Selenium		743
	Silver		744
	Sodium	745	
	Zinc		749
	TOTAL CATIONS		

Sp. Cond. µmhos/cm.	762	
TDS @ 180°C	786	

4 CHEMICAL ANALYSIS

pH, units

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	Carbon Dioxide	759
	Carbonate	760
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Zinc		670

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^{226}Radium	627	^{137}Cs		639
^{228}Radium	629			
^{90}Sr	631			

Analyses Approved By: K.H. Date: 830827

INTERPRETATION OF ANALYSES:
Remarks:

Based on State Standards, this sample was:

	Satisfactory	Conditional	Unsatisfactory
B.O.D.$_5$			
Tot. Sus. Solids			
M.P.N. Total Coliform.			
M.P.N. Fecal Coliform.			

By ENVIRONMENTAL HEALTH