0026

Document Information Form

Mine Number: C/015/009

File Name: Incoming

To: DOGM

From:

Person N/A

Company TRAIL MOUNTAIN COAL MINE

Date Sent: MAY 23, 1984

Explanation:

WATER ANALYSES

cc:

File in:
C/015/009, 1984, Incoming
Refer to:
- ☐ **Confidential**
- ☐ **Shelf**
- ☐ **Expandable**

Date _____ For additional information

Rev. 7/80 Field No. 2

[ ] TC [ ] TM [ ] Nut [ ] Pest.
[2] PC [2] PM [ ] BOD [ ] Bact. [ ] Spec. [ ] Rad.

Date Recd.: _____
Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. 770184 1238 701

Storet No. 702
Water Syst. No. 703 Source No. 704
Date Collected 840413 714 (yr. mo. dy.)
Time Collected 610 (24-hour clock)
Water Rights No. 707
Exact Description of sampling Point: TRAIL MOUNTAIN COAL MINE SEDIMENT POND DISCHARGE 646
Supply Owned by 712
Sample Type 04 710
Sample Collected by: DAVID LOF 713
SEND REPORT TO: Phone 533571
DIV OIL GAS & MINING 715
4241 STATE OFFICE BLDG 648
SLC, UT 84114 717
zip code

Sample Source 719: 07
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: 08
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: 4
Proposed use 709: 4
1. Culinary
2. Agriculture
3. Industrial
4. Other 900B

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
[X] Tot. Sus. Solids	36 787	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	780	Sulfide	672	M.F. Fecal Coliforms/100ml.	655
				Plate Count-Org./ml.	599

3 Filtered / Unfiltered — CATIONS

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, Hexavalent			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			

RECEIVED
MAY 23 1984
DIVISION OF OIL GAS & MINING

4 CHEMICAL ANALYSIS

pH, units

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

	CATIONS	mg/l	ug/l (ppb)	
	Aluminum			800
	Arsenic			660
	Barium			661
	Beryllium			801
	Cadmium			662
	Chromium			663
	Cobalt			804
	Copper			664
	Gold			700
[X]	Iron	40		755
	Lead			665
[X]	Manganese		30	666
	Mercury			739
	Molybdenum			802
	Nickel			667
	Selenium			668
	Silver			669
	Uranium			601
	Vanadium			803
	Zinc			670

6

[X] Sp. Cond. µmhos/cm.	1125	762
[X] TDS @ 180°C	600	786

7 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: RZ Date: 840516

INTERP
Remarks

File in:
[ ] Confidential
[ ] Shelf
[ ] Expandable
Refer to Record No 0026 Date 5/23/84
In C/015/007, 1984, Incoming
For additional information

Satisfactory	Conditional	Unsatisfactory

By _____
ENVIRONMENTAL HEALTH

Rev. 7/80 Field No. 2

☐ TC ☐ TM ☐ Nut
☑ PC ☑ PM ☐ BOD

☐ Pest. ☐ Rad. ☐ Bact. ☐ Spec.

Date Recd.: _____
Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. 701 — 270184 1238

Storet No. 702 | Water Syst. No. 703 | Source No. 704

Date Collected 714: 840413 (yr. mo. dy.) | Time Collected 610: (24-hour clock) | Water Rights No. 707

Exact Description of sampling Point 646:
TRAIL MOUNTAIN COAL MINE
SEDIMENT POND DISCHARGE

Supply Owned by 712 | Sample Type 710: 04

Sample Collected by 713: DAVID LOF

SEND REPORT TO: Phone 533 5771
715: DIV. OIL GAS & MINING
648: 4241 STATE OFFICE BLDG
717: SLC, UT 84114 (zip code)

Sample Source 719: 07
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: 08
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: 4
Proposed use 709: 4
1. Culinary
2. Agriculture
3. Industrial
4. Other 900B

1 FIELD TESTS

Temperature (°C)	792	CO_2, mg/l	572
D.O., mg/l	793	Depth, m	609
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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
X Tot. Sus. Solids	36 787	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	780	Sulfide	672	M.F. Fecal Coliforms/100ml.	655
				Plate Count-Org./ml.	599

3 ☐ Filtered ☐ Unfiltered

4 CHEMICAL ANALYSIS — pH, units

me/l	CATIONS	mg/l	ug/l (ppb)		ANIONS	mg/l	
	Ammonia as N			722	Bicarbonate		758
	Arsenic			723	Carbon Dioxide		759
	Barium			724	Carbonate		760
	Boron			725	Chloride		763
	Cadmium			727	CO_3 Solids		
	Calcium			728	Fluoride		765
	Chromium			729	Hydroxide		767
	Chromium, Hexavalent			730	Nitrate as N		605
	Copper			732	Nitrite as N		606
	Iron, dissolved			733	Phosphorus, Ortho as P		607
	Lead			734	Silica, dissolved as SiO_2		750
	Magnesium			737	Sulfate		772
	Manganese			738			
	Nickel			740			
	Potassium			742	TOTAL ANIONS		
	Selenium			743	GRAND TOTAL		
	Silver			744			
	Sodium			745			
	Zinc			749			
	TOTAL CATIONS						

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
X	Iron		140	755
	Lead			665
X	Manganese		30	666
	Mercury			739
	Molybdenum			802
	Nickel			667
	Selenium			668
	Silver			669
	Uranium,			601
	Vanadium			803
	Zinc			670

6

X Sp. Cond. µmhos/cm.	1125	762
X TDS @ 180°C	600	786

7 RADIOLOGICS

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

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.			

Analyses Approved By: RZH Date: 840516

By _____ ENVIRONMENTAL HEALTH

RECEIVED MAY 23 1984 DIVISION OF OIL GAS & MINING

Rev. 9/80 Field No. 3

☐ TC ☐ TM ☐ Nut
☒ PC ☒ PM ☐ BOD

☐ Pest. ☐ Rad. ☐ Bact. ☐ Spec.

Date Recd.: _____
Received By: _____

UTAH STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH
WATER ANALYSES

Sample No. 701: 7 6 N 8 4 1 2 3 9

Storet No. _____ 702
Water Syst. No. Source No. _____ 703 704
Date Collected 8 4 0 4 1 3 (yr. mo. dy.) 714
Time Collected 1 1 2 0 (24-hour clock) 610
Water Rights No. _____ 707

Exact Description of sampling Point: TRAIL MOUNTAIN COAL MINE OUTLET OF COTTONWOOD CK. BYPASS CULVERT 646

Supply Owned by _____ 712
Sample Type 0 4 710

Sample Collected by: TOM WRIGHT 713

SEND REPORT TO: Phone 5 3 3 5 7 7 1
DIV. OIL GAS + MINING 715
4241 STATE OFFICE BLDG 648
SLC, UT 84114 717
zip code

Sample Source 719: 0 3
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: 0 8
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

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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		
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	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			

RECEIVED MAY 23 1984 DIVISION OF OIL GAS & MINING

4 CHEMICAL ANALYSIS

pH, units

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Cadmium			662
Chromium			663
Cobalt			804
Copper			664
Gold			700
☒ Iron	0 9		755
Lead			665
☒ Manganese		2 5	666
Mercury			739
Molybdenum			802
Nickel			667
Selenium			668
Silver			669
Uranium,			601
Vanadium			803
Zinc			670

6

☒ Sp. Cond. µmhos/cm.	7 0 0	762
☒ TDS @ 180°C	3 7 4	786

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^{228}Radium		629		
^{90}Sr		631		

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.			

Analyses Approved By: RZb Date: 840516

By _____ ENVIRONMENTAL HEALTH