

0073

Canyon Fuel Company, LLC  
Dugout Canyon Mine  
P.O. Box 1029  
Wellington, Utah 84542



July 8, 2005

Ms. Pamela Grubaugh-Littig  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

*Handwritten signature*  
C/007/0039

RE: Pace Canyon Fan Portal Topsoil and Soil Test Pit Analyses  
Dugout Canyon Mine, Canyon Fuel Company, LLC, C/007/039, Carbon County, Utah

Dear Ms. Grubaugh-Littig:

Attached please find four copies of revisions to the M&RP to add the analyses results for the topsoil piles and the test pist sampled with Priscilla Burton to Appendix 2-4 of the M&RP.

A copy of this submittal has been delivered to the Price field office.

Thank you for your assistance and if you have any questions please call me at (435) 636-2869.

Sincerely yours,

*Vicky S. Miller*

Vicky S. Miller

cc: Dave Spillman  
Pete Hess

RECEIVED

JUL 08 2005

DIV. OF OIL, GAS & MINING

# APPLICATION FOR COAL PERMIT PROCESSING

Permit Change  New Permit  Renewal  Exploration  Bond Release  Transfer

**Permittee:** Canyon Fuel Company, LLC

**Mine:** Dugout Canyon Mine

**Permit Number:** C/007/039

**Title:** Pace Canyon Fan Portal Topsoil and Soil Test Pit Analyses

**Description,** Include reason for application and timing required to implement:

**Instructions:** If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- Yes  No 1. Change in the size of the Permit Area? Acres: \_\_\_\_\_ Disturbed Area: \_\_\_\_\_  increase  decrease.
- Yes  No 2. Is the application submitted as a result of a Division Order? DO# \_\_\_\_\_
- Yes  No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- Yes  No 4. Does the application include operations in hydrologic basins other than as currently approved?
- Yes  No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes  No 6. Does the application require or include public notice publication?
- Yes  No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- Yes  No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- Yes  No 9. Is the application submitted as a result of a Violation? NOV # \_\_\_\_\_
- Yes  No 10. Is the application submitted as a result of other laws or regulations or policies?  
*Explain:* \_\_\_\_\_
- Yes  No 11. Does the application affect the surface landowner or change the post mining land use?
- Yes  No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- Yes  No 13. Does the application require or include collection and reporting of any baseline information?
- Yes  No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- Yes  No 15. Does the application require or include soil removal, storage or placement?
- Yes  No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- Yes  No 17. Does the application require or include construction, modification, or removal of surface facilities?
- Yes  No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- Yes  No 19. Does the application require or include certified designs, maps or calculation?
- Yes  No 20. Does the application require or include subsidence control or monitoring?
- Yes  No 21. Have reclamation costs for bonding been provided?
- Yes  No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- Yes  No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

**Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you.** (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

David Spillman  
Print Name

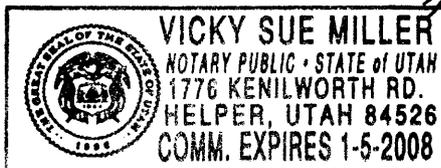
David Spillman, Engineering Manager  
Sign Name, Position, Date

Subscribed and sworn to before me this 8 day of July, 2005

Vicky Sue Miller  
Notary Public

My commission Expires: 1-5, 2008

Attest: State of UTAH } ss:  
County of CARBON



**For Office Use Only:**

Assigned Tracking Number:

Received by Oil, Gas & Mining

**RECEIVED**

**JUL 08 2005**

DIV. OF OIL, GAS & MINING



**APPENDIX 2-4**

Results of Laboratory Analyses

**APPENDIX 2-4**

Results of Laboratory Analyses

PACE TOPSOIL

InterMountain Laboratories, Inc.

Report ID: 010502656

1673 Terra Avenue  
Sheridan, WY 82801

Soil Analysis Report

Canyon Fuel Co

Dugout Mine

P.O. Box 1029

Wellington, UT 84542

REC'D JUN 21 2005

Page 1 of 3

Client Project ID: Table 6

Date Received: 06/01/05

Set #0105S02656

Report Date: 06/17/05

Lab Id	Sample Id	pH	Saturation	EC	Calcium	Magnesium	Sodium	SAR	Sand	Silt	Clay	Texture
		s.u.	%	@ 25°C dS/m	meq/L	meq/L	meq/L		%	%	%	
105S02656	North Pile	7.3	34.3	0.50	3.57	1.36	0.44	0.28	52.0	31.0	17.0	SANDY LOAM
105S02657	Upper South Pile	7.0	33.2	1.19	13.1	3.74	0.39	0.13	54.0	29.0	17.0	SANDY LOAM
105S02658	Lower South Pile	7.0	35.0	1.23	13.7	3.75	0.34	0.12	56.0	28.0	16.0	SANDY LOAM
105S02659	Portal	7.1	33.2	2.04	21.5	12.7	0.80	0.19	54.0	30.0	16.0	SANDY LOAM

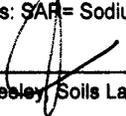
These results only apply to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H2Osol= water soluble, AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate

Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neut. Pot.= Neutralization Potential

Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed By:

  
Joey Sheeley, Soils Lab Supervisor

Report ID: 010502656

1673 Terra Avenue  
Sheridan, WY 82801

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**Canyon Fuel Co**

Dugout Mine

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REC'D JUN 21 2005

Page 2 of 3

Client Project ID: Table 6

Date Received: 06/01/05

Set #0105S02656

Report Date: 06/17/05

Lab Id	Sample Id	Coarse Fragments %	Field Capacity %	Wilt Point %	Available Sodium meq/100g	Exchangeable Sodium meq/100g	Boron ppm	Nitrogen Nitrate ppm	Selenium ppm	Phosphorus ppm	TKN %
105S02656	North Pile	31.7	18.5	10.9	0.18	42.0	0.39	1.50	<0.02	4.81	0.33
105S02657	Upper South Pile	47.1	20.0	9.5	16.9	16.9	0.31	1.26	<0.02	9.39	0.70
105S02658	Lower South Pile	43.2	21.4	9.2	11.9	11.9	0.28	1.40	<0.02	10.6	<0.01
105S02659	Portal	42.8	21.7	9.5	17.9	17.9	0.43	1.74	<0.02	13.0	0.38

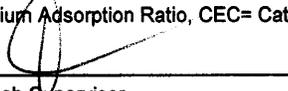
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Page 3 of 3

Client Project ID: Table 6

Date Received: 06/01/05

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Report Date: 06/17/05

Lab Id	Sample Id	TOC %	Total Sulfur %	T.S. AB t/1000t	Neutral. Pot. t/1000t	T.S. ABP t/1000t
105S02656	North Pile	2.4	<0.01	0.00	37.8	37.8
105S02657	Upper South Pile	2.3	0.05	1.56	44.8	43.3
105S02658	Lower South Pile	2.2	0.05	1.56	27.3	25.8
105S02659	Portal	3.2	0.06	1.87	48.2	46.4

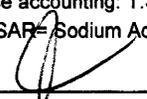
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Reviewed By:

  
Joey Sheeley, Soils Lab Supervisor

Report ID: 010501873

1673 Terra Avenue  
Sheridan, WY 82801

Soil Analysis Report

Canyon Fuel Co

Dugout Mine

P.O. Box 1029

Wellington, UT 84542

Page 1 of 1

Client Project ID: Dugout Canyon Mine

Date Received: 04/06/05

Set #0105S01873

Report Date: 04/19/05

Lab Id	Sample Id	pH s.u.	EC @ 25°C dS/m	Calcium meq/L	Magnesium meq/L	Sodium meq/L	SAR	Total Sulfur %	T.S. AB t/1000t	Neutral. Pot. t/1000t	T.S. ABP t/1000t
105S01873	Waste Oxidized	4.2	2.20	25.1	8.75	0.20	0.05	<0.01	0.00	-0.53	-0.53

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Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed By:

Joey Sheeley, Soils Lab Supervisor

Report ID: 010501875

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Sheridan, WY 82801

**Soil Analysis Report**

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Dugout Mine

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Client Project ID: Dugout Canyon Mine

Date Received: 04/06/05

Set #0105S01875

Report Date: 04/19/05

Lab Id	Sample Id	pH s.u.	Saturation %	EC	Calcium meq/L	Magnesium meq/L	Sodium meq/L	SAR	Sand %	Silt %	Clay %	Texture
				@ 25°C dS/m								
105S01875	Near Creek Waste	6.5	46.7	2.49	26.9	4.40	0.13	0.03	67.0	21.0	12.0	SANDY LOAM
105S01876	Horizon B W-1	7.6	33.0	0.26	1.56	0.61	0.09	0.09	53.0	29.0	18.0	SANDY LOAM
105S01877	Horizon B 2 W-1	7.6	32.4	0.26	1.44	0.65	0.15	0.15	43.0	37.0	20.0	LOAM
105S01878	By Well Waste	5.7	51.5	0.43	2.40	1.11	0.09	0.07	82.0	8.0	10.0	LOAMY SAND
105S01879	Horizon A W-1	7.3	38.2	0.43	2.68	0.99	0.10	0.08	49.0	34.0	17.0	LOAM
105S01880	Horizon A E-2	7.1	61.8	0.46	2.79	0.79	0.06	0.05	57.0	27.0	16.0	SANDY LOAM
105S01881	Horizon A 2 E-2	7.3	37.6	0.45	2.72	0.66	0.09	0.07	57.0	27.0	16.0	SANDY LOAM
105S01882	Horizon B E-2	7.5	30.3	0.25	1.62	0.46	0.14	0.14	53.0	31.0	16.0	SANDY LOAM
105S01883	Horizon C E-2	7.6	27.9	0.27	1.44	0.53	0.10	0.11	64.0	24.0	12.0	SANDY LOAM
105S01884	E-1	7.7	26.3	0.32	1.77	0.66	0.14	0.12	71.0	17.0	12.0	SANDY LOAM

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Reviewed By:

Joey Sheeley, Soils Lab Supervisor

Report ID: 010501875

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Client Project ID: Dugout Canyon Mine  
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Set #0105S01875  
Report Date: 04/19/05

Lab Id	Sample Id	Coarse Fragments %	Field Capacity %	Wilt Point %	Available Sodium meq/100g	Exchangeable Sodium meq/100g	Boron ppm	Nitrogen Nitrate ppm	Phosphorus ppm	Selenium ppm	TKN %
105S01875	Near Creek Waste	43.6	33.3	12.3	0.07	0.06	1.14	14.3	14.1	0.02	0.11
105S01876	Horizon B W-1	21.5	22.1	8.7	0.05	0.05	0.16	<0.02	5.82	<0.02	0.33
105S01877	Horizon B 2 W-1	4.8	22.1	9.6	0.06	0.06	0.20	0.32	1.23	<0.02	0.05
105S01878	By Well Waste	44.3	24.5	8.6	0.06	0.06	0.38	0.90	2.13	<0.02	1.47
105S01879	Horizon A W-1	15.2	27.0	9.8	0.05	0.05	0.22	1.06	3.03	<0.02	0.13
105S01880	Horizon A E-2	5.8	36.6	17.8	0.04	0.04	0.84	7.82	13.4	<0.02	0.28
105S01881	Horizon A 2 E-2	20.4	23.3	9.4	0.05	0.05	0.26	1.68	2.03	<0.02	0.12
105S01882	Horizon B E-2	16.5	19.4	8.5	0.04	0.04	0.18	0.76	0.90	<0.02	0.09
105S01883	Horizon C E-2	13.5	18.1	5.1	0.05	0.05	0.12	0.32	0.72	<0.02	0.02
105S01884	E-1	43.5	16.3	6.4	0.08	0.08	0.18	1.06	1.08	<0.02	0.03

These results only apply to the samples tested.

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Reviewed By: \_\_\_\_\_  
Joey Sheeley, Soils Lab Supervisor

**Inter-Mountain Laboratories, Inc.**

Report ID: 010501875

1673 Terra Avenue  
Sheridan, WY 82801

**Soil Analysis Report**

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Page 3 of 6

Client Project ID: Dugout Canyon Mine

Date Received: 04/06/05

Set #0105S01875

Report Date: 04/19/05

Lab Id	Sample Id	TOC %	Total Sulfur %	T.S. AB t/1000t	Neutral. Pot. t/1000t	T.S. ABP t/1000t	Sulfate- Sulfur %	Pyritic- Sulfur %	Organic- Sulfur %	PyrS AB t/1000t	PyrS ABP t/1000t
105S01875	Near Creek Waste	33.5	0.76	23.7	23.6	-0.13					
105S01876	Horizon B W-1	0.6	0.02	0.62	8.53	7.91					
105S01877	Horizon B 2 W-1	0.7	<0.01	0.00	54.2	54.2					
105S01878	By Well Waste	61.0	0.95	29.7	-0.09	-29.8	0.15	0.80	<0.01	25.0	-25.1
105S01879	Horizon A W-1	1.7	0.03	0.94	17.2	16.2					
105S01880	Horizon A E-2	5.3	0.05	1.56	35.6	34.1					
105S01881	Horizon A 2 E-2	1.6	<0.01	0.00	109	109					
105S01882	Horizon B E-2	0.7	<0.01	0.00	212	212					
105S01883	Horizon C E-2	<0.1	<0.01	0.00	222	222					
105S01884	E-1	0.5	0.01	0.31	247	246					

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Joey Sheeley, Soils Lab Supervisor

Report ID: 010501875

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Lab Id	Sample Id	pH	Saturation	EC @ 25°C	Calcium	Magnesium	Sodium	SAR	Sand	Silt	Clay	Texture
		s.u.	%	dS/m	meq/L	meq/L	meq/L		%	%	%	
105S01883	Horizon C E-2	7.6	27.9	0.27	1.44	0.53	0.10	0.11	64.0	24.0	12.0	SANDY LOAM
105S01883D	Horizon C E-2	7.6	26.4	0.25	1.35	0.51	0.12	0.13	65.0	23.0	12.0	SANDY LOAM

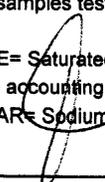
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Report Date: 04/19/05

Lab Id	Sample Id	Coarse Fragments %	Field Capacity %	Wilt Point %	Available Sodium meq/100g	Exchangeable Sodium meq/100g	Boron ppm	Nitrogen Nitrate ppm	Phosphorus ppm	Selenium ppm	TKN %
0105S01883	Horizon C E-2	13.5	18.1	5.1	0.05	0.05	0.12	0.32	0.72	<0.02	0.02
0105S01883D	Horizon C E-2		18.5	5.2	0.05	0.05	0.12	0.38	0.49	<0.02	0.01

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Lab Id	Sample Id	TOC %	Total Sulfur %	T.S. AB t/1000t	Neutral. Pot. t/1000t	T.S. ABP t/1000t	Sulfate- Sulfur %	Pyritic- Sulfur %	Organic- Sulfur %	PyrS AB t/1000t	PyrS ABP t/1000t
0105S01883	Horizon C E-2	<0.1	<0.01	0.00	222	222					
0105S01883D	Horizon C E-2	<0.1	<0.01	0.00	219	219					

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