Lila Canyon Extension

Chapter 1
Legal

Volume 1 of 7
# TABLE OF CONTENTS

100. GENERAL CONTENTS ............................................. Page -2-

110. Minimum Requirements ........................................ Page -2-

111. Intent ............................................................ Page -2-

112. Identification of Interests ..................................... Page -2-

113. Violation Information ........................................... Page -8-

114. Right-of-Entry Information .................................... Page -9-

115. Status of Unsuitability Claims ............................... Page -12-

116. Permit Term ...................................................... Page -12-

117. Insurance ........................................................ Page -13-

118. Filing Fee ......................................................... Page -13-

120. Permit Application Format and Contents ................... Page -13-

130. Reporting of Technical Data ................................ Page -14-

140. Maps and Plans ................................................ Page -14-

150. Completeness .................................................... Page -14-

## List of Appendixes

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Ownership and Control</td>
</tr>
<tr>
<td>1-2</td>
<td>Current and Previous Coal Mining Permits</td>
</tr>
<tr>
<td>1-3</td>
<td>Violation Information</td>
</tr>
<tr>
<td>1-4</td>
<td>County Correspondence</td>
</tr>
<tr>
<td>1-5</td>
<td>Certifications, Publications, &amp; Verifications</td>
</tr>
<tr>
<td>1-6</td>
<td>BLM Correspondence</td>
</tr>
<tr>
<td>1-7</td>
<td>BLM Rights-of-Way</td>
</tr>
</tbody>
</table>

## List of Plates

<table>
<thead>
<tr>
<th>Plate</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Permit Area Map (Official Permit Boundary Map)</td>
</tr>
<tr>
<td>1-2</td>
<td>Disturbed Area Map</td>
</tr>
</tbody>
</table>

**INCORPORATED**

**JAN 25 2018**

Div. of Oil, Gas & Mining
100. GENERAL CONTENTS.

110. Minimum Requirements

111. Intent

The information included within this chapter of the permit application is intended to satisfy the minimum requirements of R645-301-100. All relevant information on the ownership and control of persons who conduct coal mining and reclamation operations, the ownership and control of the property to be affected by the operation, the compliance status and history of those persons, and other important information is provided. The format for the permit application was used to facilitate expedient review and approval.

112. Identification of Interests.

112.100. The applicant, UtahAmerican Energy, Inc., is a corporation organized and existing under the laws of Utah and qualified to do business in Utah.

112.200. The name, address, telephone number, and employer identification number of the applicant, resident agent, and person who will pay the abandoned mine land reclamation fee is as follows:

112.210. The Applicant UtahAmerican Energy, Inc., will also be the operator.

UtahAmerican Energy, Inc.
P.O. Box 986
Price, Utah 84501

Employer Identification Number: 34-1874726

112.220. The resident agent of the applicant, UtahAmerican Energy, Inc., is:

Karin Odendahl-Madsen
UtahAmerican Energy, Inc.
P.O. Box 986
Price, Utah 84501
(435) 888-4000

Page -2-
112.230. The abandoned mine land reclamation fee will be paid by:

Robert E. Murray
Utah American Energy, Inc.
46226 National Road
St. Clairsville, Ohio 43950

112.300. The person's name, address and employer identification number for each person who owns or controls the applicant is listed under Appendix 1-1. In addition, Appendix 1-1 shows the person's ownership or control relationship to the applicant, percentage of ownership, and location in the organizational structure.

112.310. Persons who own or control names, address social security numbers and employer identification numbers can be found in Appendix 1-1.

112.320. Persons ownership or control relationship to the applicant can be found in Appendix 1-1.

112.330. Title of the person's position and date position was assumed can be found in Appendix 1-1.

The American Coal Company
PennAmerican L.P.
Canterbury Coal Company
Energy Resources, Inc.
Oklahoma Coal Company
Ohio Valley Coal Company
MonValley Transportation Center, Inc.
KenAmerican Resources, Inc.
Belmont Coal, Inc.
UMCO Energy, Inc.
Maple Creek Mining, Inc.
Onieda Coal, Inc.
Spring Church Coal Company

Permit numbers, regulatory authority and issuance dates are found in Appendix 1-2.

112.350. There are no pending coal mine permit applications in any State in the United States.

112.400. Miscellaneous information for coal mining and reclamation operations owned or controlled by the applicant or by any person who owns or controls the applicant follows.

112.410. The name, address, identifying numbers, including employer identification number, Federal or State permit numbers and MSHA number, with date of issuance and the regulatory authority issuing the permit can be found in Appendix 1-2.

112.420. Ownership or control relationship to the applicant is presented in Appendix 1-1.

112.500. The name and address of each legal owner of the surface and mineral property to be mined is shown on Plate 4-1 for surface ownership and Plate 5-4 for coal ownership, and is as follows:

**Surface Owners:**

**Josiah K Eardley:**
2433 S HWY 10
Route 1, Box 119
Price, Utah 84501

**Bronco Coal Company:**
P.O. Box 217
Cleveland, Utah 84518

**UTAHAMERICAN ENERGY, INC.:**
46226 National Road
St. Clairsville, Ohio 43950
UNITED STATES DEPARTMENT OF THE INTERIOR:
Bureau of Land Management
Utah State Office
324 South State
Salt Lake City, Utah 84111

STATE OF UTAH:
Utah School and Institutional Trust Lands Administration (SITLA)
675 East 500 South Suite 500
Salt Lake City, Utah 84114-5703

COLLEGE OF EASTERN UTAH FOUNDATION:
451 East 400 North
Price, Utah 84501

Subsurface Owners:

UTAHAMERICAN ENERGY, INC.:
46226 National Road
St. Clairsville, Ohio 43950

Bronco Coal Company:
P.O. Box 217
Cleveland, Utah 84518

STATE OF UTAH:
Utah School and Institutional Trust Lands Administration (SITLA)
675 East 500 South Suite 500
Salt Lake City, Utah 84114-5703

UNITED STATES DEPARTMENT OF THE INTERIOR:
Bureau of Land Management
Utah State Office
324 South State
Salt Lake City, Utah 84111

COLLEGE OF EASTERN UTAH FOUNDATION:
451 East 400 North
Price, Utah 84501
The name and address of each owner (surface and subsurface) of all property contiguous to the proposed permit area is shown on Plate 4-1 for surface, and Plate 5-4 for subsurface. Plate 1-1 is the official boundary map and it will be used to clarify any questions about the permit boundaries. Plate 1-2 shows the disturbed area.

Contiguous Surface Owners:

UNITED STATES DEPARTMENT OF THE INTERIOR:
Bureau of Land Management
Utah State Office
324 South State
Salt Lake City, Utah 84111

STATE OF UTAH:
Utah School and Institutional Trust Lands Administration (SITLA)
675 East 500 South Suite 500
Salt Lake City, Utah 84114-5703

Josiah K Eardley:
2433 S HWY 10
Route 1, Box 119
Price, Utah 84501

Bronco Coal Company:
P.O. Box 217
Cleveland, Utah 84518

UTAHAMERICAN ENERGY, INC.:
46226 National Road
St. Clairsville, Ohio 43950

WILLIAM MARSING LIVESTOCK INC.:
4330 E 8900 N
Price, Utah 84501

COLLEGE OF EASTERN UTAH FOUNDATION:
451 East 400 North
The following is a list of MSHA numbers associated with the permit.

MSHA ID Number: 42-00100 (Horse Canyon)
MSHA ID Number 42-02241 (Lila Canyon)
Refuse Pile I.D. Number: 1211-UT-09-02241-01

United States Department of Labor
Mine, Safety and Health Administration
P.O. Box 25367
Denver, Colorado 80225
112.800. UEI submitted a lease by application to the BLM for 4,192 acres in the William’s Draw area as well as 1,117 acres in the Turtle Canyon area that have both been identified as an area of interest to the south and east of current UEI reserves. The LBA delineation and recoverable reserves have yet to be determined by the BLM. If the area of interest is offered for lease, and if UEI bids on the LBA, and if UEI is the successful bidder, then it could be anticipated that mining in the leased area would occur once current Lila reserves are exhausted (by approximately the year 2020).

112.900. After UtahAmerican Energy, Inc., is notified that the application is approved, but before the permit is issued, UtahAmerican Energy, Inc., will update, correct or indicate that no change has occurred in the information previously submitted under R645-301-112.100 to R645-301-112.800.

113. Violation Information.

113.100. Neither UtahAmerican Energy, Inc., nor any subsidiary, affiliate, or persons controlled by or under common control with the applicant, has had any federal or state permit to conduct coal mining and reclamation operations suspended or revoked in the five years preceding the date of submission of the application.

113.110. No federal or state permits to conduct coal mining and reclamation operations has been suspended or revoked in the five years preceding the date of submission of the application.

113.120. Neither UtahAmerican Energy, Inc., nor any
subsidiary, affiliate, or persons controlled by or under common control with the applicant, have forfeited a performance bond or similar security deposited in lieu of bond.

113.200. Since no suspensions revocations, or forfeitures have taken place section 113.200 with subsections is not applicable.

113.300. A list of violations received by the applicant or any subsidiary, affiliate or persons controlled by or under common control with the applicant in connection with any coal mining and reclamation operation during the three year period proceeding the application date is provided in Appendix 1-3. MSHA numbers for the operations listed in Appendix 1-3 can be found in Appendix 1-2.

113.310. Violation information such as: Identifying numbers including Federal and State permit numbers, date issued, and name of issuing agency is included in Appendix 1-3.

113.320. A brief description of violations alleged in the notice is included in Appendix 1-3.

113.330. The date, location, and type of any administrative or judicial proceeding is included in Appendix 1-3.

113.340. The current status of violations is included in Appendix 1-3.

113.350. Actions taken to abate the violation is included in Appendix 1-3.

113.400. After UtahAmerican Energy, Inc., is notified that the application is approved, but before the permit is issued, UtahAmerican Energy, Inc., will update, correct or indicate that no change has occurred in the information previously INCORPORATED

APR 09 2019
Div. of Oil, Gas & Mining
submitted under R645-301-113.

114. Right-of-Entry Information.

A Right-of-Way application and the subsequent Environmental Assessment (EA) have been submitted to the BLM. The EA was issued for public comment in the summer of 2000. A Finding of No Significant Impact (FONSI) and record of decision were issued in October 2000. An appeal was filed and a stay requested. The stay was not acted on and an uninhibited Right-of-Way could be issued in the spring of 2003. Appendix 1-6 contains BLM correspondence in regards to Right-of-Entry as provided by the pending Right-of-Way and its related use.

114.100. UtahAmerican Energy, Inc., currently holds 5,549.01 acres of federal coal contained in six federal leases, purchase in June 2000 from Intermountain Power Agency and assigned to UEI by the BLM. (See Table 1-1 and Plate 5-4). These leases are contained in the South Lease - North Block LMU filed May 1996. The leases as described in the North Block LMU are not under any pending litigation. UtahAmerican Energy, Inc., bases its legal right to enter and conduct mining activities in the permit area pursuant to the language contained in the Federal Coal Lease, Part I Lease Rights Granted which reads as follows:

"That the lessor, in consideration of the rents and royalties to be paid and the covenants to be observed as hereinafter set forth, does hereby grant and lease to the lessee the exclusive right and privilege to mine and dispose of all the coal in, upon, or under the following described tracts of land, situated in the State of Utah.... together with the right to construct all such works, buildings, plants, structures and appliances as may be necessary and convenient for the mining and preparation of the coal for market, the manufacture of coke or other products of coal, the housing and welfare of employees, and subject to the conditions herein provided, to use so much of the surface as may reasonably be required in the exercise of the rights and privileges herein granted."

INCORPORATED
APR 09 2019
Div. of Oil, Gas & Mining
numbers.

114.200. Since no private mineral estate is involved this section does not apply.

114.210. Since no private mineral estate is involved this section does not apply.

114.220. Since no private mineral estate is involved this section does not apply.

114.230. Since no private mineral estate is involved this section does not apply.

### Table 1-1
Federal Coal Leases Held by Permittee (See Plate 5-4)

<table>
<thead>
<tr>
<th>Federal Coal Lease</th>
<th>TownShip &amp; Range</th>
<th>Section</th>
<th>Description</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>#SL-065490</td>
<td>T16S, R14E</td>
<td>11</td>
<td>E1/2</td>
<td>2445.00</td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>12</td>
<td>W1/2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>13</td>
<td>W1/2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>14</td>
<td>E1/2, SW1/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>15</td>
<td>E1/2, SE1/4</td>
<td></td>
</tr>
<tr>
<td>Lease Modification</td>
<td>T16S, R14E</td>
<td>15</td>
<td>SE1/4SE1/4NW1/4SE1/4 NE1/4NE1/4SW1/4SE1/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>22</td>
<td>NE1/4NE1/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>23</td>
<td>N1/2, E1/2SW1/4, SE1/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>24</td>
<td>NW1/4, W1/2SW1/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>26</td>
<td>N1/2NE1/4</td>
<td></td>
</tr>
<tr>
<td>#U-014218</td>
<td>T16S, R14E</td>
<td>12</td>
<td>E1/2</td>
<td>320</td>
</tr>
<tr>
<td>#U-0126947</td>
<td>T16S, R14E</td>
<td>13</td>
<td>E1/2</td>
<td>1059.81</td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>24</td>
<td>E1/2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R14E</td>
<td>25</td>
<td>N1/2NE1/4, SE1/4NE1/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16S, R15E</td>
<td>19</td>
<td>SE1/4SW1/4, Lots 3 &amp; 4</td>
<td></td>
</tr>
</tbody>
</table>
115. **Status of Unsuitability Claims.**

115.100. The proposed permit area is not within an area designated as unsuitable for mining. **UtahAmerican Energy, Inc.,** is not aware of any petitions currently in progress to designate the area as unsuitable for coal mining and reclamation activities.

115.200. Since no exemption is requested this section does not apply.

115.300. UtahAmerican Energy, Inc., will not conduct mining operations within 300 feet of a currently occupied dwelling. However, UtahAmerican Energy, Inc., will conduct mining or mining related activities within 100 feet of a public road. UtahAmerican Energy, Inc., has received permission from Emery County to construct facilities and operate coal mining activities within 100 feet of a public road. Refer to the Emery County letter found in Appendix 1-4.
116. Permit Term.

116.100. The anticipated starting and termination dates of the coal mining and reclamation operations are as follows:

<table>
<thead>
<tr>
<th>Phase</th>
<th>Begin</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin Underground work</td>
<td>June 2005</td>
<td></td>
</tr>
<tr>
<td>Terminate Mining</td>
<td>Dec. 2027</td>
<td></td>
</tr>
</tbody>
</table>

Reclamation operation dates can be found in Table 3-3.

Approximately 5,992.07 surface acres, which include federal, state and private land, are included within the permit area. These surface acres are described in Table 4-2, and coal acres are shown on Table 4-2A.

The existing perimeter of the disturbed area contains approximately 40.26 surface acres within the disturbed area. However, only 37.02 acres will be disturbed; leaving 3.24 acres of undisturbed islands within the total disturbed area boundary.

116.200. The initial permit application is for a five year term with anticipated successive five year permit renewals.

116.210 Since the initial permit application is for a term of five years this section does not apply.

116.220 Since the initial permit application is for a term of five years this section does not apply.

117. Insurance, Proof of Publication and Facilities or Structures Used in Common

117.100. The Certificate of Liability Insurance is included as Appendix.
117.200. A copy of the newspaper advertisement of the permit extension and proof of publication can be found in Appendix 1-5.

117.300. Since no structures are going to be shared by two or more separately permitted coal mining permit applications this section does not apply.

118. Filing Fee.

A filing fee of $5.00 has been submitted.

120. Permit Application Format and Contents.

121. The permit application contains current information and is written in a clear and concise manner in a format satisfactory to the Division.

122. Referenced materials not on file at the Division, or readily available to the Division, will be provided upon request of the Division by the applicant. On August 22, 2000 Dave Darby confirmed a copy of the R2P2 is on file at the Salt Lake City Division office.

123. A notarized statement, attesting to the accuracy of the information can be found in Appendix 1-5.

130. Reporting of Technical Data.

131. Persons or organizations that collected or analyzed data, the dates associated with the collection and/or analysis of the data, can be found in Appendix 1-5.

132. Resumes for the professional qualified persons who planned, directed the collection of or analyzed data can be found in Appendix 1-5.
140. Maps and Plans.

141. Maps have been presented in a consolidated format, to the extent possible, and include all the types of information that are set forth on U.S. Geological Survey of the 1:24,000 scale series. Maps of the permit area are to the scale of 1:6,000 or larger. Maps of the adjacent area will clearly show the lands and waters within those areas.

142. Maps and plans submitted with the permit application distinguish among each of the phases during which coal mining and reclamation operations were or will be conducted at any place within the life of operations.

150. Completeness

This permit extension to the existing Horse Canyon Permit ACT/007-013 to conduct coal mining and reclamation operations is complete and includes the minimum information required under R645-301 and, if applicable, R645-302. Plates 1-1 and 1-2 show the permit area and proposed disturbed area boundaries.

This permit extension is intended to add the Lila Canyon Mine as part “B” to the existing permit, and to leave unchanged the current approved Horse Canyon Mine as part “A”. The Horse Canyon Mine “part A” is for historical purposes only.
OWNERSHIP AND CONTROL

Murray Energy Holding Company
46228 National Road
St. Clairsville, Ohio 43950
ID # 20-5180463

See Section 4
Murray Energy Corporation
46226 National Road
St. Clairsville, Ohio 43950
ID # 34-1956752

See Section 5
Murray Energy Corporation
46226 National Road
St. Clairsville, Ohio 43950
ID # 34-1956752

See Section 6
UtahAmerican Energy, Inc.
PO Box 910
East Carbon, UT 84520
ID # 34-1874726

See Section 7
Anadale Resources Management, Inc.
PO Box 910
East Carbon, UT 84520

See Section 8
AAICA Coal Leasing
PO Box 910
East Carbon, UT 84520
ID # 43-0914234

See Section 9
Anadale Resources, Inc.
PO Box 910
East Carbon, UT 84520
ID # 61-0001325

See Section 10
General Resources, Inc.
PO Box 910
East Carbon, UT 84520
ID # 87-0633099

See Section 11
West Ridge Resources, Inc.
PO Box 910
East Carbon, UT 84520
ID # 87-0635529


Home Canyon Reclamation, Part A
Lliso Canyon Project, Part B
C0070613

Carcoswol Project
(Aberdeen Mine, Winnar Mine, and Aztec Mine)
C0070619

Crandall Canyon Project
C0015403

West Ridge Mine
C0070641
A-3  Complete this item for each entity listed in the corporate structure.

Name of Entity: Andalea Resources, Inc.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah American Energy</td>
<td>46226 National Road,</td>
<td>34-1841426</td>
<td>Shareholder</td>
<td>9/10/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Inc.</td>
<td>St. Clairsville,</td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road,</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>St. Clairsville,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road,</td>
<td>Not Available</td>
<td>Director</td>
<td>1/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td></td>
<td>St. Clairsville,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road,</td>
<td>Not Available</td>
<td>President</td>
<td>1/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td></td>
<td>St. Clairsville,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road,</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>St. Clairsville,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road,</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>St. Clairsville,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road,</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>St. Clairsville,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matthew C. Elzaw</td>
<td>46226 National Road,</td>
<td>XXX-XX-6793</td>
<td>President</td>
<td>1/5/2018</td>
<td>6/24/2019</td>
</tr>
<tr>
<td></td>
<td>St. Clairsville,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carson Puffastro</td>
<td>46226 National Road,</td>
<td>Not Available</td>
<td>President</td>
<td>6/24/2019</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>St. Clairsville,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Part V No. 1**

Complete this form for each entity listed in the corporate structure.

**Name of Entity**: Genial Resources, Inc.

**Mailing Address**: 46226 National Road

**Street Address**: (if mailing address is a Post Office Box)

**City**: St. Clairsville

**State**: Ohio

**Zip**: 43950

**FEIN No.**: 87-0583909

**Telephone No.**: 740-338-3100

**NOTE**: If entity is an EIN PROPRIETORSHIP, list owner.

- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholders owning ten percent (10%) or more or any class of voting stock of all owners.
- *Title* as President, Vice President, Secretary, Treasurer, Director, or any other person performing a business or business relationship to the entity.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS 3/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>UtahAmerican Energy, Inc</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1841426</td>
<td>Shareholder 100%</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Director</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-0703</td>
<td>Treasurer</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
<tr>
<td>Mathew C. Elw</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6793</td>
<td>President</td>
<td>1/5/2018</td>
<td>6/24/2019</td>
</tr>
<tr>
<td>Carson Pollastro</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>6/24/2019</td>
<td>Open</td>
</tr>
</tbody>
</table>

**INCORPORATED**

**JUL 09 2019**

**Div. of Oil, Gas & Mining**
### Form 4950 Entity Information

**Name of Entity:** UtahAmerican Energy, Inc.  
**Mailing Address:** 46226 National Road  
**Street Address:**  
**City:** St. Clairsville  
**State:** Ohio  
**Zip:** 43950  
**Telephone No.:** 740-338-3100

#### Employee Retention Equity Plan Entity Information

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>UtahAmerican Energy, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1841426</td>
<td>Shareholder 100%</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Director</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
<tr>
<td>Mathew C. Efaw</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6793</td>
<td>President</td>
<td>1/5/2018</td>
<td>6/24/2019</td>
</tr>
<tr>
<td>Carson Pollastro</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>6/24/2019</td>
<td>Open</td>
</tr>
</tbody>
</table>

**INcorporated Jul 09 2019**  
Div. of CII, Gas & Mining
**Part V No. 1**

A.3 Complete this item for each entity listed in the corporate structure.

Name of Entity: West Ridge Resources, Inc.
Mailing Address: 46226 National Road

City: St. Clairsville
State: Ohio
Zip: 43950

NOTE:
- If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholders (owners in person)/ 10% or more of any class of voting stock, all officers such as President, Vice President, Secretary, Treasurer, Directors, any other person performing a similar function, and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS/NIEIN/ TIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>UtahAmerican Energy, Inc</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1841426</td>
<td>Shareholder 100%</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Director</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-903</td>
<td>Treasurer</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
<tr>
<td>Matthew C. Efw</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6763</td>
<td>President</td>
<td>1/5/2018</td>
<td>6/24/2019</td>
</tr>
<tr>
<td>Carson Pollastro</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>6/24/2019</td>
<td>Open</td>
</tr>
<tr>
<td>Entity Name</td>
<td>Address</td>
<td>Ownership/Control Relationship to Permittee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>--------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murray Energy Corp.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael C. McGown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James M. Spignesi</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jeffrey Cash</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INcorporated**

**APR 27 2015**

Div. of Oil, Gas & Mining
A-3
Complete this item for each entity listed in the corporate structure.

Name of Entity: The American Coal Company
Mailing Address: 46226 National Road
State: Ohio
City: St. Clairsville
Zip: 43950
Telephone No.: 740-338-3100

NOTE:
- If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity’s legal structure is other than a sole proprietorship or partnership, list all owners or stockholder’s owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>AmCoal Holdings, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1867389</td>
<td>Shareholder 100%</td>
<td>7/2/1998</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>7/2/1998</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>11/2/2002</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Vice President</td>
<td>3/15/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>General Counsel</td>
<td>3/15/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>John R. Forrelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2688</td>
<td>Senior Vice President</td>
<td>8/7/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>10/1/1998</td>
<td>Open</td>
</tr>
<tr>
<td>James M. Spigarelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Asst. Treasurer</td>
<td>1/3/2012</td>
<td>Open</td>
</tr>
<tr>
<td>B.J. Cornelius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5023</td>
<td>Senior VP - Sales</td>
<td>6/28/2011</td>
<td>Open</td>
</tr>
<tr>
<td>Jeffrey Cash</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Asst. Treasurer</td>
<td>11/1/1999</td>
<td>1/3/2012</td>
</tr>
<tr>
<td>Jeffrey Cash</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Asst. Secretary</td>
<td>6/1/2001</td>
<td>1/3/2012</td>
</tr>
</tbody>
</table>
**Part V No. 1**

A-3 Complete this item for each entity listed in the corporate structure.

**Name of Entity:** The American Coal Sales Company

**Mailing Address:** 46226 National Road

Street Address (if mailing address is a P.O. Box): 34-1603699

**City:** St. Clairsville **State:** Ohio **Zip:** 43950

**Fein No.:** 740-338-3100

**Telephone No.:** 740-338-3100

**NOTE:**
- If entity is a SOLE PROPRIETORSHIP, list owner.
- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1586390</td>
<td>Shareholder 100%</td>
<td>1/1/1991</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>9/8/1995</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>CEO</td>
<td>11/11/1988</td>
<td>Open</td>
</tr>
<tr>
<td>B.J. Cornelius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5023</td>
<td>Vice President</td>
<td>1/30/2015</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Edward Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1320</td>
<td>President</td>
<td>1/30/2015</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5311</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>James M. Spigarelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Asst. Secretary</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Andrew W. Cox</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Vice President</td>
<td>8/6/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Edward Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1320</td>
<td>Vice President</td>
<td>8/7/2012</td>
<td>1/30/2015</td>
</tr>
<tr>
<td>B.J. Cornelius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5023</td>
<td>President</td>
<td>9/8/1995</td>
<td>1/30/2015</td>
</tr>
</tbody>
</table>
A-3
Complete this item for each entity listed in the corporate structure.

Name of Entity: American Energy Corporation
Mailing Address: 46226 National Road
Street Address (if mailing address is a Post Office Box):
City: St. Clairsville
State: Ohio
Zip: 43950
FEIN No.: 31-1550443
Ownership/Control relationship to Permittee

NOTE:
- If entity is a SOLE PROPRIETORSHIP, list owner.
- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4532</td>
<td>Secretary</td>
<td>11/1/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>12/15/2004</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>12/15/2004</td>
<td>Open</td>
</tr>
<tr>
<td>B.J. Cornelius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5023</td>
<td>Vice President - Sales</td>
<td>6/28/2011</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Asst. Treasurer</td>
<td>1/27/2004</td>
<td>Open</td>
</tr>
<tr>
<td>Anothony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5311</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Kevin Hughes</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4397</td>
<td>Vice Pres. - Operations &amp; GM</td>
<td>9/20/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Murray Energy</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>31-1956752</td>
<td>Shareholder 100%</td>
<td>2/23/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Corporation</td>
<td></td>
<td></td>
<td>Vice President - Longwallas</td>
<td>3/17/2015</td>
<td>Open</td>
</tr>
</tbody>
</table>
A-3  Complete this item for each entity listed in the corporate structure.

Name of Entity  AmericanMountaineer Energy, Inc.
Mailing Address  46226 National Road
Street Address (if mailing address is a Post Office box)  
City  St. Clairsville  State  Ohio  Zip  43950  Telephone No.  740-338-3100

NOTE:  
-if entity is a SOLE PROPRIETORSHIP, list owner
-if entity is a PARTNERSHIP, list all partners, including limited partners
-if entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray Energy Corp.</td>
<td>46226 National Road, St. Clairsville, Ohio, 43950</td>
<td>34-1956752</td>
<td>Owner – 100%</td>
<td>6/30/2008</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio, 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>6/30/2008</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Edward Murray</td>
<td>46226 National Road, St. Clairsville, Ohio, 43950</td>
<td>XXX-XX-1320</td>
<td>President</td>
<td>8/22/2008</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio, 43950</td>
<td>XXX-XX-3754</td>
<td>V.P. &amp; Secretary</td>
<td>8/22/2008</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio, 43950</td>
<td>XXX-XX-4552</td>
<td>V.P. &amp; Asst. Secretary</td>
<td>8/22/2008</td>
<td>Open</td>
</tr>
<tr>
<td>Anthony C. Voelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio, 43950</td>
<td>XXX-XX-5311</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Peter J. Vuljanic</td>
<td>46226 National Road, St. Clairsville, Ohio, 43950</td>
<td>XXX-XX-6310</td>
<td>Vice President</td>
<td>9/12/2008</td>
<td>6/21/2010</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio, 43950</td>
<td>XXX-XX-8372</td>
<td>Treasurer</td>
<td>8/22/2008</td>
<td>10/7/2013</td>
</tr>
<tr>
<td>Entity Name</td>
<td>Address</td>
<td>SS #/EIN</td>
<td>Title</td>
<td>Beginning Date</td>
<td>End Date</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------</td>
<td>--------------</td>
<td>------------------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>Mill Creek Mining Company</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>31-1040986</td>
<td>Shareholder 100%</td>
<td>7/8/1988</td>
<td>Open</td>
</tr>
<tr>
<td>Charles E. Shestak</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9288</td>
<td>Director</td>
<td>7/3/1998</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>President</td>
<td>5/26/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>6/25/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>5/26/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Asst. Treasurer</td>
<td>1/2/2003</td>
<td>Open</td>
</tr>
<tr>
<td>James M. Spigarelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Asst. Secretary</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Asst. Secretary</td>
<td>6/1/2008</td>
<td>10/7/2013</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

Name of Entity: Coal Resources Holdings Company
Mailing Address: 46226 National Road
Street Address (if mailing address is a Post Office box):  
City: St. Clairsville  
State: Ohio  
Zip: 43950  
Telephone No.: 740-338-3100

**NOTE:**
- If entity is a SOLE PROPRIETORSHIP, list owner.
- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for Limited Liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray American Resources, Inc</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1875051</td>
<td>Shareholder 100%</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>6/27/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chairman</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>CEO</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>CFO</td>
<td>2/3/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>1/28/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>11/6/2009</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Assistant Secretary</td>
<td>6/30/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Assistant Treasurer</td>
<td>6/30/2003</td>
<td>Open</td>
</tr>
</tbody>
</table>
Part V No. 1

A-3 Complete this item for each entity listed in the corporate structure.

Name of Entity **Coal Resources, Inc.**  
Mailing Address **46226 National Road**  
Street Address (if mailing address is a Post Office box)  
City St. Clairsville  
State Ohio  
Zip 43950  
Telephone No. 740-338-3100

**NOTE:**  
- If entity is a SOLE PROPRIETORSHIP, list owner  
- If entity is a PARTNERSHIP, list all partners, including limited partners  
- If entity’s legal structure is other than a sole proprietorship or partnership, list all owners or stockholder’s names ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal Resources Holdings Company</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>20-0100479</td>
<td>Shareholder 100%</td>
<td>10/21/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>1/29/1988</td>
<td>Open</td>
</tr>
<tr>
<td>Henry W. Fayne</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7216</td>
<td>Director</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Richard L. Lawson</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4413</td>
<td>Director</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>4/23/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chairman</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>CEO</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Sr. Vice President</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>CFO</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Vice President</td>
<td>7/16/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>General Counsel</td>
<td>7/16/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>7/16/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Edward Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1320</td>
<td>VP - Business Development &amp; External Affairs</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Ryan Michael Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-0815</td>
<td>VP - Operations</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>John R. Forrelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2688</td>
<td>VP - Engineering and Planning</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Roy A. Heidelbach</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5011</td>
<td>Asst. VP - Operations</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Locolono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5011</td>
<td>Treasurer</td>
<td>6/27/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Asst. Secretary</td>
<td>6/25/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Asst. Treasurer</td>
<td>6/25/2001</td>
<td>Open</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

Name of Entity: Consolidation Coal Company
Mailing Address: 46226 National Road
Street Address (if mailing address is a Post Office box): St. Clairsville, Ohio 43950
FEIN No.: 13-2556584

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio Valley Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1586391</td>
<td>Owner 100%</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
</tbody>
</table>
A-3 Complete this item for each entity listed in the corporate structure.

Name of Entity  Consolidation Coal Company  
Mailing Address  46226 National Road  
Street Address (if mailing address is a Post Office box)  
City  St. Clairsville  
State  Ohio  
Zip  43950  
Telephone No.  740-338-3100

NOTE:  If entity is a SOLE PROPRIETORSHIP, list owner  
- If entity is a PARTNERSHIP, list all partners, including limited partners  
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS#/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brian Murdy</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Assistant Secretary</td>
<td>2/20/2009</td>
<td>5/27/2010</td>
</tr>
<tr>
<td>Louis Barletta, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>1/1/2006</td>
<td>3/9/2011</td>
</tr>
<tr>
<td>Robert Belesky</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>5/27/2010</td>
<td>10/25/2011</td>
</tr>
<tr>
<td>Robert King</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>10/9/2007</td>
<td>3/16/2012</td>
</tr>
<tr>
<td>Robert King</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>8/21/2006</td>
<td>3/16/2012</td>
</tr>
<tr>
<td>Alexander Reyes</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Secretary</td>
<td>10/9/2007</td>
<td>6/26/2012</td>
</tr>
<tr>
<td>Rodney Ford</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Assistant Secretary</td>
<td>6/15/2003</td>
<td>12/31/2012</td>
</tr>
<tr>
<td>Daniel Cancilla</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Treasurer</td>
<td>5/1/2006</td>
<td>12/31/2012</td>
</tr>
<tr>
<td>William Lyons</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>9/30/2000</td>
<td>3/1/2013</td>
</tr>
<tr>
<td>Robert Pusateri</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>8/21/2008</td>
<td>3/1/2013</td>
</tr>
<tr>
<td>Robert Pusateri</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>9/13/2011</td>
<td>3/1/2013</td>
</tr>
<tr>
<td>P. Richey</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>3/1/2005</td>
<td>3/1/2013</td>
</tr>
<tr>
<td>Entity Name</td>
<td>SS #/EIN</td>
<td>Address</td>
<td>Zip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>----------</td>
<td>---------</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Harvey</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Harvey</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bart Hyla</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bart Hyla</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steven Strope</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicholas Delius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jack Richardson</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lorraine Ritter</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

Name of Entity: Consolidation Coal Company
Mailing Address: 46226 National Road
Street Address (if mailing address is a Post Office box): 
City: St. Clairsville
State: Ohio
FEIN No.: 13-2566594
Ownership/Control relationship to Permittee: 
NOTE: If entity is a SOLE PROPRIETORSHIP, list owner
If entity is a PARTNERSHIP, list all partners, including limited partners
If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Brock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>6/12/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>James Brock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>9/12/2005</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>James Grech</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>6/12/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>James Grech</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>9/13/2011</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Charles Shaynak</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>2/20/2009</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Stephen Johnson</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>9/22/2011</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Stephen Johnson</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>6/26/2012</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>William Gillenwater</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>10/12/2010</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>David Kelly</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>2/20/2009</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>David Khani</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>6/26/2012</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>David Khani</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>6/12/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Michael Baker</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Secretary</td>
<td>6/26/2012</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Steve Aspinall</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Treasurer</td>
<td>1/1/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>David Miller</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Assistant Secretary</td>
<td>6/12/2013</td>
<td>12/5/2013</td>
</tr>
</tbody>
</table>
Part V  No. 1

A-3 Complete this item for each entity listed in the corporate structure.

<table>
<thead>
<tr>
<th>Name of Entity</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidation Coal Company</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>13-2566594</td>
<td>Owner 100%</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8552</td>
<td>Director</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8552</td>
<td>President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8552</td>
<td>Chief Executive Officer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

**Name of Entity**: Eighty-Four Mining Company  
**Mailing Address**: 46226 National Road  
**Street Address (if mailing address is a Post Office Box)**:  
**City**: St. Clairsville  
**State**: Ohio  
**Zip**: 43950  
**Telephone No.**: 740-338-3100  

**NOTE**:  
- If entity is a SOLE PROPRIETORSHIP, list owner  
- If entity is a PARTNERSHIP, list all partners, including limited partners  
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more of any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS#/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter Lilly</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>1/1/2002</td>
<td>1/31/2009</td>
</tr>
<tr>
<td>Peter Lilly</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>President</td>
<td>1/1/2002</td>
<td>1/31/2009</td>
</tr>
<tr>
<td>Samuel Skeen</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Secretary</td>
<td>1/16/2004</td>
<td>3/9/2011</td>
</tr>
<tr>
<td>Robert Vukas</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Secretary</td>
<td>2/1/2006</td>
<td>3/9/2011</td>
</tr>
<tr>
<td>Bart Hyota</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>11/1/2004</td>
<td>3/9/2011</td>
</tr>
<tr>
<td>Albert Aloia</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>President</td>
<td>2/19/2009</td>
<td>3/9/2011</td>
</tr>
<tr>
<td>Louis Barletta, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>1/1/2006</td>
<td>3/9/2011</td>
</tr>
<tr>
<td>Robert King</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>8/21/2006</td>
<td>10/25/2011</td>
</tr>
<tr>
<td>Robert Belesky</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>3/9/2011</td>
<td>10/25/2011</td>
</tr>
<tr>
<td>Alexander Reyes</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Secretary</td>
<td>3/9/2011</td>
<td>6/26/2012</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

**Name of Entity**: Eighty-Four Mining Company

**Mailing Address**: 46226 National Road

**Street Address**: 46226 National Road, St. Clairsville, Ohio 43950

**City**: St. Clairsville

**State**: Ohio

**Zip**: 43950

**NOTE**: If entity is a SOLE PROPRIETORSHIP, list owner.

- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS#/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albert Alola</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>3/9/2011</td>
<td>11/15/2012</td>
</tr>
<tr>
<td>Rodney Ford</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Assistant Secretary</td>
<td>6/15/2003</td>
<td>12/31/2012</td>
</tr>
<tr>
<td>Daniel Cangilla</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Treasurer</td>
<td>1/1/2006</td>
<td>12/31/2012</td>
</tr>
<tr>
<td>Robert Pusateri</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>9/13/2011</td>
<td>3/1/2013</td>
</tr>
<tr>
<td>P. Richey</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>3/1/2005</td>
<td>3/1/2013</td>
</tr>
<tr>
<td>J. Harvey</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>9/22/1998</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Bart Hyita</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>President</td>
<td>3/9/2011</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Nicholas Deullis</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>2/19/2009</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Lorraine Ritter</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Assistant Secretary</td>
<td>3/1/2006</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Lorraine Ritter</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Controller</td>
<td>6/26/2012</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Entity Name</td>
<td>Address</td>
<td>SS #/EIN</td>
<td>Title</td>
<td>Beginning Date</td>
<td>End Date</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------</td>
<td>----------</td>
<td>------------------</td>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Lu Ann Datesh</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>6/12/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>James Brock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>3/9/2011</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>James Grech</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>9/13/2011</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Stephen Johnson</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Director</td>
<td>6/12/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Stephen Johnson</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>9/13/2011</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>William Gillenwater</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>10/12/2010</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>David Aiola</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>3/9/2011</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>David Khani</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Vice President</td>
<td>6/26/2012</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Michael Baker</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Secretary</td>
<td>6/26/2012</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Steve Aspinall</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Treasurer</td>
<td>1/1/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>David Miller</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td></td>
<td>Assistant Secretary</td>
<td>6/12/2013</td>
<td>12/5/2013</td>
</tr>
</tbody>
</table>
A-3

Complete this item for each entity listed in the corporate structure.

Name of Entity: Energy Resources, Inc.
Mailing Address: 46226 National Road
Street Address (if mailing address is a Post Office Box):
City: St. Clairsville
State: Ohio
Zip: 43950
FEIN No.: 31-1044044

Ownership/Control relationship to Permittee:
Telephone No.: 740-338-3100

NOTE: - If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more of any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar, and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Creek Mining Company</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>31-1040986</td>
<td>Shareholder 100%</td>
<td>5/25/1988</td>
<td>Open</td>
</tr>
<tr>
<td>Stanley T. Plasecki</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1838</td>
<td>Director</td>
<td>8/11/2004</td>
<td>Open</td>
</tr>
<tr>
<td>Stanley T. Plasecki</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1838</td>
<td>President</td>
<td>8/11/2004</td>
<td>Open</td>
</tr>
<tr>
<td>Stanley T. Plasecki</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1838</td>
<td>CEO</td>
<td>8/11/2004</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5311</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Charles F. Shestak</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9288</td>
<td>Asst. Secretary</td>
<td>4/30/1993</td>
<td>Open</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Treasurer</td>
<td>5/30/2008</td>
<td>10/7/2013</td>
</tr>
</tbody>
</table>
### Part V No. 1

A-3  Complete this item for each entity listed in the corporate structure.

**Name of Entity** The Harrison County Coal Company  
**Mailing Address** 46226 National Road  
**Street Address** (If mailing address is a Post Office box)  
**City** St. Clairsville  
**State** Ohio  
**Zip** 43950  
**FEIN No.** 46-4067631  
**Ownership/Control relationship to Permittee**  
**Telephone No.** 740-338-3100

**NOTE:**  
- If entity is a SOLE PROPRIETORSHIP, list owner  
- If entity is a PARTNERSHIP, list all partners, including limited partners  
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray American Energy, Inc</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Owner 100%</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Matthew C. Efw</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6793</td>
<td>Vice President</td>
<td>1/4/2014</td>
<td>Open</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

**Name of Entity:** KenAmerican Resources, Inc.

**Mailing Address:** 46226 National Road

**Street Address:**

**City:** St. Clairsville

**State:** Ohio

**Zip:** 43950

**Telephone No.:** 740-338-3100

**FEIN No.:** 61-1264385

**Ownership/Control relationship to Permittee:**

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Creek Mining</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>31-1040986</td>
<td>Shareholder 100%</td>
<td>6/9/1994</td>
<td>Open</td>
</tr>
<tr>
<td>Company</td>
<td></td>
<td></td>
<td>Director</td>
<td>6/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>SR Vice President</td>
<td>11/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>B.J. Cornelius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5023</td>
<td>Vice President</td>
<td>7/6/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Randy L. Wiles</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>General Manager</td>
<td>7/6/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Randy L. Wiles</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Secretary</td>
<td>2/13/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5311</td>
<td>Asst. Treasurer</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>10/7/2013</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>10/7/2013</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

**Name of Entity**: Maple Creek Mining, Inc.
**Mailing Address**: 46226 National Road
**Street Address**: (if mailing address is a Post Office box)
**City**: St. Clairsville **State**: Ohio
**FEIN No.**: 25-1755305
**Ownership/Control relationship to Permittee**: Zip 43950
**Telephone No.**: 740-338-3100

**NOTE**: -if entity is a SOLE PROPRIETORSHIP, list owner

-If entity is a PARTNERSHIP, list all partners, including limited partners

-If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunburst Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>25-1766427</td>
<td>Shareholder 100%</td>
<td>1/11/1995</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>11/15/1994</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Vice President</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Roberta K. Heil</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2378</td>
<td>Asst. Secretary</td>
<td>11/1/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Entity Name</td>
<td>Address</td>
<td>SS #/EIN</td>
<td>Title</td>
<td>Beginning Date</td>
<td>End Date</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------------------</td>
<td>---------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>Murray American Energy, Inc</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Owner 100%</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Matthew C. Efaw</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6793</td>
<td>Vice President</td>
<td>1/4/2014</td>
<td>Open</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

Name of Entity: The Marshall County Coal Company
Mailing Address: 46226 National Road
Street Address (if mailing address is a Post Office box): 
City: St. Clairsville
State: Ohio
FEIN No.: 46-4064123
Zip: 43950
NOTE: If entity is a SOLE PROPRIETORSHIP, list owner
If entity is a PARTNERSHIP, list all partners, including limited partners.
If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray American Energy, Inc</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Owner 100%</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
</tbody>
</table>
### Entity Name
### Address
### SS #/EIN
### Title
### Beginning Date
### End Date

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidation Coal Company</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>13-2566594</td>
<td>Owner 100%</td>
<td>6/30/1987</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8832</td>
<td>Director</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8832</td>
<td>President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8832</td>
<td>Chief Executive Officer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>12/5/2013</td>
<td>Open</td>
</tr>
</tbody>
</table>
Complete this form for each entity listed in the corporate structure.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS-IEIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter Lilly</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Director</td>
<td>1/1/2002</td>
<td>1/1/2009</td>
</tr>
<tr>
<td>Peter Lilly</td>
<td>46275 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>President</td>
<td>1/1/2003</td>
<td>1/1/2009</td>
</tr>
<tr>
<td>Brian Murdy</td>
<td>46275 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Assistant Secretary</td>
<td>2/19/2009</td>
<td>5/3/2010</td>
</tr>
<tr>
<td>Robert King</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>2/19/2009</td>
<td>10/25/2011</td>
</tr>
<tr>
<td>Robert Selesky</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>3/9/2011</td>
<td>10/25/2011</td>
</tr>
<tr>
<td>Robert Vukas</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Secretary</td>
<td>1/1/2006</td>
<td>6/26/2012</td>
</tr>
<tr>
<td>Daniel Cangilla</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Treasurer</td>
<td>1/1/2006</td>
<td>12/31/2012</td>
</tr>
<tr>
<td>Robert Pursera</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>9/17/2011</td>
<td>3/1/2013</td>
</tr>
<tr>
<td>P. Richiey</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Director</td>
<td>3/1/2005</td>
<td>3/1/2013</td>
</tr>
<tr>
<td>J. Harvey</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Director</td>
<td>8/3/1998</td>
<td>12/31/2013</td>
</tr>
<tr>
<td>Barry Hyde</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>President</td>
<td>10/9/2007</td>
<td>12/31/2013</td>
</tr>
<tr>
<td>Steven Stroope</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Assistant Secretary</td>
<td>5/27/2010</td>
<td>12/25/2013</td>
</tr>
<tr>
<td>Nicholas Desoile</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Director</td>
<td>2/19/2009</td>
<td>12/25/2013</td>
</tr>
<tr>
<td>Lorraine Ritter</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Controller</td>
<td>10/9/2007</td>
<td>12/25/2013</td>
</tr>
<tr>
<td>Lorraine Ritter</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Assistant Secretary</td>
<td>3/1/2006</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Lu Ann Cutlass</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>6/1/2010</td>
<td>12/3/2013</td>
</tr>
<tr>
<td>James Grech</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>9/13/2011</td>
<td>12/25/2013</td>
</tr>
<tr>
<td>Charles Shaynak</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>3/9/2011</td>
<td>12/3/2013</td>
</tr>
<tr>
<td>Stephen Johnson</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>9/23/2011</td>
<td>12/3/2013</td>
</tr>
<tr>
<td>Stephen Johnson</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Director</td>
<td>6/26/2013</td>
<td>12/3/2013</td>
</tr>
<tr>
<td>William Gildenstor</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>3/23/2013</td>
<td>12/3/2013</td>
</tr>
<tr>
<td>David Kelly</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>2/19/2009</td>
<td>12/3/2013</td>
</tr>
<tr>
<td>David Khari</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Vice President</td>
<td>6/26/2013</td>
<td>12/3/2013</td>
</tr>
<tr>
<td>Michael Baker</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Secretary</td>
<td>6/26/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>Steve Aspinall</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Treasurer</td>
<td>1/1/2013</td>
<td>12/5/2013</td>
</tr>
<tr>
<td>David Miller</td>
<td>46276 National Road, St. Clairsville, Ohio 43950</td>
<td>24-31593951</td>
<td>Assistant Secretary</td>
<td>6/12/2013</td>
<td>12/5/2013</td>
</tr>
</tbody>
</table>

INCORPORATED

APR 27 2015

One of Oil, Gas & Mining
### Part V No. 1

**A-3**
Complete this item for each entity listed in the corporate structure.

- **Name of Entity**: Mill Creek Mining Company
- **Mailing Address**: 46226 National Road
- **Street Address**(if mailing address is a Post Office box)__________
- **City**: St. Clairsville
- **State**: Ohio
- **FEIN No.**: 31-1040986
- **Ownership/Control relationship to Permittee**
- **Zip**: 43950
- **Telephone No.**: 740-338-3100

**NOTE:**
- If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal Resources, Inc.</td>
<td>46226 National Road, St. Clairsville,</td>
<td>34-1586390</td>
<td>Shareholder 100%</td>
<td>5/25/1988</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville,</td>
<td>XXX-XX-</td>
<td>Director</td>
<td>5/3/1993</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td>8852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charles E. Shestak</td>
<td>46226 National Road, St. Clairsville,</td>
<td>XXX-XX-</td>
<td>President</td>
<td>8/18/1998</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td>9288</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville,</td>
<td>XXX-XX-</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td>5311</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville,</td>
<td>XXX-XX-</td>
<td>Asst. Treasurer</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td>9703</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville,</td>
<td>XXX-XX-</td>
<td>Secretary</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td>4552</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville,</td>
<td>XXX-XX-</td>
<td>Asst. Secretary</td>
<td>6/25/2001</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td>8460</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville,</td>
<td>XXX-XX-</td>
<td>Asst. Treasurer</td>
<td>6/25/2001</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Ohio 43950</td>
<td>8460</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Entity Name |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray American Energy, Inc</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
</tr>
<tr>
<td>Robert D. Moore</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
</tr>
<tr>
<td>Jason D. Witt</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
</tr>
<tr>
<td>Matthew C. Efaw</td>
</tr>
</tbody>
</table>

### Address |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
<tr>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
</tr>
</tbody>
</table>

### SS#/EIN |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX-XX-8852</td>
</tr>
<tr>
<td>XXX-XX-8852</td>
</tr>
<tr>
<td>XXX-XX-8852</td>
</tr>
<tr>
<td>XXX-XX-8852</td>
</tr>
<tr>
<td>XXX-XX-9073</td>
</tr>
<tr>
<td>XXX-XX-2971</td>
</tr>
<tr>
<td>XXX-XX-3754</td>
</tr>
<tr>
<td>XXX-XX-6784</td>
</tr>
<tr>
<td>XXX-XX-6784</td>
</tr>
<tr>
<td>XXX-XX-6784</td>
</tr>
<tr>
<td>XXX-XX-7115</td>
</tr>
<tr>
<td>XXX-XX-6793</td>
</tr>
</tbody>
</table>

### Title |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner 100%</td>
</tr>
<tr>
<td>Director</td>
</tr>
<tr>
<td>President</td>
</tr>
<tr>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>Vice President</td>
</tr>
<tr>
<td>Vice President</td>
</tr>
<tr>
<td>Secretary</td>
</tr>
<tr>
<td>Treasurer</td>
</tr>
<tr>
<td>Asst. Secretary</td>
</tr>
<tr>
<td>Comptroller</td>
</tr>
<tr>
<td>Vice President</td>
</tr>
</tbody>
</table>

### Beginning Date |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
<tr>
<td>10/29/2013</td>
</tr>
</tbody>
</table>

### End Date |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Open</td>
</tr>
</tbody>
</table>

---

**NOTE:**

- If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.
### Part V No. 1

#### A-3

Complete this item for each entity listed in the corporate structure.

<table>
<thead>
<tr>
<th>Name of Entity</th>
<th>Mailing Address</th>
<th>Street Address (if mailing address is a Post Office box)</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
<th>FEIN No.</th>
<th>Telephone No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon Valley Transportation Center, Inc.</td>
<td>46226 National Road</td>
<td></td>
<td>St. Clairsville</td>
<td>Ohio</td>
<td>43950</td>
<td>25-1490495</td>
<td>740-338-3100</td>
</tr>
</tbody>
</table>

**Ownership/Control relationship to Permittee**

**NOTE:**
- If entity is a **SOLE PROPRIETORSHIP**, list owner.
- If entity is a **PARTNERSHIP**, list all partners, including limited partners.

- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners' names, percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania Transloading, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1603748</td>
<td>Shareholder 100%</td>
<td>8/28/1995</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>8/28/1995</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Laiocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Director</td>
<td>11/1/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>President</td>
<td>4/28/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3311</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>James M. Spigarelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Secretary</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Secretary</td>
<td>3/1/2005</td>
<td>10/7/2013</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>10/7/2013</td>
</tr>
</tbody>
</table>
### A-3
Complete this item for each entity listed in the corporate structure.

**Name of Entity:** Murray American Energy, Inc.

**Mailing Address:** 46226 National Road

**Street Address:** 46226 National Road, St. Clairsville, Ohio 43950

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio Valley Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Owner 100%</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9073</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6874</td>
<td>Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6874</td>
<td>Asst. Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6874</td>
<td>Comptroller</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
</tbody>
</table>
### Part V No. 1

**A-3** Complete this item for each entity listed in the corporate structure.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray Energy Corporation</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1956752</td>
<td>Shareholder 100%</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XXX-8852</td>
<td>Director</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XXX-9703</td>
<td>President</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XXX-9703</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XXX-9703</td>
<td>Secretary</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

**Name of Entity:** Murray Energy Corporation  
**Mailing Address:** 46226 National Road  
**Street Address:** 46226 National Road, St. Clairsville, Ohio 43950  
**City:** St. Clairsville  
**State:** Ohio  
**FEIN No.:** 34-1956752  
**Zip:** 43950  
**Ownership/Control relationship to Permittee:** [Insert relationship]  
**Telephone No.:** 740-338-3100

**Note:**
- If entity is a SOLE PROPRIETORSHIP, list owner.
- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar, and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray Energy Holdings Company</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>20-0100463</td>
<td>Owner - 100%</td>
<td>10/21/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>2/23/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Henry W. Fayne</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7216</td>
<td>Director</td>
<td>1/28/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>4/23/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Richard L. Lawson</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4413</td>
<td>Director</td>
<td>1/28/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>2/23/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Executive V.P.</td>
<td>8/15/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Chief Financial Officer</td>
<td>8/15/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chairman of the Board</td>
<td>2/23/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>2/23/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>2/24/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>2/23/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Entity Name</td>
<td>Address</td>
<td>SS #/EIN</td>
<td>Title</td>
<td>Beginning Date</td>
<td>End Date</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------</td>
<td>------------------</td>
<td>--------------------------------------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>John R. Forrelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2688</td>
<td>Senior Vice President</td>
<td>11/1/2010</td>
<td>Open</td>
</tr>
<tr>
<td>B. J. Cornelius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5023</td>
<td>Sr. VP - Marketing &amp; Sales</td>
<td>8/15/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Roy A. Heidelbach</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5011</td>
<td>Asst. Vice President-Operations</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Ryan Michael Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8015</td>
<td>Vice President-Operations</td>
<td>9/11/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. Mckown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Senior VP - Law &amp; Admin</td>
<td>8/15/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Chief Operating Officer</td>
<td>8/15/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Michael T.W. Carey</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2161</td>
<td>VP - Govt. Relations</td>
<td>6/1/2012</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Edward Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1320</td>
<td>Executive VP - Marketing and Sales</td>
<td>1/30/2015</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Assistant Secretary</td>
<td>4/30/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>VP - H.R. &amp; Employee Relations</td>
<td>1/4/2014</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Edward Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1320</td>
<td>VP - External Affairs</td>
<td>8/15/2012</td>
<td>7/29/2014</td>
</tr>
<tr>
<td>Robert Edward Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1320</td>
<td>VP - Marketing &amp; Sales</td>
<td>8/15/2012</td>
<td>7/29/2014</td>
</tr>
</tbody>
</table>
### Part V No. 1

**Complete this item for each entity listed in the corporate structure.**

- **Name of Entity**: Murray Energy Corporation  
- **Mailing Address**: 46226 National Road  
- **City**: St. Clairsville  
- **State**: Ohio  
- **Zip**: 43950  
- **Telephone No.**: 740-338-3100

**Ownership/Control relationship to Permittee**

- If entity is a SOLE PROPRIETORSHIP, list owner.
- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity’s legal structure is other than a sole proprietorship or partnership, list all owners or stockholder’s owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS#/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5311</td>
<td>Assistant Treasurer</td>
<td>7/29/2014</td>
<td>Open</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Vice President - Engineering</td>
<td>1/1/2015</td>
<td>Open</td>
</tr>
<tr>
<td>John R. Forrelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2688</td>
<td>Vice President</td>
<td>9/11/2007</td>
<td>11/1/2010</td>
</tr>
<tr>
<td>Michael O. Mckown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>General Counsel</td>
<td>8/1/2008</td>
<td>8/15/2012</td>
</tr>
<tr>
<td>Michael O. Mckown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Sr. Vice President</td>
<td>8/1/2008</td>
<td>8/15/2012</td>
</tr>
<tr>
<td>B. J. Cornelius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5023</td>
<td>Vice President</td>
<td>8/1/2008</td>
<td>8/15/2012</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Vice President - Operations</td>
<td>11/1/2010</td>
<td>8/15/2012</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Executive V.P. - Operations</td>
<td>2/9/2011</td>
<td>8/15/2012</td>
</tr>
<tr>
<td>G. Christopher Van Bever</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2161</td>
<td>Assistant Secretary</td>
<td>10/22/2007</td>
<td>4/8/2013</td>
</tr>
<tr>
<td>James R. Turner</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Senior VP - Eng. &amp; Human Res.</td>
<td>8/15/2012</td>
<td>10/7/2013</td>
</tr>
</tbody>
</table>
A-3 Complete this item for each entity listed in the corporate structure.

Name of Entity: Murray Energy Holdings Company  
Mailing Address: 46226 National Road  
Street Address:  
City: St. Clairsville  
State: Ohio  
Zip: 43950  
FEIN No.: 20-0100463  
Ownership/Control relationship to Permittee: 

NOTE:  
If entity is a SOLE PROPRIETORSHIP, list owner  
If entity is a PARTNERSHIP, list all partners, including limited partners  
If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>6/30/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>4/23/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Director</td>
<td>6/30/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>1/10/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>6/30/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>6/30/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer &amp; Chair</td>
<td>6/30/2003</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Chief Financial Officer</td>
<td>4/23/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Murray, Robert Eugene Trustee, (REM Family Trust)</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Provided</td>
<td>Shareholder – 100% Class A Voting Stock</td>
<td>5/10/2010</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Shareholder 100% Class A Voting Stock</td>
<td>6/27/2003</td>
<td>5/10/2010</td>
</tr>
</tbody>
</table>
Part V No. 1

A-3 Complete this item for each entity listed in the corporate structure.

Name of Entity: Murray Keystone Processing, Inc.
Mailing Address: 46226 National Road
Street Address (if mailing address is a Post Office Box): 
City: St. Clairsville State: Ohio Zip: 43950 Telephone No.: 740-338-3100
FEIN No.: 46-4068709 Ownership/Control relationship to Permittee

NOTE: - If entity is a SOLE PROPRIETORSHIP, list owner.
- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray American Energy, Inc</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Owner 100%</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Lolocono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
</tbody>
</table>
A-3  Complete this item for each entity listed in the corporate structure.

Name of Entity: The Ohio County Coal Company
Mailing Address: 46226 National Road
Street Address: 46226 National Road, St. Clairsville, Ohio 43950
City: St. Clairsville  State: Ohio  Zip: 43950
FEIN No. 46-4054000
Ownership/Control relationship to Permittee: Telephone No. 740-338-3100

NOTE: -if entity is a SOLE PROPRIETORSHIP, list owner.
-if entity is a PARTNERSHIP, list all partners, including limited partners.
-if entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Director, any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS#/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray American Energy, Inc</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Owner 100%</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Kevin R. Hughes</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4397</td>
<td>Vice President - Operations</td>
<td>1/4/2014</td>
<td>Open</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

Name of Entity: The Ohio Valley Coal Company

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio Valley Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1586391</td>
<td>Shareholder 100%</td>
<td>5/25/1988</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>3/10/1995</td>
<td>Open</td>
</tr>
<tr>
<td>Roberta K. Heil</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2378</td>
<td>Asst. Secretary</td>
<td>11/1/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Bonnie M. Froehlich</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8632</td>
<td>Asst. Secretary</td>
<td>6/25/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Bonnie M. Froehlich</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8632</td>
<td>Asst. Treasurer</td>
<td>6/25/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>1/1/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Secretary</td>
<td>9/28/2009</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Comptroller</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Kevin R. Hughes</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4397</td>
<td>Vice President - Operations</td>
<td>6/2/2014</td>
<td>Open</td>
</tr>
<tr>
<td>Ryan Michael Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-0815</td>
<td>Vice President - Operations</td>
<td>9/19/2012</td>
<td>6/2/2014</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Secretary</td>
<td>3/1/2005</td>
<td>9/28/2009</td>
</tr>
</tbody>
</table>
### Part V No. 1

**A-3** Complete this item for each entity listed in the corporate structure.

**Name of Entity:** Ohio Valley Resources, Inc.

**Mailing Address:** 46226 National Road  
**Street Address:** (If mailing address is a Post Office box)

**City:** St. Clairsville  
**State:** Ohio  
**Zip:** 43950  
**Telephone No.:** 740-338-3100

**FEIN No.:** 34-1586391

**NOTE:**
- If entity is a SOLE PROPRIETORSHIP, list owner.
- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray Energy Corp.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1956752</td>
<td>Owner 100%</td>
<td>6/1/2001</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>11/1/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Chief Executive Officer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>Vice President</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Jason D. Witt</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-3754</td>
<td>Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Asst. Secretary</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Michael D. Loiacono</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Comptroller</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Treasurer</td>
<td>10/29/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>President</td>
<td>4/28/2006</td>
<td>10/30/2013</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Secretary</td>
<td>3/1/2005</td>
<td>10/30/2013</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>10/30/2013</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Comptroller</td>
<td>3/1/2005</td>
<td>10/30/2013</td>
</tr>
</tbody>
</table>
Complete this item for each entity listed in the corporate structure.

**Name of Entity:** Ohio American Energy, Inc.

**Mailing Address:** 46226 National Road  
**Street Address:** St. Clairsville, Ohio 43950  
**City:** St. Clairsville  
**State:** Ohio  
**Zip:** 43950  
**Telephone No.:** 740-338-3100

**City:** St. Clairsville  
**State:** Ohio  
**Zip:** 43950  
**Telephone No.:** 740-338-3100

**Employer Identification Number (EIN):** 31-1956752  
**Title:** Shareholder 100%  
**Beginning Date:** 5/1/2005  
**End Date:** Open

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray Energy Corporation</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>31-1956752</td>
<td>Shareholder 100%</td>
<td>5/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>5/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Stanley T. Piaszeki</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1838</td>
<td>VP - Operations</td>
<td>12/1/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>5/2/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>5/2/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Assistant Treasurer</td>
<td>6/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Charles O. Kapp</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9453</td>
<td>Vice President</td>
<td>7/15/2009</td>
<td>Open</td>
</tr>
<tr>
<td>Charles O. Kapp</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9453</td>
<td>Manager</td>
<td>7/15/2009</td>
<td>Open</td>
</tr>
</tbody>
</table>
### Part V No. 1

**A-3** Complete this item for each entity listed in the corporate structure.

**Name of Entity**: The Oklahoma Coal Company  
**Mailing Address**: 46226 National Road  
**Street Address**: St. Clairsville, Ohio 43950  
**City**: St. Clairsville  
**State**: Ohio  
**Zip**: 43950  
**Telephone No.**: 740-338-3100

**FEIN No.**: 34-1673480  
**Ownership/Control relationship to Permittee**: 

**NOTE:**  
- If entity is a SOLE PROPRIETORSHIP, list owner  
- If entity is a PARTNERSHIP, list all partners, including limited partners  
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Coal Sales Company</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1603699</td>
<td>Shareholder 100%</td>
<td>11/1/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>4/17/1992</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>President</td>
<td>4/28/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5311</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>James M. Spigarelli</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Asst. Secretary</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Asst. Secretary</td>
<td>1/10/2003</td>
<td>Open</td>
</tr>
</tbody>
</table>
Part V  No. 1

A-3 Complete this item for each entity listed in the corporate structure.

Name of Entity  Pennsylvania Transloading, Inc.
Mailing Address  46226 National Road
Street Address (If mailing address is a Post Office Box)  
City  St. Clairsville  State  Ohio  Zip  43950  Telephone No.  740-338-3100

FEIN No.  34-1603743 Ownership/Control relationship to Permittee

NOTE:  
- If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity’s legal structure is other than a sole proprietorship or partnership, list all owners or stockholder’s owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Director; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunburst Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>25-1766427</td>
<td>Shareholder 100%</td>
<td>4/1/1996</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>11/18/1988</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6784</td>
<td>Secretary</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5311</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>James R. Turner, Jr.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8372</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>10/7/2013</td>
</tr>
</tbody>
</table>
A-3  Complete this item for each entity listed in the corporate structure.

Name of Entity  Sunburst Resources, Inc.
Mailing Address  46226 National Road
Street Address (if mailing address is a Post Office Box)  
City  St. Clairsville  State  Ohio  Zip  43950
FEIN No.  25-1766427  Ownership/Control relationship to Permittee  
NOTE:  - If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more of any class of voting stock; all officers
such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio Valley Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1586391</td>
<td>Shareholder 100%</td>
<td>4/1/1997</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>11/1/1995</td>
<td>Open</td>
</tr>
<tr>
<td>Paul B. Piccolini</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-2971</td>
<td>President</td>
<td>4/28/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Secretary</td>
<td>10/26/2009</td>
<td>Open</td>
</tr>
</tbody>
</table>
### Part V. No. 1

#### A-3: Complete this item for each entity listed in the corporate structure.

- **Name of Entity:** TDK Coal Sales, Inc.
- **Mailing Address:** 46226 National Road
- **City:** St. Clairsville
- **State:** Ohio
- **Zip:** 43950
- **FEIN No.:** 25-1422374
- **Telephone No.:** 740-338-3100

**Ownership/Control relationship to Permittee**
- If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>31-1044044</td>
<td>Shareholder 100%</td>
<td>2/1/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Stanley T. Piasecki</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1838</td>
<td>Director</td>
<td>8/1/2004</td>
<td>Open</td>
</tr>
<tr>
<td>Stanley T. Piasecki</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1838</td>
<td>President</td>
<td>8/1/2004</td>
<td>Open</td>
</tr>
<tr>
<td>Stanley T. Piasecki</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-1838</td>
<td>CEO</td>
<td>8/1/2004</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Anthony C. Vcelka, II</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5311</td>
<td>Treasurer</td>
<td>10/7/2013</td>
<td>Open</td>
</tr>
<tr>
<td>Charles E. Shestak</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9288</td>
<td>Asst. Secretary</td>
<td>2/1/1999</td>
<td>Open</td>
</tr>
<tr>
<td>Entity Name</td>
<td>Address</td>
<td>SS#/EIN</td>
<td>Title</td>
<td>Beginning Date</td>
<td>End Date</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>Maple Creek Mining, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>25-1755305</td>
<td>Shareholder 100%</td>
<td>10/14/1996</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>10/14/1996</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Vice President</td>
<td>7/12/2010</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Treasurer</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
<tr>
<td>Ronnie D. Dietz</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-7715</td>
<td>Asst. Secretary</td>
<td>3/1/2005</td>
<td>Open</td>
</tr>
</tbody>
</table>
### Part V No. 1

**A-3**  Complete this item for each entity listed in the corporate structure.

**Name of Entity:** West Virginia Resources, Inc.  
**Mailing Address:** 46226 National Road  
**Street Address (if mailing address is a Post Office box):**  
**City:** St. Clairsville  
**State:** Ohio  
**Zip:** 43950  
**Telephone No.:** 740-338-3100  

**FEIN No.:** 55-0713676  
**Ownership/Control relationship to Permittee:**

**NOTE:**
- If entity is a SOLE PROPRIETORSHIP, list owner.
- If entity is a PARTNERSHIP, list all partners, including limited partners.
- If entity's legal structure is other than a sole proprietorship or partnership, list all owners or stockholder's owners ten percent (10%) or more or any class of voting stock; all officers such as President, Vice President, Secretary, Treasurer, Directors; any other person performing a function similar to those listed above for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Creek Mining Company</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>31-1040986</td>
<td>Shareholder 100%</td>
<td>12/27/1991</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>10/2/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Charles E. Shestak</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9288</td>
<td>Vice President</td>
<td>10/2/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Treasurer</td>
<td>12/1/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Robert L. Putsock</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8460</td>
<td>Secretary</td>
<td>12/1/2007</td>
<td>Open</td>
</tr>
<tr>
<td>Neil Kok</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Unk</td>
<td>President</td>
<td>10/2/2006</td>
<td>8/6/2012</td>
</tr>
</tbody>
</table>
APPENDIX 1-2

CURRENT AND PREVIOUS COAL MINING PERMITS

Information Can Be Found in Appendix 1-9 of Part “A” Horse Canyon.

Information was Revised 5/2/07
<table>
<thead>
<tr>
<th>Company</th>
<th>Belmont Coal, Inc.</th>
<th>EIN: 31-153-6602</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td>Belmont Coal, Inc.</td>
<td>D-0241</td>
<td>Ohio</td>
</tr>
<tr>
<td></td>
<td>D-1020</td>
<td>Ohio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>KenAmerican Resources Inc.</th>
<th>EIN: 61-1264385</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td>KenAmerican Resources Inc.</td>
<td>889-5009</td>
<td>KY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Onieda Coal Company Inc.</th>
<th>EIN: 62-1011712</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td>Onedia Coal Co. Inc., 29525 Chagrin Boulevard, Suite 111 Pepper Pike, Ohio 44122</td>
<td>U0-359</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>U0-524</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>U0-620</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>D-7-82</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>D-47-81</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>D-46-82</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>U-2016-89</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>P-154-81</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>P-62-81</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>P-2043-89</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>S-2004-87</td>
<td>WV</td>
</tr>
<tr>
<td></td>
<td>S-71-85</td>
<td>WV</td>
</tr>
<tr>
<td>Company</td>
<td>MonValley Transportation Center Inc.</td>
<td>EIN: 62-1011712</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Address:</td>
<td>Permit # State Regulator Authority MSHA # Date Issued</td>
<td></td>
</tr>
<tr>
<td>MonValley Trans Center Inc.</td>
<td>02851602 PA DEP N/A  N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Oklahoma Coal Co.</th>
<th>EIN: 34-1673480</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Permit # State Regulator Authority MSHA # Date Issued</td>
<td></td>
</tr>
<tr>
<td>The Oklahoma Coal Co.</td>
<td>D-0230 OH DOR N/A N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Maple Creek Mining Inc.</th>
<th>EIN: 25-1755305</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Permit # State Regulator Authority MSHA # Date Issued</td>
<td></td>
</tr>
<tr>
<td>Maple Creek Mining Inc.</td>
<td>63841302 PA PA DEP 36-00970 1970</td>
<td></td>
</tr>
<tr>
<td></td>
<td>63733706 PA PA DEP 1211-PA20-0058-03 1970</td>
<td></td>
</tr>
<tr>
<td></td>
<td>63723707 PA PA DEP 1211-PA20-0058-04 1970</td>
<td></td>
</tr>
</tbody>
</table>
### Energy Resources, Inc.

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>EIN: 25-1755305</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>Permits and States</td>
<td></td>
</tr>
<tr>
<td>Energy Resources, Inc.</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td>Brockway, PA</td>
<td>33840125</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>33860102</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>17880102</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>33870113</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>33830115</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>24880101</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>24880103</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>24890108</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>24900120</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>24900104</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>24900106</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>24900102</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>24960101</td>
<td>PA</td>
</tr>
</tbody>
</table>

### Canterbury Coal Company

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>EIN: 25-112473</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>Permits and States</td>
<td></td>
</tr>
<tr>
<td>Canterbury Coal Company</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>SMP # 039000112</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>SMP # 03904111</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>CMAP 03841302</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>CRDA 03743701</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>CRDA 03950701</td>
<td>PA</td>
</tr>
<tr>
<td>Company</td>
<td>The Ohio Valley Coal Company</td>
<td>EIN: 34-1041310</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Address:</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td>The Ohio Valley Coal Company</td>
<td>D-3060</td>
<td>OH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>UMCO Energy, Inc.</th>
<th>EIN: 52-1615668</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td>UMCO Energy, Inc.</td>
<td>63-921301</td>
<td>PA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>The American Coal Company</th>
<th>EIN: 73-1543124</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td>The American Coal Company</td>
<td>No. 2</td>
<td>IL</td>
</tr>
<tr>
<td></td>
<td>No. 255</td>
<td>IL</td>
</tr>
<tr>
<td></td>
<td>No. 257</td>
<td>IL</td>
</tr>
<tr>
<td></td>
<td>No. 306</td>
<td>IL</td>
</tr>
<tr>
<td></td>
<td>No. 165804AAA</td>
<td>IL</td>
</tr>
<tr>
<td></td>
<td>No. 110061727</td>
<td>IL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>PennAmerican Coal, L.P.</th>
<th>EIN: 25-1800809</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Permit #</td>
<td>State</td>
</tr>
<tr>
<td>PennAmerican Coal, L.P.</td>
<td>32951301</td>
<td>PA</td>
</tr>
</tbody>
</table>

**INCORPORATED**
MAY 18 2007
Div. of Oil, Gas & Mining
<table>
<thead>
<tr>
<th>Company</th>
<th>EIN:</th>
<th>Address:</th>
<th>Permit #</th>
<th>State</th>
<th>Regulator Authority</th>
<th>MSHA #</th>
<th>Date Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utah American Energy, Inc.</strong></td>
<td><strong>34-1874726</strong></td>
<td>UtahAmerican Energy, Inc. ACT/007-013 Horse/Lila</td>
<td>Utah</td>
<td>Division of Oil, Gas and Mining</td>
<td>42-00100 - 42-02241</td>
<td>12/24/78 - 04/05/99</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>794 &quot;C&quot; Canyon Road East Carbon, Ut 84520</td>
<td></td>
<td>Divison of Oil, Gas and Mining</td>
<td>42-02356 - 42-01715</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>P.O. Box 986 Price, Utah 84501</td>
<td></td>
<td>Divison of Oil, Gas and Mining</td>
<td>42-02233</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACT/007/041 West Ridge</td>
<td>Utah</td>
<td>Divison of Oil, Gas and Mining</td>
<td>42-02028 - 42-00174</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACT/007/033 Tower</td>
<td>Utah</td>
<td>Divison of Oil, Gas and Mining</td>
<td>42-01864</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>American Energy, Corporation</strong></td>
<td><strong>31-1550443</strong></td>
<td>American Energy Corp. 43521 Mayhugh Hill Road</td>
<td>Ohio</td>
<td>ODNR</td>
<td>33-01070</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Township Highway 88 Beallsville, Ohio 43716</td>
<td></td>
<td>ODNR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TDK Coal Sales, Inc.</strong></td>
<td><strong>25-1422374</strong></td>
<td>TDK Coal Sales, Inc. P.O. Box 259</td>
<td>PA</td>
<td>PaDep</td>
<td>3608867</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>R.D. #2, Fermantown Road Brockway, PA. 15824</td>
<td></td>
<td>PaDep</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
VIOLATION INFORMATION
APPENDIX 1-3

Information updated to April, 2009
<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah American Energy, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>34-1874726</td>
<td>Shareholder 100%</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Director</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. Mckown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
<tr>
<td>Matthew C. Efaw</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6793</td>
<td>President</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
</tbody>
</table>
### Part V No. 1

**A-3**

Complete this item for each entity listed in the corporate structure.

**Name of Entity:** Genwal Resources, Inc.

**Mailing Address:** 46226 National Road, St. Clairsville, Ohio 43950

**Street Address:**

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #:EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andalex Resources, Inc.</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>61-0931325</td>
<td>Shareholder 100%</td>
<td>1/11/1995</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>David. W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Director</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>David. W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
<tr>
<td>Matthew C. Efw</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6793</td>
<td>President</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
</tbody>
</table>
Part VI

A-4 Identify below all permits held within the last five (5) years for surface coal mining operations in the United States owned or controlled by the Permittee and/or any person listed in items A-3 No. 1 or A-3 No. 2. Include all operations that the Permittee and/or any person is deemed or presumed to own or control through contract, subcontract, lease, sublease, license, or other contractual relationship, regardless of the entity holding the permit.

Name of Permittee or person  West Ridge Resources, Inc
Address  46226 National Road
City  St. Clairsville  State  Ohio  Zip  43950  Telephone No.  740-338-3100
FEIN  87-0585129  Social Security No.  

*If more than one operator is on a permit, list the appropriate information as requested below for all operators.

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>State Regulatory Authority</th>
<th>Operator (if different from permittee)</th>
<th>MSHA Number</th>
<th>MSHA Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>C/007/041</td>
<td>UT-DOGM</td>
<td></td>
<td>4202233</td>
<td>8/9/2006</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A-3 Complete this item for each entity listed in the corporate structure.

**Name of Entity**: Utah American Energy, Inc.

**Mailing Address**: 46226 National Road

**Street Address** (if mailing address is a Post Office box):

**City**: St. Clairsville  
**State**: Ohio  
**Zip**: 43950

**FEIN No.**: 34-1874726  
**Ownership/Control relationship to Permittee**

**Telephone No.**: 740-338-3100

**NOTE:**
- If entity is a SOLE PROPRIETORSHIP, list owner
- If entity is a PARTNERSHIP, list all partners, including limited partners
- If entity’s legal structure is other than a sole proprietorship or partnership, list all owners or stockholder’s owners ten percent (10%) or more or any class of voting stock, all officers such as President, Vice-President, Secretary, Treasurer, Directors; any other person performing a function similar; and for limited liability companies, all members and managers.

<table>
<thead>
<tr>
<th>Entity Name</th>
<th>Address</th>
<th>SS #/EIN</th>
<th>Title</th>
<th>Beginning Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray Energy Corporation</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>31-1956752</td>
<td>Shareholder 100%</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert Eugene Murray</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-8852</td>
<td>Director</td>
<td>7/31/1998</td>
<td>Open</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>Director</td>
<td>11/5/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>David W. Hibbs</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>Not Available</td>
<td>President</td>
<td>12/11/2009</td>
<td>1/5/2018</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Treasurer</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Michael O. McKown</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-4552</td>
<td>Secretary</td>
<td>8/18/2006</td>
<td>Open</td>
</tr>
<tr>
<td>B.J. Cornelius</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-5023</td>
<td>SR. Vice President - Sales</td>
<td>9/12/2006</td>
<td>Open</td>
</tr>
<tr>
<td>Robert D. Moore</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-9703</td>
<td>Director</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
<tr>
<td>Matthew C. Efaw</td>
<td>46226 National Road, St. Clairsville, Ohio 43950</td>
<td>XXX-XX-6793</td>
<td>President</td>
<td>1/5/2018</td>
<td>Open</td>
</tr>
</tbody>
</table>
APPENDIX 1-4

COUNTY CORRESPONDENCE

County Correspondence for Appendix 1-4 are all hard copies no electronic copies exist.
Utah American Energy, Inc.
Environmental Industrial Service
31 North Main Street
Helper, Utah 84501

To Whom It May Concern:

Emery County has approved a Large Site Development Plan for the Utah American Energy, Inc. Lila Canyon Mine surface facilities.

Said approval authorizes mining activities to be conducted within 100 feet of the public road with the provision that, to provide for public safety, a 6 foot chain link fence shall be constructed adjacent to the road right-of-way in the vicinity of the surface facilities area.

Additionally, the location of the fence must not restrict continued public use of the road.

Sincerely,

Rex Funk,
Road Supervisor

cc Val Payne, Public Lands Commissioners
Bryant Anderson, Planning & Zoning
Lowell Braxton, Division of Oil, Gas and Mining

P.O. Box 869 • 300 North 1st West • Castle Dale, Utah 84513 • Telephone (801) 381-5450 • FAX (801) 381-5239
22 March 2001

Utah American Energy, Inc.
Environmental Industrial Services
31 North Main Street
Helper, Utah 84526

To Whom It May Concern:

Emery County has previously approved a Large Site Development Plan for the Utah American Energy, Inc. Lila Canyon Mine surface facilities.

It is understood that as part of this project a 60" culvert will have to be installed adjacent to the proposed sedimentation pond. This culvert will extend under the existing county road. During the installation of the culvert it may be necessary to temporarily limit travel through this area. Emery County has no problems with this action as long as public safety concerns are maintained.

Sincerely,

Bryant Anderson
Zoning Administrator
March 27, 2001

UtahAmerican Energy, Inc.
Environmental Industrial Services
31 North Main Street
Helper, Utah 84526

To Whom It May Concern:

Emery County has previously approved a Large Site Development Plan of the UtahAmerican Energy, Inc. (UEI) Lila Canyon Mine surface facilities. Part of this plan involves the rehabilitation of an existing sediment pond.

Emery County has no problems with the rehabilitation of this sedimentation pond and realizes that it is adjacent to and may be on the county road right of way. It is also understood that UEI has a 100' right of way in this area. With the installation of a 6' chain link fence, it is our opinion that the public will have adequate protection; so Emery County does not have a problem with this sedimentation pond.

Sincerely,

[Signature]
Rex Funk,
Road Supervisor

RF/IIs
AGREEMENT

This agreement made and entered into this 19 day of October 1999, by and between Emery County, a body corporate and politic (County), and Utah American Energy, Inc. (UEI).

WHEREAS, there is an existing road in Emery County known as Lila Canyon Road (#126) and

WHEREAS, UEI requires extensive use of said road, and

WHEREAS, due to said extensive use, said road must be improved for the health, safety and welfare of the citizens of County as well as others who may have occasion to use said road,

NOW THEREFORE, be it agreed as follows:

1. The parties hereto agree and acknowledge that presently the southwest portion of the road known as Lila Canyon Road is a County road. Said County road runs from State Route 6 in a Northeasterly direction for approximately 2.63 miles to a presently existing corral. Thereafter the road is an unimproved RS 2477 roadway under assertion by Emery County with the Bureau of Land Management (BLM) and identified as assertion #144 lower Lila point, #155 Lila Canyon and #326 Lila Canyon Lila Pt. The Assertions were indexed and submitted to BLM Jan. 8, 1993.

2. That Emery County will improve the Lila Canyon Road according to the plans and specifications as approved by Johansen & Tuttle Engineering, Inc., as Emery County's engineers of record.

3. The parties shall enter into an Escrow Agreement. Johansen & Tuttle Engineering, Inc. estimates for such improvements are shown in attachment A. Estimates for each phase shall be carefully reviewed and brought up to date before funds are put in escrow prior to initiation of the individual phases. UEI and Emery County shall jointly agree in writing before beginning any specific phase. No phase shall commence before the required funds for that specific phase is in escrow. Each phase once initiated shall be completed.

4. Insofar as the road will be used by the public for access to private and public lands and by UEI for access and construction of the Lila Canyon mine, and insofar as improvement of the Roadway would not otherwise be a budgeted item for Emery County given other priorities for highway maintenance or reconstruction, it has been agreed between Emery County and UEI that the total cost of the reconstruction of the county road shall be the responsibility of UEI. Upon satisfactory completion by both parties of each phase, any remaining unspent funds in escrow shall remain sole property of UEI.
5. UEI will assist the County in obtaining additional road ROW’s as required. The newly applied for BLM, ROW #UTU- 76617, now in the EA process will, be issued and assigned to Emery County.

6. Emery County shall make available at no cost, any native rock or dirt materials available on County or otherwise permitted local properties which might be suitable for road construction.

7. UEI shall acquire an Encroachment Permit from Emery County and comply with the conditions as set forth in the permit. It is agreed that when UEI is operating any coal mining or reclamation activity within 100' of a County road that UEI shall protect the public from normal hazards associated with said activity by installing a 6' chain link fence between the public and mine activity or facility situated within the 100' distance from the road unless as otherwise agreed to by Emery County through its Road Encroachment Ordinance 8-7-85A or as amended.

8. It is further agreed by Emery County that in consideration of UEI’s contributions, Emery County agrees and acknowledges that said contribution does not in any manner constitute participation by UEI in the design, construction, maintenance or operation of the road except as otherwise agreed by both parties. The road will remain a County network road entirely under authority of Emery County. Furthermore, Emery County agrees to indemnify and hold UEI, its owners, directors, officers, employees, and agents (indemnitees) harmless of any liability, cost or expense, including defense costs, from any claim, demand or action which may be brought alleging negligence or responsibility on the part of indemnitees in the design or construction of the roadway, including any claim or demand which may be made by UEI employees. This obligation to indemnify and hold harmless commences immediately and includes the period of time during which construction is taking place.

Emery County agrees that it will fully cooperate with UEI should any explanation of this expenditure by UEI be required by any of the commissions which regulate UEI operations and/or any government agency which may inquire or investigate into the expenditure of UEI.

EMERY COUNTY

[Signature]
Commission Chairman

Attest:

[Signature]
Emery County Clerk

Page 2 of 4
Subscribed and sworn to before me this 19th day of October, 1999.

Carol Cox
Notary Public

Utah American Energy, Inc.

Hershel H. Hayden, President

Subscribed and sworn to before me this 26th day of October, 1999.

Janet A. King
Notary Public
## ATTACHMENT “A”

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>Engineering and Design of the Lila Canyon road complete, ready for bid.</td>
<td>$150,000</td>
</tr>
<tr>
<td>Phase II</td>
<td>Construction of gravel roadways. Includes acceleration &amp; deceleration lanes on State Hwy 6.</td>
<td>To be determined by Phase I studies.</td>
</tr>
<tr>
<td>Phase III</td>
<td>Paving of the western segment of the Lila Canyon road.</td>
<td>To be determined by Phase I studies.</td>
</tr>
</tbody>
</table>
APPENDIX 1-5

CERTIFICATIONS, PUBLICATIONS & VERIFICATIONS
STATE OF UTAH
COUNTY OF CARBON

I, R. Jay Marshall, hereby certify that I am a responsible official for the applicant (UtahAmerican Energy, Inc.) and that the information contained in this application for part "B" of the Horse Canyon Permit is true and correct to the best of my knowledge and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Signed: R. Jay Marshall
Position: Chief Engineer & Resident Agent

Taken, subscribed, and sworn to me before the undersigned authority in my said county, this 26 day of October, 1998.

My Commission Expires: 12/05/01

INCORPORATED
MAY 18, 2007
Div. of Oil & Gas Mining
Names of the persons “OR” organizations that collected and analyzed the data.

<table>
<thead>
<tr>
<th>Survey</th>
<th>Organization</th>
<th>Dates of Collection</th>
<th>Methodology</th>
<th>Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lila Canyon Vegetation Inventory (App 3-2)</td>
<td>Environmental Industrial Services (EIS)</td>
<td>November 1999</td>
<td>Page 1</td>
<td>M. Coonrod, K. Salt, and G. Cook</td>
</tr>
<tr>
<td>Attachment 3-2A Lila Canyon Veg Survey</td>
<td>Environmental Industrial Services (EIS)</td>
<td>November 2000</td>
<td>Page 1</td>
<td>M. Coonrod, and D. Varner</td>
</tr>
<tr>
<td>T &amp; E Species Inventories (App 3-4)</td>
<td>Environmental Industrial Services (EIS)</td>
<td>May 1998</td>
<td>Page 1</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>EIS / BLM</td>
<td>April 2002</td>
<td>Page 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EIS</td>
<td>May 2002</td>
<td>Page 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BLM / DOGM</td>
<td>September 2002</td>
<td>Page 1</td>
<td></td>
</tr>
<tr>
<td>Raptor Survey (App 3-5)</td>
<td>DWR (Personal Communication with Chris Colt)</td>
<td>Page 2</td>
<td>DWR (Personal Communication with Chris Colt)</td>
<td>N/A</td>
</tr>
<tr>
<td>Productivity Within and Around the Permit Area (Appendix 3-7)</td>
<td>Environmental Industrial Services (EIS)</td>
<td>Pages 1 to 3</td>
<td>Page 1 to 3</td>
<td>George Cook,</td>
</tr>
<tr>
<td>Soil Resource Inventory and Assessment (Appendix 2-3)</td>
<td>Environmental Industrial Services (EIS)</td>
<td>October 1998</td>
<td>Page 2</td>
<td>Daniel M. Larsen</td>
</tr>
<tr>
<td>Hydrology Spring &amp; Seep &amp; Baseline</td>
<td>JBR Earthfax</td>
<td>1985, 1993, 1994, 1995</td>
<td>Appendix 7-6, Appendix 7-1, Appendix 7-2</td>
<td>N/A</td>
</tr>
</tbody>
</table>
REFERENCE: Affidavit of Publication for the Horse Canyon Mine Lila Canyon Extension

Dear Mr. Haddock;

Attached you will find a copy of the Affidavit of Publication for the Horse Canyon Mine Lila Canyon Extension to be filed with the application to serve as proof of publication pursuant to R645-301-117.200.

Upon the Division's determination of administrate completeness of the Lila Canyon Extension to the Horse Canyon Mine Plan and as per R645-300-121.100, UtahAmerican Energy placed an advertisement in the SunAdvocate, which is a local newspaper of general circulation in the locality of the proposed coal mining and reclamation operation. The advertisement was placed in the legal section of the paper and was published once a week for four consecutive weeks. The dates of publication were February 28, March 7, 14, and 21, 2002.

A copy of the advertisement was submitted to the Division for your review prior to publication.

The advertisement contains UtahAmerican's name and business address, clearly shows the precise location and boundaries of the proposed permit area and is sufficient to enable local residents to readily identify the proposed permit area. The location is identified where a copy of the application is available for public inspection, along with the Division's address where written comments, objections, or requests for informal conferences may be submitted.

In addition to what is required by regulation, UtahAmerican Energy, Inc. published a similar notice in the Emery County Progress.

UtahAmerican Energy's understands that comments are due within 30 days of the last publication and the public comment period begins on the 21st of March and ends on April 20th 2002.

Sincerely,

R. Jay Marshall

R. Jay Marshall
**PUBLIC NOTICE**  
**Horse Canyon Mine Lila Canyon Mine Extension**

Notice is hereby given that UtahAmerican Energy, Inc. P.O. Box 986 Price, Utah 84501, has submitted a complete application to the State of Utah, Division of Oil, Gas & Mining for an extension to the Horse Canyon Mine Permit Number C/007/013. The new application will be known as part “B” Lila Canyon Mine and is being processed as a new permit under the Horse Canyon Mine Permit Number.

A copy of the complete application is available for inspection at the Division of Oil, Gas & Mining office located at 1594 West North Temple, Suite 1210, Salt Lake City, Utah 84114-5801, and at the Emery County Recorders Office, Emery County Courthouse, Castle Dale, Utah 84513 and at the Carbon County Recorders Office, Carbon County Courthouse, Price, Utah 84501.

The extension to the approved permit area is described as follows:

<table>
<thead>
<tr>
<th>T16SR14E</th>
<th></th>
<th>T16SR15E</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 10</td>
<td>Portions of SE1/4</td>
<td>Section 22</td>
<td>NE1/4NE1/4</td>
</tr>
<tr>
<td>Section 11</td>
<td>E1/2</td>
<td>Section 23</td>
<td>N1/2</td>
</tr>
<tr>
<td>Section 12</td>
<td>All</td>
<td>Section 24</td>
<td>All</td>
</tr>
<tr>
<td>Section 13</td>
<td>All</td>
<td>Section 25</td>
<td>N1/2</td>
</tr>
<tr>
<td>Section 14</td>
<td>All</td>
<td>Section 26</td>
<td>E1/2NE1/4</td>
</tr>
<tr>
<td>Section 15</td>
<td>Portions of E1/2 SW1/4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 19  
W1/2SW1/4  
SE1/4SW1/4  
S1/4NE1/4SW1/4  

Section 30  
NW1/4  
SW1/4NE1/4  
S1/4NW1/4NE1/4

The described areas are contained on the following U.S. Geological Survey 7.5 minute quadrangle maps, Cedar, Lila Point.

Written comments, objection or requests for informal conference on the application may be submitted by anyone affected by this proposal. Such comments should be filed within the next thirty (30) days with: State of Utah, Department of Natural Resources, Division of Oil, Gas & Mining, Coal Program.

Published in the Sun Advocate February XX, XX, XX and March XX, 2002

INCORPORATED

MAY 18 2007  
Div. of Oil, Gas & Mining
AFFIDAVIT OF PUBLICATION

STATE OF UTAH

County of Carbon,

I, Ken Larson, on oath, say that I am the Publisher of the Sun Advocate, a twice-weekly newspaper of general circulation, published at Price, State. A true copy of which is hereto attached, was published in the full issue of such newspaper for 4 (Four) consecutive issues, and that the first publication was on the 28th day of February, 2002, and that the last publication of such notice was in the issue of such newspaper dated the 21st day of March, 2002.

Ken G Larson - Publisher

Subscribed and sworn to before me this 21st day of March, 2002.

Notary Public. My commission expires January 10, 2003 Residing at Price, Utah

Publication fee, $407.68

LINDA THAYN
NOTARY PUBLIC - STATE OF UTAH
845 EAST MAIN
PRICE, UTAH 84501
COMM. EXP. 1-10-2003
STATE OF UTAH

County of Emery,

I, Ken Larson, on oath, say that I am the Publisher of the Emery County Progress, a weekly newspaper of general circulation, published at Castle Dale, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue of such newspaper for 3 (Three) consecutive issues, and that the first publication was on the 5th day of March, 2002 and that the last publication of such notice was in the issue of such newspaper dated the 19th day of March, 2002.

Ken G Larson - Publisher

Subscribed and sworn to before me this 19th day of March, 2002.

Linda Mayn
Notary Public  My commission expires January 16, 2003 Residing at Price, Utah

Publication fee, $219.18
Melvin A. Coonrod  
Owner, EIS

Mel Coonrod has a Bachelors of Science Degree in Vertebrate Zoology and Chemistry, a Masters Degree in Silviculture, and Post-Graduate work in ecology. Mel has a wide range of experience in the environmental arena. Beginning as an instructor in two major universities, then into the private sector where he built the largest reforestation TSI contracting firm in the Intermountain West, planting in excess of one million trees per year. In the mid-1970's, he was hired by Getty Oil Company as an environmental coordinator; and completed the second Approved Mine Reclamation Plan in Utah. When Texaco purchased Getty Oil in 1981, Mel founded EIS Environmental Industrial Service. Under his direction, the firm has implemented numerous NEP documents, PAP's, LBA's. reclamation and engineering plans throughout the west. The first two coal mines to receive Phase III Bond Release were projects in which EIS played a major role in both planning and implementation. Mel is licensed in engineering; landscape architecture; general contracting; and is certified for Threatened, Endangered, and Sensitive Species surveys; wetland delineation; raptor inventories; asbestos inspection; and numerous MSHA ratings. He is also a licensed pilot and a fully certified diver in open water, with scuba ratings in various areas.

In addition to his vast experience in a variety of fields, he has published a number of articles and has worked extensively with several government agencies in developing training films and literature used to instruct both industry and agency personnel in areas of reclamation and wildlife enhancement. Mel's philosophy relative to development is to create a win-win scenario, wherein the resource can be utilized in a cost-effective manner, while at the same time the environment can be enhanced to such a degree through cost-effective mitigation that there is no net loss for the life of the project. (Full resume attached).

David K. Steed  
Project Manager/Ecologist

Mr. Steed (B.S. Ecology, 1993 Idaho State University) is an experienced Environmental Consultant and Project Manager with highly developed administrative and decision-making skills. Since joining EIS in 1993, he has overseen the coordination and management of regulatory documentation and baseline analysis required for state and federal mandates. Mr. Steed develops and acts as primary author of most of the NEPA and EPA related regulatory documentation produced, and is proficient with all CERCLA, RCRA, and TSCA related documentation. He is able to interface with agency personnel on all levels and in the absence of the supervisor, is responsible for the functions of the firm. Other specific duties include the supervision of water, soil and vegetation monitoring; wetland delineations, threatened, endangered and sensitive species inventories, stream classification, aquatic restoration, compliance coordination, reclamation supervision, GIS mapping, marketing solicitation; and contract management.

In 1998, Mr. Steed conducted an independent review for the Utah Regulatory Office of the U.S. Army Corp of Engineers of developed wetland mitigation projects throughout the state of Utah. Through his role as Lead Project Ecologist, his study was utilized to determine the rate of functional success, as well as to develop a set of guidelines for insuring the success of future projects. Associated duties while assisting the COE included independent review of federal wetland guidelines, wetland delineations, project management assistance, new-site review and interagency coordination on policy action and design.

Other studies that Mr. Steed has been associated with include: a nutrient cycling stream study in
Yellowstone National Park for the National Park Service to examine the impacts to burned watersheds from the 1988 fire; a two-year Department of Energy telemetry study at the Idaho Nuclear Engineering Laboratory upon the potential for radioisotope transport by small mammals; a comparative U.S. Forest Service stream study in Southeastern Idaho to determine the level of stream degradation from year-long grazing; and numerous toxicity studies to determine the impact of heavy metals, pesticides, and nutrient enrichment upon salmonid communities. (Full resume attached).

David D. Varner
Biologist

David graduated in May of 1999 from Southern Utah University with a Bachelors of Interdisciplinary Science with an emphasis in Plant Science. He worked as an Assistant Laboratory Supervisor for Anadalex Resources for three years. In that capacity, David was responsible for maintaining quality of coal test results, and environmental compliance of the Wildcat Loadout surface facility. He is also licensed by the State of Utah as a private pesticide applicator. He has also conducted Environment Reviews for Federal Housing Authority and Housing and Urban Development grants.

Since joining EIS in May of 2000 David has conducted Threatened, Endangered, and Sensitive species surveys, raptor inventories, and has written corresponding reports for these studies. He has also participated and supervised in reclamation and mine surface compliance work.

As a lifetime resident of Eastern Utah, David is very familiar with the environmental issues that effect rural communities. Being a third generation agriculturist, Dave understands that conservation of our natural resources is vital to our future generations.

Carl East
Biologist

Carl graduated in December of 1995 from Adams State College with a Bachelors of Science in Biology with a field emphasis. He worked as a fishery technician for Utah State University, where he assisted in the surgery placing ultrasonic radio tags inside cutthroat trout. In 1996, Carl worked for the U.S. Forest Service in the state of Colorado, there he maintained and constructed motorized trails. Carl was responsible for the clearing of the timber, cleaning and building water diversion structures and informing users about the Colorado Off Highway Coalition Program.

Carl joined the EIS team in 1998, he has been involved with inventories such as Threatened, Endangered and Sensitive Species surveys, Vegetation Surveys, Wildlife Delineation of Habitat Constituents. He has worked extensively with aquatics and aquatic environments and is currently over the fisheries program for the Nest Purse Indian Nation.
Melvin A. Coonrod
Owner/Principal Consultant
Environmental Industrial Services

EXPERIENCE

Owner/Principal Consultant - Environmental Industrial Services (EIS), Helper, Utah

1990 to Present: Environmental Industrial Services (EIS) operates two distinct divisions and maintains a fully staffed office of college trained consultants that are involved in all phases of biological and physical monitoring of potential disturbance. Duties include vegetation baseline studies, wildlife, soils, and threatened and endangered species inventories, riparian and wetland classification, environmental assessments, environmental impact statements, mine reclamation plans (MRP), lease buy applications (LBA), etc. In addition, the staff works with and coordinates with a number of local, state and federal agencies to facilitate permits and compliance with federal and state regulations.

Mr. Coonrod also provides reclamation/revegetation and construction project management. This involves the oversight and coordination of a large variety of heavy equipment and a substantial labor force, subcontractors, skilled technicians, etc. to implement the work. Projects include all aspects of construction from total mine construction with associated support facilities to demolition and the total reclamation of abandoned and obsolete mine facilities. This is followed with environmental monitoring to assist and insure bond release.

Co-Owner - B & R Reclamation, Helper, Utah

1983 - 1990: Performed reclamation contracting for the following clients:

Co-Op Mining Co. - Salaried Position, Permitting and Compliance.
Beaver Creek Coal - Hydrologic Monitoring, Mines 3,2,4,6,7, and CV Spur.
Summit Coal Co. - Mine and Reclamation Plan Preparation, submittal January 1984.
Exxon Oil Co. - Drill Site Reclamation Plan.
U.S. Fuel - Ocular Monitoring of Revegetation Success.
R & M Consultants - Stability Analysis Compaction Testing Sediment Ponds, GenwaI Coal Co.
College of Eastern Utah - Instructor, Taught Reclamation Practices, Spring Quarter 1983.
A.E.P. Blackhawk Coal Co. - Environmental Engineer, Maintain Utah Coal Properties.

Environmental Coordinator Permitting and Compliance - Getty Oil Company, Price, Utah

1980 - 1983: All phases of mine plan approval, environmental assessment on proposed unit-train loadout, reclamation plans including methods, species, and procedures though train loadout, reclamation contracts and work on property in 1981 in excess of $400,000.00.

Supervised all monitoring of hydrology subsidence, climate, wildlife and revegetation efforts. Handled compliance efforts relative to all state, federal and local regulations including toxic waste, raptors and subsidence.

Residential, Licensed General B-1 Contractor - State of Utah

Teacher - Carbon County School District, Price, Utah

1970 - 1973: Teaching Botany, Zoology, and Ecology. Was instrumental in changing curriculum design to offer a wider range of subjects rather than general science. Set up and maintained a fully enclosed herpetarium within the school including both tropical and desert life zones with representative plants and animal life of each.

T.S.I. and Reforestation Contractor


Teacher - Weber State College, Ogden, Utah

1965 - 1967: Teaching assistance in entomology and physiology under Dr. Earl Smart. Taught bacteriology, entomology, and physiology.

EDUCATION

Utah State University - Utah
M.F. Silviculture -1970
Secondary Certification - Ecology/ Botany
Post Graduate work in Ecology

Weber State College - Utah
B.S. Zoology - 1967
Minor - Chemistry

PROFESSIONAL LICENSES & CERTIFICATIONS

General Contractor, Classification - B-100
Engineering - S-310
Landscape Architecture - S-330
Earth Moving - B-100-A
Blaster - Utah, Arizona, New Mexico, Arkansas.
MSHA - Refuse and Sediment Pond Inspection.
Asbestos -Inspection and Compliance, Utah.
Opacity Inspector - DEQ Visual Emission, Utah.
Threatened and Endangered Species Inventories - BLM.
NEPA and Biological Consultant - BLM - Utah, New Mexico, Arizona, Colorado, & Nevada.
USFS Manti-LaSal National Forest Approved TES Consultant.
Utah State Division of Wildlife Resources TES and Raptor Consultant.
USFWS Certified Mexican Spotted Owl Surveyor.
USACOE Certified Section 404 Wetland Delineator.
Utah State DEQ Certified On-Site Wastewater Treatment Design, Soil Evaluation & Percolation Testing.
BIA certified on TE&S Species - Utah, Arizona, New Mexico and Colorado for a number of Indian Nations
AWARDS & CERTIFICATES

Wildlife Society - Conservation Achievement Award.
Utah State University - Outstanding Reclamation Award 1986 & 1987.
Board of Director - Carbon County Country Club.
Board of Director - East Duck Club.
Utah Agro-forester of the Year - 2001
Chairman Local DU Chapter

PUBLICATIONS

Coal Mining and Wildlife. slide presentation in cooperation with UDWR, presently being utilized by the majority of mine in Utah as a training program.


SUMMARY OF SUPPORTIVE QUALIFICATIONS AND CAREER OBJECTIVE

An experienced Environmental Consultant and Project Manager with highly developed administrative and decision-making skills. Expertise in regulatory procedures, site design and proposal preparation, environmental monitoring and systems design, as well as a developed background in terrestrial and aquatic ecology.

EMPLOYMENT HISTORY

Ecologist/Environmental Consultant - EIS Environmental & Engineering Consulting, Helper, UT

1993 to Present: Coordination and management of regulatory documentation and baseline analysis required for state and federal mandates. Specific duties include: supervision of water, soil and vegetation monitoring; wetland delineation; stream classification; aquatic restoration; threatened, endangered and sensitive (TES) species monitoring; compliance coordination; reclamation supervision; marketing solicitation; and contract management. Federally certified to conduct threatened, endangered and sensitive species inventories. Coordinate and act as primary author of most of the NEPA and EPA related regulatory documentation produced. Interface with agency personnel on all levels and in the absence of the supervisor, responsible for the functions of the firm. Also proficient with all CERCLA, RCRA, and TSCA related documentation.

Project Ecologist - U.S. Army Corp of Engineers, Utah Regulatory Office, Bountiful, UT

1998: Review and analysis of on-going wetland mitigation projects throughout the state of Utah to determine the rate of success, as well as to determine a set of guidelines for insuring the success of future projects. Specific duties included review of federal wetland guidelines, wetland delineations, project management assistance, new-site review and interagency coordination on policy action and design.

Ecological Technician - CERE Environmental Research Group, Pocatello, ID

1991 to 1993: Primary design and collection of ecological data associated with several on-going studies. Studies included: a nutrient cycling stream study in Yellowstone N.P. to examine the impacts to burned watersheds from the 1988 fire, a two year telemetry study at the Idaho Nuclear Engineering Laboratory upon the potential for radioisotope transport by small mammals, a comparative U.S. Forest Service stream study in Southeastern Idaho to determine the level of stream degradation from year-long grazing, and numerous toxicity studies to determine the impact of heavy metals, pesticides, and nutrient enrichment upon salmonid communities.

Field Technician - Idaho Department of Fish and Game, Pocatello, ID


EDUCATION

Idaho State University: B.S. 1993. Major - Ecology; Minors - Geology, English and Philosophy

Course work emphasized stream ecology, geology, environmental law, and outdoor recreation management. Specific experience with GIS technology, remote sensing and data logging equipment. Extensive use and expertise with Windows, Corel, Wordperfect, Quattro and ArcView.
Utah BLM Approved NEPA and Biological Consultant
Utah BLM Approved TES Consultant
Utah BLM Approved Third Party Monitor and ROW Preparer
Approved BLM NEPA and Biological Consultant in New Mexico, Idaho, Arizona, Colorado and Nevada
USFS Manti-LaSal NF Approved NEPA and Biological Consultant
USFS Manti-LaSal NF Approved TES Consultant
Utah State Division of Wildlife Resources TES and Raptor Consultant
USFWS Certified Mexican Spotted Owl Surveyor
USFWS Certified Southwestern Willow Flycatcher Surveyor
USACOE Certified Section 404 Wetland Delineator
International Erosion Control Association - Member

COMMUNITY AFFILIATIONS

Castle Country Anglers-Trout Unlimited - Member
Castle Country Council for the Arts and Humanities - Board Member
Emery County Tourism Economic Development - Board Member
Utah Division of Community Development/Helper Main Street Program - Board Member
Utah Department of Transportation - U.S. Highway 191/6 Interchange Planning
Helper Arts Festival - Board Member
BSA Troop 282 - Committee Member
PROJECTS AND RELATED EXPERIENCE

1998:
Project manager and third party coordinator, Environmental Assessment for Andalex Resources and Carbon County Westridge Project, Carbon County, Utah.

Project manager and third party coordinator, Environmental Assessment for Chandler & Associates Gas Field Development, Emery County, Utah.

Project Manager and agency liaison, Mine and Reclamation Plan for Marblehead Lime Company, Toole County, Utah.

Supervise analysis for threatened, endangered and sensitive plant, animal and insect species in Southeastern Utah for numerous federal projects

1997:
Coordinate resource evaluation and project design for Ferron Coalbed Methane projects, Environmental Assessments for proposed Texaco E&P, Inc. Exploration, Emery County, Utah.

Supervise evaluation and alternative design, and address all associated permitting, Environmental Assessment for proposed PacifiCorp Barn Canyon Transmission Line Realignment, Carbon County, Utah.

Supervised resource evaluation, impact analysis, and associated permitting, Environmental Assessment for Dugout Canyon Road, Carbon County, Utah.

1996-93:
Conducted raptor inventories, emphasizing sensitive species/nesting habitat within the Wasatch Plateau and Book Cliffs for various developments in Carbon, Emery and Wasatch Counties, Utah.

1996-95:
Assist in project design and supervision, Mountain Coal/ARCO 2,7&8 Mine Reclamation, Carbon County, Utah. Coordinate revegetation requirements and design.

1996-95:
Analyzed natural resource impacts involved in a Lease-Buy Application for a 5000 Acre land acquisition by Genwal Resources from Manti-La Sal NF, Emery County, Utah.

1995:
Supervised development and alternative evaluation process, for a proposed gas pipeline in Nine Mile Canyon, Carbon-Duschene Counties, Utah. Coordinated the assessment with 7 separate Indian Nations (Shoshone (3), Shoshone-Bannock, Navajo, Hopi, & Ute) with established cultural rights within the area.

Project manager for development and ROW/resource impact evaluation, Environmental Assessment for proposed PacifiCorp Helper-National 138 kV Transmission Line, Carbon County, Utah.

Conducted a series of Phase I Environmental Audits for Utah Railway, Mountain Coal, and several realty offices.

Project manager for development and resource impact evaluation of proposed route and alternatives, Environmental Assessment for PacifiCorp, Trail Mountain 69 Kv Transmission Line, Emery County, Utah. Prime author of document.

1994:
Conducted a full riparian inventory of soils, vegetation, and habitat available to macrobenthic organisms and associated wildlife along Crandall Creek in Emery County, Utah for Genwal Resources in association with Manti-La Sal NF and UDWR.

Conducted resource development and baseline analysis for Environmental Assessment for Genwal Resources of Proposed Morland Coal Loadout, Emery County, Utah. Co-authored document.

Conducted a Phase I Environmental Site Assessment of the Proposed Moab Tram for Portal
Recreation, Grand County, Utah.

1994-93: Co-supervised reclamation construction and equipment needs, AMAX Coal Sowbelly Mine Reclamation, Carbon County, Utah. Acted as liaison for mine with UDOGM in regards to project compliance.

1993: Analyzed and organized regulatory permitting included in the Banning Loadout Mining & Reclamation Plan for Soldier Creek Coal, Carbon County, Utah.

Other Experience:

Ecological Technician - CERE, Pocatello, Idaho: 1989-93

Conducted telemetry studies on Black-tailed jackrabbit populations and assisted Great Basin desert vegetation composition and nutrient cycling studies at the Idaho Nuclear Engineering Laboratory (INEL).

Developed nitrogen and micronutrient cycling study in Yellowstone National Park. The study concerned the role of detrital and chemical breakdown in terrestrial and aquatic habitats as a result of the 1988 fire.

Comparative stream study showing the effects of stream degradation on the East and West forks of Mink Creek, Idaho. Conducted toxicity testing involving the effects of nutrient enrichment, heavy metals, and pesticides upon fish.

Studied the effects of changing water levels on trout populations along Henry's Fork of the Snake River.
Resume
of
Dan W. Guy
Registered Professional Engineer

State of Utah - No. 154168
State of Colorado - No. 28570
State of Wyoming - No. 6414
General Information:

Name: Dan W. Guy
Age: 59
Married: 2 Children
Residence: 1056 West 2060 North, Helper, Utah 84526
Home Telephone: (435) 637-3234
Work Telephone: (435) 637-2422
Fax Number: (435) 637-2431
Occupation: President of Blackhawk Engineering, Inc.
1056 West 2060 North
Helper, Utah 84526
Statement of Qualifications:

26 years Registered Professional Engineer, State of Utah.
9 years Registered Professional Engineer, State of Colorado.
9 years Registered Professional Engineer, State of Wyoming.
35 years of experience in field of Mining Engineering.
35 years of experience in surveying.
29 years of supervisory experience.
23 years of managerial experience.
26 years Registered Mine Foreman, State of Utah.
16 years of experience with coal quality control and analysis.
25 years of experience with environmental regulations and compliance.
25 years experience with environmental engineering, including hydrologic computations, and design and construction of drainage and sediment control structures.

Responsibility for the construction of 6 complete Mining and Reclamation Plans and Major revisions of 5 additional plans.

Participated on the Utah Coal Operator's Committee to rewrite the Utah Surface Mining Regulations in conjunction with the Utah Division of Oil, Gas & Mining.

Responsibility for final reclamation of 3 mine sites, 2 of which have been granted Final Bond Release.

Extensive experience with hydrologic design, including flow calculations, channel design, pond design and rip-rap sizing.

19 years President of Blackhawk Engineering, Inc. (Mining and Environmental Engineering).

2 years President of Western Testing and Engineering, Inc. (Commercial Coal Analysis Laboratory).

Past Chairman A.I.M.E. Utah Chapter, 8 year member.
Daniel M. Larsen
Soil Scientist/ Soil Management Specialist
EIS

EXPERIENCE

Forest Soil Scientist, GS-12 - USDA Forest Service, Manti-LaSal National Forest, Price, Utah

1979 - 1997 (Retired): Served as soils project staff responsible for soil survey, soil management services, and watershed improvement activities on the Manti-LaSal National Forest. Participated as an interdisciplinary team member for Forest Land Use and Management Planning and Project Support. Responsible for soils program planning and budget preparation. Provided numerous soils management services for minerals, range, timber, wildlife, recreation, and special use projects. Much of this activity was related to environmental assessment. Provided soils information for coal, gas and oil leasing, exploration, and development. Reviewed company provided soils information for data adequacy standards.

Conducted and coordinated soil survey activities on lands administered by the Manti-LaSal National Forest covering about 1,400,000 acres. This included progressive soil surveys at the order of 3 intensity level on six different soil survey areas. It involved working closely with the Natural Resources Conservation Service as well as contractors. Prepared and administered contracts for three soil surveys. Completed a draft soil survey report for the Manti Division and contributed to the preparation of a draft soil survey report for the Monticello District of the Manti-LaSal National Forest. Contributed to ecological mapping, primarily at the section and subsection levels, and was part of a team to determine “properly functioning condition” of subsections.

Detailed to the Tongass Nation Forest at Sitka, Alaska during the summer of 1991 to work on soil/slope stability analysis of potential timber sales areas.

Soil Scientist GS-12 - USDA Forest Service

1977 - 1979: Served as a soils and reclamation specialist on an Interagency Environmental Task Force to evaluate proposed coal mining projects in the state of Utah. This task force involved working with several state and federal agencies and was under the lead of the US Geological Survey. Assisted in preparation of two Regional Environmental Impact Statements: one for Central Utah and one for Southern Utah. Was part of an I.D. Team to evaluate mine reclamation covering projects in an eight state area. Co-authored a publication on The Reclamation of Mined Lands in the Western Coal Region, USGS Circular 872. Completed the soils portion of the Nation Erosion Inventory on the Manti-LaSal National Forest.
Forest Soil Scientist, GS-11 - USDA Forest Service, Deschutes National Forest, Bend Oregon

1971 - 1977: Primary duties consisted of soil management assistance to Forest resource managers. Responsible for Environmental Analysis Reports and Impact Statements. Worked on soil, topography, climate and vegetation input for the Land Use Plan and Environmental Impact Statement for Deschutes National Forest. Soil management services were primarily related to sensitive soil areas where logging activities were proposed and to the use of prescribed burning in forest management. Also provided soil management assistance to the Bend Pine Nursery. Completed the final report of The Soil Resource Inventory of the Deschutes National Forest (1,852,000 acres).

Forest Soil Scientist, GS-11 - USDA Forest Service, Wayne-Hoosier National Forest, Bedford, Indiana

1968-1969: Conducted soil resource inventory and assisted in the Forest Soil Scientist with soil management services. Duties included soil mapping on aerial photographs, making soil profile descriptions, vegetation identification and correlation with soils, identifying soil-landscape relationships, and evaluating laboratory data obtained in soil investigations. Mapped about 21,000 acres at a scale of 4 inches to the mile. Aided in obtaining soils information on two recreation sites and several reforestation sites.

Research and Teaching Assistant - University of Minnesota, St. Paul, Minnesota

1965 - 1968: Conducted soil fertility studies on mineral and organic soils in northern Minnesota. Studies fertilization rates and dates of application as related to seed production and plant tissue analysis of Kentucky bluegrass and Timothy. Obtained soil and climatic data at various plot locations. Conducted soil chemical analysis tests. Acted as a teaching assistant by providing instruction for a three hour per week class in “Soil Fertility Evaluation.” Wrote a Master’s Thesis on “The Effect of Fertilization on Timothy Seed Production in Northern Minnesota.”

Biological Aide, GS-4, USDA Forest Service - Tongass National Forest, Ketchikan, Alaska

1964 - 1965: Aide to a Soil Scientist conducting a soil resource inventory. Worked on the north half of the Prince of Wales Island. The job consisted of digging soil pits, assisting and making soil profile descriptions, plant identification and notations on distribution, and some independent soil mapping on aerial photographs.

AWARDS

Certificate of Merit for superior performance as a member of the Interagency Environmental Task Force on Coal.
Certificate of Merit for evaluation of factors leading to the preparation of the Forest Land and Resource Management Plan, Manti-LaSal National Forest.

Extra Step Award for soils presentation for Conservation Day on the Manti-LaSal National Forest.

Extra Step Award related to the minority employment program, Manti-LaSal National Forest.

Certificate of Appreciation for soils input to the plan and Environmental Assessment for the South Manti Timber Sale, Manti-LaSal National Forest.

Scholarship in Conservation, University of Wisconsin, Stevens Point.

PROFESSIONAL ORGANIZATIONS

Member of the Utah Society of Soil Scientists

PUBLICATIONS


Reclamation of Mined Lands in the Western Coal Region, Geological Survey Circular 272, Co-Author.

Conducted field work on Natural Resources Conservation Service Publications:
   Soil Survey of Canyonlands Area, Utah.
   Soil Survey of Fairfield-Nephi Area, Utah
   Soil Survey of San Miguel Area, Colorado

Numerous in-service Forest Service Reports in Forest Service files.
STATE OF UTAH

ss.

County of Carbon,

I, Ken Larson, on oath, say that I am the Publisher of the Sun Advocate, a twice-weekly newspaper of general circulation, published at Price, State. A true copy of which is hereto attached, was published in the full issue of such newspaper for 4 (Four) consecutive issues, and that the first publication was on the 1st day of April, 2004, and that the last publication of such notice was in the issue of such newspaper dated the 22nd day of April, 2004.

Ken G Larson - Publisher

Subscribed and sworn to before me this 22nd day of April, 2004.

Linda Thayn

Notary Public My commission expires January 10, 2007 Residing at Price, Utah

Publication fee, $ 565.76
AFFIDAVIT OF PUBLICATION

STATE OF UTAH

ss.

County of Emery,

I, Ken Larson, on oath, say that I am the Publisher of the Emery County Progress, a weekly newspaper of general circulation, published at Castle Dale, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue of such newspaper for 4 (Four) consecutive issues, and that the first publication was on the 6th day of April, 2004 and that the last publication of such notice was in the issue of such newspaper dated the 27th day of April, 2004.

Ken G Larson - Publisher

Subscribed and sworn to before me this 27th day of April, 2004.

Linda Thayn

Notary Public  My commission expires January 10, 2007 Residing at Price, Utah

Publication fee, $ 408.28
May 30, 2005

Patrick Gubbins
Field Office Manager
Bureau of Land Management
Price Field Office
125 South 600 West
Price, Utah 84501

REFERENCE: Water Survey Horse Canyon Extension - Lila Canyon Mine

Dear Mr. Gubbins:

Division of Oil, Gas and Mining rule R645-301-525.130 requires that all property owners in, and around, the Lila Canyon Extension receive copies of any water rights surveys completed during the permitting process.

UtahAmerican Energy, Inc. notifies the Bureau of Land Management that a water rights survey was conducted in conjunction with the Lila Canyon Mine permitting process. A copy of this survey can be found in Chapter 7 of the Lila Canyon PAP. A copy of the PAP is on file, in the confidential room, at your office.

Should you have any questions please call.

Sincerely,

R. Jay Marshall
Project Manager

cc File
Appendix 1-5 PAP
Thomas J. Suchoski

EDUCATION

MS, WATERSHED MANAGEMENT
University of Arizona  1979
Tucson, Arizona

BS, GEOLOGY
Utah State University  1977
Logan, Utah

OSHA HAZARDOUS WASTE SAFETY TRAINING  1986

CHANNEL RESTORATION SHORT COURSE  1987

Utah Division of Oil, Gas, & Mining  1985
Salt Lake City, Utah

DESIGN OF WATER QUALITY MONITORING NETWORKS  1980
Colorado State University

GEOMORPHOLOGY SEMINAR AND SHORT COURSE  Fort Collins, Colorado

U.S. Office of Surface Mining

EMPLOYMENT

PRESIDENT/HYDROLOGIST  1999-PRESENT
Hydrologic Design  Salt Lake City, Utah

PROJECT MANAGER/HYDROLOGIST  1990-PRESENT
Salt Lake City, Utah

EarthFax Engineering, Inc.  1989-1990

SENIOR HYDROLOGIST  Gillette, Wyoming

Powder River Coal Company  1987-1989

SENIOR HYDROLOGIST  Salt Lake City, Utah

Sargent, Hanskins & Beckwith Geotechnical Engineers  1986-1987

PROJECT MANAGER/HYDROGEOLOGIST  Salt Lake City, Utah


HYDROLOGIST/ENGINEERING GEOLOGIST  Salt Lake City, Utah

State of Utah, Division of Oil, Gas, & Mining  1982-1984

PROJECT HYDROGEOLOGIST  Salt Lake City, Utah

Ford, Bacon & Davis Inc.  1980-1982

PROJECT HYDROLOGIST  Salt Lake City, Utah

Vaughn Hansen Associates Inc.

EXPERIENCE

Responsibilities have included conducting and managing surface and groundwater projects for public and private clients. Groundwater projects included: supervision and contract management of groundwater well drilling activities for numerous projects for water quality monitoring and water supply development; preparation of well head source protection plans, water right applications, and permits and specifications for well drilling; design and installation of well monitoring networks to conduct hydrogeologic characterization and water quality sampling; design of groundwater interception and re-injection systems; design of spring collection systems; developed MODFLOW groundwater flow models and associated interface routines; performance of a sensitivity analysis of MODFLOW groundwater model for the Jordanelle Reservoir in northern Utah; modeling of groundwater flow for mines; groundwater flow and contaminant migration modeling for various facilities to determine the rate and extent of plume development and evaluated various treatment options; performance of a seepage study for a tailings facility to determine the extent of a contaminant plume; review and evaluation of a groundwater dewatering model for an open pit gold mine in New Guinea; evaluation and preliminary design of groundwater dewatering system for an open pit mine; evaluation, design, and installation of a groundwater dewatering well for a surface copper mine; analysis of data from numerous pumping tests for aquifer parameters; supervision and coordination of hydrogeologic characterization efforts at a hazardous-waste site; collection of groundwater quality samples and analysis of
chemistry data to determine compliance with water quality regulations; conducting and supervising groundwater quality characterization and environmental audits; evaluation of water quality data from problem sites not meeting water quality standards; analysis of water quality data using database management and GIS software; collection of water chemistry and aquifer parameters for hydrogeochemical characterizations of abandoned uranium mill tailings sites in the western United States; performance of hydrologic and geologic review and feasibility studies to locate a super conducting-super collider in western Utah; groundwater dewatering and water quality monitoring associated with a uranium mine in central Wyoming.

Surface water projects have included: supervision of hydrological aspects of environmental permitting for surface water diversions, impoundments, and runoff-control facilities; development and maintenance of runoff control plans for mine facilities; preparation of construction specifications for various surface water control projects; developed runoff-control plans for gold-ore heap-leach facilities in Nevada, South Carolina, and Utah; conducted runoff evaluations using SCSHYDRO and HEC-1 software for projects in West Texas, Arizona, Nevada, Montana, and Utah; designed surface hydrology facilities; evaluation of meander potential for rivers affected by channel modification and preparation of permit applications for stream channel alterations in Arizona, Colorado, Utah, and Wyoming; determination of scour and depositional potential of reclamation channels; design of storm water handling system for a 1,500 acre subdivision in northern Utah; conducted surveys of stream channels, runoff control facilities (i.e., ditches, ponds, and outlet structures), and earthwork construction areas; conducted construction inspections, coordinated subcontractors for water resources projects and determined budgetary compliance; evaluation of erosion potential and sediment loading from reclaimed mining sites; determination of 100-year flood and associated flood plains for complex natural channels; design of runoff-control facilities for a probable-maximum flood (PMF) event; determination of flood-inundation areas associated with PMF and 100-year flood plains; collection of surface water base line flow, groundwater level, and water chemistry monitoring data; analysis of water quality data for compliance with water quality standards using database management software; supervised preparation of hydrologic, geologic, and engineering portions of coal and mineral mining permits in Colorado, Nevada, and Utah; development and management of capital improvements budget for hydrologic projects and permitting activities; preparation of a surface and groundwater monitoring database and evaluation of data for compliance with water quality standards using database management software; participated in environmental assessments and audits; coordinated large scale permitting projects with local, state, and federal agencies; collection of stream flow and surveyed cross-section data and water quality parameters; and performance of alluvial valley floor evaluations in Colorado, Utah, and Wyoming.

Engineering projects have included: preparation of grading plans for mine site reclamation, commercial sites, and residential subdivisions; design, layout, and specification of water wells, water systems, and water tanks and controls; and design and layout of expansion of existing sanitary sewer systems.

Managed computer network and workstations for both Netware and Microsoft operating systems. Configured hardware, installed software, conducted network maintenance and backups, and handled help desk functions. Managed CAD and GIS translation software use and customization. Provided advanced word processing, spreadsheet, database, Visual Basic, FORTRAN, and C software development. Worked with clients to ensure compatibility of the electronic data files with various systems and platforms.

MEMBERSHIPS

Association of Groundwater Scientists and Engineers
American Institute of Hydrology
CERTIFICATIONS AND REGISTRATIONS

Registered Professional Geologist (Utah)
Registered Professional Hydrologist (AIH)
Engineer in Training (Utah)
CURRICULUM VITAE

MICHAEL M KING

1130 N 200 E
Price, UT 84501
(435) 637-4193

College of Eastern Utah
451 E 400 N
Price, UT 84501
(435) 613-5232

EDUCATION

<table>
<thead>
<tr>
<th>Degree</th>
<th>Institution</th>
<th>Major Field</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D.</td>
<td>Utah State University</td>
<td>Wildlife Science</td>
<td>1985</td>
</tr>
<tr>
<td>M.S.</td>
<td>Brigham Young University</td>
<td>Zoology</td>
<td>1979</td>
</tr>
<tr>
<td>B.S.</td>
<td>Brigham Young University</td>
<td>Zoology</td>
<td>1977</td>
</tr>
<tr>
<td>A.S.</td>
<td>College of Eastern Utah</td>
<td>Life Sciences</td>
<td>1974</td>
</tr>
</tbody>
</table>


M.S. Thesis: Differential Habitat Utilization by Male and Female Mule Deer (1979, Brigham Young University).

Course Work Summary (Quarter Hours)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
<th>Foreign Language</th>
<th>Math/Physics</th>
<th>Stat./Comp. Sci..</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Biology</td>
<td>34</td>
<td>Range Sci./Botany</td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Zoology</td>
<td>32</td>
<td>Japanese</td>
<td></td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

PROFESSIONAL EXPERIENCE

Dean, Arts and Sciences - College of Eastern Utah (7/1/2000 to present).

Professor, Life Sciences - College of Eastern Utah (7/96-6/2000).

Associate Professor and Extension Wildlife Specialist - University of Tennessee, Department of Forestry, Wildlife and Fisheries (8/88-8/96). Responsible for developing Extension Education programs in Wildlife Management on private lands, Wildlife Damage Management and the Tennessee 4-H Wildlife Project.

Natural Resources Planner - U.S. Department of Defense/Utah State Research Foundation (3/86-8/88). Developed natural resources management plans, conducted Environmental Assessments, and developed a research project to study the effects of sonic boom on wildlife for Hill Air Force Base and the Utah Test and Training Range, Utah.

Research Biologist/Technical Writer/Graduate Research Assistant - Department of Fisheries and Wildlife, Utah State University (9/80-3/86). Designed and conducted research on ecology and behavior of desert bighorn sheep on Bureau of Land Management lands in southeastern Utah; Bureau of Land Management.
Collected and analyzed data and wrote reports for an inventory of the flora and fauna of Hill Air Force Base and the Utah Test and Training Range. Developed desert bighorn sheep habitat management plans for Bureau of Land Management administered lands in southeastern Utah.

Graduate Research Assistant - Department of Zoology, Brigham Young University (4/78-9/78). Designed and conducted research on summer habitat utilization of mule deer in central Utah.


RELATED EXPERIENCE

Member - Southeastern Utah Regional Advisory Committee for Utah Division of Wildlife Resources (1997-).
Editor - University of Tennessee Agricultural Extension Service Renewable Natural Resources Homeowners Newsletter (1991-1996).
Advisor - Mutual of Omaha's Wild Kingdom, Operation Bighorn Segment, Utah Division of Wildlife Resources (1983).
Technician - Desert bighorn sheep survey, capture, and relocation in southeastern, Utah Division of Wildlife Resources (1986).
Technician - Grouse Hunter Check Stations, Utah Division of Wildlife Resources (1977).
M.M. King

TEACHING EXPERIENCE

College of Eastern Utah  Quarter Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Course</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFSC 101</td>
<td>Principles of Biology</td>
<td>LFSC 110</td>
<td>General Botany</td>
</tr>
<tr>
<td>LFSC 116</td>
<td>Anatomy and Physiology</td>
<td>LFSC 118</td>
<td>Human Reproductive Biology</td>
</tr>
<tr>
<td>LFSC 125</td>
<td>Heredity</td>
<td>LFSC 210</td>
<td>General Zoology</td>
</tr>
<tr>
<td>LFSC 270</td>
<td>Natural History Excursion</td>
<td>LFSC 150</td>
<td>General Ecology</td>
</tr>
</tbody>
</table>

College of Eastern Utah  Semester Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Course</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFSC 1220</td>
<td>Biology II</td>
<td>LFSC 1240</td>
<td>Biology II Lab</td>
</tr>
<tr>
<td>LFSC 1410</td>
<td>General Botany</td>
<td>LFSC 1420</td>
<td>General Botany Lab</td>
</tr>
<tr>
<td>LFSC 2100</td>
<td>General Zoology</td>
<td>LFSC 2110</td>
<td>General Zoology Lab</td>
</tr>
<tr>
<td>LFSC 2350</td>
<td>Introductory Ecology</td>
<td>LFSC 2360</td>
<td>Introductory Ecology Lab</td>
</tr>
<tr>
<td>WILD 2010</td>
<td>Human Kind and the Environ.</td>
<td>WILD 1010</td>
<td>Field Experience</td>
</tr>
<tr>
<td>LFSC/Geol 1800</td>
<td>Principles of Environ. Science</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New CEU Courses Developed

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Course</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFSC 1220</td>
<td>Biology II</td>
<td>LFSC 1240</td>
<td>Biology II Lab</td>
</tr>
<tr>
<td>LFSC 2350</td>
<td>Introductory Ecology</td>
<td>LFSC 2360</td>
<td>Introductory Ecology Lab</td>
</tr>
<tr>
<td>LFSC/GEOL 1800</td>
<td>Principles of Environ. Science</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Laboratory Courses at Brigham Young University, 1977-79)

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOOL 105</td>
<td>Intro. Zoology</td>
</tr>
<tr>
<td>ZOOL 203</td>
<td>Vertebrate Zoology</td>
</tr>
<tr>
<td>ZOOL 457</td>
<td>Fish and Wildlife Techniques</td>
</tr>
<tr>
<td>ZOOL 350</td>
<td>General Ecology</td>
</tr>
<tr>
<td>ZOOL 547</td>
<td>Mammalogy</td>
</tr>
</tbody>
</table>

Inservice Training Short Courses (Training for Univ. Tenn. County Extension Personnel)

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXT Wildlife &amp; Fisheries 201</td>
<td>4-H Wildlife and Fisheries Project 8 hrs</td>
<td></td>
</tr>
<tr>
<td>EXT Wildlife &amp; Fisheries 202</td>
<td>Backyard Wildlife/Outdoor Classrooms 8 hrs</td>
<td></td>
</tr>
<tr>
<td>EXT Wildlife &amp; Fisheries 301</td>
<td>Wildlife Damage Management 8 hrs</td>
<td></td>
</tr>
<tr>
<td>EXT Wildlife &amp; Fisheries 302</td>
<td>Wildlife Enterprises 4 hrs</td>
<td></td>
</tr>
<tr>
<td>EXT Wildlife &amp; Fisheries 303</td>
<td>Advanced 4-H Judging 6 hrs</td>
<td></td>
</tr>
<tr>
<td>EXT Wildlife &amp; Fisheries 305</td>
<td>Advanced Small Game Management 8 hrs</td>
<td></td>
</tr>
</tbody>
</table>

Workshops Conducted for the General Public

Small Game Management for Extension Agents (1990, 1993)

INTEGRATED

MAY 18 2007

Div. of Oil, Gas & Mining
M.M. King

Backyard Wildlife Seminar (1992)
Fee Hunting as an Alternative Enterprise (1990)
Managing Deer Damage In Tennessee (1989)

PROGRAM AND COMMITTEE APPOINTMENTS

Southeastern Regional Advisory Committee, Utah Division of Wildlife Resources (1997-).
National 4-H Wildlife Habitat Evaluation Program (1989; Chair, 1992-1995).
Tennessee Ag. Extension Service Natural Resources Priority Team (Chair, 1995-96; member, 1993-96).
Tennessee 4-H Wildlife Project (Director, 1988-1996).
Tennessee District II Forest Stewardship Committee (19961990-1994).
Tennessee Animal Damage Control Committee (1988-).
Tennessee Wetlands Technical Assistance to Private Landowners Committee (1990-92).
Tennessee Wetlands Partners Project Committee (1993-).
Univ. Tennessee Ag. Extension Serv. Natural Resources Initiative Team (1993-).
Regional Ecosystem Management Project Cooperator, Virginia Tech University,
Auburn University, University of Tennessee (1994-).
Search Committees, Extension Wildlife Assistant Position (Chair, 1990); Extension

Graduate Student Committee Membership:

1990-1991 A comparison of bird species use of two different forest types (Carol Hardy; M.S.)
1991-1995 An analysis of hunter perceptions of small game management of two wildlife management areas in Tennessee (Mike Weefer; M.S.)
1993-1995 Perception of crop damage by black bears in North Carolina (Bobby Madry; M.S.)
1991-1995 Identification and mapping of ruffed-grouse habitat in Tennessee (Melora Doan; M.S.).

PROFESSIONAL ORGANIZATIONS

The Wildlife Society
Southeast Section of the Wildlife Society
Tennessee Chapter of the Wildlife Society
Tennessee Association of Agricultural Agents & Specialists
National Association of County Agricultural Agents
Tennessee Conservation League
Epsilon Sigma Phil (National Honorary Extension Fraternity)
Education Committee, Tennessee Chapter the Wildlife Society (1993-)
The Wildlife Society - Tennessee Chapter; Representative to Southeast Section of The Wildlife Society (1996-)

GRANTS/CONTRACTIONS

Utah Electronic College Curriculum Development; Introduction to Environmental Science. (UECC - 2001-02, $10,000).

Wildlife Database Project. (Utah Division of Wildlife Resources - 1999-2000, $17,000).


Star Schools Curriculum Development; Biology II - the Diversity of Life (Mountain Plains Distance Learning Partnership, Riverton, WY - 1999, $8000).


Increasing Environmental Literacy/ Recruitment of Minorities to Natural Resources through the Use of Outdoor Classrooms (USDA Cooperative Research and Extension Services, Washington, DC - 1996, $10,000).


National 4-H Wildlife Habitat Evaluation Program (Rocky Mountain Elk Foundation, $5,000 (1993); $4,500 (1994); $5,000 (1995).

National 4-H Wildlife Habitat Evaluation Program (National Rifle Association, $2,500 (1994); $5,000 (1995).

Youth Quail Ecology and Management Education Program (Tennessee Wildlife Resources Agency, $15,000; Quail Unlimited, $5,000; Wildlife Forever, $5,000 - 1995).

AWARDS/HONORS

Outstanding Faculty Member 1997-98, Division of Science and Technology; College of Eastern Utah.

USDA Certificate of Appreciation for service to the National 4-H Wildlife Habitat Evaluation Program (1996); 1989-1996 (National Chair, 1993-1995)

The Wildlife Society Certificate of Appreciation - National Conservation Education Award (1996); Awarded in the Program Category to the National 4-H Wildlife Habitat Evaluation Program

State Early-Career Award - Epsilon Sigma Phi National Honorary Extension Fraternity (1995)

Tennessee Leadership Academy (1995)


Outstanding Young Agent, Tennessee Association of Agricultural Agents and Specialists (1994).

1st Place (Southern Region) - Team Newsletter, National Association of County Agricultural Agents (1994).


University of Tennessee Institute of Agriculture Best Education Publication (1992).

Outstanding Alumni Award, College of Eastern Utah (1987).

1ST and 2ND Place, Utah Wildlife Society Photo Contest (1984).


Honorarium, Invited Seminar, College of Eastern Utah Natural History Seminar Series (1980).

Cum Laude Graduate, Brigham Young University (1977).

Honors Graduate, College of Eastern Utah (1974).

High Honors Graduate, Carbon County High School (1970).

Elk's Most Valuable Student Award, Carbon High School (1970).
M.M. King

Jewkes-Woodward-Mele Outstanding Student Athlete Award, Carbon High School (1970)


PEER REVIEWED EXTENSION PUBLICATIONS:


INCORPORATED

MAY 18 2007

Div. of Oil, Gas & Mining
M.M. King

REFEREED/PEER REVIEWED PUBLICATIONS


PROCEEDINGS EDITED


REPORTS/MANUSCRIPTS


MAGAZINE ARTICLES


EDUCATIONAL VIDEOS


TECHNICAL PAPER PRESENTATIONS

King, M. M. 1993. Teaching Environmental Stewardship through the Tennessee 4-H Wildlife Project. 2nd Tennessee Natural Resource Researchers and Educators Symposium, Murfreesboro, TN.


M.M. King

INVITED SEMINAR PRESENTATIONS


Endangered Species and Pesticide Use. 1992. The University of Tennessee Agricultural Extension Service Commercial Pesticide Applicators Certification Workshops. Memphis, Jackson, Nashville, Knoxville, Cleveland, Murfreesboro, Kingsport, TN.


Wildlife in Utah. 1984-1985. Box Elder County Junior High Schools, Mantua, UT.

History of wildlife in Utah. 1984-1985. Logan Junior High School-Utah History Classes, Logan, UT.

Field aging techniques for desert bighorn sheep. 1982-1985. Utah Division of Wildlife Resources, Blanding and Moab, UT.

Effects of cattle grazing and human disturbance on desert bighorn sheep in southeastern.

INTEGRATED
MAY 1 & 2007
Div. of Oil, Gas & Mining
M.M. King


Desert bighorn sheep habitat use in southeastern Utah. 1982. Utah Bighorn Sheep Society, Orem, UT.

Bighorn sheep research in Utah. 1981. Utah Bighorn Sheep Society, Salt Lake City, UT.


Mule deer habitat utilization and winter problems in central Utah. 1979. Brigham Young University Student Chapter of the Wildlife Society, Provo, UT.
VITAE
2006

Jody J. Patterson

EDUCATION: 1994 B.A. New Mexico Highlands University
1996 M.A. New Mexico Highlands University
2002 A.B.D. (Ph. D. expected Fall 2005) University of Alaska, Fairbanks

PROFESSIONAL ORGANIZATIONS:
Plains Anthropological Association
Alaska Anthropological Association
Alaska Quaternary Center
Association of American Geographers

PROFESSIONAL EXPERIENCE IN COLORADO:
2001 Cultural Resource Inventory and Limited Testing Resource Development
Technologies Eleven Well Locations Southwest of Rangeley, Rio Blanco County, Colorado. Project Duration: 1 month.

PROFESSIONAL EXPERIENCE:
2001 Archaeologist, Montgomery Archaeological Consultants, Moab, Utah. Permitted as a supervisor in Utah (statewide). Responsibilities include fieldwork (survey and testing); documentation of prehistoric and historic cultural resources; site eligibility (NRHP) assessments; laboratory analysis of artifacts; and IMACS site form and report and research design preparation.

2000 Adjunct Faculty, University of Alaska-Fairbanks, Department of Anthropology
Courses taught include: Fundamentals of Archaeology, Archaeological Field School, and Introduction to Anthropology. Also worked as a laboratory instructor and Teaching Assistant for various courses from 1998-2000.

2000 Archaeologist, Cultural Resource Consultants, Anchorage, Alaska. Responsibilities included archaeological survey and testing, literature reviews, and report writing.

1998 Archaeologist-Project Director, University of Alaska and Wrangell-St. Elias National Park and Preserve Project.
Supervised archaeology crew, conducted archaeological survey, lab work, and report writing.

1997 Archaeologist (GS-09), Wrangell-St. Elias National Park and Preserve
Conducted archaeological survey, supervised crew members, performed lab work, and wrote reports.

1995-1996 Archaeological Technician, Pecos National Historical Park
Lithic analyst and crew member for cultural resource survey at Pecos Historical National Park.
J. Patterson

1993-1996 Archaeological Technician and Crew Chief, Northern Research Group, Inc., Las Vegas, New Mexico. Conducted field work, supervised crew members, conducted file searches, and wrote reports.

1993-1995 Archaeological Technician and Crew Chief, Las Vegas Cultural Resource Management, Las Vegas, NM. Conducted field work, supervised crew members, conducted file searches, and wrote reports.

1993 Crew Chief, Archaeological Mapping, NMHU, Department of Anthropology, Las Vegas, NM. Supervised mapping crew during the summer field season.

Professional Presentations and Presented Papers

Patterson, J., S. George, P. Matheus, and C. Martin
2001 *Upper Yukon River Region. 1:6,000,000 scale map published by the Alaska Quaternary Center and National Park Service for the Upper Yukon Heritage Symposium.*

Patterson, J.

Patterson, J.

Patterson, J.
1998 *Late Holocene Land Use in the Nutzotin Mountains.* University of Alaska, Public Anthropology Colloquium.


Selection of Projects with Technical Publications in Utah

Patterson, J.
2005 Archaeological Data Recovery at 42Ga3818 and 43In1371 Along State Route 20, Garfield and Iron Counties, Utah.

Patterson, J., and K. Montgomery
2005 Cultural Resource Inventory of Bill Barrett Corporation’s Stone Cabin Access on SITLA in Carbon County, Utah.

Patterson, J.
2004 Bill Barrett Corporation’s Stone Cabin Jack Canyon and Rims Survey, Carbon County, Utah.

2004 Cultural Resource Inventory of the Division of Wildlife Resources Little Mountain Test Annex Project, Weber County, Utah.
J. Patterson


2004 Cultural Resource Summary of BBC’s Tavaputs Plateau Exploratory Drilling Program, Carbon County, Utah.

Patterson, J. and A. Whitfield
2004 Monitoring and Additional CRI of BBC Stone Cabin 3-D Seismic Program, Carbon County, Utah.

Patterson, J.
2003 Mitigation of UDOT’s US 191 Improvement Project from SR 279 to SR 313, Grand County, Utah.

2003 Cultural Resource Inventory of Lone Mountain’s Bar X 25 Well Location and Access, Grand County, Utah. MOAC Report 03-55.

2003 Cultural Resource Inventory of Rio Algom’s Water Drilling Program, San Juan County, Utah. MOAC Report 03-37.


2003 Cultural Resource Inventory of Bill Barrett Corporation’s 12-24 and 5-13 Alt. Well Location, Carbon County, Utah.

2003 Cultural Resource Inventory of Bill Barrett Corporation’s Three Mile Pipeline in Nine Mile Canyon, Carbon County, Utah.

2003 Cultural Resource Inventory of Bill Barrett Corporation’s Water Canyon Compressor Station, Carbon County, Utah.

2003 UDOT’s Data Recovery Plan for 42Be2189, Beaver County, Utah.

2003 Cultural Resource Inventory of Bill Barrett Corporation’s Dry Canyon Compressor Station, Carbon County, Utah.

2002 Cultural Resource Inventory of the RSA-USA, Inc. Marlboro Commercial Location Near Gemini Bridges, San Juan County, Utah. MOAC Report 02-68.

2002 Cultural Resource Inventory of the RSA-USA, Inc., Marlboro Commercial Location Near Dugout Ranch, San Juan County, Utah. MOAC Report No. 02-62.


2002 Cultural Resource Inventory of Brown Brothers Constructions’ Material Pit Near Cainville, Wayne County, Utah. MOAC Report No. 02-05.

INTEGRATED

MAY 18 2007

Div. of Oil, Gas & Mining
2002 Cultural Resource Inventory of Utah Department of Transportation's Proposed Baker Gravel Pit Near Kanosh, Millard County, Utah.

2002 Cultural Resource Inventory for MACTEC-ERS' Five Water Monitoring Well Locations Near Green River, Grand County, Utah.

2002 Cultural Resource Inventory for MACTEC-ERS' Four Water Monitoring Well Locations Near Moab, Grand County, Utah.

2002 Cultural Resource Inventory of Rock Deformation Research Inc's Proposed Sampling Areas Along Muddy Creek, Emery County, Utah.

Patterson, J. and K.R. Montgomery
2002 Cultural and Paleontological Resources Survey of UDOT's US 191 Improvement Project Between SR 279 and SR 313, Grand County, Utah. MOAC Report No. 01-36.

Patterson, J. and K.R. Montgomery
2002 Cultural Resource Inventory of Two RSA-USA, Inc.'s Marlboro Commercial Locations in Grand and San Juan Counties, Utah

2002 Cultural Resource Monitoring of Anshutz Headwater Federal 7-15 Access Road, San Juan County, Utah.

Patterson, J., M. Elkins, and K. Montgomery
2001 Cultural Resource Inventory of the New Water Utility Line for the City of Price, Carbon County, Utah. MOAC Report No. 01-87.

Patterson, J. and K. Montgomery
2001 Cultural Resource Inventory of Three Areas within the Proposed Scofield Area Coal Mine, Carbon County, Utah. MOAC Report No. 01-97

2001 Cultural Resource Inventory of the Quitchupah Coal Haul Road, Emery and Sevier Counties, Utah. MOAC Report NO. 01-82.

Patterson, J.


Patterson, J.
NAME: Keith R. Montgomery

ADDRESS: P.O. Box 147
Moab, Utah 84532
(435) 259-5764
kmontgomery@montarch.com

EDUCATION: 1974 A.A. Edmonds Community College
1976 B.A. Western Washington University (Anthropology)
1979 M.A. Western Washington University (Archaeology/Anthropology)

PROFESSIONAL ORGANIZATIONS: Utah Professional Archaeological Council
Society for American Archaeology

PROFESSIONAL EXPERIENCE:

1996 - Present Principal Investigator, Montgomery Archaeological Consultants, Moab, Utah.
In charge of writing technical proposals, and initiating and directing all cultural resource projects. Responsible for ensuring that all projects conducted by the company meet required standards for compliance with federal and state legislature pertaining to cultural resources. To date, he has directed over 500 projects to completion on state, federal, and private lands.

Permitted under Sagebrush to conduct cultural resource investigations (survey, testing, and excavation) on federal and state lands in the Great Basin (Utah and Nevada) and Colorado Plateau (Utah, Colorado, and Arizona). Responsible for project planning and coordination, supervision of field crews, site recordation, NRHP assessments, data analysis, and report preparation.

1984-1996 Consulting Project Archaeologist, Abajo Archaeology, Bluff, Utah.
Permitted under Abajo to perform cultural resource investigations (survey, testing, excavation) on federal and state lands in the Utah, western Colorado, and northern Arizona. Responsible for project planning and coordination, technical proposals, supervision of field crews, site recordation and NRHP assessments, data analysis, and report preparation.

1981-1983 Staff Archaeologist. Archeological Environmental Research Corporation (AERC) Bountiful, Utah. Permitted (federal and state) to supervise cultural resource investigations (survey and excavation) in the Great Basin and Colorado Plateau (Fremont and Anasazi) geographical/cultural areas.
Selected Projects with Technical Reports and Publications:

Montgomery, K.
2005  Cultural Resource Inventory of EOG Resources, Inc.'s Five Proposed Wells: CWU #662-6, CWU #663-6, and East Chapita #1-5, #2-5, and #5-5 in Uintah County, Utah

Montgomery, K.

Montgomery, K.R., and D.L. Shank
2004  Cultural Resource Inventory for Utah Department of Transportation’s SR 56 Bridge (Structure OC -307) Rehabilitation Project, East of Modena, Iron County, Utah.

Montgomery, K., and S. Kinnear-Ferris

Elkins, M., and K. Montgomery
2004  Cultural Resource Block Inventory of Ute Tribal Lands in Sections 19, 30, and 31 of T5S R5W for UTE FNR LLC, Duchesne County, Utah.

Mrstik, J., and K. Montgomery
2004  Cultural Resource Inventory of Division of Wildlife Resources Consumers Road Parcels, Carbon County, Utah.

Whitefield, A., and K. Montgomery
2004  Cultural and Fossil Resource Inventory Along US Highway 89 and State Route 14 Near Long Valley Junction, Kane County, Utah. STP-0089(86)104.

Elkins, M. and K.R. Montgomery
2003  Cultural Resource Inventory For the Utah Department of Transportation’s US 6 Helper Interchange, Carbon County, Utah. Report No. U-03-MQ-0320s.

2003  Class 1 Existing Data Review of Encana Oil and Gas Corporation’s Proposed Oil and Gas Development Area in the Kennedy Wash Region of Uintah County, Utah. Report No. U-03-MQ-752b,s,p.

Montgomery, J.A. and K.R. Montgomery
2003  Utah Department of Transportation’s State Route 10 Muddy Creek Bridge Replacement Cultural Resource Inventory, Emery County, Utah.
Elkins, M. and K.R. Montgomery
2002  Cultural Resource Inventory of UP&L Pacificorp Camp Williams To Four Corners 345kv Power Line, San Juan County, Utah.

2002  Cultural Resource Inventory of Seven Seismic Lines for the Veritas Uintah Seismic Project, Uintah County, Utah.

2002  Cultural Resource Inventory of the Emery Telecom’s Fiber Optic Line Between the Towns of Price and Helper, Carbon County, Utah.

Kinnear-Ferris, S. and K.R. Montgomery
2002  Cultural Resource and Fossil Inventory of Utah Department of Transportation’s SR-95 Westwater Canyon Realignment, San Juan County, Utah.

Montgomery, J. and K.R. Montgomery
2002  Utah Department of Transportation’s State Route 10 Muddy Creek Bridge Replacement Cultural Resource Inventory, Emery County, Utah.

Montgomery, K.R. and S. Ball
2002  Cultural Resource Inventory of Inland Resources’ 760-Acre Parcel in Township 8S, Range 16E, Section 24 and Township 8S, Range 17E, Section 19, Duchesne County, Utah.

Raney, A. and K.R. Montgomery

Montgomery, K.R.


Montgomery, K.R. and S. Ball
2001  Cultural Resource Inventory of the Moore Road (County Road 1612) Emery County, Utah. Prepared for the Utah Department of Transportation under contract with JBR Environmental Consultants. Montgomery Archaeological Consultants.

2001  Cultural Resource Inventory of the Garkane Powerline Between Mount Carmel Junction and Zion National Park, Kane County, Utah. Montgomery Archaeological Consultants.

Montgomery, J.A. and K.R. Montgomery
2001  Cultural Resource Inventory of Bonneville Fuels Corporation’s Willow Creek Pipeline, Uintah County, Utah. Montgomery Archaeological Consultants.

Elkins, M. and K.R. Montgomery
2001  Cultural Resource Inventory of Citizen Communications’ Fiber Optic Line Along SR 174, Millard County, Utah. Montgomery Archaeological Consultants.
Elkins, M. and K.R. Montgomery
2001 Cultural Resource Inventory for the Utah Department of Transportation’s US 89 Intersection Improvement Near Big Water, Kane County, Utah. Montgomery Archaeological Consultants.

Patterson, J.J. and K.R. Montgomery
2001 Cultural Resource Inventory of the Quitchupah Coal Haul Road, Emery and Sevier Counties, Utah. Montgomery Archaeological Consultants.

Montgomery, K.R.
2000 Archaeological Data Recovery at a Prehistoric Quarry (Site 5RB790/42Un1669) In Hells Hole Canyon, Rio blanco County, Colorado. Montgomery Archaeological Consultants.

Montgomery, K.R. and S. Ball

Montgomery, K.R. and J.A. Montgomery
2000 Utah Department of Transportation’s Interstate 70 to Price State Route 10 Passing Lanes Cultural Resource Inventory, Emery and Carbon Counties, Utah. Montgomery Archaeological Consultants.


Montgomery, K.R.
1999 Cultural Resource Inventory of the Plateau’s Willow Creek Mine Pipeline Gathering System, Carbon County, Utah. Montgomery Archaeological Consultants.

1999 Cultural Resource Inventory of Coastal Oil and Gas Corporation’s Ten Well Locations in the Park Mountain Area, Rio Blanco County, Colorado. Montgomery Archaeological Consultants.

Montgomery, K.R. and J.A. Montgomery
1999 Cultural Resource Inventory Along Salina’s Main and State Streets, Sevier County, Utah. Montgomery Archaeological Consultants.

Montgomery, K.R., J.A. Montgomery, and S.Kinnear-Ferris
1999 Cultural Resource Inventory of the Emery Telephone Fiber Optic Line Ferron to Emery, Emery County, Utah. Montgomery Archaeological Consultants.

1999 Eligibility Testing at Site 42Cb1302, Carbon County, Utah. Montgomery Archaeological Consultants.

Montgomery, K.R.
1998 Cultural Resource Inventories of Coastal Oil and Gas Corporation’s Douglas Creek Unit Wells #67, #69, and #70, Rio Blanco, Colorado. Montgomery Archaeological Consultants.

1998 Data Recovery at Site 42Em2423.1 for the Proposed Cottonwood Creek Water Treatment Plant in Emery County, Utah. Montgomery Archaeological Consultants.
Montgomery, K.R., and J.A. Montgomery


Montgomery, K.R., and J.A. Montgomery
1997 Cultural Resource Inventory and Site Testing of the Cottonwood Creek Water Project, Emery County, Utah. Montgomery Archaeological Consultants.

1997 Cultural Resource Inventory and Evaluative testing for the Wilson Arch Power Line Project, San Juan County, Utah. Montgomery Archaeological Consultants.


Montgomery, K.R., and J.A. Montgomery

Montgomery, K.R., and J.A. Montgomery
1996 Cultural and Paleontological Resource Inventory of Utah Department of Transportation's U.S. 191 Lane Addition and Drainage Easement for the Kane Springs Wash Bridge Replacement Project, San Juan County, Utah. Abajo Archaeology.

1996 Cultural Resource Inventory and Evaluation of Utah Department of Transportation's Mormon Tank Wash Bridge Replacement Project Along U.S. 191, San Juan County, Utah. Abajo Archaeology.

Montgomery, K.R.
1996 Evaluative Testing of Site 42Gr2556 along Tusher Canyon Road (CR126), Grand County, Utah. Abajo Archaeology.

W.E. Davis and K.R. Montgomery.
1996 Site 42Sa22396: A Prehistoric Hoe Procurement Site on Big Bench, Southern San Juan County, Utah. Utah Archaeology 1996.

Montgomery, K.R., and J.A. Montgomery
1995 Cultural Resource Inventory of Pacificorp/Utah Power's Proposed 345 kV Transmission Line Green River to Grand Junction Section, Grand County, Utah and Mesa County, Colorado. Volumes I and II. Abajo Archaeology.
Montgomery, K.R.
1995 Cultural Resource Inventory and Evaluative Testing for Utah Department of Transportation’s State Route 18: St. George to Snow Canyon, Washington County, Utah. Abajo Archaeology.

Montgomery, K.R., and J.A. Montgomery
1994 Cultural Resource Inventory and Evaluation of Utah Department of Transportation’s Mormon Tank Wash Bridge Replacement Project along U.S. 191, San Juan County, Utah. Abajo Archaeology.

1994 Cultural Resource Inventory and Historical Reconnaissance Survey for Utah Department of Transportation’s SR-260, Sevier County, Utah. Abajo Archaeology.

Montgomery, K.R.
1994 Cultural Resource Inventory of Utah Departments of Transportation’s La Sal Junction road improvement project along U.S. 191 and SR-46, San Juan Co., Utah. Abajo Archaeology.

Montgomery, K.R., and J.A. Montgomery
1993 Utah Department of Transportation’s State Route 31 Huntington Canyon Project: Archaeological Excavations at Site 42Em2109 and 42Em2095, Emery County, Utah. Abajo Archaeology.

Montgomery, K.R.
1993 Cultural Resource Inventory and Site Testing for White Mesa Sanitary Landfill in San Juan County, Utah. Abajo Archaeology.

Montgomery, K.R., and J.A. Montgomery
1992 Cultural Resource Inventory and Evaluation of the Utah Department of Transportation’s State Route 14 Corridor between Mileposts 0.6 and 8.5, Iron County, Utah. Abajo Archaeology.

Montgomery, K.R., and J.A. Montgomery
1992 Cultural Resource Inventory and Evaluation of Garfield County’s Johns Valley Road Improvement Project, State Road 22 Survey Corridor between Mileposts 12.00 and 16.58, Garfield County, Utah. Abajo Archaeology.

Montgomery, K.R.
1992 Cultural Resource Inventories of Utah Department of Transportation’s Circleville to Junction State Route 89 and State Route 62 Project Areas, Piute County, Utah. Abajo Archaeology.

Montgomery, K.R.

1989 Cultural Resource Inventory of the Proposed Utah Department of Transportation’s Dubinkey Road Materials Pit, Grand County, Utah. Abajo Archaeology.

Montgomery, K.R.
1989 Cultural Resource Inventories and Evaluations of the Utah Department of Transportation’s Information/View Localities along State Route 313, Grand County, Utah. Abajo Archaeology.

1988 Cultural Resource Inventory of the Proposed Utah Department of Transportation’s Sagebrush Bench Materials Pit, Emery County, Utah. Abajo Archaeology.
Montgomery, K.R., and J.A. Montgomery
1988 The Archaeology of the Recapture Dam Pipeline Project, Phase I, San Juan County, Utah. Abajo Archaeology.

1988 Archaeological Testing for Utah Department of Transportation at Site 42Em1876: Interstate Highway 70, Castle Valley to Beyond Muddy Creek Segment, Emery County, Utah. Abajo Archaeology.

1988 Archaeological Testing at Sites 42Sa10636, 42Sa18241 and 42Sa20040 Along U.S. Highway 191, Grand and San Juan Counties, Utah. Abajo Archaeology.

Montgomery, K.R.
1987 Cultural Resource Inventory of the Utah Department of Transportation's Ferron Creek Bridge and Highway Improvement Project in Emery County, Utah. Abajo Archaeology.

Montgomery, K.R., and J.A. Montgomery
1987 Cultural Resource Inventory of the State of Utah's Horse Pasture No. 2 Chaining Program, Grand County, Utah. Abajo Archaeology.

Montgomery, K.R.
1986 Intensive Cultural Resource Inventory of the Proposed Utah Department of Transportation Cat Canyon Materials Pit, Carbon County, Utah. Abajo Archaeology.

Montgomery, K.R., and J.A. Montgomery
1986 Cultural Resource Inventory and Avoidance Recommendations for the Alkali Road Improvement Project, San Juan County, Utah. Abajo Archaeology.

Montgomery, K.R., and J.A. Montgomery
1985 Cultural Resource Inventory and Avoidance on Seven Seismographic Transects for Champlin Petroleum, Alkali Prospect, San Juan County, Utah. Abajo Archaeology.

Montgomery, K.R.

Montgomery, J.A., K.R. Montgomery, D.Weder, and F.R. Hauck

Montgomery, K.R.
1981 Archaeological Reconnaissance of Seismic Corridors and Access Roads in the Cottonwood Canyon, Tank Mesa, Montezuma Canyon, Cedar Peak, and Little Ruin Canyon Localities of San Juan County, Utah. Archeological Environmental Research Corporation.

Montgomery, K.R.

Montgomery, K.R.
Education

2004 - Present  Ph.D., Anthropology, Washington State University - Pullman, WA
Dissertation topic – How shifting subsistence strategies of settled agro-pastoralists relate to changes in the environment and social structure at the Chalcolithic site of Gilund India, Chaired by Dr. S. Weber

2000 - 2004  M.A., Anthropology, Washington State University - Pullman, WA
Thesis titled "Investigations of Human Gnawing on Small Mammal Bones Among Contemporary Bofi Foragers of the Central African Republic," Chaired by Dr. K.D. Lupo

1992 - 1997  B.S., Sociology-Anthropology, Montana State University - Bozeman, MT

Research Interests

- Conservation Biology, Prehistoric Environmental Exploitation, Cultural Sustainability
- Appropriate Field Methodologies, Public Participation and Archaeological Applicability
- Colorado Plateau, Chaco, Anasazi, Fremont, Socioeconomic Scale and Interactions
- Indus Civilization, Shifting Subsistence Strategies, Pastoralism, Domestication
- Central Africa Forest-Foragers, Ethnography, Applied Ethnographic Research
- Zooarchaeology, Taphonomy, Hominid/Hominoid Ecology

Publications and Reports

Fancher, Jason and Matthew Landt

Landt, Matthew and Andrew Duff

Landt, Matthew

Landt, Matthew and Jenn Mueller
In Press  Prehistoric Bedrock Mortars in Southeastern Utah. Utah Archaeology. Given final acceptance and awaiting publication of volume.

Landt, Matthew J.
2005  Preliminary Report on the Faunal Remains from Gilund, India. Submitted in Fall 2005 and awaiting final form from P.I.s Dr. G. Possehl (U. of Penn.) and Dr. V. Shinde (Deccan College) – expected during summer 2006

Mueller, Jenn and Matthew Landt

Lupo, Karen, and Matthew Landt
2003  Wear and Functional Analysis of Three Bone Scrapers from the Bernstein-Dierking Discovery Site (42SA24364), Utah. Prepared for Edge of the Cedars State Park Museum, Blanding, Utah.

Incorporated
May 18, 2007
Div. of Oil, Gas & Mining
MATTHEW J. LANDT  MA, RPA
(509) 435-5080
matthew_landt@wsu.edu
PO Box 2612 Pullman, WA 99165-2612

Professional Presentations

Mueller, Jenn L., Matthew J. Landt, and Donna Turnipseed

Landt, Matthew, Andrew Duff, and Fumiyasu Arakawa

Duff, Andrew, Alissa Nauman, Jenn Mueller, Stephanie VanBuskirk, Gary Huckleberry, Matthew Landt, and Hugh Robinson

Landt, Matthew

Schachner, Gregson, Andrew I. Duff, Matt J. Landt, and R. David Satterwhite

Guest Lecturer

Landt, Matthew
2005  *Chimpanzee Mastication and Early Hominid Evolution.* Invited Lecturer at WSU-Pullman as part of the Undergraduate Anthropology Lecture Series.

Landt, Matthew
2005  *The Marginal Chalcolithic Site of Gilund, India.* Invited Lecturer at WSU-Vancouver as part of Vancouver Anthropology Undergraduate Colloquium Series.

Society Memberships

Society for American Archaeology (since 2000)  Register of Professional Archaeology (since 2004)
Archaeological Conservancy (since 2003)  Society of Conservation Biology (since 2003)

Computer & Miscellaneous Skills

Adobe Suite (Photoshop and Illustrator)  Automotive Repair Skills (Clutch, Throttle Bearing, Carburetor, Transfer Case, etc.)
ArcGis & GPS Pathfinder NAUI Certified (2002)
Microsoft Suite (Excel, Word, Powerpoint, etc.)
Field Work Experience

Date / Location

July - Aug 2005
Utah

Donna Turnipseed (BLM), Archaeological Technician/ArcGis Specialist

Hired under the STEP program with the Moab Field Office. Performed Section 106, Class III Field Inventory and Pedestrian Survey for Uranium testing programs in Lisbon Valley with at-risk/vandalized sites in Ten-Mile Canyon. In field mapping and lithic analysis with Trimble mapping.

May - July 2003-2005
New Mexico

Dr. Andrew Duff (WSU) - Field School Teaching Assistant/Excavation Crew Chief/ Site Photographer; Plan and Supervise Site Excavation and Facilitate Student Instruction in Excavation Procedures as well as Field Laboratory Methods that include Flotation and Faunal Analysis at the Cox Ranch Pueblo Community

Jan - Feb 2005
India

Dr. Gregory Possehl (University of Pennsylvania), Faunal Analyst/Excavation Crew Chief; Archaeological Excavation, Survey and Faunal Analysis at the Chalcolithic site of Gilund, Rajasthan District, India

July - Dec 2004
Utah

Donna Turnipseed (BLM) & Dr. Andrew Duff (WSU), Crew Chief/ArcGis Trainee Challenge Cost-Share/Cooperative Conservation Initiative Agreement between Washington State University and the BLM, Moab Field Office (MFO). Audited cultural resource records at MFO for 'at-risk' sites. Performed unsupervised Section 106, Class III field inventory for designated sites with GIS. Reassessed site evaluations and provided action plan for mitigation in Lisbon Valley.

Sept - Dec 2003
Central African Republic

Dr. K.D. Lupo (WSU), Ethnoarchaeological Assistant

Pedestrian and Archaeological Survey of Rockshelters, Ethnographic Interviews and Focal Follows among Forest Foragers in the N’gotto Forest Reserve

July 2003
Utah

Mr. David Schmitt (Desert Research Institute), Crew

Pedestrian Survey on Dougway Military Base for Stryker Project

July - Aug 2002
Washington

Dr. Matthew Root (Rainshadow Research, Inc.), Crew

Pedestrian Survey for BLM Land Exchange in NE Washington

May - June 2002
New Mexico

Dr. Andrew Duff (WSU) - Crew

Pedestrian Survey & Reconnaissance for 2003 WSU Field School at the Cox Ranch Peublo Community

Sept 2001
Idaho

Dr. Peter Mehringer (WSU), Student

Lake Coring linked with Palynology class at Perkins Lake

July - Aug 2001
Montana

Dr. Leslie Davis (Museum of the Rockies), Crew and Lab Manager

Pedestrian Survey and Excavation at the Hagen Site, OTL Ridge, and MacHaffie Site. Responsible for the Curation and Cataloging of Excavated Materials.

July - Aug 2000
Montana

Dr. Leslie Davis (Museum of the Rockies), Excavation Crew and Lab Manager

Archaeological Reconnaissance in the Badlands of Montana and South Dakota. Responsible for Excavation, Curation and Cataloging of Materials at MacHaffie.
MATTHEW J. LANDT - MA, RPA
matthew_land@wsu.edu
PO Box 2612 Pullman, WA 99165-2612

Field Work Experience cont’d
Supervisor, Position, & Nature of Work

Date / Location
July - Aug 1998 / Montana
Dr. Leslie Davis (Museum of the Rockies), Crew
Excavation in Central Montana at Blacktail Cave and the MacHaffie Site

June - July 1996 / Wyoming
Dr. Marcel Kornfeld & Dr. Charles Reher (University of Wyoming), Student
Excavator at the Vore Buffalo Jump, Sandcreek Rockshelter, and Pedestrian
Survey in the Black Mountain Archaeological District

Teaching/Professional Experience

Date Position/Supervisor Nature of Work/Location
2005-2006 Teaching Assistant Anthropology Department WSU, Pullman, WA
World History Pre-1500 (GenEd 110) Dr. Richard Hines
Introduction to Anthropology (Anth 101) Dr. Marsha Quinlan

Spring 2004 Preceptor/Grader, World History Post-1500 (GenEd 111)
Dr. Ken Faunce, Anthropology Department WSU, Pullman, WA

Spring 2004 Preceptor/Tutor, Physical Anthropology (Anth 260)
Dr. Katherine Lovrich, Student Advising and Learning Center WSU, Pullman, WA

Dr. Chris Davitt Department of Biological Sciences WSU, Pullman, WA

2001-2003 Teaching Assistant, Anthropology Department WSU, Pullman, WA
Introduction to Anthropology (Anth 101) Dr. Gary Huckleberry
Sex, Evolution and Human Behavior (Anth 468) Mrs. Terry Tucker
World History Post-1500 (GenEd 111) Dr. Ken Faunce
Introduction to Anthropology (Anth 101) Dr. Shila Baks

2001-2003 Senator, Graduate and Professional Student Association (GPSA) WSU, Pullman, WA

2001-2003 Affiliate, GPSA Budget Committee WSU, Pullman, WA

Fall 2002 Research Assistant, SEM Technician/Image Analysis of Ground Stone
Dr. Peter Mehringer, Anthropology Department WSU, Pullman, WA

Spring 2002 Research Assistant, Human Genome Diversity Project Literature Research
Dr. Linda Stone, Anthropology Department WSU, Pullman, WA

Spring 2002 Research Assistant, Lab Prep/Cataloging of Small Animal Comparative Specimens
Mr. Kevin Pullen, for Curation in the Connor Museum of Vertebrate Zoology
Department of Biological Sciences WSU, Pullman, WA

Fall 2001 Museum Assistant, Volunteer/Supervisor for Visit of Grade School Children
Dr. Mary Collins, Museum of Anthropology WSU, Pullman, WA

Summer 2001 Museum Technician, Catalogue Artifacts for Curation and NAGPRA Compliance
Dr. Mary Collins, Museum of Anthropology WSU, Pullman, WA
MATTHEW J. LANDT  MA, RPA

Teaching/Professional Experience cont’d

<table>
<thead>
<tr>
<th>Date</th>
<th>Position/Supervisor</th>
<th>Nature of Work/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2001</td>
<td>Research Technician,</td>
<td>Identification of Macrobotanicals in Multiple Lake Cores</td>
</tr>
<tr>
<td></td>
<td>Dr. Peter Mehringer,</td>
<td>Anthology Department</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WSU, Pullman, WA</td>
</tr>
<tr>
<td>1997-1998</td>
<td>Research Assistant,</td>
<td>Display Preparation, Cataloging and Curation of Prehistoric and Historic Artifacts and Fossils</td>
</tr>
<tr>
<td></td>
<td>Dee Seitel</td>
<td>Museum of the Rockies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MSU, Bozeman, MT</td>
</tr>
<tr>
<td>1994-1996</td>
<td>Resident Advisor,</td>
<td>Organize &amp; Supervise Student Community Involvement</td>
</tr>
<tr>
<td></td>
<td>Tammy Olsten</td>
<td>Montana State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MSU, Bozeman, MT</td>
</tr>
<tr>
<td>Spring 1995</td>
<td>Resident Advisor National Representative, National Association of College and University</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jeff Bondy</td>
<td>Montana State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MSU, Bozeman, MT</td>
</tr>
</tbody>
</table>

Awards, Grants, and Honors

<table>
<thead>
<tr>
<th>Type/Date</th>
<th>Issuer &amp; Nature of Grant/Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award /</td>
<td>1st Annual Rain Shadow Research Graduate Student Award to further graduate research.</td>
</tr>
<tr>
<td>Fall 2005</td>
<td></td>
</tr>
<tr>
<td>Scholarship /</td>
<td>1st Annual Janet L. Friedman Memorial Scholarship in Archaeology for a Ph.D. student with a focus in Cultural Resource Management.</td>
</tr>
<tr>
<td>Spring 2005</td>
<td></td>
</tr>
<tr>
<td>Award /</td>
<td>Excellence Award for archaeological contribution to the BLM- Moab Field Office (1st Oct 2004)</td>
</tr>
<tr>
<td>Fall 2004</td>
<td></td>
</tr>
<tr>
<td>Grant /</td>
<td>Graduate School Travel Grant for travel to 68th Annual Meeting of the Society for American Archaeology, April 2003, Milwaukee, WI.</td>
</tr>
<tr>
<td>Spring 2003</td>
<td></td>
</tr>
<tr>
<td>Grant /</td>
<td>GPSA Registration Grant for registration at 68th Annual Meeting of the Society for American Archaeology, April 2003, Milwaukee, WI.</td>
</tr>
<tr>
<td>Spring 2003</td>
<td></td>
</tr>
<tr>
<td>Award /</td>
<td>GPSA Senate Excellence Award for service to graduate and professional students as a member of the Senate and Budget Committee</td>
</tr>
<tr>
<td>Spring 2003</td>
<td></td>
</tr>
</tbody>
</table>

Language Abilities

<table>
<thead>
<tr>
<th>Language</th>
<th>Experience</th>
<th>Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>-</td>
<td>fluent</td>
</tr>
<tr>
<td>German</td>
<td>2 years school</td>
<td>non-practical</td>
</tr>
<tr>
<td>Hindi</td>
<td>2 months</td>
<td>practical only - Spring 2005</td>
</tr>
<tr>
<td>Rajastani</td>
<td>2 months</td>
<td>practical only - Spring 2005</td>
</tr>
<tr>
<td>French</td>
<td>3 months</td>
<td>practical only - Fall 2003</td>
</tr>
<tr>
<td>Sangho</td>
<td>2.5 months</td>
<td>practical only - Spring 2005</td>
</tr>
<tr>
<td>Bofi</td>
<td>2.5 months</td>
<td>practical only - Fall 2003</td>
</tr>
</tbody>
</table>

INCORPORATED

MAY 18, 2007

Div. of Oil, Gas & Mining
VITA

MARK CLAYTON BOND
P.O. Box 56
Bluff, Utah 84512

EDUCATION:

MA in Anthropology (Dean's List), Northern Arizona University, Flagstaff, Arizona, 1981.

BA in Anthropology, (with Honors), New Mexico State University, Las Cruces, New Mexico, 1974.

PROFESSIONAL EXPERIENCE:

1999-Present  Staff Archaeologist (full-time), Montgomery Archaeological Consultants, Moab, Utah.

1996-1998 and 2002 Project Site Foreman, University of Colorado (Boulder), summer field school excavations at Site 42Sa22674, a Chacoan Great House in Bluff, Utah.

1990-2002 Consulting Project Archaeologist contracting with Abajo Archaeology, Bluff, Utah.

1988-1990 Staff Archaeologist, Zuni Archaeological Program, Zuni Pueblo, New Mexico.


1981  Crew Director, Plano Archaeological Consultants, Longmont, Colorado.

1981 Project Archaeologist, Archaeology Laboratory, Northern Arizona University, Flagstaff, Arizona.

1980  Crew Director, Laboratory of Public Archaeology, Colorado State University, Fort Collins, Colorado.

1979-1980 (full time) and 1975-1977 (intermittent) Project Director, Cultural Resources Management Division, Department of Sociology and Anthropology, New Mexico State University, Las Cruces, New Mexico.

TECHNICAL REPORTS AND PUBLICATIONS:

INTEGRATED INCORPORATED

MAY 18 2007

Div. of Oil, Gas & Mining
1976 An Archaeological Survey of Sixteen Proposed Drill Pads in Socorro County, New Mexico. New Mexico State University, Cultural Resources Management Division Report No. 47.

1976 An Archaeological Reconnaissance of Ten Proposed Geothermal Testing Areas in Hidalgo County, New Mexico, with Janet Watson. New Mexico State University, Cultural Resources Management Division Report No. 51.


1978 Collection and Analysis of Lithic Procurement Debris Loci in the Bullhead City-Riviera Area, Mohave County, Arizona. Manuscript on file, Laboratory of Archaeology, Northern Arizona University, Flagstaff.

1978 A Survey of Proposed Construction Site Areas in Riviera, Arizona. Manuscript on file, Laboratory of Archaeology, University of Northern Arizona, Flagstaff.


1979 A Class III Cultural Resource Inventory of Proposed Off-Road Vehicle Areas in the Haystack Mountain, Comanche Hill, and Mescalero Sands Vicinity near Roswell, New Mexico. New Mexico State University, Cultural Resources Management Division Report No. 327.

1979 An Archaeological Clearance Survey for a Buried Telephone Cable in Dona ana County, New Mexico. New Mexico State University, Cultural Resources Management Division Report No. 330.

1980 An Archaeological Clearance Survey of the Restless Prospect. New Mexico State University, Cultural Resources Management Division Report No. 360.


1980 An Archaeological Clearance Survey of the Hunts Hole Prospect. New Mexico State University, Cultural Resources Management Division Report No. 364.
1980 An Archaeological Survey of Two Proposed Well Pad Sites in Southern Dona Ana County, New Mexico. New Mexico State University, Cultural Resources Management Division Report No. 367.


1980 An Archaeological Survey of Nineteen Proposed Uranium Prospect Drill Holes in McKinley County, New Mexico. New Mexico State University, Cultural Resources Management Division Report No. 377.


1980 An Archaeological Survey of the Mesa Park Project, Las Cruces, New Mexico. New Mexico State University, Cultural Resources Management Division Report No. 390.

1980 An Archaeological Survey of Five Proposed Uranium Test Drilling Locations near the Bear Mountains, Socorro County, New Mexico. New Mexico State University, Cultural Resources Management Division Report No. 391.

1980 An Archaeological Survey of a Mine Access Road near Magdalena, Socorro County, New Mexico. New Mexico State University, Cultural Resources Management Division Report No. 395.

1981 An Archaeological Survey of Two Proposed Water Well Sites in Coconino and Navajo Counties, near Dennebito Trading Post, Arizona. Manuscript on file, Northern Arizona University, Archaeology Laboratory, Project No. 452-AZ-D.

1981 An Archaeological Survey of Fifteen Proposed House Sites in the Keams Canyon Wash Vicinity and Three Proposed Electrical Service Lines on Hopi Tribal Lands in Navajo County, Arizona. Manuscript on file, Northern Arizona University, Archaeology Laboratory, Project No. 475-AZ-J.

1981 Ground and Pecked Stone Artifacts from the San Juan Bridge Project. Manuscript on file, Selected Studies Program, Department of Anthropology, Northern Arizona University.


1984 Archaeological Survey of the Proposed San Juan County Roads’ Alkali Ridge Road (CR204) Gravel Quarry, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the San Juan Resource Area, Bureau of Land Management, Monticello, Utah.

1984 Archaeological Survey of the Proposed San Juan County Roads’ Bluff Airport Road, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the San Juan Resource Area, Bureau of Land Management, Monticello, Utah.

1984 Archaeological Survey of a Portion of the City of Blanding Water Pipeline Construction Project, Johnson Creek Canyon, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the San Juan Resource Area, Bureau of Land Management, Monticello, Utah.

1984 Archaeological Survey of the San Juan County Roads’ Alkali Ridge Road (CR204) Surfacing Project, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the San Juan Resource Area, Bureau of Land Management, Monticello, Utah.

1984 The Archaeological Survey of the Union Oil Company of California’s Proposed Natural Gas Pipeline: Drill Site A-911 to the Big Indian Valley, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Moab District Area, Bureau of Land Management, Monticello, Utah.

1984 Archaeological Survey of the San Juan County Roads’ Proposed County Road 146 Realignment at the Confluence of Tank and Montezuma Canyons, San Juan County, Southeastern Utah, with William E. Davis. Manuscript on file, Abajo Archaeology, Bluff, Utah and the San Juan Resource Area, Bureau of Land Management, Monticello, Utah.


1985 Piedra Black-on-white, White Mesa Variety: Formal Description of a Western Mesa Verde Anasazi Pueblo I White Ware Type, with Winston Hurst and Sloan Emory Schwindt. *Pottery Southwest*, 12(3).


1985 Cultural Resource Inventory of the Utah Department of Transportation’s Section 7 Borrow Pit Location, Southern Carbon County, Utah with Debra Foldi. Manuscript on file, Abajo Archaeology, Bluff, Utah, and the Price River Resource Area Office, Bureau of Land Management, Price, Utah.


1987 42Em2112: Cultural Resource Inventory and Testing of a Fremont Camp Site in the Proposed Utah Department of Transportation Detour Right-of-way at the Huntington Creek Bridge, Emery County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah, and the Antiquities Section, Division of State History, Salt Lake City, Utah.

1987 Archaeological Testing at 42Sa9290: A Basketmaker III Pit House Village in the Westwater Canyon Bottom, San Juan County, Utah with William E. Davis. Manuscript on file, Abajo Archaeology, Bluff, Utah, and the Antiquities Section, Division of State History, Salt Lake City, Utah.

1987 Archaeological Inspection of Southern Union Exploration's Tin Cup Federal 1.31 Reserve Pit, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the San Juan Resource Area, Bureau of Land Management, Monticello, Utah.


1988 Historic Artifacts from Site 42Em1934. In The Interstate 70 Ghost Rock Archaeological Project, Emery County, Utah, edited by William E. Davis. Manuscript on file, Abajo Archaeology, Bluff, and the Antiquities Section, Division of State History, Salt Lake City, Utah.


1990 The Cultural Resources Inventory of a Proposed Western Gas Processors, Inc., Gas Pipeline Corridor near Tsitah Wash, Apache County, Arizona. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Navajo Nation Historic Preservation Department, Window Rock, Arizona.


1992 Archaeological Survey of the Utah Department of Transportation’s Proposed State Route 9 Dalton Wash to Grafton (F-014(17)), Slump-fill disposal Loci Project, Washington County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.
1992 Archaeological Evaluative Testing at Site 42Ws325, SR9: Dalton Wash to Grafton, Washington County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1992 A Technical Proposal for Archaeological Data Recovery at Site 42Ws325, SR9: Dalton Wash to Grafton, Washington County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1993 Cultural Resource Inventory of the Proposed Grand County Hastings Road (CR154) Improvement Project, Grand County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1993 Cultural Resource Inventory of Six Proposed Road Improvement Segments: The San Juan Road 146 Improvement Project, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1993 Cultural Resource Inventory of the SR24 Improvement Project: Interstate 70/SR24 South to Greasewood Draw, Milepost 155 to Milepost 161, Emery County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1993 Cultural Resource Inventory and Traditional Cultural Properties Survey of the Proposed San Juan County Road Department’s CR413 Improvement Project on Navajo Nation Lands, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Navajo Nation Historic Preservation Department, Window Rock, Arizona.

1993 Archaeological Investigations Along the Utah Department of Transportation’s U.S. Highway 191 Improvements Project Right-of-way: Cow Canyon to State Route 262, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1993 Cultural Resource Inventory and Evaluative Testing Along U.S. Highway 191: Black Mesa Road to Shirttail Junction, San Juan County, Utah with Winston B. Hurst, Deborah A. Westfall, and William E. Davis. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1994 Evaluative Testing of Four Archaeological Sites Along the Grand County’s Proposed Hastings Road (CR154) Improvement Project Right-of-way, Grand County, Utah with Jonathon Till. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1994 The Cultural Resource Inventory of the Utah Department of Transportation's State Road 50 Cattle Underpass Project, Eastern Millard County, Utah with William E. Davis. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1994 The Cultural Resource Inventory of Six Proposed Filming Loci for Locations Southeast in the Valley of the Gods, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1994 Limited Evaluative Testing of Six Archaeological Sites Located along Utah Department of Transportation's Proposed US-191 Improvement Project (NH-0191(2)42), Black Mesa Road to Shirttail Junction, San Juan County, Utah with Winston B. Hurst and Deborah A. Westfall. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1994 Cultural Resource Inventory of Two Proposed Gravel Pits and Associated Facilities on the Bluff Bench, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1995 Cultural Resource Inventory of the San Juan County School District's Proposed Blanding Block Project, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.


1996 Evaluative Testing of Two Discovery Sites, 42Sa22502 and 42Sa22503, Along the San Juan County Road 104 Realignment, San Juan County, Utah with Jonathon Till. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1996 A Technical Proposal for a Three Year Program of Archaeological Inventory, Natural Bridges National Monument, San Juan County, Utah with William E. Davis, Winston B. Hurst, Jonathan D. Till and Deborah A. Westfall. Manuscript on file, Natural Bridges Nationa Monument, Utah.


1997 Cultural Resource Inventory and Avoidance: Twin Mountain Rock Company’s Proposed Railroad Spur, Beaver County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1997 Cultural Resource Inventory of the Twin Rock Company’s Quarry Expansion Area, Beaver County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1998 Archaeological Investigations in the DTX-10 Project Area, Washington County, Utah with William E. Davis, Jonathon D. Till and Deborah A. Westfall. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Cedar City District Office, Bureau of Land Management, Cedar City, Utah.

1998 Cultural Resource Inventory of the Proposed KEJANA Development Mill Creek Canyon Road Improvement Corridor Project, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Grand Resource Area Office, Bureau of Land Management, Moab, Utah.

1999 Archaeological Test Excavations at Sites 42Sa23300 and 42Sa23301 in the Canyon of Mill Creek, San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Grand Resource Area Office, Bureau of Land Management, Moab, Utah.

1999 Cultural and Paleontological Resource Inventory of Utah Department of Transportation’s Proposed Improvement Project: State Route 20, Milepost 0 to 10.5, Iron and Garfield Counties, Utah with William E. Davis and Deborah A. Westfall. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

1999 A Cultural and Paleontological Resources Inventory of the Preposed Brown Sugar Surface Mine Area in Tooele County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Salt Lake City Office, Bureau of Land Management, Salt Lake City, Utah.
2000 Cultural and Paleontological Resources Inventory of the Proposed Roadway Reconstruction along Highway US-89, Centerfield to Gunnison (UDOT Project No. NH-0089(43)206), Sanpete County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and Division of State History, Salt Lake City, Utah.

2000 Evaluative Archaeological Testing at Site 42Sa22675, Bluff Bench Gravel Pit (UDOT Project NH-0191(6)37), San Juan County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and Division of State History, Salt Lake City, Utah.

2000 Cultural Resource Inventory along Selected Fence Lines at the Green River Test Site (GRTS), Green River, Grand Junction, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Archaeology Office, U.S. Army, White Sands Missile Range, New Mexico.


2001 Mars Analog Research Station (MARS) Cultural Resource and Paleontological Inventory on SITLA Lands near Hanksville, Wayne County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

2001 The Cultural Resource Inventory of the Utah National Guard Blanding Armory Maintenance Hut Construction Project, Blanding, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

2001 Cultural and Paleontological Resources Inventory of Utah Department of Transportation's SR-161 Cove Fort Rest Area Turning Lanes Project (No. IM-15-4(39)138), Millard County, Utah. Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.


2002 Cultural and Paleontological Resource Inventory Along 5500 West and 5700 West, Kanarraville to Iron Springs, Cedar City, Iron County, Utah (Udot Project No. STP-1756(1)). Manuscript on file, Abajo Archaeology, Bluff, Utah and the Division of State History, Salt Lake City, Utah.

INCOMPONATED
MAY 18 2007
Div. of Oil, Gas & Mining
2002 The Class III Cultural Resources Inventory of the Southeastern Area Sale Parcels:
Looking Glass Overlook Deux, Pine Ridge, Lower Allen Canyon, Dolores Point
Overlook, Mine Road, Photograph Gap, Millcreek Overlook and Southern Comb Ridge,
San Juan, Grand and Emery Counties, Utah (State Survey Permit No. U-01-AS-0541s)
with Winston B. Hurst and William E. Davis. Manuscript on file, Abajo Archaeology,
Bluff, Utah and the Division of State History, Salt Lake City, Utah.

2003 Cultural Resource Inventory of Westport Resources Deadman Creek 3939 Acre Block
Survey, Carbon County, Utah with Anne Raney. Manuscript on file, Montgomery
Archaeological Consultants, Moab, Utah and the Price River Resource Area Office,
Bureau of Land Management, Price, Utah.

2003 Cultural Resource Management Inventory of Shenandoah Energy’s OU GB #3W-15-8-22
Well Location on Glen Bench, Uintah County, Utah. Manuscript on file, Montgomery
Archaeological Consultants, Moab, Utah and the Vernal Field Office, Bureau of Land
Management, Vernal, Utah.

2003 Cultural Resource Inventory of Pendragon Energy’s Well Locations Federal #14-17-10-
18, #7-19-10-18 and #15-20-10-18, Uintah County, Utah. Manuscript on file,
Montgomery Archaeological Consultants, Moab, Utah and the Price River Resource Area
Office, Bureau of Land Management, Price, Utah.

2003 Cultural Resource Inventory of Shenandoah Energy’s Proposed Well Locations WVX
#8-17-8-21, NC 3M-32-8-22 and NC 8m-32-8-22 on Ute Indian Lands, Uintah County,
Utah. Manuscript on file, Montgomery Archaeological Consultants, Moab, Utah and the
Ute Indian, Tribe, Uintah and Ouray Agency, Fort Duchesne, Utah.

2003 Cultural Resource Inventory of Shenandoah Energy’s Proposed Well Locations WVX
1W-17, WVX 2W-17, WVX 5W-16 GB 3W-36 and GB 7W-36 on Ute Tribal Land,
Uintah County, Utah. Manuscript on file, Montgomery Archaeological Consultants,
Moab, Utah and the Price River Resource Area Office, Bureau of Land Management,
Price, Utah.

2003 Cultural Resource Inventory of Shenandoah Energy’s Proposed Well Locations NDC
9M-22, 11M-22, 3M-27, 10W-25 and Lateral #5 Pipeline (Township 8S, Range 21E),
Uintah County, Utah. Manuscript on file, Montgomery Archaeological Consultants,
Moab, Utah and the Price River Resource Area Office, Bureau of Land Management,
Price, Utah.
Personal Information:

Name: Andre’ B. Jendresen

Address: 322 E, 100 S
Moab, Utah 84532

Phone #: (435) 259-5764

E-mail: ajendresen@montarch.com

Education:

2004 Master of Arts in Anthropology, University of Montana, Missoula, Montana.
2001 Bachelor of Arts in Anthropology, University of Montana, Missoula, Montana.

Work Experience:

2005-Present Staff Archaeologist.
Montgomery Archaeological Consultants. Moab, Utah.
Conducted various Class I literature reviews and Class III inventories in Utah (Vernal field office, Price Field Office, Richfield Field Office, Cedar City Field Office, Monticello Field Office, and Moab Field Office). Responsibilities include conducting fieldwork (survey, testing, and data recovery); documentation of prehistoric and historic cultural resources; site eligibility (NRHP) assessments; laboratory analysis of artifacts; and site form and report preparation. Skilled in a number of software packages including Microsoft Word, Excel, GPS Pathfinder and ArcView; and is proficient with the use of GPS units and related software (e.g. Trimble GeoExplorer II and III).

USDA Forest Service, Sierra National Forest. Clovis, CA.
Conducted cultural resource surveys and inventories in areas of proposed projects. Produced site maps using a compass and protractor. Took GPS location readings using a Garmin GPSMAP 76S. Took site photos. Recorded new sites, and monitored the site condition of pre-recorded sites. Monitored the performance of contract archaeologists for compliance with their contract.

Performed file searches and pre-field research. Filed archaeological site records and reports. Uploaded GPS data to ArcGIS/ArcMap, and produced project area maps and inventory maps. Cataloged digital pictures and burned them onto CD's for storage. Compiled and entered archaeological data in preparation of reports. Updated and maintained records systems of known cultural resources. Evaluated the archaeological accuracy in the reporting of survey and excavation findings in three wilderness cultural resource inventories, and in contractor site reports. Performed site condition assessments. Served as the Forest Service’s contract...
inspector on contracts that they had negotiated with a CRM firm for Wilderness inventories. Assisted in writing cultural resource management reports for five commercial pack stations operating in Sierra Nevada Wilderness areas.

            University of Montana. Missoula, Montana.

            Filing archaeological site records, scanning records into the Montana Antiquities Database, updating records, processing requests for site records, and assigning site numbers. Providing information for and coordinating with archaeologists, Native American tribes, and the State Historic Preservation Office (SHPO).

2001  Archaeological Technician.

        Conducted surveys and inventories of cultural resources in areas of proposed projects; using a compass, topographical map, and aerial photographs. Searched for surface evidence of historic and prehistoric archaeological remains; and recorded their location. Used shovel, trowel and screen to test for subsurface evidence of historic and prehistoric archaeological remains. Took pictures of artifacts and features. Typed up cultural resource inventories and cultural site records. Recorded site leads on topographical maps. Performed historic research. Conducted pre-field research of archaeological reports, maps, and aerial photos. Filed archaeological reports.

Other Qualifications:

Professional Organizations: Register of Professional Archaeologists.

Field Schools:

Historic Archaeology. Field school in Virginia City, Montana, during the summer of 2000, under the direction of Dr. John Douglas.

Prehistoric Archaeology. Field school at the Keatley Creek site in British Columbia, Canada, during the summer of 2002, under the direction of Dr. Bill Prentiss.
UTAH FIELDWORK EXPERIENCE

2005

Crew Leader - Cultural Resource Inventory of The Central Utah Railroad Project in Sevier, Sanpete and Juab Counties, Utah. (8 weeks)

Crew Leader - Cultural Resource Inventory of Bill Barrett Corporation’s Seismic Project Near Pine Ridge, San Juan County, Utah. (2 months)

Crew Leader - Cultural Resource Inventory of The Alton Coal Development in the Alton Amphitheater, Kane County, Utah. (1 ½ months)

Crew Leader - Cultural Resource Inventory of Newfield Exploration’s Block Parcel in Township 9S, Range 16E, Sections 23 and 24, Duchesne County, Utah. (2 weeks)

Crew Leader - Cultural Resource Inventory of The State of Utah Division of Wildlife Resources Grey Wolf Parcels, Duchesne County, Utah. (3 days)

Crew Leader - Cultural Resource Inventory of The State of Utah Division of Wildlife Resources Sanford Sagegrouse 2 Project Parcels, Garfield County, Utah. (1 week)

Crew Leader - Cultural Resource Inventory of The Little Hole Hazardous Fuel Reduction Project Parcels, Daggett County, Utah. (2 weeks)

Crew Leader - UDOT US 491 Monticello to Colorado State Line, Data Recovery for Site 42Sa25619, San Juan County, Utah. (1 week)

Crew Leader - Cultural Resource Inventory of EOG Resources Inc.’s Two Proposed Wells: East Chapita #17-17 and East Chapita #18-17 in Township 9S, Range 23E, Section 17, Uintah County, Utah. (3 days)

Crew Leader - Cultural Resource Inventory of EOG Resources Inc.’s Two Proposed Wells: CWU #336-19 & CWU #548-19 in Township 9S, Range 23E, Sections 10,17, & 26 Uintah County, Utah. (2 days)

Crew Leader - Data Recovery for Sites 42Ws4113 and 42Ws4115 Washington County, Utah. Utah Department of Transportation’s State Route 18 RP 37.0 to RP 38.73 Maintenance Project. (2 weeks)

Crew Leader - Cultural Resource Inventory of Westport Oil and Gas Company’s Six Proposed Well Locations near Sand Wash: NBU Wells 1021-13 A, C, G, I, K, and O in Township 10S, Range 21E, Sections 13, Uintah County, Utah. (2 days)

Crew Leader - Cultural Resource Monitoring of Star Valley’s Proposed 12-Mile Pipeline Near Harley Dome in Grand County, Utah. (3 days).

Crew Leader - Cultural Resource Inventory of Medallion Exploration’s Nine Well Locations in Evacuation Creek, Uintah County, Utah. (3 days).
Crew Leader - Cultural Resource Inventory of GLNA LLC/Eclips Exploration’s Proposed Federal Access Corridor, Grand County, Utah. (1 week).

Crew Member - Cultural Resource Inventory of the Colorado River Bridge Project for Michael Baker Jr., Inc., Grand County, Utah. (2 weeks).

2006

Crew Leader - Cultural Resource Monitoring of GLNA LLC/Eclips Exploration’s Proposed Federal Access Corridor, Grand County, Utah. (1 week).

Crew Leader - Cultural Resource Inventory of Enduring Resources’ Proposed Southam Canyon 10-24-11-16 Well Location in T10S R24E Section 16, Uintah County, Utah. (1 day)

Crew Leader - Cultural Resource Inventory of Enduring Resources’ Proposed Southam Canyon 10-24-44-18 Well Location in T10S R24E Section 17, Uintah County, Utah. (1 day)

Crew Leader - Cultural Resource Inventory of Enduring Resources’ Proposed Southam Canyon 10-24-31-7 Well Location in T10S R24E Section 6, Uintah County, Utah. (1 day)

Crew Leader - Cultural Resource Inventory of Enduring Resources’ Two Proposed Southam Canyon Well Locations 11-24-11-10, and 11-24-22-10, in T11S R24E, Section 10, Uintah County, Utah. (2 days)

Crew Leader - Cultural Resource Inventory of EOG Resources, Inc.’s Three Proposed Chapita Well Locations CWU #1212-12, 1215-12, and 1216-11, in T9S R22E Sections 11 and 12, Uintah County, Utah. (2 days)

Crew Leader - Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed NBU #1022-17D Pipeline, Uintah County, Utah. (2 days)

Crew Leader - Cultural Resource Monitoring of GLNA LLC/Eclipse Exploration’s Federal Access/ Pipeline Corridor, Grand County, Utah. (1 week)

Crew Leader - Cultural Resource Inventory of Utah Division of Wildlife Resources Midway State Fish Hatchery, Wasatch County, Utah. (1 day)

Crew Leader - Cultural and Fossil Resource Inventory of Utah Department of Transportation’s SR-10 Muddy Creek Bridge to Ferron, Emery County, Utah. (2 weeks)

Crew Leader - Cultural Resource Inventory of Questar’s Southern System Expansion Project II in Carbon, Duchesne, and Uintah Counties, Utah. (2 days)

Crew Leader - Cultural Resource Inventory of Running Foxes Petroleum’s Broadhead CDM Trespass, Grand County, Utah. (1 day)
Crew Leader - Cultural Resource Inventory of Running Foxes Petroleum’s Eight Proposed Cisco Gamma Well Locations, Grand County, Utah. (2 days)

Crew Leader - Cultural Resource Inventory of Veritas Geophysical Integrity’s Hatch Point Seismic Staging Areas, San Juan County, Utah. (1 day)

Crew Leader - Cultural Resource Monitoring of Lisbon Valley Mine’s Proposed Flying Diamond Drill Hole, San Juan County, Utah. (1 day)

SELECTED MOAC TECHNICAL REPORTS AND PUBLICATIONS

Jendresen, A. and K. Montgomery
2005 Cultural Resource Inventory of Newfield Exploration’s Block Parcel in Township 9S, Range 16E, Sections 23 and 24, Duchesne County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A. and A. Whitfield
2005 Cultural Resource Inventory of Utah Division of Wildlife Resources Sanford Sagegrouse 2 Project, Garfield County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A. and K. Montgomery
2005 Cultural Resource Inventory of EOG Resources Inc.’s Two Proposed Wells: East Chapita #17-17 and East Chapita #18-17 in Township 9S, Range 23E, Section 17, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A. and K. Montgomery

Jendresen, A. and K. Montgomery

Jendresen, A.

Jendresen, A.
2005 Cultural Resource Inventory of Medallion Exploration’s Nine Well Locations in Evacuation Creek, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

INCORPORATED

MAY 18 2007

Div. of Oil, Gas & Mining
Jendresen, A.

Jendresen, A.
2005 Cultural Resource Inventory of EOG Resources, Inc.’s Four Proposed Well Locations: North Chapita #233-33, #307-33, #310-33, and #312-33, in T8S R22E section 33, in Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.

Jendresen, A.
2006 Cultural Resource Inventory of Flying J Oil & Gas Inc.’s proposed well location, Ute 2-17A1E, and access route, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.

Jendresen, A. and K. Lower-Eskelson

Jendresen, A.
2006 Cultural Resource Inventory of Westport Oil and Gas Company’s Proposed Well Locations: NBU#1022-16 (J, K, L, P), Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Questar Exploration’s Three Proposed Well Locations: COY #13ML-24-8-24, COY #14ML-24-8-24, and WWT #15ML-24-8-24, in Coyote Basin, T8S R24E, Section 24, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Westport Oil and Gas Company’s Bitter Creek Compressor Station, in T10S R22E Sec. 19, Uintah Co. Utah. Montgomery Archaeological Consultants, Moab, Utah.
Jendresen, A.

Jendresen, A.
2006 Cultural Resource Inventory of EOG Resources Inc.'s Proposed Well Locations: Stagecoach #103-17, and Natural Cotton #80-19, in Township 9 South, Range 22 East, Sections 17 and 19, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of XTO Energy's Proposed Well Locations: #17-8-8-14, #17-8-17-32, #17-8-18-43, #17-8-18-31 and #17-8-18-23 in T17S R8E, Sections 8, 17 and 18, Emery County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A. and T.B. Seacat
2006 Cultural Resource Inventory of EOG Resources Inc.'s Proposed Well Locations: CWU #1144-18, #1146-18, #1137-19, #1139-19, #1150-19, #1130-20 and #1170-20, in T9S R23E, Sections 18, 19, and 20, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A. and A. Whitfield
2006 Cultural Resource Inventory of EOG Resources, Inc.'s Ten Proposed Chapita Well Locations in T9S R22E Sections 10 and 11, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.

Jendresen, A.
2006 Cultural Resource Inventory of EOG Resources, Inc.'s Three Proposed Chapita Well Locations CWU #1212-12, 1215-12, and 1216-11, in T9S R22E Sections 11 and 12, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Enduring Resources' Proposed Southam Canyon 10-24-11-16 Well Location in T10S R24E Section 16, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Enduring Resources’ Proposed Southam Canyon 10-24-44-18 Well Location in T10S R24E Section 17, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.
Jendresen, A.
2006 Cultural Resource Inventory of Enduring Resources’ Proposed Southam Canyon 10-24-31-7 Well Location in T10S R24E Section 6, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed NBU #1022-17D Pipeline, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A. and P. Stavish
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed South Central Compressor to Sage Grouse Compressor Pipeline, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Enduring Resources’ Two Proposed Southam Canyon Well Locations, 11-24-11-10, and 11-24-22-10, in T11S R24E Section 10, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.

Jendresen, A.
2006 Cultural Resource Inventory of EOG Resources, Inc.’s Seven Proposed North Chapita Well Locations, in T8S R22E, Section 34, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of EOG Resources Inc.’s Eleven Proposed Chapita Well Locations, in T9S R23E, Sections 21, 27, 28, and 34, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.

Jendresen, A.
Jendresen, A.
2006 Cultural Resource Inventory of Utah Division of Wildlife Resources Midway State Fish Hatchery, Wasatch County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed Chapita Processing to Diablo Compressor Powerline, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed Chapita Processing to Bonanza Power Plant, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Cisco Expro, LLC’s Danish Flat 2D seismic prospect, in Grand County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of EOG Resources Inc.’s Proposed Big Spring Well Location #3-36GR, Duchesne County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A. and A. Whitfield

Jendresen, A.
2006 Cultural and Fossil Resource Inventory of Utah Department of Transportation’s SR-10 Muddy Creek Bridge to Ferron, Emery County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s NBU #920-25C Micro-Seismic Project, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’S Proposed Well Location NBU #922-31P-1, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

INCORPORATED
MAY 18 2007
Div. of Oil, Gas & Mining
Jendresen, A.
2006 Cultural Resource Inventory of Enduring Resources’ Two Proposed Rainbow Well Locations #11-24-14-29, and 11-24-24-29, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Enduring Resources’ Proposed Well Location Buck Camp Canyon 12-22-31-20, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed Bitter Creek #1122-4C Pipeline, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed NBU #1022-22D Pipeline, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed NBU #1022-28J Pipeline, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP’s Proposed NBU #921-25A Pipeline, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Enduring Resources’ Proposed Well Location Archy Bench #11-23-43-31, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
Jendresen, A.
2006 Cultural Resource Inventory of EOG Resources, Inc.'s Eight Proposed HOSS Well Locations (T8S R22E S. 36 and T8S R23E S. 31), Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of EOG Resources Inc.'s Proposed Well Location CWU #1228-7, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP's Two Proposed Pipelines (NBU #922-34D-3, and NBU #922-34O-3), Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP's Two Proposed Pipelines (NBU #1022-3C-2, and NBU #1022-3M-4), Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of UTE/FNR LLC's Four Proposed Well Locations #14-12-56, #2-24-56, #9-24-56, and #10-24-56, Duchesne County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of EOG Resources, Inc.'s Proposed Well Location East Chapita #55-5, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Questar Exploration and Production Company's Proposed Water Well Location WF WTR #15-15-19, on Ute Tribal Lands, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP's Hill Creek Compressor Station, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP's Four Proposed Pipelines, NBU #1022-4D-1T, #1022-4E-1T, #1022-4I-4 and #1022-4J-4T, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.
Jendresen, A.
2006 Cultural Resource Inventory of McElvain Oil & Gas’ Proposed Asphalt Wash 11-23-33-12 Well Location, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.

Jendresen, A.
2006 Cultural Resource Inventory of Veritas Geophysical Integrity’s Hatch Point Seismic Staging Areas, San Juan County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.

Jendresen, A.
2006 Cultural Resource Inventory of Running Foxes Petroleum’s Broadhead CDM Trespass, Grand County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Jendresen, A.
2006 Cultural Resource Inventory of Questar Exploration and Production’s Seven Proposed WRU Well Locations, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.
Patricia M. Stavish
Curriculum Vitae 2006

EDUCATION:

2003-2005  Masters of Science in Anthropology with a focus in Archaeology, Dec. 2005
University of Wisconsin-Milwaukee, Milwaukee, Wis. Thesis: Women and Children
First: The Distribution of Grave Goods at the La Tene cemetery Munsingen-Rain.

1998-2002  Bachelor of Arts Degree with a major in Anthropology.
University of Minnesota-Twin Cities, Minneapolis, MN.

PROFESSIONAL ORGANIZATIONS:

Register of Professional Archaeologists (RPA)
American Anthropological Association

PROFESSIONAL EXPERIENCE:

April-Sept 2005  Staff Archaeologist, Montgomery Archaeological Consultants, Moab, Utah.
Responsibilities include fieldwork (survey and mitigation); documentation of
cultural resources; site eligibility assessments; laboratory analysis of artifacts
technical and research design reports. Skilled in a number of software
packages including Microsoft Word, Excel, GPS Pathfinder and ArcView;
and is proficient with the use of GPS units and related software (e.g. Trimble
GeoExplorer II and III).

Feb 2006 to Present  Archaeological Crew Member, Bad Duerrnberge, Hallein, Austria.
Excavation of Iron Age settlement. Tasks included retrieval of artifacts and
identification of settlement features; use of total station and theodalite to
record artifacts and; laboratory analysis.

2004  Archaeological Field Technician: Foth and Van Dyke, Eagan, MN. Phase
I, II and III archaeological survey and excavation in Minnesota and Iowa.
Operation of archaeological and survey equipment.

Excavation of the Mill City ruins (historical urban site). Collection and
documentation of archaeological data; creation of scaled drawings of historic
structures; operation of survey and GPS equipment.

2000  University of Minnesota-Twin Cities Field School. Excavation of historical
fur trading site in Mendota Minnesota. Skills acquired: survey methods, site
mapping, excavation of test units, mapping unit floors, profiles and features.
Utah Fieldwork (Montgomery Archaeological Consultants)

2005 Archaeological Technician. Cultural Resource Inventory of Alton Coal Development, Kane County, Utah (2 months). Cultural Area: Anasazi

2005 Archaeological Technician. HDR Engineers Central Railroad Project, Sevier County, Utah (2 weeks). Cultural Area: Great Basin

2005 Archaeological Technician. Utah Department of Transportation’s Data Recovery at Sites 42Sa25619, 42Sa25664, and 42Sa25664, San Juan County, Utah (1 month). Cultural Area: Anasazi

2005 Archaeological Technician. Cultural Resource Inventory of Bill Barrett Corporation’s Seismic Project Near Pine Ridge, San Juan County, Utah (1.5 months). Cultural Area: Anasazi

2005 Archaeological Technician. Cultural Resource Inventory for the Santa Clara River Bridge on Shivwits Tribal Land, Washington County, Utah (2 weeks). Cultural Area: Anasazi

2005 Archaeological Technician. Cultural Resource Inventory of 13 EOG Resources well locations, Uintah County, Utah (1 week). Cultural Area: Great Basin

2005 Archaeological Technician. Cultural Resource Inventory of 5 EOG Resources well locations, Uintah County, Utah (3 days). Cultural Area: Great Basin

2005 Archaeological Technician. Cultural Resource Inventory of Veritas Geophysical Integrity’s Seep Ridge 3D seismic prospect, Uintah County, Utah (3 weeks). Cultural Area: Great Basin.

2006 Archaeological Technician. Cultural Resource Inventory of Consol Coal’s Hidden Valley development parcels, Emery County, Utah (1 week). Cultural Area: Great Basin

2006 Archaeological Technician. Cultural Resource Inventory of Delta Petroleum’s three well locations, Grand County, Utah (1 week). Cultural Area: Great Basin

2006 Archaeological Technician. Cultural Resource Inventory of Tidewater’s four well locations, Grand County, Utah (1 week). Cultural Area: Great Basin

2006 Archaeological Technician. Cultural Resource Inventory of the Adam’s mineral claims, Grand County, Utah (2 weeks). Cultural Area: Great Basin

2006 Archaeological Technician. Cultural Resource Inventory of Kerr-McKee’s Ouray compressor to Bridge station pipeline, Uintah County, Utah (5 days). Cultural Area: Great Basin.

2006 Archaeological Technician. Cultural Resource Inventory of Kerr-McKee’s proposed State 921-33M well location, Uintah County, Utah (4 days). Cultural Area: Great Basin.

2006 Archaeological Technician. Cultural Resource Inventory of Kerr-McKee’s proposed State 921-33M well location, Uintah County, Utah (4 days). Cultural Area: Great Basin.

2006 Archaeological Technician. Cultural Resource Inventory of Kerr-McKee’s proposed State 1021-36L well location, Uintah County, Utah (4 days). Cultural Area: Great Basin.
**Utah Fieldwork (Montgomery Archaeological Consultants)**

2006  

2006  
Archaeological Technician. Cultural Resource Inventory of Kerr-McKee NBU 1021-10P well location, Uintah County, Utah (5 days). Cultural Area: Great Basin

2006  
Archaeological Technician. Cultural Resource Inventory of Kerr-McKee NBU 1021-7B well location, Uintah County, Utah (5 days). Cultural Area: Great Basin

2006  
Archaeological Technician. Cultural Resource Inventory of Enduring Resources’10 Southam Canyon well locations, Uintah Co., Utah (1 week). Cultural Area: Great Basin

2006  
Archaeological Technician. Cultural Resource Inventory of Questar E & P 13 well locations in the Wonsits Valley on Ute Tribal Lands, Uintah Co., Utah (1 week). Cultural Area: Great Basin

**LABORATORY WORK**

2004  
Lab Volunteer. Old World section in the Archaeology laboratory at the University of Wisconsin-Milwaukee. Digitizing field drawing from excavations in Germany.

2002-2003  
Archaeological Lab Technician. Forth and Van Dyke, Eagan MN. Washed and cataloged artifacts, including both prehistoric and historical remains from surveys and excavations.

**TEACHING EXPERIENCE**

Fall 2005  

Spring 2005  
Teaching Assistant. Introduction of Cultural Anthropology, University of Wisconsin-Milwaukee.

**RESEARCH EXPERIENCE**

2004  
Part of a graduate student team involved in digitizing excavation drawings from the UWM "Landscape of Ancestors" project in Germany (http://www.uwm.edu/~barnold/arch/). Mortuary contexts, including burials, from two early Iron Age mounds digitized using Canvas software.

2002  
Research assistant to Professor Greg Laden, Dept. Of Anthropology; University of Minnesota-Twin Cities, Minneapolis, MN. Library research on various topics of Biological Anthropology and Archaeology.

2001-2002  
Research Assistant to Professor Robert Blanchette, Department of Plant Pathology; University of Minnesota-Twin Cities, Minneapolis, MN. Identification of archaeological wood samples using light microscope and digital imaging equipment.
PRESENTATIONS

December 2005

November 2004
Chacmool Gender Conference: Qu(e)erring Archaeology, Calgary, Alberta, Canada. Session: Expressions of Gender Identity in Mortuary Context. Presentation of paper "Women and Children First: The Distribution of Grave Goods at the La Tene cemetery Munsingen-Rain."

TECHNICAL PUBLICATIONS (Montgomery Archaeological Consultants)

Stavish, P. and K. Montgomery
2005 Cultural Resource Inventory of EOG Resources’ Proposed 3 CWU Wells: #684-1, #677-6, and #680-6 in Uintah County, Utah. Project No. U-05-MQ-0783b.


Cultural Resource Inventory of EOG Resources’ Proposed 5 Chapita Wells Units in Sections 29 and 30 of Township 9 South, Range 23 East in Uintah County, Utah. Project No. U-05-MQ-0781b.


Cultural Resource Inventory of EOG Resources’ Proposed 2 East Chapita Wells Units in Section 5 of Township 9 South, Range 23 East in Uintah County, Utah. Project No. U-05-MQ-0779b.

Cultural Resource Inventory of EOG Resources, Inc.’s Proposed Chapita Wells Unit #1065-3 (Previous #597-3), #1066-3 (Previous #543-3), and #1067-3 (Previous #542-3) in Uintah County, Utah. Project No. U-05-MQ-0778b.

Cultural Resource Inventory of EOG Resources, Inc.’s Proposed Chapita Wells Unit #1041-22 (Previous #237-22) and #1042-28 (Previous #401-28F) in Uintah County, Utah. Project No. U-05-MQ-0777b.

Cultural Resource Inventory of EOG Resources, Inc.’s Proposed Chapita Wells Unit #1036-13 (Previous #236-13), #1037-13 (Previous #338-13), and #1038-24 (Previous #328-24F) in Uintah County, Utah. Project No. U-05-MQ-0776b.
Stavish, P. and K. Montgomery

2005 Cultural Resource Inventory of Westport Oil & Gas NBU #922-34 D, K, M and 0 Well Locations, Uintah County, Utah. Project No. U-05-MQ-0782b.

Cultural Resource Inventory of EOG Resources, Inc.'s 13 Proposed Well Locations: North Chapita #225-33, #284-6, #287-5, Stagecoach #97-8, #98-8, #99-8, #100-8, #106-8, #107-8, #108-8, CWU #982-9, #983-9, #985-9 in Uintah County, Utah. Project No. U-05-MQ-0795i.

Cultural Resource Inventory of EOG Resources, Inc.'s Proposed Well Locations: North Chapita #225-33, #284-6, #287-5, Stagecoach #97-8, #98-8, #99-8, #100-8, #106-8, #107-8, #108-8, CWU #982-9, #983-9, #985-9 in Uintah County, Utah. Project No. U-05-MQ-0795i.


Cultural Resource Inventory of EOG Resources, Inc.'s Proposed Stagecoach Wells #109-7, #104-17, #80-20 and CWU #1016-16, Uintah County, Utah. Project No. U-05-MQ-0786i.

Stavish, P.


Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP's Proposed Ouray Compressor to Bridge Station Pipeline and Power Line in Uintah County, Utah. Project No. Project No. U-06-MQ-0348i.

Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP's Proposed State #921-33M Well Location, Uintah County, Utah. Project No. U-06-MQ-488s.

Cultural Resource Inventory of Kerr-McGee Oil & Gas Onshore LP's Proposed Well Locations State #1021-36L and #1021-36M Uintah County, Utah. Project No. Project No. U-06-MQ-0325b.s.


Mr. Paluso has over 32 years experience in mining, the oil and gas industry, and governmental service, with more than 26 years dedicated to coal mining. Upon graduation, he worked for Schlumberger Offshore Services in Alaska and California where he supervised a geologic exploration crew searching for oil and gas on Alaska’s North Slope and offshore drilling platforms in Cook Inlet. For several years he worked with the U. S. Forest Service in Alaska, California and Utah, concentrating on engineering and environmental projects. During his coal career, he worked in a variety of different positions in both union and non-union mining operations. These included: longwall and development section face boss, preparation plant engineer, coal laboratory manager, project engineer and chief mining engineer.

Mr. Paluso has worked for some the most innovative and aggressive coal mines in the West, such as, Kaiser Steel Corporation, which introduced longwall mining to Utah and the West, and also pioneered many experimental mining methods over the years. He worked at Skyline Mines, once the largest underground coal mine west of the Mississippi, with an annual production of 5 million tons. A wide diversity of projects were completed during his 26 years in the coal mining industry. His major areas of concern were engineering and construction. Following are a few of his major endeavors during this period: developed complete plans for a new mine, designed coal handling facilities; supervised preparation plant engineering and operation; managed coal laboratory operations; coordinated methane
drainage systems; designed and supervised the construction of rock slopes and shaft development; designed and operated underground slurry systems. Tom did extensive work on mine permitting, ventilation systems, pneumatic rock dust systems, mine de-watering and supply systems, and reserve exploration.

Mr. Paluso received his B. S. in Civil Engineering and a M. S. in Environmental Engineering from Utah State University. He is a Registered Professional Engineer and is also a certified Fireboss and Mine Foreman in Utah. Presently he is a member of the Society for Mining, Metallurgy and Exploration and the American Society of Civil Engineers.
RECENT WORK PROJECTS  
Tom Paluso

EIS PROJECTS

1. Bridge Design & Installation  
2. Road Design and Upgrading  
3. Pipeline Relocation Permitting  
4. Stream Alteration Permits  
5. Flood Evaluation  
6. Air Quality Permitting  
7. Surface and Ground Water Appropriation  
8. Culvert Sizing  
9. Petroleum Storage Tank Emissions  
10. Evaporation Pond Evaluation

LILA CANYON PROJECTS

1. Mine Permitting  
2. Sediment Pond Design  
3. Sediment Movement Calculations  
4. Reclamation Cost Evaluation  
5. Hydrology Calculations

ARCH COAL & KAISER STEEL PROJECTS

1. Sediment pond and Dam inspection  
2. Slope Stability Analysis  
3. Geologic Formation Drilling (Reserve Evaluation)
APPENDIX 1-6

BLM CORRESPONDENCE

BLM Correspondence for Appendix 1-6 are all hard copies no electronic copies exist.
Mr. Jay Marshall  
Basic Management, LLC  
P. O. Box 986  
Price, Utah 84501

Dear Mr. Marshall:

On March 27, 1998, we received five (5) right-of-way applications for various facilities associated with the proposed Lila Canyon Coal Mine project. We have assigned the applications the following serial numbers:

- Powerline: UTU-76614
- Railroad: UTU-76615
- Utility Corridor: UTU-76616
- Coal Haul road: UTU-76617
- Mine Site: UTU-77122

You indicated that you would like the firm Environmental Industrial Services, located in Helper, Utah to complete the environmental assessment (EA) for this project. We have no problem with this contractor completing the required EA. However, before they can begin work on the EA, we will need to sign a memorandum of understanding (MOU) for preparation of an environmental assessment. Enclosed for your review is the MOU we drafted for this project. If the MOU is acceptable, please sign, date and return both copies of the document as soon as possible. Also enclosed is the Statement of Work (SOW) we have prepared for the contractor. Please review this document and let us know if it is acceptable. If it is acceptable we will set up a scoping meeting with the contractor and our staff as soon as possible.

If you have any questions please feel free to contact Mark Mackiewicz of my staff at (435) 636-3600.

Sincerely,

Mark E. Bailey  
Acting Field Manager

Enclosures (2)  
1. Memorandum of Understanding  
2. Statement of Work
Ms. Mary Ann Wright
Utah Division of Oil Gas and Mining
P. O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Lila Canyon MRP (ACT/007/014)

Dear Ms. Wright:

On November 27, 2000, a Decision Record (copy enclosed) was signed for the Lila Canyon Mine Project. The decision was made to grant right-of-way to Utah American Energy to construct, operate and maintain mine related surface facilities on public lands. In addition the decision was made to grant Emery County a right-of-way to construct, operate and maintain a coal haul access road and to grant right-of-way to construct, operate and maintain a 46 kV powerline. Approval of the three rights-of-way would be contingent upon mine plan approval.

The Bureau of Land Management is prepared to grant the right of entry to these public lands. However, the case is in litigation and we are waiting for a decision from the Interior Board of Land Appeals whether to grant the appellants a stay. When this issue is resolved we would be in the position to grant right-of-way.

Our understanding is that the Utah Division of Oil Gas and Mining is unable to approve the mine plan until the UEI has demonstrated the right of entry. In several other similar cases a letter from the Bureau of Land Management has been sufficient to demonstrate the right of entry prior to the actual grants being made. Our hope is that we can continue providing good customer service by utilizing this arrangement. Another option is that we could have a simultaneous signing of the MRP and the right-of-way grants. Please let us know as soon as possible what option will meet our objectives.

If you have any questions, please feel free to contact Mark Mackiewicz of my staff at (435) 636-3616.

Sincerely,

THOMAS E. RASMUSSEN
Tom Rasmussen
Acting Field Manager.

Enclosure:

cc: Mr. Clyde Borell

MMackiewicz:mm:12:22:Lila.ltr.UDOGM12.22.00
Ms. Mary Ann Wright
Utah Division of Oil Gas and Mining
P. O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Lila Canyon MRP (ACT/007/013)

Dear Ms. Wright:

The Bureau of Land Management is prepared to grant the right of entry to UtahAmerica Inc. (UEI) for the surface facilities necessary for the Lila Canyon Mine Project. These facilities would include a site right-of-way to construct, operate and maintain mine related surface facilities on public lands, a road right-of-way to Emery County to construct operate and maintain a coal haul access road and a right-of-way to construct, operate and maintain a 46 kV powerline. However, the case is in litigation and we are waiting for a decision from the Interior Board of Land Appeals whether to grant the appellants a stay. When this issue is resolved we would be in the position to grant right-of-way.

It is our understanding that this letter will demonstrate that UEI has the right of entry pending the outcome of the ongoing litigation. If you have any questions, please feel free to contact Mark Mackiewicz of my staff or me at (435) 636-3600.

Sincerely,

Thomas E. Rasmussen
Acting Field Manager

Enclosure:

cc: Mr. Clyde Borrell

MMackiewicz:mm:1:04:01 Lila.ltr.UDOGM.1.04.01

FILE COPY

INCORPORATED

MAY 18 2007
Div. of Oil, Gas & Mining
Mr. Daron R. Haddock  
Permit Supervisor  
State of Utah  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Dear Mr. Haddock:

The Bureau of Land Management (BLM) has been asked by Genval Coal Company and the Kanti-LaSal National Forest to comment on possible subsidence effects at the Crandall Canyon Mine. This request is a result of Genval's application and subsequent revisions to add State coal leases ML-21568 and ML-21569 to the Mining and Reclamation Plan (MRP) for the Crandall Canyon Mine.

Genval's MRP states that subsidence may occur over mining areas in the two state leases. The lateral extent of possible subsidence was estimated using a 30 degree angle of draw. Using that angle, the area of influence would extend across the boundary to National Forest lands. In the MRP, the maximum amount of vertical subsidence (the distance of ground movement) was estimated as 70 percent of the height of coal extracted with adjustments to unrecovered coal left in pillared areas. The draw angle and vertical subsidence estimates were based on empirical data from a number of sources. The BLM believes some of these estimates are inappropriate for the mining conditions in this area.

ANGLE OF DRAW

Draw angles of 30 degrees are very high for this region. Angles of this magnitude come in part from observations of mining in the eastern United States and in part from the National Coal Board in the United Kingdom. Coal beds in the Wasatch Plateau/Book Cliffs lie under normally deep cover where the upper strata consist of many massive and competent sandstone and siltstone members. These conditions appear to affect subsidence profiles in the region. Documented subsidence data from mining areas in the Wasatch Plateau show draw angles ranging from 15 to 20 degrees with the majority of the measured data closer to 15 degrees. These data came from mining company data and two independent studies from the Bureau of Mines. In our opinion, draw angles of 30 degrees do not apply to the Wasatch Plateau/Book Cliffs coal fields. Estimations of possible draw angles should be in the 15 to 20 degree range.
VERTICAL SUBSIDENCE ESTIMATION

The MRP projects the maximum surface extent and magnitude of possible subsidence on both the State coal leases and the surrounding lands of Federal surface and subsurface ownership. In our opinion, the scenario depicted in the MRP is worst possible case and should not happen. From available data taken from actual mining, subsidence from room and pillar mining is less than subsidence from longwall mining. Multiple panels mined by longwall methods tend to subside the surface in a more classical form consisting of lateral ground lowering without surface disruptions. This has been documented for longwall mining under deep overburden (1500+ feet). Vertical subsidence of 60 to 70 percent of the extracted seam height has been observed over large areas of mined out longwall panels. The strata above the mined out panels tends to bend elastically. This seems logical given the wide areas of these extracted panels. The only exceptions to this have been in areas near cliffs with highly jointed and fractured outcrop rock or areas of weakened strata from faults or burnt coal.

Subsidence under room and pillar panels behaves much differently. Where long-wall panels extract coal quickly over wide areas, room and pillar panels take much longer to mine and are not as wide. Evidence shows that subsidence above room and pillar panels is much less than subsidence above longwall panels. Caving above room and pillar panels may be in the form of arches filling up with broken material displacing the void with this material before the arch reaches the surface. Case history backs this claim. Most of the mines in the region have been mining with some form of room and pillar methods for over 50 years with little documented subsidence. The room and pillar mines near Crandall Canyon (Huntington # 4 Mine, Trail Canyon Mine, Des-Bee-Dove Mine) have experienced minimal surface effects from mining. Again, significant subsidence effects have only been observed in areas of jointed cliffs or shallow cover with room and pillar mining.

Room and pillar mining results in partial seam extraction, whereas longwall mining results in a larger percentage of extraction. Barrier pillars are left between room and pillar panels which in Genval's case are quite large due to the deep cover. It is a rarity that each pillar in the panel is completely removed; stumps and fenders are left. Overall recovery is usually not much more than 50 percent. Design equations found in rock mechanic books (Rock Mechanics and the Design of Structures in Rock, by Obert and Duvall, and Underground Mining Methods Handbook, by Hustrulid) demonstrate that overall strata failure may not occur with extraction rates of 50 percent or less.
With regard to Genwal's application, the BLM's opinion is that room and pillar mining should not subside the adjoining Federal surface given the depth of mining and planned amount of coal extraction. If subsidence does occur, we are confident that the only surface effects will be minimal ground lowering. Surface resources should not be impacted.

Sincerely yours,

[Signature]

for
Assistant District Manager
Mineral Resources

cc:
DM, Moab (U-065)
SD, Utah (U-921)
Manti LaSal National Forest
Genwal Coal Company
Lila Canyon Extension

Appendix 1-7
BLM Rights-of-Way

(PDF files only. No other digital files exist.)

INTEGRATED
MAY 05 2017

Div. of Oil, Gas & Mining

2. Nature of Interest:
   a. By this instrument, the holder:

   Utah American Energy Inc
   P. O. Box 986
   Price, Utah 84501

   receives a right to construct, operate, maintain and terminate a mine facility right-of-way on public lands described as follows:

   Salt Lake Meridian, Utah,
   T.16 S., R.14 E.,
   Section 15, NW4SE4, S2SE4, E2SW4.

   b. The right-of-way granted herein is for mine site facilities and encompasses 40.0 acres, more or less within the described subdivisions.

   c. This instrument shall terminate thirty (30) years from its effective date unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

   d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
3. **Rental:**

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer, unless specifically exempted from such payment by regulation. Provided, however, the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. **Terms and Conditions:**

a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations, part 2800.

b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d), or as directed by the authorized officer.

c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.

d. The stipulations, plans, maps, or designs set forth in Exhibit A and Exhibit B, dated July 23, 2001, attached hereto are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety. All commitments referenced in Chapter 2, Alternative B, all mitigation outlined in Chapter IV and all other applicable sections of the environmental assessment for the project entitled *Development of the Lila Canyon Project, Emery County, Utah* (BA NO. UT-070-99-22, July 2000) are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.

c. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.
f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

g. Ninety (90) days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way area. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures or surface material, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Holder)

(Signature of Authorized Officer)

(Date)

(Effective Date of Grant)

INTEGRATED

MAY 05 2017

Div. of Oil, Gas & Mining
Exhibit A

1. The holder shall operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with its mine permit plan (Utah Division of Oil Gas and Mining No. ACT/007/013). When approved this grant is made part of the permit. Any relocation, additional construction, or use that is not in accord with the approved mine plan shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and mine plan, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

2. The holder shall contact the authorized officer at least fourteen (14) days prior to the anticipated start of construction and/or any surface disturbing activities. The authorized officer will require and schedule a preconstruction conference with the holder prior to the holder's commencing construction and/or surface disturbing activities on the right-of-way. The holder and/or his representative shall attend this conference. The holder's contractor, or agents involved with construction and/or any surface disturbing activities associated with the right-of-way, shall also attend this conference to review the stipulations of the grant including the plans(s) of development.

3. The holder shall not initiate any construction or other surface disturbing activities on the right-of-way without the prior written authorization of the authorized officer. Such authorization shall be a written notice to proceed issued by the authorized officer. Any notice to proceed shall authorize construction or use only as therein expressly stated and only for the particular location or use therein described. A notice to proceed shall not be issued until the mine plan is approved by the Office of Surface Mining Reclamation and Enforcement.

4. The authorized officer may suspend or terminate in whole, or in part, any notice to proceed which has been issued when, in his judgment, unforeseen conditions arise which result in the approved terms and conditions being inadequate to protect the public health and safety or to protect the environment.

5. The holder shall designate a representative who shall have the authority to act upon and to implement instructions from the authorized officer. The holder's representative shall be available for communication with the authorized officer within a reasonable time when construction or other surface-disturbing activities are underway.

INTEGRATED
MAY 05 2017
Div. of Oil, Gas & Mining
6. The holder shall conduct all activities associated with the construction, operation and maintenance of the right-of-way within the authorized limits of the right-of-way.

7. The holder shall survey and clearly mark the centerline and or exterior limits of the right-of-way, as determined by the authorized officer.

8. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of six (6) inches deep, the soil shall be deemed to be too wet to adequately support construction equipment.

9. Construction sites shall be maintained in a sanitary condition at all times; waste material at the site shall be disposed of promptly at an appropriate waste disposal facility. “Waste” means all discarded matter including human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

11. The Holder shall retain a contractor for third party compliance. The compliance contractor shall be separate, independent from, and not subcontracted by anyone preparing the engineering plans, design, construction or operation of the holder’s project.

All costs incurred by the compliance contractor in connection with this project shall be the sole responsibility of the holder, and the holder agrees to hold harmless and indemnify BLM with respect to any and all claims, demands, cause(s) or action and the like which may arise from the performance of the compliance contractor or any services utilized in the compliance of the project.

12. Thirty (30) days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination and rehabilitation plan. This plan shall include, but is not limited to, removal of facilities, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder’s commencement of any termination activities.

INCORPORATED

MAY 05 2017

Div. of Oil, Gas & Mining

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4, and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) or 43 CFR 2801.10 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents.

MAY 05 2017

Div. of Off., Gas & Mining
are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

**Standards for Obtaining a Stay**

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied;
2. The likelihood of the appellant's success on the merits;
3. The likelihood of immediate and irreparable harm if the stay is not granted; and
4. Whether the public interest favors granting the stay.

Please note that under the regulations in 43 CFR Group 2800, this decision is effective even if an appeal is filed. If you have any questions, please contact Jaydon Mead, Realty Specialist, at the above address, by e-mail jmead@blm.gov, or by phone (435) 636-3646.

Sincerely,

Don Stephens
Assistant Field Manager

Enclosure:
Right-of-Way Grant UTU-91789

2. Nature of Interest:
   a. By this instrument, the holder:
      UtahAmerican Energy Inc.
      P.O. Box 910
      East Carbon, Utah 84520

      Receives a right to construct, operate, maintain, and terminate an access road within portions of the public lands described as follows:

      T.16 S., R. 14 E., Salt Lake Meridian, Emery County, Utah
      Section 15: SE1/4SW1/4.

   b. The right-of-way or permit area granted herein is 60 feet wide, 1,300 feet long plus an additional 150 feet by 200 feet area to improve an existing damn, and contains 2.5 acres, more or less.

   c. This instrument shall expire on December 31, 2046. This grant is authorized for 30 years unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

   d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the Field Manager or other authorized officer deems necessary to protect the public interest.

   e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

   For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

Terms and Conditions:

4. Standard
   a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in
Title 43 Code of Federal Regulations part 2800.

b. Each grant issued for a term of 10 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 10th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.

c. The maps set forth in exhibit A attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.

d. BLM may suspend or terminate your grant if you do not comply with applicable laws and regulations or any terms, conditions, or stipulations of the grant (such as rent payments), or if you abandon the right-of-way. Your failure to use your right-of-way for its authorized purpose for any continuous 5-year period creates a presumption of abandonment.

e. In the event that the public land underlying the right-of-way (ROW) encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part [2800][2880], including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW Holder.

5. Applicable Laws

a. The holder shall comply with all Federal, State, and local regulations whether or not specifically mentioned within this grant.

b. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the Field Manager or other authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer. Emergency use of pesticides shall be approved in writing by the authorized officer prior to such use.

c. The holder of this right-of-way grant or the holder's successor in interest shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and the regulations of the Secretary of the Interior issued pursuant thereto.

d. The holder shall meet Federal, State, and local emission standards for air quality.

e. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

f. The holder shall comply with the construction practices and mitigating measures established by 33 CFR 323.4, which sets forth the parameters of the "nationwide permit" required by Section 404 of the Clean Water Act. If the proposed action exceeds the parameters of the nationwide permit, the holder shall obtain an individual permit from the appropriate office of the Army Corps of Engineers and provide the authorized
officer with a copy of same. Failure to comply with this requirement shall be cause for suspension or termination of this right-of-way grant.

g. The holder of Right-of-Way No. UTU-91789 agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq., or the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901 et seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

h. The holder is prohibited from discharging oil or other pollutants into or upon the navigable waters of the United States, adjoining shorelines, or the waters of the contiguous zone in violation of Section 311 of the Clean Water Act as amended, 33 U.S.C. 1321, and the regulations issued there under, or applicable laws of the State and regulations issued there under. Holder shall give immediate notice of any such discharge to the authorized officer and such other Federal and State officials as are required by law to be given such notice.

6. Miscellaneous

a. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public. All design, material, and construction, operation, maintenance, and termination practices shall be in accordance with safe and proven engineering practices.

b. The holder shall designate a representative who shall have the authority to act upon and to implement instructions from the authorized officer. The holder's representative shall be available for communication with the authorized officer within a reasonable time when construction or other surface disturbing activities are underway.

c. The holder shall permit free and unrestricted public access to and upon the right-of-way for all lawful purposes except for those specific areas designated as restricted by the Field Manager or other authorized officer to protect the public, wildlife, livestock or facilities constructed within the right-of-way.

d. The holder shall inform the Field Manager at (435) 636-3600 within 48 hours of any accidents on federal lands.

e. All surface disturbing activities will have a cultural survey completed (if one has not been previously completed) and submitted to the BLM before activities begin and may be monitored by a BLM permitted archaeologist if determined necessary by the BLM. If any cultural materials are discovered during construction, work in the area will halt immediately and the authorized official notified.

f. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

g. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.

7. Construction / Maintenance
The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.

Equipment and vehicles shall be inspected and cleaned for vegetation matter and seeds prior to entering BLM administered lands. Clothing and animals should also be inspected for vegetation matter and seeds. Vehicles and equipment should be power washed at a commercial facility or other applicable site where invasive species/noxious weeds seeds can be flushed through a waste treatment plant, where seeds will become inert.

The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the plan of development which was approved and made part of this grant. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan of development, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

The map and site plan drawings submitted with the original proposal shall be made a part of this right-of-way grant. All construction must conform to these drawings and maps.

The holder shall provide for the safety of the public entering the right-of-way. This includes, but is not limited to barricades for open trenches, flagmen/women with communication systems for single-lane roads without intervisible turnouts, and attended gates for blasting operations.

If any clearing is needed, the right-of-way will be brush-hogged to prevent unnecessary disturbance. Only those areas where safety, absolute need for construction or other regulations may warrant the use of topsoil removal by blading or scalping. This right-of-way clearing shall be limited to the limits of the right-of-way. Suitable topsoil material removed in conjunction with clearing and stripping shall be conserved in stockpiles within the right-of-way.

The holder shall remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate regrowth of vegetation.

Prior to fill construction, the existing surface shall be sloped to avoid sharp banks and allow equipment operations. No fills shall be made with frozen or water saturated soils. Construction equipment shall be routed evenly over the entire width of the fill to obtain a thorough compaction.

Construction holes left open overnight shall be covered. Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through and into a hole.

The holder shall limit excavation to the areas of construction. No borrow areas for fill material will be permitted on the site. All off-site borrow areas must be approved in writing by the authorized officer in advance of excavation. All waste material resulting from construction or use of the site by holder shall be removed from the site. All waste disposal sites on public land must be approved in writing by the authorized officer in advance of use.

All roads and parking areas shall be constructed to provide drainage and minimize erosion. Culverts shall be installed if necessary to maintain drainage. All areas to be used for roads and parking can be surfaced with gravel.

Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

If during any phase of the construction, operation, or termination any oil or other pollutant should be discharged from containers or vehicles and impact Federal lands, the control and total removal, disposal, and cleanup of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of holder to control, cleanup, or dispose of such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the authorized officer may take such measures as he deems necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the authorized officer shall not relieve the holder of any liability or responsibility.
n. Fences, gates, brace panels and any other range improvements shall be reconstructed to appropriate Bureau standards and/or specifications as determined by the authorized officer.

o. When construction activity in connection with the right-of-way breaks or destroys a natural barrier used for livestock control, the gap, thus opened, shall be fenced to prevent the drift of livestock. The subject natural barrier shall be identified by the authorized officer and fenced by the holder as per instruction of the authorized officer.

p. Construction-related traffic shall be restricted to routes approved by the authorized officer. New access roads or cross-country vehicle travel will not be permitted unless prior written approval is given by the authorized officer. Authorized roads used by the holder shall be rehabilitated or maintained when construction activities are complete as approved by the authorized officer.

q. Existing roads and trails on public lands that are blocked as the result of the construction project shall be rerouted or rebuilt as directed by the authorized officer.

r. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of four inches deep, the soil shall be deemed too wet to adequately support construction equipment.

s. The holder shall construct waterbars on all disturbed areas as needed. Waterbars are to be constructed to: (1) simulate the imaginary contour lines of the slope (ideally with a grade of one or two percent); (2) drain away from the disturbed area; and (3) begin and end in vegetation or rock whenever possible.

t. A litter policing program shall be implemented by the holder, if requested and approved of in writing by the authorized officer, which covers all roads and sites associated with the right-of-way.

a. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations). The holder shall be responsible for annual surveys, reporting the results of the surveys to the BLM, and weed control on disturbed areas within the limits of the right-of-way.

b. Holder shall maintain the right-of-way in a safe, usable condition, as directed by the authorized officer.

8. Reclamation / Rehabilitation / Termination

a. Upon grant termination by the Field Manager or other authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.

b. The holder shall restore drainages, to the greatest extent possible, to the original bank configuration, stream bottom width, and channel gradient. Loose soil, fill, and culverts shall be removed from drainage channels as directed by the authorized officer.

c. The holder shall re-contour the disturbed area and obliterate all earthwork by removing embankments, backfilling excavations, and grading to re-establish the approximate original contours of the land in the right-of-way.

d. The holder shall prepare a seedbed by scarifying the disturbed area, distributing topsoil uniformly, or disking the topsoil.

e. The holder shall seed all disturbed areas that have been or are being reclaimed with a seed mixture(s) submitted to and approved by the authorized officer.

f. Ninety (90) days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a pre-termination conference. This conference will be held to review the termination provisions of the grant.
IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Holder)

President

(Date)

(Signature of BLM Authorized Officer)

Assistant Field Manager, Price Field Office

(Effective Date of Grant)
Exhibit A (Map1)

Road ROW for UtahAmerican Energy (UTU-91789)
Exhibit A (Map 2)

Proposed ROW
June 01, 2016

Lila Canyon Road

0 0.225 0.45 0.9 Miles

Proposed ROW

BLM
PRICE FIELD OFFICE

Designated Routes
- OHVs, Motorcycles
- All Vehicles
- Motorcycles
- Emery County Roads
- All other uses

CLASS
- B
- class d roads

INTEGRATED
MAY 05 2017
City of Oil, Gas & Mining
Lila Canyon Extension

Appendix 1-7
BLM Rights-of-Way

(PDF files only. No other digital files exist.)

2. Nature of Interest:
   a. By this instrument, the holder:
      Utah American Energy Inc
      P. O. Box 986
      Price, Utah 84501
      receives a right to construct, operate, maintain and terminate a mine facility right-of-way on public lands described as follows:
      Salt Lake Meridian, Utah,
      T.16 S., R.14 E.,
      Section 15, NW4SE4, S2SE4, E2SW4.

   b. The right-of-way granted herein is for mine site facilities and encompasses 40.0 acres, more or less within the described subdivisions.

   c. This instrument shall terminate thirty (30) years from its effective date unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

   d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration or prior termination of the grant.

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer, unless specifically exempted from such payment by regulation. Provided, however, the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations, part 2800.

b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d), or as directed by the authorized officer.

c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.

d. The stipulations, plans, maps, or designs set forth in Exhibit A and Exhibit B, dated July 23, 2001, attached hereto are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety. All commitments referenced in Chapter 2, Alternative B, all mitigation outlined in Chapter IV and all other applicable sections of the environmental assessment for the project entitled Development of the Lila Canyon Project, Emery County, Utah (BA NO. UT-070-99-22, July 2000) are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.

c. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.

INCORPORATED

JAN 25 2018

Div. of Oil, Gas & Mining
f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

g. Ninety (90) days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way area. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures or surface material, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

IN WITNESS WHEREOF, the undersigned agrees to the terms and conditions of this right-of-way grant or permit.

[Signature of Holder]  [Signature of Authorized Officer]  [Title]  [Title]  [Date]  [Effective Date of Grant]
1. The holder shall operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with its mine permit plan (Utah Division of Oil Gas and Mining No. ACT/007/013). When approved this grant is made part of the permit. Any relocation, additional construction, or use that is not in accord with the approved mine plan shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and mine plan, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

2. The holder shall contact the authorized officer at least fourteen (14) days prior to the anticipated start of construction and/or any surface disturbing activities. The authorized officer will require and schedule a preconstruction conference with the holder prior to the holder's commencing construction and/or surface disturbing activities on the right-of-way. The holder and/or his representative shall attend this conference. The holder's contractor, or agents involved with construction and/or any surface disturbing activities associated with the right-of-way, shall also attend this conference to review the stipulations of the grant including the plans(s) of development.

3. The holder shall not initiate any construction or other surface disturbing activities on the right-of-way without the prior written authorization of the authorized officer. Such authorization shall be a written notice to proceed issued by the authorized officer. Any notice to proceed shall authorize construction or use only as therein expressly stated and only for the particular location or use therein described. A notice to proceed shall not be issued until the mine plan is approved by the Office of Surface Mining Reclamation and Enforcement.

4. The authorized officer may suspend or terminate in whole, or in part, any notice to proceed which has been issued when, in his judgement, unforeseen conditions arise which result in the approved terms and conditions being inadequate to protect the public health and safety or to protect the environment.

5. The holder shall designate a representative who shall have the authority to act upon and to implement instructions from the authorized officer. The holder's representative shall be available for communication with the authorized officer within a reasonable time when construction or other surface-disturbing activities are underway.
6. The holder shall conduct all activities associated with the construction, operation and maintenance of the right-of-way within the authorized limits of the right-of-way.

7. The holder shall survey and clearly mark the centerline and or exterior limits of the right-of-way, as determined by the authorized officer.

8. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of six (6) inches deep, the soil shall be deemed to be too wet to adequately support construction equipment.

9. Construction sites shall be maintained in a sanitary condition at all times; waste material at the site shall be disposed of promptly at an appropriate waste disposal facility. "Waste" means all discarded matter including human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

11. The Holder shall retain a contractor for third party compliance. The compliance contractor shall be separate, independent from, and not subcontracted by anyone preparing the engineering plans, design, construction or operation of the holder's project.

All costs incurred by the compliance contractor in connection with this project shall be the sole responsibility of the holder, and the holder agrees to hold harmless and indemnify BLM with respect to any and all claims, demands, cause(s) or action and the like which may arise from the performance of the compliance contractor or any services utilized in the compliance of the project.

12. Thirty (30) days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination and rehabilitation plan. This plan shall include, but is not limited to, removal of facilities, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

INCORPORATED

JAN 25 2018

Div. of Oil, Gas & Mining
IN REPLY REFER TO:
UTU-91789
2800 (UTG020)

CERTIFIED MAIL-RETURN RECEIPT REQUESTED:
No. 7016 1370 0000 0863 1803

PJ Jenson
Utah American Energy Inc.
P.O. Box 910
East Carbon, Utah 84520

Re: New Right-of-Way UTU-91789

DECISION

Right-of-Way Grant UTU-91789 Issued

Enclosed is a copy of a right-of-way grant (serial number UTU-91789) which has been approved by the Bureau of Land Management and issued under authority of Title V of the Federal Land Policy and Management Act of October 21, 1976, as amended through September 1999, (90 Stat. 2776; 43 U.S.C. 1761). The issuance of this right-of-way grant constitutes a final decision by the Bureau of Land Management in this matter.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4, and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) or 43 CFR 2801.10 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents
are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

**Standards for Obtaining a Stay**

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied;

(2) The likelihood of the appellant's success on the merits;

(3) The likelihood of immediate and irreparable harm if the stay is not granted; and

(4) Whether the public interest favors granting the stay.

Please note that under the regulations in 43 CFR Group 2800, this decision is effective even if an appeal is filed. If you have any questions, please contact Jaydon Mead, Realty Specialist, at the above address, by e-mail jmead@blm.gov, or by phone (435) 636-3646.

Sincerely,

[Signature]

Don Stephens
Assistant Field Manager

Enclosure:
Right-of-Way Grant UTU-91789

2. Nature of Interest:
   a. By this instrument, the holder:
      Utah American Energy Inc.
      P.O. Box 910
      East Carbon, Utah 84520
      Receives a right to construct, operate, maintain, and terminate an access road within portions of the public lands described as follows:
      T.16 S., R. 14 E., Salt Lake Meridian, Emery County, Utah
      Section 15: SE\(^{1/4}\)SW\(^{1/4}\).
   b. The right-of-way or permit area granted herein is 60 feet wide, 1,300 feet long plus an additional 150 feet by 200 feet area to improve an existing dam, and contains 2.5 acres, more or less.
   c. This instrument shall expire on December 31, 2046. This grant is authorized for 30 years unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
   d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the Field Manager or other authorized officer deems necessary to protect the public interest.
   e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:
   For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

Terms and Conditions:
4. Standard
   a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in
Title 43 Code of Federal Regulations part 2800.

b. Each grant issued for a term of 10 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 10th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.

c. The maps set forth in exhibit A attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.

d. BLM may suspend or terminate your grant if you do not comply with applicable laws and regulations or any terms, conditions, or stipulations of the grant (such as rent payments), or if you abandon the right-of-way. Your failure to use your right-of-way for its authorized purpose for any continuous 5-year period creates a presumption of abandonment.

e. In the event that the public land underlying the right-of-way (ROW) encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part [2800][2880], including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW Holder.

5. Applicable Laws

a. The holder shall comply with all Federal, State, and local regulations whether or not specifically mentioned within this grant.

b. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the Field Manager or other authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer. Emergency use of pesticides shall be approved in writing by the authorized officer prior to such use.

c. The holder of this right-of-way grant or the holder's successor in interest shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and the regulations of the Secretary of the Interior issued pursuant thereto.

d. The holder shall meet Federal, State, and local emission standards for air quality.

e. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

f. The holder shall comply with the construction practices and mitigating measures established by 33 CFR 323.4, which sets forth the parameters of the "nationwide permit" required by Section 404 of the Clean Water Act. If the proposed action exceeds the parameters of the nationwide permit, the holder shall obtain an individual permit from the appropriate office of the Army Corps of Engineers and provide the authorized
officer with a copy of same. Failure to comply with this requirement shall be cause for suspension or termination of this right-of-way grant.

g. The holder of Right-of-Way No. UTU-91789 agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901 et seq.,) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

h. The holder is prohibited from discharging oil or other pollutants into or upon the navigable waters of the United States, adjoining shorelines, or the waters of the contiguous zone in violation of Section 311 of the Clean Water Act as amended, 33 U.S.C. 1321, and the regulations issued there under, or applicable laws of the State and regulations issued there under. Holder shall give immediate notice of any such discharge to the authorized officer and such other Federal and State officials as are required by law to be given such notice.

6. Miscellaneous

a. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public. All design, material, and construction, operation, maintenance, and termination practices shall be in accordance with safe and proven engineering practices.

b. The holder shall designate a representative who shall have the authority to act upon and to implement instructions from the authorized officer. The holder's representative shall be available for communication with the authorized officer within a reasonable time when construction or other surface disturbing activities are underway.

c. The holder shall permit free and unrestricted public access to and upon the right-of-way for all lawful purposes except for those specific areas designated as restricted by the Field Manager or other authorized officer to protect the public, wildlife, livestock or facilities constructed within the right-of-way.

d. The holder shall inform the Field Manager at (435) 636-3600 within 48 hours of any accidents on federal lands.

e. All surface disturbing activities will have a cultural survey completed (if one has not been previously completed) and submitted to the BLM before activities begin and may be monitored by a BLM permitted archaeologist if determined necessary by the BLM. If any cultural materials are discovered during construction, work in the area will halt immediately and the authorized official notified.

f. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

g. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.
a. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.

b. Equipment and vehicles shall be inspected and cleaned for vegetation matter and seeds prior to entering BLM administered lands. Clothing and animals should also be inspected for vegetation matter and seeds. Vehicles and equipment should be power washed at a commercial facility or other applicable site where invasive species/noxious weeds seeds can be flushed through a waste treatment plant, where seeds will become inert.

c. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the plan of development which was approved and made part of this grant. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan of development, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

d. The map and site plan drawings submitted with the original proposal shall be made a part of this right-of-way grant. All construction must conform to these drawings and maps.

e. The holder shall provide for the safety of the public entering the right-of-way. This includes, but is not limited to barricades for open trenches, flagmen/women with communication systems for single-lane roads without intervisible turnouts, and attended gates for blasting operations.

f. If any clearing is needed, the right-of-way will be brush-hogged to prevent unnecessary disturbance. Only those areas where safety, absolute need for construction or other regulations may warrant the use of topsoil removal by blading or scalping. This right-of-way clearing shall be limited to the limits of the right-of-way. Suitable topsoil material removed in conjunction with clearing and stripping shall be conserved in stockpiles within the right-of-way.

g. Holder shall remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate regrowth of vegetation.

h. Prior to fill construction, the existing surface shall be sloped to avoid sharp banks and allow equipment operations. No fills shall be made with frozen or water saturated soils. Construction equipment shall be routed evenly over the entire width of the fill to obtain a thorough compaction.

i. Construction holes left open overnight shall be covered. Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through and into a hole.

j. Holder shall limit excavation to the areas of construction. No borrow areas for fill material will be permitted on the site. All off-site borrow areas must be approved in writing by the authorized officer in advance of excavation. All waste material resulting from construction or use of the site by holder shall be removed from the site. All waste disposal sites on public land must be approved in writing by the authorized officer in advance of use.

k. All roads and parking areas shall be constructed to provide drainage and minimize erosion. Culverts shall be installed if necessary to maintain drainage. All areas to be used for roads and parking can be surfaced with gravel.

l. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

m. If during any phase of the construction, operation, or termination any oil or other pollutant should be discharged from containers or vehicles and impact Federal lands, the control and total removal, disposal, and cleanup of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of holder to control, cleanup, or dispose of such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the authorized officer may take such measures as he deems necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the authorized officer shall not relieve the holder of any liability or responsibility.

~ 4 ~

INcorpoRATED

JAN 25 2018

Div. of Oil, Gas & Mining
n. Fences, gates, brace panels and any other range improvements shall be reconstructed to appropriate Bureau standards and/or specifications as determined by the authorized officer.

o. When construction activity in connection with the right-of-way breaks or destroys a natural barrier used for livestock control, the gap, thus opened, shall be fenced to prevent the drift of livestock. The subject natural barrier shall be identified by the authorized officer and fenced by the holder as per instruction of the authorized officer.

p. Construction-related traffic shall be restricted to routes approved by the authorized officer. New access roads or cross-country vehicle travel will not be permitted unless prior written approval is given by the authorized officer. Authorized roads used by the holder shall be rehabilitated or maintained when construction activities are complete as approved by the authorized officer.

q. Existing roads and trails on public lands that are blocked as the result of the construction project shall be rerouted or rebuilt as directed by the authorized officer.

r. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of four inches deep, the soil shall be deemed too wet to adequately support construction equipment.

s. The holder shall construct waterbars on all disturbed areas as needed. Waterbars are to be constructed to: (1) simulate the imaginary contour lines of the slope (ideally with a grade of one or two percent); (2) drain away from the disturbed area; and (3) begin and end in vegetation or rock whenever possible.

t. A litter policing program shall be implemented by the holder, if requested and approved of in writing by the authorized officer, which covers all roads and sites associated with the right-of-way.

a. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations). The holder shall be responsible for annual surveys, reporting the results of the surveys to the BLM, and weed control on disturbed areas within the limits of the right-of-way.

b. Holder shall maintain the right-of-way in a safe, usable condition, as directed by the authorized officer.

8. Reclamation / Rehabilitation / Termination

a. Upon grant termination by the Field Manager or other authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.

b. The holder shall restore drainages, to the greatest extent possible, to the original bank configuration, stream bottom width, and channel gradient. Loose soil, fill, and culverts shall be removed from drainage channels as directed by the authorized officer.

c. The holder shall re-contour the disturbed area and obliterate all earthwork by removing embankments, backfilling excavations, and grading to re-establish the approximate original contours of the land in the right-of-way.

d. The holder shall prepare a seedbed by scarifying the disturbed area, distributing topsoil uniformly, or disking the topsoil.

e. The holder shall seed all disturbed areas that have been or are being reclaimed with a seed mixture(s) submitted to and approved by the authorized officer.

f. Ninety (90) days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a pre-termination conference. This conference will be held to review the termination provisions of the grant.
IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Holder)

President

(Date)

(Signature of BLM Authorized Officer)

Assistant Field Manager, Price Field Office

(Title)

(Effective Date of Grant)

INCORPORATED

JAN 25 2018
Div. of Oil, Gas & Mining
Exhibit A (Map 2)

Provisional ROW
June 01, 2016

L entityId Road

Lida Canyon Road

Proposed ROW

Proposed ROW

Designated Routes

Dirt/Motorcycles
All Vehicles
Motorcycles
Emery County Roads
Other Vehicles

CLASS

0
dass d made

INCORPORATED

- JAN 25 2018

Div. of Oil, Gas & Mining