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2008 ANNUAL REPORT

This Annual Report shows information the Division has for your mine. Please review the information to see if it is current. If the information needs to be updated please do so in this document. At the end of each section the operator is asked to verify if the information is correct. Please answer these questions and make all comments on this document. Submit the completed document and any additional information identified in the Appendicies to the Division by April 30, 2009. During a complete inspection an inspector will check and verify the information. To enter text, click in the cell and type your response. You can use the tab key to move from one field to the next. To enter an X in a box, click next to the box, right click, and select properties, then the checked circle, then hit enter, or hit the unchecked circle if the X is to be removed.

GENERAL INFORMATION

Permitte Name	<u>UTAHAMERICAN ENERGY, INC.</u>
Mine Name	<u>Horse Canyon Mine</u>
Operator Name	<u></u>
(If other then permittee)	<u></u>
Permit Expiration Date	<u>May 6, 2011</u>
Permit Number	<u>C/007/013</u>
Authorized Representative Title	<u>R. Jay Marshall</u>
Phone Number	<u>453 888 4007</u>
Fax Number	<u>Fax (435) 888-4002</u>
E-mail Address	<u>jmarshall@coalsource.com</u>
Mailing Address	<u>UtahAmerican Energy, Inc.</u> <u>P.O. Box 910</u> <u>East Carbon, Utah 84520</u>
Designated Representative	<u>R. Jay Marshall</u>
Resident Agent	<u>R. Jay Marshall</u>
Resident Agent Mailing Address	<u>UtahAmerican Energy, Inc.</u> <u>P.O. Box 910</u> <u>East Carbon, Utah 84520</u>
Number of Binders Submitted	<u></u>

Operator, please update any incorrect information.

IDENTIFICATION OF OTHER PERMITS

Identify other permits that are required in conjunction with mining and reclamation activities.

Permit Type	ID Number	Description	Expiration Date
MSHA Mine ID(s)	42-00100	Horse Canyon	None
	42-02241	Lila Canyon	None
MSHA Impoundment(s)	1211-UT-09-02241-01	Lila Canyon	None
NPDES/UPDES Permit(s)	UtG040013		April 30, 2013
	UTG040024		April 30, 2013
PSD Permit(s) (Air)	DAQE-702-99		None
Other			

0'024

UtahAmerican Energy, Inc.



COPY

C/007/013 Incoming
Lila Canyon Project
P. O. Box 910
East Carbon, Utah 84501
Phone: (435) 888-4000
(435) 650-3157
Fax: (435) 888-4002
#3269

April 15, 2009

Daron Haddock
Permit Supervisor
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Re: UtahAmerican Energy, Inc. Horse Canyon Mine 08-016 C/007/013. Annual Report

Dear Mr. Haddock,

Attached you will find two (2) copies of the 2008 Annual Report. One copy is to be delivered to Price and one for Salt Lake City Office.

Should you have any questions please call.

Sincerely,

R. Jay Marshall
Chief Engineer/Project Manager

RECEIVED
APR 20 2009
DIV. OF OIL, GAS & MINING

File in:
C/0070013.2009.Incoming
Refer to:
 Confidential
 Shelf
 Expandable
Date 4/15/09 For additional information

Operator, please update any incorrect information.

CERTIFIED REPORTS

List the certified inspection reports as required by the rules and under the approved plan that must be periodically submitted to the Division. Specify whether the information is included as Appendix A to this report or currently on file with the Division.

Certified Reports:	Required		Included Included	or	DOGM file location Vol, Chapter, Page
	Yes	No			
Excess Spoil Piles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Refuse Piles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Impoundments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Other					
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Operator Comments:

Inspector:

Has the operator complied with this section? Yes No

Inspector Comments:

COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the MRP and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If the particular section is blank, no commitment has been identified and no response is required for this report. If additional written response is required, it should be filed under Appendix B to this report.

Admin R645-301-100
Soils R645-301-200
Biology R645-301-300
Landuse, Cultural Resources, Air Quality R645-301- 400
Engineering R645-301-500

Geology R645-301-600

Hydrology R645-301-700

Title: SUBMIT WATER MONITORING DATA IN AN ELECTRONIC FORMAT

Objective: Put water data in DOGM water quality database.

Frequency: Submit quarterly.

Status: Submit quarterly monitoring data during operational and reclamation phases of mining.

Reports: Submit field data, laboratory analyses and UPDES data to electronic database.

Citation: Special Conditions December 21, 2007.

Operator: Has this commitment been acted on this year?

Yes No Not required this year. If yes, comment;

Operator Comments:

Submitted Electronically

Inspector:

Has the operator complied with this commitment? Yes No

Inspector Comments:

Title: RAIN GAUGES

Objective: Establish on-site climatological database.

Frequency: No less than monthly from May 1 through October 30, monthly when feasible during the remaining months.

Status: To be implemented within 30 days of Board's approval of the Stipulation for Dismissal.

Reports: Data will be downloaded quarterly and included in the Annual Report

Citation: Conditions to the Permit, Attachment A, Special Conditions (December 21, 2007).

Operator: Has this commitment been acted on this year?

Yes No Not required this year. If yes, comment;

Operator Comments:

Installation information submitted to DOGM in August, Data is included in attachment "B" of this report.

Inspector:

Has the operator complied with this commitment? Yes No

Inspector Comments:

Title: CREST STAGE GAUGES AND SIPHON SAMPLERS

Objective: additional water-quality and -quantity data.

Frequency: Quarterly monitoring for 2 years; Installation, maintenance, and inspection to follow USGS protocols and on a frequency established by the Division.

Status: Devices to be installed by March 31, 2008. At the end of the first year, the data will be analyzed and additional monitoring locations may be required.

Reports: Included in regular quarterly monitoring reports. The MRP (and CHIA) to be updated as needed.

Citation: Conditions to the Permit, Attachment A, Special Conditions (December 21, 2007).

Operator: Has this commitment been acted on this year?

Yes No Not required this year. If yes, comment;

Operator Comments:

Installation information submitted to DOGM in August, Data is included in attachment "B" of this report.

Inspector:

Has the operator complied with this commitment? Yes No

Inspector Comments:

Title: SEEP AND SPRING SURVEY**Objective:** Locate previously unidentified water resources.**Frequency:** One time to survey to check all canyons along the escarpment in the permit area.**Status:** Survey to be commenced by March 31, 2008. Additional sites may be selected for quarterly monitoring of water quality and quantity.**Reports:** Included in regular quarterly monitoring reports. The MRP (and CHIA) to be updated as needed.**Citation:** Conditions to the Permit, Attachment A, Special Conditions (December 21, 2007)**Operator:** Has this commitment been acted on this year?Yes No Not required this year. If yes, comment;**Operator Comments:**

Seep and Spring information was submitted to DOGM in August.

Inspector:Has the operator complied with this commitment? Yes No **Inspector Comments:****Title: USE GPS TO SURVEY LOCATIONS OF ALL KNOWN AND NEWLY IDENTIFIED SEEPS AND SPRINGS****Objective:** More precise identification and location of seeps and springs**Frequency:** Annual.**Status:** Survey to be commenced by March 31, 2008.**Reports:** The MRP (and CHIA) to be updated.**Citation:** Conditions to the Permit, Attachment A, Special Conditions (December 21, 2007).**Operator:** Has this commitment been acted on this year?Yes No Not required this year. If yes, comment;**Operator Comments:**

Seep and Spring data was submitted to DOGM in August.

Inspector:Has the operator complied with this commitment? Yes No **Inspector Comments:**

Title: TWO MONITORING WELLS TO BE ESTABLISHED IN FUTURE BOREHOLES.

Objective: Monitor water levels and water quality within the permit and adjacent areas.

Frequency: If wells are established.

Status: To be done when and if additional holes are bored from the surface to the coal seam.

Reports: Water-quality and -quantity data will be included in the quarterly hydrology reports. The MRP (and CHIA) to be updated as needed.

Citation: Conditions to the Permit, Attachment A, Special Conditions (December 21, 2007)

Operator: Has this commitment been acted on this year?

Yes No Not required this year. If yes, comment;

Operator Comments:

Inspector:

Has the operator complied with this commitment? Yes No

Inspector Comments:

Bonding & Insurance R645-301-800

Other Commitments

*Reminder: If equipment has been abandoned during 2008, an amendment must be submitted that includes a map showing its location, a description of what was abandoned, whether there were any hazardous or toxic materials and any revision to the PHC as necessary.

REPORTING OF OTHER TECHNICAL DATA

List other technical data and information as required under the approved plan, which must be periodically submitted to the Division. Specify whether the information is included as Appendix B to this report or currently on file with the Division.

Operator Comments:

Inspector:

Has the operator complied with this section? Yes No

Inspector Comments:

LEGAL, FINANCIAL, COMPLIANCE AND RELATED INFORMATION

O:\AnnualReport\2008 Annual Reports\Operator Annual Reports (Initial Outgoing)\Active Mines\Horse Canyon Mine C0070013.doc

APPENDIX A

Certified Reports

Excess Spoil Piles
Refuse Piles
Impoundments

As required under R645-301-514

CONTENTS

APPENDIX B

Reporting of Technical Data

Including monitoring data, reports, maps, and other information
As required under the approved plan or as required by the Division

In accordance with the requirement of R645-310-130 and R645-301-140

CONTENTS

- 1) **Copy of "Conditions Satisfied Letter" Originally submitted to DOGM 8/29/08**
- 2) **Rain Gauge Data**
- 3) **Water Sample data from Crest Gauge Sampler**
- 4) **Data from Crest Gauges**
- 5) **2008 Raptor Inventory Resubmittals**

UtahAmerican Energy, Inc.



**Lila Canyon Project
P. O. Box 910
East Carbon, Utah 84501
Phone: (435) 888-4000
(435) 650-3157
Fax: (435) 888-4002**

August 29, 2008

Daron Haddock
Permit Supervisor
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Re: UtahAmerican Energy, Inc. Horse Canyon Mine 08-009 C/007/013. Special
Conditions Met.

Dear Mr. Haddock,

Attached you will find three (3) copies of a "Conditions Satisfied Letter." This letter is to document the work that was done to satisfy the Special Conditions resulting from the settlement between DOGM, SUWA and UEI.

Several of the conditions are ongoing and will not be fully satisfied until two years of data has been collected and others are ongoing for the life of the mine.

Should you have any questions please call.

Sincerely,

A handwritten signature in cursive script that reads "R. Jay Marshall".

R. Jay Marshall P.E.
Chief Engineer/Project Manager

Special Conditions
(December 21, 2007)

CONDITIONS SATISFIED
August 29, 2008

- 1) UtahAmerican Energy Inc. (UEI) will submit water quality data for the Horse Canyon Mine, in an electron format through the Electronic Data Input web site.
(This condition is ongoing.)
- 2) UEI will follow the Programmatic Agreement if cultural resource sites are discovered within the permit or adjacent areas.
(This condition is ongoing.)
- 3) UEI will: 1) provide for conducting yearly fly-over raptor surveys: 2) immediately contact UDOGM, USFWS, UDWR and BLM if raptors are tending nests or are nesting in areas near the area to be mined (mining in the subsidence zone and below the cliffs next to the subsidence zone) in the current nesting season or in the coming nesting season (the following year); 3) implement the Best Technology Available (BTA) to provide for the protection of the raptors and their nests. This BTA will be determined by the agencies and then implemented by UEI. Implementation of BTA measures may include fencing of the nests, or avoidance of the area and or may also include the need to apply for a 'take' permit from USFS; and 4) provide a complete report of the yearly surveys to UDOGM.
(This condition is ongoing.)
- 4) UEI must report actual annual water depletions to OSM-Western Regional Coordinating Center by September 30 of each year.
(This condition is ongoing.)
- 5) (a) UEI shall, within 30 days (weather permitting and pickup accessibility permitting) of the approval by the Board of the Stipulation for dismissal, locate and make operable two rain gauges within the permit area, including one in the upper elevation area, and one in the surface facility area. Data will be collected no less than monthly during the period from May 1 through October 30 and otherwise monthly unless access is not feasible. Data will be downloaded quarterly and included in the annual report.
On March 11, 2008 the first of two rain gauges was installed and made operational on the surface facility area of Lila Canyon. The rain gauge is located within the undisturbed island within the disturbed area.

two rain gauge installation was delayed until the closure ended on July 15th.

On August 6, 2008 the second of two rain gauges was installed near IPA #2. On August 14, 2008 the second rain gauge was made operational.

The location of the rain gauges are shown on the attached map.

(Monitoring is ongoing)

- (b) UEI will by March 31, 2008 (weather and pickup accessibility permitting) place and make operable crest stage gauges and siphon samplers at the sampling locations shown on the attached map #1. UEI will collect two years of additional quarterly surface water quantity and quality baseline information from the gauges. The gauges will be installed, maintained, and inspected as required by normal USGS protocol and on a frequency established by the Division. The division will accompany UEI on the initial placement of the siphon and crest stage gauges.

On March 11, 2008 the first of seven crest gauges was installed in Lila Canyon wash. Jim Smith of DOGM was in attendance.

Due to the delay caused by the raptor closures the remaining crest gauge (numbers 2-7) installation was delayed until the raptor closure ended on July 15th.

Crest gauges numbers 2-7 were installed on August 6th. Dave Darby of DOGM assisted in specifying the locations.

The location of the crest gauges are shown on the attached map.

- (c) At the conclusion of the first year, the data will be analyzed, and additional monitoring locations may be required.

(Monitoring is ongoing)

- 6) (a) By March 31, 2008, UEI will commence a comprehensive, on-the-ground survey for discharges in seeps or springs within the area from the top of the Sunnyside coal seam of the Book Cliffs escapement in a southwesterly direction to the Emery County Road (old tram road at 5,750 foot elevation) and from Lila Canyon near the proposed mine facilities area to the Williams Draw Fault line near the southern limits of the permit

area.

On April 11th and 12th a spring and seep survey was conducted to satisfy condition 6)(a) above. Results of the survey "Stipulation Response-Seep and Spring Inventory, Rain & Crest Gauges" is attached.

- (b) The seeps and springs identified by prior surveys in the permit area and adjacent area (within the areas identified on the attached map #2) shall be located by a GPS survey, along with any newly identified seeps and springs identified by UEI within permit and adjacent areas as provided for in subpart 5 (a) above.

Results of the survey "Stipulation Response-Seep and Spring Inventory, Rain & Crest Gauges" is attached.

- (c) Representative seeps and springs may be selected by UEI, subject to approval by the Division, for monitoring for two years of quarterly water quality and quantity measurements. That monitoring shall be in addition to the monitoring required by the operational plan for those seeps and springs previously identified.

No Springs or Seeps were located requiring monitoring. Results of the survey "Stipulation Response-Seep and Spring Inventory, Rain & Crest Gauges" is attached.

- 7) If UEI proposes future drilling from the surface into the coal seams for coal evaluation or other purposes, UEI will establish monitoring wells in at least two of those locations and monitor the water level and the water quality for two years. These wells shall be incorporated into a monitoring program in conjunction with the currently proposed monitoring program base on the evaluation in paragraph 8 below.

(This condition is ongoing.)

- 8) UEI will revise the PHC and Operational Plan, and the Division will revise the CHIA based on the additional data obtained from paragraphs 5,6, and 7 above. The data obtained will be used in further characterizing the surface flows, the ground water systems and the monitoring locations will be incorporated into the surface-water monitoring program for the permit as appropriate to monitor the impact of mining on the surface flows and ground water systems in the area identified in the CHIA.

(This condition is ongoing.)

- 9) UEI will engage a knowledgeable biologist to conduct a survey of the literature (reports) cited below to determine if potential habitat exists for the Sensitive Species, Western (Boreal) toad (*Bufo boreas*), at any of the springs or seeps within the permit area. For those seeps and springs that meet the criteria

for potential habitat, UEI will engage a knowledgeable biologist to conduct field surveys for *Bufo boreas* at breeding season or at tadpole stage. The two reports are found at: <http://dwrcdc.nr.utah.gov/ucdc/ViewReports/vertprt.htm> and are cited as follows:

Vertebrate Information Compiled by the Utah natural Heritage Program: A Progress Report 92003), pp.71 and 72

Inventory of Sensitive Vertebrate and Invertebrate Species: A Progress Report (1997). Pp. 167-169.

UEI's consultant, Derris Jones, is a knowledgeable biologist and conducted a literature survey and determined that "the Lila Canyon Mine site is not western toad habitat and does not warrant surveying for this species."

Western Toad report is attached.

Lila Canyon Mine

East Carbon, UTAH

Stipulation Response - Seep and Spring
Inventory, Rain & Crest Gauges

Prepared For:

UtahAmerica Energy Inc.
794 C Canyon Road
East Carbon, UT 84520
435.888.4007 Tel

Prepared by:



Hydrologic Design Inc.
10969 Topview Road
South Jordan, Utah 84095
801.608.2414 Tel
801.576.9259 Fax

Contact:
Tom Suchoski

August 2008

INTRODUCTION:

On January 2, 2008 the DOGM required additional special stipulations on the prior approval of the Lila Canyon Permit. Stipulations 1 through 4 were on-going stipulation from the prior approval. Stipulations 5 through 9 were new stipulations. This report addresses the stipulations 5 (rain and crest gauges and siphon samplers) and 6 (seep and spring) .

The purpose of this study was to address these stipulations and to specifically:

- o Described the installation of rain gauges within the Lila Canyon Mine Permit Area.
- o Describe the installation of crest gauges and siphon samplers on selected streams.
- o Describe the seep and spring inventory within the selected area and determine if the groundwater resources have been adequately characterized.

RAIN GAUGES

In accordance with stipulation #5, two rain gauges were installed within the Lila Canyon Mine Permit area. One is located to the south of the mine facilities area and one is located on top of the Book Cliffs in the Little Park Wash drainage area (near the IPA #2 well site). The locations of the rain gauges were determined by an Delorme Earthmate PN-20 GPS unit and are shown on Plate 1 and the coordinates and elevations are presented in Table 1. These rain gauges were tipping bucket type rain gauges with a data logger. The data are collected in 0.01" increments with a resolution of 0.01 inches per second. Readings are taken only when precipitation is recorded. The data are stored in the data logger memory until the data are downloaded. When the next sequence is started, the prior data are erased and overwritten.

CREST GAUGES AND SIPHON SAMPLERS

In accordance with stipulation #5, seven (7) sets of crest gauge and siphon sampler were installed on selected drainages within the Lila Canyon Mine Permit area. Crest Gauge 1 was installed on March 11, 2008 and Crest Gauges 2 - 7 were installed on August 1, 2008. The position of the sample sites were determined by either Mr. David Darby and Mr. James Smith, of the DOGM staff, in concurrence with the UEI representatives. Efforts were made to locate the sampling sites in a fairly

uniform section of channel and in a location where the upstream flows would not be affected by channel changes. This was generally possible in all locations except Crest Gauge 1 where the channel was meandering sharply. Once installed, the locations of the sampling sites were determined using an Delorme Earthmate PN-20 GPS unit. Plate 1 shows the location of these sites and Table 1 presents the coordinates and elevations.

The crest gauges were U.S.G.S. Type C, 4-foot crest gauges. These were attached to a 2-inch diameter steel pipe driven into the channel bottom.

The siphon samplers were standard, single-stage samplers and were located adjacent to the crest gauges. These samplers were secured to t-posts driven into the channel bottom. The sampling ports were secured to the t-post and pointed up-channel and the vents were secured to the vertical t-post.

SEEP AND SPRING INVENTORY

In accordance with stipulation #6, a seep and spring inventory was conducted of the area from the top of the Sunnyside coal seam of the Book Cliffs escarpment in a southwesterly direction to the Emery county Road (old tram road at 5750 foot elevation) from Lila Canyon near the proposed mine facilities to the Williams Draw Fault Line near the southern limits of the permit area. Plate 1 (attached) shows the location of the area that was covered by the seep and spring survey.

METHODS: On April 11 and 12, 2008, a spring and seep survey was conducted to address the special condition #5 as described above. The area of study was traversed on foot to determine any seep or spring locations. A team of three individuals consisting of Tom Suchoski, Josh Suchoski, and Jay Marshall walked the area at various elevations from just below the base of the coal seam, at mid slope, and along the bottom of the channel or toe of the slope. In this manner, the area was checked for any water occurrences.

Where water was identified, a GPS reading was taken to locate the site using a DeLorme Earthmate PN-20 GPS unit. An estimate of flow was determined and where sufficient water was available temperature, pH, and conductivity readings were taken. These measurements were taken with a Hanna combination meter, model HI98129.

The GPS data were exported from the DeLorme GPS units on the NAD 27 base in deg.-min. format. These values were then converted to State Plane

coordinates (feet) using the U.S. Army Corps of Engineers, CorpsCon program, version 6.0.1. The data were then plotted on the site area base map using AutoCAD.

RESULTS: Within the survey area, a series of 5 seeps were identified that were in addition to the seeps previously identified. All of these seeps were located within the Stinky Spring Canyon. Most occurrences were in close proximity to previously identified sites. It was difficult to tell whether these were separate occurrences or if they were different expressions of the same water.

Points JS-1 and JS-2 were separate occurrences. JS-1 was a wet spot high up on a cliff face and appeared to be the result of formation contact expression (i.e., sandstone layer overlying shale layer). JS-2 was located up the side canyon to Stinky Spring and was also a formation contact expression.

Plate 1 shows the location of the seep occurrences. Table 1 shows the coordinates and elevations of the seeps. Also, the table presents the flows and associated data.

As can be seen, the flows were extremely small and in three locations the rocks were damp with no flowing water. In the locations where flows were sufficient to collect a sample, the conductivity was greater than the meter could read and pH values were quite basic. Such water quality would not be suitable for wildlife. Few if any indications that wildlife had used these sources could be seen.

TABLE 1
Lila Canyon - Water Monitoring Coordinate Data

Site	Latitude	Longitude	Stateplane N (feet)	Stateplane E (feet)	Elevation (ft.)	# of satellites	Error margin (+/-)	Flow Rat	Cond.	Temp	pH
IPA #1	39° 25.514' N	110° 18.439' W	399946.05	2336903.63	7049	6	22				
IPA #2	39° 25.088' N	110° 19.144' W	397316.3	2333618.88	6872	6	17				
IPA #3	39° 24.488' N	110° 18.718' W	393701.03	2335672.92	6820	7	17				
L-01-S	39° 25.6457' N	110° 20.8662' W	400595.57	2325467.03	5826	8	19				
L-02-S	39° 25.5230' N	110° 20.7040' W	399860.709	2326240.081	5934	8	19				
L-07-G	39° 26.450' N	110° 18.223' W	405640.88	2337844.49	7354	5	19				
L-08-G	39° 26.717' N	110° 17.621' W	401229.84	2340737.96	7049	5	45				
L-09-G	39° 24.988' N	110° 17.952' W	396601.96	2339241.56	7036	6	18				
L-11-G	39° 26.618' N	110° 19.781' W	406563.58	2330498.28	7220	4	35				
L-12-G	39° 24.143' N	110° 18.038' W	391649.72	2338902.98	6762	6	29				
L-13-S	39° 24.831' N	110° 19.032' W	395763.35	2334166.82	6820	6	18				
L-14-S	39° 23.960' N	110° 18.472' W	390511.64	2336874	6678	8	19				
L-16-G	39° 24.2498' N	110° 19.5893' W	392201.033	2331589.099	5792	8	19				
L-17-G	39° 24.2957' N	110° 19.4968' W	392485.352	2332021.029	5896	8	19				
L-18-S	39° 23.9366' N	110° 20.1881' W	390627.335	2328789.29	5513	8	19				
L-19-S	39° 24.228' N	110° 19.094' W	392099.45	2333923.26	6700	5	18				
L-20-S	39° 26.314' N	110° 18.916' W	404771.98	2334593.76	7153	9	15				

RAIN GAUGES - APRIL 2008 & AUGUST 2008

RG-1	39° 25.5620' N	110° 20.8216' W	400090.266	2325683.408	5946	8	19				
RG-2	39° 25.1101' N	110° 19.1383' W	397450.92	2333644.12	6875	8	19				

SPRING & SEEP - APRIL 2008

JS-1	39° 24.2052' N	110° 19.7143' W	391922.606	2331004.009	5793	8	19	damp	-	-	-
JS-2	39° 24.3467' N	110° 19.5807' W	392789.721	2331621.879	5932	8	19	0.01	+4000	54.3	9.03
TS-1	39° 24.2667' N	110° 19.5851' W	392303.871	2331607.531	5873	8	19	0.01	+4000	40.2	8.68
TS-2	39° 24.2848' N	110° 19.5101' W	392418.37	2331959.268	6005	8	19	damp	-	-	-
TS-3	39° 24.2899' N	110° 19.5168' W	392448.911	2331927.311	5992	8	19	damp	-	-	-

CREST GAUGES - AUGUST 2008

Lila CG1	39° 25.6006' N	110° 21.0658' W	400309.785	2324530.799	5739	8	19				
Lila CG2	39° 26.7840' N	110° 18.7754' W	407451.416	2335220.175	7303	8	19				
Lila CG3	39° 26.3110' N	110° 18.8839' W	404745.876	2334745.274	7233	8	19				
Lila CG4	39° 25.4918' N	110° 18.8207' W	399787.62	2335108.598	6968	8	19				
Lila CG5	39° 23.9398' N	110° 18.4462' W	390390.749	2336997.324	6675	8	19				
Lila CG6	39° 24.8083' N	110° 18.9742' W	395629.264	2334440.693	6809	8	19				
Lila CG7	39° 23.9969' N	110° 18.9549' W	390705.618	2334596.861	6656	8	19				

UTAHAMERICAN ENERGY, INC.

Lila Canyon Mine Facility

**Western Toad (Bufo boreas)
Report**

**Written
March 05, 2008**

**By:
Derris Jones
Senior Wildlife Biologist**

ENVIRONMENTAL INDUSTRIAL SERVICES

**Environmental & Engineering Consulting
31 North Main Street * Helper * Utah 84526
Office - 435-472-3814 * Fax - 435-472-8780**

1.0 Introduction

UtahAmerican Energy, Inc. (UEI) has contracted EIS Environmental & Engineering Consulting (EIS) to conduct investigation into the need for a Western Toad survey for their Lila Canyon Mine Facility. The proposed area is located south of East Carbon, Utah. This area also consists of land administered by the State of Utah, private owners, and the Bureau of Land Management (BLM). These proposed facilities are required to be surveyed for a variety of threatened, endangered, and sensitive (TES) plant and animal species. Several TES species have been identified by the BLM through past studies as occurring, or potentially occurring within the UEI project area. Using established protocols, qualified Field Biologists of EIS conducted inventories for several proposed Threatened and Endangered Species at all areas of concern within the project area. The inventory for this Project was conducted on May 03, 2007.

Recently UEI agreed to investigate the need to survey for western toads in the same area of concern. The western toad was not included on the original list of TES species because of the marginal nature of potential habitat. Due to a settlement on litigation, UEI has agreed to look at existing habitat and determine if the need to survey for this species is warranted.

2.0 Status

Currently the western toad is classified as a sensitive species in Utah. Nationally the Southern Rocky Mountain population of the boreal toad at one time was listed as a candidate species for listing or warranted for listing as endangered but precluded. In 2005, following a 12-month finding the United States Fish and Wildlife Service removed western toads as a candidate because the Southern Rocky Mountain population was not recognized as species, subspecies, or Distinct Population Segment. Utah DWR has developed a conservation strategy for the western toads.

3.0 Distribution

Historically the western toad was found in high plateaus of 21 Utah counties, but only about 10 counties hold significant populations now. Predicted habitat in southeastern Utah is generally restricted to the Manti-La Sal and Fish Lake National Forests. Recent surveys indicate a small population on the South Horn Mountain in western Emery County. Historic records show western toads inhabiting along the east side of the Wasatch Plateau around into the Bookcliffs. No recent surveys have been done in the Bookcliff range, and no known breeding populations have been documented in the last 50 years.

4.0 Life Histories and Ecology

4.1 Elevation Range

Western toad is generally considered to occupy relatively high elevation habitats compared to other western amphibians. In Colorado, the documented elevation range of boreal toad is 2,164 to 3,640 m and toads are most often observed between 2,250 and 3,600 m (Campbell 1970a, Livo and Yeakely 1997). In southeastern Wyoming, historic records previously ranged up to 3,200 m but records of current occurrence currently do not exceed 2,925 m (Livo and Yeakely 1997).

The DIVISION has records of historic boreal toad occurrence in Utah at elevations from 1,570 to 3,220 m (Thompson et al. 2004). Based on a query of museum holdings, Ross et al. (1995) found that elevation information was available for 29 of the 100 reported specimens. The elevation of the collection localities for these specimens ranged from 1,374 to 3,136 m, but Ross et al. (1995) questioned the validity of the lower elevation records based on a lack of supporting museum specimens and the absence of typical boreal toad habitat at the reported localities. The current distribution suggests that the actual historic minimum elevation of boreal toad in Utah is probably not lower than 1,570 m. Differential habitat use between the sexes has been documented in the Paunsagunt Plateau and Sevier Plateau from preliminary radio telemetry studies conducted by the US Forest Service (S. Brazier, pers. comm.)

4.2 Habitat Requirements

Although boreal toad habitats in Colorado seem to be closely associated with lodge pole pine or spruce fir forests (Campbell 1970b), occupied wetlands in Utah are surrounded by a variety of upland vegetation communities, including sagebrush and grassland, Pinyon-juniper, mountain shrubs, and coniferous forest (Scott et al. 1993). Extensive observations of upland and winter habitat use in Utah have not been completed. However, toads have been observed using small mammal burrows in drier upland areas (Fridell et al. 2000). Radio-telemetry studies in Colorado indicate that toads occupy upland montane forests and rocky areas near spring seeps (Jones et al. 1998). Campbell (1970b) noted that boreal toads are relatively independent of water compared to other amphibians, but they must re-hydrate daily. In Utah, breeding habitats include low velocity, low gradient streams, off-channel marshes, beaver ponds, small lakes, reservoirs, stock ponds, wet meadows, seeps, and associated woodlands (Fridell et al. 2000, Thompson and Chase 2001).

Habitat use patterns after breeding are likely dependent on characteristics of the upland environment and may differ between the sexes (Campbell 1970b, Campbell 1976). Female toads may use habitats that are drier and more distant from breeding habitats compared to males (Jones et al. 1998). In a study of Oregon populations (Samallow 1980), males were abundant in and near water bodies throughout the warm months. Females were generally found in surrounding forested areas except during the brief breeding period. Campbell (1970b) indicated that male boreal toads in Colorado preferentially use moist areas, whereas females are more common in drier habitats. Differential habitat use between sexes has not been documented in Utah.

Currently, hibernacula in Utah have not been described. To date, only one hibernacula was discovered in the Paunsagunt Plateau. In Colorado, Campbell (1970c) found five separate hibernacula along a stream with perennial flow. Each hibernaculum consisted of a small chamber beneath or adjacent to large boulders. A continuous flow of groundwater 1 to 4 cm beneath the chamber floor maintained hibernacula air temperatures above 0.0°C, despite ambient temperatures during winter measured as low

as -31°C. The five hibernacula were used by a minimum of 30 toads during a single winter and there was apparently no mortality. Campbell(1970c) speculated that this sort of hibernaculum is probably uncommon and that most of the toads in the study area either traveled relatively long distances to find other similar hibernacula, or they used hibernacula with different characteristics. In other areas, hibernating boreal toads have been found using ground squirrel (*Spermophilus lateralis*) burrows to avoid freezing during the winter (Jones et al. 1998). Other possible hibernation sites, particularly for metamorphs, are beaver lodges and dams (Loeffler 2001).

Burrows represent critical microhabitats for boreal toad and other amphibians, especially in warmer, drier climates (Carey 1978, Smits 1984). Burrows are important for maintaining stable body temperatures despite extreme ambient temperatures (Smits 1984). Smits (1984) found that toads always remained in the deepest burrow locations during winter, resulting in relatively low and stable body temperatures. During summer, burrows may be used to prevent water loss and dehydration.

Breeding habitat requires open water at least 6 inches deep. Aquatic or flooded plant life offers cover for the eggs. Local populations tend to return to the same area each year for breeding. Springs, slow moving streams, lakes and wetlands are the preferred breeding habitat, however some populations have been found living in gravel pits that held runoff water only during the spring.

5.0 Threats

These amphibians are more influenced by changes in environment than other taxonomic groups. The loss of a specific stump or burrow can have a great effect on fitness. Areas with human activity brings common ravens and raccoons, both are associated with massive predation during young stages of the toad's life cycle. The local population gathers in one small area, and the concentrated collection of toads provides an easy meal for predators. Freezing temperatures, lowering water levels, and loss of vegetative cover surrounding the water may also lead to young die off of young toads. Chytrid fungus has been implicated in severe western toad die-offs else where in the range (Loeffler 2001) and poses a potential significant threat to western toads in Utah.

6.0 Habitat Description of Lila Mine Site

Elevation of the Mine site runs from 5900 ft to 6200 ft above sea level. Vegetation is sparse Juniper with an Atriplex shrub understory. Grasses present are *Hilaria jamesii*, and *Stipa comota* for warm season grasses and *Orizopsis hymenoides*, and *Elymus Salinas* for cool season grasses. *Bromus tectorum* is the dominant non-native grass species.

Soils are of alluvium deposit from the immediate cliff face to the Southeast. These soils originate from sandstone and are very coarse and porous.

No ponds with 6-inch depth and vegetation exist on or near the mine site. No perennial source of water is present on the mine site. One small drainage could run water for a short period with large precipitation events.

7.0 Discussion of western toad potential

Elevation range of the mine site falls within potential western toad habitat. Although the literature suggests western toads have been located in the Bookcliffs range, when you look at the locations for the toads, Bulger Creek, Kuyune, Price and Helper are the locations given for Bookcliffs. The latest date for any of these records is 1950. These locations are more closely associated with the Wasatch Plateau than with the Bookcliffs.

The three habitat types used by western toads, breeding ponds, summer range, and winter refugia, are all lacking or at best marginal in the Lila Mine site. Due to precipitation patterns, porous soils, and steep gradient it is doubtful if breeding habitat could be maintained if it existed. Summer range is usually described as montane forest at elevations exceeding 7000 feet above sea level. Although western toads have been found in Utah below 5500 feet, this is normally associated with a riparian habitat type. The Lila mine site is Ecotone between Juniper and salt desert shrub communities. Winter hibernacula would be difficult to find due to the dry rocky conditions associated with the mine site. Small mammal burrows used by western toads in some areas would be difficult to find below the freeze line as most winters snow conditions do not lend themselves to insulation.

It is the opinion of DWR, BLM and this author that the Lila Canyon Mine site is not western toad habitat and does not warrant surveying for this species.

References:

- Campbell, J. B. 1970a. New elevational records for the boreal toad (*Bufo boreas boreas*). *Arctic and Alpine Research* 2:157-159.
- Campbell, J. B. 1970b. *Life history of Bufo boreas boreas in the Colorado Front Range*. Phd dissertation, University of Colorado, Boulder, CO.
- Campbell, J. B. 1970c. Hibernacula of a population of *Bufo boreas boreas* in the Colorado Front Range. *Herpetologica* 26:278-282.
- Campbell, J. B. 1976. Environmental controls on boreal toad populations in the San Juan Mountains. Pages 289-295 in Steinhoff, H. W. and J. D. Ives (editors). *Ecological impacts of snowpack augmentation in the San Juan Mountains, Colorado*. Final report, San Juan Ecology Project, Colorado State University, Fort Collins, CO.
- Carey, C. 1978. Factors affecting body temperatures of toads. *Oecologia* 35:197-219.
- Fridell, R. A., K. M. Comella, G. N. Garnett, B. A. Zettle, T. K. Smith, and D. L. Harstad. 2000. *Boreal toad (Bufo boreas boreas) distribution surveys in southwestern Utah 1994 - 1998*. Publication Number 00-10, Utah Division of Wildlife Resources, Salt Lake City, UT.
- Jones, M. S., J. P. Goettl, K. L. Scherff-Norris, S. Brinkman, L. J. Livo, and A.M. Goebel. 1998. *1998 Boreal toad research progress report: 1995 - 1997*. Unpublished report, Colorado Division of Wildlife, Fort Collins, CO.
- Livo, L. J. and D. Yeakely. 1997. Comparison of current with historical elevational range in the boreal toad, *Bufo boreas*. *Herpetological Review* 28(3):143-144.
- Loeffler, C. (ed.). 2001. Conservation plan and agreement for the management and recovery of the southern Rocky Mountain population of the boreal toad (*Bufo boreas boreas*). Boreal Toad Recovery Team. 76 pages + appendices.
- Ross, D. A., T. C. Esque, R. A. Fridell, and P. Hovingh. 1995. Historical distribution, current status, and range extension of *Bufo boreas* in Utah. *Herpetological Review* 26(4):187-189.
- Samollow, P. B. 1980. Selective mortality and reproduction in a natural population of *Bufo boreas*. *Evolution* 34(1):18-39.
- Scott, J. M., F. Davis, B. Csuti, R. Noss, B. Butterfield, S. Caicco, C. Groves, T. C. Edwards, Jr., J. Ulliman, H. Anderson, F. D. Erchia, R. G. Wright. 1993. Gap analysis: A geographic approach to protection of biological diversity. *Wildlife Monographs* Number 123. 62 pp.
- Smits, A. W. 1984. Activity patterns and thermal biology of the toad *Bufo boreas halophilus*. *Copeia* 1985(5): 689-696.
- Sullivan, Janet. 1994. *Bufo boreas*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Website accessed December 7, 2007. <<http://www.fs.fed.us/database/feis/>>

Thompson, P. and P. Chase. 2001. *Boreal toad (Bufo boreas boreas) distributional surveys and monitoring in northern Utah, 1999 - 2001*. Publication Number 01-27, Utah Division of Wildlife Resources, Salt Lake City, UT.

Thompson, P. D., R. A. Fridell, K. K. Wheeler, and C. L. Bailey. 2004. Distribution of *Bufo boreas* in Utah. *Herpetological Review* 35(3):255-257.

U. S. Fish and Wildlife Services website accessed December 7, 2007.

<http://www.fws.gov/mountain-prairie/species/amphibians/borealtoad/>

Utah Division of Wildlife Resources Utah Conservation Data Center website accessed December 7, 2007. <http://dwrcdc.nr.utah.gov/ucdc/>

Utah Division of Wildlife Resources. Utah Sensitive Species List. October 17, 2006.

Series	Event (2008)
Logger Info	Information specific to the logger
Model	HOBO Event (C) 1996 ONSET Computer Corp
Serial Number	11370
Memory Size (Bytes)	32768
Extra Info	Information used by tech support
Model Number	7
Version Number	4
Deployment	3
Series Info	Information about the data in the series
Points Used	2
First Point	05/27/2008 11:25:19.19
Last Point	08/14/08 12:57:57.0
Duration	79:01:01:32:37.8
Stats	Calculated from the series
Wrap Count	0
Event Sum	0.00
Launch Parameters	Mirrors the launch dialog settings
Description	Lila RainGauge Lower
Wrap	Off
Delay Start	Off
Stealth Mode	Off
Event Name	2008
Event Value	208.00
Lockout After Event	00:00:01.0

Date/Time Event (2008)
NO DATA - Equipment Malfunction

Series	Event (2008)
Logger Info	Information specific to the logger
Model	HOBO Event (C) 1996 ONSET Computer Corp
Serial Number	11370
Memory Size (Bytes)	32768
Extra Info	Information used by tech support
Model Number	7
Version Number	4
Deployment	2
Series Info	Information about the data in the series
Points Used	2
First Point	05/14/08 10:25:08.0
Last Point	05/27/08 11:22:09.5
Duration	13:00:57:58.5
Stats	Calculated from the series
Wrap Count	0
Event Sum	0.00
Launch Parameters	Mirrors the launch dialog settings
Description	Lila Raingauge Lower
Wrap	Off
Delay Start	Off
Stealth Mode	Off
Event Name	2008
Event Value	208.00
Lockout After Event	00:00:01.0

Date/Time	Event (2008)
05/14/08 10:25:08.0	0
05/27/08 11:22:09.5	0

Series	Event (2008)
Logger Info	Information specific to the logger
Model	HOBO Event (C) 1996 ONSET Computer Corp
Serial Number	11370
Memory Size (Bytes)	32768
Extra Info	Information used by tech support
Model Number	7
Version Number	4
Deployment	3
Series Info	Information about the data in the series
Points Used	2
First Point	8/14/2008 12:57:57
Last Point	3/20/2009 12:43:36
Duration	217:22:40:39
Stats	Calculated from the series
Wrap Count	0
Event Sum	0.00
Launch Parameters	Mirrors the launch dialog settings
Description	Lila Raingauge Lower
Wrap	Off
Delay Start	Off
Stealth Mode	Off
Event Name	2008
Event Value	208.00
Lockout After Event	00:00:01.0

Date/Time	Event (2008)	
8/14/2008 12:57:57		0
3/20/2009 12:43:36		0

Series	Event (2008)
Logger Info	Information specific to the logger
Model	HOBO Event (C) 1996 ONSET Computer Corp
Serial Number	11370
Memory Size (Bytes)	32768
Extra Info	Information used by tech support
Model Number	7
Version Number	4
Deployment	1
Series Info	Information about the data in the series
Points Used	2
First Point	03/11/08 09:29:21.0
Last Point	05/14/08 10:20:03.0
Duration	64:00:51
Stats	Calculated from the series
Wrap Count	0
Event Sum	0.00
Launch Parameters	Mirrors the launch dialog settings
Description	Lila Raingauge Lower
Wrap	Off
Delay Start	Off
Stealth Mode	Off
Event Name	2008
Event Value	2.00
Lockout After Event	00:00:01.0

Date/Time	Event (2008)
03/11/08 09:29:21.0	0
05/14/08 10:20:03.0	0



General Offices: P.O. Box 995 Price, UT. 84501 (435)637-8855
 Laboratory: 65 North 300 East Price, UT. 84501

Report Date
 10/28/2008

Client
 Utah American Energy Inc.
 Horse/Lila Canyon
 P.O. Box 986
 Price, UT 84501
 Jay Marshall
 (435)637-5032 Ext.724

Sample I.D.
 CG # 7
 Sampled By: RJM/DD
Date: ~ 8/31/08
Time:
 Received
Date: 10/3/2008
Time: 15:50

Field Measurements				
Cond. uS	Temp. F	pH	D.O. ppm	Turbidity NTU
589	71.7	5.6		

Notes:
 Flood Single - Stage Sample
 Total Suspended Solids exceed method stated maximum range.
 Sample temperature > 6°C when received.
 Insufficient sample to analyze for Cl, SO₄, and F.
 *Expired upon receipt

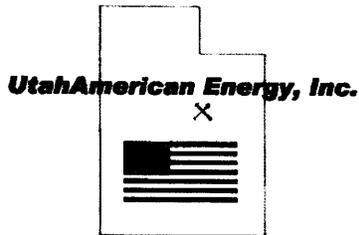
Lab I.D. #: 719 Mine Code 9 Site Code

Certificate of Analysis

Analyte	Results	Units	MRL	Method	Date	Time	Analyst
<u>Wet Chem.</u>							
*Acidity to pH 8.3	-3778	mg/L as CaCO ₃	NA	SM 2310 B(4a)-97	10/15/2008	12:12	SB
*Alkalinity, Bicarbonate	2968	mg/L as CaCO ₃	10	SM2320-B-97	10/13/2008	9:29	SB
*Alkalinity, Carbonate	<10	mg/L as CaCO ₃	10	SM2320-B-97	10/13/2008	9:29	SB
*Alkalinity, Total	2968	mg/L as CaCO ₃	20	SM2320-B-97	10/13/2008	9:29	SB
*Solids, Total Dissolved	285	mg/L	20	SM 2540 C-97	10/9/2008	13:49	SB
*Solids, Total Suspended	40175	mg/L	4	SM 2540 D-97	10/9/2008	13:49	SB
<u>Metals by ICP</u>							
Calcium, Dissolved	66.70	mg/L	0.05	EPA 200.7	10/28/2008	13:43	SB
Iron, Dissolved	0.165	mg/L	0.010	EPA 200.7	10/28/2008	13:43	SB
Iron, Total	1444	mg/L	0.010	EPA 200.7	10/21/2008	17:33	SB
Magnesium, Dissolved	15.41	mg/L	0.050	EPA 200.7	10/28/2008	13:43	SB
Manganese, Dissolved	1.070	mg/L	0.001	EPA 200.7	10/28/2008	13:43	SB
Manganese, Total	59.560	mg/L	0.001	EPA 200.7	10/21/2008	17:33	SB
Potassium, Dissolved	4.45	mg/L	0.3	EPA 200.7	10/28/2008	13:43	SB
Sodium, Dissolved	12.05	mg/L	0.750	EPA 200.7	10/28/2008	13:43	SB
<u>Calculations</u>							
Hardness	230.01	mg/L as CaCO ₃		SM2340-B	10/28/2008	12:31	SB
Total Cations	5.23	meq/L			10/28/2008	12:31	SB

Brandon Pierce
 Technical Director

All reported results meet the requirements of NELAC, except for Balance and Hardness.
 Balance and Hardness are calculated from certified results.



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Daron Haddock
Permit Supervisor
Division of Oil, Gas and Mining
1594 West North Temple
P.O. Box 145801
Salt Lake City Utah, 841114-5801

REFERENCE: Annual Raptor Survey 2008, UtahAmerican Energy, Inc. (UEI), Horse Canyon Mine Part "B" Lila Canyon, C/007/013

Dear Mr. Haddock:

On May 14, 2008 UtahAmerican Energy, Inc. ("UEI") received a letter from the Division discussing Exclusionary Periods for Golden Eagles and Rock Mountain Bighorn Sheep. Within that letter a statement was made in reference to the 2008 Raptor inventory at Lila Canyon. The statement in the letter was "Based on the survey information to date an aerial survey for nest #947 would not be required this year." It is UEI's intent that the ground survey completed at Lila would fulfill the requirements on the annual survey committed to in the Horse Canyon MRP part "B". Section 333.300 (7) allows for a ground survey. (Attachment #1)

UEI was aware of the BLM November 1st closure for wildlife habitat and requested an exception to the closure period with the BLM. The exception was denied but a clarification was made as to the closure being for crucial mule deer winter range. Because the surface at Lila does not include any crucial mule deer winter range this closure did not apply.

On January 3, 2008 equipment was mobilized to the Lila Canyon surface and construction began using one cat and one backhoe. It was UEI's understanding that once work started and was continuous that the winter closures would not become an issue. However, UEI requested a clarification from both DOGM and BLM as to what amount of work satisfies the continuous operation requirement.

UEI had verbal OK's from the Division and BLM to continue the work at the current level. On February 17th UEI received a letter from DOGM that confirmed that the level of work was satisfactory to allow for continued operations through the closure periods. The letter also states that if UEI wanted to increase the level of activity a Raptor survey would have to be completed before increasing the level of activity. Since UEI did have plans to increase the level of activity a Raptor ground survey was initiated. (Attachment #2)

On February 18th UEI received a letter from the BLM requesting UEI to stop construction and remove equipment within 24 hours. (Attachment #3) UEI complied with the BLM request but did continue with the ground raptor survey.

On Thursday March 6, 2008 the first of three ground surveys began. Derris Jones (EIS), Dave Waller (BLM), and Kyle Beagley (DWR) participated in the survey. All nests were located and Raptors were observed but "no courtship behavior was demonstrated". (Attachment #4)

On March 17, 2008 the second of three ground surveys was completed. Copulation and nesting activities were observed on nest #947. (Attachment #5) No activities were observed on the other nests.

On April 16, 2008 the third and final ground survey was completed. Joe Helfrich (DOGM), Dave Waller (BLM) and Sue Weller (BLM) participated in the survey. The eagle was setting on nest 947. (Attachment #6) It was questionable that the hen on the nest was in a direct line of site with the surface facility area at Lila. UEI requested of the BLM an exception based upon line of site. UEI got a verbal reject but nothing in writing.

Based upon nest #947 being occupied and reluctance of the BLM to approve a exception, UEI determined that it was best to wait until the end of the winter closures which is July 15th before proceeding with the Lila Canyon construction. The raptor inventory was complete 2008. The inventory resulted in all nests being inventoried with nest #947 being tended. The need for a helicopter survey was discounted as redundant and possible harassment of the nesting eagle. (Attachment #7).

As a result of DWR planning on not doing aerial surveys after 2008, UEI has submitted an amendment to our approved MRP removing the word aerial and helicopter and refer only to Raptor surveys. This would give the flexibility of doing aerial or ground surveys for the annual raptor surveys.

The annual Raptor has been satisfied for all nests by the ground survey which is allowed for in the approved MRP on pages 19 and 20 of Chapter 3. (Attachment #1) No additional Raptor surveys are planned for 2008.

If you have any questions please call.

R. Jay Marshall

Project Manager/Chief Engineer
Lila Canyon Mine

and restrictions on off road vehicle usage to lesson disturbance.

5. The Operator will ensure that DWR surveys for cliff nesting raptors within proposed facilities areas at least two years prior and one year following construction. The Operator will conduct annual raptor surveys.

As part of normal mining operation requirements, the Permittee must submit all results of the raptor fly-over surveys to the Division in Annual Reports and must immediately contact the Division, BLM, and USFWS following any raptor survey that shows that eagles are tending nests or nesting. The agencies will immediately coordinate to determine if the Permittee must implement appropriate measures. If the agencies recommend mitigation, the Permittee must submit all plans to the Division for incorporation into Appendix 3 of the MRP.

6. An active golden eagle nest, with young, was documented during the 1999 spring raptor survey. The nest is located in the left fork of Lila Canyon within the 1-mile buffer zone. (See Plate 3-1). A consultation with USF&W, BLM, and UDWR was held in the fall of 1999. Line of site and potential mitigation was addressed during this meeting. The results of this consultation are addressed in Sec 322.220 and the Lila Canyon EA. This nest was not active in 2000, 2001, 2002, or 2003. A survey was not done in 2004. In 2005 nest 946 contained a possibly dead chick. (See Appendix 3-5 for updated inventories)
7. The Operator will adhere to exclusionary periods when initiating construction and final reclamation projects. The exclusionary periods include: raptors (Feb 1 - July 15), Bighorn sheep lambing (May 1 - June 15), and Pronghorn (May15 - June 20).

In the event of unforeseen changes in construction or mine plans, or in the case of emergency

situations that may force the Permittee to conduct activity near or within the 0.5 mile buffer zone of raptor nest and during raptor exclusionary periods (February 1 to July 15 for golden eagles), the Permittee will immediately contact the Division, BLM, DWR, and USFWS. The agencies will immediately coordinate to determine appropriate measures that may include conducting ground surveys, in coordination with DWR, to determine if birds are tending nests or nesting and possibly determine the life stage of the offspring; developing a mitigation plan, in coordination with the agencies, for possible impacts to nests or birds; or ceasing operations until the end of breeding season to avoid 'take'. If the agencies recommend surveys, the Permittee must submit all survey results to the Division in Annual Reports. If the agencies recommend mitigation, the Permittee must submit all mitigation plans to the Division for incorporation into Appendix 3 of the MRP.

The Applicant does not plan to monitor any wildlife species during the life of the operation with the exception of raptors. Helicopter spring raptor surveys will be conducted at a minimum of a 1-mile radius around any new or potentially disruptive mining activity, 2-years prior and annually after the proposed activity. The Operator will contact the USFWS and the Division immediately following raptor fly-over surveys if raptors are observed tending nests or nesting.

The mine will emphasize their commitment to legal requirements of firearm and off-road vehicle-use by employees. This type of program has been adopted by the operator and will continue throughout the operation. An education program aimed at minimizing potential negative impacts by employees will be presented during the Operators annual retaining programs. Employees will be informed about the wildlife in the area and about which species are protected. They will be counseled to refrain from poaching or harassing animals and about the need to preserve the wildlife. They will also be instructed on the danger of animals on the road during dusk and night hours and consequently the need to reduce speed to avoid

Attachment



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
Division of Oil, Gas & Mining

MICHAEL R. STYLER
Executive Director

JOHN R. BAZA
Division Director

February 15, 2008

Jay Marshall, Resident Agent
UtahAmerican Energy, Inc.
P.O. Box 986
Price, Utah 84501

Subject: Exclusionary Periods and Construction Activity, Lila Canyon Extension to the Horse Canyon Mine, UtahAmerican Energy, Inc. (UEI), Horse Canyon Mine, C/007/0013, Outgoing File

Dear Mr. Marshall:

On January 16, 2008, the Interagency Wildlife Buffer Team (Team) discussed construction efforts at the Lila Canyon Mine. The Bureau of Land Management (BLM) stated that the work at the site was minimal and sought clarification of the intent and details of the exclusionary periods. The Team discussed certain details and BLM mentioned that they would contact you to discuss the concern of stopping and restarting or increasing the level of activity during exclusionary periods. In addition, on January 28, 2008, Wayne Western from the Utah Division of Oil Gas and Mining (Division) sent you an email that provided his understanding of the intent of exclusionary periods. This letter and "Implementation Plan" (Plan) is a follow-up to the on-going effort to provide a clear explanation of what is expected by the Division concerning commitments on wildlife exclusionary periods.

The United State Fish Wildlife Service, Utah Division of Wildlife Resources, and Division biologists have been working diligently to develop a plan that addresses the comments made during the Interagency Wildlife Buffer Team meeting. The attached Plan considers the entire level of work that is currently being conducted at the Lila Canyon Mine and the Best Management Practices for protecting golden eagles and Rocky Mountain sheep.

Previously, the Division believed that when UEI received the Permit for the Lila Canyon Extension to the Horse Canyon Mine, full construction would begin, as stated during the Board hearings on the Lila Canyon Mine issues. UEI did start construction (albeit limited construction activities) on or prior to the golden eagle and Rocky Mountain sheep exclusionary periods. UEI may continue work at the current level of activity.

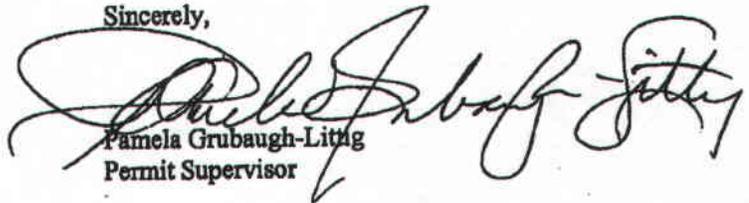
Attachment #2

Page 2
Jay Marshall
February 15, 2008

It is important to stress that execution of the attached Plan is required **ONLY** if the Permittee decides to increase construction activity at the Lila Canyon Mine site. Furthermore, restrictions on increased construction activity will apply only if ground surveys (following the protocol in the Plan) definitively show that the nests are active or if increased efforts would disturb Rocky Mountain sheep.

Please refer to the attached Plan and call me at (801) 538-5268, Daron Haddock at (801) 538-5325, or Jerriann Ernsten at (801) 538-5214 if you have any questions.

Sincerely,



Pamela Grubaugh-Littig
Permit Supervisor

an
cc: Betsy Herrman, FWS
Nathan Darnall, FWS
Leroy Mead, DWR
Tony Wright, DWR
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**Golden Eagle and Rocky Mountain Sheep
Exclusionary Period Implementation Plan
For
Lila Canyon Extension to the Horse Canyon Mine**

February 15, 2008

Introduction

The United State Fish Wildlife Service (USFWS), Utah Division of Wildlife Resources (DWR), and Utah Division of Oil Gas and Mining (Division) biologists developed this Implementation Plan (Plan) for the Utah American Energy Inc. (UEI) Lila Canyon Extension to the Horse Canyon Mine (aka Lila Canyon Mine). The Plan is intended to provide a clearer explanation of what is expected by these agencies concerning commitments on wildlife exclusionary periods. The Plan includes a summary of a recent DWR visit to the site, exclusionary provisions for the golden eagle (GE) and Rocky Mountain sheep (RMS), GE biology and survey considerations, USFWS/Division survey requirements, and Division inspection intentions.

DWR Update

On February 8, 2008, DWR visited the Lila Canyon Mine site. DWR reported that the area was under light snow cover, which should not have significantly prohibited construction up to the visit date. Construction was not occurring the morning of the February 8, 2008 visit. UEI had previously cleared approximately 3-4 acres of vegetation and boulders, but had not started leveling the surface. The equipment that was currently there was assessed as being incapable of doing the work necessary to develop the site. Furthermore, DWR estimated that at the present rate of work, it would take months to just level the site.

DWR observed GEs and unidentified raptors both perched and flying, but they were all around 4 miles from the mine site and near the highway (US-6).

DWR considered that disturbance to GE would depend on the level of excavation. Current excavation activity was very minimal. DWR considered that disturbance to the birds in the future would depend on the level of increased construction activity. DWR observed only 2 pieces of large equipment: probably a D8 bulldozer (or smaller) and a medium sized trackhoe.

GOLDEN EAGLES

2007 Fly-over Raptor Survey Results and Estimations of Distances

Golden Eagle Nest #	Notes of 2007 fly-over survey	Est of distances between nest and closest reach of disturbed area (2640'=0.5mile)*
456	Inactive	465'
455	Inactive	808'
719	Could not spot (DWR ground truthed site and found location, but only a few twigs remain)	1040'
946	Not found	1156'
947	Inactive	1389'

*UEI could take the opportunity to correct these estimations and provide an updated Plate to the MRP. UEI should include the horizontal and vertical distance to provide the most accurate accounting of the distance between each nest (5 nest/locations) to the nearest point of planned disturbance (as shown in existing Plates in the MRP).

Exclusionary Provisions for GE

Since UEI has already started construction on or prior to the GE and RMS exclusionary periods, UEI may continue at the current level of construction effort. If UEI decides to increase efforts, however, UEI will need to contact the Division and comply with this Plan or request a meeting with the Division to present alternative Best Management Practices. It is important to stress that execution of this Plan is required **ONLY** if UEI decides to increase construction efforts at the Lila Canyon Mine site.

Furthermore, restrictions on increased construction activity will apply only if ground surveys (following the protocol in this Plan) definitively show that the nests are active or if increased efforts would disturb RMS.

UEI may conduct work activities during the Feb 1 - July 1 nesting season only if work activity has been initiated prior to and up through February 1. The work activities conducted during the nesting season (Feb. 1 – July 1) must be at an equivalent or lesser level of intensity than the activity that occurred prior to and up until Feb. 1. The "level of intensity" takes into account: days per week, hours per day, and noise/disturbance level of the work activities.

GE Biology and Survey Considerations

Jim Parish (DWR) and Nathan Darnall (USFWS):

- ❖ Need to determine which nest within the territory the birds are tending or laying eggs.
- ❖ Peak GE egg laying occurs last week of February to first week of March, but ranges from January through April. The birds at Lila may have already laid their eggs or may not start for another month or more, if conditions are suitable.
- ❖ It will be very important to record behavior at the nest to clearly determine if the pair has laid their eggs.

- ❖ GE are more likely to abandon eggs than chicks, so the most critical time for the birds are during the egg laying periods and approximately 17 days into the incubation period.
- ❖ GE are secretive and can easily leave a nest without being seen. They also do not typically call near the nest. Unless the observation point allows one to see into the nest, a quick visit would not suffice to determine whether a nest is active or if there are eggs.
- ❖ Approximate critical periods depending on elevation:
 - Egg laying period: Jan 1 to mid April
(mean February 27 through March 9 for Central Utah*;
for the pair at Lila the laying may be around Mid March**).
 - Hatching period (42 day incubation period): Feb 24 to mid May
(mean April 9 to April 19 for Central Utah*;
for the pair at Lila the hatching may be around May 5**).
 - Fledging period: May 4 to July 20
(mean June 17 to June 27 for Central Utah*;
for the pair at Lila fledging may be around July 14**).

*Kent Keller (2007) Golden Eagle Nesting Survey Report For The Central Utah Study Area February – July 2007.

**Leroy Mead (2007) DWR observations during 2007 fly-over survey.

USFWS/Division Survey Requirements

- ❖ Biologist must be knowledgeable in raptor behavior and habitat.
- ❖ Contracted biologist should be accompanied by a representative from DWR depending on DWR's time availability or DWR may plan independent visit(s).
- ❖ Biologist(s) will determine
 - Line-of-sight for all 5 nest/habitat locations
 - Whether GE are present
 - Whether GE are exhibiting nesting and other notable behavior
 - Which, if any, nest within the territory is being tended or is active
 - Whether GE are tending eggs
- ❖ Surveys must be conducted by the following protocol to confirm a nesting pair
 - At least 4 times between last week of Feb through first week of April
 - At 2-3 week intervals
 - At dawn plus four hours for each survey, unless available observations show without doubt the stage of nesting, or if it is possible to see into the nest
 - In a sensitive manner to not disturb the GE
 - With scopes and binoculars
 - To include, records in writing, the details of behavioral observations including times associated with the behaviors (e.g., minutes bird was in nest).
- ❖ If, by end of the first week of April, there are no GE nesting, then UBI will be cleared for increased construction activity (after consideration of RMS).
- ❖ If GE are nesting at any time during the exclusionary period, then UBI must follow the provisions described above in "Exclusionary Provisions".
- ❖ Division must receive a verbal report within 24 hours of each survey.
- ❖ Division must receive a final written report for all the nests within 45 days of the last survey.

ROCKY MOUNTAIN SHEEP

Exclusionary Provisions for RMS

The exclusionary periods for RMS are

- ❖ Winter range: Dec 1 – April 15
- ❖ Parturition: May 1 – June 15

If UEI determines that he would like to request consideration for approval to increase construction activity between February 1 – April 15 and May 1 - June 15, then UEI must contact the Division. The Division will contact the involved agencies and may facilitate a meeting with UEI to discuss the request. The provisions to increase activity may include (but not limited to) conducting a series of surveys conducted by biologists.

UEI may conduct work activities during these sensitive periods only if work activity has been initiated prior to and up through February 1. The work activities conducted during the sensitive season must be at an equivalent or lesser level of intensity than the activity that occurred prior to and up until Feb. 1. The "level of intensity" takes into account: days per week, hours per day, and noise/disturbance level of the work activities.

Division Inspections

- ❖ Will conduct inspections of the Lila Canyon Mine project area
- ❖ Will assess
 - Level of operations
 - UEI work log for Lila Canyon Mine
 - Footprint of operations

Attachment #3



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Price Field Office
125 South 600 West
Price, Utah 84501
<http://www.blm.gov/utah/price/>



FEB 12 2008

In Reply Refer to:
UTU-77122
2800
(UT-070)

CERTIFIED MAIL 7004 2510 0005 4743 5465
RETURN RECEIPT REQUESTED

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

Re: Lila Canyon Mine Facility

Dear Mr. Marshall:

On February 11, 2008, we received your request for an exception to the raptor stipulation for the above-mentioned right-of-way UTU-77122, to continue construction of the Lila Canyon Mine Facility. The project is located in an area where construction activities are prohibited from February 1 to July 15 for the protection of raptor nesting areas.

The BLM finds insufficient evidence to support continued construction activities through this closure period. Therefore your request for exception to the raptor stipulation is hereby denied.

It is our understanding your company has had ongoing activities on the subject right-of-way beyond the February 1 restriction date. As such, your company is in non-compliance with the terms and conditions set forth in the right-of-way grant. The BLM requests that all construction equipment and personnel be removed from the site within 24 hours of the receipt of this letter or subsequent action will be taken to remediate this situation.

If you have any questions, please contact Mike Robinson, Realty Specialist, at the above address or call (435) 636-3630.

Sincerely,

Michael Stiewig
Associate Field Manager

CONFIDENTIAL INFORMATION FOLDER

RAPTOR NEST LOCATION MAP

ATTACHMENT #4

ATTACHMENT #5

ATTACHMENT #6

Attachment #7

CNR-Cliff Nesting Raptor
Ref: Cliff Nesting Raptor Survey Lila and 9 Mile

Dear Mr. Marshall:

Based on our interpretation of the MRP- CNR surveys are to be conducted in all areas that could be within ½ mile of a proposed disturbance. With the advent of the BLM assuming jurisdiction over construction at the Lila mine surface facilities and the subsequent ground survey and monitoring of a golden eagle nest. The need to implement a helicopter survey becomes redundant and may even constitute harassment of the nesting eagle that is being monitored.

Furthermore, based on BLM guidelines it appears that future CNR surveys will be site specific to areas of potential disturbance; and limited in slope to ½ mile radius of the disturbance.

If my staff or I can assist you with further explanations or guidelines please give me a call.

Thank you
M.A. Coonrod
Owner EIS

APPENDIX C

Legal Financial, Compliance and Related Information

Annual Report of Officers
As submitted to the Utah Department of Commerce

Other change in ownership and control information
As required under R645-301-110

CONTENTS

APPENDIX D

Mine Maps

As required under R645-302-525-270

CONTENTS

APPENDIX E

Other Information

In accordance with the requirements of R645-301 and R645-302

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