

# White Oak Site Location Map

C/007/001

5/13/2009

File in:

Confidential

Shelf

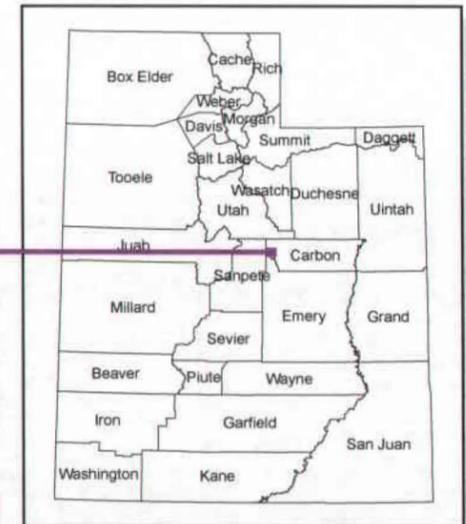
Expandable

Refer to Record No. 0002 Date 6/17/2009

In C 007/001 2009 06/17/2009

For additional information

- Interstate
- Divided Highway
- Principle Highway
- Improved Highway
- Paved Local Roads
- Improved Local Roads
- Unimproved Local Roads
- Other Roads
- AMR Plan Post-RectModified dwg Polygon
- Project Location



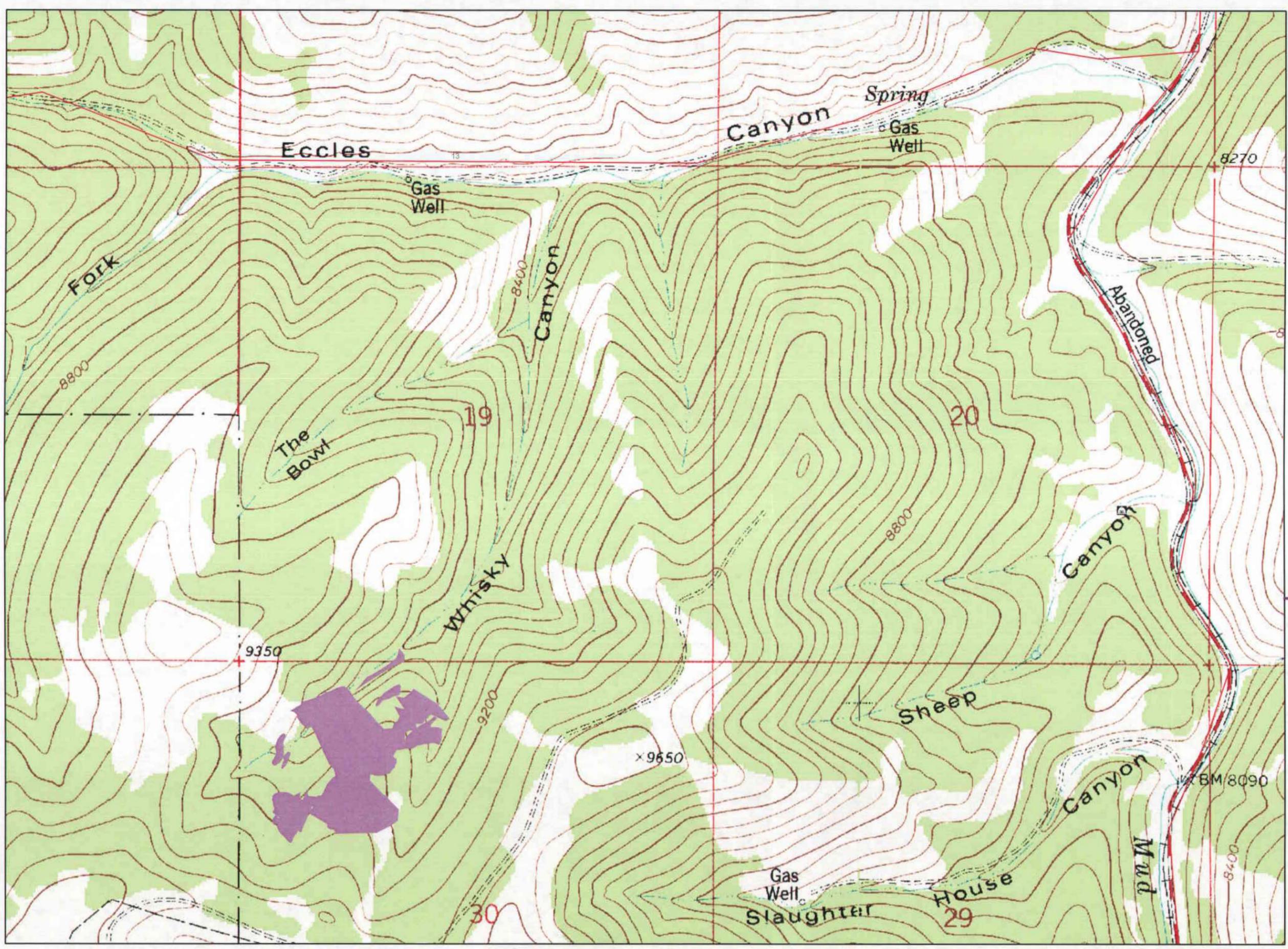
Locator Map



0.01 0.03 0.06 0.09 0.12 Miles

1:12,000  
1 inch = 0.19 miles

ProjectAreaMap.mxd  
NAD 1983 UTM Zone 12N



# White Oak Detail Map for Permit Approval

C/007/001

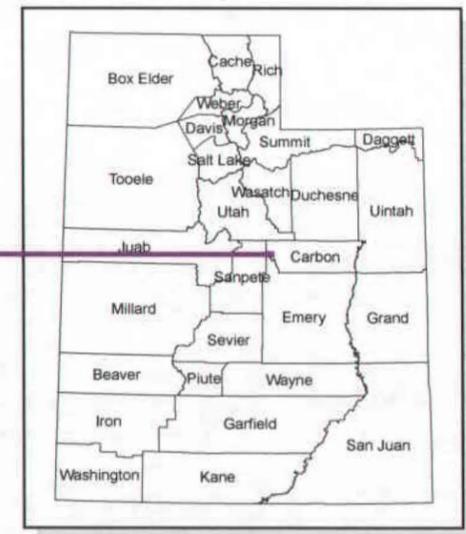
6/10/2009



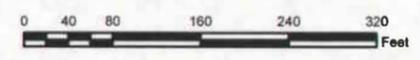
### Legend

#### Misc Points

- Comment
- Bed Rock
  - Drop
  - ▲ Parking lot
  - ▲ Seep
  - ✱ Sink Hole
  - Spring
  - Steep Drop
- Channels
- Access Road
  - Drainage
  - Large Rill
  - Ripped channel
  - Former portal
  - Contours
- Damaged Stream Channel
- Descript
- Damaged Section
  - No Action

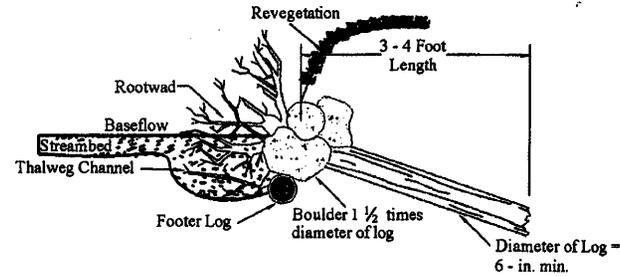
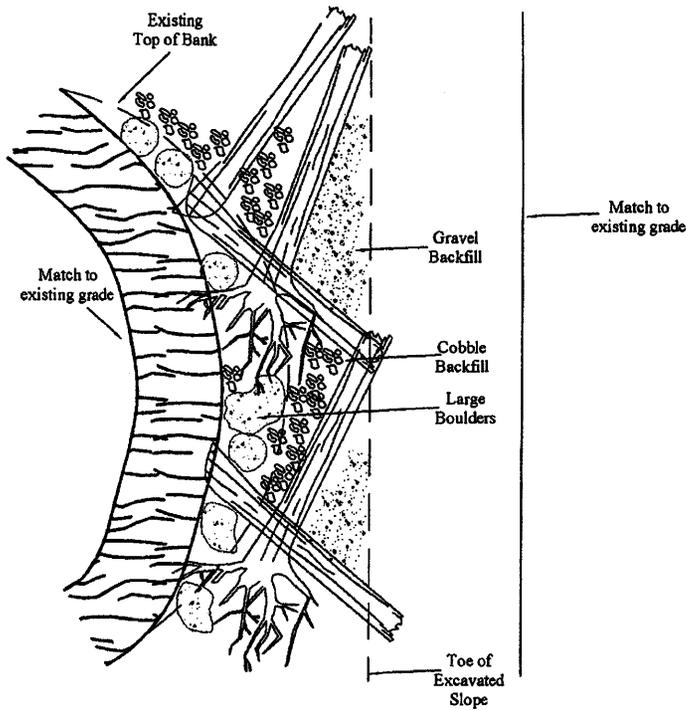


Locator Map



1:2,000  
1 in = 167 ft

ProjectDetailPermit.mxd  
NAD 1983 UTM Zone 12N



LEGEND:

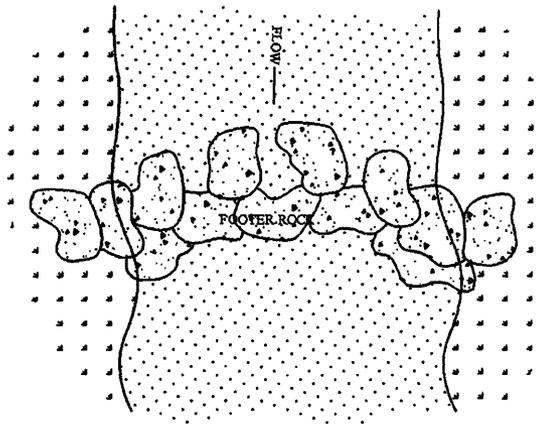
 <b>Lodestar Energy Inc.</b> Mountain Operations, White Oak Mine HC 35, Box 370, Helper Ut. 84526 PH #: 435-637-9200 Fax #: 435-448-9458	
DRAWN BY: RR	SCALE: <b>NTS</b>
APPROVAL: DAVE MILLER	SHEET: 1 of 1
TITLE: Reventment System	DATE: FEB. 28, 2001
DRAWING: C:\Dave\reventment sys.dwg	REV. DATE:

**INCORPORATED**  
**EFFECTIVE:**  
**OCT 26 2001**  
 UTAH DIVISION OIL, GAS AND MINING  
 PRICE FIELD OFFICE

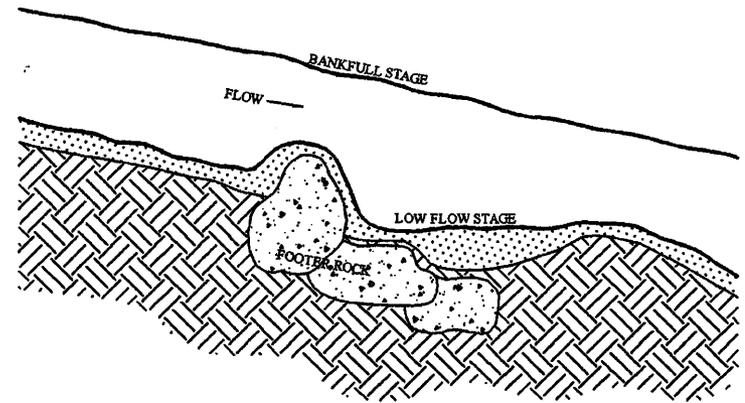


 <b>Lodestar Energy Inc.</b> Mountain Operations, White Oak Mine HC 35, Box 370, Helper Ut. 84526 PH #: 435-637-9200 Fax #: 435-448-9458	
DRAWN BY: Lodestar Engineering	SCALE: <b>NTS</b>
APPROVAL: DAVE MILLER	SHEET: 1 of 1
TITLE: Figures for Stream Alteration Permit - Division of Water Rights	DATE: Aug. 29, 2001
DRAWING: c:\Dave\stream dwgs\01.dwg	REV. DATE:

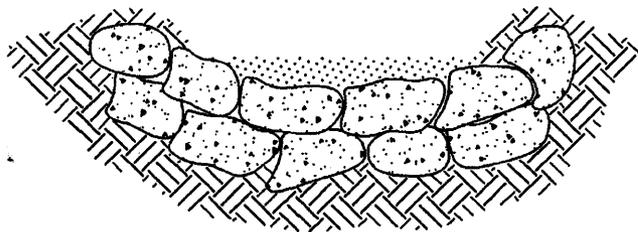
PLAN VIEW



PROFILE VIEW



CROSS SECTION VIEW



LEGEND:



**Lodestar Energy Inc.**  
Mountain Operations, White Oak Mine  
HC 35, Box 370, Helper Ut. 84526

PH #: 435-637-9200 Fax #: 435-448-9456

DRAWN BY: JASON BENNETT

SCALE: **NTS**

APPROVAL: DAVE MILLER

SHEET: 1 of 1

TITLE: **VORTEX WEIR**

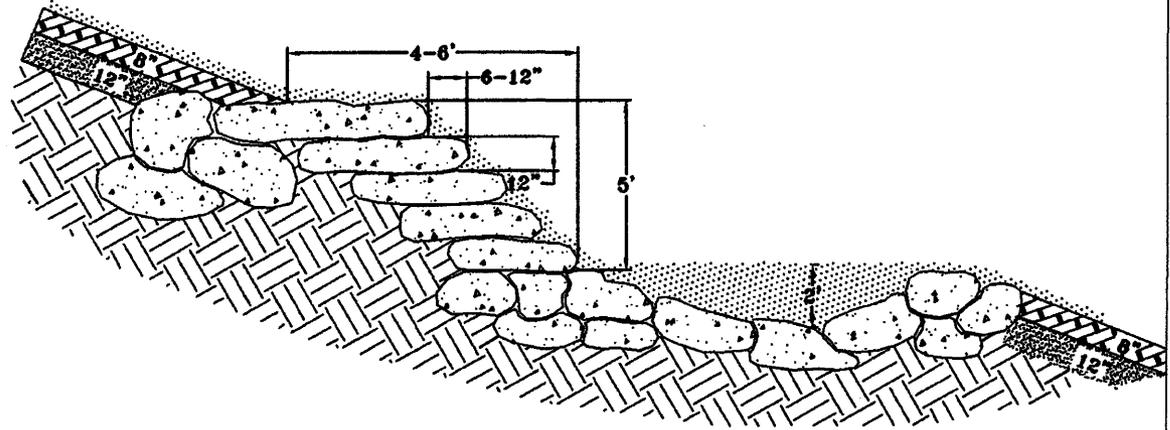
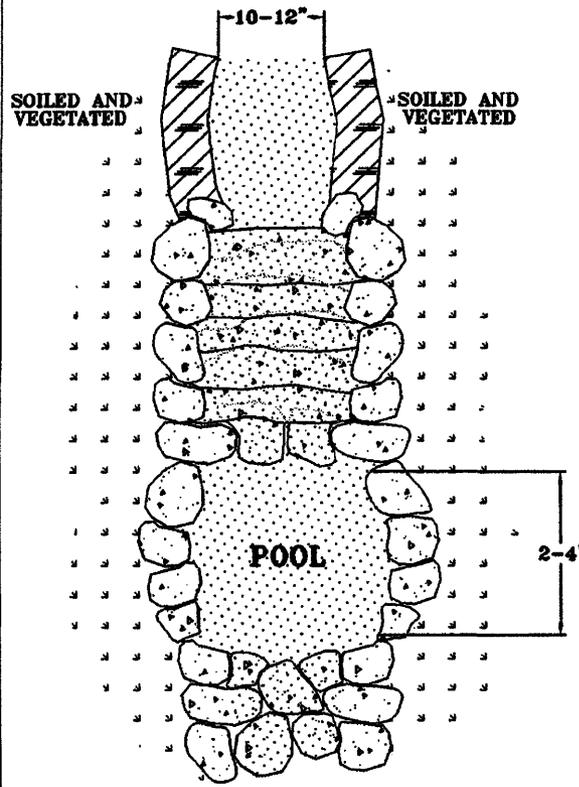
DATE: FEB. 20, 2001

DRAWING: C:\ASOW\WHITE OAK\VORTEX WEIR.DWG

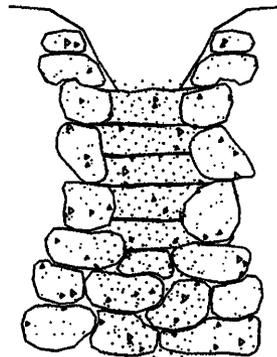
REV. DATE:

PROFILE VIEW

PLAN VIEW



CROSS SECTION VIEW



**INCORPORATED**  
EFFECTIVE:  
**OCT 26 2001**  
UTAH DIVISION OIL, GAS AND MINING  
PRICE FIELD OFFICE

LEGEND:



< 4" Gravel  
< 2" x 0 Material

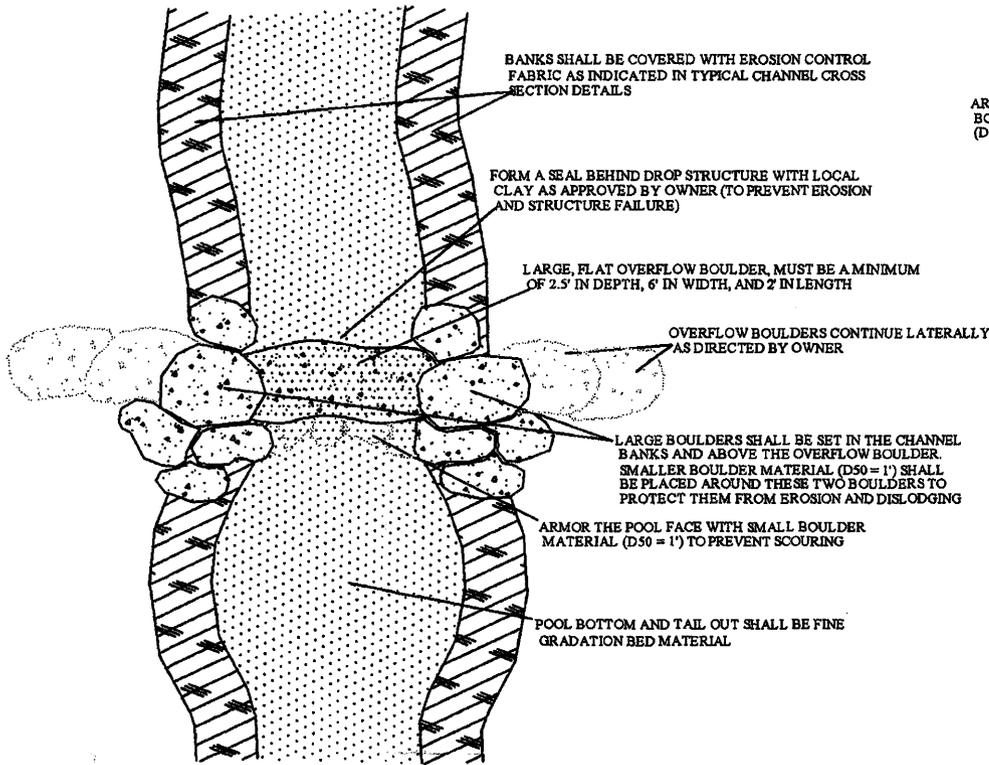


**Lodestar Energy Inc.**  
Mountain Operations, White Oak Mine  
HC 35, Box 370, Helper Ut. 84526  
PH #: 435-637-9200 Fax #: 435-448-9456

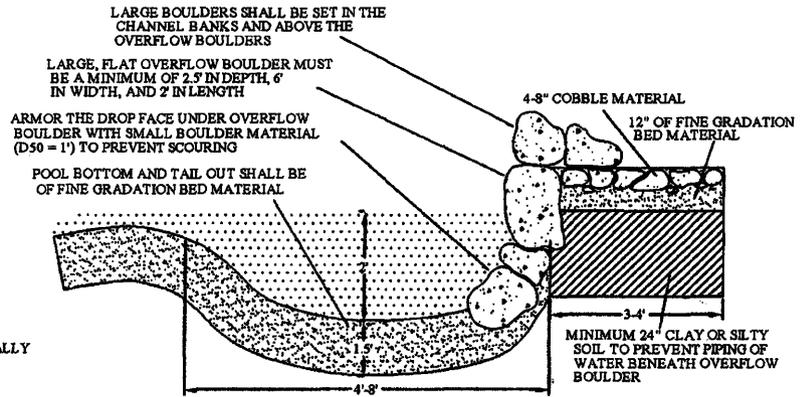
Drawn By: JASON BENNETT	Date: Feb. 21, 2001	Scale: NTS
Approved: DAVE MILLER	Drawing Location: LADDER DROP.DWG	

**LADDER DROP**  
**SIMULATES BEDROCK EXPOSED**

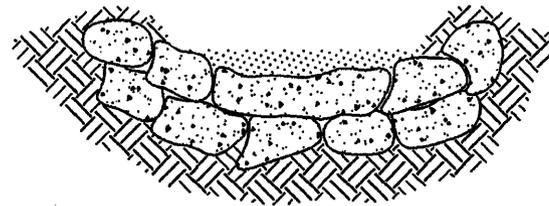
PLAN VIEW



PROFILE VIEW



CROSS SECTION VIEW



LEGEND:



**Lodestar Energy Inc.**

Mountain Operations, White Oak Mine  
 HC 36, Box 370, Helper Ut. 84528  
 PH #: 435-637-9200 Fax #: 435-448-9456

Drawn By: JASON BENNETT	Date: Feb. 28, 2001	Scale: NTS
Approved: DAVE MILLER	Drawing Location: C:\JASON\WHITE OAK\CHANNEL PROFILE.DWG	
Drawing:		

**CHANNEL PROFILE**

**1' DROP STRUCTURE**

0002

C007 0001  
Outgoing  
OK

**JOINT PERMIT APPLICATION FORM**  
U.S. ARMY CORPS OF ENGINEERS - FOR SECTIONS 404 AND 10  
UTAH STATE ENGINEER'S OFFICE - FOR NATURAL STREAM CHANNELS

Application Number

(Assigned by):

Corps

State Engineer

Applicant's Name (Last, First M.I.) Division of Oil, Gas & Mining - Coal Regulatory Program		Authorized Agent Dana Dean		Telephone Number and Area Code (801) 538-5214
Applicant's Address (Street, RFD, Box Number, City, State, Zip) 1594 West North Temple, Suite 1210 Salt Lake City, Utah 84114-5801				
<b>PROJECT LOCATION</b>				
Quarter Section(s) NW 1/4	Section 30	Township T13S	Range R7E	Base & Meridian Salt Lake
County Carbon	Watercourse to be altered Whiskey Creek		Check one: _____ Within City Limits <input checked="" type="checkbox"/> Outside City Limits List town or nearest town:	
Project location or address: Former White Oak Mine Site Scofield Route, Helper, Utah				
Brief description of project: The project seeks to repair a segment of Whiskey Creek that has become entrenched and is actively downcutting in the steepest segments. Previous channel work under permit # 00-91-24SA was completed between 2003-2005. Since then, drop structures have lost their integrity and filter fabric is exposed along a segment of stream. In the steepest gradient rip rap and filter fabric has washed away and the channel is eroded over 7 feet (see photographs). The proposed repairs include: Planting the length of both channel banks (1,200 feet) with riparian species of trees, shrubs, reeds and stoloniferous grass (proposed plant list attached); Beginning 950 ft. from upstream junction, installing drop structures along 600 ft. of the channel to dissipate energy while allowing gradient change; Beginning, 1550 ft. from upstream junction, widening the channel bottom and installing revetments and ladder drop structures above a holding pool.				
Purpose (justification) of project: The purpose is to stabilize the ephemeral channel to carry snowmelt and storm flows without transporting sediment downstream and to create a well vegetated channel that mimics the pre-mining environment. The Site Location Map presents the project area with the affected area of Whiskey Creek outlined. The Detail Map depicts the approximate 1,200 foot length of the affected portion of Whiskey Creek as well as boundaries of the reclaimed portions of the mine. The final figure represents 3 different views of the proposed drop structures to be installed to aid in energy dissipation.				
Is this a single and complete project or is it part of a larger project, continuing project, or other related activities? If so, please describe the larger project or other related activities. The stream repair work is part of a larger project to make improvements to the unstable, reclaimed mine site. Other proposed repairs include: compaction of a sinkhole that formed near the former mine portals and terracing, reseed and mulch the steep slopes where erosion is reducing reclamation success.				
If project includes the discharge of dredged or fill material into a watercourse or wetland:  Cubic yards of material: This section is not applicable.  Acreage or square footage of waters of the United States, including wetlands, affected by the project:  Source and type of fill material:				

**COPY**

File in:

C0070001.d007 Outgoing

Refer to:

- Confidential  
 Shelf  
 Expandable

Date 06/27/09 For additional information

Alternatives (other ways to accomplish the project purpose):

No alternatives are proposed. The repairs are a necessary attempt to improve hydrologic function of the stream channel and enhance the aesthetics of the area.

**COMPLETE** names and addresses of adjacent property owners (immediately upstream and downstream) or other individuals who may be affected by this project:

Milton A. Oman, LTD  
c/o Darin Caine  
1504 East Zenith Avenue  
Salt Lake City, UT 84093

Hilda M. & Robert G. Hammond  
2912 Redwood Avenue  
Costa Mesa, CA 92626

List other authorizations required by Federal, state or local governments (i.e. : National Flood Insurance Program), and the status of those authorizations.

Division of Oil, Gas, & Mining Permit No. 007/0001 - White Oak #1 and #2 Mine

Estimated starting date of project:

7/1/2009

Estimated completion date:

10/31/2011

(If project has already been partially or totally completed, indicate date of work. Indicate existing work on drawings).

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief, such information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities or am acting as the duly authorized agent of the applicant.

Signature of Applicant



Date

6-17-09

I hereby certify that

\_\_\_\_\_ is acting as my agent for this project.

Agent's address and telephone number:

## INSTRUCTIONS

### Applications which do not include the following will not be processed.

For a complete application, you **MUST** include the following on 11 X 17 or smaller paper (for large projects, multiple sheets with a key may be used). Clear, hand-drawn plans approximately to scale are acceptable.

1. An accurate location map (USGS quadrangle map preferred)
2. A plan view of the proposed activity (as seen from above) including dimensions of work.
3. A cross-section view of the proposed activity (may use typical cross-section for large projects) including dimensions.
4. For projects which include wetlands, an accurate wetland delineation must be prepared in accordance with the current method required by the Corps.

# COPY

WHISKEY CREEK PHOTOS 2009



Channel has been damaged by heavy rainstorm activity. Photo date 05/21/2009



Close up view of deeper section of the channel. Photo date 06/03/2009



Looking downstream approximately 950 ft. from upstream junction. Photo date 05/21/2009



Looking upstream approximately 1250 feet from upstream junction. Photo date 05/21/2009.



looking downstream approximately 1550 ft. from upstream junction. Photo date 05/21/2009.

Whiskey Creek Riparian Planting List

Dormant Cutting or Plug for 1-foot grid spacing waterline to mid-bank

Nebraska Sedge (*Carex nebrascensis*)

Baltic rush (*Juncus balticus*)

Creeping Spikerush (*Eleocharis palustris*)

Hardstem Bullrush (*Scirpus acutus*)

Dormant Cutting or Plug for 2-foot grid spacing waterline to mid-bank

Drummond Willow (*Salix drummondiana*)

Coyote Willow (*Salix exegua*)

Redosier Dogwood (*Cornus sericea ssp. sericea*)

Plug for 5-foot grid Spacing mid-bank

Skunkbush sumac (*Rhus trilobata*)

Silver Buffaloberry (*Shepherdia argentea*)

Saskatoon Serviceberry (*Amelanchier alifolia*)

Plug for 10-foot grid Spacing along overbank zone

Engleman Spruce (*Picea englemannii*)      along north facing banks

Rocky Mntn. Douglas fir (*Pseudotsuga menziesii*) along north facing banks

Mountain Ash (*Sorbus scopulina*)      along north facing banks

Quaking aspen (*Populus tremuloides*)      along south facing banks

Water Birch (*Betula occidentalis*)      10-foot spacing along south facing banks

**COPY**

Whiskey Creek Riparian Seeding List

Beardless Wildrye (*Leymous triticoides*)

Mountain Brome (*Bromus carinatus*) var. "Bromar"

Streambank Wheatgrass (*Elymus lanceolatus ssp. Riaparium*)

Creeping Meadow Foxtail (*Alopecurus arundinaceus*)

**COPY**