

DEC 22 2010



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, Pennsylvania 16801-4850

December 20, 2010

Daniel Maltese
Civil & Environmental Consultants, Inc.
333 Baldwin Road
Pittsburgh, PA 15205-9702

RE: USFWS Project # 2010-0581

Dear Mr. Maltese:

This responds to your letter of September 15, 2010, requesting our review of mist-net survey results for the proposed Foundation Mine Coal Refuse Disposal Alternatives Analysis coal mining complex project, located in Greene County, Pennsylvania. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

The proposed project is located within the range of the Indiana bat (*Myotis sodalis*), a species that is federally listed as endangered. Due to proposed forest clearing associated with the construction of the coal complex, mist-netting was recommended to determine whether Indiana bats are present. According to the September 13, 2010 survey report, surveys were conducted at four sites within the project area from August 4 to August 11, 2010, in accordance with the Fish and Wildlife Service's Indiana bat mist-net survey guidelines. During these surveys, 10 bats of three species were captured, but this did not include any Indiana bats. Based on these survey results, we have concluded that Indiana bats are either not present in the project area, or are present in such low densities that they were not detected. Consequently, we have determined that tree-clearing related to installation of the proposed coal mining complex project is not likely to adversely affect the Indiana bat.

This response relates only to endangered or threatened species under our jurisdiction, based on an office review of the proposed project's location. No field inspection of the project area has been conducted by this office. Consequently, this letter is not to be construed as addressing potential Service concerns under the Fish and Wildlife Coordination Act or other authorities.

To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

If you have any questions regarding this matter, please contact Kim Faulds of my staff at 814-234-4090.

Sincerely,



Clinton Riley
Field Office Supervisor



**INDIANA BAT (*Myotis sodalis*)
SURVEY REPORT**

**FOUNDATION MINE COMPLEX
GREENE COUNTY, PENNSYLVANIA**

Prepared for:

**FOUNDATION MINING, LLC
158 PORTAL ROAD
WAYNESBURG, PA 15370**

Prepared by:

**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
333 BALDWIN ROAD
PITTSBURGH, PA 15205**

USFWS PROJECT # 2010-0581

CEC PROJECT 100-931

September 13, 2010

Civil & Environmental Consultants, Inc.

Pittsburgh

333 Baldwin Road • Pittsburgh, Pennsylvania 15205-9702
Phone 412/429-2324 • Fax 412/429-2114 • Toll Free 800/365-2324 • E-mail info@cecinc.com

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1.0 INTRODUCTION

This report presents the findings of an Indiana bat (*Myotis sodalis*) presence/probable absence mist net survey conducted for Foundation Mining, LLC (Foundation) by Civil & Environmental Consultants, Inc. (CEC). The survey was completed for the proposed Foundation Mine Complex located in Greene County, Pennsylvania (Figure 1). The proposed mine complex includes refuse disposal areas, shaft and slope mine entries, a coal preparation plant, conveyors, and a railroad siding expansion area.

The proposed project site is in Center Township located approximately 5.7 miles southwest of Waynesburg, Pennsylvania on the Rogersville and Holbrook, Pennsylvania 7.5' Quadrangle map (Figure 1). The proposed project site consists of an approximately 470-acres which includes upland forest habitat as well as open field, immature forested and riparian habitats.

The purpose of this study was to confirm the presence or probable absence of the federally endangered Indiana bat within the project area. This survey was based on CEC's professional judgment and interpretation of the technical criteria outlined in the U.S. Fish and Wildlife Service (USF&WS) (Region 3) agency draft document titled *Indiana bat (Myotis sodalis) Draft Revised Recovery Plan: First Revision* dated April 2007.



2.0 METHODOLOGY

CEC biologists traversed the project area by vehicle and on foot to identify potential bat habitat (roosting areas, feeding areas, drinking pools, and flight corridors). Our field reconnaissance was completed in order to establish mist net sites that would maximize the success of the mist net survey. Given the size, shape, and amount of forested habitat within the project area, a total of four mist net sites were completed for the project. Refer to Appendix A for U.S. Fish & Wildlife Service (USF&WS) correspondence relating to the number of proposed mist net sites and proposed net nights.

The four mist net sites completed by CEC within the project area contained at least two of the following bat habitats: roosting areas, feeding areas, and/or flight corridors. These sites had the highest potential to capture an Indiana bat (Figure 2).

The mist net sites completed by CEC included a minimum of two mist net sets, placed at least 30 meters apart. All mist nets used during the survey were Avinet - USA made 75/2 38mm mesh, polyester, reduced "bag" for bats (Avinet Inc. - Dryden, New York). The mist nets measure 2.6 meters high, contain four shelves, and are various lengths ranging from 3 meters to 18 meters. CEC used Avinet stackable poles for single high net sets and custom built net poles that allow up to three nets to be stacked on top of each other. These custom-built net poles reach a maximum of 30 feet into the canopy. The custom-built net poles and CEC mist net surveying techniques are based upon Gardner, et al. 1989, and Nagorsen, et al. 1980.

The Indiana bat mist net survey was completed under strict adherence to the USF&WS *Indiana bat (Myotis sodalis) Draft Revised Recovery Plan: First Revision* dated April 2007, and was authorized by the Pennsylvania Game Commission Special Use Permit No. 96-2010 (Appendix B). All captured bats were identified by Mr. Ryan Slack, an authorized Collection Permit holder. Photographs of each mist net site and representative species of bats that were captured during the survey are presented in Appendix C. All collections made during the survey were recorded on field data sheets, which are presented in Appendix D.



3.0 RESULTS

CEC sampled a total of 16 net nights (4 survey sites x 2 nights per survey site x 2 net sets per site = 16 net nights) from August 4 through August 11, 2009. The survey sites were sampled starting at sunset and lasted a minimum of five hours. No severe weather (precipitation, strong winds, and/or temperatures dropping below 50 degrees Fahrenheit) was encountered during the surveys.

The following section provides a detailed description of the mist net sites and presents the results of the trapping effort at each site. A table summarizing the survey results follows the site descriptions.

Site 1

Mist net Site 1 was sampled over a 2 day period from August 4 to 5, 2010. On the initial survey night, one mist net set (one 6-meter long, double high net) was erected within a forested flight corridor along an unimproved road. The second net set (one 9-meter long, triple high net) was erected over a forested flight corridor along a driveway that ran through a White Pine stand. No bats were collected during the first night of surveying at Site 1.

On the second survey night, the nets remained in the same locations and were the same sizes as the first survey night. Two northern long eared bats (*Myotis septentrionalis*) were collected during the second survey night at Site 1.

Site 2

Mist net Site 2 was sampled over a 2 day period from August 6 to 7, 2010. On the initial survey night, one mist net set (one 9-meter long, triple high net) was erected within a forested flight corridor over what appeared to be an old ATV trail. The second net set (one 6-meter long, double high net) was erected within a forested flight corridor over what appeared to be an old



ATV trail. One northern long eared bat and one red bat (*Lasiurus borealis*) were collected during the first survey night at Site 2.

On the second survey night, the nets remained in the same locations and were the same sizes as the first survey night. No bats were collected during the second survey night at Site 2.

Site 3

Mist net Site 3 was sampled over a 2 day period from August 8 to 9, 2010. On the initial survey night, one mist net set (one 9-meter long, triple high net) was erected within a forested flight corridor over a trail that ran through a forested woodlot in a cow pasture. The second net set (one 6-meter long, double high net) was erected within a forested flight corridor over a trail that ran through a forested woodlot in a cow pasture. Two northern long eared bats and one red bat were collected during the first survey night at Site 3.

On the second survey night, the nets remained in the same locations and were the same sizes as the first survey night. No bats were captured during the second survey night at Site 3.

Site 4

Mist net Site 4 was sampled over a 2 day period from August 10 to 11, 2010. On the initial survey night, one mist net set (one 6-meter long, double high net) was erected over a third order perennial stream that was forested on the right descending bank and had a mowed hayfield on the left descending bank. The second net set (one 6-meter long, double high net) was erected over the same stream approximately 200 feet upstream from the first net set. No bats were collected during the first survey night at Site 4.

On the second survey night, the nets remained in the same locations and were the same sizes as the first survey night. Two red bats and one big brown bat (*Eptesicus fuscus*) were collected during the second survey night at Site 2.



TABLE 1
INDIANA BAT MIST NET SURVEY SUMMARY

Common Name	Scientific Name	Date	Site	No. of Bats Captured	Federal Status	State Status
Northern Long Eared bat	<i>Myotis septentrionalis</i>	8/5/2010	1	2	-	-
Northern Long Eared bat	<i>Myotis septentrionalis</i>	8/6/2010	2	1	-	-
Red bat	<i>Lasiurus borealis</i>	8/6/2010	2	1	-	-
Northern Long Eared bat	<i>Myotis septentrionalis</i>	8/8/2010	3	2	-	-
Red bat	<i>Lasiurus borealis</i>	8/8/2010	3	1	-	-
Red bat	<i>Lasiurus borealis</i>	8/11/2010	4	2	-	-
Big Brown bat	<i>Eptesicus fuscus</i>	8/11/2010	4	1	-	-



4.0 CONCLUSIONS

CEC conducted an Indiana bat (*Myotis sodalis*) presence/probable absence mist net survey within the approximate 470-acre Foundation Mine Complex located in Greene County, Pennsylvania between August 4 and 11, 2010. A total of ten bats representing three species were captured and identified at four mist net sites within the proposed project area. The mist netting effort consisted of a total of 16 net nights. All bats captured were identified, weighed, measured, and released alive. No Indiana bats, or any other threatened or endangered species, were captured during the survey. No additional bat surveys are recommended or warranted at this time.



5.0 LEVEL OF CARE

The Indiana bat survey services performed by CEC were conducted in a manner consistent with the criteria outlined in the USF&WS, Region 3 agency draft document titled *Indiana bat (Myotis sodalis) Draft Revised Recovery Plan: First Revision* dated April 2007, and with the level of care and skill ordinarily exercised by members of the environmental consulting profession practicing contemporaneously under similar conditions in the locality of the project.



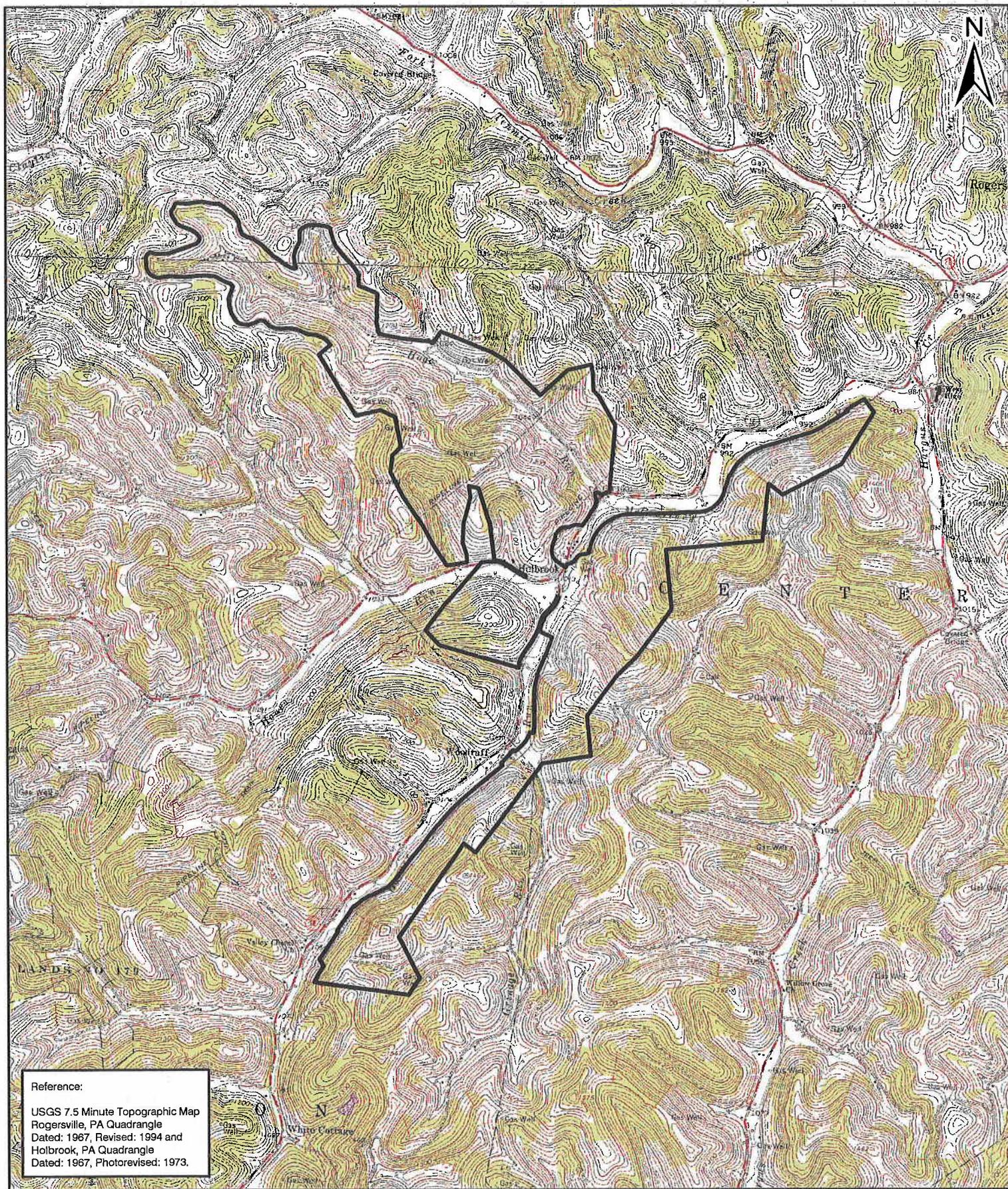
6.0 REFERENCES

Gardner, J. E., J. D. Garner, and J. E. Hofmann. 1989. A Portable Mist-Netting System for Capturing Bats with Emphasis on *Myotis sodalis* (Indiana bat). *Bat Research News* 30:1-8.

Nagorsen, D. W.; Peterson, R. L., 1980: Mammal Collectors Manual. A Guide for Collecting, Documenting, and Preparing Mammal Specimens For Scientific Research. Belonging to the unnumbered series: Life Sciences Miscellaneous Publications. Royal Ontario Museum, Toronto. ISBN: 0-88854-255-0 pa.

U.S. Fish and Wildlife Service. 2007. *Indiana bat (Myotis sodalis) Draft Revised Recovery Plan: First Revision*. U.S. Fish and Wildlife Service, Fort Snelling, MN. 258 pp.

FIGURES



Reference:
 USGS 7.5 Minute Topographic Map
 Rogersville, PA Quadrangle
 Dated: 1967, Revised: 1994 and
 Holbrook, PA Quadrangle
 Dated: 1967, Photorevised: 1973.

DRAWN BY: CLC
 CHECKED BY: SRB
 APPROVED BY: *DAM*
 SCALE: 1" = 3,000'
 DATE: 8/17/2010

Legend

 Study Area

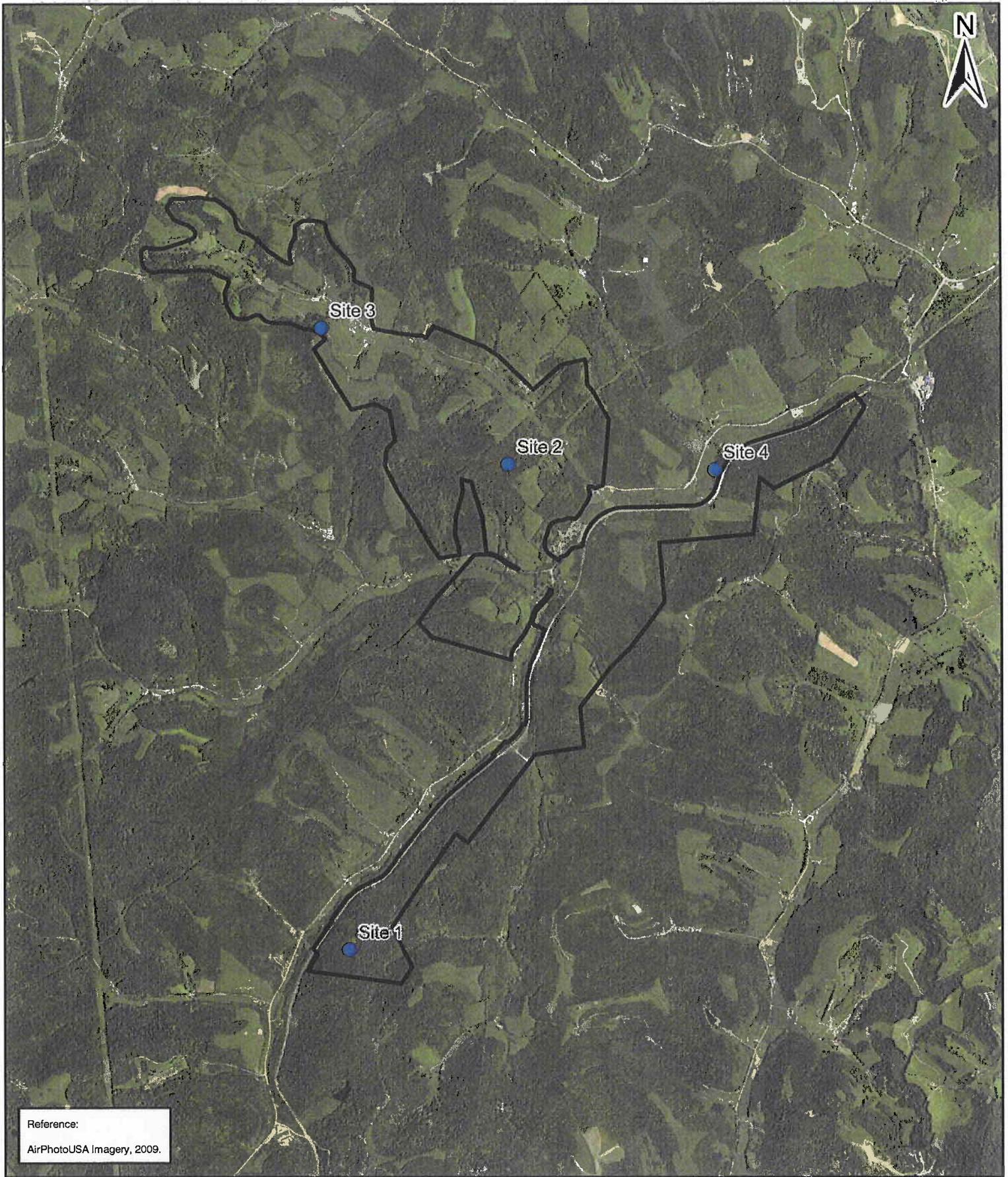
0 1,500 3,000 Feet

ISSUED FOR:
 ISSUED BY:

 CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
 333 Baldwin Road
 Pittsburgh, PA 15205-9702
 1-800-365-2324
www.cecinc.com

USGS SITE LOCATION MAP
FOUNDATION MINE BAT SURVEY
FOUNDATION MINING, LLC
GREENE COUNTY, PA

PROJECT NO.: 100-931 FIGURE: 1



Reference:

AirPhotoUSA Imagery, 2009.

DRAWN BY: CLC



ISSUED FOR:

CHECKED BY: SRB

Legend

ISSUED BY:

APPROVED BY: *[Signature]*

Study Area



CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

SCALE: 1" = 3,000'

Mist Net Site

333 Baldwin Road
Pittsburgh, PA 15205-9702
1-800-365-2324

DATE: 8/17/2010

www.cecinc.com

MIST NET SITES
FOUNDATION MINE BAT SURVEY
FOUNDATION MINING, LLC
GREENE COUNTY, PA

PROJECT NO.: 100-931

FIGURE: 2

APPENDIX A

U.S. FISH & WILDLIFE SERVICE CORRESPONDENCE

From: Pamela_Spayd%FWS@fws.gov on behalf of Pamela_Shellenberger@fws.gov

Sent: Wed 6/9/2010 10:19 AM

To: Slack, Ryan

Subject: Re: FW: permit application

Ryan,

I have reviewed the brief mist net survey plans for four different sites and concur with the amount of nets vs. the amount of forest disturbance acreage. Please submit survey data in separate reports.

Thank you,

Pamela Shellenberger

Fish and Wildlife Biologist

Endangered Species Program

U.S. Fish and Wildlife Service

315 South Allen Street, Suite 322

State College, PA 16801

P: 814-234-4090 x241

F: 814-234-0748

 "Slack, Ryan" <rslack@cecinc.com>

"Slack, Ryan"

<rslack@cecinc.com>

To<Pamela_Shellenberger@fws.gov>

06/04/2010 02:10 PM

cc

SubjectFW: permit application

Hi Pam,

Attached is our PA collectors permit application for conducting mist netting on several coal mining permitting projects. Greg Turner has indicated that we are approved through his agency to begin the work. Our goal is to begin these surveys on the evening of June 7. I was wondering if you would allow us to use the attached application as a study plan to gain concurrence on our level of efforts from your office to take to the field with us. Please let me know if this is not sufficient enough information and/or if the accelerated timeframe cannot be met.

Thanks for your attention to the matter,
Ryan

Ryan Slack / Project Manager

Civil & Environmental Consultants, Inc.

1 North Pennsylvania Street · Suite 1100 · Indianapolis, IN 46204

Toll-Free: 877-746-0749 · Fax: 317-655-7778

Mobile: (513)237-5051 · <http://www.cecinc.com>

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From: Dunlap, Kathleen

Sent: Tuesday, June 01, 2010 3:22 PM

To: 'bhollis@state.pa.us'

Subject: permit application

Mr. Hollis,

I've attached our permit applications for 4 sites in PA. I attempted to send the application on Thursday night via PDF, but I think the file was just too big. It doesn't look like it ever went through to you. I was able to reduce the size quite a bit, but lost a little of the detail. So, I have backed up this email PDF with a hardcopy that we are sending FedEx today. Hopefully, this will be enough to get things moving.

We had hoped to start on the projects at the end of the week, but since this is a holiday week, we anticipate a mid-June start. If there is anything else that you need from me, please let me know.

Thank you,
Katie

Kathleen Dunlap / Assistant Project Manager

Civil & Environmental Consultants, Inc.

8740 Orion Place, Suite 100 · Columbus, Ohio 43240

Toll-Free: 888-598-6808 · Direct: 614-310-0175 · Fax: 614-540-6638

Mobile: (614)499-3188 · <http://www.cecinc.com>

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Study Plan For: Foundation Mine (100-931)

Foundation Mine is located southwest of Waynesburg, Pennsylvania. Review of records including aerial photography, topographic maps, and mining maps indicated that approximately 470 acres of forested habitat exist. Please see the attached figure. This estimate includes all potentially forested areas, and may encompass areas of immature or low-suitability forested habitat. We will use our best professional judgment to determine the most-suitable areas to mist net.

Based on the 470 acre scenario, the mist net survey will require a minimum of 16 net-nights (4 survey sites x 2 nights per survey site x 2 nets per survey night = 16 net nights) to complete the survey. Each mist-net survey site will include at least two mist-nets, placed a minimum of 100 feet apart. Each site will be sampled for 2 nights, which will begin at sunset and last for a minimum of 5 hours. In the case of severe weather including precipitation, strong winds, and/or temperatures dropping below 50 degrees Fahrenheit during the initial survey effort, surveys will be terminated and sites will be resurveyed under suitable conditions, in accordance with established protocols.

At this time, we anticipate the survey to commence in early to mid June, weather permitting.

APPENDIX B

SCIENTIFIC COLLECTION PERMIT



Commonwealth of Pennsylvania
PENNSYLVANIA GAME COMMISSION
 2001 Elmerton Avenue
 Harrisburg, PA 17110-9797

(717) 783-8164

SPECIAL USE PERMIT NO. 96-2010

QUALIFIED INDIANA BAT SURVEYOR: CEC, INC. RYAN SLACK 8740 ORION PLACE, SUITE 100 COLUMBUS, OHIO 43240 513-237-5051	EFFECTIVE 06/03/2010	EXPIRES 08/15/2010
ADDITIONAL QUALIFIED INDIANA BAT SURVEYORS: BAT IDENTIFIERS: ASSISTANTS: KATHLEEN DUNLAP, CODY BROUNCE, SCHUYLER BROUNCE, AND BRENT MOCK	SCIENTIFIC STUDY BAT SAMPLING - CAPTURE & RELEASE ALL BATS INCLUDING INDIANA BATS (MYOTIS SODALIS) RENEWABLE: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> REPORT REQUIRED: <input checked="" type="checkbox"/> AS SPECIFIED <input checked="" type="checkbox"/> UPON COMPLETION	

CONDITIONS AND AUTHORIZATIONS:

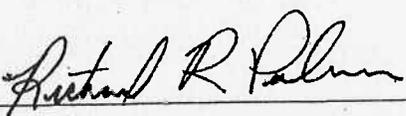
- A. THE VALIDITY OF THIS PERMIT IS CONDITIONED UPON RECEIPT OF ANY OTHER REQUIRED FEDERAL, STATE OR LOCAL PERMITS.
- B. PERMITTEE MAY CONDUCT MIST NET SURVEYS FOR BATS TO INCLUDE INDIANA BATS AT THE FOLLOWING SITES: FREEPORT MINE, FOUNDATION MINE, CUMBERLAND MINE, AND EMERALD MINE. ALL ARE LOCATED IN THE WAYNESBURG AREA, GREENE COUNTY..
- C. BATS MAY BE CAPTURED THROUGH THE USE OF MIST NETS AND HARP TRAPS. BATS MAY BE Banded USING FOREARM BANDS AS PRESCRIBED IN PROJECT OUTLINE. RADIO TELEMTRY MAY BE USED TO DETERMINE ROOST LOCATIONS AND FORAGING AREAS FOR ALL SPECIES. TISSUE SAMPLES MAY NOT BE TAKEN FROM INDIANA BATS (MYOTIS SODALIS).
- D. NEW EQUIPMENT SHOULD BE USED IN BAT SURVEYS IN COUNTIES UNAFFECTED BY WHITE NOSE SYNDROME (WNS). COUNTIES CURRENTLY AFFECTED BY WNS INCLUDE BUCKS, FAYETTE, CARBON, HUNTINGDON, LYCOMING, LACKAWANNA, LUZERNE, CENTRE, MONROE, NORTHUMBERLAND, SCHUYLKILL, SULLIVAN, AND MIFFLIN. USED EQUIPMENT THAT CANNOT BE SANITIZED AS DESCRIBED WILL NOT BE TRANSPORTED INTO WNS UNAFFECTED COUNTIES. AFTER EACH USE, ALL HARDWARE AND SOFT SIDED EQUIPMENT (TRAPS, NETS, HANDLING GLOVES, AND BAT RETENTION OR MEASUREMENT EQUIPMENT) SHALL BE 1) WASHED FREE OF COARSE MUD AND DEBRIS; 2) SANITIZED BY SUBMERGING IN A 10% BLEACH SOLUTION FOR AT LEAST 10 MINUTES; 3) RINSED IN CLEAN WATER AT LEAST TWICE; AND 4) AIR-DRIED. ANY EQUIPMENT THAT CANNOT BE SUBMERGED CANNOT BE TRANSPORTED INTO COUNTIES UNAFFECTED BY WNS. AS A REMINDER, THE WHITE FUNGUS IS ONLY ONE SIGN OF WNS. YOU SHOULD NOT EXPECT TO FIND BATS WITH FUNGUS ON THEM DURING THE SUMMER OR FALL. HOWEVER, ALL BATS WITH ABNORMAL WING/TAIL MEMBRANE CHARACTERISTICS DESCRIBED IN THE ATTACHED GUIDELINES SHOULD BE PHOTOGRAPHED AND REPORTED TO THE PENNSYLVANIA GAME COMMISSION WITHIN 24 HOURS (SEE ATTACHED). PERMITTEES ARE REQUIRED TO FOLLOW ALL DECONTAMINATION AND DISINFECTION GUIDELINES INCLUDED WITH THIS PERMIT (BAT HANDLING/DISINFECTION PROTOCOL FOR SUMMER BAT FIELD STUDIES).
- E. ALL BATS CAPTURED DURING THE SURVEY SHALL BE HANDLED IN A HUMANE MANNER AND NON TARGET BATS SHALL BE RELEASED UNHARMED. ANY NON TARGET BAT THAT MAY DIE DUE TO HANDLING WILL BE REPORTED TO THE PENNSYLVANIA GAME COMMISSION, BUREAU OF WILDLIFE MANAGEMENT, 2001 ELMERTON AVENUE, HARRISBURG, PA 17110, (717)787-5529, WITHIN 72 HOURS OF ITS DEATH.
- F. A REPORT OF THE ACTIVITIES CONDUCTED THROUGH THIS PERMIT SHALL BE PROVIDED TO THE PENNSYLVANIA GAME COMMISSION UPON PROJECT COMPLETION. REPORTS WILL INCLUDE THE PROVIDED MANDATORY REPORTING FORMS. PLEASE SEND TO ADDRESS AS "E" ATTN: CAL BUTCHKOSKI.

SPECIAL USE PERMIT NO. 96-2010

QUALIFIED INDIANA BAT SURVEYOR: CEC, INC. RYAN SLACK 8740 ORION PLACE, SUITE 100 COLUMBUS, OHIO 43240 513-237-5051	EFFECTIVE 06/03/2010	EXPIRES 08/15/2010
	SCIENTIFIC STUDY BAT SAMPLING - CAPTURE & RELEASE INDIANA BATS (MYOTIS SODALIS) & ALL OTHER BATS	
ADDITIONAL QUALIFIED INDIANA BAT SURVEYORS: BAT IDENTIFIERS: ASSISTANTS: KATHLEEN DUNLAP, CODY BROUNCE, SCHUYLER BROUNCE, AND BRENT MOCK	RENEWABLE: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> REPORT REQUIRED: <input checked="" type="checkbox"/> AS SPECIFIED <input checked="" type="checkbox"/> UPON COMPLETION	

- CONDITIONS AND AUTHORIZATIONS:**
- G. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES AND PRESENTED TO ANY AUTHORIZED PERSON UPON REQUEST.
 - H. A QUALIFIED INDIANA BAT SURVEYOR MUST BE PRESENT DURING THE TIMES OF SURVEYS AND IS RESPONSIBLE FOR OVERSEEING ALL ASPECTS OF THE PROJECT INCLUDING ADHERANCE TO PGC NETTING STANDARDS AND EFFORT REQUIREMENTS. THIS PERSON SHALL BE LISTED ON THE USFWS QUALIFIED INDIANA BAT SURVEYORS LIST.
 - I. ONLY QUALIFIED INDIANA BAT SURVEYORS AND APPROVED BAT IDENTIFIERS WILL IDENTIFY BATS. BAT IDENTIFIERS SHALL BE LISTED ON THE USFWS BAT IDENTIFIER LIST.
 - J. PROJECT AREA MAY BE EXTENDED TO STATE GAME LANDS WITH PRIOR PERMISSION OF REGIONAL LAND MANAGEMENT SUPERVISOR (LMS), WHO CAN BE CONTACTED THROUGH THE APPROPRIATE REGIONAL OFFICE.
 - K. ONCE PERMISSION FROM THE LMS IS OBTAINED, WHEN PARKING OR LEAVING A VEHICLE UNATTENDED IN AN AREA NOT OPEN TO PUBLIC TRAVEL, PERMITTEE SHALL DISPLAY A LOGO OR CARD IN AN OBVIOUS LOCATION IN OR ON YOUR VEHICLE TO IDENTIFY ITS AFFILIATION AND LEAVE A COPY OF THIS PERMIT ON THE DASHBOARD, VISIBLE FROM OUTSIDE THE VEHICLE.
 - L. ACCESS WILL ONLY BE GRANTED FOR OFFICIAL PURPOSES AND NO UNAUTHORIZED PERSONS SHALL BE TRANSPORTED BEHIND COMMISSION GATES OR INTO OTHER AREAS CLOSED TO THE PUBLIC.
 - M. NO ACTIVITY SHALL OCCUR BEFORE NOON ON ALL SATURDAYS DURING THE SPRING TURKEY SEASON. ACCESS MAY BE DENIED AT OTHER TIMES DUE TO HUNTING SEASONS, INCLEMENT WEATHER, ROAD CONDITIONS OR OTHER CONFLICTS AS DETERMINED BY THE LMS. CONSENT FOR RIGHT OF ENTRY SHALL NOT INTERFERE WITH LAWFUL PUBLIC HUNTING AND TRAPPING ACTIVITIES.

GIVEN UNDER MY HAND AND THE SEAL OF THE PENNSYLVANIA GAME COMMISSION THIS 3RD DAY OF JUNE, 2010 AT HARRISBURG, DAUPHIN COUNTY, PENNSYLVANIA.



DIRECTOR, BUREAU OF WILDLIFE PROTECTION

c: CAL BUTCHKOSKI
 LES TOMLINSON, WMS TRUSSO
 WCO BURNS

APPENDIX C
PHOTOGRAPHS



Photo 1: View of forested flight corridor at Mist Net Site 1, Net Set A.



Photo 2: View of forested flight corridor at Mist Net Site 1, Net Set B.

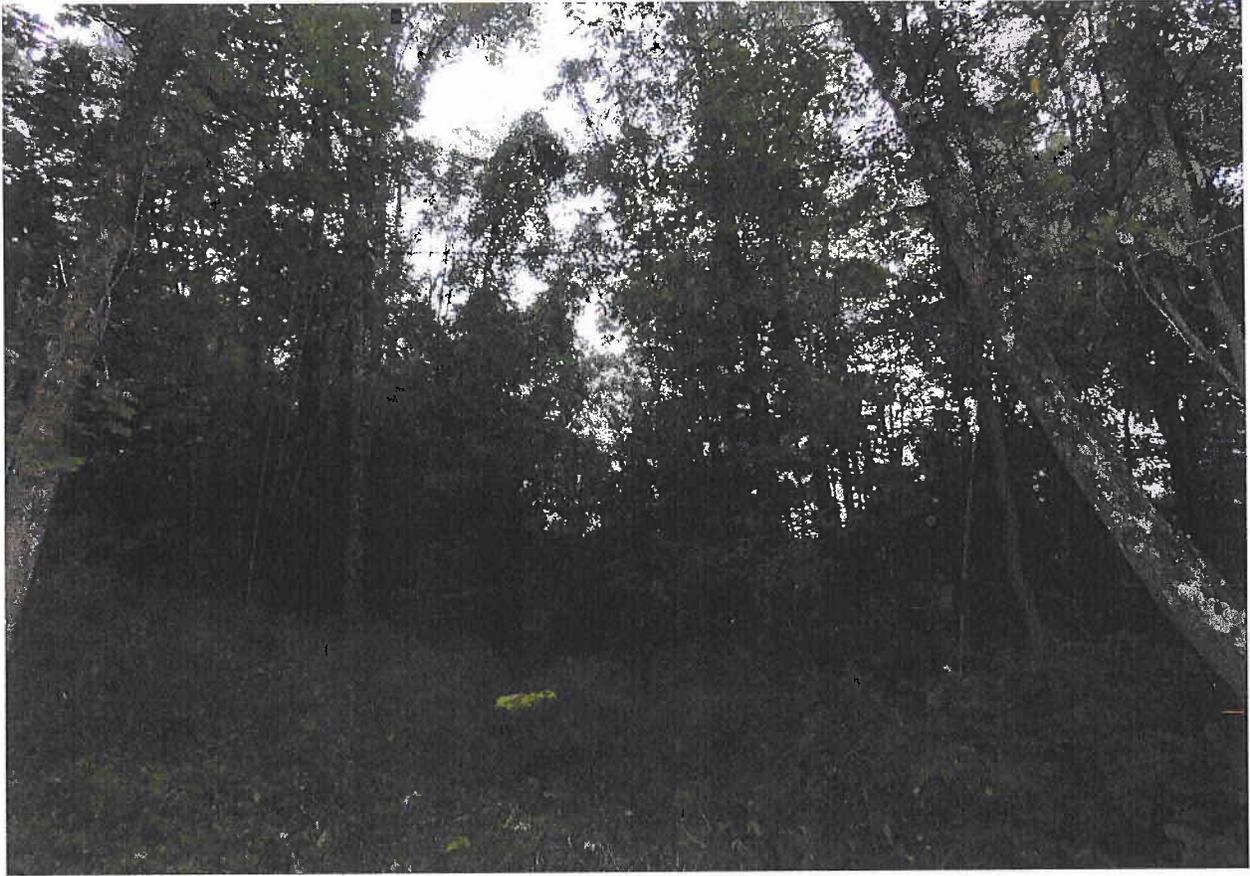


Photo 3: View of flight corridor over ATV trail at Mist Net Site 2, Net Set A.



Photo 4: View of forested flight corridor over ATV trail at Mist Net Site 2, Net Set B.



Photo 5: View of 3rd order stream at Mist Net Site 4, Net Set A.



Photo 6: View of 3rd order stream at Mist Net Site 4, Net Set B.



Photo 7: Northern Myotis bat (*Myotis septentrionalis*) captured at Mist Net Site 1.



Photo 8: Northern Myotis bat (*Myotis septentrionalis*) captured at Mist Net Site 2.



Photo 9: Eastern Red bat (*Lasiurus borealis*) captured at Mist Net Site 2.



Photo 10: Northern Myotis bat (*Myotis septentrionalis*) captured at Mist Net Site 3.



Photo 11: Eastern Red bat (*Lasiurus borealis*) captured at Mist Net Site 3.



Photo 12: Big Brown bat (*Eptesicus fuscus*) captured at Mist Net Site 4.



Photo 13: Eastern Red bat (*Lasiurus borealis*) captured at Mist Net Site 4.

APPENDIX D

PENNSYLVANIA GAME COMMISSION REPORT

COMMONWEALTH OF PENNSYLVANIA
Pennsylvania Game Commission
Bureau of Law Enforcement, Technical Services Division
2001 Elmerton Avenue, Harrisburg, PA 17110-9797

Section 1 - Cover

PERMITTEE BAT CAPTURE REPORT

Permit Number 96-2010

Project Name: Foundation Mine

Company/

Organization/

Permittee Name: Civil and Environmental Consultants, Inc.

Address: 333 Baldwin Road

Pittsburgh, PA 15205

Phone: (412) 429-2324 Fax: (412) 429-2114

E-Mail: rslack@cecinc.com

Project Supervisor Name: Dan Maltese

Supervisor Contact: Phone: (412) 429-2324

E-Mail: dmaltese@cecinc.com

If this is contracted work, provide the name & address of the individual/organization work is being performed for:

Alpha Natural Resources

158 Portal Road

Waynesburg, PA 15370

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/4/2010 2. Company Name: Civil and Environmental Consultants
3. Bat Identifier: Ryan Slack 4. Assistants: Stacy Brounce
(Responsible Recorder)
5. Site Name and/or Number: Foundation Site 2
6. Site is (circle one): hibernation site summer habitat
- 7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
other structure, describe - _____
- 7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):
Forested Unimproved Roads
8. County: Greene 9. 7.5' Quad.: Rogersville and Holbrook
10. Was site GPS'd (required)? YES - NO
11. Geographic Coordinates (D-M-S): Latitude: 39°-49'-47.9"N, Longitude: 80°-19'-49.9"W
Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____
12. Ownership and Access: (Who owns site or controls access? Give name and address.)
Alpha Natural Resources
13. Time (military) & Temperature: Start Time 21:30 h Stop Time 01:30 h Total Minutes: 30
Start Temp. 20 °C End Temp. 18 °C (must stay ≥10°C for summer netting)
14. General Weather (circle one): Clear; Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain;
(suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____
15. General Wind Conditions (circle one): Calm, Breezy (Leaves Rustling), Windy (Trees Swaying).
16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	4	1.2m x 2.6m	Stacked over trail	124.8 sq. m
A	Nets	2	1.0m x 2.0m	Stacked over Unimproved Road	31.2
B	Nets	3	9m x 2.0m	Stacked over Camp Drive Way	70.2

Total Capture Area: 101.4 sq. m

(Site Survey Record - Continued) Site Name/No.: Foundation near Site 1 Date: 8/4/2010

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)
 White Pine stand and open old field with transecting unimproved Road!
 Dominant Tree species is white pine, white ash and sugar maple.

18. Was reproductive status checked? YES / NO (if "NO" only enter numbers in Total columns)

*CAPTURE RESULTS

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>			1			3	2	1	1	2	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>											
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>											
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other - specify:											
Other - specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total No Bats

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/5/2010 2. Company Name: Civil and Environmental Consultants
3. Bat Identifier: Ryan Slack 4. Assistants: _____
(Responsible Recorder)
5. Site Name and/or Number: Foundation Mine Site 1
6. Site is (circle one): hibernation site summer habitat
- 7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
other structure, describe - _____
- 7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):
Forested Unimproved Roads
8. County: Greene 9. 7.5' Quad.: Rogersville and Holbrook
10. Was site GPS'd (required)? YES NO
11. Geographic Coordinates (D-M-S): Latitude: 39°-49'-47.9"N, Longitude: 80°-19'-49.4"W
Datum (circle one) NAD27 (Preferred), NAD83, WGS84, Other: _____
12. Ownership and Access: (Who owns site or controls access? Give name and address.)
Alpha Natural Resources
13. Time (military) & Temperature: Start Time 21:30 h Stop Time 01:30 h Total Minutes: 300
Start Temp. 21 °C End Temp. 19 °C (must stay ≥10°C for summer netting)
14. General Weather (circle one) Clear; Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain;
(suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____
15. General Wind Conditions (circle one): Calm Breezy (Leaves Rustling), Windy (Trees Swaying).
16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
	Nets	4	12m x 2.6m	Stacked over trail	124.8 sq. m
A	Nets	2	6m x 2.6m	Stacked over Unimproved Road	31.2
B	Nets	3	9m x 2.6m	Stacked over Camp Driveway	70.2

Total Capture Area: 101.4 sq. m

(Site Survey Record - Continued) Site Name/No.: Foundation Mm Sik 1 Date: 8/5/2010

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

White Pine Stand and Open Old Field with transecting Unimproved Roads.
Dominant Tree Species: White Pine, White Ash and Sugar Maple.
(interior Upland Second Growth Forest)

18. Was reproductive status checked? YES NO (if "NO" only enter numbers in Total columns)

*CAPTURE RESULTS

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>								1	1		2
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>											
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other - specify:											
Other - specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total <u>2</u>

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

M. Sept: Net B - 5.1g RFA = 36.0mm Wing Score \emptyset Juv
 M. Sept: Net B - 5.5g RFA = 33.8mm Wing Score \emptyset Adult

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/6/10 2. Company Name: CFC

3. Bat Identifier: Ryan Sluck (Responsible Recorder) 4. Assistants: Katie Dunlap

5. Site Name and/or Number: Foundation Mine site 2

6. Site is (circle one): hibernation site summer habitat

7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
other structure, describe - _____

7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):
forested trail

8. County: Greene 9. 7.5' Quad.: Rogersville and Holbrook

10. Was site GPS'd (required)? YES NO

11. Geographic Coordinates (D-M-S): Latitude: 39°-51'-43.0" N, Longitude: 80°-19'-5.2" W

Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____

12. Ownership and Access: (Who owns site or controls access? Give name and address.)
Alpha Natural Resources

13. Time (military) & Temperature: Start Time 2045 h Stop Time 0145 h Total Minutes: 300

Start Temp. 22 °C End Temp. 15.1 °C (must stay ≥ 10 °C for summer netting)

14. General Weather (circle one) Clear; Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain;
(suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____

15. General Wind Conditions (circle one) Calm; Breezy (Leaves Rustling); Windy (Trees Swaying).

16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	4	12m x 2.6m	Stacked over trail	124.8 sq. m.
A	Nets	3	9m x 2.6m	Stacked over trail	70.2
B	Nets	2	6m x 2.6m	Stacked over trail	31.2

Total Capture Area: 101.4 sq. m

(Site Survey Record - Continued) Site Name/No.: Foundation Mine / Site 2 Date: 8/6/10

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

upland interior forest
red oaks, black walnuts, white oak, American Elm

18. Was reproductive status checked? YES / NO (if "NO" only enter numbers in Total columns)

*CAPTURE RESULTS

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>					1						1
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>									1		1
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other - specify:											
Other - specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total
											2

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

Myo. sept. Not A wt - 6.25g RFA 34.5mm wing score ♂
L. borealis Not B wt - 8.25g RFA 38.5mm wing score ♂

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/7/2010 2. Company Name: CEC

3. Bat Identifier: Ryan Slack (Responsible Recorder) 4. Assistants: Katie Dunlap

5. Site Name and/or Number: Foundation Mine Site 2

6. Site is (circle one): hibernation site summer habitat

7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel, other structure, describe - _____

7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):
Forested Trail

8. County: Greene 9. 7.5' Quad.: Rogersville and Holbrook

10. Was site GPS'd (required)? YES - NO

11. Geographic Coordinates (D-M-S): Latitude: 39°-51'-43.0"N, Longitude: 80°-19'-5.2"W

Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____

12. Ownership and Access: (Who owns site or controls access? Give name and address.)
Alpha Natural Resources

13. Time (military) & Temperature: Start Time 20:45 h Stop Time 01:45 h Total Minutes: 300

Start Temp. 21 °C End Temp. 15 °C (must stay ≥10°C for summer netting)

14. General Weather (circle one): Clear Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain; (suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____

15. General Wind Conditions (circle one): Calm Breezy (Leaves Rustling), Windy (Trees Swaying).

16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	4	12m x 2.6m	Stacked over trail	124.8 sq. m
A	Nets	3	9m x 2.6m	Stacked Over Trail	70.2
B	Nets	2	6m x 2.6m	Stacked Over Trail	31.2

Total Capture Area: 101.4 sq. m

(Site Survey Record - Continued) Site Name/No.: Foundation Mira Site Z Date: 8/7/2016

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

Upland Interior Forest

Dominant Tree Species: Rd oaks, Black Walnuts, white Ash and American Elm

18. Was reproductive status checked? YES / NO (if "NO" only enter numbers in Total columns)

***CAPTURE RESULTS**

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>											
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>											
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other - specify:											
Other specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.										Grand Total No Bats	

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/8/10 2. Company Name: CBC

3. Bat Identifier: Ryan Slack (Responsible Recorder) 4. Assistants: Kate

5. Site Name and/or Number: Foundation/Site ~~2~~ 3

6. Site is (circle one): hibernation site summer habitat

7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel, other structure, describe - _____

7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):
forested trail in cow pasture

8. County: Greene 9. 7.5' Quad.: Rogersville and Halbrook

10. Was site GPS'd (required)? YES NO

11. Geographic Coordinates (D-M-S): Latitude: 39°-52'-~~14.0~~^{13.8} N, Longitude: 80°-20'-3.1 W
Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____

12. Ownership and Access: (Who owns site or controls access? Give name and address.)
Alpha Natural Resources

13. Time (military) & Temperature: Start Time 2040 h Stop Time 0145 h Total Minutes: 300
Start Temp. 20 °C End Temp. 15 °C (must stay ≥10°C for summer netting)

14. General Weather (circle one): Clear; Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain; (suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____

15. General Wind Conditions (circle one): Calm, ~~Breeze~~ Leaves Rustling, Windy (Trees Swaying).

16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	1	12m x 2.0m	Stacked over trail	124.8 sq. m
A	Nets	3	9m x 2.0m	Stacked over trail	70.2
B	Nets	2	6m x 2.0m	Stacked over trail	31.2

Total Capture Area: 101.4 sq. m

(Site Survey Record - Continued) Site Name/No.: Foundation / site 3 Date: 8/8/10

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

Open wooded cow pasture to east north
dense forest to south

18. Was reproductive status checked? YES / NO (if "NO" only enter numbers in Total columns)

*CAPTURE RESULTS

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>					1			1			2
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>				1							1
<i>Lasiurus cinereus</i>											
<i>Lasiurus noctivagans</i>											
Other - specify:											
Other - specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total 3

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

L. borealis RFA-39.5mm wt. -15.8g wing score \emptyset Net A
M. sept RFA-35.55 wt. -6.3g wing score \emptyset Net A
M. sept RFA-34.10 wt. -5.2g wing score \emptyset Net B

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/19/10 2. Company Name: CFC
3. Bat Identifier: Ryan Slack 4. Assistants: Sky Brown
(Responsible Recorder)
5. Site Name and/or Number: Foundation Mine / Site 3

6. Site is (circle one): hibernation site summer habitat

7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
other structure, describe - _____

7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):
forested run improved road

8. County: Greene 9. 7.5' Quad.: Rogersville and Holbrook

10. Was site GPS'd (required)? YES - NO

11. Geographic Coordinates (D-M-S): Latitude: 39° 52' 18.8" N, Longitude: 80° 20' 3.1" W

Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____

12. Ownership and Access: (Who owns site or controls access? Give name and address.)
Alpha Natural Resources

13. Time (military) & Temperature: Start Time 2045 h Stop Time 0145 h Total Minutes: 300

Start Temp. 21 °C End Temp. 17 °C (must stay ≥ 10 °C for summer netting)

14. General Weather (circle one): Clean Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain;
(suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____

15. General Wind Conditions (circle one): Calm, Breezy (Leaves Rustling), Windy (Trees Swaying).

16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	4	12m x 2.6m	Slacked over trail	124.8 sq. m
B	Nets	2	6m x 2.6m	Stacked over track	31.2
A	Nets	3	9m x 2.6m	Stacked over trail	70.2

Total Capture Area: 101.4 sq. m

(Site Survey Record - Continued) Site Name/No.: Foundation Mine/site 3 Date: 8/9/10

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)
Open Wooded Cow Pasture to North dense forest to South

18. Was reproductive status checked? YES / NO (if "NO" only enter numbers in Total columns)

*CAPTURE RESULTS

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>								1	1		
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>											
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other - specify:											
Other - specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total No Bats

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/10/2010 2. Company Name: Civil and Environmental Consultants
3. Bat Identifier: Ryan Slack 4. Assistants: Sky Branci
(Responsible Recorder)
5. Site Name and/or Number: Foundation Mine Site 4
6. Site is (circle one): hibernation site summer habitat
- 7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
other structure, describe - _____
- 7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):
Forested Stream with Mowed Field on Left descending Bank
8. County: Greene 9. 7.5' Quad.: Rogersville and Helbrook
10. Was site GPS'd (required)? YES - NO
11. Geographic Coordinates (D-M-S): Latitude: 39° 51' 43.1" N, Longitude: 80° 18' 2.2" W
Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____
12. Ownership and Access: (Who owns site or controls access? Give name and address.) _____
Alpha Natural Resource Group
13. Time (military) & Temperature: Start Time 21:45 h Stop Time 01:45 h Total Minutes: 300
Start Temp. 21 °C End Temp. 17 °C (must stay ≥10°C for summer netting)
14. General Weather (circle one): Clear; Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain;
(suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____
15. General Wind Conditions (circle one): Calm; Breezy (Leaves Rustling), Windy (Trees Swaying).
16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	1	12m x 2.6m	Stacked over trail	31.2
A	Nets	2	6m x 2.6m	Stacked over Stream	31.2
B	Nets	3	6m x 2.6m	Stacked over Stream	46.8

Total Capture Area: 78.0 sq. m

(Site Survey Record - Continued) Site Name/No.: Foundation Min Site 4 Date: 8/16/2010

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

Right Descendry Bank, forested Riparian Habitat Left Descendry Bank a narrow Hayfield
 Dominant Tree Species:

18. Was reproductive status checked? YES NO (if "NO" only enter numbers in Total columns)

*CAPTURE RESULTS

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
Eptesicus fuscus	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>											
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>											
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other -- specify:											
Other -- specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total No Bats

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

1. Survey Date: 8/1/2011 2. Company Name: Civil and Environmental Consultants

3. Principal Investigator: Ryan Slack Assistants: Ky Brounce

4. Site Name and/or Number: Foundation on St 4

5. Site is (circle one): International site Summer habitat

6a. If hibernation site, circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
other structure type: _____

6b. If stream site, circle one: Stream side (e.g. forested stream or forest clearing with stream):
Forested stream with Mowat Haystack on a descending bank

7. County: Greene 8. 7.5' Quad: Rogersville and Holbrook

9. Was site GPS'd (required)? YES - NO

10. Geographic Coordinates (D-M-S): Latitude: 39° 51' 43.1" N, Longitude: 80° 18' 2.7" W

11. Datum (circle one): UTM, NAD83, WGS84 Other: _____

12. Ownership and Access: (Who owns site or has access? Give name and address.)
Alpha Natural Resources

13. Time (military) & Temperature: Start Time 21:45 h Stop Time 01:45 h Total Minutes: 300
Start Temp 22 °C End Temp 17 °C (must stay >10°C for summer netting)

14. General weather (circle one): Clear, partly cloudy, Mostly cloudy, Cloudy, Drizzle, Intermittent rain,
(suspending netting during periods of rain) Steady rain, Thunderstorms, Snow, Other: _____

15. General Wind Conditions (circle one): Calm, Breezy (Leaves rustling), Windy (Trees swaying).

16. Trapping Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
	Nets	4	1.2m x 2.6m	Stacked over trail	124.8 sq.m
A	Nets	2	6m x 2.6m	Stacked over Stream	31.2
B	Nets	3	6m x 2.6m	Stacked over Stream	46.8

Total Captured Area: 77.0 sq.m

(Site Survey Record - Continued) Site Name/No.: Foundation Mine Site 4 Date: 8/11/2010

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

Right Descending Bank, Forested Riparian Habitat, Left Descending Bank
 a mowed Hay field. Dominant Tree species: Black Walnut, Black Willow, & Sycamore

18. Was reproductive status checked? YES / NO (if "NO" only enter numbers in Total columns)

*CAPTURE RESULTS

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>											
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>								1			1
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>	11										2
<i>Lasiurus cinereus</i>											
<i>Lasiurus noctivagus</i>											
Other - specify:											
Other - specify:											
Reproductive Status: NR = non-reproductive, PG = pregnant, L = lactating, PL = post-lactating, SCR = scrotal/epididymus swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total
											3

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

L. borealis 12.8g REA 46.50 mm wing score 0 Not A
 E. fuscus 16.5g REA 46.45 mm wing score 0 Not B
 L. borealis 10.75g REA 40.0 mm wing score 0 Not B

RECEIVED OCT 21 2011



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, Pennsylvania 16801-4850

October 19, 2011

Hari Chakravorti
Michael Baker Jr., Inc.
4301 Dutch Ridge Road
Beaver, PA 15009

RE: USFWS Project #2010-0581

Dear Mr. Chakravorti:

This responds to your letter of August 5, 2011, requesting our review of mist-net survey results for the proposed Foundation Mine Refuse Disposal Area located in Greene County, Pennsylvania. The proposed project is located within the range of the Indiana bat (*Myotis sodalis*), a species that is federally listed as endangered. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

According to your email of July 18, 2011, an additional area was added to the coal refuse disposal alternative analysis. In response, our email of July 20, 2011, requested that at least one additional mist net site be set up.

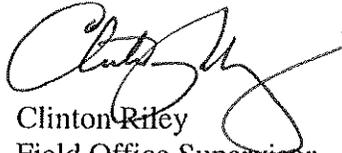
Due to proposed forest clearing associated with the additional area of this project, mist-netting was conducted to determine whether Indiana bats are present. According to the August 2011 survey report, surveys were conducted at 2 sites within the project on August 1 and August 2, 2011, in accordance with the Fish and Wildlife Service's Indiana bat mist-net survey guidelines. During these surveys, 8 bats of 3 species were captured, but this did not include any Indiana bats. Based on these survey results, we have concluded that Indiana bats are either not present in the project area, or are present in such low densities that they were not detected. In addition, the project is not within the likely swarming radius of any known hibernacula or maternity colony. Lastly, no caves or portals were found on the site during the field reconnaissance. Consequently, we have determined that tree-clearing related to the proposed project is not likely to adversely affect the Indiana bat.

This response relates only to endangered or threatened species under our jurisdiction, based on an office review of the proposed project's location. No field inspection of the project area has been conducted by this office. Consequently, this letter is not to be construed as addressing potential Service concerns under the Fish and Wildlife Coordination Act or other authorities.

To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

If you have any questions regarding this matter, please contact Pamela Shellenberger of my staff at 814-234-4090.

Sincerely,

A handwritten signature in black ink, appearing to read "Clinton Riley". The signature is fluid and cursive, with a large loop at the end.

Clinton Riley
Field Office Supervisor

Indiana Bat (*Myotis sodalis*) Mist Net Survey Report

**Foundation Mining, LLC
Foundation Mine Complex – Fresh Water Impoundment
USFWS Project # 2010-0581**

**Greene County
Pennsylvania**

Prepared for:

**Foundation Mining, LLC
Waynesburg, PA**

***Prepared by:*
Pittsburgh Wildlife &
Environmental, Inc.**

August 8, 2011

Table of Contents

1. Introduction.....	1
2. Methodology.....	1
3. Results	2
4. Conclusion.....	5

1. Introduction

This report presents the findings of an Indiana bat (*Myotis sodalis*) mist net survey conducted for the proposed Foundation Mine Complex – Fresh Water Impoundment (Project Location Map). The Project area is located in Jackson Township, Greene County, Pennsylvania approximately 7.9 miles southwest of Waynesburg, PA. The project area consists of an approximate 221 acre land tract which is dominated by forested habitat.

An Indiana bat presence/absence mist net survey was conducted by Pittsburgh Wildlife & Environmental, Inc. (PWE) from August 1 through August 2, 2011. The purpose of the study was to confirm the presence or probable absence of the Indiana bat during the summer months within the project area. The survey was based on PWE's professional judgment; the technical criteria outlined in the U.S. Fish & Wildlife Service (USF&WS) (Region 3) Indiana bat (*Myotis sodalis*) DRAFT Recovery Plan, dated April, 2007, and the Pennsylvania Game Commission Standard and Minimum Effort Requirements for Qualified Indiana Bat Surveyor Netting within the Commonwealth of Pennsylvania for Environmental Review Projects.

2. Methodology

PWE biologists traversed the site by foot and ATV to identify potential bat habitat (roosting areas, feeding areas, drinking pools, and flight corridors) within the study area. The initial field reconnaissance was completed in order to document the suitability of the forest for Indiana bat use and to establish mist net sites that would maximize the success of the mist net survey. In addition, PWE conducted the reconnaissance in order to determine if any open portals occur within the area. Based upon previous consultation with the USFWS, 1 mist net site was

recommended. However, due to an increase in size since the previously consulted project area a total of 2 mist net sites were proposed to be completed. Refer to the USF&WS correspondence presented in Appendix A.

The Indiana Bat mist net survey was completed with strict adherence to the U.S. Fish & Wildlife Service (USF&WS) (Region 3) Indiana bat (*Myotis sodalis*) DRAFT Recovery Plan, dated April, 2007, and the Pennsylvania Game Commission Standard and Minimum Effort Requirements for Qualified Indiana Bat Surveyor Netting within the Commonwealth of Pennsylvania for Environmental Review Projects and was authorized by the Pennsylvania Game Commission (PGC) under Scientific Collection Permit Number 88-2011. All bats were identified by the Collection Permit holder. All collections made during the survey were recorded on field data sheets which are presented in Appendix B. Photographs of each mist net site and representative species of bats were taken during the survey and are presented in Appendix C. Additionally the supplemental PGC required permittee report is included in Appendix D.

3. Results

The following section provides a detailed description of the overall mist net survey, each mist net site, and presents the results of the trapping effort at that site. A table summarizing the results of the survey (by site) is presented in Table 1 and a summary of all the bats captured (by species) is presented in Table 2 following the site descriptions.

PWE identified 2 mist net sites within the study area that contained at least two of the following bat habitats: roosting areas, feeding areas, drinking pools, and/or flight corridors. These 2 mist net sites identified during the reconnaissance had the highest potential to capture an Indiana bat (refer to the Aerial Map).

A total of 8 net nights (2 locations x 2 nights per survey site x 2 nets per site = 8 net nights) were completed from August 1 through August 2, 2011. Each of the 2 mist net survey sites included at least two mist net sets, placed a minimum of 30 meters apart. Each survey site was sampled for two nights, beginning at sunset and lasting for a minimum of 5 hours. No severe weather was encountered (precipitation, strong winds, and/or temperatures dropping below 50 degrees Fahrenheit) during the survey.

Site 1

Mist net Site 1 was sampled over a period of two days. The initial survey night was August 1, 2011. On this date, two mist net sets (one triple high 18 meter net and one triple high 6 meter net) were erected within forested flight corridors. During the first survey night, five bats were captured.

The second survey night was conducted on August 2, 2011. On this date, two mist net sets (one triple high 18 meter net and one triple high 6 meter net) were erected within forested flight corridors. During the second survey night, three bats were captured.

Site 2

Mist net Site 2 was sampled over a period of two days. The initial survey night was August 1, 2011. On this date, two mist net sets (one triple high 12 meter net and one triple high 6 meter net) were erected within forested flight corridors. During the first survey night, no bats were captured.

The second survey night was conducted on August 2, 2011. On this date, two mist net sets (one triple high 12 meter net and one triple high 6 meter net) were erected within forested flight corridors. During the second survey night, no bats were captured.

The following tables summarize the bats captured by site (Table 1) and by species (Table 2).

TABLE 1 Summary of Bats Captured - By Site

Common Name	Scientific Name	Date	Site	Total	Federal Status	State Status
Big Brown bat	<i>Eptesicus fuscus</i>	8/1/11	01	1	NA	NA
Eastern Red bat	<i>Lasiurus borealis</i>	8/1/11	01	1	NA	NA
Northern Myotis bat	<i>Myotis septentrionalis</i>	8/1/11	01	3	NA	SOC
Eastern Red bat	<i>Lasiurus borealis</i>	8/2/11	01	1	NA	NA
Northern Myotis bat	<i>Myotis septentrionalis</i>	8/2/11	01	2	NA	SOC

TABLE 2 Summary of Total Bats Captured – By Species

Common Name	Scientific Name	Total Females	Total Males	Total Captured
Northern Myotis bat	<i>Myotis septentrionalis</i>	-	5	5
Big Brown bat	<i>Eptesicus fuscus</i>	-	1	1
Eastern red bat	<i>Lasiurus borealis</i>	1	1	2
	Grand Total	1	7	8

As part of the mist net survey both an office data review and field review were completed to identify any potential winter bat habitat areas within the vicinity of the proposed project. The literature review did not identify any abandoned mine portals within or adjacent to the project area. No cave features were identified within the project area during the literature review.

During the mist net survey biologists from PWE traversed the project area looking for undocumented mine portals as well as searching for other possible winter bat habitat areas. No open mine portals were found within the project area.

4. Conclusion

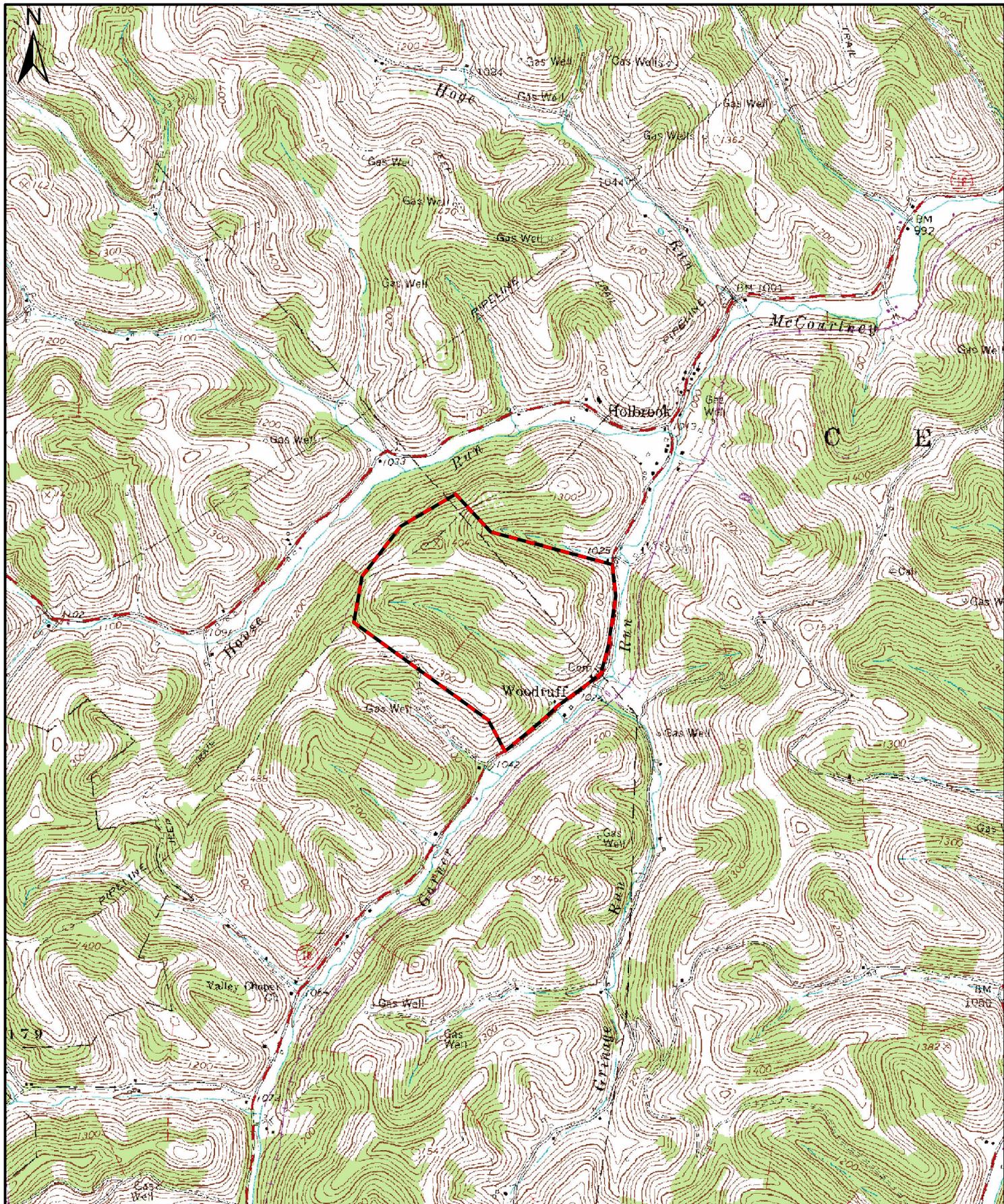
From August 1 to August 2, 2011, PWE conducted an Indiana bat (*Myotis sodalis*) mist net survey within the proposed Foundation Mining, LLC proposed Foundation Mine Complex – Fresh Water Impoundment area located in Jackson Township, Greene County, Pennsylvania. A total of 8 bats representing three species were captured and identified at 2 mist net sites. No Indiana bats were captured. All bats captured were released alive and unharmed.

Lastly, no open portals were observed within the study area during the field reconnaissance.

Project Location Map

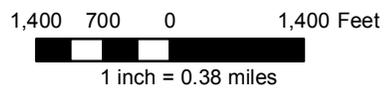
and

Aerial Map



Legend

 Permit Area



Prepared For:
Foundation Mining, LLC

Prepared By:
Pittsburgh Wildlife &
Environmental, Inc.

Project Location Map

**Foundation Mine Complex
Fresh Water Impoundment
Foundation Mining, LLC
Greene County, Pennsylvania**



Legend

 Permit Area

 Mist Net Site

640 320 0 640 Feet



1 inch = 0.16 miles

Prepared For:
Foundation Mining, LLC

Prepared By:
Pittsburgh Wildlife &
Environmental, Inc.

Aerial Map

**Foundation Mine Complex
Fresh Water Impoundment
Foundation Mining, LLC
Greene County, Pennsylvania**

Appendix A
Agency Correspondence

Neil Bossart

From: Roman, Brad <broman@mbakercorp.com>
Sent: Monday, July 25, 2011 2:22 PM
To: Neil Bossart
Cc: chuff@alphanr.com
Subject: FW: USFWS #2010-0581; Foundation Mine Complex

Neil,

Here is the email from Pam requiring a mist net survey. She reviewed the same maps that you have.

From: Pamela_Shellenberger@fws.gov [mailto:Pamela_Shellenberger@fws.gov]
Sent: Wednesday, July 20, 2011 10:54 AM
To: Roman, Brad
Cc: Chakravorti, Hari (N K); chuff@alphanr.com
Subject: USFWS #2010-0581; Foundation Mine Complex

Brad,

I have reviewed the additional information you provided to me and the additional 190.8 acres of forest area that will be effected by this project. Due to the extent of forest area that is proposed to be impacted, we request that at least one additional mist net site (2 nets/30m apart), be set up in the larger parcel.

Please let me know if you have any questions.

Thank you,
Pamela Shellenberger
Fish and Wildlife Biologist
Endangered Species Program
U.S. Fish and Wildlife Service
315 South Allen Street, Suite 322
State College, PA 16801
P: 814-234-4090 x241
F: 814-234-0748

July 25, 2011

Ms. Pamela Shellenberger
U.S. Fish and Wildlife Service
Pennsylvania Field Office
315 South Allen Street, Suite 322
State College, PA 16801-4850

Subject: Request for Concurrence - Indiana Bat Mist Net Survey
Foundation Mine Complex
Center Township, Greene County, Pennsylvania
USFWS Project # 2010-0581

Dear Ms. Shellenberger:

Pittsburgh Wildlife & Environmental, Inc. (PWE) is requesting concurrence relating to an Indiana bat (*Myotis sodalis*) mist net survey and authorization to proceed. Alpha Natural Resources has contracted PWE to perform presence/probable absence mist net surveys for the following project area.

The proposed study area is part of a larger project which you have reviewed previously. This additional project area for the Foundation Mine Complex is located on the Holbrook 7.5' U.S.G.S. Quadrangle. The project area is located approximately 7.9 miles southwest of Waynesburg, PA. The project area consists of an approximate 221 acre land tract (Site Location Map) which is dominated by forested habitat (Aerial Map).

The mist-net survey is scheduled to start in August and will be completed under Pennsylvania PGC Special Use Permit Number 88-2011. The mist-net survey will strictly follow the technical criteria outlined in the USF&WS (Region 3) agency draft document titled Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision dated April 2007 as well as any additional recommendations by the USF&WS and the PGC netting standards.

At this time, PWE proposes to complete 2 mist net sites within the proposed study area. The mist-net survey will consist of a minimum of 8 net nights (2 locations x 2 nights per survey site x 2 nets per night). The mist-net survey sites will include at least 2 mist nets, placed a minimum of 30 meters apart. The survey sites will be sampled for two nights which will begin at sunset and last for a minimum of 5 hours. In the case of severe weather including precipitation, strong winds, and/or temperatures dropping below 50 degrees Fahrenheit during the initial survey effort, surveys will be terminated and the site will be resurveyed under suitable conditions.

If an Indiana bat (*Myotis sodalis*) or other federally listed bat species is captured during the mist net surveys the bat identification will be documented with photographs showing clear identification characteristics. PWE will also affix a radio transmitter to the back of the bat and attempt to track it until the transmitter fails or falls off of the bat. If a roost area is identified during tracking of an endangered bat, exit counts will be conducted for a minimum of 3 days per roost area identified when possible. Additionally, PWE will spend a maximum of 3 additional nights netting in the attempt to capture a maximum of 2 additional endangered bats. Each of the additional endangered bats that are captured will be tracked until the transmitter fails or falls off of the bat. PWE will perform nightly telemetry surveys to define the travel routes and the limits of foraging areas for each radio-tagged

bat. Telemetry data collected will not include triangulation.

At this time, we respectfully request concurrence for the number of mist net sites proposed and authorization to initiate the mist net survey.

Please sign and return this letter along with any additional requests or guidelines if necessary. If you have any questions or require additional information, please contact me at nbossart@windstream.net or at (717) 860-7679.

Very truly yours,

Pittsburgh Wildlife & Environmental, Inc.



Neil Bossart
Project Manager

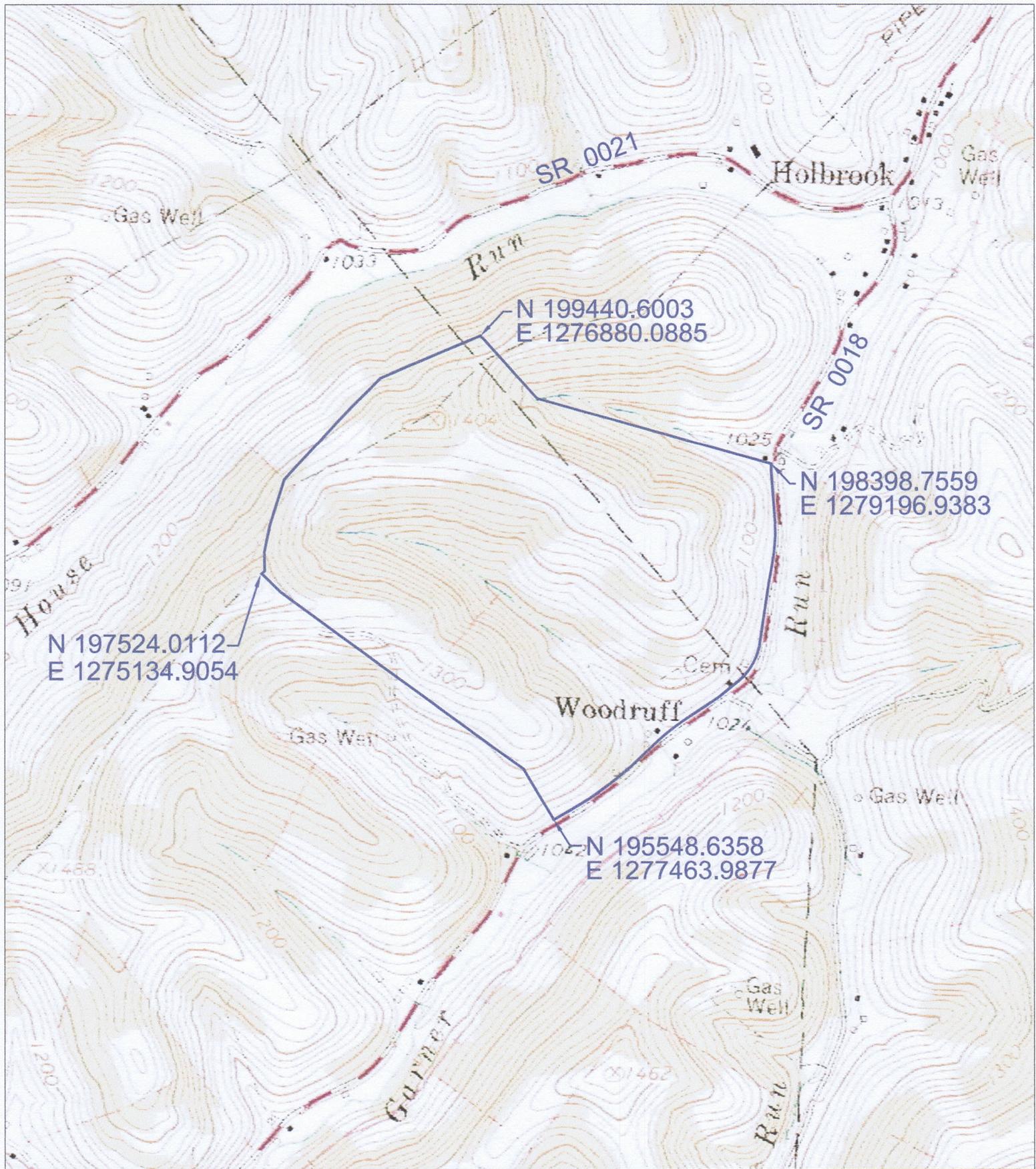
cc: Chester Huff – AlphaNR
Brad Roman – Baker

CONCURRENCE:

Request for Concurrence - Indiana Bat Mist Net Survey
Foundation Mine Complex
Center Township, Greene County, Pennsylvania
USFWS Project # 2010-0581

Pamela Shellenberger
USFWS

Date



**FOUNDATION MINING, LLC
BAT SURVEY LOCATION MAP**

**HOLBROOK,
GREENE COUNTY, PA**

Baker

**MICHAEL BAKER JR., INC.
CONSULTING ENGINEERS**
BEAVER, PENNSYLVANIA

SCALE: 1" = 1000'

DATE: July 2011



**FOUNDATION MINING, LLC
BAT SURVEY LOCATION MAP**

**HOLBROOK,
GREENE COUNTY, PA**

Baker

**MICHAEL BAKER JR., INC.
CONSULTING ENGINEERS** **BEAVER, PENNSYLVANIA**

SCALE: 1" = 1000'

DATE: July 2011

Appendix B
Field Data Sheets

PWE Bat Survey Data Form

Project Name: Foundation Mine Complex - Freshwater Pond

Land owner: Foundation Coal

Township Center State: Pa County: Greene

Scientists J Dreibelbis

Date: 8/1/11 Start Temp (°F) [Time]: 26 [2100] Mid Temp (°F) [Time]: 23 [2330] End Temp (°F) [Time]: 21 [0200]

Moon Phase: ☾ Weather: clear calm Hot/Humid Coordinates / Datum: 39°50'42.8" 080°19'02.8" NAD83

Identification By: N Bassart Site Number: 01 Night Number: 01 USGS Quad: Holbrook

Site Description: Forested headwater stream valley

Number of Net Sets at Site: 2 Time Started: 2100 Time Ended: 0200

Net A [length (m) and height]: (18) x 3

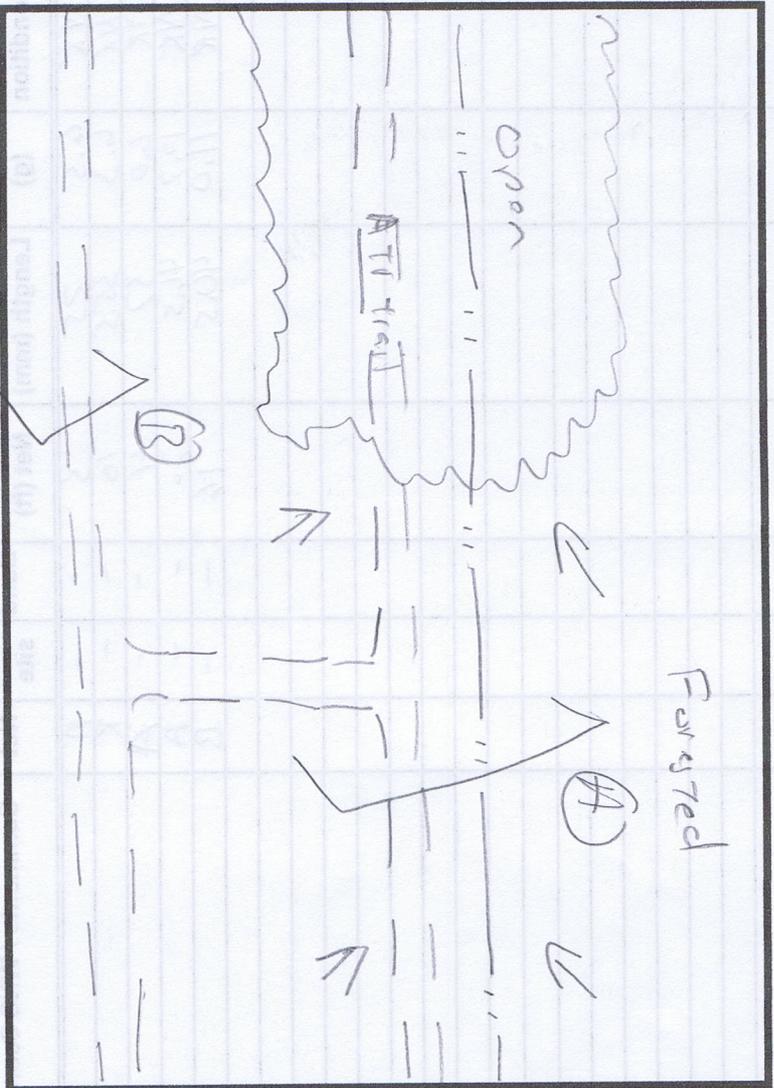
Net B [length (m) and height]: (6) x 3

Net C [length (m) and height]: () ()

Net D [length (m) and height]: () ()

Other Wildlife Observed: deer

Notes / Comments: Bat activity 8:10



Date Entered into Database: _____

Sketch site with net locations, label nets with letters; include streams and roads in drawing.

PWE Bat Survey Data Form

Project Name: Foundation Mine Complex - Freshwater pond Land owner: Foundation Coal

Township Center State: Pa County: Greene Scientists J Dreibeckis

Date: 8/2/11 Start Temp (°F) [Time]: 24 [2100] Mid Temp (°F) [Time]: 23 [2330] End Temp (°F) [Time]: 23 [0150]

Moon Phase: ☾ Weather: cloudy calm humid Coordinates / Datum: 39°50'42.8" 080°19'22.8" NAD83

Identification By: N Bossert Site Number: 01 Night Number: 02 USGS Quad: Halbrook

Site Description: Forested headwater stream valley

Number of Net Sets at Site: 2 Time Started: 2055 Time Ended: 0155

Net A [length (m) and height]: (18) x 3

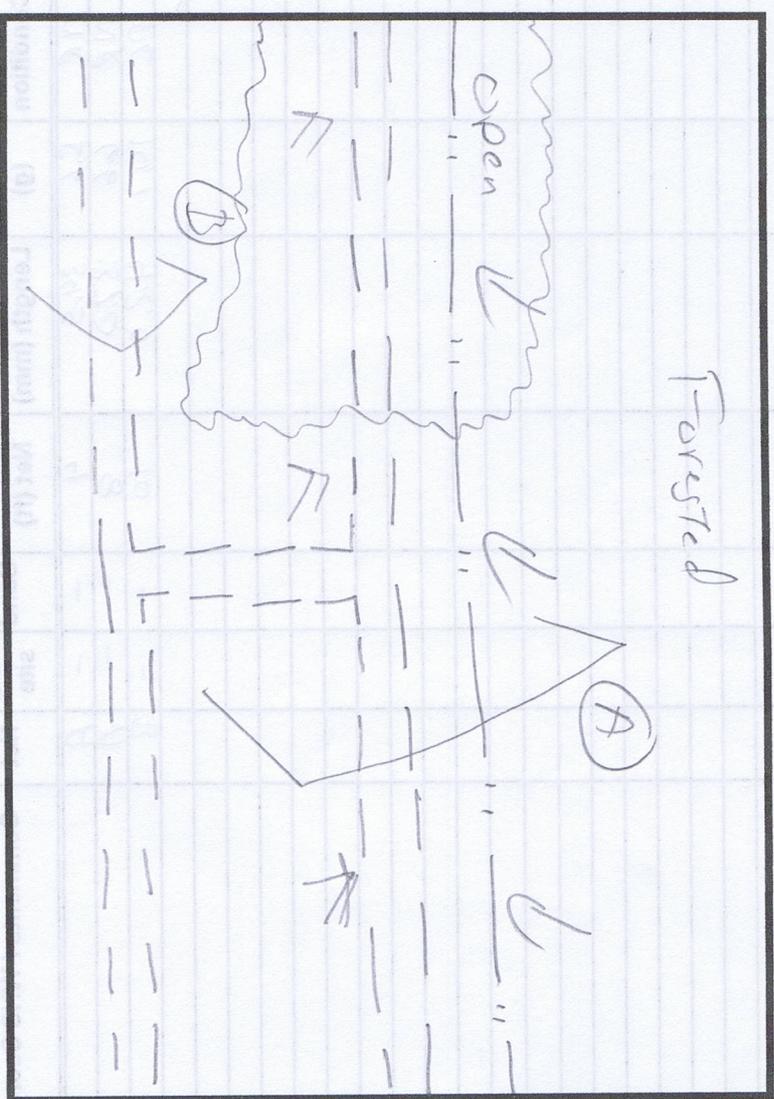
Net B [length (m) and height]: (6) x 3

Net C [length (m) and height]: () ()

Net D [length (m) and height]: () ()

Other Wildlife Observed: deer track

Notes / Comments: Bat activity @ 2100



Date Entered into Database: _____ Sketch site with net locations, label nets with letters; include streams and roads in drawing.

PWE Bat Survey Data Form

Project Name: Foundation Mine Complex - Fresh Water Pond

Land owner: Foundation Coal

Township Center State: Ra County: Greene Scientists B Cooper

Date: 8/11/11 Start Temp (°F) [Time]: 26 [2100] Mid Temp (°F) [Time]: 23 [2330] End Temp (°F) [Time]: 21 [0200]

Moon Phase: ☾ Weather: Clear, calm, Hot/Humid Coordinates / Datum: 35°50'49.7" 080°19'37.9" NAD83

Identification By: N. Bassart Site Number: 02 Night Number: 01 USGS Quad: Helbrook

Site Description: Forested headwater stream valley

Number of Net Sets at Site: 2 Time Started: 2100 Time Ended: 0200

Net A [length (m) and height]: (12) x 3

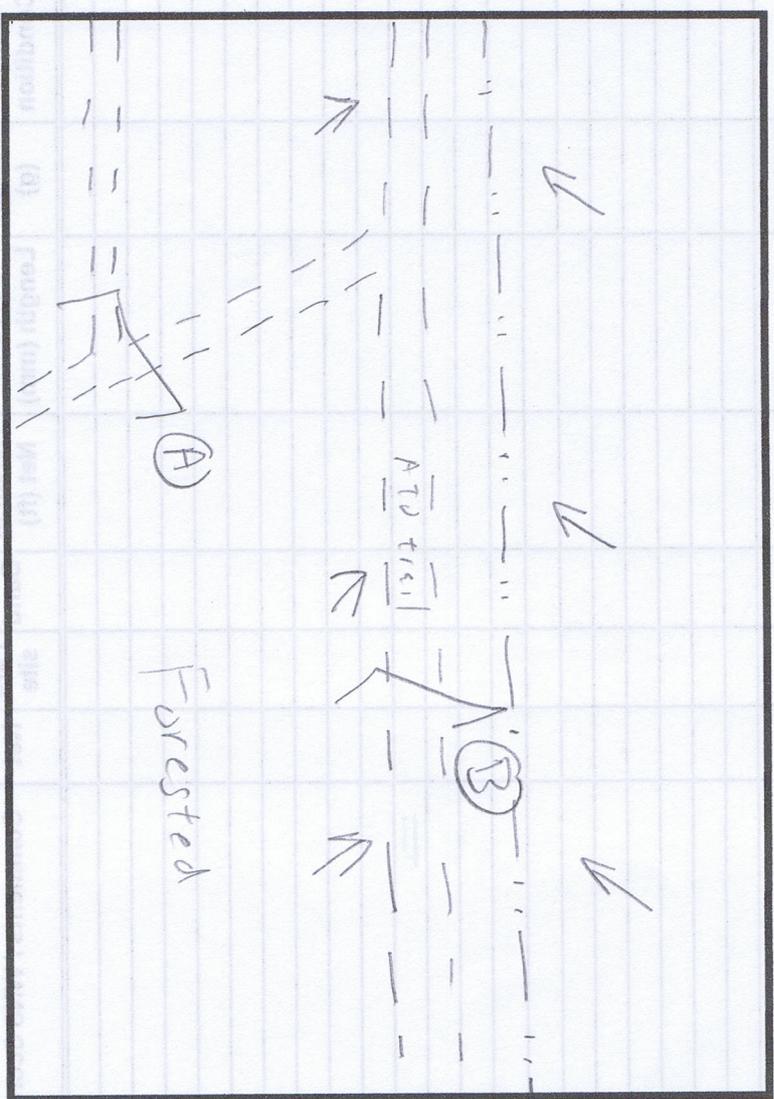
Net B [length (m) and height]: (6) x 3

Net C [length (m) and height]: () ()

Net D [length (m) and height]: () ()

Other Wildlife Observed: deer

Notes / Comments: Bat activity 6 21:05



Date Entered into Database: _____
 Sketch site with net locations, label nets with letters; include streams and roads in drawing.

PWE Bat Survey Data Form

Project Name: Foundation Mine Complex - Fresh Water Pond

Land owner: Foundation Co

Township: Center State: Pa County: Greene Scientists: B Cooper

Date: 8/21/11 Start Temp (°F) [Time]: 24 [2100] Mid Temp (°F) [Time]: 23 [2330] End Temp (°F) [Time]: 23 [0150]

Moon Phase: ☽ Weather: cloudy calm humid Coordinates / Datum: 39°58'49.7" 080°19'37.9" NAD83

Identification By: N Bossert Site Number: 02 Night Number: 02 USGS Quad: Holbrook

Site Description: Forested headwater stream valley

Number of Net Sets at Site: 2 Time Started: 2055 Time Ended: 0155

Net A [length (m) and height]: (12) x 3

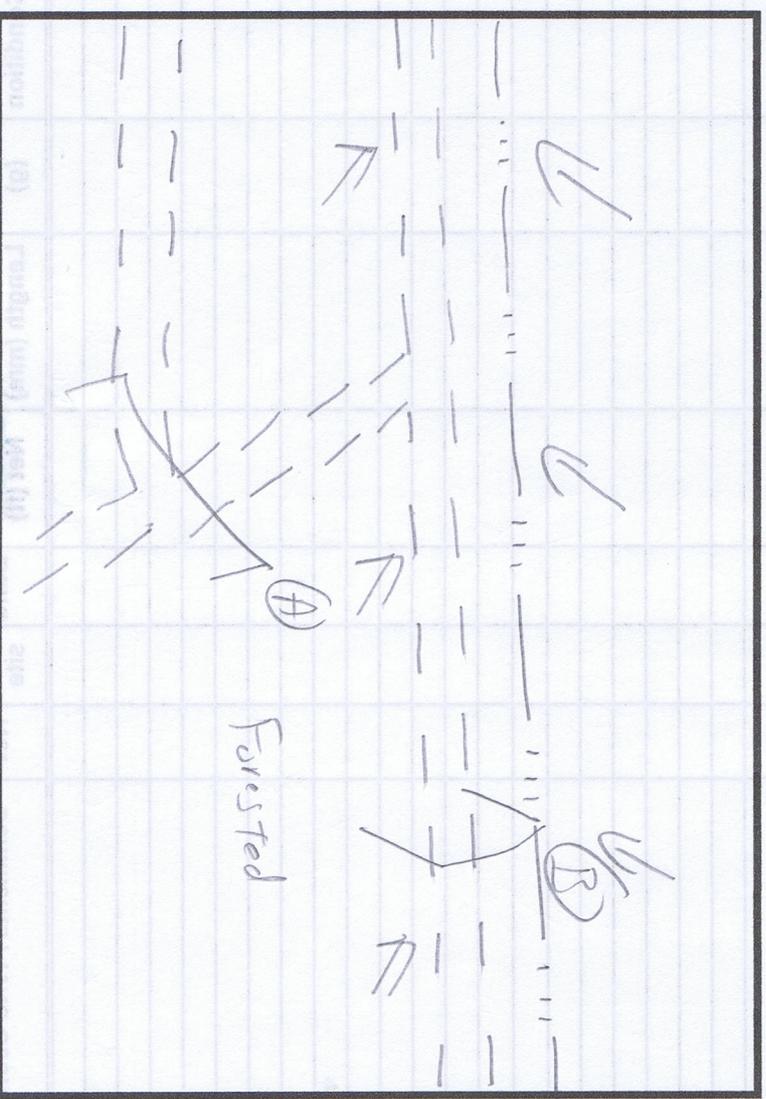
Net B [length (m) and height]: (6) x 3

Net C [length (m) and height]: () ()

Net D [length (m) and height]: () ()

Other Wildlife Observed: deer

Notes / Comments: B structure @ 21:00



Date Entered into Database: _____ Sketch site with net locations, label nets with letters; include streams and roads in drawing.

Appendix C

Photographs

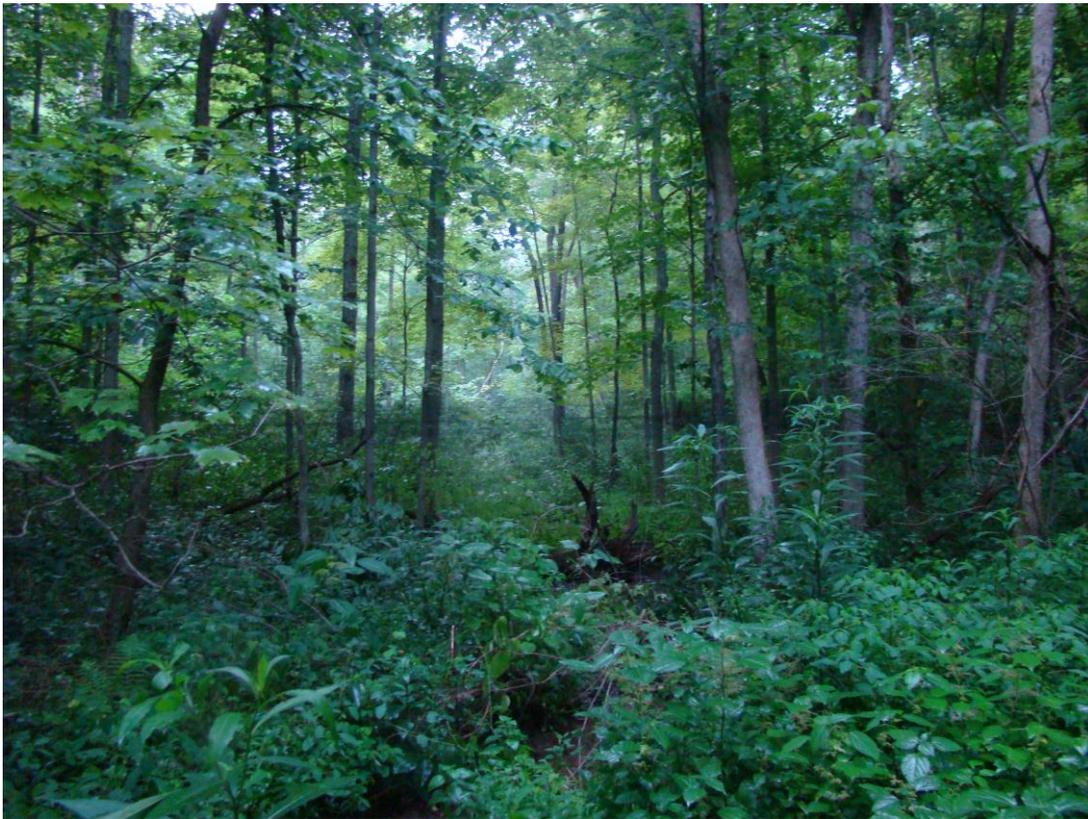


Photo 1: View of Mist Net Site 01.



Photo 2: View of Mist Net Site 02.



Photo 3: View of Big Brown bat (*Eptesicus fuscus*) captured at Mist Net Site 01.



Photo 4: View of Eastern Red bat (*Lasiurus borealis*) captured at Mist Net Site 01.



Photo 5: View of Northern Myotis bat (*Myotis septentrionalis*) captured at Mist Net Site 01.

Appendix D

PGC Permittee Report

COMMONWEALTH OF PENNSYLVANIA
Pennsylvania Game Commission
2001 Elmerton Avenue
Harrisburg, PA 17110-9797

Section 1 - Cover

PERMITTEE BAT CAPTURE REPORT

Permit Number: 88-2011

Project Name: Foundation Mine Complex - Fresh Water Impoundment

Company/ Pittsburgh Wildlife & Environmental
Organization/

Permittee Name: Neil Bossart

Address: 853 Beagle Club Road
McDonald, Pa 15057

Phone: 717-860-7679

E-Mail: nbossart@windstream.net

If this is contracted work, provide the name & address of the individual/organization work is being performed for:

Mr. Chester J wh
Alpha Natural Resources
PO Box 1020
158 Portal Road
Waynesburg, PA 15370

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/11/11 2. Company Name: Pittsburg Wildlife & Env
 3. Bat Identifier: N Bossert (Responsible Recorder) 4. Assistants: J Dreibelbis
 5. Site Name and/or Number: Foundation Mine Complex - Freshwater Pond Site 01
 6. Site is (circle one): hibernation site summer habitat

7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel, other structure, describe - _____

7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):

Forested stream valley

8. County: Greene 9. 7.5' Quad.: Holbrook

10. Was site GPS'd (required)? YES NO

11. Geographic Coordinates (D-M-S): Latitude: 39° 50' 42.8" N, Longitude: 080° 19' 22.8" W

Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____

12. Ownership and Access: (Who owns site or controls access? Give name and address.)

Foundation Coal

13. Time (military) & Temperature: Start Time 2100 h Stop Time 0200 h Total Minutes: 300

Start Temp. 26 °C End Temp. 21 °C (must stay ≥ 10 °C for summer netting)

14. General Weather (circle one): Clear, Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain; (suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____

15. General Wind Conditions (circle one): Calm, Breezy (Leaves Rustling), Windy (Trees Swaying).

16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	4	12m x 2.6m	Stacked over trail	124.8 sq. m
A	"	3	18	11' stream	140.4
B	"	3	6	"	46.8

Total Capture Area: 187.2 sq. m

(Site Survey Record - Continued)

Site Name/No.: Foundation Mine Complex Site 01 *Freshwater Pond*

Date: 8/1/11

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

*oak
 boxelder
 maple
 Int stream*

18. Was reproductive status checked? YES / NO (if "NO" only enter numbers in **Total** columns)

***CAPTURE RESULTS**

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>								///		3	3
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>									1	1	1
<i>Perimyotis subflavus</i>										1	1
<i>Lasiurus borealis</i>									1	1	1
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other - specify:											
Other - specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.										Grand Total	
										5	

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/11/11 2. Company Name: Pittsburg Wildlife & Env
 3. Bat Identifier: N Bossert (Responsible Recorder) 4. Assistants: J Dreibeibic
 5. Site Name and/or Number: Foundation Mine Complex - Freshwater Pond - Site 01
 6. Site is (circle one): hibernation site summer habitat

7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
 other structure, describe - _____

7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):
Forested stream valley

8. County: Greene 9. 7.5' Quad.: Holbrook
 10. Was site GPS'd (required)? YES NO

11. Geographic Coordinates (D-M-S): Latitude: 39° - 50' - 42.8" N, Longitude: 080° - 19' - 22.8" W
 Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____

12. Ownership and Access: (Who owns site or controls access? Give name and address.)
Foundation Coal

13. Time (military) & Temperature: Start Time 2055 h Stop Time 0155 h Total Minutes: 300
 Start Temp. 24 °C End Temp. 23 °C (must stay ≥10°C for summer netting)

14. General Weather (circle one): Clear; Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain;
 (suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____

15. General Wind Conditions (circle one): Calm, Breezy (Leaves Rustling), Windy (Trees Swaying).

16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	4	12m x 2.6m	Stacked over trail	124.8 sq. m
A	"	3	18	11 ft over stream	140.4
B	"	3	6	"	46.8

Total Capture Area: 187.2 sq. m

(Site Survey Record – Continued)

Site Name/No.: Foundation Mine Complex Site 01

Date: 8/2/11

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

Oak
 Buckelder
 maple

Int Stream

18. Was reproductive status checked? YES / NO (if "NO" only enter numbers in **Total** columns)

***CAPTURE RESULTS**

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>								1	1		
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>				1							
<i>Lasiurus cinereus</i>											
<i>Lasiomycteris noctivagans</i>											
Other – specify:											
Other – specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/1/11 2. Company Name: Pittsburg Wildlife & Env
 3. Bat Identifier: N Bossart 4. Assistants: B Cooper
(Responsible Recorder)
 5. Site Name and/or Number: Foundation Mine Complex - Fresh Water Pond - Site 02
 6. Site is (circle one): hibernation site summer habitat

7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
 other structure, describe - _____

7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):

Forested stream valley

8. County: Greene 9. 7.5' Quad.: Halbrook

10. Was site GPS'd (required)? YES NO

11. Geographic Coordinates (D-M-S): Latitude: 39° 50' 49.7" N, Longitude: 80° 19' 37.9" W

Datum (circle one): NAD27 (Preferred), NAD83, WGS84, Other: _____

12. Ownership and Access: (Who owns site or controls access? Give name and address.)
Foundation Coal

13. Time (military) & Temperature: Start Time 2100 h Stop Time 0200 h Total Minutes: 300

Start Temp. 24 °C End Temp. 21 °C (must stay ≥ 10 °C for summer netting)

14. General Weather (circle one): Clear Partly Cloudy; Mostly Cloudy; Cloudy; Drizzle; Intermittent Rain;
(suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____

15. General Wind Conditions (circle one): Calm, Breezy (Leaves Rustling), Windy (Trees Swaying).

16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	4	12m x 2.6m	Stacked over trail	124.8 sq. m
A	"	3	12	"	93.6
B	"	3	6	"	46.8

Total Capture Area: 140.4 sq. m

(Site Survey Record – Continued)

Site Name/No.: Franklin Mine Complex - Site 02

Date: 8/1/11

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

*box elder
 tulip poplar
 maple cherry*

18. Was reproductive status checked? YES NO (if "NO" only enter numbers in Total columns)

***CAPTURE RESULTS**

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>											
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>											
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other – specify:											
Other – specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:

BAT NETTING/TRAPPING SITE SURVEY RECORD

1. Survey Date: 8/2/11 2. Company Name: Pittsburg Wildlife & Env
 3. Bat Identifier: N Bossert 4. Assistants: B Cooper
(Responsible Recorder)
 5. Site Name and/or Number: Founders Mine Complex - Freshwater Pond - Site 02
 6. Site is (circle one): hibernation site **summer habitat**

7a. If hibernation site circle one: limestone mine, coal mine, limestone cave, sandstone cave, RR tunnel,
 other structure, describe - _____

7b. If summer habitat, describe area being sampled (e.g. forested stream or forest clearing with stream):

Forested stream valley

8. County: Greene 9. 7.5' Quad.: Holbrook
 10. Was site GPS'd (required)? YES NO

11. Geographic Coordinates (D-M-S): Latitude: 39° 50' 49.7" N, Longitude: 080° 19' 37.9" W

Datum (circle one): NAD27 (Preferred), **NAD83**, WGS84, Other: _____

12. Ownership and Access: (Who owns site or controls access? Give name and address.) _____

Founders Coal

13. Time (military) & Temperature: Start Time 2055 h Stop Time 0155 h Total Minutes: 300
 Start Temp. 24 °C End Temp. 23 °C (must stay ≥10°C for summer netting)

14. General Weather (circle one): Clear; Partly Cloudy; Mostly Cloudy; **Cloudy**; Drizzle; Intermittent Rain;
(suspend netting during periods of rain) Steady Rain; Thunderstorms; Snow; Other: _____

15. General Wind Conditions (circle one): **Calm**; Breezy (Leaves Rustling); Windy (Trees Swaying).

16. Capture Setup at Site:

Set #	Type	Count	Dimensions	Description	TOTAL AREA (m)
1	Nets	4	12m x 2.6m	Stacked over trail	124.8 sq. m
A	"	3	12	"	93.6
B	"	3	6	"	46.8

Total Capture Area: 140.4 sq. m

(Site Survey Record - Continued)

Site Name/No.: Foundation Mine Complex

Date: 8/2/11

17. Describe habitat 150 m around site: (topography and vegetation including dominant tree species.)

*bar elder
 tulip poplar
 maple cherry*

18. Was reproductive status checked? **YES** / NO (if "NO" only enter numbers in Total columns)

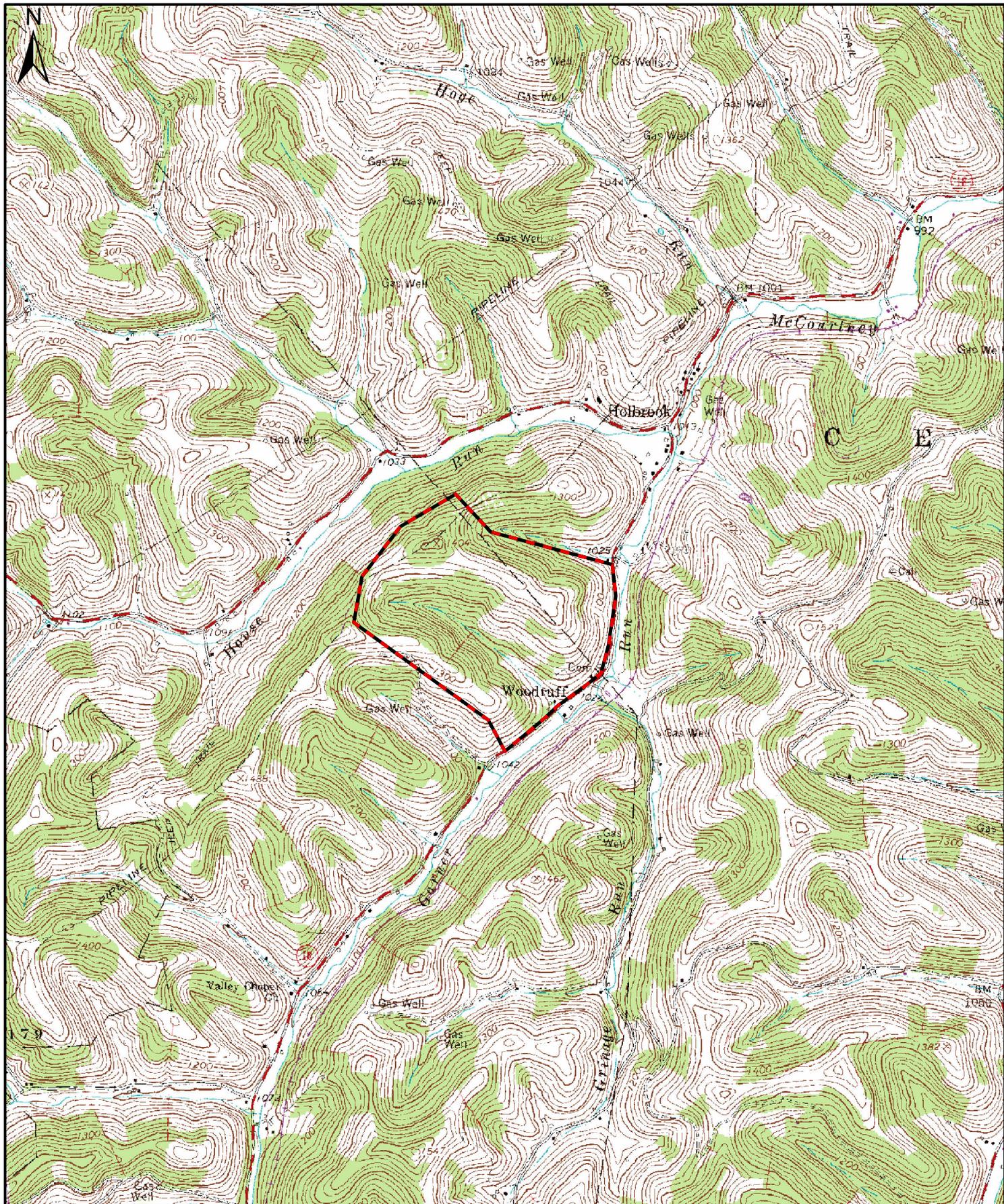
***CAPTURE RESULTS**

Species	Number of Adult Females				No. Juv. Fem.	Total No. Fem.	Number of Adult Males		No. Juv. Male	Total No. Males	Species Totals
	NR	PG	L	PL			SCR	NR			
<i>Eptesicus fuscus</i>	2		1			3	2	1	1	4	7
<i>Myotis lucifugus</i>											
<i>Myotis septentrionalis</i>											
<i>Myotis leibii</i>											
<i>Myotis sodalis</i>											
<i>Eptesicus fuscus</i>											
<i>Perimyotis subflavus</i>											
<i>Lasiurus borealis</i>											
<i>Lasiurus cinereus</i>											
<i>Lasionycteris noctivagans</i>											
Other - specify:											
Other - specify:											
Reproductive Status: NR= nonreproductive, PG= pregnant, L= lactating, PL= post lactating, SCR= scrotal/epididymis swollen. *Complete Measurement and Capture Data Form for all: (1) <i>Myotis sodalis</i> , (2) <i>Myotis leibii</i> , (3) bats you are banding or band recaptures, (4) radio-tagged bats and (5) bat species not usually found in PA.											Grand Total

19. BAT DETECTORS & OTHER MONITORING DEVICES: Tallies of bat passes / hour. One to 5 hours required for Indiana bat hibernacula surveys. Monitor one hour after 22:00 hrs when trapping/netting hibernacula and 5 hours when only monitoring with bat detectors, night vision or infrared device (when site can not be trapped/netted). Describe procedure & equipment used in remarks.

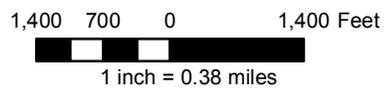
1 st hour	2 nd hour	3 rd hour	4 th hour	5 th hour
Start Time:				
End Time:				
Tallies:	Tallies:	Tallies:	Tallies:	Tallies:

20. REMARKS:



Legend

 Permit Area



Prepared For:
Foundation Mining, LLC

Prepared By:
Pittsburgh Wildlife &
Environmental, Inc.

Project Location Map

**Foundation Mine Complex
Fresh Water Impoundment
Foundation Mining, LLC
Greene County, Pennsylvania**



Legend

 Permit Area

 Mist Net Site

640 320 0 640 Feet



1 inch = 0.16 miles

Prepared For:
Foundation Mining, LLC

Prepared By:
Pittsburgh Wildlife &
Environmental, Inc.

Aerial Map

**Foundation Mine Complex
Fresh Water Impoundment
Foundation Mining, LLC
Greene County, Pennsylvania**

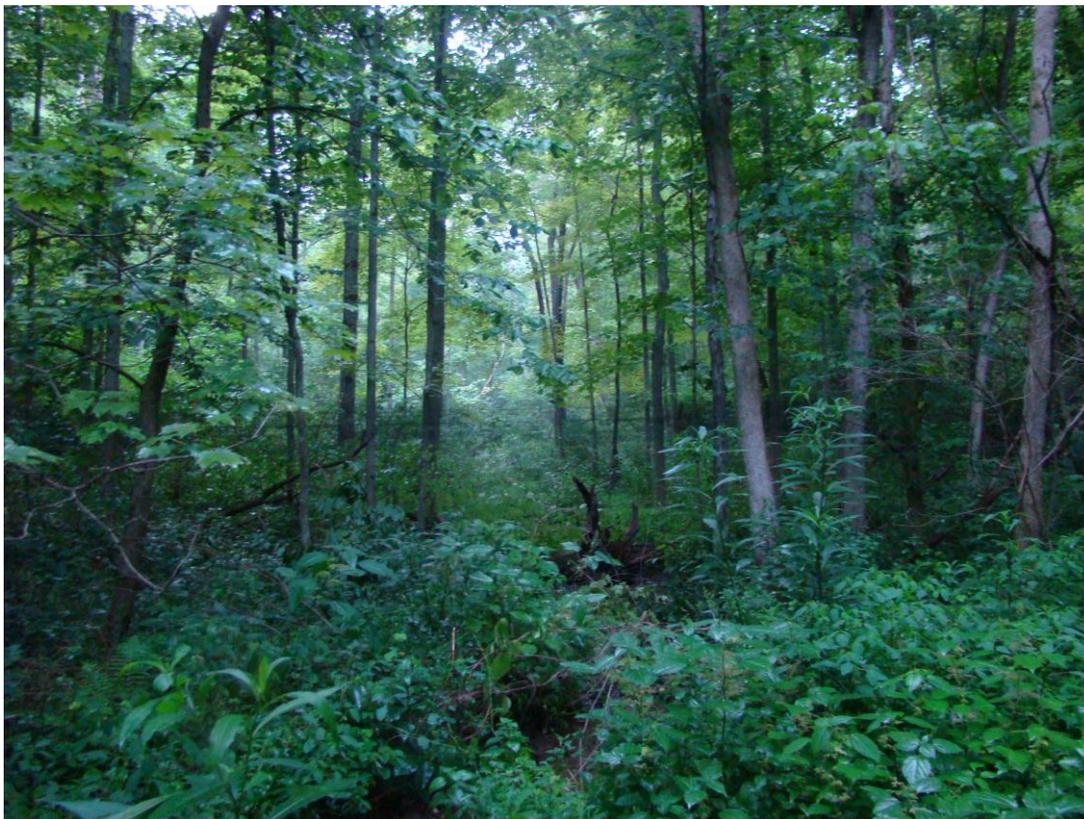


Photo 1: View of Mist Net Site 01.



Photo 2: View of Mist Net Site 02.



Photo 3: View of Big Brown bat (*Eptesicus fuscus*) captured at Mist Net Site 01.



Photo 4: View of Eastern Red bat (*Lasiurus borealis*) captured at Mist Net Site 01.



Photo 5: View of Northern Myotis bat (*Myotis septentrionalis*) captured at Mist Net Site 01.