Print Form | Submit by Email | Reset Form

Annual Report

This Annual Report shows information the Division has for your mine. Submit the completed document and any additional information identified in the Appendices to the Division by the date specified by the cover letter**.** During a complete inspection an inspector will check and verify the information.

GENERAL INFORMATION

Company Name	CONSOL Mining Company LLC	Mine Name	Emery Deep Mine
Permit Number	C/015/0015	Permit expiration Date	1/07/2016
Operator Name	CONSOL Mining Company LLC	Phone Number	+1 (724) 485-4267
Mailing Address	1000 CONSOL Energy Drive	Email	kerrygoodballet@consolenergy.com
City	Canonsburg		
State	PA	Zip Code	15317

		DOGM File Location or Annual Report Location
Excess Spoil Piles	☐ Required ☒ Not Required	
Refuse Piles	☒ Required ☐ Not Required	See Appendix A-2, Quarterly Coal Refuse Inspections
Impoundments	☒ Required ☐ Not Required	See Appendix A-1, Annual Impoundment inspections
Other:		

OPERATOR COMMENTS

Underground mining operations have been idle with no production since 12/17/10.

Appendix A-1, Annual Impoundment Inspections Appendix A-2, Quarterly Coal Refuse inspections
Appendix B-1, 4th East Dust Monitoring Appendix B-2 Annual Subsidence Survey Appendix B-2a, Monthly Subsidence Reports
Appendix B-3 Bryant 14th West Flow Appendix B-4, Emery Town Well Report
Appendix D-1, 2010 Annual Report and final MSHA Mine Maps

REVIEWER COMMENTS ☐ Met Requirements ☐ Did Not meet Requirements

COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the Mining and Reclamation Plan and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If additional written response is required, it should be filed as an attachment to this report.

Title: CULTURAL RESOURCE PROTECTION
Objective: To monitor the five eligible cultural resource sites that could be damaged as a result of subsidence in the zero zero north area. Sites include: 42Em3964, 42Em3965, 42Em3969, and 42Em3974.
Frequency: Annually after undermining until the Division determines subsidence is no longer an impact.
Status: ongoing, Undermining has not occurred to date.
Reports: Annual
Citation: MRP, Confidential Binder, Chapter X, Part A, Page 1

Operator Comments

No mining occurred under these sites. Underground mining operations have been idle with no production since 12/17/10.

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: CONTROL OF COAL FINES DEPOSITION
Objective: To prevent coal fines from accumulating on undisturbed soils.
Frequency: Annual inspection of three transects, three sample sites each for % coal, 5 live vegetative cover, and presence of cryptogrammic cover and soil color. Include the name of the person collecting the data, soil color data, and cryptogram observation.
Status: Annual inspections should be ongoing during periods of production. The data could be more effectively displayed using an excel spreadsheet so that comparisons of the data and trends may be seen over time.
Reports: Annual report, build on the table provided in Chapter X-C, page 5, with the inclusion of a column for soil color.
Citation: MRP, Chapter X part C, page 5b.
Operator Comments

Refer to Appendix B-1, 4th East Dust Monitoring. Underground mining operations have been idle with no production since 12/17/10.

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: INVESTIGATIVE STUDY INTO RECLAMATION PRACTICE

Objective: To develop an enhanced reclamation plan, based on an evaluation of soil chemistry and vegetation establishment on previous reclaimed sites. (results located in Chapter 11, Appendix 1). This is a four-phase project.
Phase I involves reporting on the investigation of past reclamation sites and practices at the mine.
Phase II requires to lower the profile of pond 6 stockpiles, reseed and keep wildlife off piles; reclaim ponds 4 & 5, and pond 1 subsoil pile; adjust final reclamation plans to incorporate beneficial treatments observed such as discing in 1 T/ac straw mulch; modify the seed mix to include only salt tolerant species and allow for a higher percentage of shrubs and forbs; adjust the reference areas to eliminate duplication.
Phase III requires that the applied techniques be evaluated qualitatively annually and quantitatively between the 4th and 6th year. These evaluations will be correlated to precipitation data.
Phase IV requires the permittee to revise the MRP to include the best technology for final revegetation.
Frequency: Ongoing
Status: Phase I has been met.
Reports: Qualitative report annually, and quantitative report 4th and 6th year.
Citation: MRP, Chapter III, page 4a, and Chapter III, appendix 1

Operator Comments

CONSOL representatives met with DOGM & Consultants to discuss in 2011 to develop a plan to address compliance and a field meeting is scheduled for early in 2014

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: WASTE STOCKPILE MATERIAL
Objective: To identify chemical characteristics of material as it is placed on the Temporary Coal mine Waste Stockpile. Sample and analyze waste for acid toxic parameters in accordance with R645-301-731.300.
Frequency: One sample/600 cu yds of coal mine waste brought to the temporary stockpile.
Status: Ongoing
Reports: Provide analysis in annual report.
Citation: MRP, Chapter II, page 10.

Operator Comments

No additional mine waste has been added in 2013. Underground mining operations have been idle with no production since 12/17/10..

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING- MONTHLY INSPECTIONS
Objective: Inspect the area outlined on Plate V-5 as full extraction areas when pillar splitting begins.
Frequency: Monthly until there is no record of additional subsidence.
Status: Ongoing
Reports: Track in annual report to ensure compliance. Resubmittal of monthly reports is not necessary if the operator has already submitted them. Division engineer will review reports annually to ensure compliance.
Citation: MRP, Chapter V, Binder 1 of 3, Page 36

Operator Comments

Underground mining operations have been idle with no production since 12/17/10. Annual subsidence surveys were performed in 2013 (refer to Appendix B-2, Annual Subsidence Survey).
Monthly subsidence reports of the 00 North subsidence area that was previously mitigated are underway and per DOGM email dated 10/12/13 copies of the monthly subsidence report are being emailed to DOGM and are compiled in the annual report at Appendix B-2a, Monthly Subsidence Reports.

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING- POINTS OVER PARTIAL PILLAR SECTIONS
Objective: monitor points over partial pillar sections that have been resurveyed once and where no significant movement (<0.5') was found will be surveyed within one year. If this subsequent survey shows no significant movement from the original survey, the point will be surveyed again at one year intervals. Points over advancing sections need not be resurveyed unless there has been evidence that subsidence has taken place (caving).
Frequency: As needed
Status: Ongoing
Reports: Track in annual report to ensure compliance. Resubmittal of monthly reports is not necessary if the operator has already submitted them. Division engineer will review reports annually to ensure compliance.
Citation: MRP, Chapter V, binder 1 of 3, page 36.

Operator Comments

Refer to appendix B-2, 2012 Annual Subsidence Survey

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING- NEW POINTS
Objective: Resurvey new monitoring points established over advancing sections such as mains and submains within one year after mining has been completed beneath the station. Include dates that points were established to track if the points have been resurveyed within a year after mining has been completed.
Frequency: As needed.
Status: Ongoing.
Reports: Track in annual report to ensure compliance. Resubmittal of monthly reports is not necessary if the operator has already submitted them. Division engineer will review reports annually to ensure compliance.
Citation: MRP, Chapter V, binder 1 of 3, page 36.

Operator Comments

N/A, Underground mining operations have been idle with no production since 12/17/10..

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING- REPORT

Objective: Subsidence monitoring report containing: 1.) Mine maps showing where pillars have been pulled and the month and year that such pillars were removed or partially removed. 2.) Maps showing the location of survey monitoring stations and tension cracks and/or compression features visible on the surface. 2a.) Photographs of the subsidence monitoring points above the full extraction areas outlined on Plate V-5 to record pre and post subsidence. 3.) The differential level and horizontal survey summary and 4.) a narrative.

Frequency: As needed, report submitted to the Division annually.

Status: Ongoing

Reports: Provide report in annual report.

Citation: MRP, Chapter V, binder 1 of 3, page 37.

Operator Comments

Underground mining operations have been idle with no production since 12/17/10. Annual subsidence surveys were performed in 2013 (refer to Appendix B-2, Annual Subsidence Survey).
Monthly subsidence reports of the 00 North subsidence area that was previously mitigated are underway and per DOGM email dated 10/12/13 copies of the monthly subsidence report are being emailed to DOGM and are compiled in the annual report at Appendix B-2a, Monthly Subsidence Report.

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING- PREMINING ELEVATIONS AND GRADIENTS

Objective: Establish pre-mining elevations and gradients of any irrigation ditches and pond embankments within the angle of draw. The permittee will monitor these areas by visual inspection and post-subsidence ground survey to establish the effects of subsidence.

Frequency: As needed.

Status: Ongoing

Reports: Track in annual report to ensure compliance. Resubmittal of monthly reports is not necessary if the operator has already submitted them. Division engineer will review reports annually to ensure compliance.

Citation: MRP, Chapter V, binder 1 of 3, page 37.

Operator Comments

N/A, Underground mining operations have been idle with no production since 12/17/10..

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING- MITIGATION REPORT

Objective: Provide, to the Division on an as-needed basis, a subsidence mitigation report that describes the surface mitigation projects and their status broken down by surface land owners.

Frequency: quarterly

Status: Ongoing

Reports: Track in annual report to ensure compliance. Resubmittal of monthly reports is not necessary if the operator has already submitted them. Division engineer will review reports annually to ensure compliance.

Citation: MRP, Chapter V, binder 1 of 3, page 37.

Operator Comments

Underground mining operations have been idle with no production since 12/17/10. Annual subsidence surveys were performed in 2013 (refer to Appendix B-2, Annual Subsidence Report).
Monthly subsidence reports of the 00 North subsidence area that was previously mitigated are underway and per DOGM email dated 10/12/13 copies of the monthly subsidence report are being emailed to DOGM and are compiled in the annual report at Appendix B-2a, Monthly Subsidence Report.
Monthly flow measurements of the dam breach panel 14th West (Bryant -14th West) are being taken and data presented in Appendix B-3, Bryant 14th West Flow

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING- UPDATE PRE-SUBSIDENCE SURVEY

Objective: Update the existing pre-subsidence survey and plates six months before full extraction and provide copies to the surface land owner, the Division and the water conservancy district.

Frequency: As needed, six months prior to full extraction.

Status: Ongoing

Reports: Track in annual report to ensure compliance. Resubmittal of monthly reports is not necessary if the operator has already submitted them. Division engineer will review reports annually to ensure compliance.

Citation: MRP, Chapter V, binder 1 of 3, page 37.

Operator Comments

Underground mining operations have been idle with no production since 12/17/10. No new pre-subsidence surveys required with idle underground mining operations

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: SUBSIDENCE MONITORING- RESURVEY NEW MONITORING POINTS

Objective: Resurvey new monitoring points established over partial pillar sections within six months after final mining has taken place beneath them. Provide dates that points were established to track if the points have been resurveyed within six months after final mining.

Frequency: as needed

Status: Ongoing

Reports: Track in annual report to ensure compliance. Resubmittal of monthly reports is not necessary if the operator has already submitted them. Division engineer will review reports annually to ensure compliance.

Citation: MRP, Chapter V, binder 1 of 3, page 36.

Operator Comments

N/A for 2013, no new monitoring points established. Underground mining operations have been idle with no production since 12/17/10..

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Title: EMERY TOWN WELL MONITORING
Objective: Consol commits to providing an annual report that evaluates the monitoring data collected from Emery Town Wells #1 and #2.
Frequency: Annually
Status: Ongoing
Reports: Annual Report
Citation: Chapter VI, page VI-56.

Operator Comments

Refer to Appendix B-4 for the Emery Town Well Update report dated 2/28/2014

Reviewer Comments ☐ Did Not Meet Requirements ☐ Met Requirements

Title: MONITOR FIVE ELIGIBLE SITES IN THE ZERO ZERO NORTH AREA FOR IMPACTS FROM MINING
Objective: To monitor eligible cultural resource sites that could be damaged as a result of subsidence. Sites include: 42Em3964, 42Em3965, 42Em3966, 42Em3969, 42Em3974.
Frequency: Annually after undermining until the Division determines subsidence is no longer an impact.
Status: Ongoing. Undermining was expected to occur in 2010.
Reports: Annual Report
Citation: MRP, Confindential, Chap. X, Part A. page1.

Operator Comments

These sites have not been undermined at this time

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

FUTURE COMMITMENTS AND CONDITIONS

The following commitments are not required for the current annual report year, but will be required by the permittee in the future as indicated by the "status" field. These commitments are included for information only, and do not currently require action. If you feel that the commitment is no longer relevant or needs to be revised, please contact the Division.

Title: SOIL SAMPLING AT 4TH EAST PORTAL
Objective: Verify soil characteristics prior to final reclamation grading through sampling and analysis for pH, SAR, and EC with particular attention to those areas that were treated with dust suppressant.
Frequency: At final reclamation.
Status: At final reclamation.
Reports: report findings to Division.
Citation: MRP, Chapter III part C.1, page 11 and Appendix X, part C-3, page 24.

Title: SOIL SAMPLING OF POND NO. 4 AND POND NO. 9
Objective: To determine if evaporative salts have accumulated to a toxic level.
Frequency: at final reclamation
Status: at final reclamation.
Reports: report to the Division.
Citation: MRP, Chapter III, part C-1, page 12.

Title: SOIL TESTING OF RECLAIMED SITE BEFORE SEEDING
Objective: To verify the suitability of the growth media.
Frequency: At reclamation.
Status: At reclamation, before seeding.
Reports: report to Division.
Citation: MRP, Chapter VIII, part C-4, page 21, paragraph 1.

Title: PERMANENT WASTE DISPOSAL SITE SUBSTITUTE TOPSOIL AND SUBSOIL COVER
Objective: To determine how to segregate best available material within the disturbed area for use as substitute topsoil from less desirable material to be used as cover over the coal mine waste permanent disposal site.
Frequency: Prior to construction of permanent disposal site, Consol will resample the gravel pit site for topsoil substitute quality and quantity, and cover material quality. The site will be sampled on one sample per acre grid, with analysis on one foot
Status: Future Commitment
Reports: report to Division.
Citation: MRP, Chap VII, App. VII-2, pg. 2

Title: IDENTIFY CHEMICAL CHARACTERISTICS OF COAL MINE WASTE PRIOR TO FINAL BURIAL OR TREATMENT

Objective: In accordance with R645-301-731.300, determine chemical characteristics of coal mine waste in existing temporary coal mine waste stockpile. Commitment to core temporary pile in at least 5 locations and analyze waste in 5 ft. intervals for pH, EC, SAR, Acid Base Accounting, Se, B, and texture.

Frequency: One year prior to moving the waste

Status: Future Commitment

Reports: report to Division.

Citation: MRP, Chap III, pg. 13

OPERATOR COMMENTS (OPTIONAL)

REVIEWER COMMENTS

REPORTING OF OTHER TECHNICAL DATA

Please list other technical data or information that was not included in the form above, but is required under the approved plan, which must be periodically submitted to the Division.

Please list attachments:

Reviewer Comments

MAPS

Copies of mine maps, current and up-to-date, are to be provided to the Division as an attachment to this report in accordance with the requirements of R645-301-525.240. The map copies shall be made in accordance with 30 CFR 75.1200 as required by MSHA. Mine maps are not considered confidential.

Map Name	Map Number	Included		Confidential	
		Yes	No	Yes	No
Annual subsidence map		☐	☒	☐	☐
Mine Map MSHA map and 2010 Annual Report Map		☒	☐	☐	☐
		☐	☐	☐	☐
		☐	☐	☐	☐
		☐	☐	☐	☐

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

Appendix A-1

Annual Impoundment Inspections

EarthFax Engineering Group, LLC
7324 South Union Park Avenue, Suite 100, Midvale, Utah 84047 • 801.561.1555 • FAX 801.561.1861

902-15

EarthFax

September 30, 2013

Tim Kirschbaum
Environmental Engineer
Consolidation Coal Company
P.O. Box 566
Sesser, IL 62884-0566

Subject: Emery Mine sedimentation pond annual inspection results

Dear Tim:

On September 18, 2013 I inspected the sedimentation ponds at the Emery Mine for the purpose of the 2013 annual inspection. The results of those inspections are attached.

It is my opinion that the ponds adequately serve their intended purpose and may continue to be used for that purpose. However, minor improvements should be made to the inlet of Pond 5 to minimize the potential for erosion at this inlet. Furthermore, fill material should be added to the roadway on the south side of Pond 9 to prevent draining of that pond onto the 4th East portal slope in the future. I have noted these issues on the inspection forms.

Other than the above issues, I did not observe any conditions associated with the ponds that require attention.

Please contact me if you have any questions.

Sincerely,

Richard B. White, P.E.
President

REGISTERED PROFESSIONAL ENGINEER
No. 168246
RICHARD B. WHITE
30 Sep 2013
STATE OF UTAH

Enclosure

Cc: John Gefferth (Civil & Environmental Consultants, Inc.)

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	30 Sep 2013
Permit Number	ACT 015/015
Mine Name	Emery Mine
Company Name	Consolidated Coal Company

IMPOUNDMENT IDENTIFICATION

Impoundment Name	Pond 1
Impoundment Number	UPDES Outfall 001
UPDES Permit Number	UT0022616
MSHA ID Number	NA

IMPOUNDMENT INSPECTION

Inspection Date	18 Sep 2013
Inspected by	R.B. White
Reason for Inspection	Annual

(Annual, quarterly or other periodic inspections, critical installation , or completion of construction.)

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

Questions a and b are required for an impoundment, which functions as a Sedimentation pond.

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Design sediment storage volume = 10.3 AF
60% sediment cleanout volume = 6.2 AF
Sediment cleanout elevation = 5935.7 ft

Average elevation of sediment in pond bottom = 5933.5 ft (based on Aug 2010 survey)

b. Principle and emergency spillway elevations.

Spillway elevation = 5939.3 ft
With stop logs in place, the spillway elevation can be raised a minimum of an additional 12 inches.

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

This pond serves as a location for the discharge of mine water, but has not been used for that purpose for several months. The pond qwas empty in September 2013. The embankments remain in good condition and the pond remains capable of serving its intended purpose if re-activated.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

The pond is capable of properly serving its intended function. Plenty of sediment capacity remains in the pond. The pond is adequate for continued use.

QUALIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous condition of the structure affecting stability.

Signature: Richard J Wolfe Date: 30 Sep 2013

CERTIFIED REPORT

IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

		YES	NO
1.	Is impoundment designed and constructed in accordance with the approved plan?	☒	☐
2.	Is impoundment free of instability, structural weakness, or any other hazardous conditions?	☒	☐
3.	Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	☒	☐

COMMENTS/ OTHER INFORMATION

Consol has operated this pond in the past for the settlement of sediment contained in water that is discharged from the underground mine. Discharges to the pond ceased several months ago.

CERTIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: Richard B. White, P.E. - President, EarthFax Engineering Group, LLC

Full Name and Title

Signature: Richard B White Date 30 Sep 2013

P.E. Number & State 168246, UT

[P.E. Cert. Stamp]

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	30 Sep 2013
Permit Number	ACT 015/015
Mine Name	Emery Mine
Company Name	Consolidated Coal Company

IMPOUNDMENT IDENTIFICATION

Impoundment Name	Pond 2
Impoundment Number	UPDES Outfall 002
UPDES Permit Number	UT0022616
MSHA ID Number	NA

IMPOUNDMENT INSPECTION

Inspection Date	18 Sep 2013
Inspected by	R.B. White
Reason for Inspection	Annual

(Annual, quarterly or other periodic inspections, critical installation , or completion of construction.)

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

Questions a and b are required for an impoundment, which functions as a Sedimentation pond.

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Design sediment storage volume = 0.83 AF
Design sediment storage elevation = 5905.3 ft
60% sediment cleanout volume = 0.50 AF
60% sediment cleanout elevation = 5903.0 ft

Approximate average current sediment storage elevation = 5900.4 ft

b. Principle and emergency spillway elevations.

Spillway elevation = 5908.5 ft

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

Water flows into this pond via a 12-inch diameter PVC pipe, which discharges onto riprap down the inside embankment. Approximately 2 to 3 inches of water and a small amount of accumulated sediment were in the pond at the time of the inspection. Large boulders have been placed downstream from the pond outlet. No signs of erosion were observed during the inspection. The dewatering culvert has been fitted with a skimmer. The pond appears to be in good, functional shape.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

No problems were observed.

QUALIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous condition of the structure affecting stability.

Signature: Richard B Walker Date: 30 Sep 2013

CERTIFIED REPORT

IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

		YES	NO
1.	Is impoundment designed and constructed in accordance with the approved plan?	☒	☐
2.	Is impoundment free of instability, structural weakness, or any other hazardous conditions?	☒	☐
3.	Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	☒	☐

COMMENTS/ OTHER INFORMATION

The pond appears to be functioning as designed and is adequate for continued use.

CERTIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: Richard B. White, P.E. - President, EarthFax Engineering Group, LLC

Full Name and Title

Signature: Richard B White Date 30 Sep 2013

P.E. Number & State 168246, UT

[P.E. Cert. Stamp]

O:\FORMS\Annual rpt\Impoundment.doc

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	30 Sep 2013
Permit Number	ACT 015/015
Mine Name	Emery Mine
Company Name	Consolidated Coal Company

IMPOUNDMENT IDENTIFICATION

Impoundment Name	Pond 3
Impoundment Number	UPDES Outfall 005
UPDES Permit Number	UT0022616
MSHA ID Number	NA

IMPOUNDMENT INSPECTION

Inspection Date	18 Sep 2013
Inspected by	R.B. White
Reason for Inspection	Annual

(Annual, quarterly or other periodic inspections, critical installation , or completion of construction.)

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

Questions a and b are required for an impoundment, which functions as a Sedimentation pond.

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Design sediment storage volume = 1.14 AF
Design sediment storage elevation = 5906.5 ft
60% sediment cleanout volume = 0.68 AF
60% sediment cleanout elevation = 5905.0 ft

Approximate average current sediment storage elevation = 5902.6 ft

b. Principle and emergency spillway elevations.

Spillway elevation = 5907.8 ft

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

The pond contained approximately 2 to 3 inches of water and some fresh sediment at the time of the inspection. The overflow consists of a 42-inch diameter riser with two 6-inch diameter side inlets (one with its invert located 15.5 inches below the top of the riser and the other with its invert 58 inches below the top of the riser). The riser outlet invert is located 69 inches below the top of the riser. There were no signs of recent water on the inside of the riser, indicating that the pond has not recently filled to this elevation. No signs of instability were observed, including on the steep, natural outslope on the north embankment.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

The pond appears to be functioning as designed.

QUALIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous condition of the structure affecting stability.

Signature: Richard Bowles Date: 30 Sep 2013

CERTIFIED REPORT

IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

		YES	NO
1.	Is impoundment designed and constructed in accordance with the approved plan?	☒	☐
2.	Is impoundment free of instability, structural weakness, or any other hazardous conditions?	☒	☐
3.	Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	☒	☐

COMMENTS/ OTHER INFORMATION

The pond appears to be functioning as designed and is adequate for continued use.

CERTIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: Richard B. White, P.E. - President, EarthFax Engineering Group, LLC

Full Name and Title

Signature: Richard B White Date 30 Sep 2013

P.E. Number & State 168246, UT

[P.E. Cert. Stamp]

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	30 Sep 2013
Permit Number	ACT 015/015
Mine Name	Emery Mine
Company Name	Consolidated Coal Company

IMPOUNDMENT IDENTIFICATION

Impoundment Name	Pond 5
Impoundment Number	UPDES Outfall 007
UPDES Permit Number	UT0022616
MSHA ID Number	NA

IMPOUNDMENT INSPECTION

Inspection Date	18 Sep 2013
Inspected by	R.B. White
Reason for Inspection	Annual

(Annual, quarterly or other periodic inspections, critical installation , or completion of construction.)

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

The HDPE inlet culverts have been cut where they protrude from the interior pond slope to avoid future degradation of the material. A corrugated HDPE liner has been placed on this slope at the middle inlet to direct the flow of water into the pond. Riprap has been placed at the outlet from this liner to minimize erosion of the pond bottom at the inlet. Some of this riprap has been moved by the force of the water. Additional riprap should be placed along the liner edges and at the liner outlet to provide additional protection.

Questions a and b are required for an impoundment, which functions as a Sedimentation pond.

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Design sediment storage volume = 1.13 AF
Design sediment storage elevation = 5944.6 ft
60% sediment cleanout volume = 0.68 AF
60% sediment cleanout elevation = 5943.8 ft

Approximate average current sediment storage elevation = 5943.1 ft

b. Principle and emergency spillway elevations.

Spillway elevation = 5949.2 ft

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

This pond has four 24-inch diameter inlet culverts (one CMP and three HDPE). The pond contained 3.5 to 4 feet of water at the time of the inspection. Floatsam along the edge of the primary spillway indicated that the pond filled during recent storm events, but did not discahrge. The open-channel outlet spillway shows no sign of erosion. The pond embankment shows no signs of instability.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

Some additional minor repairs should be implemented to the middle pond inlet, as described above, thereby further minimizing the potential for erosion of the pond in-slope. No stability or operational concerns were noted during the inspection.

QUALIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous condition of the structure affecting stability.

Signature: Richard B Wolfe Date: 30 Sep 2013

CERTIFIED REPORT

IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

		YES	NO
1.	Is impoundment designed and constructed in accordance with the approved plan?	☒	☐
2.	Is impoundment free of instability, structural weakness, or any other hazardous conditions?	☒	☐
3.	Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	☒	☐

COMMENTS/ OTHER INFORMATION

The pond appears to be functioning as designed.

CERTIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

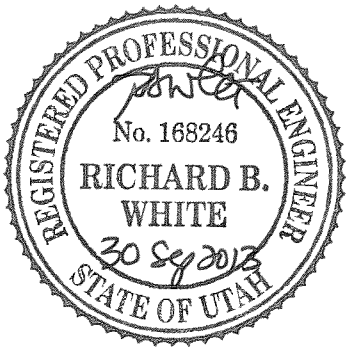
By: Richard B. White, P.E. - President, EarthFax Engineering Group, LLC

Full Name and Title

Signature: Richard B White Date 30 Sep 2013

P.E. Number & State 168246, UT

[P.E. Cert. Stamp]



*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	30 Sep 2013
Permit Number	ACT 015/015
Mine Name	Emery Mine
Company Name	Consolidated Coal Company

IMPOUNDMENT IDENTIFICATION

Impoundment Name	Pond 6
Impoundment Number	UPDES Outfall 003
UPDES Permit Number	UT0022616
MSHA ID Number	NA

IMPOUNDMENT INSPECTION

Inspection Date	18 Sep 2013
Inspected by	R.B. White
Reason for Inspection	Annual

(Annual, quarterly or other periodic inspections, critical installation , or completion of construction.)

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

It appears that the pond is operating as designed, with no instability concerns observed.

Questions a and b are required for an impoundment, which functions as a Sedimentation pond.

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Design sediment storage volume = 7.5 AF
60% sediment cleanout volume = 4.5 AF
Sediment cleanout elevation = 6012.5 ft

Average elevation of sediment in pond bottom = 6010.3 (based on August 2010 survey)

b. Principle and emergency spillway elevations.

Spillway elevation = 6016.0 ft

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

At the time of the inspection, the flow depth in the 6-inch Parshall flume at the pond outlet was 1.10 ft, representing a discharge of 2.40 cfs. The pond elevation was approximately 5 inches above the spillway invert at the time of the inspection.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

The pond appears to be operating as designed.

QUALIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous condition of the structure affecting stability.

Signature: Richard Bowles Date: 30 Sep 2013

CERTIFIED REPORT

IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	☒	☐
2. Is impoundment free of instability, structural weakness, or any other hazardous conditions?	☒	☐
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	☒	☐

COMMENTS/ OTHER INFORMATION

Consol operates this pond to settle sediment from mine discharge water.

CERTIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

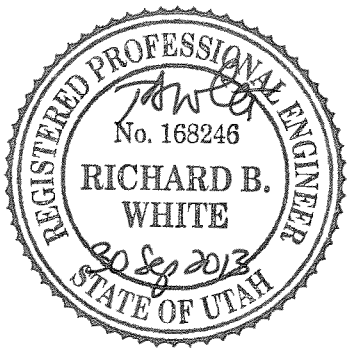
By: Richard B. White, P.E. - President, EarthFax Engineering Group, LLC

Full Name and Title

Signature: Richard B White Date 30 Sep 2013

P.E. Number & State 168246, UT

[P.E. Cert. Stamp]



*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	30 Sep 2013
Permit Number	ACT 015/015
Mine Name	Emery Mine
Company Name	Consolidated Coal Company

IMPOUNDMENT IDENTIFICATION

Impoundment Name	Pond 8
Impoundment Number	UPDES Outfall 006
UPDES Permit Number	UT0022616
MSHA ID Number	NA

IMPOUNDMENT INSPECTION

Inspection Date	18 Sep 2013
Inspected by	R.B. White
Reason for Inspection	Annual

(Annual, quarterly or other periodic inspections, critical installation , or completion of construction.)

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

The level of flow in Quitchupah Creek, adjacent to the pond, is occasionaly high enough to nearly flow over the south embankment of Pond 8 and into the pond. Such a condition of near-overflow occurred within a few weeks of this inspection. Nonetheless, the embankment rebmains stable with no significant erosion of the outslope adjacent to the creek. No signs of instability were observed elsewhere within the pond.

Questions a and b are required for an impoundment, which functions as a Sedimentation pond.

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Design sediment storage volume = 2.00 AF
Design sediment storage elevation = 5910.0 ft
60% sediment cleanout volume = 1.35 AF
60% sediment cleanout elevation = 5909.0 ft
Approximate average current sediment storage elevation = 5907.0 ft

b. Principle and emergency spillway elevations.

This impoundment is designed as a total containment pond without a spillway. The pond can contain the total design sediment volume plus the runoff from the 100-yr, 6-hr storm and still have a freeboard of 3.4 feet. The invert elevation on the dewatering pipe is set at 5910.0 ft.

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

The pond inlets appear to be adequate. The pond contined approximatley 4 to 6 inches of water at the time of the inspection. No substantial amount of sediment has accumulated in the pond.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

The pond appears to be operating as designed.

QUALIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous condition of the structure affecting stability.

Signature: Richard Bowles Date: 30 Sep 2013

CERTIFIED REPORT

IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

		YES	NO
1.	Is impoundment designed and constructed in accordance with the approved plan?	☒	☐
2.	Is impoundment free of instability, structural weakness, or any other hazardous conditions?	☒	☐
3.	Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	☒	☐

COMMENTS/ OTHER INFORMATION

The pond appears to be functioning as designed and is adequate for continued use.

CERTIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: Richard B. White, P.E. - President, EarthFax Engineering Group, LLC

Full Name and Title

Signature: Richard B White Date 30 Sep 2013

P.E. Number & State 168246, UT

[P.E. Cert. Stamp]

*To enter text, click in the box and type your response. If a box already contains an entry select the entry and type the replacement. You can use the **tab** key to move from one field to the next. To select a check box, click in the box or type an x.*

GENERAL INFORMATION

Report Date	30 Sep 2013
Permit Number	ACT 015/015
Mine Name	Emery Mine
Company Name	Consolidated Coal Company

IMPOUNDMENT IDENTIFICATION

Impoundment Name	Pond 9
Impoundment Number	UPDES Outfall 009
UPDES Permit Number	UT0022616
MSHA ID Number	NA

IMPOUNDMENT INSPECTION

Inspection Date	18 Sep 2013
Inspected by	R.B. White
Reason for Inspection	Annual

(Annual, quarterly or other periodic inspections, critical installation , or completion of construction.)

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

Questions a and b are required for an impoundment, which functions as a Sedimentation pond.

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Design sediment storage volume = 0.32 AF
Design sediment storage elevation = 6052.5 ft
60% sediment cleanout volume = 0.18 AF
60% sediment cleanout elevation = 6051.7 ft
Approximate average current sediment storage elevation = 6051.2 ft

b. Principle and emergency spillway elevations.

Spillway elevation = 6054.6 ft

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

A moderate amount of sediment has accumulated since the pond was last cleaned out. No signs of erosion were noted at the pond outlet or the spillway. No signs of instability were observed.

The pond contained approximately 1 foot of water at the time of the inspection. It appears that recent heavy thunderstorm activity filled the pond, causing some of the water to discharge down the ramp to the sealed 4th East portal. No water discharged from the pond spillway during this event (i.e., the roadway on the south side of the pond is slightly lower than the spillway elevation). Therefore, it is recommended that fill be added to the roadway on the south side of the pond to prevent water from draining to the portal slope in the future.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

No stability concerns were noted. As noted above, fill should be added to the roadway on the south side of the pond to prevent water from draining onto the 4th East portal slope in the future.

QUALIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous condition of the structure affecting stability.

Signature: Richard B Lee Date: 30 Sep 2013

CERTIFIED REPORT

IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

		YES	NO
1.	Is impoundment designed and constructed in accordance with the approved plan?	☒	☐
2.	Is impoundment free of instability, structural weakness, or any other hazardous conditions?	☒	☐
3.	Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	☒	☐

COMMENTS/ OTHER INFORMATION

The pond appears to be functioning as designed and is adequate for continued use.

CERTIFICATION STATEMENT:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: Richard B. White, P.E. - President, EarthFax Engineering Group, LLC

Full Name and Title

Signature: Richard B White Date 30 Sep 2013

P.E. Number & State 168246, UT

[P.E. Cert. Stamp]

Appendix A-2

Quarterly Coal Refuse Inspections

INSPECTION FORM

COAL REFUSE PILES AND COAL WASTE IMPOUNDMENTS

Name Quinn Healy Title PE

Date 2/4/13 Date last inspected 11/27/12

Site Name Emery Temp. Coal Stockpile Mine Name Emery

Refuse Facility ID # 1211-UT-09-00079-01

Refuse piles---Part A only
Impoundments---Part A and Part B

Part A

1.	Foundation preparation (vegetation, topsoil removal?)	X Yes	___ No
2.	Lift Thickness (inches)		
3.	Compaction (4 to 6 complete passes)	X Yes	___ No
4.	Burning* (specify extent and location)	___ Yes	X No
5.	Angle of Slope (degrees)	3:1	
6.	Seepage* (specify location, color, & appr. volume	___ Yes	X No
7.	Cracks or scarps* (location, size)	___ Yes	X No
8.	Major erosion problems* (location and extent)	___ Yes	X No
9.	Water impounding against toe*	___ Yes	X No

Part B

10.	Embankment freeboard (feet)		
11.	___Increase___Decrease in water level (feet)	___ Yes	___ No
12.	Sumps or sinkholes in slurry surface	___ Yes	___ No
13.	Clogging* (pipes, ditches, spillway)	___ Yes	___ No
14.	Trash racks clear and in place	___ Yes	___ No

* Adverse conditions noted in these items should be described (extent, location, volume, etc.) in the space provided. Major adverse changes could cause instability.

Inspection Category	Comments
	I inspected the refuse pile on 2/4/2013.
	The slopes are compacted and stable. The site drainage impoundment ditches are intact. There are no visible instabilities or other hazardous conditions.

LICENSED PROFESSIONAL ENGINEER
No. 275564
J. QUINN
HEALY
2/4/13
STATE OF UTAH

FORM 1

INSPECTION FORM

COAL REFUSE PILES AND COAL WASTE IMPOUNDMENTS

Name Quinn Healy Title PE

Date 5/18/2013 Date last inspected 2/4/2013

Site Name Emery Temp. Coal Stockpile Mine Name Emery

Refuse Facility ID # 1211-UT-09-00079-01

Refuse piles---Part A only
Impoundments---Part A and Part B

Part A

1.	Foundation preparation (vegetation, topsoil removal?)	X Yes	No
2.	Lift Thickness (inches)		
3.	Compaction (4 to 6 complete passes)	X Yes	No
4.	Burning* (specify extent and location)	Yes	X No
5.	Angle of Slope (degrees)	3:1	
6.	Seepage* (specify location, color, & appr. volume	Yes	X No
7.	Cracks or scarps* (location, size)	Yes	X No
8.	Major erosion problems* (location and extent)	Yes	X No
9.	Water impounding against toe*	Yes	X No

Part B

10.	Embankment freeboard (feet)		
11.	____Increase____Decrease in water level (feet)	Yes	No
12.	Sumps or sinkholes in slurry surface	Yes	No
13.	Clogging* (pipes, ditches, spillway)	Yes	No
14.	Trash racks clear and in place	Yes	No

* Adverse conditions noted in these items should be described (extent, location, volume, etc.) in the space provided. Major adverse changes could cause instability.

Inspection Category

Comments

I inspected the refuse pile on 5/18/2013.

The slopes are compacted and stable. The site drainage impoundment ditches are intact. There are no visible instabilities or other hazardous conditions.

LICENSED PROFESSIONAL ENGINEER
No. 275564
J. QUINN HEALY
5/18/13
STATE OF UTAH

INSPECTION FORM

COAL REFUSE PILES AND COAL WASTE IMPOUNDMENTS

Name Quinn Healy Title PE

Date 8/13/2013 Date last inspected 5/8/2013

Site Name Emery Temp. Coal Stockpile Mine Name Emery

Refuse Facility ID # 1211-UT-09-00079-01

Refuse piles---Part A only
Impoundments---Part A and Part B

Part A

1.	Foundation preparation (vegetation, topsoil removal?)	X Yes	No
2.	Lift Thickness (inches)		
3.	Compaction (4 to 6 complete passes)	X Yes	No
4.	Burning* (specify extent and location)	Yes	X No
5.	Angle of Slope (degrees)	3:1	
6.	Seepage* (specify location, color, & appr. volume	Yes	X No
7.	Cracks or scarps* (location, size)	Yes	X No
8.	Major erosion problems* (location and extent)	Yes	X No
9.	Water impounding against toe*	Yes	X No

Part B

10.	Embankment freeboard (feet)		
11.	Increase Decrease in water level (feet)	Yes	No
12.	Sumps or sinkholes in slurry surface	Yes	No
13.	Clogging* (pipes, ditches, spillway)	Yes	No
14.	Trash racks clear and in place	Yes	No

* Adverse conditions noted in these items should be described (extent, location, volume, etc.) in the space provided. Major adverse changes could cause instability.

Inspection Category	Comments
	I inspected the refuse pile on 8/13/2013.
	The slopes are compacted and stable. The site drainage impoundment ditches are intact. There are no visible instabilities or other hazardous conditions.

LICENSED PROFESSIONAL ENGINEER
No. 275564
J. QUINN HEALY
8/13/13
STATE OF UTAH

INSPECTION FORM

COAL REFUSE PILES AND COAL WASTE IMPOUNDMENTS

Name Quinn Healy Title PE

Date 11/24/2013 Date last inspected 8/13/2013

Site Name Emery Temp. Coal Stockpile Mine Name Emery

Refuse Facility ID # 1211-UT-09-00079-01

Refuse piles---Part A only
Impoundments---Part A and Part B

Part A

1.	Foundation preparation (vegetation, topsoil removal?)	X Yes	No
2.	Lift Thickness (inches)		
3.	Compaction (4 to 6 complete passes)	X Yes	No
4.	Burning* (specify extent and location)	Yes	X No
5.	Angle of Slope (degrees)	3:1	
6.	Seepage* (specify location, color, & appr. volume	Yes	X No
7.	Cracks or scarps* (location, size)	Yes	X No
8.	Major erosion problems* (location and extent)	Yes	X No
9.	Water impounding against toe*	Yes	X No

Part B

10.	Embankment freeboard (feet)		
11.	____Increase____Decrease in water level (feet)	Yes	No
12.	Sumps or sinkholes in slurry surface	Yes	No
13.	Clogging* (pipes, ditches, spillway)	Yes	No
14.	Trash racks clear and in place	Yes	No

* Adverse conditions noted in these items should be described (extent, location, volume, etc.) in the space provided. Major adverse changes could cause instability.

Inspection Category	Comments
	I inspected the refuse pile on 11/24/2013.
	The slopes are compacted and stable. The site drainage
	impoundment ditches are intact. There are no visible
	instabilities or other hazardous conditions.

LICENSED PROFESSIONAL ENGINEER
No. 275564
J. QUINN HEALY
11/24/2013
STATE OF UTAH

Appendix B-1

4th East Dust monitoring data

Consol Emery Mine - Coal Dust Plots 2013: Observations made on May 29, 2013 by Karla Knoop (JBR Environmental Consultants, Inc.).

Site	Mixed Soil/Coal Cover (%)	Dominant Color of Soil/Coal Mixture	Bare Soil and/or Rock Cover (%)	Live Vegetative Cover (%)	Notes
1A	73	10YR 4/2	2	25	One small cryptogam. Good growth of galleta grass; a lot of halogeton. Dead wood and other litter. Recent trampling/ground disturbance from cows.
1B	60	10YR 5/3	10	30	No cryptogams observed. New grown on perennials; annuals sprouting. Not clear distinction between mixed soil and bare soil, grades from one to the other based on color; color noted is average color observed.
1C	18	10YR 6/3	80	2	Lichen growth; no cryptogams observed. More rock than soil.
2A	Plot destroyed during power line installation				
2B	60	10YR 6/3	15	25	1 cryptogams observed. Prickly pear has new growth, galetta and indian ricegrass doing well, mustard and globe mallow present. Soil color ranges; average reflected in column.
2C	50	10YR 6/4	45	3	No cryptogams observed. Robust vegetation; also halogeton. Litter also present. Not clear distinction between mixed soil and bare soil.
3A	Plot destroyed during power line installation				
3B	45	10YR 6/4	45	10	No cryptogams observed. Indian ricegrass, galleta, forbs, blooming mustard. Soil trampling by cattle. Not clear distinction between mixed soil and bare soil.
3C	90	10YR 5/4	7	3	One cryptogam observed. Indian ricegrass, galleta, prickly pear, other.

Note: Overall, vegetation looks much more robust than previous couple of years. Cattle have been in area and some plots were trampled and stakes knocked over.

Appendix B-2

Annual Subsidence Survey

Consolidation Coal Co.
November 2013 - Annual Subsidence Survey

NAD 1983, Utah Central, US Survey feet
NAVD 1988

MEASURED POINTS

POINT NAME	NORTHING	EASTING	PREVIOUS ELEVATION	Nov. 2007 ELEVATION	Nov. 2008 ELEVATION	Nov. 2009 ELEVATION	Dec. 2010 ELEVATION	Dec. 2011 ELEVATION	Dec. 2012 ELEVATION	Nov. 2013 ELEVATION
			ADJUSTED							
			OCT. 06 ELEV.							
H-1	6758256.55	1713035.05	6082.81	6082.74	6082.88	6082.87	6082.94	6082.89	6082.87	6082.88
36	6756805.63	1713716.02	6041.05	6040.79	6041.00	6040.89	6040.95	6040.91	6040.92	6040.92
SMH	6755882.85	1712049.12	6057.67	6057.32	6057.61	6057.52	6057.59	6057.56	6057.54	6057.52
90-1	6755171.22	1712000.26	6037.91	6037.45	6037.70	6037.63	6037.66	6037.69	6037.69	6037.67
90-2	6755593.14	1712304.86	6053.83	6053.39	6053.64	6053.58	6053.63	6053.55	6053.56	6053.55
35	6761558.54	1711229.20	6106.36	6106.67	6106.80		6106.92	6106.76	6106.77	6106.78
83-1	6759093.54	1713116.69	6065.51	6065.46	6065.64	6065.58	6065.62	6065.60	6065.59	6065.59
86-1	6757857.39	1706660.25	6003.40	6003.59	6003.84	6003.86	6003.93	6003.79	6003.77	6003.77
86-2	6758652.96	1705551.95	6040.48	6040.76	6040.91	6040.93	6040.97	6040.76	6040.73	6040.72
86-4	6760837.61	1702889.91	6078.44	6079.20	6079.40	6079.40	6079.42	6079.23	6079.24	6079.25
86-5	6760155.85	1704278.88	6163.45	6163.97	6164.22	6164.21	6164.25	6164.10	6164.05	6164.07
86-13	6759176.02	1704251.23	6036.06	6036.50	6036.65	6036.63	6036.68	6036.44	6036.41	6036.41
88-2	6759134.95	1703887.62	6016.57	6017.01	6017.17	6017.18	6017.20	6016.95	6016.97	6016.95
88-3	6758692.06	1704300.65	6014.34	6014.83	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED
88-4	6758006.11	1704828.28	5988.26	5988.56	5988.71	5988.73	5988.72	5988.51	5988.51	5988.52
88-5	6757972.48	1705259.42	5994.61	5994.92	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED
88-6	6757177.64	1705879.38	5975.05	5975.24	5975.39	5975.42	5975.56	5975.48	5975.47	5975.48
89-2	6762836.20	1705604.61	6200.08	6200.84	6200.98	6200.95	6201.03	6200.81	6200.76	6200.74
89-3	6761091.78	1704846.48	6170.31	6170.90	6171.13	6171.11	6171.10	6171.16	6171.17	6171.18
89-4	6762473.44	1706321.62	6184.86	6185.60	6185.69	6185.77	6185.81	6185.59	6185.52	6185.52
90-03	6756435.50	1712926.84	6037.17	6036.93	6037.13	6037.04	6037.04	6037.12	6037.10	6037.10
90-04	6757182.04	1713517.48	6031.02	6030.74	6030.89	6030.76	6030.89	6030.91	6030.89	6030.88
90-4	6756652.76	1713321.91	6043.29	6043.02	6043.27	6043.16	6043.17	6043.20	6043.18	6043.19
90-5	6757394.42	1713688.58	6036.66	6036.41	6036.56	6036.50	6036.55	6036.58	6036.55	6036.57
90-6	6758779.41	1714726.46	6050.72	6050.62	6050.82	6050.78	6050.84	6050.88	6050.89	6050.91
SM-C	6758743.87	1714106.30	6051.44	6051.38	6051.64	6051.53	6051.57	6051.54	6051.57	6051.61
91-01	6756669.94	1712000.00	6052.23	6052.01	6052.25	6052.67	6052.20	6052.22	6052.19	6052.20
91-02	6757585.42	1713036.14	6051.46	6051.28	6051.41	6051.38	6051.44	6051.41	6051.42	6051.40
91-03	6758030.88	1713361.38	6055.63	6055.45	6055.56	6055.61	6055.62	6055.63	6055.63	6055.65
91-04	6758791.86	1713935.17	6051.81	6051.72	6051.91	6051.82	6051.79	6051.81	6051.80	6051.79
87-1	6757159.14	1706351.37	5990.51	5990.59	5990.78	5990.81	5990.90	5990.70	5990.70	5990.71
97-1	6759589.84	1709488.21	6117.57	6117.83	6117.94	6117.97	6117.97	6117.95	6117.96	6117.98
97-2	6758894.76	1709132.54	6116.53	6116.66	6116.84	6116.87	6116.87	6116.87	6116.88	6116.88
E	6759462.66	1712234.87	6082.64	6082.75	6082.89	6082.95	6082.97	6082.94	6082.90	6082.91
E1/4 28	6758451.40	1713666.32	6054.53	6054.45	6054.56	6054.52	6054.52	6054.53	6054.52	6054.56
H-6	6758064.50	1711094.12	6095.91	6095.93	6096.06	6096.02	6096.04	6096.01	6096.01	6096.02
W	6756275.89	1705674.96	5958.82	5958.80	5958.94	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED
L	6754880.54	1705574.55	5950.19	5950.06	5950.29	5950.28	5950.21	5950.28	5950.24	5950.23
N	6755536.21	1706165.54	5950.23	5950.16	5950.36	5950.39	5950.33	5950.36	5950.39	5950.41
SMK-2	6758755.59	1710054.13	6102.92	6102.95	6103.12	6103.13	6103.13	6103.12	6103.13	6103.14
SMK-3	6758965.95	1711660.45	6082.15	6082.18	6082.28	6082.27	6082.34	6082.32	6082.35	6082.36
	11-2006 ELEVATION									
6-01	6761645.96	1710904.27	6110.04	6110.09	6110.27	6110.27	6110.33	6110.12	6110.13	6110.13
6-02	6761002.37	1710059.15	6116.61	6116.60	6116.79	6116.88	6116.81	6116.57	6116.57	6116.58
6-03	6760565.27	1709554.45	6117.32	6117.33	6117.55	6117.69	6117.57	6117.56	6117.52	6117.54
6-04	6758380.42	1707028.80	6023.68	6023.77	6019.63	6019.51	6019.52	6019.35	6019.31	6019.34
6-05	6758719.90	1706656.21	6030.59	6030.68	6027.85	6027.67	6027.58	6027.46	6027.41	6027.37
6-06	6759875.49	1705933.25	6143.18	6142.91	6142.85	6142.71	6142.70	6142.56	6142.58	6142.56
6-07	6760863.83	1706266.65	6170.20	6169.65	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED
6-08	6759343.46	1706993.37	6065.73	6065.23	6064.69	6064.36	6064.22	6063.99	6063.96	6064.00
6-09	6760017.86	1706164.92	6141.75	6139.26	6139.27	6139.11	6139.04	6138.90	6138.88	6138.92
6-10	6760383.96	1705795.14	6150.80	6148.22	6148.25	6148.13	6148.12	6147.98	6147.97	6147.97
6-11	6759493.36	1715652.26	6056.86	6056.87	6057.03	6057.01	6057.04	6057.05	6057.05	6057.04
6-12	6760098.03	1714699.42	6076.19	6076.15	6076.39	6076.35	6076.40	6076.37	6076.38	6076.38
6-13	6760891.31	1713698.10	6090.16	6090.17	6090.36	6090.35	6090.33	6090.36	6090.35	6090.32
6-14	6761793.53	1712734.97	6097.29	6097.30	6097.48	6097.43	6097.38	6097.40	6097.39	6097.38
6-15	6762265.78	1712329.15	6107.03	6107.08	6107.19	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED
6-16	6759657.74	1716089.80	6059.39	6059.44	6059.57	6059.56	6059.59	6059.61	6059.62	6059.66
6-17	6761139.50	1717065.30	6071.56	6071.66	6069.61	6069.11	6068.97	6068.99	6068.97	6068.94
6-18	6761947.48	1717858.85	6081.27	6081.34	6081.87	6081.54	6081.46	6081.49	6081.48	6081.48
6-19	6762448.91	1718246.74	6085.90	6085.96	6086.59	6086.17	6086.11	6086.05	6086.01	6086.02
6-20	6762741.05	1718538.73	6090.48	6090.52	6091.33	6090.73	6090.64	6090.57	6090.56	6090.60
6-21	6760438.20	1716180.06	6070.28	6070.30	6070.97	6070.38	6070.50	6070.53	6070.53	6070.52
6-22	6761333.56	1714916.16	6090.69	6090.68	6090.93	6090.92	6090.85	6090.92	6090.90	6090.89
6-23	6762101.13	1714019.00	6111.33	6111.31	6111.58	6111.52	6111.45	6111.50	6111.49	6111.49
6-24	6761067.04	1716301.20	6080.76	6080.80	6081.42	6079.91	6078.15	6078.22	6078.23	6078.24
6-25	6762329.01	1714637.51	6106.02	6106.01	6106.23	6106.28	6106.13	6106.32	6106.30	6106.30
6-27	6764041.79	1715533.49	6114.65	6114.65	6114.79	6114.81	6114.83	6114.85	6114.87	6114.86
6-29	6762703.00	1712897.66	6141.81	6141.85	6142.02	6142.00	6141.99	6141.97	6141.96	6141.99
6-30	6763349.98	1713654.71	6131.17	6131.20	6131.41	6131.32	6131.29	6131.31	6131.27	6131.24
6-34	6760357.41	1706945.65	6148.20	6148.07	6148.20	6147.88	6147.83	6147.69	6147.67	6147.66
86-11	6760330.48	1707019.83	6153.72	6153.62	6153.73	6153.39	6153.37	6153.20	6153.18	6153.21
86-8	6762484.75	1713660.38	6125.27	6125.27	6125.43	6125.43	6125.43	6125.46	6125.45	6125.47
R BOLT	6759584.85	1705565.44	6151.78	6151.79	6151.25	6151.17	6151.12	6150.97	6150.98	6151.00
	9-14-07 ELEVATION									
07-01	6759689.65	1717605.56	6077.19	6077.17	6077.36	6077.32	6077.42	6077.45	6077.45	6077.48
07-02	6761395.09	1718892.63	6080.35	6080.35	6080.54	6080.60	6080.58	6080.60	6080.59	6080.58
07-03	6759677.37	1716935.01	6059.25	6059.28	6059.49	6059.43	6059.48	6059.53	6059.55	6059.60
07-04	6760461.70	1717523.64	6067.06	6067.06	6067.20	6067.12	6067.22	6067.20	6067.19	6067.20
07-05	6761257.03	1718095.27	6075.77	6075.80	6075.76	6075.70	6075.75	6075.73	6075.75	6075.77
07-06	6760573.27	1718252.26	6078.10	6078.13	6078.32	6078.32	6078.32	6078.35	6078.34	6078.34
07-07	6759021.04	1716449.85	6065.37	6065.43	6065.58	6065.63	6065.68	6065.69	6065.66	6065.67
07-08	6762043.96	1718677.76	6082.46	6082.48	6083.35	6082.68	6082.64	6082.60	6082.62	6082.60
	8-21-09 ELEVATION									
09-01	6761952.49	1716938.13	6080.76			6080.40	6080.09	6080.07	6080.05	6080.08
09-03	6761294.34	1709303.71	6125.44				6125.41	6125.21	6125.20	6125.19
09-04	6762109.15	1710461.68	6119.61				6119.62	6119.40	6119.39	6119.42
09-05	6763111.43	1710025.90	6135.53				6134.91	6134.32	6134.32	6134.34
09-06	6763680.48	1709550.41	6147.18				6146.97	6146.81	6146.81	6146.82
09-09	6762038.07	1707708.75	6167.88				6167.89	6167.66	6167.65	6167.64
09-10	6762015.46	1708703.97	6141.18				6141.18	6140.96	6140.97	6140.96
11W-02	6761123.43	1707793.81	6151.79				6151.73	6151.47	6151.49	6151.49
11W-09	6760858.27	1708526.84	6137.60				6137.52	6137.48	6137.50	6137.52
86-7	6761413.82	1713876.28	6103.92				6103.90	6103.90	6103.90	6103.89
86-10	6760465.35	1715272.28	6077.71				6077.64	6077.57	6077.56	6077.58

Appendix B-2a

Monthly Subsidence

Reports

EMERY MINE
SUBSIDENCE INSPECTION REPORT

This report summarizes the results of subsidence inspections conducted at the Emery Mine in Emery, Utah during the period of September through November 2013. The area of the observed subsidence is in the general vicinity of 38° 52' 58" North Latitude and 111° 13' 11" West Longitude over the northeastern portion of the 00 North panel.

September 2013 Inspection

An inspection was conducted on September 18, 2013 by Richard White (EarthFax Engineering Group) and Russel Jensen of Consol Energy. The purpose of this inspection was to update observations made during subsidence surveys conducted in December 2010 and January 2011 and evaluate the current status of efforts performed during the first quarter of 2011 to mitigate the surface impacts of subsidence in the area. These efforts involved regrading of the surface to cover cracks and smooth areas of abrupt changes in the ground surface.

During this inspection, six subsidence depressions were observed in the subject area. The coordinates of these depressions are provided in Table 1 and the locations relative to the 00 North panel are shown on Figure 1. These conditions are briefly described below. All depressions are located on land owned by Consol.

Depression #1

This depression covers an area of approximately 300 feet (North-South) by 150 feet (East-West). Subsidence cracks were observed primarily around the periphery of the depression. These cracks range up to a few inches in top wide and greater than 3 feet deep in some areas.

Depression #2

This depression measures approximately 120 feet (N-S) by 70 feet (E-W) and is located immediately south of Depression #1. Subsidence cracks were observed primarily around the periphery of the depression. These cracks range up to a few inches in top wide and greater than 3 feet deep in some areas.

Depression #3

This depression is located immediately west of Depression #1. It covers an area that measures about 300 feet (N-S) by 220 feet (E-W). Most of the observed cracks are on the west side of the depression. Most cracks are less than 1 foot deep, but a few exceed 3 feet in depth.

Depression #5

This depression is nearly circular, measuring about 180 feet (N-S) by 200 feet (E-W). Subsidence cracks were observed primarily around the periphery of the depression. These cracks range up to a few inches in top wide and greater than 3 feet deep in some areas.

Depression #6

This depression is located between Depressions #2 and #5. It is approximately circular, measuring about 120 feet (N-S) by 100 feet (E-W). The depression contains a few cracks around the periphery, with one crack on the south side of the depression measuring more than 3 feet deep. Most of the other cracks are less than 1 foot deep.

October 2013 Inspection and Mitigation

On October 10, 2013, wooden stake were placed at each depression for future reference. General observations of the area revealed no new cracks. On this and subsequent days through October 22, 2013, Mr. Jensen filled the majority of the subsidence cracks by hand and then graded the area with a wheel-mounted loader and backhoe. He then conducted a reconnaissance of the area and verified that all cracks had been filled.

November 2013 Inspection

On November 5, 2013, Mr. Jensen conducted an inspection of the area with Karl Housekeeper, an inspector with the Utah Division of Oil, Gas and Mining. No new cracks were observed. Mr. Housekeeper stated that the area looked good and he would include an entry to this effect in his report.

On November 25, 2013 Mr. Jensen walked entire area of the 6 depressions over 00 North found no new cracks. He took photographs of the area, although the presence of snow made observations difficult.

Comparative Photographs

Photographs of the six depressions are provided in Appendix A. Side-by-side photographs are taken from the same general locations, allowing comparisons to be made between inspection dates.

TABLE 1

Emery Mine Subsidence Depressions
Location of Approximate Middle
18 Sep 2013

Depression Number	Degree/Minute/Seconds		Decimal Degrees	
	Latitude	Longitude	Latitude	Longitude
1	38° 52’ 59.0652”	111° 13’ 08.4371”	38.88307°	111.21901°
2	38° 52’ 56.4250”	111° 13’ 08.8636”	38.88234°	111.21913°
3	38° 52’ 58.9146”	111° 13’ 11.2371”	38.88303°	111.21979°
4	38°52’ 59.8776”	111° 13’ 13.7850”	38.88330	111.22050
5	38° 52’ 58.0504”	111° 13’ 12.3999”	38.88279	111.22011
6	38° 52’ 56.4058”	111° 13’ 11.1420”	38.88233	111.21976

Note: All areas of depression are located on land owned by Consol.

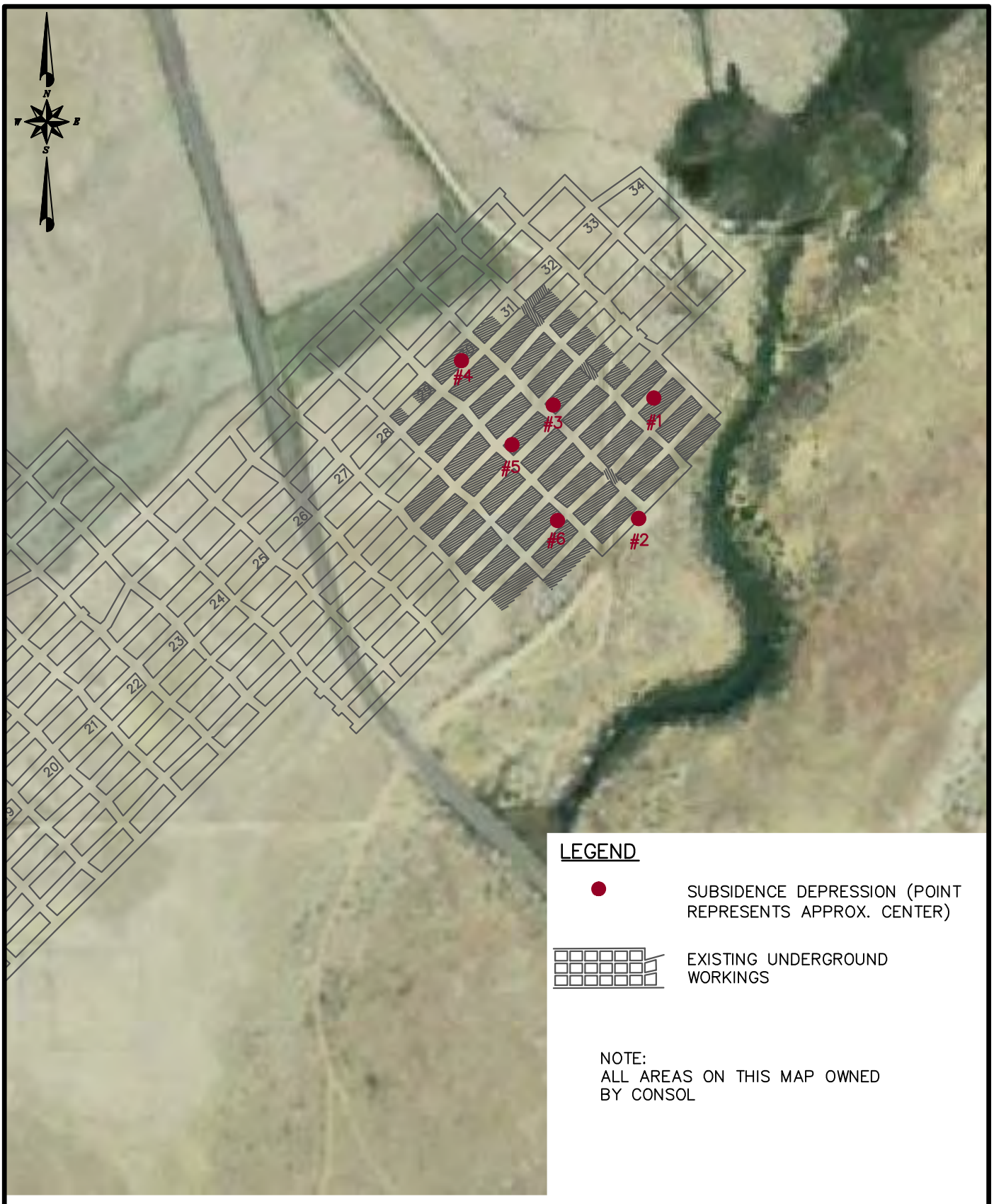


FIGURE 1. EMERY MINE SUBSIDENCE DEPRESSIONS

EarthFax

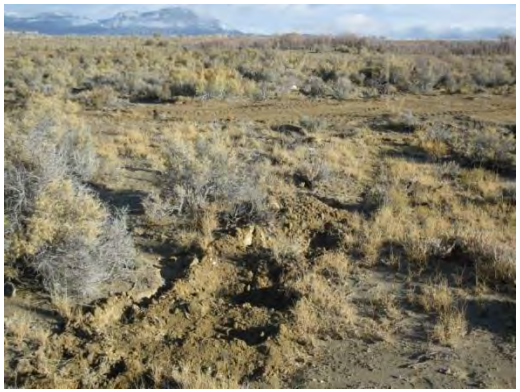
G:\UC982\15 - Structures and facilities\DWG\FIG 1-SUBSIDENCE.DWG, 9/30/2013 5:01:39 PM

ATTACHMENT A

Comparative Photographs

Depression #1 - September 2013

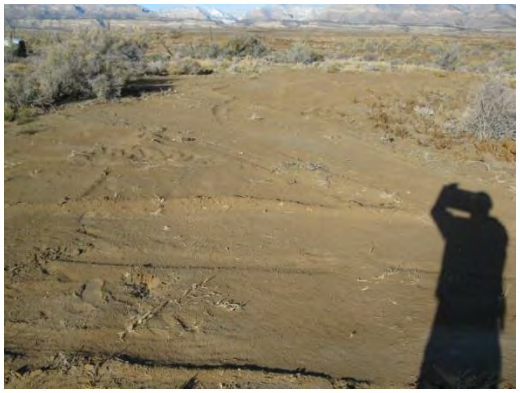
Depression #1 - October 2013



Depression #1 - November 2013

Depression #1 - September 2013

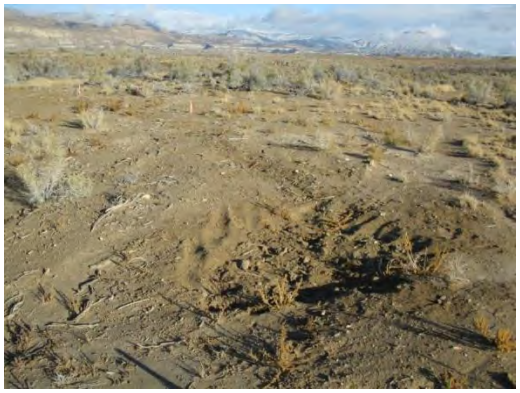
Depression #1 - October 2013



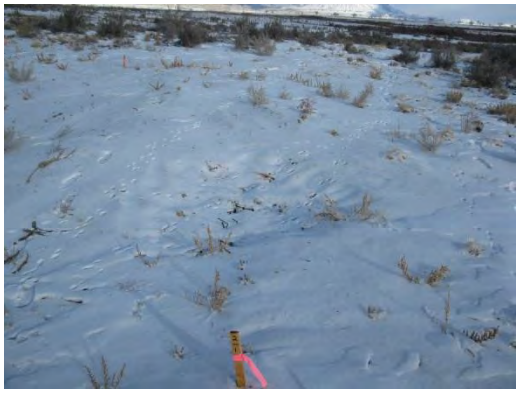
Depression #1 - November 2013

Depression #2 - September 2013

Depression #2 - October 2013



Depression #2 - November 2013



Depression #2 - September 2013

Depression #2 - October 2013

Depression #2 - November 2013

Depression #3 - September 2013

Depression #3 - October 2013

Depression #3 - November 2013

Depression #3 - September 2013

Depression #3 - October 2013

Depression #3 - November 2013

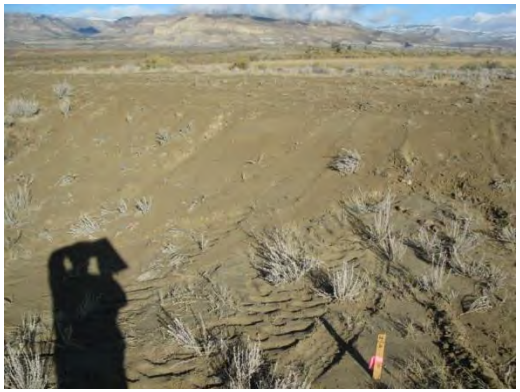
Depression #4 - September 2013

Depression #4 - October 2013

Depression #4 - November 2013

Depression #4 - September 2013

Depression #4 - October 2013



Depression #4 - November 2013

Depression #5 - September 2013

Depression #5 - October 2013

Depression #5 - November 2013

Depression #5 - September 2013

Depression #5 - October 2013

Depression #5 - November 2013

Depression #6 - September 2013

Depression #6 - October 2013

Depression #6 - November 2013

Depression #6 - September 2013

Depression #6 - October 2013

Depression #6 - November 2013

EMERY MINE
SUBSIDENCE INSPECTION REPORT
DECEMBER 2013

In November 2013, Cody Ware of Ware Surveying and Engineering surveyed the established subsidence survey monuments at the Emery Mine in Emery County, Utah. A copy of his survey results is included in Attachment A. As indicated, elevation differences between the December 2012 survey and the November 2013 survey are essentially within survey method tolerances. Thus, no subsidence was measured by the survey.

On December 30, 2013, Russel Jensen of Consol Energy walked the area over the 00 North section of the Emery Mine. Subsidence cracks were documented in this area in September 2013 and mitigated in October 2013. No new subsidence cracks were observed. Mr. Jensen photographed all staked subsidence locations. Copies of these photographs are provided in Attachment B.

ATTACHMENT A

Subsidence Topographic Survey Results

Consolidation Coal Co.
November 2013 - Annual Subsidence Survey

NAD 1983, Utah Central, US Survey feet
NAVD 1988

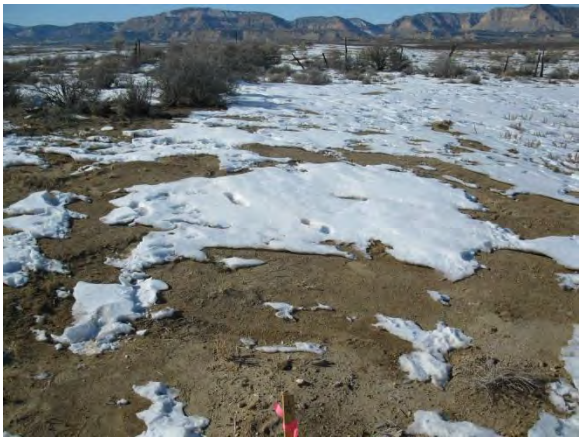
MEASURED POINTS

POINT NAME	NORTHING	EASTING	PREVIOUS ELEVATION	Nov. 2007 ELEVATION	Nov. 2008 ELEVATION	Nov. 2009 ELEVATION	Dec. 2010 ELEVATION	Dec. 2011 ELEVATION	Dec. 2012 ELEVATION	Nov. 2013 ELEVATION	2012-2013 Elev. Diff.
			ADJUSTED								
			OCT. 06 ELEV.								
H-1	6758256.55	1713035.05	6082.81	6082.74	6082.88	6082.87	6082.94	6082.89	6082.87	6082.88	0.01
36	6756805.63	1713716.02	6041.05	6040.79	6041.00	6040.89	6040.95	6040.91	6040.92	6040.92	0.00
SMH	6755882.85	1712049.12	6057.67	6057.32	6057.61	6057.52	6057.59	6057.56	6057.54	6057.52	-0.02
90-1	6755171.22	1712000.26	6037.91	6037.45	6037.70	6037.63	6037.66	6037.69	6037.69	6037.67	-0.02
90-2	6755593.14	1712304.86	6053.83	6053.39	6053.64	6053.58	6053.63	6053.55	6053.56	6053.55	-0.01
35	6761558.54	1711229.20	6106.36	6106.67	6106.80		6106.92	6106.76	6106.77	6106.78	0.01
83-1	6759093.54	1713116.69	6065.51	6065.46	6065.64	6065.58	6065.62	6065.60	6065.59	6065.59	0.00
86-1	6757857.39	1706660.25	6003.40	6003.59	6003.84	6003.86	6003.93	6003.79	6003.77	6003.77	0.00
86-2	6758652.96	1705551.95	6040.48	6040.76	6040.91	6040.93	6040.97	6040.76	6040.73	6040.72	-0.01
86-4	6760837.61	1702889.91	6078.44	6079.20	6079.40	6079.40	6079.42	6079.23	6079.24	6079.25	0.01
86-5	6760155.85	1704278.88	6163.45	6163.97	6164.22	6164.21	6164.25	6164.10	6164.05	6164.07	0.02
86-13	6759176.02	1704251.23	6036.06	6036.50	6036.65	6036.63	6036.68	6036.44	6036.41	6036.41	0.00
88-2	6759134.95	1703887.62	6016.57	6017.01	6017.17	6017.18	6017.20	6016.95	6016.97	6016.95	-0.02
88-3	6758692.06	1704300.65	6014.34	6014.83	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	
88-4	6758006.11	1704828.28	5988.26	5988.56	5988.71	5988.73	5988.72	5988.51	5988.51	5988.52	0.01
88-5	6757972.48	1705259.42	5994.61	5994.92	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	
88-6	6757177.64	1705879.38	5975.05	5975.24	5975.39	5975.42	5975.56	5975.48	5975.47	5975.48	0.01
89-2	6762836.20	1705604.61	6200.08	6200.84	6200.98	6200.95	6201.03	6200.81	6200.76	6200.74	-0.02
89-3	6761091.78	1704846.48	6170.31	6170.90	6171.13	6171.11	6171.10	6171.16	6171.17	6171.18	0.01
89-4	6762473.44	1706321.62	6184.86	6185.60	6185.69	6185.77	6185.81	6185.59	6185.52	6185.52	0.00
90-03	6756435.50	1712926.84	6037.17	6036.93	6037.13	6037.04	6037.04	6037.12	6037.10	6037.10	0.00
90-04	6757182.04	1713517.48	6031.02	6030.74	6030.89	6030.76	6030.89	6030.91	6030.89	6030.88	-0.01
90-4	6756652.76	1713321.91	6043.29	6043.02	6043.27	6043.16	6043.17	6043.20	6043.18	6043.19	0.01
90-5	6757394.42	1713688.58	6036.66	6036.41	6036.56	6036.50	6036.55	6036.58	6036.55	6036.57	0.02
90-6	6758779.41	1714726.46	6050.72	6050.62	6050.82	6050.78	6050.84	6050.88	6050.89	6050.91	0.02
SM-C	6758743.87	1714106.30	6051.44	6051.38	6051.64	6051.53	6051.57	6051.54	6051.57	6051.61	0.04
91-01	6756669.94	1712000.00	6052.23	6052.01	6052.25	6052.67	6052.20	6052.22	6052.19	6052.20	0.01
91-02	6757585.42	1713036.14	6051.46	6051.28	6051.41	6051.38	6051.44	6051.41	6051.42	6051.40	-0.02
91-03	6758030.88	1713361.38	6055.63	6055.45	6055.56	6055.61	6055.62	6055.63	6055.63	6055.65	0.02
91-04	6758791.86	1713935.17	6051.81	6051.72	6051.91	6051.82	6051.79	6051.81	6051.80	6051.79	-0.01
87-1	6757159.14	1706351.37	5990.51	5990.59	5990.78	5990.81	5990.90	5990.70	5990.70	5990.71	0.01
97-1	6759589.84	1709488.21	6117.57	6117.83	6117.94	6117.97	6117.97	6117.95	6117.96	6117.98	0.02
97-2	6758894.76	1709132.54	6116.53	6116.66	6116.84	6116.87	6116.87	6116.87	6116.88	6116.88	0.00
E	6759462.66	1712234.87	6082.64	6082.75	6082.89	6082.95	6082.97	6082.94	6082.90	6082.91	0.01
E1/4 28	6758451.40	1713666.32	6054.53	6054.45	6054.56	6054.52	6054.52	6054.53	6054.52	6054.56	0.03
H-6	6758064.50	1711094.12	6095.91	6095.93	6096.06	6096.02	6096.04	6096.01	6096.01	6096.02	0.01
W	6756275.89	1705674.96	5958.82	5958.80	5958.94	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	
L	6754880.54	1705574.55	5950.19	5950.06	5950.29	5950.28	5950.21	5950.28	5950.24	5950.23	-0.01
N	6755536.21	1706165.54	5950.23	5950.16	5950.36	5950.39	5950.33	5950.36	5950.39	5950.41	0.02
SMK-2	6758755.59	1710054.13	6102.92	6102.95	6103.12	6103.13	6103.13	6103.12	6103.13	6103.14	0.01
SMK-3	6758965.95	1711660.45	6082.15	6082.18	6082.28	6082.27	6082.34	6082.32	6082.35	6082.36	0.01
			11-2006 ELEVATION								
6-01	6761645.96	1710904.27	6110.04	6110.09	6110.27	6110.27	6110.33	6110.12	6110.13	6110.13	0.00
6-02	6761002.37	1710059.15	6116.61	6116.60	6116.79	6116.88	6116.81	6116.57	6116.57	6116.58	0.01
6-03	6760565.27	1709554.45	6117.32	6117.33	6117.55	6117.69	6117.57	6117.56	6117.52	6117.54	0.02
6-04	6758380.42	1707028.80	6023.68	6023.77	6019.63	6019.51	6019.52	6019.35	6019.31	6019.34	0.03
6-05	6758719.90	1706656.21	6030.59	6030.68	6027.85	6027.67	6027.58	6027.46	6027.41	6027.37	-0.04
6-06	6759875.49	1705933.25	6143.18	6142.91	6142.85	6142.71	6142.70	6142.56	6142.58	6142.56	-0.02
6-07	6760863.83	1706266.65	6170.20	6169.65	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	
6-08	6759343.46	1706993.37	6065.73	6065.23	6064.69	6064.36	6064.22	6063.99	6063.96	6064.00	0.04
6-09	6760017.86	1706164.92	6141.75	6139.26	6139.27	6139.11	6139.04	6138.90	6138.88	6138.92	0.04
6-10	6760383.96	1705795.14	6150.80	6148.22	6148.25	6148.13	6148.12	6147.98	6147.97	6147.97	0.00
6-11	6759493.36	1715652.26	6056.86	6056.87	6057.03	6057.01	6057.04	6057.05	6057.05	6057.04	-0.01
6-12	6760098.03	1714699.42	6076.19	6076.15	6076.39	6076.35	6076.40	6076.37	6076.38	6076.38	0.00
6-13	6760891.31	1713698.10	6090.16	6090.17	6090.36	6090.35	6090.33	6090.36	6090.35	6090.32	-0.03
6-14	6761793.53	1712734.97	6097.29	6097.30	6097.48	6097.43	6097.38	6097.40	6097.39	6097.38	-0.01
6-15	6762265.78	1712329.15	6107.03	6107.08	6107.19	DESTROYED	DESTROYED	DESTROYED	DESTROYED	DESTROYED	
6-16	6759657.74	1716089.80	6059.39	6059.44	6059.57	6059.56	6059.59	6059.61	6059.62	6059.66	0.04
6-17	6761139.50	1717065.30	6071.56	6071.66	6069.61	6069.11	6068.97	6068.99	6068.97	6068.94	-0.03
6-18	6761947.48	1717858.85	6081.27	6081.34	6081.87	6081.54	6081.46	6081.49	6081.48	6081.48	0.00
6-19	6762448.91	1718246.74	6085.90	6085.96	6086.59	6086.17	6086.11	6086.05	6086.01	6086.02	0.01
6-20	6762741.05	1718538.73	6090.48	6090.52	6091.33	6090.73	6090.64	6090.57	6090.56	6090.60	0.04
6-21	6760438.20	1716180.06	6070.28	6070.30	6070.97	6070.38	6070.50	6070.53	6070.53	6070.52	-0.01
6-22	6761333.56	1714916.16	6090.69	6090.68	6090.93	6090.92	6090.85	6090.92	6090.90	6090.89	-0.02
6-23	6762101.13	1714019.00	6111.33	6111.31	6111.58	6111.52	6111.45	6111.50	6111.49	6111.49	0.00
6-24	6761067.04	1716301.20	6080.76	6080.80	6081.42	6079.91	6078.15	6078.22	6078.23	6078.24	0.01
6-25	6762329.01	1714637.51	6106.02	6106.01	6106.23	6106.28	6106.13	6106.32	6106.30	6106.30	0.00
6-27	6764041.79	1715533.49	6114.65	6114.65	6114.79	6114.81	6114.83	6114.85	6114.87	6114.86	-0.01
6-29	6762703.00	1712897.66	6141.81	6141.85	6142.02	6142.00	6141.99	6141.97	6141.96	6141.99	0.03
6-30	6763349.98	1713654.71	6131.17	6131.20	6131.41	6131.32	6131.29	6131.31	6131.27	6131.24	-0.03
6-34	6760357.41	1706945.65	6148.20	6148.07	6148.20	6147.88	6147.83	6147.69	6147.67	6147.66	-0.01
86-11	6760330.48	1707019.83	6153.72	6153.62	6153.73	6153.39	6153.37	6153.20	6153.18	6153.21	0.03
86-8	6762484.75	1713660.38	6125.27	6125.27	6125.43	6125.43	6125.43	6125.46	6125.45	6125.47	0.02
R BOLT	6759584.85	1705565.44	6151.78	6151.79	6151.25	6151.17	6151.12	6150.97	6150.98	6151.00	0.02
			9-14-07 ELEVATION								
07-01	6759689.65	1717605.56	6077.19	6077.17	6077.36	6077.32	6077.42	6077.45	6077.45	6077.48	0.03
07-02	6761395.09	1718892.63	6080.35	6080.35	6080.54	6080.60	6080.58	6080.60	6080.59	6080.58	-0.01
07-03	6759677.37	1716935.01	6059.25	6059.28	6059.49	6059.43	6059.48	6059.53	6059.55	6059.60	0.05
07-04	6760461.70	1717523.64	6067.06	6067.06	6067.20	6067.12	6067.22	6067.20	6067.19	6067.20	0.01
07-05	6761257.03	1718095.27	6075.77	6075.80	6075.76	6075.70	6075.75	6075.73	6075.75	6075.77	0.02
07-06	6760573.27	1718252.26	6078.10	6078.13	6078.32	6078.32	6078.32	6078.35	6078.34	6078.34	0.00
07-07	6759021.04	1716449.85	6065.37	6065.43	6065.58	6065.63	6065.68	6065.69	6065.66	6065.67	0.01
07-08	6762043.96	1718677.76	6082.46	6082.48	6083.35	6082.68	6082.64	6082.60	6082.62	6082.60	-0.03
			8-21-09 ELEVATION								
09-01	6761952.49	1716938.13	6080.76			6080.40	6080.09	6080.07	6080.05	6080.08	0.03
09-03	6761294.34	1709303.71	6125.44				6125.41	6125.21	6125.20	6125.19	-0.01
09-04	6762109.15	1710461.68	6119.61				6119.62	6119.40	6119.39	6119.42	0.03
09-05	6763111.43	1710025.90	6135.53				6134.91	6134.32	6134.32	6134.34	0.02
09-06	6763680.48	1709550.41	6147.18				6146.97	6146.81	6146.81	6146.82	0.01
09-09	6762038.07	1707708.75	6167.88				6167.89	6167.66	6167.65	6167.64	-0.01
09-10	6762015.46	1708703.97	6141.18				6141.18	6140.96	6140.97	6140.96	-0.01
11W-02	6761123.43	1707793.81	6151.79				6151.73	6151.47	6151.49	6151.49	0.00
11W-09	6760858.27	1708526.84	6137.60				6137.52	6137.48	6137.50	6137.52	0.02
86-7	6761413.82	1713876.28	6103.92				6103.90	6103.90	6103.90	6103.89	-0.01
86-10	6760465.35	1715272.28	6077.71				6077.64	6077.57	6077.56	6077.58	0.02

ATTACHMENT B

Photographs of 00 North Subsidence Depressions
December 30, 2013

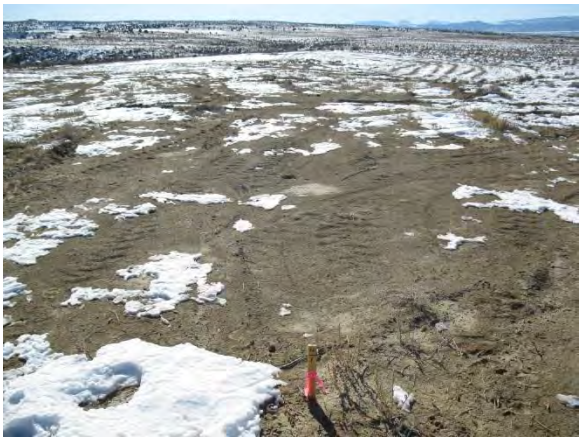
Depression #1 - December 2013

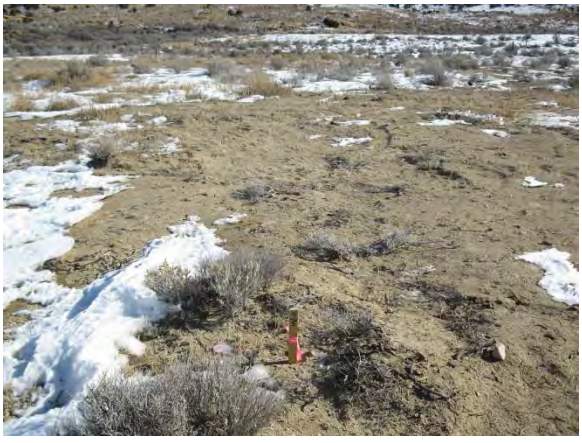


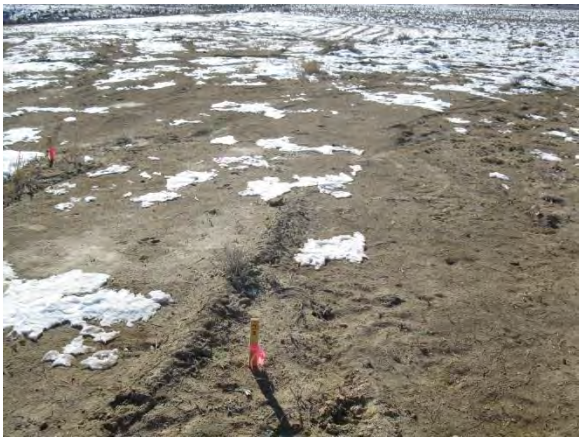
Depression #2 - December 2013

Depression #3 - December 2013

Depression #4 - December 2013

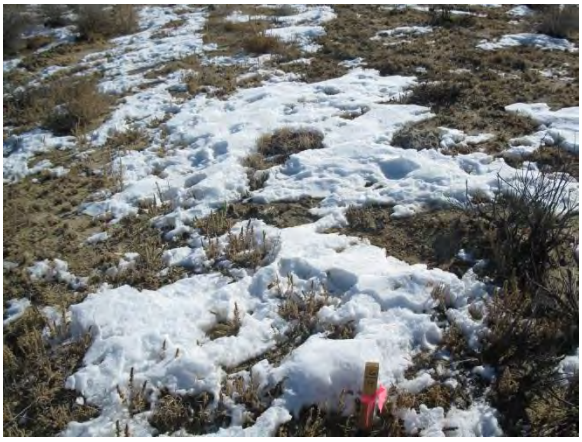






Depression #5 - December 2013

Depression #6 - December 2013

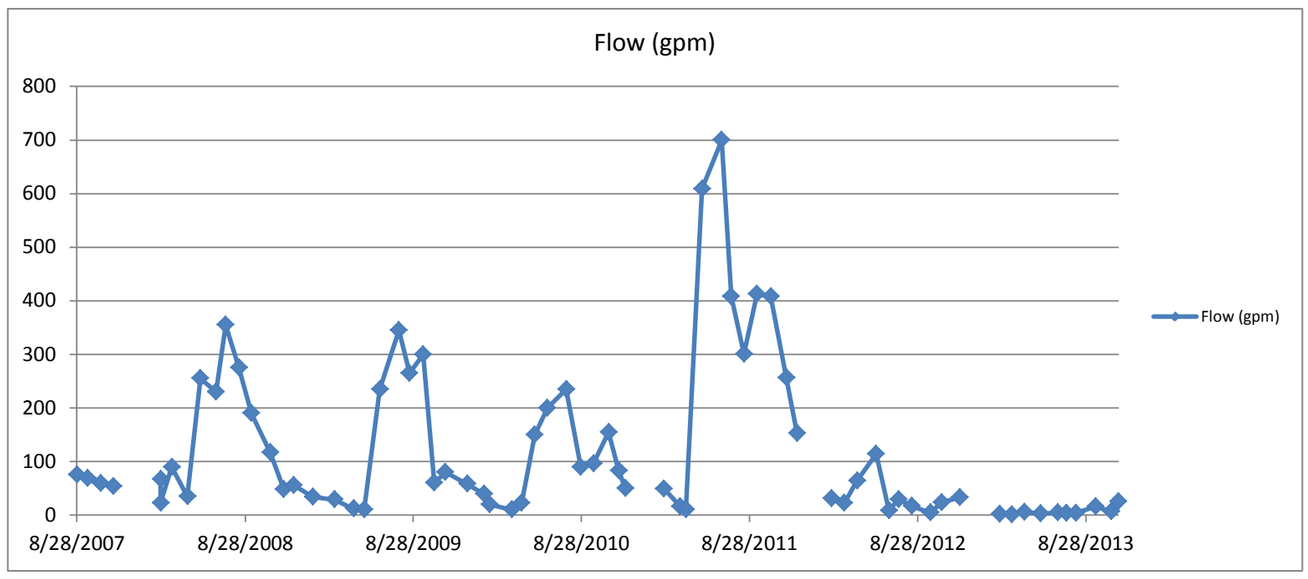


Appendix B-3

Bryant (14th West) flows

Consol Emery Mine
Panel 14th West
Bryant No. 1
Flow Measurements made at dam breach

Date	Flow (gpm)	
6/13/2007	77	
7/24/2007	52	
8/28/2007	75	
9/20/2007	69	
10/19/2007	59	
11/15/2007	54	
12/17/2007		frozen
1/15/2008		Flowing under, over & through ice/snow; can't measure,
2/26/2008	67	
3/21/2008	90	
4/24/2008	35	
5/22/2008	255	
6/25/2008	230	
7/16/2008	355	
8/14/2008	275	
9/10/2008	190	
10/21/2008	117	
11/19/2008	48	
12/11/2008	56	
1/21/2009	34	
2/26/2008	23	
3/10/2009	29	
4/20/2009	12	
5/13/2009	10	
6/16/2009	235	
7/27/2009	345	
8/19/2009	265	
9/18/2009	300	
10/12/2009	60	
11/5/2009	80	
12/23/2009	58	
1/28/2010	40	
2/9/2010		Channel iced over, broke through to measure, but
	20	results could be affected by remaining ice.
3/30/2010	10	
4/20/2010	23	
5/18/2010	150	
6/15/2010	200	
7/26/2010	235	
8/26/2010	90	
9/23/2010	96	
10/26/2010	155	
11/17/2010	83	
12/1/2010	50	
1/5/2011		frozen solid - no measurement
2/23/2011	49	
3/30/2011	16	
4/12/2011	10	
5/17/2011	609	
6/28/2011	700	This is an estimate; measurement compromised due to issues with equipment/high flows
7/19/2011	408	
8/16/2011	301	
9/13/2011	413	
10/13/2011	408	
11/16/2011	256	
12/9/2011	153	
1/30/2012		frozen - no measurement
2/22/2012	31	
3/21/2012	23	
4/18/2012	64	
5/29/2012	114	
6/26/2012	8.4	
7/17/2012	29.4	
8/14/2012	17	
9/24/2012	4.3	
10/18/2012	23.5	
11/27/2012	33	
12/18/2012		frozen - no measurement
1/10/2013		frozen - no measurement
2/21/2013	2	
3/20/2013	1.4	
4/16/2013	5.5	
5/21/2013	2.7	
6/28/2013	4.4	
7/16/2013	4.1	
8/6/2013	4.0	
9/18/2013	16	
10/22/2013	6.3	
11/6/2013	25	estimate
12/10/2013	28	frozen but able to chop through for measurement w/ flume



Appendix B-4

Emery Town Well Report

EarthFax Engineering Group, LLC
7324 South Union Park Avenue, Suite 100, Midvale, Utah 84047 • 801.561.1555 • FAX 801.561.1861

EarthFax

February 28, 2014

Kerry Goodballet, P.E.
Director of Permitting - Coal
Consolidation Coal Company
1000 Consol Energy Drive
Canonsburg, PA 15317

Subject: Emery Town Well Data Update

Dear Kerry:

Attached is a summary of the data collected from the Emery Town wells from November 2007 through December 2013. Explanatory notes are provided at the bottom of the spreadsheet to assist in data interpretation.

The water-quality data collected from Well #1 during 2013 are consistent with data collected earlier from this location. However, the water-level data collected from Well #2 suggest that water levels dropped abruptly by about 15 feet between November 2012 and March 2013, remaining essentially constant since then. Russel Jensen, the individual at the mine responsible for data collection, indicated that the mine purchased a new water-level indicator in early 2013 and that he began using that probe beginning with the March 2013 monitoring event. To determine whether or not the change in probes could result in the apparent water-level discrepancy, I visited the Emery Town wells with Mr. Jensen on February 11, 2014. I independently measured the depth to water in Well #2 using the old Emery probe, the new Emery probe, and a probe owned by EarthFax Engineering. Both the new Emery probe and the EarthFax probe indicated that the depth to water was 243.2 feet. The old Emery probe did not respond until it was well below the water level. That probe then continued to respond even after it was removed from the well. Therefore, the old Emery probe is obviously faulty and probably has been for some time.

Given these observations, it is my opinion that the water levels reported for 2013 in Well #2 are correct and that levels has remained relatively constant since measurements began. It is further my opinion that previous mining activity at the Emery Mine has not adversely affected water levels or water quality at the Emery Town wells.

Please let me know if you have any questions regarding this matter.

Sincerely,

Richard B. White, P.E.
President

Enclosure

cc: John Gefferth (Civil & Environmental Consultants, Inc.)

Emery Town well data

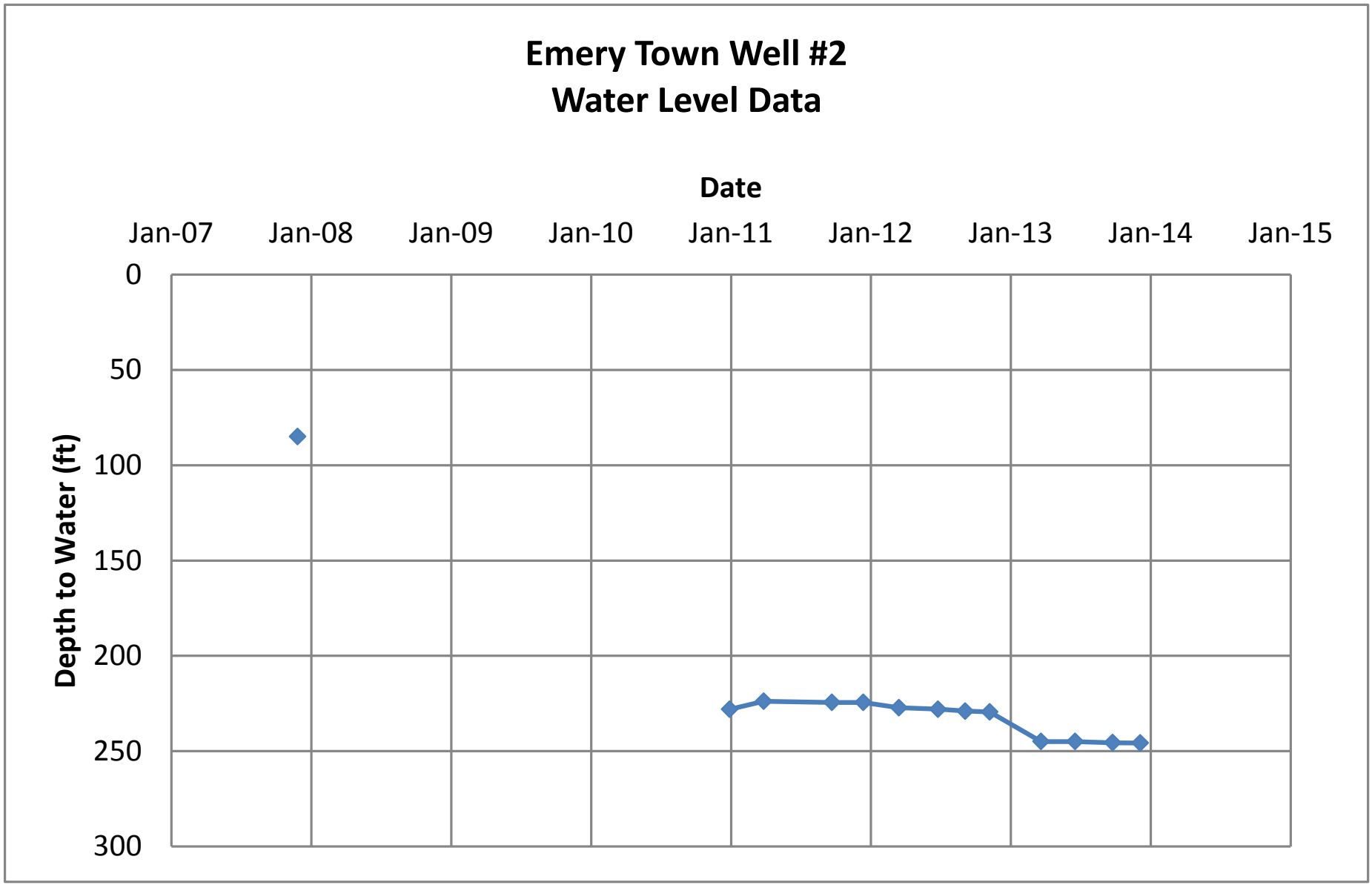
Consolidation Coal Company - Emery Mine

SITE TYPE	SITE NAME	DATE	Wat. Temp Deg. C	F-pH pH units	F-D.O. mg/l	Cond(FLD) umhos/cm	Depth ft	L-pH pH un	TSS mg/l	O/G mg/l	NH3 mg/l	D-As mg/l	D-B mg/l	D-Cd mg/l	D-Ca mg/l	D-Cu mg/l	D-Fe mg/l	D-Pb mg/l	D-Mg mg/l	D-Mn mg/l	D-K mg/l	D-Se mg/l	D-Na mg/l	D-Zn mg/l	Bicarb mg/l	Acidity mg/l	Carb mg/l	Cl mg/l	Hydroxide mg/l	NO3 mg/l
Well	Emery Town Well #1	11/28/2007	18.2	8.0		1225			38	<2	0.4	<0.010		<0.001	33.13		<0.03	<0.01	20.82	0.016	3.93	<0.02	190.79		229		<5	20		<0.05
Well	Emery Town Well #1	3/1/2008	2.3	8.2		1189																								
Well	Emery Town Well #1	6/1/2008																												
Well	Emery Town Well #1	9/1/2008																												
Well	Emery Town Well #1	11/1/2008																												
Well	Emery Town Well #1	6/1/2009																												
Well	Emery Town Well #1	7/1/2009																												
Well	Emery Town Well #1	6/24/2010	24.2	7.1		1198									32.72		<0.03		19.94	0.016	3.93		205.66		237		<5	17		
Well	Emery Town Well #1	9/23/2010	16.0	7.7		936									8.13		<0.03		11.53	0.006	3.16		192.45		142		54	16		
Well	Emery Town Well #1	12/29/2010	19.7	8.34		1317									31.93		<0.03		18.34	0.023	3.75		199.97		230		<5	17		
Well	Emery Town Well #1	3/28/2011	15.8	8.4		1300									29.46		0.03		18.59	0.016	3.65		193.04		237		<5	15		
Well	Emery Town Well #1	6/14/2011	20.2	9.5		1045									7.76		<0.03		16.62	0.014	4.27		189.75		142		56	16		
Well	Emery Town Well #1	9/22/2011	19.3	8.2		1200									29.16		<0.03		17.58	0.009	3.61		188.03		231		<5	14		
Well	Emery Town Well #1	12/13/2011	19.9	7.1		1174									30.77		<0.03		18.73	0.009	3.67		196.87		232		<5	16		
Well	Emery Town Well #1	3/15/2012	18.6	7.1		1210									30.63		<0.03		18.51	0.016	3.76		199.85		232		9	16		
Well	Emery Town Well #1	6/25/2012	24.8	7.3		1252									27.22		<0.03		17.36	0.012	3.52		191.32		230		<5	15		
Well	Emery Town Well #1	9/4/2012	23.0	7.1		1241									31.19		<0.03		18.37	0.011	4.05		207.52		225		<5	17		
Well	Emery Town Well #1	11/7/2012	21.4	7.0		1430									31.20		0.06		18.16	0.010	4.61		202.20		226		<5	17		
Well	Emery Town Well #1	3/21/2013	21.3	7.1		1180									31.78		<0.03		19.39	0.011	3.80		199.84		227		<5	17		
Well	Emery Town Well #1	6/20/2013	24.2	7.0		1360									32.53		<0.03		19.51	0.009	3.97		202.46		228		<5	18		
Well	Emery Town Well #1	9/24/2013	19.6	7.0		1320									31.22		<0.03		18.55	0.011	3.77		193.35		231		<5	18		
Well	Emery Town Well #1	12/17/2013	15.2	7.0		1292									31.19		<0.03		18.22	0.009	3.93		204.12		234		<5	18		
Well	Emery Town Well #2	11/28/2007					85																							
Well	Emery Town Well #2	Mar-08																												
Well	Emery Town Well #2	Jun-08																												
Well	Emery Town Well #2	Sep-08																												
Well	Emery Town Well #2	Nov-08																												
Well	Emery Town Well #2	Jun-09																												
Well	Emery Town Well #2	Jul-09																												
Well	Emery Town Well #2	6/24/2010																												
Well	Emery Town Well #2	9/23/2010																												
Well	Emery Town Well #2	12/29/2010					228.2																							
Well	Emery Town Well #2	3/28/2011					223.9																							
Well	Emery Town Well #2	9/22/2011					224.5																							
Well	Emery Town Well #2	12/13/2011					224.5																							
Well	Emery Town Well #2	3/15/2012					227.2																							
Well	Emery Town Well #2	6/25/2012					228.0																							
Well	Emery Town Well #2	9/4/2012					229.0																							
Well	Emery Town Well #2	11/7/2012					229.5																							
Well	Emery Town Well #2	3/21/2013					245.0																							
Well	Emery Town Well #2	6/18/2013					245.0																							
Well	Emery Town Well #2	9/24/2013					245.6																							
Well	Emery Town Well #2	12/5/2013					245.8																							

Emery Town well data

Consolidation Coal Company - Emery Mine

SITE TYPE	SITE NAME	DATE	NO2 mg/l	O-PO4 mg/l	SO4 mg/l	T-P mg/l	T-Alk mg/l	T-Hardns mg/l	L-Sp. Cond umhos/cm	TDS mg/l	Set Solids ml/l	D-Al mg/l	D-Mb mg/l	T-Cats meq/l	T-Anis meq/l	T-Fe mg/l	T-Mn mg/l	T-Mg mg/l	COMMENTS
Well	Emery Town Well #1	11/28/2007		<0.05	357		229	168		812									
Well	Emery Town Well #1	3/1/2008																	
Well	Emery Town Well #1	6/1/2008																	Discharge pipe under water in canal
Well	Emery Town Well #1	9/1/2008																	Discharge pipe under water in canal
Well	Emery Town Well #1	11/1/2008																	Discharge pipe under ice in canal
Well	Emery Town Well #1	6/1/2009																	Discharge pipe under water in canal
Well	Emery Town Well #1	7/1/2009																	Discharge pipe under water in canal
Well	Emery Town Well #1	6/24/2010			329		237	164		784									
Well	Emery Town Well #1	9/23/2010			270		195	68		632									
Well	Emery Town Well #1	12/29/2010			360		230	155		752									
Well	Emery Town Well #1	3/28/2011			328		237	150		757									
Well	Emery Town Well #1	6/14/2011			279		198	88		638									
Well	Emery Town Well #1	9/22/2011			321		231	145		710									
Well	Emery Town Well #1	12/13/2011			325		232	154		745									
Well	Emery Town Well #1	3/15/2012			323		241	153		743									
Well	Emery Town Well #1	6/25/2012			316		230	139		727									
Well	Emery Town Well #1	9/4/2012			341		225	154		734									
Well	Emery Town Well #1	11/7/2012			322		226	153		771									
Well	Emery Town Well #1	3/21/2013			329		227	159		754									
Well	Emery Town Well #1	6/20/2013			338		228	162		749									
Well	Emery Town Well #1	9/24/2013			345		231	154		754									
Well	Emery Town Well #1	12/17/2013			346		234	153		763									
Well	Emery Town Well #2	11/28/2007																	Spurious data due to plugged air line.
Well	Emery Town Well #2	Mar-08																	No data
Well	Emery Town Well #2	Jun-08																	No data
Well	Emery Town Well #2	Sep-08																	No data
Well	Emery Town Well #2	Nov-08																	No data
Well	Emery Town Well #2	Jun-09																	No data
Well	Emery Town Well #2	Jul-09																	No data
Well	Emery Town Well #2	6/24/2010																	No data
Well	Emery Town Well #2	9/23/2010																	No data
Well	Emery Town Well #2	12/29/2010																	
Well	Emery Town Well #2	3/28/2011																	
Well	Emery Town Well #2	9/22/2011																	
Well	Emery Town Well #2	12/13/2011																	
Well	Emery Town Well #2	3/15/2012																	
Well	Emery Town Well #2	6/25/2012																	
Well	Emery Town Well #2	9/4/2012																	
Well	Emery Town Well #2	11/7/2012																	
Well	Emery Town Well #2	3/21/2013																	New water-level probe used.
Well	Emery Town Well #2	6/18/2013																	
Well	Emery Town Well #2	9/24/2013																	
Well	Emery Town Well #2	12/5/2013																	


Emery Town Well #2
Water Level Data
Date
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Depth to Water (ft)
0
50
100
150
200
250
300

Appendix D-1

2010 Annual Report

and MSHA Maps

Gravel Pit

Emery Mine Office

POND 6
UPDES 003

POND 1
UPDES 001

No Dumping

I herby certify that to the best of my knowledge this map is true and accurate in its depiction of the mine.

Mine Engineer

Date

Intake Airway
Return Airway
Regulator
Stopping
Mandoor
Airlock
Overcast
Seal
Curtain
Roof Fall
Primary Escapeway
Secondary Escapeway
Permit Area Boundary
Floor Elevation
Pool Elevation
Drill Hole
Control Point
Bottom of Coal Elevation
Body of Water
Refuge Alternative
Surface Water

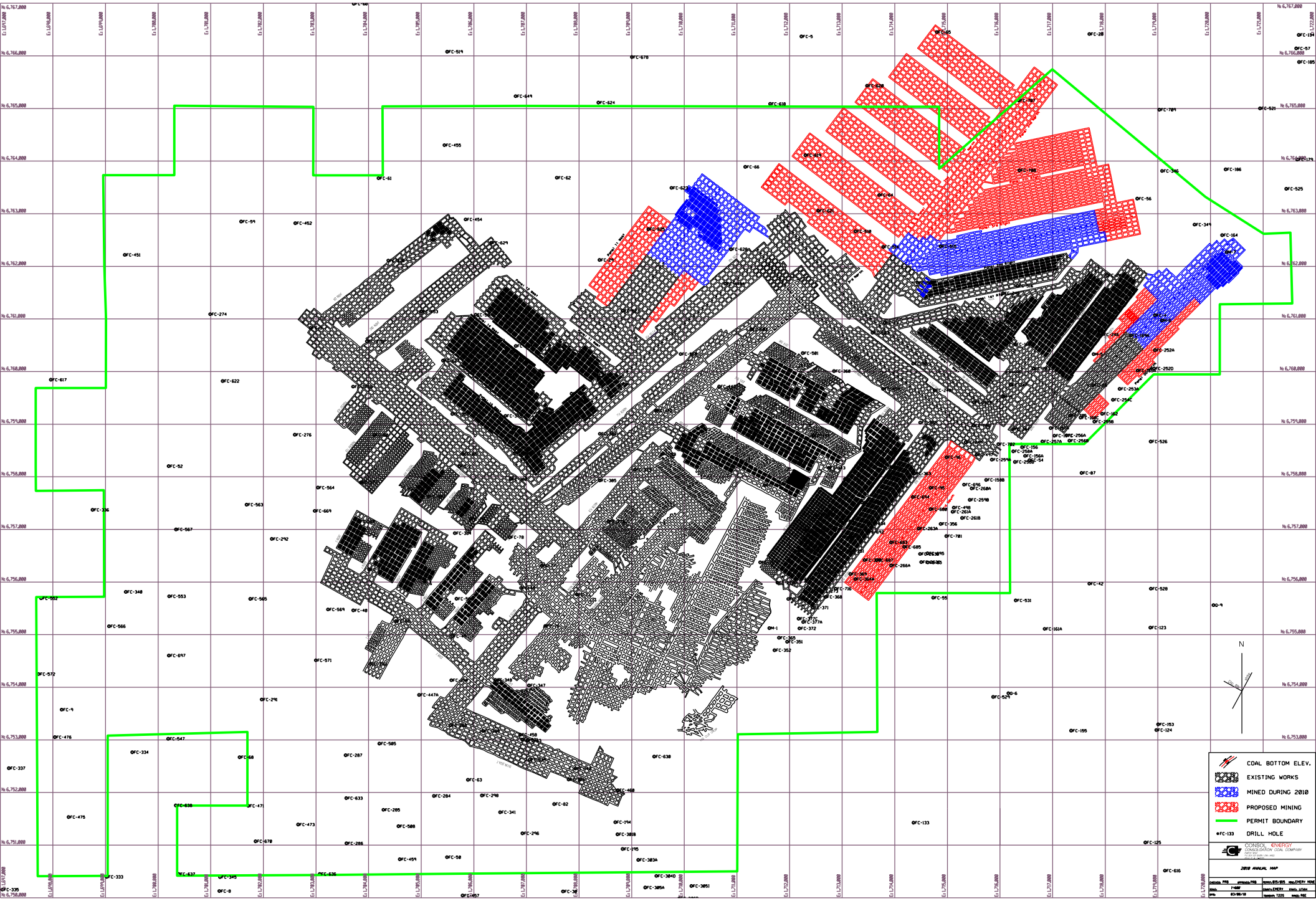
N

There are no mines above or below and no oil or gas wells.

CONSOL ENERGY
CONSOLIDATION COAL COMPANY
EMERY MINE
P.O. BOX 527 ORANGEVILLE, UTAH 84537
MINE ID # 42-00079

MSHA 1200 Map (After Mine Closure)

DRAWN BY: PRB
DATE: 9-10-2012
SCALE: 1" = 500'


COAL BOTTOM ELEV.
EXISTING WORKS
MINED DURING 2010
PROPOSED MINING
PERMIT BOUNDARY
DRILL HOLE
CONSOL ENERGY
CONSOLIDATION COAL COMPANY
2010 ANNUAL MAP
N