



C/015/0018
Received 11/4/2014
Task ID #4715

Energy West Mining Company
P. O. Box 310
15 No Main Street
Huntington, Utah 84528

November 3, 2014

Electronically Submitted

Utah Coal Program
Utah Division of Oil, Gas, and Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Subj: Amendment to Deer Creek Mine MRP, PacifiCorp, Deer Creek Mine C/015/0018, Emery County, Utah.

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company "Energy West" as mine operator, hereby submits an amendment to amend the Deer Creek Mine MRP, Volume 1, Part 2, as a response to the approved reduction in water monitoring responsibilities of the Deer Creek, Cottonwood and Trail Mountain mines.

Energy West recently submitted (September 19, 2014) an amendment to the Volume 9 which covers the specific hydrological information for the East Mountain Cumulative Hydrologic Impact Area (CHIA). The Division, in response, required Energy West to update the MRP's of the Cottonwood/Wilberg and Deer Creek mines to include the hydrologic monitoring responsibilities specific to each mine. Those responsibilities are now included within each MRP.

This submittal includes additions to the text section of Volume 1, Part 2 that outlines the hydrologic monitoring required for the Deer Creek Mine. The required C1/C2 forms are also included with this submittal.

If you have any questions concerning this submittal, please contact Dennis Oakley at 435-687-4825.

Sincerely,

Kenneth Fleck
Geology and Environmental Affairs Manager

Cc: file

Encl Volume 1, Part 2, pgs 2-219 thru 2-224
Map HM1-A
C1/C2 Forms

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change New Permit Renewal Exploration Bond Release Transfer

Permittee: PacifiCorp

Mine: Deer Creek Mine

Permit Number: C/015/0018

Title: Amendment to Deer Creek Mine MRP, PacifiCorp, Deer Creek Mine C/015/0018, Emery County, Utah.

Description, Include reason for application and timing required to implement:

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- Yes No 1. Change in the size of the Permit Area? Acres: _____ increase decrease.
- Yes No 2. Is the application submitted as a result of a Division Order? DO# _____
- Yes No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- Yes No 4. Does the application include operations in hydrologic basins other than as currently approved?
- Yes No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes No 6. Does the application require or include public notice publication?
- Yes No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- Yes No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- Yes No 9. Is the application submitted as a result of a Violation? NOV # _____
- Yes No 10. Is the application submitted as a result of other laws or regulations or policies?
Explain: _____
- Yes No 11. Does the application affect the surface landowner or change the post mining land use?
- Yes No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- Yes No 13. Does the application require or include collection and reporting of any baseline information?
- Yes No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- Yes No 15. Does the application require or include soil removal, storage or placement?
- Yes No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- Yes No 17. Does the application require or include construction, modification, or removal of surface facilities?
- Yes No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- Yes No 19. Does the application require or include certified designs, maps or calculation?
- Yes No 20. Does the application require or include subsidence control or monitoring?
- Yes No 21. Have reclamation costs for bonding been provided?
- Yes No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- Yes No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you. (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Kenneth Fleck
Print Name

Kenneth S. Fleck
Sign Name, Position, Date

Manager of Environmental Affairs NOV. 3, 2014

Subscribed and sworn to before me this 3rd day of November, 2014

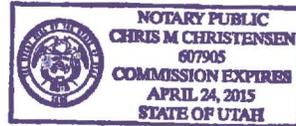
Chris M Christensen

Notary Public

My commission Expires:

Attest: State of Utah April 24, 2015 } ss:

County of Emery



For Office Use Only:

Assigned Tracking
Number:

Received by Oil, Gas & Mining

PacifiCorp
Energy West Mining Company

Amendment to Deer Creek Mine MRP, PacifiCorp, Deer Creek Mine C/015/0018,
Emery County, Utah.

Volume 1 – Part 2

Replace page 2-219

HYDROLOGIC RESOURCES AND MONITORING REQUIREMENTS

Hydrology

The Deer Creek Mine is part of the East Mountain property in which PacifiCorp holds coal mining interests. The East Mountain property encompasses multiple adjacent mining operations including; Cottonwood/Wilberg Mine, Deer Creek Mine, and the reclaimed Des Bee Dove Mine (Phase III Bond Released approved August 2014). PacifiCorp has collected comprehensive baseline information on the hydrologic resources of the East Mountain property that consists of ground and surface water investigations, climatological information, baseline cumulative impact area information, and probable hydrologic consequence determination to ensure the protection of the hydrologic balance of the Deer Creek Mine permit area and East Mountain property. This information is found in Volume 9, Volume 9A, and/or Volume 9B.

As part of the requirements of the Utah Coal Regulations R645-301-731.221 through R645-301-731.225, a hydrologic monitoring program has been established in cooperation with Utah Division of Oil, Gas, and Mining. The hydrologic monitoring program involves collecting water quality and quantity samples of ground and surface water for specific sites pertinent the Deer Creek Mine permit area.

The following details the hydrologic monitoring program for the Deer Creek Mine permit for surface and ground water monitoring sites, required sampling parameter list, and map showing site locations.

Surface Water Hydrology (for detailed information for the Deer Creek Mine see Volumes 9, 9A, and 9B)

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Add pages 2-220 thru 2-224

Cottonwood Creek Drainage System

Indian Creek (refer to Deer Creek Volume 12 R645-301-700:
Hydrologic Monitoring Map MFS1851D)

1) ICA

3) ICD

2) ICF

4) ICB

Huntington Creek Drainage System

Huntington Creek (refer to Deer Creek and Wilberg/Cottonwood
Mines: Volume 9 Map HM-1A)

1) HCC01

2) HCC02

3) HCC04

Deer Creek Canyon (refer to Deer Creek and
Wilberg/Cottonwood Mines: Volume 9 Map HM-1A)

1) DCR01

2) DCR04

3) DCR06

Meetinghouse Canyon-South Fork (refer to Deer Creek and
Wilberg/Cottonwood Mines: Volume 9 Map HM-1A)

1) MHC01

Rilda Canyon (refer to Deer Creek and Wilberg/Cottonwood
Mines: Volume 9 Map HM-1A)

1) RCF1

5) RCF3

2) RCLF1

6) RCW4

3) RCLF2

4) RCF2

Mill Fork Canyon (refer to Deer Creek Volume 12 R645-301-700:

Hydrologic Monitoring Map MFS1851D)

1) MFA01

2) MFB02

3) MFU03

Ground Water Hydrology (for detailed information for the Deer Creek Mine see Volumes 9 and 9A)

East Mountain Springs (refer to Deer Creek and

Wilberg/Cottonwood Mines: Volume 9 maps HM-4)

1) Sheba Springs

6) 89-67

2) 80-48

7) 89-68

3) 80-50

8) Rilda Canyon Meters (Meters

4) 89-65

2 & 3) *

5) 89-66

* NEWUSSD controls Rilda Canyon meters. Monitoring will be conducted when meters are functioning.

East Mountain Springs - Mill Fork Area (refer to Deer Creek

Permit Volume 12 R645-301-700: Hydrologic Monitoring

Map MFS1851D)

1) EM-216

9) MF-10

2) MFR-30

10) MF-19B

3) JV-9

11) MF-213

4) JV-34

12) MF-219

5) RR-5

13) SP1-26

6) RR-15

14) SP1-29

7) RR-23A

15) MFR-10

8) MF-7

16) UJV 101

17) UJV-206

20) Little Bear Spring

18) UJV-213

21) Grants Spring

19) EMPond

Piezometric Data - Surface

Rilda Canyon

1) P1

2) P5

3) P6

4) P7

5) EM-47

Cottonwood Creek Canyon

1) EM-31

2) CCCW-1A

3) CCCW-1S

4) CCCW-2A

5) CCCW-3A

6) CCCW-3S U

7) CCCW-3S L

Piezometric Data - Underground

1) Refer to Annual Hydrologic Reports for Locations: Map
HM-2

Waste Rock Wells

1) DCWR1

UPDES Monitoring Locations - UPDES Permit #UT0023604

1) 001 - Sediment Pond

2) 002 - Mine Discharge

Required Monitoring Parameters

Field Measurements shall be collected during monitoring of surface and ground water sites. Field measurements include:

- Date and Time
- Flow
- pH
- Temperature
- Conductivity
- Dissolved Oxygen (perennial streams only)

Surface and ground water samples shall be analyzed for quality utilizing the following parameters (in mg/L). Baseline parameters shall be collected every 5 years. Operational samples shall be collected at all other times and as dictated by the monitoring schedule.

Laboratory Measurements:

#	*	-	Total Settleable Solids (UPDES Only)
#	*	-	Total Suspended Solids (Surface Only)
	*	-	Total Dissolved Solids
	*	-	Total Hardness (CaCO ₃)
		-	Acidity (CaCO ₃)
		-	Aluminum (Al) - Dissolved
		-	Arsenic (As) - Dissolved
		-	Boron (B) - Dissolved (Waste Rock Sites Only)
	*	-	Carbonate (CO ₃ -2)
	*	-	Bicarbonate (HCO ₃ -)
		-	Cadmium (Cd) - Dissolved
	*	-	Calcium (Ca) - Dissolved
	*	-	Chloride (Cl-)
		-	Copper (Cu) - Dissolved
	*	-	Iron (Fe) - Total & Dissolved
		-	Lead (Pb) - Dissolved
	*	-	Magnesium (Mg) - Dissolved
	*	-	Manganese (Mn) - Total & Dissolved
		-	Molybdenum (Mo) - Dissolved
		-	Nitrogen: Ammonia (NH ₃) - reported as N
		-	Nitrite (NO ₂) - reported as N
		-	Nitrate (NO ₃ -) - reported as N
	*	-	Potassium (K) - Dissolved

Laboratory Measurements Con't.:

- * - Oil & Grease (UPDES & surface waters above & below mine sites)
- Ortho Phosphate (PO4-3) - reported as P
- Selenium (Se) - Dissolved (Waste Rock Sites Only)
- * - Sodium (Na) - Dissolved
- * - Sulfate (SO4-2)
- Zinc (Zn) - Dissolved
- * - Cation-Anion Balance

Construction * Operational - Baseline

Monitoring Schedule

Surface monitoring sites shall be field monitored quarterly for all field parameters except for Indian Creek Sites - monitoring to be conducted during base flow only. Surface sites shall also be sampled and analyzed for quality for all quality parameters except for Indian Creek sites - monitoring to be conducted during base flow only.

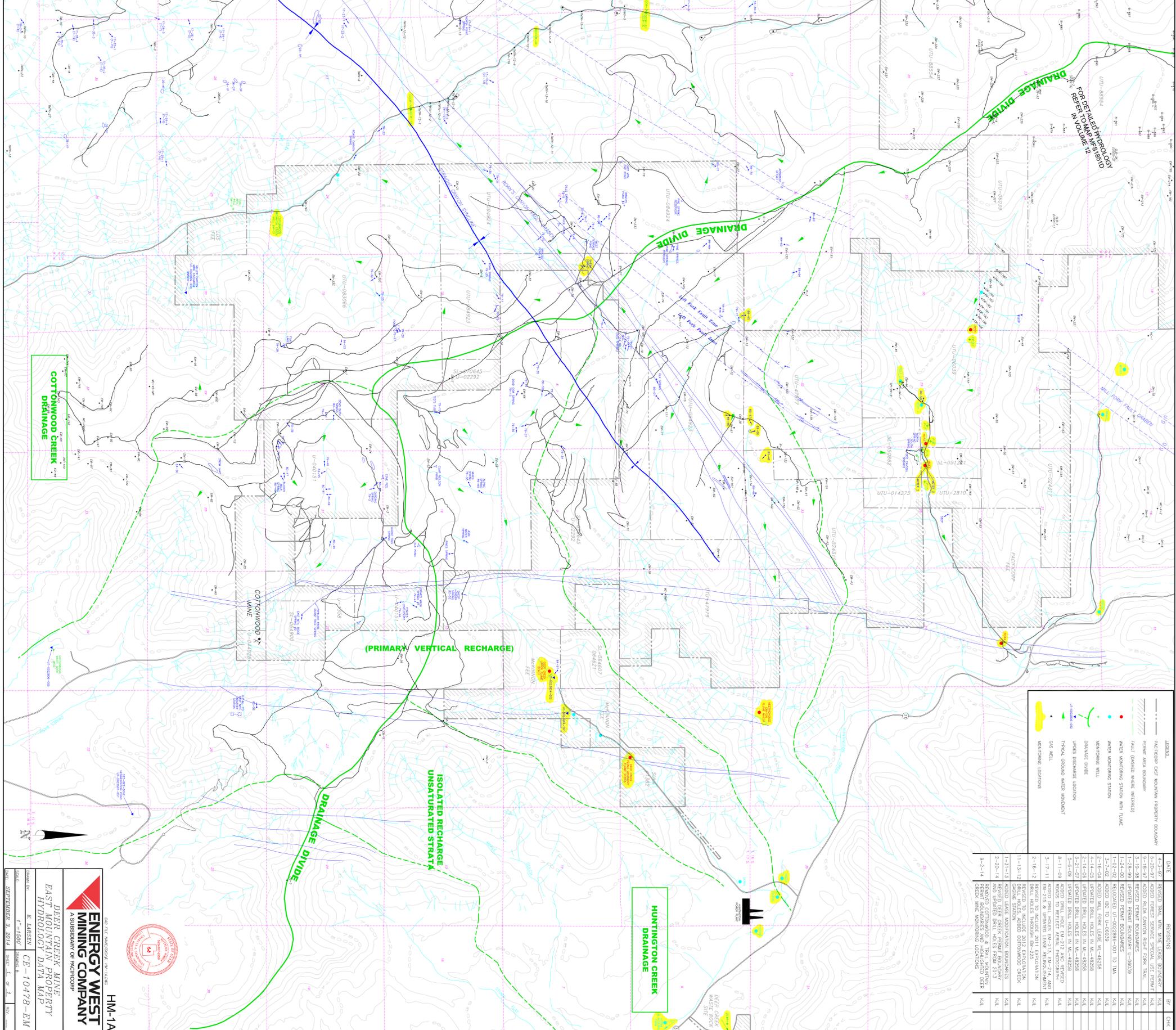
East Mountain Springs (including the Mill Fork Area) shall be field monitored during the months of July and October. Rilda Canyon Springs - NEWUSSD: Meters 2 & 3 shall be field monitored monthly depending on access. East Mountain Springs (including the Mill Fork Area) shall also be sampled and analyzed for quality during the months of July and October. Rilda Canyon Springs - NEWUSSD: Meters 2 & 3 shall be monitored for quality monthly depending on access.

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Add Map HM1-A after page 2-224



SYMBOL	DESCRIPTION
--- (dashed line)	MONITORING LOCATION
● (yellow circle)	MONITORING WELL
● (red circle)	USUAL DISCHARGE LOCATION
● (blue circle)	TYPICAL GROUND WATER MONITORING
○ (yellow circle)	USUAL DISCHARGE LOCATION
○ (red circle)	MONITORING WELL
○ (blue circle)	TYPICAL GROUND WATER MONITORING
○ (yellow circle)	USUAL DISCHARGE LOCATION
○ (red circle)	MONITORING WELL
○ (blue circle)	TYPICAL GROUND WATER MONITORING

DATE	REVISIONS	BY	CHK
5-23-07	REVISED TRAIL WITH WASTE BOUNDARY	KAL	
5-20-07	ADDED FOREST SERVICE SPECIAL USE PERMIT	KAL	
5-18-07	REVISED RILDA CANYON RIGHT FORK TRAIL	KAL	
5-18-07	REVISED PERMIT BOUNDARIES	KAL	
1-28-06	UPDATED PERMIT BOUNDARY U-06039	KAL	
1-02-02	RELOCATED U-0202888-001 TO MA	KAL	
3-7-02	ADDED BC TO U-06039	KAL	
2-16-04	UPDATED BELL HOLE LEASE WL-48258	KAL	
4-14-05	UPDATED BELL HOLE WL-48258	KAL	
2-14-06	UPDATED BELL HOLE WL-48258	KAL	
3-5-09	UPDATED BELL HOLE WL-48258	KAL	
9-11-09	ADDED BELL HOLE EM-217 AND REVISED	KAL	
3-17-11	ADDED BELL HOLE EM-218 & UPDATED LEASE REINDEMPMENT	KAL	
2-16-12	REVISED TO INCLUDE 2011 EXPANSION	KAL	
11-13-12	REVISED TO INCLUDE 2012 EXPANSION	KAL	
1-31-13	ADDED LEASE MODIFICATION BOUNDARIES	KAL	
2-20-14	REVISED DEER CREEK PERMIT BOUNDARIES	KAL	
9-2-14	ADDED PERMIT BOUNDARIES AND INDICATED DEER CREEK WASTE MONITORING LOCATIONS	KAL	


ENERGY WEST MINING COMPANY
 A SUBSIDIARY OF TECHCOM
DEER CREEK MINE
EAST MOUNTAIN PROPERTY
HYDROLOGY DATA MAP
 R. LANSON
 T-14500
 CE-10478-EM
 DATE: SEPTEMBER 3, 2014
 SHEET 1 OF 1



HM-1A
 COTTONWOOD MINE
 HUNTINGTON CREEK DRAINAGE
 COTTONWOOD CREEK DRAINAGE