RoxCoal, Inc.
Agustus Mine
Final Map

MSHA ID# 36-08636
C.M.A.P. NO. 56951301
1499 Gahagen Road
Central City, PA 15926
Upper Kittanning Seam
Date: 7-11-13
Scale: 1"=200'
Sheet 1

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — RICHARD ALAN WAGNER, JR. — ENGINEER — PE077664

SEAL 7-11-13

The information on this map is accurate to the best of my knowledge, information and belief.

This map represents the complete and accurate locations of all excavations and is the Final Map.

Company or Corporate Officer — Date 7/12/13

VENTILATION LEGEND

- STOPPING WITH DOOR
- STOPPING WITH HOLE
- PERMANENT STOPPING
- PARTIAL WALL
- PROPOSED STOPPING
- REGULATOR
- CANVAS CHECK
- OVERCAST
- FINAL SEALS
- LINE CANVAS
- EQUIPMENT DOORS
- 6' DOOR
- 6' DOOR WITH HOLE
- CAVED AREA
- FLOODED AREA
- CRIBBED AREA
- CHECK SURVEY STATION

- Impounded water boundary barrier
- Coal contour (2440)
- Drillholes
- Roads
- Streams
- Property identification number (4)
- Well & Spring (W) (S)
- Not Surveyed
- Underground Telephone Line (-U-T-)
- Telephone\Electric Line (-T-E-)
- Water Line (-W-)
- Dwellings
- Other buildings
- Permit line
- Subsidence Control Plan Boundary
- Property line
- Surface permit boundary
- Angle of Draw

PROCEDURES USED TO LOCATE ADJACENT SURFACE MINES

Lower Kittanning, Upper Kittanning, Lower Freeport, Upper Freeport Seams

Joseph Godin Mine Designation N
Located from Harrisburg Blueprint Co. map Reference No. 2054

Lower Kittanning, Middle Kittanning, Lower Freeport, Upper Freeport Seams

Constantino Coal Co. Designation H
Located from Harrisburg Blueprint Co. map Reference No. 8790

NSM Coals, Inc. Designation J
Located from Harrisburg Blueprint Co. map Reference Nos. 22759 and 23223

Lower Kittanning, Middle Kittanning, Lower Freeport Seams

Pentrex Resources, Inc. Swallow Mine Designation O
Located from Harrisburg Blueprint Co. map Reference No. 2166

Pittsburgh Summit Coal Co. Burg #1 Mine Designation P
Located from Harrisburg Blueprint Co. map Reference No. 9023

Lower Freeport, Upper Freeport Seams

PBS Coals, Inc., Job 24 Designation F
Located from PBS Coals, Inc., Job 24 mine map.
Also located from Harrisburg Blueprint Co. map Reference No. 23853 & 22741.

PBS Coals, Inc. Job 9 Designation G
Located from PBS Coals, Inc., Job 9 mine map and Harrisburg Blueprint Co. map Reference No. 27805.

Lower Kittanning Seam

Huskin Coal Mining Co. Designation I
Located by field observation.

Upper Freeport Seam

J. E. Hgan, #2 Mine Designation Q
Located from Harrisburg Blueprint Co. map Reference No. 8696

ABANDONED MINE LEGEND

UNDERGROUND MINES

DESIGNATION	MINE NAME	COMPANY NAME	SEAM
A	Huskin #4	Gahagen Coal Co.	UK
B	Huskin #3 & #5	Gahagen Coal Co.	LK
C	Reitz #3	Reitz Coal Co.	UK
D	Shade #1	PBS Coals, Inc.	UK
E	Laurel Mine	Laurel Mines Corp.	LK
F	Longview Mine	RoxCoal, Inc.	UK, C
G	Pitcairn #1	Pittsburgh Summit Coal Co.	B, C

SURFACE MINES

DESIGNATION	MINE NAME	COMPANY NAME	SEAM
J	Job 24	PBS Coals, Inc.	LF, UF
K	Job 9	PBS Coals, Inc.	LF, UF
L		Constantino Coal Co.	LK, MK, LF, UF
M		Huskin Coal Mining Co.	LK
N		NSM Coals, Inc.	LK, MK, LF, UF
O	Godin Mine	Joseph Godin	LK, MK, LF, UF
P	Swallow Mine	Pentrex Resources, Inc.	LK, MK, LF
Q	Burg #1	Pittsburgh Summit Coal Co.	LK, MK, LF
R	Hgan #2	J. E. Hgan	UF

Check surveys:

1. On 10-27-04 from control outside to spad 49 in mains.
2. On 3-24-05 from spad 49 to spad 125 in NW mains.
3. On 12-22-05 from spad 49 to spad 578 in 1 right.
4. On 1-11-06 from spad 578 to spad 636 in west mains.
5. On 2-8-06 from spad 636 to spad 644 in 1 left of west mains.
6. On 2-23-06 from spad 644 to spad 692 in A butt.
7. On 6-22-06 from check spad 31 to spad 159 in 2 left.
8. On 8-4-06 from check spad 48 to spad 800 in C butt.
9. On 10-31-06 from check spad 202 to spad 822 in D butt.
10. On 2-15-07 from check spad 217 to spad 850 in 1 south and also to spad 886 in E butt.
11. On 3-12-07 from check spad 48 to face of 1 west and to face of 2 south.
12. On 7-26-07 from check spad 43 to spad 993 in 1 north.
13. On 11-8-07 from check spad 255 to spad 1053 in 1 north.
14. On 11-15-07 from spad 1053 to spad 1081 in 1 north.
15. On 1-25-08 from check spad 277 to spad 1156 in 1 east.
16. On 5-14-08 from check spad 284 to spad 1251 in 2 right.
17. On 8-27-08 from outside baseline to spad 14
18. On 9-4-08 from spad 14 to cme 316
19. On 9-11-08 from cme 316 to spad 540
20. On 9-18-08 from spad 540 to spad 585
21. On 10-1-08 from spad 585 to cme 350
22. On 11-12-08 from cme 350 to spad 1245 in 4 mains 2 right.
23. On 11-20-08 from cme 302 to spad 1428 in 5 mains.
24. On 12-10-09 from cme 370 to spad 1457 in 5 mains.
25. On 1-15-09 from cme 358 to spad 1212 in main A.
26. On 1-23-09 from cme 391 to spad 1152 in main A.
27. On 2-6-09 from cme 383 to spad 1494 in 5 mains.
28. On 5-22-09 from cme 401 to cme 410 in 5 mains.
29. On 6-5-09 from cme 391 to cme 419 in main A.
30. On 6-12-09 from cme 419 to spad 1638 in main B.
31. On 6-19-09 from cme 410 to spad 1586 in 5 mains.
32. On 6-26-09 from spad 1638 to spad 1688 & 1692 in main B.
33. On 7-10-09 from cme 439 to spad 1662 in 5 mains.
34. On 9-18-09 from spad 1692 to spad 1815 in main B1.
35. On 10-28-09 from spad 1815 to spad 1872 in main B1.
36. On 2-3-10 from cme 470 to spad 1951 in main B.
37. On 3-26-10 from spad 1968 to spad 2024 in main B.
38. On 5-28-10 from spad 2024 to spad 2096 & cme 489 within 100' of the face of main B.
39. On 7-6-10 to spad 2157 in main B rooms.
40. On 9-3-10 to spad 2223 in main C first rooms to left.
41. On 9-29-10 to spad 2268 in main C first rooms to left.
42. On 11-16-10 to check spad 463 at face of main C second rooms to left.
43. On 1-5-11 to spad 2381 & check spad 525 at face of main C.
44. On 3-4-11 to spad 2452 in main D.
45. On 3-11-11 to spad 2478 & check spad 541 at face of main D1.
46. On 4-13-11 to spad 2525 & check spad 544 at face of main D2.
47. On 5-27-11 to spad 2604 & check spad 557 at face of main D3.
48. On 7-1-11 to spad 2637 & check spad 563 in main D.
49. On 7-22-11 to spad 2662 & check spad 577 at face of main D4.
50. On 8-19-11 to spad 2704 & check spad 593 at face of main D5.
51. On 9-19-11 to spad 2737 & check spad 601 at face of main D.
52. On 10-28-11 to spad 2767 in main E1.
53. On 11-16-11 to spad 2796 & check spad 610 at face of main E1.
54. On 12-30-11 to spad 2865 in main E2.
55. On 3-2-12 to spad 2900 in 5 mains butt to left.
56. On 6-13-12 to spad 1612 & check spad 625 in 5A
57. On 6-22-12 to spad 2993 in 5A
58. On 7-11-12 to spad 3046 & check spad 641 within 100' of face in 5A

Accuracy of closed loop surveys exceeds 1/10,000.

SHEET 1 | SHEET 2

PROCEDURES USED TO LOCATE ADJACENT UNDERGROUND MINES

Upper Kittanning (C) Seam

Huskin Coal Mining Co., Huskin #4 Designation A
This mine is located from maps of Gahagen Coal Co., formerly Huskin Coal Co. These maps are 1"=400' and 1"=100'. They both show the same mining boundary. The map is dated November 3, 1936 and survey lines are listed through December 20, 1948, which area is marked "A". This area is visible on the mining boundary on both 1"=100' and 1"=400' maps marked final. Orientation is by property lines shown on both the Huskin maps and the Agustus Mine map. Orientation was also accomplished by overlaying a 1"=400' map of the Reitz #3 C Mine, which shows the Huskin #3(B) Mine drifts, on a 1"=400' map of the Reitz Coal Co. Mines #3 & #4(B) which includes a map showing Huskin #3(B) Mine, the Huskin #4(C) drifts and surface features including Twp Rd. 762. TR 792 was then traced onto the Huskin #4Mine map and then the orientation of the #4 Mine could be compared relative to TR 792 on the Agustus Mine maps. Map files at OSM, DMS and DMO were searched.

PBS Coals, Inc., formerly J&J Sales, Shade #1 Designation D
This mine is located from a final, certified map (1"=400' & 1"=100) showing mining completed on February 12, 1973. The PA Annual Reports show 6219 tons mined in 1973. The mine is not referenced after 1973. This mine is connected to Reitz No. 7 and Reitz No 3C' (Upper). Map files of OSM, DMS, and DMO were searched.

The mine workings on the 1"=400' final certified map and the 1"=100' final certified maps are identical. The mine workings were located on the Agustus maps from the 1"=100' maps. The digitizing was accomplished using the 1"=100' mylars which were used to make the 1"=100' certified maps. All of the orientation points were digitized From the Shade #1 maps and plotted on the Agustus mine maps. The power borehole that appears on the Shade #1 maps was surveyed in the field by RoxCoal, Inc. The orientation points are: A - intersection of SR 160 & T631; B - power borehole; C - intersection of T729 & farm lane; D - intersection of T729 and T790; E - intersection of T729 & T817;

Shade #1 is connected to the Reitz #3 C' Mine. This mine discharges in Central City at an elev. of 2218'. Both of these mines are interconnected to the Reitz #3 and #4 B Seam mines through the goh and discharge to Central City at the B Seam discharge at an elev. of 2185' behind the fire hall. In addition, the Shade #1 Mine was inadvertently interconnected to the B Seam Laurel Mine due to pillaring in the Laurel Mine in 1977. A borehole was drilled into the Shade Mine as noted on this map. The water elevation at this borehole is 2242 feet. The water elevation was also checked at an old power borehole and found to be 2243'. The permit research reflects a mine pool elev. of 2240'. The old portal elevations for the Shade #1 Mine are at 2442'. There is no discharge at this location. The static water level in the Laurel Mine (B Seam) is 2244'.

Lower Kittanning (B) Seam

Huskin Coal Mining Co., Huskin #3 & #5 Designation B
This mine is located from a 1"=400' map of Gahagen Coal Co., formerly Huskin Coal Mining Co. It is titled: Mine No. 3-"B" Seam. The date on the legend is December 23, 1925. The map is not marked final and is not certified. The survey index shows mining until September 1962 in an area designated "C". Production statistics from PA Annual Reports show this mine stopped production in 1954 when 7328 tons were mined. The Annual Reports show 17665 tons produced in 1953. The workings of two mine are depicted on the Reitz No. 4 Mine map (see below, Designation C). These workings are not as extensive as the workings on the Huskin #3 map. Orientation was checked by overlaying the Huskin #3 map over the Reitz No. 3 map (see below, Designation C) which shows the Huskin #3 mine and some surface features including TR 792. TR 792 was traced onto the Huskin #3 map and then orientation of the #3 Mine could be compared relative to TR 792 on the Agustus Mine maps.

Reitz Coal Co., Reitz No. 3 Designation C
This mine is located from maps, (1"=400') obtained from Berwind and is not marked final and is not certified. This map is a map of Reitz 4 & 3 Mines and the date on the legend is 1919. The latest mining on this map is marked 6/63. Examination of 1"=100' map reveals mining on 2/17/72 in the northwest portion of the mine, not adjacent to the Agustus permit area. Records of this mine production could not be found in the Pa Bituminous Annual Reports. Orientation is by surface features, specifically roads TR 792 and TR 617 in the Agustus permit area.

Laurel Mines Corporation, Laurel Mine Designation E
This mine is located from maps of Laurel Mines Corp. The map is a certified map (1"=200') dated 07/09/1985. The mining boundary and orientation correlate with that on another certified map of Laurel Mines Corp. (1"=400') dated August, 1984, and certified on 01/24/1986. Production records reveal no production after this date. The workings on these maps also correlate with those on a 1"=200' map titled Mine Works At Time Of Temporary Abandonment and dated 4/25/1986. Orientation is by surface features, specifically TR 617 and numerous dwellings depicted on both the certified Laurel Mine Corp. maps and the Agustus Mine maps.

RoxCoal, Inc. Longview Mine Designation F
This mine is located from maps of RoxCoal, Inc. The map is a certified map. Final mining was completed July 31, 2002. The Agustus Mine is located east of the Longview Mine. The Agustus Mine is in the C' seam and the Longview Mine is in the B seam. There is approx. 90' of interburden. Check surveys were conducted by RoxCoal throughout the Longview Mine including to the eastern boundary. Orientation is from mine surveys.

The following mines are located on the Harrisburg Blueprint Co. maps. There is no evidence that these mines were opened. There is no reference to them and no mine maps available.

Reitz 10 (C' Seam) Not Shown
This is depicted on the HBPC map as Reference No. 9298 located North of Shade #1. Berwind officials are not aware of a Reitz 10 Mine ever being in existence. It would be isolated from the Agustus permit area by Shade #1.

Russell M. Pile Mine (E Seam) Not Shown
This is depicted on the HBPC map as Reference No. 8794 located 6600 feet west and 4900 feet south of the Huskin #3 portals. This would be 8500 feet south of Route 30. No reference to a Russell M. Pile #1 Mine could be found.

The Pittsburgh Summit Coal Co. Pitcairn #1 Mine (C & B Seam) Designation I
These portals are shown on the HBPC maps as Reference No. 8024 and located on the C Seam and B Seam and are shown within the Huskin #3 B Seam Mine. There is no reference to this mine in any agency map files and no mention of this company mining any coal from an underground mine in the PA Annual Reports. There is mention in the Annual Reports of production from the surface mine (Burg #1) of The Pittsburgh Summit Coal Co.

Gahagen Coal Co., Huskin Mine (E Seam) Not Shown
This mine is shown to the east of the Huskin #4 Mine. There are no references to this mine in the agency map files. This mine is shown over 1000 feet from the permit line.

U.K. DIP 6% — U.K. STRIKE S 12° 23' W

Notes:

1. The certification of this map is based on prior certifications.
2. There are no underground seals installed.
3. All drill holes and wells into the mine have been grouted.
4. Original mapping done by Killam Assoc.
5. Grids are located on PA State Plane Coordinate System South Zone 1927 NAD.
6. Distance between seams: LK-UK 95' avg. UK-LF 90' avg.
7. There are no known active oil or gas wells within the permit area.
8. There are no underground mines above the Agustus mine.
9. Mining completed on 10-16-12.
10. Equipment removed 12-14-12
11. Seals completed 5-6-13
12. Accuracy of closed loop surveys exceeds 1/10,000.
13. Final survey spad number is 3148.

LEGEND FOR ABANDONED DEEP MINES:

- (A) = HUSKIN #4 (Upper Kittanning C' Seam)
- (B) = HUSKIN #3 (Lower Kittanning B Seam)
- (C) = REITZ #3 (Lower Kittanning B Seam)
- (D) = SHADE #1 (Upper Kittanning C' Seam)
- (E) = LAUREL (Lower Kittanning B Seam), Inactive

1000' Permit Offset
30° Angle of Draw
NO MINING AREA
PERMIT BOUNDARY
SUBSIDENCE CONTROL PLAN BOUNDARY
NO MINING
50% MINING
SORBER RD. T-621
SHADE CHURCH RD. T-744
T-751
S.R. 0030
INDIAN LAKE DRIVE
INDIAN DRIVE
SHADE TOWNSHIP
STONYCREEK TOWNSHIP
INDIAN LAKE BOROUGH
LINCOLN HIGHWAY
TO BUCKSTOWN
UNNAMED TRIBUTARY TO CALENDAR RUN
ROCK CUT RD. T-160
HUCKLEBERRY HIGHWAY
INTERMITTENT
MAIN-C
MAIN-B
MAIN-A
PUBLIC WATER
FORBES TRAIL MEDICAL CENTER PUBLIC WATER SUPPLY (NON-COMMUNITY)
water shown is roof line
CNG GAS WELL NO. 20169 PLUGGED AND ABANDONED
Unoccupied
RG-82 SUR. EL. 2465.3 UK 36" UK 2150 LK 57" LK 2056
RG-90 SUR. EL. 2491 UK 26" UK 2154 LK 0" LK 2055
RG-93 SUR. EL. 2431 UK 29" UK 2141 LK 72" LK 2012
DH 09169 SUR. EL. 2471.02 UK 0 UK 2150
DH 09170 SUR. EL. 2468.6 UK 0 UK 2138
DH 09168 SUR. EL. 2500.61 UK 0 UK 2158
DH 09164 SUR. EL. 2493.12 UK 0 UK 2167
DH111006 SUR. EL. 2491 UK 48" UK 2159 LK 46" LK 2036
DH111008 SUR. EL. 2439 UK 56" UK 2144 LK 44" LK 2064
DH111007 SUR. EL. 2467 UK 53" UK 2143 LK 40" LK 2070
DH 09163 SUR. EL. 2501 UK 0" UK 2168
DH 09162 SUR. EL. 2495 UK 0" UK 2192
DH 09160 SUR. EL. 2510 UK 0" UK 2226
DH 09159 SUR. EL. 2515 UK 0" UK 2244
DH111004 SUR. EL. 2495 UK 49" UK 2199 LK 41" LK 2122
DH12244 SUR. EL. 2483 UK 0" UK 7??? LK 20" LK 1967
DH12302 SUR. EL. 2521 UK 18" UK 2278 LK 43" LK 2195
DH 09161 SUR. EL. 2503 UK 0" UK 2220
DH 09165 SUR. EL. 2485 UK 0" UK 2187
DH 09166 SUR. EL. 2488 UK 35" UK 2274
DH-50 SUR. EL. 2393 UK 45" LK 2136
DH-09101 SUR. EL. 2418 UK 38" LK 2140
DH-09102 SUR. EL. 2418 UK 50" UK 2138 LK 52" LK 2057
PZ6D SE 2418.09 UK 2140.09-3.17' S.W.L. 2328.24
PZ5D

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JUL 22 2013
Dept. of Environmental Protection
California District Office