Massey Coal Services, Inc.

Massey Energy.

P.O. Box 261
300 Morgan Massey Drive
Julian, WV 25529-0261
Phone: 304.369.8500

July 12, 2010

Office of Environmental Information Docket (Mail Code: 2822T)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW.,
Washington, DC 20460

Technical Comments for EPA's draft document titled "A field based aquatic life benchmark for conductivity in central Appalachian streams".

Docket ID No. EPA-HQ-ORD 2009-0934

Dear Sir or Madam,

On April 1 2010 the draft report for the aquatic life benchmark for conductivity in Appalachian steams was released for public review. Below are some general comments as they pertain to the decisions made by EPA within this document. On April 23rd, after a FOIA request to WVDEP, a copy of the WAB database was reviewed. After analyzing data within this WAB database, several issues of concern became apparent. Most comments within this letter address interesting data within this database and how a benchmark of conductivity is unreasonable at this time utilizing data from the WAB database.

GENERAL COMMENTS

General Comment 1: (Within the Executive Summary of the document). Document clearly states that a disadvantage of field data is that the "exposures are not controlled". As any elementary science class would know, variables from undetected sources are neither measured nor held constant, and these may produce illusory correlations in the variables under study. For EPA to attempt to regulate every discharge for every industry in Central Appalachia with field data seems beyond the scope of science.

General Comment 2: (Page 1). "A criterion for an individual ion could be under-protective". WVDEP and USEPA have performed analytical testing for decades to establish acceptable guidelines for water quality parameters.

General Comment 3: (Page 10). RBP habitat assessment was utilized to remove streams from study. In the October 2005 Programmatic EIS, RBP habitat was discarded from report due to inconsistencies in collection. To believe that technicians for DEP analyzed RBP habitat consistently for 8 years is unpractical.

General Comment 4: (Page 17). Fish data were not utilized because fish are affected by stream size. Are benthics not affected by stream size also? Has EPA demonstrated that stream size does not alter benthic composition?

General Comment 5: (Page 58). Report states that mayflies were present in 28 streams with conductivities over 1,500 µS and that they were absent within 35 streams that had conductivity less than 200µS. How can EPA determine that all streams in Appalachia need conductivity levels below 500µS when 53 streams within their own database conflict with their benchmark? If EPA is going to create a value that designates impairment, then there should be no exceptions. Streams with conductivity below 200µS should always have more mayflies than those with conductivity levels >1,500µS. The fact that EPA has discovered that

this is not the case within 53 streams in WV should toss out any notion of adopting a <500 or <300µS conductivity standard.

General Comment 6: (Page 74). Once again, this confounding reasoning only compares conductivity to watershed size. There must be data that show a shift in benthic community as watershed size changes. This would demonstrate a difference in the small headwater benthic community to a large watershed regardless of conductivity.

General Comment 7: (Page 171). EPA claims that "because the region has a long history of mining, persistent effects of mining were potentially present even when there was no current record of past or present mining activity". Perhaps this is an indicator that EPA's methods are fundamentally flawed? If EPA concludes that a stream is impaired by mining, even though they have no history of mining in that watershed, then EPA must be utilizing invalid techniques in their assessment of land use.

General Comment 8: (Page 172). Only benthic samples with a GMIPLSS score were utilized. This immediately should eliminate the validity of this study as the GLIMPSS method is not an established scientific metric to determine impairment.

General Comment 9: No mention of the condition of the streams was made prior to surface mining. Much of current mining occurs within areas that were pre-law mined and contained AMD seeps and extremely poor water quality. The streams that WVDEP examined could have potentially improved AFTER surface mining had occurred. This would be a result of the buffering of AMD seeps from alkaline run-off.

General Comment 10: Conductivity has generally been used in the field as a first screen for water quality. Elevated conductivity levels indicate that further analysis should be done to determine the specific water chemistry and whether those particles occur in amounts that are demonstrated to impair aquatic life specific to that stream. The EPA guidance within the conductivity benchmark paper eliminates this critical process.

SPECIFIC COMMENTS – Pertaining to data within the WAB database utilized by EPA

1. IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS

Numerous streams within the WAB database (the database which EPA based their conclusions) had conductivity levels below 200µS and yet still had impaired WVSCI scores (below 60.6). Within the WAB database prepared by the WVDEP:

- Three hundred ninety five (395) sampling events had conductivity <200µS and had impaired WVSCI scores.
- Ninety three (93) sampling events had conductivity <100µS and were still considered impaired due to their benthic composition.

From this simple observation, 395 sampling events in West Virginia have been identified that do not agree with what EPA claims. Although conductivity levels were low, the benthic communities within these samples were not healthy. This demonstrates that other forces play a significant factor in benthic health and composition. Until EPA demonstrates the relevance of conductivity versus all potential factors that could inhibit benthic communities it is unreasonable to assume that conductivity is the main culprit of benthic impairment.

2. UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS

Many streams within the WAB database had unimpaired WV-SCI scores (>60.6) with conductivity levels over 500µS. Within the WAB database prepared by the WVDEP:

- Three hundred eighty two (382) sampling events had conductivity >500µS and had unimpaired WVSCI scores.
- One hundred seventy (170) sites had conductivity of >750µS and had unimpaired WVSCI scores.
- Eighty five (85) sites had conductivity >1,000µS and had unimpaired WVSCI scores.
- Two sites had conductivity levels of >5000µS and had unimpaired WVSCI scores.
- For the 777 sampling events within comments 1 & 2, sites with conductivity >500µS had healthier benthic communities than those with conductivity levels <200µS.

Here are more stream streams that do not fall in line with the trend that EPA claims. When combining the high conductivity/unimpaired WVSCI scores with low conductivity/ impaired WVSCI scores, a total of 777 sampling events are within the WAB database which disagrees with the claims made by EPA.

3. EPHEMEROPTERA ABUNDANCES AT REFERENCE SITES

According to the WAB database, the benthic communities within the level 1 reference sites contained an average Ephemeroptera abundance of 29.38% with a standard deviation of 15.6. Only thirty four sites contained >50% Ephemeroptera, representing just 10% of the reference sites.

- One hundred sixty nine (169) level 1 reference sites contained %mayfly abundances of less than 29.38%. This represented over half (54%) of all the level 1 reference sites amassed by WVDEP.
- One hundred one (101) level 1 reference sites contained %mayfly abundances of less than 20%. This represented 32% of the level 1 reference sites.
- Twenty nine (29) level 1 reference sites contained %mayfly abundances of less than 10%.
- Four (4) level 1 reference sites contained %mayfly abundances of less than 5%.

Even within the most ideal conditions in West Virginia, Ephemeroptera were not an abundant taxonomic group as over 50% of the reference streams contained an abundance of less than 29%. How can EPA claim that mining activities harm downstream mayflies, when some reference sites in WV contain less than 5% total abundance of mayflies?

4. EPHEMEROPTERA ABUNDANCES AT HIGH CONDUCTIVITY LEVELS

According to Pond et al (2008), mining activity (indirectly measured as conductivity) "had subtle to severe impacts on macroinvertebrate communities". Pond also claimed that total Ephemeroptera abundance declined with increased mining disturbance (indirectly measured as conductivity).

When examining the WAB database for benthic sites that had "medium" to "high" conductivity levels (>500 and >1000µS), discrepancies to these claims by EPA are abundant.

- One hundred fifty nine (159) sites contained >500µS and had >29.38% Ephemeroptera (the average for reference streams).
- Seventeen (17) sites contained >1000µS and had > 29.38% Ephemeroptera.

Although these sites are supposed to be impaired by mining (and conductivity), the % mayflies at these sites are more abundant than they are at many of the level 1 reference sites. This should not be possible. If the entire mining industry is going to be held to conductivity limits below 500µS, then there should be a definite, non-debatable impairment at this level. Instead, hundreds of benthic sites within the WAB database demonstrate % mayfly abundances that are greater than those found at reference sites. How can conductivity levels alone be considered the threat?

5. EPHEMEROPTERA ABUNDANCES AT LOW CONDUCTIVITY LEVELS

When examining the WAB database for benthic sites that had "low" conductivity levels (<200µS), discrepancies are evident as numerous sites had benthic compositions containing less than the average found at reference sites.

- One thousand four hundred sixty three (1,463) sites with conductivity levels <200µS had less than 29.38% Ephemeroptera. This represented over 25% of all samples collected within the WAB database.
- Nine hundred ninety five (995) sites contained <200µS and had less than 20% Ephemeroptera.
- Five hundred three (503) sites contained <200µS and had less than 10% Ephemeroptera.
- Two hundred seventy nine (279) sites contained <200µS and had less than 5% Ephemeroptera.
- Forty eight (48) sites contained <200µS and had no Ephemeroptera present.

Although the sites listed above had low conductivity levels, they did not have %Ephemeroptera abundances comparable to those found at the reference sites. Forty eight of the sites completely lacked mayflies and did not have elevated conductivity. According to EPA's claims, there should be a distinct, predictable difference between low and high conductivity streams as they pertain to mayfly abundance. As this data demonstrates, this is not the case.

6. REFERENCE SITES AND CIRCULAR REASONIONG BY EPA

Within the Conductivity Benchmark paper, EPA concludes that benthic communities downstream of land disturbances do not contain the same benthic communities as streams with reference conditions, specifically sites with elevated conductivity. For the WVDEP to consider a site as a Level 1 reference reach it must meet all of the following conditions:

- No known significant point source discharges upstream of assessment site (i.e., NPDES).
- Field evaluation of anthropogenic activities and disturbances at the assessment site by trained biologists and environmental resource specialists.
- No obvious sources of NPS near assessment site
- Primary WQ criteria: D.O. ≥ 5.0 mg/l, pH between 6.0 and 9.0.
- Secondary WQ criteria: Conductivity < 500 µmhos/cm, fecal coliform bacteria < 800 colonies/100 ml.
- No known violations of state water quality criteria (i.e., metals)
- U.S. EPA-RBP habitat metric scores: ≥11 for epifaunal substrate, channel alteration, sediment deposition
- U.S. EPA-RBP habitat metric scores: ≥6 for bank vegetative protection (both banks), riparian vegetative zone width (both banks).
- U.S. EPA-RBP habitat metric scores: ≥130 for total RBP habitat score.

After going into great length to define and select reference streams, the EPA determines within the conductivity benchmark paper that there is a difference in benthic communities collected below land disturbances and those collected within reference streams. This had already been assumed when DEP selected their reference sites and would represent circular reasoning within EPA's conclusions as the proposition to be proved has been assumed in the premise.

Are we supposed to believe that any benthic communities that differ from reference conditions are "impaired"? Are all benthic communities supposed to mimic reference conditions? How do sites below residential areas compare to sites below mining?

Does the EPA consider any shift to benthic communities acceptable?
Does the EPA consider a change in the diet of crayfish a violation of the Clean Water Act?

7. REFERENCE STREAMS HELD AS A STANDARD?

It is unreasonable to hold the mining industry to a benthic macroinvertebrate standard that only reference streams can attain. This would not allow any industry within Central Appalachia to alter a forested watershed.

For the study, EPA compared sites collected to reference stream channels and probability sites that contained >90% cover within the watershed. All data within the WAB database were compared to reference sites within the database and only species that were present at 30 of the reference sites were considered valid. How can EPA be certain that forest cover is not influencing these benthic populations via a complex relationship between temperature, nutrients, and dissolved oxygen levels? The percentage of forest cover within a watershed was not examined as a confounding factor for Ephemeroptera abundance. When separating out individual factors, temperature may not show a direct relationship to Ephemeroptera loss as stated within EPA's report (page 73 B.4.8), but stream ecosystems are complex and forest cover within the watershed would provide factors that EPA is not accounting for that could affect the health of macroinvertebrates. This goes back to General Comment 1: when utilizing field data, "variables from undetected sources are neither measured nor held constant".

If forest cover does affect benthic populations downstream, will EPA attempt to keep landowners from harvesting timber? Will maintaining a 90% forest cover influence whether or not water quality is out of compliance? According to www.epa.gov, "Gatherer/Collectors" (Ephemeroptera are considered gatherer/collectors) "consume fine pieces of organic matter (e.g., leaf fragments or other material on the stream bottom)". Common sense dictates that as land use shifts from forest to industrial uses and trees are removed, the organic matter input into a stream channel would lessen dramatically and benthic communities would be expected to shift to scrapers, predators, and generalists.

This would be a direct response to land use rather than water chemistry. If land use is proven as the most influential measurement of benthic impairment, will EPA attempt to regulate shifts in land use, regardless of whether or not water quality parameters are in compliance? Are forested watersheds now considered special aquatic sites?

8. REFERENCE STREAMS BELOW EPA STANDARDS?

Only the best 75% of the reference data were utilized by EPA for the Conductivity Benchmark paper. This was based on collective expertise of EPA field ecologists. Apparently within the Level 1 reference sites, some of these locations "have extreme values of a stressor because of measurement error or unusual conditions at the time the sample was taken". How is EPA completely confident that these measurement errors occurred? Is it only because the data did not support their assumptions? Wouldn't DEP already have removed these sites from their reference list if this was so?

This seems alarming that streams with low conductivity, high scoring habitat, with 90% forested watersheds have failed to comply with EPA's assumption of what a reference channel should be. Does this mean that 25% of the reference stations would fail the narrative water quality standard for West Virginia?

Massey Energy

9. CONCLUSIONS

At this time it appears that adopting a benchmark for conductivity is unwarranted, especially when there are many questions that remain when comparing conductivity and benthic macroinvertebrate health. Without further examining the water chemistry to see if a parameter is in exceedence, it does not seem prudent to declare that violations of the clean water act have taken place simply on conductivity levels. According to EPA's claims, there should be a distinct, predictable difference between low and high conductivity streams as they pertain to benthic macroinvertebrates. As this data demonstrates, this is not the case.

In one data pool examined in Comments 1 & 2, 777 benthic sites completely disagree with EPA's proposed trend. Of these 777 sampling events, sites with conductivity levels >500µS are healthier than sites with <200µS. Are we to believe that all 779 sampling events are statistical outliers?

In the data pool examined within Comments 4 & 5, mayfly abundances at 159 sampling events with >500µS conductivity are higher than those recorded for half of all the reference level 1 streams within the WAB database. How can mayflies be more abundant at streams with elevated conductivities than at reference streams? The answer can only be found by examining which ions are present that cause the impairment to aquatic organisms and not by examining specific conductance alone.

Thank you for the opportunity to address comments with EPA's Conductivity Benchmark Paper.

Sincerely,

Thomas Cook
Massey Coal Services
PO Box 261
Julian, WV 25529

Will Fisher
Republic Energy
Rt. 1 Box 77
Scarbro, WV 25917

David Willson
Republic Energy
Rt. 1 Box 77
Scarbro, WV 25917

Enclosed: data tables from WAB database showing sample ID, specific conductivity, and benthic health.

Note: for comment 5, to show data for all 1400+ sites would take 32 pages so only sites with <5% Ephemeroptera were focused on.

DATA TABLES

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
3339	57.16	199	Wayne, WV	West Fork/Twelvepole Creek
30992	49.51	199	Jackson, WV	Biglick Run
794	49.52	198	Kanawha, WV	UNT/Allen Fork RM 4.99
40322	44.87	197	Kanawha, WV	Pocatalico River
2166	59.04	196	Braxton, WV	Oil Creek
20584	50.19	196	Cabell, WV	Johns Branch
102	33.67	196	McDowell, WV	Little Slate Creek
27047	27.71	196	Lincoln, WV	Fuquay Creek
562	60.02	195	Braxton, WV	Upper Mill Creek
30862	59.39	195	Cabell, WV	Spurlock Creek
3337	57.14	195	Wayne, WV	West Fork/Twelvepole Creek
30848	53.21	195	Pleasants, WV	Sugar Creek
17276	53.18	195	Mason, WV	Trace Fork
567	48.19	195	Braxton, WV	Bear Run
20553	23.03	195	Marion, WV	Mahan Run
3129	58.06	194	Marshall, WV	Lynn Camp Run
1955	56.68	194	Pocahontas, WV	Possum Hollow
200	19.87	194	Kanawha, WV	Coal Hollow
2118	56.11	193	Calhoun, WV	Leading Creek
30805	55.69	193	Roane, WV	McKown Creek
224	48.1	193	Kanawha, WV	Lower Donnally Branch
211	38.05	193	Kanawha, WV	Holmes Branch
878	13.22	193	Preston, WV	Cherry Run
2081	56.79	192	Roane, WV	Left Fork/Reedy Creek
3118	34.81	192	Marshall, WV	Fish Creek
787	25.84	192	Kanawha, WV	Boardtree Run
1440	57.33	191	Cabell, WV	Right Fork/Mill Creek
2192	52.78	191	Ritchie, WV	North Fork/Hughes River
30666	43.99	191	Grant, WV	Jordan Run
3387	28.35	191	Wayne, WV	Cove Creek
20590	57.1	190	Wayne, WV	Buffalo Creek
11394	54.54	189	Roane, WV	Flat Fork
3461	46.1	189	Marion, WV	Buffalo Creek
3276	44.85	189	Mason, WV	Stonecoal Run
2676	44.49	189	Marion, WV	Dents Run
2085	40.38	189	Roane, WV	Seaman Fork
3300	58.43	188	Wayne, WV	Twelvepole Creek
27074	56.06	188	Wayne, WV	Hurricane Creek
2123	55.94	188	Calhoun, WV	Pine Creek
5348	47.14	188	Kanawha, WV	Witcher Creek
174	34.3	188	Putnam, WV	UNT/Crooked Creek RM 0.72
195	30.93	188	Kanawha, WV	Trace Fork

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
3148	27.03	188	Wetzel, WV	Sugar Run
2010	56.33	187	Roane, WV	Middle Fork/Reedy Creek
17892	50.84	187	Wetzel, WV	Price Run
55	48.89	187	Mingo, WV	Elk Creek
1540	38.15	187	Grant, WV	Laurel Run
503	58.68	186	Clay, WV	Laurel Fork
5397	56.69	186	Kanawha, WV	Left Fork/Longbottom Creek
2180	58.39	185	Wirt, WV	Lyda Run
20619	43.24	185	Wayne, WV	East Fork/Twelvepole Creek
139	56.53	184	Mason, WV	Pond Branch
3011	55.16	184	Lewis, WV	Sand Fork
1419	43.84	184	Cabell, WV	Little Cabell Creek
17889	42.22	184	Wetzel, WV	South Fork/Fishing Creek
199	32.66	184	Kanawha, WV	Rays Branch
2987	53.67	183	Lewis/Upshur, WV	Pringle Fork
3378	55.81	182	Wayne, WV	Tiger Fork
2134	30.61	182	Gilmer, WV	Kelley Run
2982	35.28	181	Lewis, WV	Stonecoal Creek
30852	30.41	181	Wayne, WV	Gilkerson Branch
3581	55.58	180	Wyoming, WV	Barkers Creek
27088	50.56	180	Wetzel, WV	West Virginia Fork/Fish Creek
10395	44.85	179	Lewis, WV	West Fork River
17937	58.66	178	Lincoln, WV	Ninemile Creek
3346	51.25	178	Mingo, WV	West Fork/Twelvepole Creek
1229	47.29	178	Randolph, WV	Three Forks Run
639	41.67	178	Greenbrier, WV	Little Clear Creek
2246	59.22	177	Calhoun, WV	Meadow Run
2199	54.84	177	Ritchie, WV	Beason Run
2012	47	177	Wirt, WV	Straight Creek
3366	18.93	177	Mingo, WV	Moses Fork
2154	54.33	176	Gilmer, WV	Sand Fork
712	54.22	176	Clay, WV	Open Fork
2069	50.9	176	Wirt, WV	Reedy Creek
570	45.33	175	Braxton, WV	Granny Creek
1319	44.34	175	Cabell, WV	Mud River
29414	19.48	175	Preston, WV	Snowy Creek
571	36.61	174	Braxton, WV	Old Woman Run
4473	58.11	173	Hampshire, WV	UNT/South Branch Potomac River RM 21.86
2577	57.39	173	Summers, WV	Red Spring Branch
16953	56.79	173	Wayne, WV	Newcomb Creek
40323	53.61	173	Kanawha, WV	Pocatalico River
25696	53.59	173	Lewis, WV	Crooked Fork

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
1281	51.48	173	Wayne, WV	Butler Branch
2082	44.49	173	Roane, WV	Left Fork/Reedy Creek
30799	43.46	173	Cabell, WV	Wire Branch
17946	40.47	173	Logan, WV	Trace Fork
1396	59.14	171	Lincoln, WV	Trace Fork
2127	56.58	171	Gilmer, WV	Tanner Creek
31014	55.31	171	Lewis, WV	Sycamore Lick
3616	48.15	171	Wyoming, WV	Cabin Branch
45	53.8	170	Wayne, WV	Jennie Creek
2146	55.09	169	Lewis, WV	Isaacs Fork
1169	55.08	169	Randolph, WV	Riffle Creek
3336	46.77	169	Wayne, WV	Toms Creek
31132	40.64	169	Preston, WV	Big Sandy Creek
30767	40.29	169	Rockingham, VA	Crab Run
2745	59.31	168	Wayne, WV	Sugar Branch
20559	58.14	168	McDowell, WV	Horse Creek
3433	51.97	168	Monongalia, WV	Days Run
3370	59.54	166	Wayne, WV	East Fork/Twelvepole Creek
27212	49.69	166	Harrison, WV	Mudlick Run
2008	46.59	166	Wirt, WV	Reedy Creek
678	46.31	166	Nicholas, WV	Lower Laurel Run
1385	56.14	165	Logan, WV	Mill Creek
98	55.13	165	McDowell, WV	Bradshaw Creek
3319	52.72	165	Wayne, WV	Beech Fork
2000	52.44	165	Wirt, WV	Gooseneck Run
2725	31.85	165	Wayne, WV	Whites Creek
2156	54.8	163	Gilmer, WV	Sand Fork
10424	53.82	163	Cabell, WV	Long Branch
2031	50.28	163	Ritchie, WV	North Fork/Hughes River
2263	50.12	163	Wetzel, WV	Little Fishing Creek
2058	48.24	163	Wood, WV	Tug Fork
27041	47.34	163	Cabell, WV	Cavill Creek
17401	59.43	162	Nicholas, WV	Bearpen Fork
17938	58.4	162	Lincoln, WV	Tenmile Creek
20480	46.97	162	Wetzel, WV	Little Fishing Creek
2206	59.65	161	Ritchie, WV	South Fork/Hughes River
2138	52.79	161	Gilmer, WV	Sinking Creek
20617	25.19	160	Boone, WV	Rock Creek
2579	18.71	160	Summers, WV	Brooks Branch
16943	56.05	159	Wayne, WV	East Fork/Twelvepole Creek
801	55.95	159	Kanawha, WV	Raccoon Creek
2162	49.58	159	Lewis, WV	Goosepen Run
27067	44.93	159	Mingo, WV	West Fork/Twelvepole Creek

Massey Energy

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
30893	26.16	159	Fayette, WV	Mossy Creek
18900	23.44	159	Raleigh, WV	Right Fork/Sandlick Creek
1128	56.92	158	Barbour, WV	Bear Run
3332	51.7	158	Wayne, WV	Lynn Creek
803	18.08	158	Kanawha, WV	Camp Creek
26063	37.87	157	Raleigh, WV	Glade Creek
30846	59.08	156	Cabell, WV	Smith Creek
27196	58.25	156	Harrison, WV	UNT/Patterson Fork RM 0.59
2133	49.81	156	Braxton, WV	Cedar Creek
16885	30.71	156	Wayne, WV	Wolf Creek
1632	50.09	155	Grant, WV	Powers Hollow
2235	47.86	155	Calhoun/Roane, WV	Henry Fork
18901	38.84	155	Raleigh, WV	Right Fork/Sandlick Creek
17926	57.08	154	Doddridge, WV	Meathouse Fork
2163	47.11	154	Lewis, WV	Cove Lick
484	58.3	153	Kanawha, WV	Leatherwood Creek
2760	54.23	153	Wayne, WV	Redhead Branch
26971	53.04	153	Doddridge, WV	Big Isaac Creek
3322	43.61	153	Wayne, WV	Rubens Branch
2226	38.07	153	Gilmer, WV	White Oak Run
17488	55.5	152	Morgan, WV	Sleepy Creek
18899	20.96	152	Raleigh, WV	Right Fork/Sandlick Creek
3358	32.08	151	Wayne, WV	Right Fork/Moses Fork
1415	59.73	150	Lincoln, WV	Valley Fork
36320	43.1	150	Calhoun, WV	Sang Run
16878	30.59	150	Kanawha, WV	Grapevine Creek
869	59.27	149	Preston, WV	Beaver Creek
2280	59.11	149	Tyler, WV	Middle Island Creek
20494	52.71	148	Doddridge, WV	Meathouse Fork
30971	42.02	148	Ritchie, WV	Beech Run
20587	58.29	147	Pendleton, WV	South Fork/South Branch Potomac River
2025	48.25	147	Ritchie, WV	Indian Creek
866	30.61	147	Preston, WV	Little Sandy Creek
2207	49.13	146	Ritchie, WV	South Fork/Hughes River
16933	47.13	146	Putnam, WV	Buckelew Hollow
1692	37.7	146	Hampshire, WV	Buffalo Creek
40355	26.03	146	Kanawha, WV	Grapevine Creek
44	59.36	144	Wayne, WV	Silver Creek
2041	57.04	144	Gilmer, WV	Little Kanawha River
1627	55.54	144	Grant, WV	South Fork/Lunice Creek
2535	43.88	144	Fayette, WV	Osborne Creek
226	55.75	143	Kanawha, WV	Dry Branch

Massey Energy

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
1249	55.34	143	Preston, WV	Snowy Creek
2741	54.25	143	Wayne, WV	Gilkerson Branch
99	32.15	143	McDowell, WV	Groundhog Branch
3575	27	143	Wyoming, WV	Marsh Fork
2301	21.69	143	Jackson, WV	Mill Creek
1252	53.55	142	Preston, WV	Wardwell Run
26598	53.48	142	Wayne, WV	Beech Fork
33768	45.64	142	Grant, WV	Robinson Run
2770	30.61	142	Lewis, WV	West Fork River
2731	59.71	142	Wayne, WV	Balangee Branch
2279	57.68	141	Tyler, WV	Elk Fork
8298	48.82	141	Hancock, WV	Mercer Run
1280	47.91	141	Wayne, WV	Rubens Branch
245	29.44	141	Kanawha, WV	Dry Branch
2103	26.32	141	Roane, WV	Miletree Run
1786	59.03	140	Doddridge, WV	Meathouse Fork
10421	57.58	140	Fayette, WV	Mill Creek
20482	49	140	Wyoming, WV	Little Pinnacle Creek
2285	33.14	140	Tyler, WV	McElroy Creek
40371	55.52	139	Kanawha, WV	Raccoon Creek
30960	54.23	139	Ritchie, WV	Bone Creek
2214	51.72	139	Calhoun, WV	Rush Run
2029	46.56	139	Doddridge, WV	Middle Fork/South Fork/Hughes River
20634	59.26	138	Wayne, WV	Hurricane Creek
29402	48.59	138	Monongalia, WV	Camp Run
22352	45.88	137	Fayette, WV	Mill Creek
26957	40.23	136	Kanawha, WV	Left Hand Creek
497	35.67	136	Kanawha, WV	Green Bottom
30872	28.81	136	Roane, WV	Hurricane Creek
30897	39.59	136	Gilmer, WV	Left Fork/Steer Creek
291	59.86	135	Raleigh, WV	Maple Fork
2190	58.2	135	Ritchie, WV	Poverty Hollow
17898	52.06	135	Tyler, WV	Middle Island Creek
25983	53.46	134	Gilmer, WV	Right Fork/Duskcamp Run
3009	36.24	134	Lewis, WV	Hughes Fork
3317	28.18	134	Wayne, WV	Beech Fork
4519	57.26	133	Pendleton, WV	Hawes Run
1135	26.39	133	Barbour, WV	Shooks Run
1789	52.91	132	Doddridge, WV	Toms Fork
2281	46.47	132	Tyler, WV	Big Run
27001	43.18	132	Putnam, WV	Big Creek
2286	41.13	132	Tyler, WV	McElroy Creek
2266	39.05	132	Wetzel, WV	South Fork/Fishing Creek

Massey Energy

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
3310	56.78	131	Wayne, WV	Buffalo Creek
31021	55.55	131	Morgan, WV	Sleepy Creek
2267	54.11	131	Wetzel, WV	South Fork/Fishing Creek
1762	51.92	131	Tyler, WV	Mudlick Run
25982	45.94	131	Gilmer, WV	Duskcamp Run
40360	39.78	131	Kanawha, WV	Middle Fork/Pocatalico Creek
3373	55.51	130	Mingo, WV	East Fork/Twelvepole Creek
3615	55.14	130	Wyoming, WV	Chestnut Flats Branch
20627	52.64	130	Wayne, WV	Gragston Creek
4556	51.32	130	Grant, WV	Jordan Run
27080	22.41	130	Roane, WV	Laurel Run
537	54.13	129	Clay, WV	Moore Fork
20653	52.1	129	Harrison, WV	Big Elk Creek
2077	49.09	129	Wirt, WV	Little Laurel Run
3348	12.97	129	Wayne, WV	Big Branch
1180	58.82	128	Taylor, WV	Wickwire Run
633	58.68	128	Fayette, WV	Gould Hollow
2861	56.51	126	Harrison, WV	Rockcamp Run
27140	50.42	126	Gilmer, WV	Tanner Creek
25676	44.9	126	Gilmer, WV	Joes Run
2032	59.83	125	Calhoun, WV	Steer Creek
33772	55.61	124	Grant, WV	Powers Hollow
96	53.27	124	McDowell, WV	Grapevine Branch
1589	41.86	124	Hampshire, WV	McDowell Run
25674	41.74	124	Lewis, WV	Sand Fork
20510	31.17	124	Boone, WV	Hurricane Branch
20436	58.89	123	Mineral, WV	UNT/Patterson Creek RM 16.25
18204	51.55	123	Wayne, WV	Lost Creek
1187	60.07	122	Upshur, WV	French Creek
16908	59.34	122	Morgan, WV	Middle Fork/Sleepy Creek
16790	38.56	122	Logan, WV	Smokehouse Fork
1194	56.31	121	Upshur, WV	Laurel Run/Buckhannon River
10407	54.99	121	Logan, WV	Bulwark Branch
30964	53.95	121	Gilmer, WV	Right Fork/Steer Creek
27084	47.63	121	Lincoln, WV	Twomile Creek
3012	26.44	121	Lewis, WV	Sand Fork
10473	46.29	120	Clay, WV	Reed Fork
30765	45.99	120	Hardy, WV	Capon Run
27012	22.69	120	Logan, WV	Buck Fork
30378	58.92	119	Preston, WV	Greens Run
10408	56.51	119	Mercer, WV	Adair Run
31012	55.8	119	Harrison, WV	Little Rockcamp Run
2215	49.88	119	Calhoun, WV	Raccoon Run

Massey Energy

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
25675	34.33	119	Lewis, WV	Sand Fork
2237	59.72	118	Roane, WV	Pup Run
238	59.1	118	Kanawha, WV	Ring Hollow
30931	58.04	118	Kanawha, WV	Brier Creek
3596	56.92	118	Wyoming, WV	Left Fork/Allen Creek
227	27.28	118	Kanawha, WV	Coal Fork
3109	59.79	117	Hampshire, WV	Little Cacapon River
1411	59.86	116	Lincoln, WV	Straight Fork
4560	44.13	116	Pendleton, WV	Zeke Run
1190	41.12	116	Upshur, WV	Mudlick Run
25679	56.19	115	Gilmer, WV	Right Fork/Ellis Creek
3002	49.78	115	Lewis, WV	Skin Creek
1370	47.5	114	Logan, WV	Ed Stone Branch
27251	38.66	114	Lewis, WV	West Fork River
2270	32	113	Wetzel, WV	South Fork/Fishing Creek
3617	54.63	112	Wyoming, WV	Tom Bailey Branch
12751	55.37	112	Preston, WV	Little Sandy Creek
1043	51.59	112	Tucker, WV	Pendleton Creek
2227	44.76	112	Gilmer, WV	Steer Run
2128	58.68	111	Gilmer, WV	Jones Cabin Run
3372	51.2	111	Mingo, WV	East Fork/Twelvepole Creek
36331	33.55	111	Summers, WV	UNT/Jumping Branch RM 2.48
25690	56.76	110	Lewis, WV	Old Field Fork
2465	51.88	110	Summers, WV	Pipestem Creek
2198	51.84	110	Ritchie, WV	Long Bottom
2129	28.84	110	Gilmer, WV	Hardman Fork
1973	44.52	109	Pocahontas, WV	Shock Run
1416	60.18	108	Lincoln, WV	Sugartree Fork
1543	41.34	108	Grant, WV	Helmick Run
1258	58.9	107	Preston, WV	Maple Run
872	42.03	107	Preston, WV	Barnes Run
29423	50.89	106	Preston, WV	Wardwell Run
2034	55.85	105	Gilmer, WV	Left Fork/Steer Creek
11413	37.6	105	Braxton, WV	Elk River
3357	55.18	104	Wayne, WV	Moses Fork
2630	58.16	104	Preston, WV	Patterson Run
3064	48.55	104	Hampshire, WV	UNT/Bearwallow Creek RM 0.98
4588	39.73	104	Pendleton, WV	UNT/South Branch Potomac River RM 89.72
30918	32.29	104	Wayne, WV	Billy Branch
4366	49.31	103	Tucker, WV	North Branch/Blackwater River
17965	43.82	103	Lincoln, WV	Big Creek
1412	40.41	103	Lincoln, WV	Meadow Branch

Massey Energy

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
1170	30.77	102	Randolph, WV	McGee Run
191	44.86	101	Kanawha, WV	Davis Creek
1350	24.12	101	Lincoln, WV	Dry Run
16818	39.82	100	Fayette, WV	Mill Creek
26007	28.39	100	Fayette, WV	Marr Branch
531	49.1	99	Clay, WV	Pheasant Run
1046	52.69	98	Tucker, WV	North Branch/Blackwater River
1173	45.25	98	Randolph, WV	Poundmill Run
25617	37.56	98	Raleigh, WV	Little Beaver Creek
1153	36.15	98	Randolph, WV	Davis Lick
2985	34.83	98	Lewis, WV	Right Fork/Stonecoal Creek
1698	45.76	97	Hampshire, WV	Mayhew Run
3063	27.88	97	Hampshire, WV	UNT/Tear Coat Creek RM 16.01
20633	19.78	97	Mingo, WV	Breeden Creek
2219	57.91	96	Gilmer, WV	Right Fork/Steer Creek
1352	54.03	96	Lincoln, WV	Laurel Fork
10551	54.75	95	Preston, WV	Youghiogheny River
39657	35.06	95	Mineral, WV	UNT/Patterson Creek RM 16.25
16835	51.82	93	Lincoln, WV	Ely Fork
26001	51.26	93	Fayette, WV	Osborne Creek
1239	23.22	93	Preston, WV	Youghiogheny River
25691	54.25	92	Lewis, WV	Cove Lick
1398	53.85	92	Lincoln, WV	Coon Creek
2220	52.57	91	Braxton, WV	Right Fork/Steer Creek
39913	58.25	90	Braxton, WV	Upper Mill Creek
367	54.54	90	Boone, WV	Tickle Britches Fork
1337	54.43	89	Lincoln, WV	Aarons Creek
1083	50.02	88	Preston, WV	Scott Run
25611	37.38	88	Raleigh, WV	Cranberry Creek
1197	59.09	87	Upshur, WV	Panther Creek
26027	52	86	Fayette, WV	Floyd Creek
17421	50.33	81	Webster, WV	Big Ditch Run
4488	32.53	81	Hampshire, WV	UNT/Buffalo Run RM 1.67
27149	48.84	79	Greenbrier, WV	UNT/Stony Run RM 1.12
20582	57.98	78	Lincoln, WV	Stinson Branch
16930	52.57	78	Hardy, WV	UNT/UNT RM 2.52/Hutton Run RM 0.78
3392	45.54	78	Wayne, WV	Milam Creek
30814	53.46	77	Clay, WV	UNT/Porter Creek RM 5.49
1248	29.06	77	Preston, WV	Muddy Creek
4487	48.3	75	Hampshire, WV	Buffalo Run
422	44.58	75	Raleigh, WV	Canterberry Branch
10515	52.63	74	Barbour, WV	Long Run
27078	58.59	73	Wayne, WV	Open Fork

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
867	57.71	73	Preston, WV	Little Sandy Creek
1351	54.79	73	Lincoln, WV	Short Bend Fork
1333	56.39	71	Lincoln, WV	Lick Branch
29433	56.31	71	Preston, WV	Maple Run
1715	59.03	69	Jefferson, WV	Hog Run
3355	47.89	69	Wayne, WV	Billy Branch
3356	32.02	69	Wayne, WV	Wells Branch
855	59.85	67	Preston, WV	Big Sandy Creek
3394	56.83	67	Wayne, WV	HoneyTrace Fork
18896	46.98	67	Raleigh, WV	Right Fork/Sandlick Creek
5428	50.98	66	Fayette, WV	Plum Orchard Creek
1116	35.38	66	Preston, WV	Sandy Creek
341	40.75	65	Nicholas, WV	Gauley River
520	55.91	64	Clay, WV	Jim Young Fork
860	54	64	Preston, WV	Patterson Run
1957	57.5	63	Pocahontas, WV	Cochran Creek
500	57.76	62	Clay, WV	Camp Creek
4579	57.48	62	Pendleton, WV	Teeter Camp Run
4362	51.37	62	Tucker, WV	Sand Run
4338	58.6	61	Tucker, WV	Black Fork/Cheat River
3151	58.74	60	Wetzel, WV	Long Drain
1234	54.85	59	Randolph, WV	Rocky Run
2230	53.73	59	Braxton, WV	Bender Run
1978	54.75	57	Pocahontas, WV	Buffalo Run
1606	49.13	57	Pendleton, WV	Miller Run
30474	42.69	57	Tucker, WV	Horseshoe Run
20521	56.92	56	Pocahontas, WV	Shavers Fork
30472	55.04	56	Tucker, WV	Clover Run
27083	53.35	56	Lincoln, WV	Upton Branch
1071	53.03	55	Randolph, WV	Tory Camp Run
1618	49.29	55	Pendleton, WV	Stony Run
1155	55.96	54	Randolph, WV	Laurel Run
22353	40.04	54	Raleigh, WV	Mill Creek
1140	59.84	53	Barbour, WV	Back Fork
995	59.3	52	Tucker, WV	Clay Lick Run
450	57.28	52	Webster, WV	UNT/Brooks Creek RM 1.53
33779	44.7	52	Jefferson, WV	Hog Run
533	50.23	51	Clay, WV	Turkey Run
20551	24.09	48	Lincoln, WV	Laurel Creek
4310	58.83	47	Preston, WV	Hickory Bearpen Run
4518	58.95	45	Pendleton, WV	Sugar Run
1035	47.46	45	Tucker, WV	Freeland Run
4517	53.51	44	Pendleton, WV	UMT/South Fork RM 43.25/South Branch

Table 1. (Comment 1) IMPAIRED WVSCI SCORES IN LOW CONDUTIVITY STREAMS				
SAMPLE_ID	**WVSCI**	**CONDUCT**	**COUNTY**	**STREAM_NAME**
				Potomac River
20466	59.88	42	Wyoming, WV	White Oak Branch
21580	38.19	42	Monroe, WV	Ray Fork
2541	53	38	Fayette, WV	Laurel Creek/Glade Creek
20471	54.54	36	Raleigh, WV	Spanker Branch
35642	58.71	33	Mercer, WV	Mash Fork
31013	57.91	31	Berkeley, WV	Roaring Run
959	53.17	30	Preston, WV	Buckhorn Run
4365	58.35	28	Tucker, WV	Yellow Creek
4402	54.53	22	Tucker, WV	Red Creek
10366	60.14	19	Tucker, WV	UNT/Beaver Creek RM 11.91
16772	59.92	19	Raleigh, WV	Wiley Spring Branch
36321	49.94	17	Tucker, WV	UNT/Beaver Creek RM 11.91

Massey Energy

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
35680	64.61	6492	Marshall, WV	UNT/Wheeling Creek RM 25.77
2601	60.84	5000	Marion, WV	Buffalo Creek
27044	63.81	3948	Putnam, WV	Farley Creek
5398	69.95	2768	Kanawha, WV	Laurel Fork/Longbottom Creek
922	66.35	2052	Preston, WV	Lick Run
10414	64.07	1890	Monongalia, WV	Owl Creek
2941	65.22	1842	Barbour, WV	Isaacs Run
17322	64.74	1702	Nicholas, WV	Twentymile Creek
26978	81.31	1650	Fayette, WV	Buckles Branch
12829	62.44	1590	Upshur, WV	Tenmile Creek
17365	67.04	1543	Fayette, WV	Glade Creek
16917	66.26	1534	Boone, WV	West Fork/Pond Fork
11378	64.72	1528	Putnam, WV	Heizer Creek
5522	65	1523	Brooke, WV	Scott Run
26169	60.96	1494	Monongalia, WV	Miracle Run
27265	72.41	1476	Harrison, WV	Little Tenmile Creek
5523	67.91	1475	Brooke, WV	Parmar Run
1294	61.34	1409	Brooke, WV	Parmar Run
27317	67.19	1388	Logan, WV	Rum Creek
2014	76.38	1383	Calhoun, WV	Laurel Creek
2898	62.64	1332	Barbour, WV	UNT/West Branch RM 0.63/Simpson Creek
27000	74.75	1323	Mingo, WV	White Oak Hollow
2662	67.15	1307	Marion, WV	Paw Paw Creek
26629	70.41	1303	Wayne, WV	Kiah Creek
2801	61.55	1299	Harrison, WV	Bingamon Creek
1537	69.42	1298	Grant, WV	Stony River
443	64.25	1297	Raleigh, WV	Workman Creek
2972	68.34	1288	Harrison, WV	Browns Run
36187	68.01	1282	Kanawha, WV	Coal River
26647	77.8	1270	Monongalia, WV	Dunkard Creek
2958	63.25	1266	Harrison, WV	Duck Creek
1523	63.47	1247	Mineral, WV	Slaughterhouse Run
36345	63.64	1222	Boone, WV	Big Coal River
31010	68.91	1210	Harrison, WV	UNT/Stonecoal Run RM 0.97
27260	71.31	1177	Harrison, WV	Tenmile Creek
11041	66.78	1176	Boone, WV	Little Coal River
2125	76.88	1175	Calhoun, WV	Laurel Creek
2605	64.15	1175	Marion, WV	Prickett Creek
11040	64.5	1165	Boone, WV	Little Coal River
5528	62.14	1165	Brooke, WV	Harmon Creek
11472	65.13	1158	Clay, WV	Right Fork/Leatherwood Creek

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
11495	70.05	1147	Webster, WV	Birch River
1449	65.46	1147	Garrett, MD	North Branch Potomac River
362	72.53	1137	Boone, WV	Spruce Fork
910	63.44	1137	Preston, WV	Fickey Run
5362	66.04	1136	Kanawha, WV	Mill Branch
11120	63.49	1131	Boone, WV	Cow Creek
26160	74.45	1111	Monongalia, WV	Days Run
350	65.23	1111	Boone, WV	Little Coal River
11133	75.91	1106	Boone, WV	Drawdy Creek
26377	69.68	1105	Brooke, WV	Pierce Run
2498	66.82	1104	Fayette, WV	Laurel Creek
27272	61.67	1100	Harrison, WV	Simpson Creek
1290	62.84	1094	Brooke, WV	Ebenezer Run
11211	62.23	1083	Raleigh, WV	Workman Creek
12738	69.23	1082	Taylor, WV	Berkeley Run
614	71.95	1077	Nicholas, WV	Rockcamp Branch
2921	68.27	1077	Barbour, WV	Elk Creek
12801	75.74	1075	Barbour, WV	Pecks Run
27271	61.37	1075	Harrison, WV	Simpson Creek
1448	67.59	1074	Garrett, MD	North Branch Potomac River
18217	68.31	1070	Mingo, WV	Beech Creek
26646	74.2	1068	Monongalia, WV	Dunkard Creek
3601	62.14	1066	Raleigh, WV	Winding Gulf
5515	69.88	1059	Brooke, WV	Cross Creek
27199	61.19	1059	Lewis, WV	McKinney Run
2965	60.62	1058	Lewis, WV	Hackers Creek
5519	68.58	1050	Brooke, WV	Ebenezer Run
713	62.42	1044	Clay, WV	Sangamore Fork
16799	64.64	1039	Mingo, WV	Lick Creek
380	66.82	1037	Boone, WV	Pond Fork
349	73.89	1030	Kanawha, WV	Little Coal River
1536	77.5	1029	Grant, WV	Stony River
379	64.34	1028	Boone, WV	Pond Fork
359	72.53	1024	Boone, WV	Spruce Fork
1322	62.81	1024	Lincoln, WV	Mud River
641	65.13	1018	Greenbrier, WV	Little Clear Creek
27261	67.6	1017	Harrison, WV	Tenmile Creek
5386	61.67	1017	Kanawha, WV	Cabin Creek
377	73.09	1016	Boone, WV	Pond Fork
11137	66.93	1016	Boone, WV	Left Fork/Joes Creek
10566	69.59	1006	Boone, WV	Little Laurel Creek
11520	78.16	1001	Webster, WV	Laurel Creek

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
5357	68.81	1000	Kanawha, WV	Fields Creek
439	62.15	998	Raleigh, WV	Dow Fork
438	69.68	985	Raleigh, WV	Long Branch
21896	79.32	978	Wayne, WV	Tug Fork
2595	64.73	977	Marion, WV	Prickett Creek
11125	72.56	974	Boone, WV	Lacey Branch
436	70.73	971	Raleigh, WV	Panther Branch
11155	68.39	968	Raleigh, WV	Little Marsh Fork
11106	64.14	967	Boone, WV	Pond Fork
5514	63.22	961	Brooke, WV	Cross Creek
21898	61.45	959	Mingo, WV	Tug Fork
2984	61.22	951	Lewis, WV	Grass Run
21895	61.47	944	Mingo, WV	Tug Fork
21908	85.88	943	Wayne, WV	Tug Fork
2931	66.09	939	Harrison, WV	Glade Run
11065	69.45	938	Logan, WV	Spruce Fork
21894	81.77	934	Mingo, WV	Tug Fork
31490	69.11	934	Preston, WV	Buffalo Run
444	74.85	931	Raleigh, WV	Workman Creek
11094	63.64	931	Logan, WV	Beech Creek
3539	63.03	927	Wyoming, WV	McDonald Fork
11099	78.7	926	Logan, WV	Adkins Fork
11108	72.19	925	Boone, WV	Pond Fork
5372	68.74	918	Kanawha, WV	Bradley Fork
3236	73.02	916	Brooke, WV	Titt Run
27141	64.48	916	Boone, WV	Mudlick Branch
11124	75.03	913	Boone, WV	Lacey Branch
11118	63.14	910	Boone, WV	Whites Branch
11107	61.32	907	Boone, WV	Pond Fork
620	64.41	897	Fayette, WV	Glade Creek
5520	69.59	893	Brooke, WV	North Potrock Run
23	66.69	893	McDowell, WV	Turnhole Branch
2886	62.8	892	Harrison, WV	Beards Run
2843	60.86	892	Harrison, WV	Jones Creek
21907	82.18	889	Mingo, WV	Tug Fork
576	68.03	887	Braxton, WV	Spruce Fork
11147	63.17	887	Boone, WV	Elk Run
2584	61.03	885	Monroe, WV	Sweet Springs Creek
21906	84.9	884	Mingo, WV	Tug Fork
360	67.91	883	Logan, WV	Spruce Fork
1525	77.52	874	Mineral, WV	Deep Run
11138	71.05	862	Boone, WV	Laurel Creek

Massey Energy

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
5387	64.59	861	Kanawha, WV	Cabin Creek
3172	71.47	852	Marshall, WV	Little Toms Run
11212	78.56	847	Raleigh, WV	Stover Fork
11156	65.81	847	Raleigh, WV	Birch Fork
11063	61.38	846	Boone, WV	Spruce Fork
11135	68.24	845	Boone, WV	Joes Creek
185	79.69	836	Boone/Kanawha, WV	Big Coal River
7329	63.84	831	Wyoming, WV	Indian Creek
11191	61.62	828	Raleigh, WV	Clear Fork
413	71.96	822	Raleigh, WV	Marsh Fork
11408	69.25	821	Fayette, WV	Ingram Branch
18208	64.98	818	Mingo, WV	Pigeon Creek
3513	61.06	817	Logan, WV	Rockhouse Creek
3612	62.82	814	Wyoming, WV	Lower Road Branch
13	73.44	813	McDowell, WV	Harris Branch
403	65.29	813	Boone, WV	Laurel Creek
3238	66.34	812	Brooke, WV	Grog Run
908	70.58	810	Preston, WV	UNT/Muddy Creek RM 9.80
7327	64.52	810	Wyoming, WV	Indian Creek
2951	63.42	810	Harrison, WV	Sycamore Creek
29556	81.38	808	Marshall, WV	UNT/Wheeling Creek RM 25.77
16928	69.46	805	Harrison, WV	UNT/Sycamore Creek RM 3.04
705	67.62	805	Nicholas, WV	Twentymile Creek
27327	66.18	803	Mingo, WV	Gilbert Creek
2961	62.42	798	Harrison, WV	Two Lick Creek
21904	79.1	797	Wayne, WV	Tug Fork
408	70.51	797	Boone, WV	Left Fork/White Oak Creek
10500	84.18	796	Raleigh, WV	Ellis Creek
188	76.25	795	Boone, WV	Big Coal River
3529	71.71	794	Wyoming, WV	Kezee Fork
306	72.12	786	Fayette, WV	Milburn Creek
414	71.86	784	Raleigh, WV	Marsh Fork
30976	61.93	784	Mingo, WV	Beech Creek
30950	64.41	777	Mingo, WV	Mate Creek
2533	67.93	775	Fayette, WV	Laurel Creek
415	76.27	771	Raleigh, WV	Marsh Fork
27320	72.62	770	Logan, WV	Buffalo Creek
26610	63.41	769	Wayne, WV	West Fork/Twelvepole Creek
3579	63.27	769	Wyoming, WV	Still Run
21903	78.82	768	Mingo, WV	Tug Fork
21902	80.25	758	Mingo, WV	Tug Fork
2926	71.71	756	Harrison, WV	Hooppole Run

Massey Energy

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
305	67.07	755	Fayette, WV	Skitter Creek
36337	66.57	752	Berkeley, WV	Evans Run
5355	75.61	751	Kanawha, WV	Fields Creek
11192	68.77	751	Raleigh, WV	Clear Fork
442	76.36	749	Raleigh, WV	McDowell Branch
11136	83.73	745	Boone, WV	Joes Creek
26309	64.08	745	Ohio, WV	Peters Run
11131	70.57	743	Boone, WV	Honeycamp Fork
433	66.22	743	Raleigh, WV	Clear Fork
1214	71.5	742	Barbour, WV	Pecks Run
3568	71.5	741	Wyoming, WV	Laurel Branch/Pinnacle Creek
612	69.68	738	Nicholas, WV	Jerry Fork
11100	65.77	734	Logan, WV	Adkins Fork
2950	65.14	726	Harrison, WV	Coburns Creek
2978	60.98	725	Lewis, WV	Mare Run
20569	87.4	722	Mingo, WV	Little Laurel Branch
12808	72.24	721	Upshur, WV	Left Fork/Sand Run
10581	61.25	720	Barbour, WV	Foxgrape Run
27414	77.58	719	Marshall, WV	Lower Bowman Run
18201	67.2	718	McDowell, WV	Tug Fork
27334	66.84	717	Wyoming, WV	Indian Creek
123	75.7	715	McDowell, WV	Stonecoal Branch
406	71.38	715	Boone, WV	Cold Fork
3239	72.06	713	Brooke, WV	Hogtan Run
5338	62.97	713	Kanawha, WV	Big Tenmile Fork
265	62.38	712	Kanawha, WV	Laurel Fork/Coal Fork
23457	65.64	711	Gilmer, WV	Lynch Run
304	63.19	710	Fayette, WV	Spring Branch
3215	71.97	709	Marshall, WV	Britt Run
126	66.46	706	McDowell, WV	Moorecamp Branch
11089	70.32	704	Boone, WV	Skin Poplar Branch
5315	63.39	704	Kanawha, WV	Campbells Creek
308	64.21	701	Fayette, WV	Bishop Fork
11518	83.11	699	Braxton, WV	Laurel Creek
30811	67.16	694	Wyoming, WV	Indian Creek
18220	66.49	694	McDowell, WV	Dry Fork
5437	61.87	694	Kanawha, WV	Morris Creek
264	74.79	687	Kanawha, WV	Coal Fork
3546	71.19	685	Wyoming, WV	Indian Creek
514	71.11	684	Clay, WV	Leatherwood Creek
11141	70.9	684	Boone, WV	Hopkins Fork
27288	72.98	680	Harrison, WV	Isaacs Creek

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
30804	69.9	680	Logan, WV	Littles Creek
668	74.04	678	Fayette, WV	Big Creek
3523	64.86	677	Wyoming, WV	Little Huff Creek
5416	65.15	675	Kanawha, WV	Powerhouse Hollow
11028	73.57	673	Boone, WV	Big Coal River
11027	80.55	669	Kanawha, WV	Big Coal River
31929	75.16	666	Kanawha, WV	Left Fork/Kellys Creek
3611	73.32	664	Wyoming, WV	Clear Fork
21889	63.5	664	Marion, WV	Paw Paw Creek
22	61.31	663	McDowell, WV	Belcher Branch
2460	73.17	662	Mercer, WV	Twelvemile Creek
30820	85.54	660	Wyoming, WV	Dave Branch
11195	75.27	659	Raleigh, WV	Rockhouse Creek
3200	67.55	653	Ohio, WV	Peters Run
417	78.01	651	Raleigh, WV	Marsh Fork
18235	76.66	651	McDowell, WV	South Fork/Tug Fork
27295	70.56	651	Lewis, WV	Freemans Creek
5318	62.45	648	Kanawha, WV	Campbells Creek
421	73.33	646	Raleigh, WV	Drews Creek
18199	71.53	646	Mingo, WV	Tug Fork
32	74.23	645	McDowell, WV	Road Fork
11203	63.46	641	Raleigh, WV	Fulton Creek
575	76.14	640	Braxton, WV	Wolf Creek
30785	85.34	638	Webster, WV	Lost Run
2887	68.05	637	Taylor, WV	Jerry Run
411	65.74	636	Boone, WV	Elk Run
17504	61.37	633	Morgan, WV	Warm Spring Run
27343	70.79	629	Wyoming, WV	Still Run
2663	63.65	628	Marion, WV	Little Paw Paw Creek
5543	69.19	627	Hancock, WV	Hardin Run
23461	71.62	624	Gilmer, WV	Duskcamp Run
6	76.37	623	Mingo, WV	Tug Fork
27887	69.06	623	Ohio, WV	Little Wheeling Creek
418	70.08	622	Raleigh, WV	Hazy Creek
5449	61.66	621	Fayette, WV	Powellton Fork
425	79.92	619	Raleigh, WV	Rock Creek
4496	76.33	618	Hardy, WV	UNT/Mudlick Run RM 1.65
3218	79.88	617	Marshall, WV	Hollidays Run
27292	68.16	617	Harrison/Lewis, WV	Kincheloe Creek
10398	69.7	616	Boone, WV	Big Coal River
3496	66.26	616	Logan, WV	Buffalo Creek
295	73.14	612	Kanawha, WV	Brushy Branch

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
666	77.19	611	Nicholas, WV	Laurel Fork
10522	63.17	611	Kanawha, WV	UNT/Cane Fork RM 1.5
3195	60.88	611	Ohio, WV	Long Run
27055	69.33	608	Boone, WV	Spruce Fork
136	63.76	608	McDowell, WV	Buzzard Branch
1456	61.5	606	Berkeley/Jefferson, WV	Opequon Creek
1954	73.82	605	Pocahontas, WV	Browns Creek
5	73.01	605	Mingo, WV	Tug Fork
3449	63.77	605	Monongalia, WV	South Fork/West Virginia Fork/Dunkard Creek
382	68.69	604	Boone, WV	Grapevine Branch
372	65.22	603	Boone, WV	Hewett Creek
420	76.02	601	Raleigh, WV	Peachtree Creek
11186	66.37	601	Raleigh, WV	Clear Fork
92	66.06	601	McDowell, WV	Dry Fork
3198	68.66	600	Ohio, WV	Little Wheeling Creek
11188	65.61	600	Raleigh, WV	Clear Fork
2796	68.68	599	Marion, WV	Tevebaugh Creek
2993	70.94	597	Lewis, WV	Murphy Creek
11187	67.13	597	Raleigh, WV	Clear Fork
36332	89.55	595	Raleigh, WV	Stover Fork
1704	62.62	594	Jefferson, WV	Flowing Springs Run
27321	68.82	590	Logan, WV	Buffalo Creek
11066	67.08	590	Logan, WV	Spruce Fork
704	65.94	590	Fayette/Nicholas, WV	Twentymile Creek
2431	67.48	589	Mercer, WV	Camp Creek
5399	64.38	589	Kanawha, WV	Greens Branch
1455	69.02	586	Berkeley, WV	Opequon Creek
278	68.9	586	Kanawha, WV	Left Fork/Kellys Creek
30752	63.41	586	Jefferson, WV	Evitts Run
10405	90.34	585	Kanawha, WV	Laurel Fork/Coal Fork
17395	67.47	585	Nicholas, WV	Big Beaver Creek
47	78.27	583	Mingo, WV	Marrowbone Creek
46	60.8	583	Wayne, WV	Marrowbone Creek
31927	74.12	582	Kanawha, WV	Fivemile Fork
27325	74.1	582	Wyoming, WV	Huff Creek
94	65.42	582	McDowell, WV	Dry Fork
412	65.22	582	Boone, WV	Elk Run
3233	67.56	581	Brooke, WV	Buffalo Creek
2443	81.94	580	Summers, WV	Stinking Lick Creek
2406	71.19	579	Mercer, WV	East River
1113	65.18	577	Taylor, WV	Berry Run
1299	69.35	576	Brooke, WV	Mechling Run

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
2991	63.79	576	Lewis, WV	Polk Creek
2935	62.71	576	Harrison, WV	Rooting Creek
29540	70.59	575	Marshall, WV	Britt Run
2425	66.97	575	Mercer, WV	Brush Creek
2859	61.24	575	Harrison, WV	Rockcamp Run
31491	81.03	572	Preston, WV	UNT/Buffalo Run RM 1.92
711	70.64	571	Nicholas, WV	Bells Creek
2511	63.28	571	Fayette, WV	White Oak Creek
11129	65.97	570	Boone, WV	Brush Creek
3237	78.37	569	Brooke, WV	Pierce Run
2552	62.26	569	Fayette, WV	Dunloup Creek
1714	69.89	568	Jefferson, WV	Long Marsh Run
448	67.56	568	Braxton, WV	Laurel Creek
656	62.75	568	Nicholas, WV	Muddlety Creek
40451	68.83	567	Kanawha, WV	Ruffner Branch
29541	92.5	565	Marshall, WV	Britt Run
3175	69.5	563	Marshall, WV	Wells Run
27120	71.28	561	Brooke, WV	Newlands Run
2628	66.03	559	Marion, WV	Dunkard Mill Run
26363	61.25	558	Ohio, WV	Short Creek
629	83.29	557	Greenbrier, WV	Meadow Creek
11466	79.02	556	Clay, WV	Sycamore Creek
3508	74.77	554	Wyoming, WV	Huff Creek
18895	67.98	554	Monroe, WV	Indian Creek
427	83.17	553	Raleigh, WV	Cove Creek
35340	85.71	552	Clay, WV	Buffalo Creek
681	70.93	552	Nicholas, WV	Panther Creek
18894	64.43	552	Monroe, WV	Indian Creek
5358	72.49	551	Kanawha, WV	Fields Creek
31914	64.04	549	Kanawha, WV	Kellys Creek
27294	68.57	548	Lewis, WV	Freemans Creek
667	85.92	546	Nicholas, WV	Persinger Creek
27328	66.47	545	Wyoming, WV	Little Huff Creek
17453	62.41	542	Berkeley, WV	Tuscarora Creek
10433	62.01	541	Fayette, WV	Loop Creek
827	65.91	540	Kanawha, WV	Schoolhouse Branch
3506	63.66	539	Wyoming, WV	Huff Creek
5537	68.3	537	Hancock, WV	Turkeyfoot Run
2471	73.57	536	Mercer, WV	Brush Creek
27359	73.07	534	Wyoming, WV	Clear Fork
11194	77.43	533	Raleigh, WV	Rockhouse Creek
23460	70.38	532	Gilmer, WV	Duskcamp Run

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME
3162	81.88	531	Marshall, WV	Fish Run
26981	64.92	531	Brooke, WV	Pierce Run
11160	71.96	530	Raleigh, WV	Peachtree Creek
66	67.18	530	Mingo, WV	Sycamore Creek
2509	65.78	530	Fayette, WV	Dunloup Creek
27309	68.79	529	Wyoming, WV	Guyandotte River (Upper)
5433	68.23	529	Kanawha, WV	Upper Creek
18226	60.73	529	McDowell, WV	Jacobs Fork
2561	67.83	528	Raleigh, WV	Piney Creek
26	67.73	528	McDowell, WV	South Fork/Tug Fork
27267	65.8	526	Harrison, WV	Salem Fork
2530	77.76	524	Summers, WV	Lick Creek
5367	67.91	524	Kanawha, WV	Slaughter Creek
782	69.57	523	Putnam, WV	Heizer Creek
365	68.35	522	Boone, WV	Spruce Laurel Fork
11174	62.88	522	Raleigh, WV	Surveyor Creek
5364	71.12	521	Kanawha, WV	Fields Creek
23464	67.18	521	Gilmer, WV	Copen Run
27331	73.63	520	Wyoming, WV	Big Cub Creek
26609	72.5	520	Wayne, WV	West Fork/Twelvepole Creek
274	61.05	519	Kanawha, WV	Kellys Creek
29534	73.79	518	Ohio, WV	McCoy Run
2136	73.73	518	Braxton, WV	Slabcamp Run
26684	68.35	517	Monongalia, WV	Honey Run
2050	67.96	517	Wood, WV	UNT/Tygart Creek RM 12.99
11499	79.29	516	Nicholas, WV	Powell Creek
5439	74.93	515	Kanawha, WV	Youngs Branch
17459	68.73	514	Berkeley, WV	Buzzard Run
5534	62	514	Hancock, WV	Kings Creek
18227	66.92	512	McDowell, WV	Big Creek
3561	69.41	510	Wyoming, WV	Pinnacle Creek
27324	69.18	510	Logan, WV	Huff Creek
27339	71.01	509	Wyoming, WV	Pinnacle Creek
30219	82.97	508	Marshall, WV	Middle Bowman Run
5542	73.94	508	Hancock, WV	Lick Run
14	61.33	508	McDowell, WV	Mitchell Branch
435	84.26	507	Raleigh, WV	Rockhouse Creek
17467	62.08	506	Berkeley, WV	Mill Creek
375	66.2	505	Logan, WV	Isom Branch
3518	72.19	503	Logan, WV	Elk Creek
17390	71.43	503	Nicholas, WV	Muddlety Creek
10548	80.85	502	Marshall, WV	Lower Bowman Run

Table 2. (Comment 2) UNIMPAIRED WVSCI SCORES IN "HIGH" CONDUCTIVITY STREAMS				
SAMPLE_ID	**WVSCI**	**CONDUCT**	**COUNTY**	**STREAM_NAME**
26386	73.55	502	Brooke, WV	Castleman Run
108	68.48	502	McDowell, WV	Jacobs Fork
3191	62.13	502	Ohio, WV	Wheeling Creek
29362	68.71	501	Monongalia, WV	Ripleys Run
5368	62.11	501	Kanawha, WV	Slaughter Creek

Massey Energy

Table 3. (Comment 4) EPHEMEROPTERA ABUNDANCES AT HIGH CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
20536	58.89	1530	Boone, WV	West Fork/Pond Fork	78.80
3492	56.17	956	Logan, WV	Right Hand Fork/Rum Creek	75.47
27260	71.31	1177	Harrison, WV	Tenmile Creek	71.10
20518	56.47	595	McDowell, WV	Dry Fork	70.53
3518	72.19	503	Logan, WV	Elk Creek	70.40
11147	63.17	887	Boone, WV	Elk Run	70.26
328	57.6	597	Fayette, WV	Jarrett Branch	69.57
1704	62.62	594	Jefferson, WV	Flowing Springs Run	66.20
136	63.76	608	McDowell, WV	Buzzard Branch	64.90
26609	72.5	520	Wayne, WV	West Fork/Twelvepole Creek	64.47
448	67.56	568	Braxton, WV	Laurel Creek	63.75
3506	63.66	539	Wyoming, WV	Huff Creek	62.92
23460	70.38	532	Gilmer, WV	Duskcamp Run	62.73
23457	65.64	711	Gilmer, WV	Lynch Run	62.44
188	76.25	795	Boone, WV	Big Coal River	61.31
3191	62.13	502	Ohio, WV	Wheeling Creek	61.28
349	73.89	1030	Kanawha, WV	Little Coal River	61.19
10361	59.97	551	Fayette, WV	Dunloup Creek	61.14
27280	59.78	1381	Harrison, WV	Elk Creek	60.91
2886	62.8	892	Harrison, WV	Beards Run	60.71
5449	61.66	621	Fayette, WV	Powellton Fork	60.09
711	70.64	571	Nicholas, WV	Bells Creek	59.46
108	68.48	502	McDowell, WV	Jacobs Fork	59.12
18	54.69	817	McDowell, WV	Sandlick Creek	58.54
11518	83.11	699	Braxton, WV	Laurel Creek	58.46
415	76.27	771	Raleigh, WV	Marsh Fork	57.83
27294	68.57	548	Lewis, WV	Freemans Creek	56.95
3508	74.77	554	Wyoming, WV	Huff Creek	56.57
27079	51.21	553	Wyoming, WV	Indian Creek	55.95
413	71.96	822	Raleigh, WV	Marsh Fork	55.75
417	78.01	651	Raleigh, WV	Marsh Fork	54.89
10433	62.01	541	Fayette, WV	Loop Creek	54.75
27343	70.79	629	Wyoming, WV	Still Run	54.59
433	66.22	743	Raleigh, WV	Clear Fork	54.05
92	66.06	601	McDowell, WV	Dry Fork	53.97
46	60.8	583	Wayne, WV	Marrowbone Creek	53.85
11186	66.37	601	Raleigh, WV	Clear Fork	53.64
27120	71.28	561	Brooke, WV	Newlands Run	53.53
10618	47.61	591	Fayette, WV	Jarrett Branch	53.27
2471	73.57	536	Mercer, WV	Brush Creek	52.81
27328	66.47	545	Wyoming, WV	Little Huff Creek	52.78
14	61.33	508	McDowell, WV	Mitchell Branch	52.25
3507	59.12	610	Wyoming, WV	Huff Creek	52.00

Massey Energy

Table 3. (Comment 4) EPHEMEROPTERA ABUNDANCES AT HIGH CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
5386	61.67	1017	Kanawha, WV	Cabin Creek	51.49
20470	40.64	889	Logan, WV	Island Creek	51.00
23464	67.18	521	Gilmer, WV	Copen Run	50.64
21906	84.9	884	Mingo, WV	Tug Fork	50.54
29541	92.5	565	Marshall, WV	Britt Run	50.44
1214	71.5	742	Barbour, WV	Pecks Run	50.19
35340	85.71	552	Clay, WV	Buffalo Creek	50.00
2530	77.76	524	Summers, WV	Lick Creek	50.00
2965	60.62	1058	Lewis, WV	Hackers Creek	49.31
23456	60.17	701	Gilmer, WV	Lynch Run	49.24
3505	60.25	513	Logan, WV	Huff Creek	49.17
13	73.44	813	McDowell, WV	Harris Branch	48.88
18235	76.66	651	McDowell, WV	South Fork/Tug Fork	48.77
5517	53.14	860	Brooke, WV	Cross Creek	48.62
11141	70.9	684	Boone, WV	Hopkins Fork	48.20
21904	79.1	797	Wayne, WV	Tug Fork	48.08
27292	68.16	617	Harrison/Lewis, WV	Kincheloe Creek	47.91
22	61.31	663	McDowell, WV	Belcher Branch	47.89
11205	57.66	727	Raleigh, WV	White Oak Creek	47.83
5355	75.61	751	Kanawha, WV	Fields Creek	47.35
11109	57.49	883	Boone, WV	Pond Fork	46.95
5442	55.39	653	Fayette, WV	Armstrong Creek	46.84
359	72.53	1024	Boone, WV	Spruce Fork	46.68
18892	53.78	547	Monroe, WV	Gin Hollow	46.36
3519	38.68	504	Mingo, WV	Spice Creek	46.12
58	60.5	729	Mingo, WV	Spring Branch	46.03
185	79.69	836	Boone/Kanawha, WV	Big Coal River	45.99
2406	71.19	579	Mercer, WV	East River	45.31
36337	66.57	752	Berkeley, WV	Evans Run	45.25
47	78.27	583	Mingo, WV	Marrowbone Creek	44.80
18220	66.49	694	McDowell, WV	Dry Fork	44.50
11520	78.16	1001	Webster, WV	Laurel Creek	43.67
10405	90.34	585	Kanawha, WV	Laurel Fork/Coal Fork	43.33
17390	71.43	503	Nicholas, WV	Muddlety Creek	43.08
350	65.23	1111	Boone, WV	Little Coal River	42.08
11499	79.29	516	Nicholas, WV	Powell Creek	41.64
2917	55.87	993	Harrison, WV	Elk Creek	41.36
21894	81.77	934	Mingo, WV	Tug Fork	41.28
18199	71.53	646	Mingo, WV	Tug Fork	41.24
23461	71.62	624	Gilmer, WV	Duskcamp Run	40.87
17319	47.53	798	Fayette, WV	Scrabble Creek	40.69
666	77.19	611	Nicholas, WV	Laurel Fork	40.68
27331	73.63	520	Wyoming, WV	Big Cub Creek	40.28
11155	68.39	968	Raleigh, WV	Little Marsh Fork	40.10

Massey Energy

Table 3. (Comment 4) EPHEMEROPTERA ABUNDANCES AT HIGH CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
11466	79.02	556	Clay, WV	Sycamore Creek	39.47
27320	72.62	770	Logan, WV	Buffalo Creek	39.15
2479	43.48	667	Mercer, WV	South Fork/Brush Creek	39.15
268	53.12	954	Kanawha, WV	Tenmile Fork	38.98
5315	63.39	704	Kanawha, WV	Campbells Creek	38.97
3612	62.82	814	Wyoming, WV	Lower Road Branch	38.65
11066	67.08	590	Logan, WV	Spruce Fork	38.53
425	79.92	619	Raleigh, WV	Rock Creek	38.24
123	75.7	715	McDowell, WV	Stonecoal Branch	38.11
17395	67.47	585	Nicholas, WV	Big Beaver Creek	38.02
511	57.54	552	Clay, WV	Grassy Fork	37.70
908	70.58	810	Preston, WV	UNT/Muddy Creek RM 9.80	37.14
264	74.79	687	Kanawha, WV	Coal Fork	36.96
2961	62.42	798	Harrison, WV	Two Lick Creek	36.79
11191	61.62	828	Raleigh, WV	Clear Fork	36.68
30899	47.87	640	Boone, WV	Hopkins Fork	36.64
16854	46.9	696	Mingo, WV	Pigeon Creek	36.61
3495	58.23	684	Logan, WV	Buffalo Creek	36.57
26	67.73	528	McDowell, WV	South Fork/Tug Fork	36.49
11120	63.49	1131	Boone, WV	Cow Creek	36.24
21902	80.25	758	Mingo, WV	Tug Fork	35.98
94	65.42	582	McDowell, WV	Dry Fork	35.75
3511	48.1	613	Wyoming, WV	Paynter Branch	35.74
26298	51.73	690	Ohio, WV	Long Run	35.68
49	35.62	934	Mingo, WV	Pigeon Creek	35.64
372	65.22	603	Boone, WV	Hewett Creek	35.24
20	54.75	787	McDowell, WV	Left Fork/Sandlick Creek	34.62
620	64.41	897	Fayette, WV	Glade Creek	34.60
11106	64.14	967	Boone, WV	Pond Fork	34.20
3504	53.25	511	Logan, WV	Huff Creek	34.00
126	66.46	706	McDowell, WV	Moorecamp Branch	33.92
576	68.03	887	Braxton, WV	Spruce Fork	33.71
29534	73.79	518	Ohio, WV	McCoy Run	33.64
3522	51.59	691	Mingo, WV	Browning Fork	33.59
36345	63.64	1222	Boone, WV	Big Coal River	33.49
11027	80.55	669	Kanawha, WV	Big Coal River	33.47
377	73.09	1016	Boone, WV	Pond Fork	33.39
362	72.53	1137	Boone, WV	Spruce Fork	33.33
304	63.19	710	Fayette, WV	Spring Branch	33.33
17	53.23	632	McDowell, WV	Sandlick Creek	33.33
6	76.37	623	Mingo, WV	Tug Fork	33.33
27321	68.82	590	Logan, WV	Buffalo Creek	33.18
360	67.91	883	Logan, WV	Spruce Fork	33.06
704	65.94	590	Fayette/Nicholas, WV	Twentymile Creek	33.03

Massey Energy

Table 3. (Comment 4) EPHEMEROPTERA ABUNDANCES AT HIGH CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
21908	85.88	943	Wayne, WV	Tug Fork	32.56
11115	54.52	1640	Boone, WV	West Fork/Pond Fork	32.30
21898	61.45	959	Mingo, WV	Tug Fork	31.47
2125	76.88	1175	Calhoun, WV	Laurel Creek	31.46
18234	51.87	521	McDowell, WV	North Fork/Elkhorn Creek	31.12
3162	81.88	531	Marshall, WV	Fish Run	31.11
5	73.01	605	Mingo, WV	Tug Fork	31.03
5443	46.65	712	Fayette, WV	Armstrong Creek	30.93
11187	67.13	597	Raleigh, WV	Clear Fork	30.88
3546	71.19	685	Wyoming, WV	Indian Creek	30.73
11108	72.19	925	Boone, WV	Pond Fork	30.57
10398	69.7	616	Boone, WV	Big Coal River	30.56
278	68.9	586	Kanawha, WV	Left Fork/Kellys Creek	30.43
27267	65.8	526	Harrison, WV	Salem Fork	30.42
3496	66.26	616	Logan, WV	Buffalo Creek	30.36
427	83.17	553	Raleigh, WV	Cove Creek	30.36
2050	67.96	517	Wood, WV	UNT/Tygart Creek RM 12.99	30.32
26629	70.41	1303	Wayne, WV	Kiah Creek	30.24
26629	70.41	1303	Wayne, WV	Kiah Creek	30.24
11028	73.57	673	Boone, WV	Big Coal River	30.24
23452	54.42	679	Gilmer, WV	Duck Creek	30.22
11107	61.32	907	Boone, WV	Pond Fork	30.20
11194	77.43	533	Raleigh, WV	Rockhouse Creek	30.14
27288	72.98	680	Harrison, WV	Isaacs Creek	30.08
5367	67.91	524	Kanawha, WV	Slaughter Creek	29.68
29540	70.59	575	Marshall, WV	Britt Run	29.65
26684	68.35	517	Monongalia, WV	Honey Run	29.57
5354	58.46	647	Kanawha, WV	Fields Creek	29.55

Massey Energy

Table 4. (Comment 5) EPHEMEROPTERA ABUNDANCES AT LOW CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
5434	63.14	8.3	Kanawha, WV	West Hollow	0.00
1507	76.66	22	Berkeley, WV	Roaring Run	0.00
3066	64.2	23	Hampshire, WV	Meadow Run	0.00
4365	58.35	28	Tucker, WV	Yellow Creek	0.00
959	53.17	30	Preston, WV	Buckhorn Run	0.00
26972	69.31	31	Preston, WV	UNT/UNT RM 0.56/Sandy Creek RM 10.47	0.00
31013	57.91	31	Berkeley, WV	Roaring Run	0.00
4273	68.21	41	Preston, WV	UNT/Cherry Run RM 1.96	0.00
4303	66.36	43	Preston, WV	Lick Run	0.00
879	61.67	50	Preston, WV	UNT/Cherry Run RM 1.96	0.00
533	50.23	51	Clay, WV	Turkey Run	0.00
30857	64.97	52	Preston, WV	Laurel Run	0.00
30474	42.69	57	Tucker, WV	Horseshoe Run	0.00
16841	65.4	59	Monongalia, WV	UNT/Deckers Creek RM 8.8	0.00
867	57.71	73	Preston, WV	Little Sandy Creek	0.00
422	44.58	75	Raleigh, WV	Canterberry Branch	0.00
1201	68.24	86	Upshur, WV	Herods Run	0.00
25611	37.38	88	Raleigh, WV	Cranberry Creek	0.00
1083	50.02	88	Preston, WV	Scott Run	0.00
1239	23.22	93	Preston, WV	Youghiogheny River	0.00
2985	34.83	97.8	Lewis, WV	Right Fork/Stonecoal Creek	0.00
531	49.1	99	Clay, WV	Pheasant Run	0.00
10380	60.97	107	Summers, WV	UNT/Jumping Branch RM 2.48	0.00
1543	41.34	108	Grant, WV	Helmick Run	0.00
39780	78.12	113	Kanawha, WV	Joes Hollow	0.00
1190	41.12	116	Upshur, WV	Mudlick Run	0.00
227	27.28	118	Kanawha, WV	Coal Fork	0.00
30378	58.92	119	Preston, WV	Greens Run	0.00
20436	58.89	123	Mineral, WV	UNT/Patterson Creek RM 16.25	0.00
1135	26.39	133	Barbour, WV	Shooks Run	0.00
10421	57.58	140	Fayette, WV	Mill Creek	0.00
907	62.69	147	Preston, WV	Muddy Creek	0.00
869	59.27	149	Preston, WV	Beaver Creek	0.00
39783	63.72	159	Kanawha, WV	Mudlick Branch	0.00
2579	18.71	160	Summers, WV	Brooks Branch	0.00
4263	75.77	170	Preston, WV	Left Fork Bull Run	0.00
29414	19.48	175	Preston, WV	Snowy Creek	0.00
570	45.33	175	Braxton, WV	Granny Creek	0.00
34969	65.72	177	Kanawha, WV	Slack Branch	0.00
639	41.67	178	Greenbrier, WV	Little Clear Creek	0.00
858	69.8	181	Preston, WV	Little Laurel Run	0.00
475	60.56	183	Kanawha, WV	Joes Hollow	0.00
640	64.83	186	Greenbrier, WV	Little Clear Creek	0.00

Massey Energy

Table 4. (Comment 5) EPHEMEROPTERA ABUNDANCES AT LOW CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
1540	38.15	187	Grant, WV	Laurel Run	0.00
846	63.78	188	Preston, WV	Left Fork Bull Run	0.00
2676	44.49	189	Marion, WV	Dents Run	0.00
39777	64.56	192	Kanawha, WV	Whiteoak Fork	0.00
878	13.22	193	Preston, WV	Cherry Run	0.00
591	69.63	16	Webster, WV	Right Fork/Laurel Fork/Left Fork/Holly River	0.25
2103	26.32	141	Roane, WV	Miletree Run	0.25
2042	75.89	21	Upshur, WV	Little Kanawha River	0.37
2770	30.61	142	Lewis, WV	West Fork River	0.37
4300	73.19	39	Preston, WV	Jump Rock Run	0.40
3348	12.97	129	Wayne, WV	Big Branch	0.40
29402	48.59	138	Monongalia, WV	Camp Run	0.40
30795	74.42	26	Preston, WV	UNT/Laurel Run RM 2.39	0.42
3009	36.24	134	Lewis, WV	Hughes Fork	0.43
30666	43.99	191	Grant, WV	Jordan Run	0.43
36331	33.55	111	Summers, WV	UNT/Jumping Branch RM 2.48	0.44
17394	67.24	112	Nicholas, WV	Brushy Fork	0.44
3461	46.1	189	Marion, WV	Buffalo Creek	0.45
20601	69.79	40	Randolph, WV	UNT/Little Black Fork RM 3.38	0.46
4272	70.96	94	Preston, WV	Cherry Run	0.46
39657	35.06	95	Mineral, WV	UNT/Patterson Creek RM 16.25	0.46
5348	47.14	188	Kanawha, WV	Witcher Creek	0.46
27003	73.86	154	Kanawha, WV	Pigeonroost Fork	0.47
3575	27	143	Wyoming, WV	Marsh Fork	0.48
4269	72.75	136	Preston, WV	Beaver Creek	0.49
3559	72.36	140	Wyoming, WV	Bird Branch	0.49
3366	18.93	177	Mingo, WV	Moses Fork	0.49
20553	23.03	195	Marion, WV	Mahan Run	0.49
22352	45.88	137	Fayette, WV	Mill Creek	0.51
30893	26.16	159	Fayette, WV	Mossy Creek	0.55
1248	29.06	77	Preston, WV	Muddy Creek	0.57
4560	44.13	116	Pendleton, WV	Zeke Run	0.57
2630	58.16	104	Preston, WV	Patterson Run	0.62
18899	20.96	152	Raleigh, WV	Right Fork/Sandlick Creek	0.68
4268	70.31	38	Preston, WV	Little Laurel Run	0.75
1203	77.07	82	Upshur, WV	Alec Run	0.78
1040	65.72	74	Tucker, WV	Middle Run	0.83
18901	38.84	155	Raleigh, WV	Right Fork/Sandlick Creek	0.83
4488	32.53	81	Hampshire, WV	UNT/Buffalo Run RM 1.67	0.84
27080	22.41	130	Roane, WV	Laurel Run	0.84
1260	63.51	43	Preston, WV	Buffalo Run	0.85
5428	50.98	66	Fayette, WV	Plum Orchard Creek	0.88
2146	55.09	169	Lewis, WV	Isaacs Fork	0.88

Massey Energy

Table 4. (Comment 5) EPHEMEROPTERA ABUNDANCES AT LOW CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
4262	78.72	158	Preston, WV	Left Fork Bull Run	0.89
1231	60.5	100	Randolph, WV	Pleasant Run	0.91
4451	62.37	42	Randolph, WV	Fall Run	0.92
2583	70.04	8	Monroe, WV	Crosier Branch	0.93
1197	59.09	87	Upshur, WV	Panther Creek	0.93
1968	70.47	139	Pocahontas, WV	Thorny Creek	0.93
30852	30.41	181	Wayne, WV	Gilkerson Branch	0.93
1241	75.75	59	Preston, WV	White Oak Springs Run	0.94
4586	72	30	Grant, WV	Austin Gap	0.97
10368	73.37	25	Randolph, WV	UNT/Roaring Creek RM 11.0	0.98
17494	62.72	33	Morgan, WV	Meadow Branch	0.98
923	61.92	76	Preston, WV	Little Lick Run	0.98
4259	74.83	41	Monongalia, WV	UNT/Clay Run RM 1.01	1.02
4258	81.65	42	Monongalia, WV	Clay Run	1.02
20633	19.78	97	Mingo, WV	Breeden Creek	1.04
3063	27.88	97	Hampshire, WV	UNT/Tear Coat Creek RM 16.01	1.05
1041	62.7	58	Tucker, WV	Snyder Run	1.06
2085	40.38	189	Roane, WV	Seaman Fork	1.09
4455	76.66	21.6	Randolph, WV	Whitmeadow Run	1.12
4402	54.53	22	Tucker, WV	Red Creek	1.19
12751	55.37	112	Preston, WV	Little Sandy Creek	1.19
2134	30.61	182	Gilmer, WV	Kelley Run	1.21
3002	49.78	115	Lewis, WV	Skin Creek	1.23
99	32.15	143	McDowell, WV	Groundhog Branch	1.23
10366	60.14	19	Tucker, WV	UNT/Beaver Creek RM 11.91	1.24
200	19.87	194	Kanawha, WV	Coal Hollow	1.27
4309	76.37	34	Preston, WV	Bearwallow Run	1.28
4370	67.47	41	Randolph, WV	Yellow Creek	1.33
4361	61.19	45	Tucker, WV	Snyder Run	1.33
870	72.2	32	Preston, WV	Beaver Creek	1.37
21580	38.19	42	Monroe, WV	Ray Fork	1.37
245	29.44	141	Kanawha, WV	Dry Branch	1.37
22353	40.04	54	Raleigh, WV	Mill Creek	1.38
3317	28.18	134	Wayne, WV	Beech Fork	1.40
3300	58.43	188	Wayne, WV	Twelvepole Creek	1.40
20551	24.09	48	Lincoln, WV	Laurel Creek	1.41
3012	26.44	121	Lewis, WV	Sand Fork	1.41
4453	90.55	21.23	Randolph, WV	Crouch Run	1.43
1506	66.34	22	Berkeley, WV	Meadow Branch	1.46
30343	70.92	32	Preston, WV	Beaver Creek	1.46
5334	68.38	126	Kanawha, WV	Slatelick Run	1.46
16818	39.82	100	Fayette, WV	Mill Creek	1.48
27012	22.69	120	Logan, WV	Buck Fork	1.49
30765	45.99	120	Hardy, WV	Capon Run	1.53

Massey Energy

Table 4. (Comment 5) EPHEMEROPTERA ABUNDANCES AT LOW CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
2270	32	113	Wetzel, WV	South Fork/Fishing Creek	1.56
20584	50.19	196	Cabell, WV	Johns Branch	1.60
3591	60.45	139	Wyoming, WV	Marsh Fork	1.62
665	85.22	33	Nicholas, WV	Falls Run	1.66
17889	42.22	184	Wetzel, WV	South Fork/Fishing Creek	1.68
1955	56.68	194	Pocahontas, WV	Possum Hollow	1.74
12830	89.03	52	Upshur, WV	Panther Creek	1.75
877	66.39	110	Preston, WV	Elk Run	1.75
27037	86.32	115	Raleigh, WV	Fat Creek	1.75
30863	65.52	145	Wetzel, WV	Laurel Run	1.76
3530	82.66	111	Wyoming, WV	Mudlick Fork	1.80
787	25.84	192	Kanawha, WV	Boardtree Run	1.83
16783	70.33	125	Raleigh, WV	Bowyer Creek	1.84
4473	58.11	173	Hampshire, WV	UNT/South Branch Potomac River RM 21.86	1.88
3079	72.07	121	Hardy, WV	Waites Run	1.89
3387	28.35	191	Wayne, WV	Cove Creek	1.89
36321	49.94	17	Tucker, WV	UNT/Beaver Creek RM 11.91	1.90
1256	60.61	47	Preston, WV	Little Laurel Run	1.94
27149	48.84	79	Greenbrier, WV	UNT/Stony Run RM 1.12	1.95
882	79.51	75	Preston, WV	Hazel Run	1.96
35642	58.71	33	Mercer, WV	Mash Fork	1.98
4355	80.92	31	Tucker, WV	Flat Rock Run	1.99
881	65.22	51	Preston, WV	Hazel Run	2.00
1234	54.85	59	Randolph, WV	Rocky Run	2.00
27251	38.66	114	Lewis, WV	West Fork River	2.01
40322	44.87	197	Kanawha, WV	Pocatalico River	2.01
2301	21.69	143	Jackson, WV	Mill Creek	2.04
1999	82.01	22	Upshur, WV	Getout Run	2.08
27230	77.86	94	Greenbrier, WV	Anthony Creek	2.13
26007	28.39	100	Fayette, WV	Marr Branch	2.17
678	46.31	166	Nicholas, WV	Lower Laurel Run	2.21
3356	32.02	68.8	Wayne, WV	Wells Branch	2.23
20514	60.72	13	Tucker, WV	Left Fork/Red Creek	2.24
17401	59.43	162	Nicholas, WV	Bearpen Fork	2.26
1440	57.33	191	Cabell, WV	Right Fork/Mill Creek	2.30
20523	67.69	191	Braxton, WV	Tate Creek	2.30
17421	50.33	81	Webster, WV	Big Ditch Run	2.31
679	62.04	37	Nicholas, WV	Upper Laurel Run	2.34
3077	67.91	183	Hardy, WV	Moores Run	2.34
30922	86.36	17	Greenbrier, WV	Meadow Creek	2.38
3256	67.28	186	Cabell, WV	Bryan Creek	2.39
31639	67.45	26	Tucker, WV	Laurel Run/Dry Fork	2.40
10545	79.4	41	Monongalia, WV	UNT/Clay Run RM 1.01	2.40

Massey Energy

Table 4. (Comment 5) EPHEMEROPTERA ABUNDANCES AT LOW CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
31882	76.97	65	Tucker, WV	Snyder Run	2.44
497	35.67	136	Kanawha, WV	Green Bottom	2.48
17334	88.19	143	Nicholas, WV	Road Fork	2.52
211	38.05	193	Kanawha, WV	Holmes Branch	2.53
16980	79.72	106	Grant, WV	Glade Run	2.54
20619	43.24	185	Wayne, WV	East Fork/Twelvepole Creek	2.59
2541	53	38	Fayette, WV	Laurel Creek/Glade Creek	2.60
3064	48.55	104	Hampshire, WV	UNT/Bearwallow Creek RM 0.98	2.63
743	73.14	21	Webster, WV	Little Rough Run	2.65
4588	39.73	104	Pendleton, WV	UNT/South Branch Potomac River RM 89.72	2.67
17294	62.79	180	Jackson, WV	Little Mill Creek	2.67
1116	35.38	66	Preston, WV	Sandy Creek	2.68
1319	44.34	175	Cabell, WV	Mud River	2.70
29412	82.56	44	Preston, WV	Buffalo Run	2.72
10467	61.74	183	Mason, WV	UNT/Tenmile Creek RM 5.33	2.79
1071	53.03	55	Randolph, WV	Tory Camp Run	2.81
1169	55.08	169	Randolph, WV	Riffle Creek	2.82
3134	65.17	94	Marshall, WV	Valley Run	2.84
10395	44.85	179	Lewis, WV	West Fork River	2.85
1515	75.11	112	Morgan, WV	North Fork/Indian Run	2.87
3276	44.85	189	Mason, WV	Stonecoal Run	2.88
28408	79.29	165	Jackson, WV	Bear Fork	2.90
4369	66.69	32	Randolph, WV	Moore Run	2.93
30971	42.02	147.6	Ritchie, WV	Beech Run	2.93
1229	47.29	178	Randolph, WV	Three Forks Run	2.97
28390	86.93	49	Kanawha, WV	Bays Fork	2.99
20480	46.97	162	Wetzel, WV	Little Fishing Creek	3.00
27047	27.71	196	Lincoln, WV	Fuquay Creek	3.02
11413	37.6	105	Braxton, WV	Elk River	3.05
30986	52.92		Marion, WV	Pyles Fork	3.06
2861	56.51	126	Harrison, WV	Rockcamp Run	3.08
27005	73.41	39	Randolph, WV	UNT/Little Black Fork RM 3.38	3.11
3110	69.97	120.9	Hampshire, WV	Little Cacapon River	3.11
26027	52	86	Fayette, WV	Floyd Creek	3.12
4579	57.48	62	Pendleton, WV	Teeter Camp Run	3.14
25674	41.74	124	Lewis, WV	Sand Fork	3.15
20487	75.5	86	Hampshire, WV	South Fork/Little Cacapon River	3.18
30872	28.81	136	Roane, WV	Hurricane Creek	3.23
2577	57.39	173	Summers, WV	Red Spring Branch	3.26
30472	55.04	56	Tucker, WV	Clover Run	3.27
4291	68.15	143	Preston, WV	Muddy Creek	3.27
2027	76.03	180	Ritchie, WV	Left Fork/Slab Creek	3.28
2145	54.39	164	Doddridge, WV	Sand Fork	3.32

Massey Energy

Table 4. (Comment 5) EPHEMEROPTERA ABUNDANCES AT LOW CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
545	76.53	120	Braxton, WV	Leatherwood Run	3.36
1252	53.55	142	Preston, WV	Wardwell Run	3.36
3865	85.22	118	Wirt, WV	Lick Run	3.44
4526	60.61	76	Pendleton, WV	Lick Run	3.48
18900	23.44	159	Raleigh, WV	Right Fork/Sandlick Creek	3.49
174	34.3	188	Putnam, WV	UNT/Crooked Creek RM 0.72	3.51
2058	48.24	163	Wood, WV	Tug Fork	3.53
803	18.08	158	Kanawha, WV	Camp Creek	3.55
29487	76.34	193	Marshall, WV	North Fork/Grave Creek	3.55
16885	30.71	156	Wayne, WV	Wolf Creek	3.57
27157	67.57	86	Greenbrier, WV	Fleming Run	3.59
3148	27.03	188	Wetzel, WV	Sugar Run	3.63
1249	55.34	143	Preston, WV	Snowy Creek	3.64
1192	77.13	165	Upshur, WV	Trubie Run	3.65
4517	53.51	44	Pendleton, WV	UMT/South Fork RM 43.25/South Branch Potomac River	3.66
2082	44.49	173	Roane, WV	Left Fork/Reedy Creek	3.67
1240	73.12	61	Garrett, MD	South Branch/Laurel Run/Buffalo Run	3.74
16933	47.13	146	Putnam, WV	Buckelew Hollow	3.83
30890	82.33	56	Randolph, WV	UNT/Big Laurel Run RM 2.99	3.86
2166	59.04	196	Braxton, WV	Oil Creek	3.86
900	69.74	74	Preston, WV	UNT/Muddy Creek RM 1.53	3.88
3052	63.17	97	Hardy, WV	North River	3.98
3433	51.97	168	Monongalia, WV	Days Run	4.04
3581	55.58	180	Wyoming, WV	Barkers Creek	4.04
27029	69.65	32	Randolph, WV	Red Run	4.05
1504	80.36	197	Morgan, WV	Sleepy Creek	4.08
4456	79.76	43	Randolph, WV	Stonecoal Run	4.11
3011	55.16	184	Lewis, WV	Sand Fork	4.14
33820	87.36	133	Preston, WV	Left Fork Bull Run	4.15
30960	54.23	139	Ritchie, WV	Bone Creek	4.15
8298	48.82	141	Hancock, WV	Mercer Run	4.15
228	61.7	155	Kanawha, WV	Clover Hollow	4.15
1973	44.52	109	Pocahontas, WV	Shock Run	4.17
10444	76.36	50	Upshur, WV	Laurel Fork/French Creek	4.18
2162	49.58	159	Lewis, WV	Goosepen Run	4.22
30817	79.69	59	Tucker, WV	Devils Run	4.23
1238	79.35	35	Randolph, WV	Short Run	4.24
4276	63.22	76	Preston, WV	Hazel Run	4.26
524	89.94	45	Clay, WV	The Gulf	4.27
36320	43.1	150	Calhoun, WV	Sang Run	4.27
847	69.16	120	Preston, WV	Left Fork Bull Run	4.30
1533	75.63	121	Grant, WV	Wycroff Run	4.30
17892	50.84	187	Wetzel, WV	Price Run	4.33

Massey Energy

Table 4. (Comment 5) EPHEMEROPTERA ABUNDANCES AT LOW CONDUCTIVITY LEVELS					
SAMPLE_ID	WVSCI	CONDUCT	COUNTY	STREAM_NAME	% Mayfly
3831	82.33	50	Morgan, WV	Rockwell Run	4.39
291	59.86	135	Raleigh, WV	Maple Fork	4.40
2008	46.59	166	Wirt, WV	Reedy Creek	4.42
3373	55.51	130	Mingo, WV	East Fork/Twelvepole Creek	4.43
4525	80.93	50	Pendleton, WV	Little Fork	4.46
3576	69.37	58.4	Wyoming, WV	Black Fork	4.46
10358	93.56	24	Webster, WV	Joe Run	4.57
3322	43.61	153	Wayne, WV	Rubens Branch	4.60
2790	60.7	137	Marion, WV	Hustead Fork	4.61
4364	72.33	164	Tucker, WV	Glade Run	4.62
18896	46.98	67	Raleigh, WV	Right Fork/Sandlick Creek	4.64
4310	58.83	47	Preston, WV	Hickory Bearpen Run	4.67
1698	45.76	97	Hampshire, WV	Mayhew Run	4.69
2133	49.81	156	Braxton, WV	Cedar Creek	4.73
224	48.1	193	Kanawha, WV	Lower Donnally Branch	4.76
1965	70.96	86	Pocahontas, WV	Thorny Creek	4.79
16878	30.59	150	Kanawha, WV	Grapevine Creek	4.81
20671	83.6	72	Morgan, WV	North Fork/Indian Run	4.82
16845	77.3	93	Berkeley, WV	UNT/Elk Branch RM 4.27	4.90
2073	63.11	136	Wirt, WV	Cranesnest Run	4.92
1969	70.87	140	Pocahontas, WV	Thorny Creek	4.98
26063	37.87	157	Raleigh, WV	Glade Creek	5.00