

The unweathered NP values of the splits sent to the participating labs are only about half the magnitude of the original splits, and all of these fizz ratings are 0. The most encouraging element of this NP data is that the weathered NP values are substantially less than their unweathered counterparts, reflecting a loss of NP due to the weathering of the samples during the leaching column study.

Table 9.2 Houchin Creek Shale Summary ABA Data

Sample Treatment		N	%S			NP		
			Min	Mean	Max	Min	Mean	Max
HCS-IN	Initial Standard NP	4	4.73	5.08	5.27	41.29	44.14	47.53
HCS-IN	Initial Modified NP	4	4.73	5.08	5.27	41.05	45.54	48.27
HCS-IN	Splits Before Leaching	6	4.93	5.25	5.53	19.61	23.52	26.53
HSC-IN	Splits After Leaching	25	2.99	4.70	5.98	-17.82	13.96	34.69

Kanawha Black Flint Shale

The Kanawha Black Flint shale sample was collected from a roadcut near Charleston, WV in a terrain where selenium concentrations were a concern. However, this rock sample has relatively low total sulfur content and relatively low NP, as shown in Tables 9.3 and 9.10. These types of ABA analyses are sometimes difficult to interpret. The original splits from the homogenization of the sample, tested on June 24, 2005 have relatively consistent sulfur contents and NP values, as shown in Table 9.10, except for the 0.21 percent sulfur in Split 11. The NP values by the 1997 method are slightly lower than the 1978 method values in these 4 splits, as might be expected. The original Split 4 was used by Lab 4 in the weathering study and was retested to have 0.11% less sulfur than the original. Original Split 11 was sent to Lab 2 for the weathering study, and upon retesting the unweathered split is only 0.03% different from the original test value. However, the sulfur contents of the weathered material from both leaching columns had higher sulfur contents than the unweathered sample as shown in Table 9.10. It is curious that the sulfur contents of all of the particle size classes from the two columns at Lab 6 are only about one third to one half of the sulfur contents of the original splits, indicating a greater degree of weathering than at most of the other labs.

With this rock sample, there are again numerous inconsistencies and questions about the NP values and fizz ratings. Many of the unweathered and weathered samples from the participating labs are considerably higher to several times higher than the original homogenization splits. Also, there is one anomalous weathered sample from Lab 5 with an NP of 315.62 and a fizz rating of 2. The other fizz ratings in Table 9.10 are about evenly divided as 0 or 1.