

2008 Analyzer of the Year Award

Thermo Fisher Scientific is pleased to announce an award for the best performing analyzer among all of its many customers who gather regular lab vs. analyzer data on batches of coal, usually train loads or barge loads, although it can be for finite time periods, such as one hour or four hours. This Analyzer of the Year award is objectively determined, based upon the lowest RMSD achieved for any given month on each of three parameters: sulfur, moisture, and ash. Separate awards will be given for sample stream analyzers (CQM or 1812C) and for cross-belt analyzers (ECA). In order to qualify for the award the analyzer owner must satisfy the following requirements:

- a minimum of ten lab vs. analyzer points during that month
- the time period for each point must be between 30 minutes and 4 hours
- a range of values in the measured parameter no less than the following
 - 0.20% for sulfur
 - 1.50% for moisture
 - 1.50% for ash
- no more than one outlier rejected, and that could only occur when the number of standard deviations from the linear regression exceeds 3

Even though this contest had not been previously announced, we did examine all the data in our possession, for analyzers whose lab vs. analyzer data had been provided to us during 2008, and we selected winners based upon the above criteria. The 2008 winners are: for sulfur, Arch Mountain Laurel; for ash, Arch Pardee; and for moisture, Arch Ragland. All three analyzers are Thermo Scientific CQMs located respectively in three rail loadouts. It must be recognized the statistic used to determine the winner—RMSD—incorporates three sources of measurement error: the analyzer precision, the reference system (sampling system followed by sample preparation and lab analysis) precision, and calibration error. To have the lowest RMSD among more than 100 installed Thermo Scientific analyzers requires not only a well-performing analyzer, but also an excellent sampling system and a top-notch team conducting the sample prep and lab analysis.

We hereby salute the teams at these three Arch sites for their excellent performance in 2008. The RMSD data they achieved was as follows:

Parameter	Analyzer Site	Month	RMSD	Range
Sulfur	Mtn. Laurel	September	0.020%	0.20%
Ash	Pardee	December	0.233%	5.9%
Moisture	Ragland	September	0.332%	1.7%

The winner receives a plaque. Submit a month's worth of analyzer data to ussdi.customersupport@thermofisher.com to be considered for the award.