



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

May 5, 2015

Mr. Shaun McGrath,
Regional Administrator
US EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

RE: 2014 Annual Air Monitoring Data Certification for South Dakota

Dear Mr. Shaun McGrath:

I am requesting EPA's approval to certify the 2014 air monitoring data for South Dakota. The review of the 2014, particulate matter (PM10, PM10-2.5 and PM2.5), PM2.5 speciation, carbon monoxide, sulfur dioxide (one hour and five minute), nitrogen dioxide, NOy/NO and ozone data for the SLAMS monitors in South Dakota has been completed and any necessary corrections were made to the Air Quality System data set. The data was collected in accordance with the procedures outlined in the South Dakota Quality Assurance Project Plan for Air Measurements Systems and all applicable quality assurance, air monitoring, and probe location criteria contained in 40 CFR Part 58.

This is the second attempt to complete the certification process for the South Dakota air quality data. Adjustments were made by the EPA Air Quality Systems staff so the South Dakota PM2.5 data would combine parameter occurrence codes (POC) so the completion calculations would be completed correctly.

As the senior air monitoring staff member for South Dakota, I have reviewed the data in AMP 450NC and AMP600. I certify that, to the best of my knowledge, all 2014 ambient air quality monitoring and quality assurance data are completely submitted to AQS. The submitted air monitoring data are accurate taking into consideration the quality assurance findings. See the enclosed reports AMP450NC and AMP600 for details of the monitoring sites, pollutant parameters, and POC data being certified by this letter.

The certification is limited to only the data under the agency description codes of 0973, South Dakota Department of Environment Protection Air Quality Program. In addition, Table 1 lists other parameters included in AMP450NC report not being certified by this letter.

Table 1. Parameters Not Certified in the Report AMP 450NC

Parameter	Name
61103	Wind Speed - Resultant
61104	Wind Direction - Resultant
61106	Standard Deviation Horizontal Wind Direction
62101	Outdoor Temperature
62201	Relative Humidity

The summary material satisfies the annual air monitoring certification required in 40 CFR Subsection 58.15(a). The files containing the certification letter, AMP450NC, and AMP600 are also being sent by e-mail to EPA Region 8 contact Albion Carlson. I certify the reports sent by e-mail are exact duplicates of the hardcopy of the submittal sent to the Regional Administrator.

If you have questions or comments, please contact me at 605-773-6038.

Sincerely,



Brad Schultz
Environmental Scientist Manager I
Air Quality Program
605-773-6038

Enclosures



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and NATURAL RESOURCES**

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If you have questions or comments, please contact me at 605-773-6038.

Sincerely,

A handwritten signature in cursive script that reads "Brad Schultz".

Brad Schultz
Environmental Scientist Manager I
Air Quality Program
605-773-6038

Enclosures

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

CERTIFICATION EVALUATION AND CONCURRENCE

User ID: BJN

Report Request ID: 1330998

Report Code: AMP600

May. 5, 2015

GEOGRAPHIC SELECTIONS											
Tribal Code	State	County	Site	Parameter	POC	City	AQCR	UAR	CBSA	CSA	EPA Region

46

PROTOCOL SELECTIONS			
Parameter Classification	Parameter	Method	Duration
	South Dakota Dept Environmental Protection Air Quality Prog		

AGENCY SELECTIONS
South Dakota Dept Environmental Protection Air Quality Prog

CRITERIA

SELECTED OPTIONS	
Option Type	Option Value
MERGE PDF FILES	YES
AGENCY ROLE	CERTIFYING

DATE CRITERIA	
Start Date	End Date
2014	2014

Data Evaluation and Concurrence Report Summary

Certification Year: 2014

Certifying Agency (CA): South Dakota Dept Environmental Protection Air Quality Prog (0973)

Pollutants in Report:

<u>Parameter Name</u>	<u>Code</u>	<u>Monitors Evaluated</u>	<u>Monitors Recommended for Concurrence by AQS</u>	<u>Monitors NOT Recommended for Concurrence by AQS</u>
Carbon monoxide	42101	1	1	0
Nitrogen dioxide (NO2)	42602	4	4	0
Ozone	44201	6	6	0
PM10 Total 0-10um STP	81102	12	10	2
PM2.5 - Local Conditions	88101	17	17	0
Sulfur dioxide	42401	4	4	0

PQAOs in Report:

<u>PQAO Name</u>	<u>PQAO Code</u>	<u>TSA Date</u>
South Dakota Dept Environmental Protection Air Quality Prog	0973	

Summary of 'N' flags for all pollutants:

<u>Parameter</u>	<u>AQS Code</u>	<u>AQS Site-ID</u>	<u>POC</u>	<u>AQS Recommended Flag</u>	<u>Cert. Agency Recommended Flag</u>	<u>Reason for AQS Recommendation</u>
	0973	81102	2	N	Y	Annual Summary completeness < 70%.
	0973	81102	1	N	Y	Annual Summary completeness < 70%.

Signature of Monitoring Organization Representative:

Bruce Schuelty

Data Evaluation and Concurrence Report for Gaseous Pollutants

Certifying Year 2014
Certifying Agency Code South Dakota Dept Environmental Protection Air Quality Prog (0973)
Parameter Carbon monoxide (42101) (ppm)

PQAO Name South Dakota Dept Environmental Protection Air Quality Prog (0973)
QAPP Approval Date 09/18/2013

NPAP Audit Summary: Number of Valid Audits NPAP Bias Criteria Met
 0 Y

AQS Site ID	POC Monitor Type	Routine Data			Exceed. Count	Outlier Count	Perc. Comp.	One Point Quality Check		Annual PE		NPAP PQAO Level Criteria	QAPP Appr.	Concur. Flag			
		Mean	Min	Max				Precision	Bias	Complete	Bias			Complete	Aqs Rec Flag	CA Rec Flag	Epa Concur
46-099-0008	3 SLAMS	0.186	0.100	1.300	0	0	96	4.26	+/-3.64	100	- 1.55	100	Y	Y	Y	Y	S

Data Evaluation and Concurrence Report for Gaseous Pollutants

Certifying Year 2014
Certifying Agency Code South Dakota Dept Environmental Protection Air Quality Prog (0973)
Parameter Nitrogen dioxide (NO2) (42602) (ppb)

PQAO Name South Dakota Dept Environmental Protection Air Quality Prog (0973)
QAPP Approval Date 09/18/2013

NPAP Audit Summary: Number of Valid Audits NPAP Bias Criteria Met
 2 2.70714 Y

AQS Site ID	POC Monitor Type	Routine Data			Exceed. Count	Outlier Count	Perc. Comp.	One Point Quality Check		Annual PE		NPAP Bias	NPAP PQAO Level Criteria	QAPP Appr.	Concur. Flag		
		Mean	Min	Max				Precision	Bias	Complete	Bias				Complete	Aqs Rec Flag	CA Rec Flag
46-071-0001	3 SLAMS	0.7	0.0	7.3	0	96	3.68	+/-2.92	96	- 2.07	100	7.20	Y	Y	Y	Y	S
46-099-0008	3 SLAMS	5.0	0.0	39.7	0	97	6.41	+/-4.37	100	- 1.59	100		Y	Y	Y	Y	S
46-103-0020	3 SLAMS	6.7	0.0	52.1	0	97	8.89	+/-8.25	92	0.38	100		Y	Y	Y	Y	S
46-127-0001	3 SLAMS	3.0	0.0	32.7	0	99	3.27	+/-2.73	100	- 3.42	100	- 1.79	Y	Y	Y	Y	S

Data Evaluation and Concurrence Report for Gaseous Pollutants

Certifying Year 2014
Certifying Agency Code South Dakota Dept Environmental Protection Air Quality Prog (0973)
Parameter Ozone (44201) (ppm)
PQAO Name South Dakota Dept Environmental Protection Air Quality Prog (0973)
QAPP Approval Date 09/18/2013
NPAP Audit Summary:

Number of Valid Audits NPAP Bias Criteria Met
 3 9.06516 Y

AQS Site ID	POC Monitor Type	Routine Data			Exceed. Count	Outlier Count	Perc. Comp.	One Point Quality Check		Annual PE		NPAP Bias	NPAP PQAO Level Criteria	QAPP Appr. Flag	Concur. Flag	
		Mean	Min	Max				Precision	Bias	Complete	Bias				Complete	Aqs Rec Flag
46-011-0003	3 SLAMS	0.042	0.012	0.068	0	0	99	0.62	+/-0.38	100	2.20	100	Y	Y	Y	S
46-033-0132	3 SLAMS	0.047	0.019	0.064	0	0	99	0.55	+/-0.36	100	- 2.50	100	Y	Y	Y	S
46-071-0001	3 SLAMS	0.044	0.020	0.069	0	0	99	0.70	+/-0.54	100	1.01	100	Y	Y	Y	S
46-093-0001	3 SLAMS	0.045	0.012	0.067	0	0	99	2.30	+/-1.46	100	0.73	100	Y	Y	Y	S
46-099-0008	3 SLAMS	0.047	0.005	0.078	0	0	95	2.31	+/-2.57	100	- 1.04	100	Y	Y	Y	S
46-127-0001	3 SLAMS	0.040	0.010	0.079	0	0	99	2.34	+/-1.75	100	- 1.75	100	Y	Y	Y	S

Data Evaluation and Concurrence Report for Gaseous Pollutants

Certifying Year 2014
Certifying Agency Code South Dakota Dept Environmental Protection Air Quality Prog (0973)
Parameter Sulfur dioxide (42401) (ppb)

PQAO Name South Dakota Dept Environmental Protection Air Quality Prog (0973)
QAPP Approval Date 09/18/2013

NPAP Audit Summary: Number of Valid Audits NPAP Bias Criteria Met
 0 Y

AQS Site ID	POC Monitor Type	Routine Data			Exceed. Count	Outlier Count	Perc. Comp.	One Point Quality Check		Annual PE		Bias	NPAP PQAO Level Criteria	QAPP Appr.	Aqs Rec Flag	Concur. Flag
		Mean	Min	Max				Precision	Bias	Complete	Bias					
46-071-0001	3 SLAMS	0.2	0.0	4.3	0	97	0.99	+1.20	96	0.11	100	0.11	Y	Y	Y	S
46-099-0008	3 SLAMS	0.7	0.4	20.4	0	98	4.79	+/-3.58	100	- 0.52	100	- 0.52	Y	Y	Y	S
46-103-0020	3 SLAMS	0.3	0.0	12.4	0	98	1.89	+/-1.71	100	- 1.71	100	- 1.71	Y	Y	Y	S
46-127-0001	3 SLAMS	0.3	0.0	14.8	0	99	2.58	+3.39	100	- 1.66	100	- 1.66	Y	Y	Y	S

Data Evaluation and Concurrence Report for Particulate Matter

Certifying Year: 2014

Certifying Agency: South Dakota Dept Environmental Protection Air Quality Prog (0973)

Parameter: PM10 Total 0-10um STP (81102) CONTINUOUS

PQAO Name: South Dakota Dept Environmental Protection Air Quality Prog (0973)

Quality Assurance Project Plan Approval Date: 09/18/2013

Monitors Summaries

AQS Site ID	POC	Monitor Type	Routine Data (ug/m3)				Exceed. Outlier		Flow Rate Verification		Flow Rate Audit		Collaboration		Concurrence Flag	
			Mean	Min	Max	Count	Count	% Complete	Bias	% Complete	Bias	% Complete	QAPP Appr.	AQS Rec Flag		CA Rec Flag
46-011-0002	3	SLAMS	17.89	2.0	250.0	0	0	97	-1.28	100	-0.54	100	Y	Y	Y	S
46-029-0002	3	SLAMS	20.01	2.0	452.0	0	0	97	+/-0.05	100	-1.31	100	Y	Y	Y	S
46-033-0132	3	SLAMS	7.12	2.0	97.0	0	0	97	+/-1.22	100	+0.08	100	Y	Y	Y	S
46-071-0001	3	SLAMS	9.42	2.0	159.0	0	0	95	+/-0.76	100	-0.21	100	Y	Y	Y	S
46-099-0008	3	SLAMS	21.65	2.0	418.0	0	0	96	+/-0.78	100	-1.43	100	Y	Y	Y	S
46-103-0020	3	SLAMS	37.02	2.0	522.0	0	0	96	-2.00	100	-1.07	100	Y	Y	Y	S
46-127-0001	3	SLAMS	18.56	2.0	287.0	0	0	98	+/-2.79	100	-0.17	100	Y	Y	Y	S

Data Evaluation and Concurrence Report for Particulate Matter

Certifying Year: 2014

Certifying Agency: South Dakota Dept Environmental Protection Air Quality Prog (0973)

Parameter: PM10 Total 0-10um STP (81102) INTERMITTENT

PQAO Name: South Dakota Dept Environmental Protection Air Quality Prog (0973)

Quality Assurance Project Plan Approval Date: 09/18/2013

Collocation Summary

# Sites	Req	# Sites Collocated	% Collocated	CV Est	CV UB	Criteria Met?
3	1	1	100	4.67	5.67	Y

Monitors Summaries

AQS Site ID	POC	Monitor Type	Routine Data (ug/m3)				Flow Rate Audit		Collocation		Concurrence Flag					
			Mean	Min	Max	Exceed. Count	Outlier Count	% Complete	Bias	% Complete	CV	PQAO Crit. Met	QAPP Appr.	AQS Rec CA Flag	Rec EPA Concur	
46-013-0003	1	SLAMS	16.97	2.0	41.0	0	0	96	+0.53	100	5.67	100	Y	Y	Y	S
46-013-0003	9	SLAMS	17.68	2.0	45.0	0	0	98	-0.73	100			Y	Y	Y	S
46-093-0001	1	SLAMS	14.85	2.0	33.0	0	0	98	+1.73	100			Y	Y	Y	S
46-103-1001	1	SLAMS	16.68	4.0	48.0	0	0	49	+1.55	100			Y	Y	N	S
Submitter Comment: POC 1 and 2 didn't combine for completeness																
46-103-1001	2	SLAMS	18.92	4.0	56.0	0	0	50	+1.35	100			Y	Y	N	S
Submitter Comment: POC 1 and 2 didn't combine for completeness																

Data Evaluation and Concurrence Report for Particulate Matter

Certifying Year: 2014

Certifying Agency: South Dakota Dept Environmental Protection Air Quality Prog (0973)

Parameter: PM2.5 - Local Conditions (88101)

PQAO Name: South Dakota Dept Environmental Protection Air Quality Prog (0973)

Quality Assurance Project Plan Approval Date: 09/18/2013

Collocation Summary

Method	# Sites	# Sites Req	# Sites Collocated	% Collocated	CV Est	CV	Criteria Met?	# Audited Methods	# PEP Required	# PEP Submitted	% Complete	Bias	Criteria Met?
143	4	1	1	100	12.42	18.80	Y	2	0	8	100	-29.16	Y
170	6	1	1	100	16.45	19.04	Y						

PEP Summary

Flow Rate Audit	Collocation	PEP	Concurrence Flag
Bias	% Complete	PQAO Crit. Met	AQS Rec CA Rec EPA Flag Concur
+0.15	100	Y	Y
+0.82	100	Y	Y
+0.80	100	Y	Y
-0.37	100	Y	Y
-0.90	100	Y	Y
-0.37	100	Y	Y
-0.10	100	Y	Y
-0.86	100	Y	Y

Monitors Summaries

AQS Site ID	POC Method	Monitor Type	Routine Data (ug/m3)				Exceed. Count	Outlier Count	% Complete	Flow Rate Audit Bias	% Complete	Collocation		PEP PQAO Crit. Met	Concurrence Flag
			Min	Mean	Max	CV						CV	% Complete		
46-011-0002	1	143	SLAMS	8.31	.5	38.2	0	100	+0.15	100	Y	Y	Y	Y	S
46-011-0002	2	143	SLAMS	7.08	2.4	17.7	0	100	+0.82	100	Y	Y	Y	Y	S
46-013-0003	1	143	SLAMS	6.20	2.0	20.5	0	96	+0.80	100	Y	Y	Y	Y	S
46-013-0003	2	143	SLAMS	6.21	1.5	27.3	0	96	-0.37	100	Y	Y	Y	Y	S
46-029-0002	3	170	SLAMS	4.44	-8.2	42.8	0	92	-0.90	100	Y	Y	Y	Y	S
46-033-0132	3	170	SLAMS	2.41	-8.0	37.4	0	96	-0.37	100	Y	Y	Y	Y	S
46-071-0001	3	170	SLAMS	4.29	-7.6	27.6	0	93	-0.10	100	Y	Y	Y	Y	S
46-099-0006	1	143	SLAMS	8.17	.9	20.4	0	93	-0.86	100	Y	Y	Y	Y	S
Submitter Comment: POC 1 and 2 didn't combine for completeness															
46-099-0006	2	143	SLAMS	7.52	2.3	36.6	0	93	-0.15	100	Y	Y	Y	Y	S
Submitter Comment: POC 1 and 2 didn't combine for completeness															
46-099-0006	9	143	SLAMS	8.11	2.2	35.9	0	93	-0.08	100	Y	Y	Y	Y	S
46-099-0008	1	143	SLAMS	7.84	2.2	36.4	0	94	+0.33	100	Y	Y	Y	Y	S
Submitter Comment: POC 1 and 2 didn't combine for completeness															
46-099-0008	2	143	SLAMS	6.93	.3	18.5	0	94	+0.67	100	Y	Y	Y	Y	S
Submitter Comment: POC 1 and 2 didn't combine for completeness															
46-099-0008	3	170	SLAMS	7.51	-5.2	68.7	0	94	-1.16	100	Y	Y	Y	Y	S

Data Concurrence and Evaluation Report for Lead

User ID: BJN

QUICKLOOK ALL PARAMETERS

Report Request ID: 1323611

Report Code: AMP450NC

Apr. 20, 2015

GEOGRAPHIC SELECTIONS

Tribal Code	State	County	Site	Parameter	POC	City	AQCR	UAR	CBSA	CSA	EPA Region
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46

PROTOCOL SELECTIONS

Parameter Classification	Parameter	Method	Duration
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AGENCY SELECTIONS

South Dakota Dept Environmental Protection Air Quality Prog

ALL

SELECTED OPTIONS

Option Type	Option Value	SORT ORDER
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MERGE PDF FILES YES
 EVENTS PROCESSING EXCLUDE REGIONALLY CONCURRED EVENTS
 AGENCY ROLE PQAO

Order	Column
-------	--------

1 STATE_CODE
 2 COUNTY_CODE
 3 SITE_ID
 4 PARAMETER_CODE
 5 POC
 6 DATES
 7 EDF_ID

DATE CRITERIA

Start Date	End Date
2014	2014

APPLICABLE STANDARDS

Standard Description	CO 8-hour 1971
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Lead 3-Month 2009
 Lead 3-Month PM10 Surrogate 2009
 Lead Quarterly 1978
 NO2 Annual 1971
 Ozone 8-Hour 2008
 PM10 24-hour 2006
 PM25 24-hour 2013
 SO2 1-hour 2010

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM

QUICKLOOK ALL PARAMETERS

Apr. 20, 2015

EXCEPTIONAL DATA TYPES

EDT	DESCRIPTION
0	NO EVENTS
1	EVENTS EXCLUDED
2	EVENTS INCLUDED
5	EVENTS WITH CONCURRENCE EXCLUDED

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM

Apr. 20, 2015

QUICKLOOK ALL PARAMETERS

Parameter	Unit	Site ID	City	County	POAO	Year	Meth	Obs	#	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	Cert & Eval
Site ID: 46-011-0002 City: Brookings																
County: Brookings																
68105	Ambient Temperature				1	0973	2014	143	61	25.7	24.0	23.9	23.4	6.96	24 HOUR	0
68105	Ambient Temperature				2	0973	2014	143	61	24.0	23.5	23.5	23.3	6.95*	24 HOUR	0
68108	Sample Baro Pressure				1	0973	2014	143	61	729	728	727	726	716.2	24 HOUR	0
68108	Sample Baro Pressure				2	0973	2014	143	61	728	728	727	726	717.5*	24 HOUR	0
81102	PM10 Total 0-10um STP				3	0973	2014	150	8539	250	247	194	194	17.9	1 HOUR	S 0
(25 C)																
81102	PM10 Total 0-10um STP				3	0973	2014	150	359	101	65	62	60	17.5	24-HR BLK	S 0
(25 C)																
88101	PM2.5 - Local Conditions				1	0973	2014	143	61	38.2	23.1	17.2	16.6	8.31*	24 HOUR	S 0
(LC)																
88101	PM2.5 - Local Conditions				2	0973	2014	143	61	17.7	16.3	15.4	13.9	7.08*	24 HOUR	S 0
(1C)																
Site ID: 46-011-0003 City: Not in a city																
County: Brookings																
44201	Ozone				3	0973	2014	047	8400	.064	.062	.061	.061	.0382	8-HR RUN	S 0
Address: 3714 Western Ave, Brookings, SD 57006																
Site ID: 46-013-0003 City: Aberdeen																
County: Brown																
68105	Ambient Temperature				1	0973	2014	143	62	27.4	25.1	25.1	24.9	7.38	24 HOUR	0
68105	Ambient Temperature				2	0973	2014	143	56	26.6	24.8	24.0	24.0	7.95*	24 HOUR	0
68108	Sample Baro Pressure				1	0973	2014	143	62	739	737	737	736	725.5	24 HOUR	0
68108	Sample Baro Pressure				2	0973	2014	143	56	739	739	737	737	724.8*	24 HOUR	0
81102	PM10 Total 0-10um STP				1	0973	2014	063	58	41	36	34	33	17.0	24 HOUR	S 0
(25 C)																
81102	PM10 Total 0-10um STP				9	0973	2014	063	59	45	37	36	34	17.7	24 HOUR	S 0
(25 C)																
85101	PM10 - LC				1	0973	2014	063	58	41	35	34	33	17.0	24 HOUR	0
(LC)																
85101	PM10 - LC				9	0973	2014	063	59	45	36	36	35	17.7	24 HOUR	0
(LC)																
88101	PM2.5 - Local Conditions				1	0973	2014	143	62	20.5	17.4	13.7	12.2	6.20*	24 HOUR	S 0
(LC)																
88101	PM2.5 - Local Conditions				2	0973	2014	143	56	27.3	15.7	13.8	13.5	6.21*	24 HOUR	S 0
(LC)																

Note: The * indicates that the mean does not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM

QUICKLOOK ALL PARAMETERS

Apr. 20, 2015

Parameter	Unit	P	C	PQAO	Year Meth	Obs	#	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	Cert. Eval	
															County: Watertown
81102 PM10 Total 0-10um STP	Micrograms/cubic meter (25 C)				2014	150	358	100	94	78	75	19.5	24-HR BLK	S 0	
81102 PM10 Total 0-10um STP	Micrograms/cubic meter (25 C)				2014	150	8580	452	378	315	303	20.0	1 HOUR	S 0	
88101 PM2.5 - Local Conditions	Micrograms/cubic meter (LC)				2014	170	8064	42.8	42.4	41.6	41.6	4.44	1 HOUR	S 0	
88101 PM2.5 - Local Conditions	Micrograms/cubic meter (LC)				2014	170	334	28.2	19.1	17.7	17.3	4.40	24-HR BLK	S 0	
Site ID: 46-033-0132	City: Not in a city							Address: WIND CAVE NATIONAL PARK, SOUTH DAKOTA							
44201 Ozone	Parts per million				2014	047	8743	.059	.059	.058	.057	.0436	8-HR RUN	S 0	
81102 PM10 Total 0-10um STP	Micrograms/cubic meter (25 C)				2014	150	359	24	23	21	20	6.6	24-HR BLK	S 0	
81102 PM10 Total 0-10um STP	Micrograms/cubic meter (25 C)				2014	150	8560	97	74	72	59	7.1	1 HOUR	S 0	
88101 PM2.5 - Local Conditions	Micrograms/cubic meter (LC)				2014	170	353	13.7	11.5	8.7	8.6	2.37	24-HR BLK	S 0	
88101 PM2.5 - Local Conditions	Micrograms/cubic meter (LC)				2014	170	8481	37.4	25.1	23.1	22.7	2.41	1 HOUR	S 0	
Site ID: 46-071-0001	City: Not in a city							Address: BADLANDS PO BOX 6 HEADQUARTERS							
42401 Sulfur dioxide	Parts per billion				2014	060	8473	4.3	2.1	2.1	1.8	.44	1 HOUR	S 0	
42406 SO2 max 5-min avg	Parts per billion				2014	060	8380	31.5	20.9	19.4	9.8	.39	1 HOUR	S 0	
42601 Nitric oxide (NO)	Parts per billion				2014	074	8398	25.6	19.6	16.9	11.5	.39	1 HOUR	S 0	
42602 Nitrogen dioxide (NO2)	Parts per billion				2014	074	8398	7.3	7.2	5.4	5.0	.66	1 HOUR	S 0	
42603 Oxides of nitrogen (NOx)	Parts per billion				2014	074	8398	30.6	26.0	20.1	14.1	1.10	1 HOUR	S 0	
44201 Ozone	Parts per million				2014	047	8554	.066	.059	.058	.057	.0408	8-HR RUN	S 0	
81102 PM10 Total 0-10um STP	Micrograms/cubic meter (25 C)				2014	150	8328	159	143	131	108	9.4	1 HOUR	S 0	
81102 PM10 Total 0-10um STP	Micrograms/cubic meter (25 C)				2014	150	348	31	28	28	27	9.0	24-HR BLK	S 0	

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Parameter	Unit	P	O	C	QAO	Year	Meth	Obs	#	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	Cert & Eval
Site ID: 46-071-0001 City: Not in a city County: Jackson Address: BADLANDS PO BOX 6 HEADQUARTERS																
88101	PM2.5 - Local Conditions (LC)	Micrograms/cubic meter	3	0973	2014	170	170	341	17.4	14.5	13.6	12.5	4.25	4.25	24-HR BLK	S 0
88101	PM2.5 - Local Conditions (LC)	Micrograms/cubic meter	3	0973	2014	170	170	8220	27.6	27.6	26.6	25.4	4.29	4.29	1 HOUR	S 0
Site ID: 46-093-0001 City: Not in a city County: Meade Address: 7108 SEELAIRE ST - BLACK HAWK ELEMENTARY																
44201	Ozone	Parts per million	3	0973	2014	047	047	8719	.058	.057	.056	.056	.0401	.0401	8-HR RUN	S 0
Site ID: 46-099-0006 City: Sioux Falls County: Minnehaha Address: 500 S. PHILLIPS KELO SITE																
61103	Wind Speed - Resultant	Knots	3	0973	2014	020	020	8748	29.5	29.2	28.7	28.6	6.45	6.45	1 HOUR	0
61104	Wind Direction - Resultant	Degrees Compass	3	0973	2014	020	020	8748	359.9	359.9	359.9	359.9	223.57	223.57	1 HOUR	0
61106	Std Dev Hz Wind Direction	Degrees Compass	3	0973	2014	020	020	8748	51.9	44.6	41.4	40.6	11.87	11.87	1 HOUR	0
62101	Outdoor Temperature	Degrees Fahrenheit	3	0973	2014	040	040	8623	98	98	97	97	47.6	47.6	1 HOUR	0
81102	PM10 Total 0-10um STP (25 C)	Micrograms/cubic meter	1	0973	2014	063	063	59	33	31	30	30	14.8	14.8	24 HOUR	S 0
85101	PM10 - LC (LC)	Micrograms/cubic meter	1	0973	2014	063	063	59	30	30	29	28	13.7	13.7	24 HOUR	0
Site ID: 46-099-0008 City: Sioux Falls County: Minnehaha Address: 2001 E 8th St																
68105	Ambient Temperature	Degrees Centigrade	1	0973	2014	143	143	48	28.0	25.9	25.4	25.0	13.46	13.46	* 24 HOUR	0
68105	Ambient Temperature	Degrees Centigrade	2	0973	2014	143	143	65	26.2	25.4	24.9	24.9	6.10	6.10	* 24 HOUR	0
68105	Ambient Temperature	Degrees Centigrade	9	0973	2014	143	143	40	28.3	26.1	25.6	25.1	14.45	14.45	* 24 HOUR	0
68108	Sample Baro Pressure	Millimeters (mercury)	1	0973	2014	143	143	48	734	733	728	727	721.1	721.1	* 24 HOUR	0
68108	Sample Baro Pressure	Millimeters (mercury)	2	0973	2014	143	143	65	737	732	732	732	722.1	722.1	* 24 HOUR	0
68108	Sample Baro Pressure	Millimeters (mercury)	9	0973	2014	143	143	40	735	734	729	728	722.5	722.5	* 24 HOUR	0
88101	PM2.5 - Local Conditions (LC)	Micrograms/cubic meter	1	0973	2014	143	143	43	20.4	17.8	15.6	15.2	8.17	8.17	* 24 HOUR	S 0
88101	PM2.5 - Local Conditions (LC)	Micrograms/cubic meter	2	0973	2014	143	143	65	36.6	18.6	16.7	15.2	7.52	7.52	* 24 HOUR	S 0
88101	PM2.5 - Local Conditions (LC)	Micrograms/cubic meter	9	0973	2014	143	143	58	35.9	20.3	17.2	15.5	8.11	8.11	* 24 HOUR	S 0

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Parameter	Unit	C	POAO	Year	Meth	# Obs	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	Cert'd Eval	P
42101 Carbon monoxide	Parts per million	3	0973	2014	554	8486	.5	.5	.5	.5	.19	8-HR RUN	S	0
												AVG END		
42401 Sulfur dioxide	Parts per billion	3	0973	2014	560	8545	20.4	18.5	13.4	10.5	1.55	1 HOUR	S	0
42406 SO2 max 5-min avg	Parts per billion	4	0973	2014	560	8553	60.1	43.2	34.1	27.3	.93	1 HOUR	0	0
42600 Reactive oxides of nitrogen (NOy)	Parts per billion	4	0973	2014	674	7878	148.6	84.7	76.5	68.5	6.93	1 HOUR	0	0
42601 Nitric oxide (NO)	Parts per billion	3	0973	2014	074	8516	106.7	71.1	66.9	43.4	1.45	1 HOUR	0	0
42601 Nitric oxide (NO)	Parts per billion	4	0973	2014	674	7878	121.1	63.2	43.4	43.1	1.12	1 HOUR	0	0
42602 Nitrogen dioxide (NO2)	Parts per billion	3	0973	2014	074	8516	39.7	39.1	38.4	37.3	5.04	1 HOUR	S	0
42603 Oxides of nitrogen (NOx)	Parts per billion	3	0973	2014	074	8515	127.6	94.9	88.8	65.5	6.52	1 HOUR	0	0
44201 Ozone	Parts per million	3	0973	2014	047	8552	.072	.069	.068	.066	.0427	8-HR RUN	S	0
												AVG BEGIN		
61103 Wind Speed - Resultant	Knots	3	0973	2014	020	8629	19.0	18.6	18.4	18.2	4.41	1 HOUR	0	0
61104 Wind Direction - Resultant	Degrees Compass	3	0973	2014	020	8633	359.9	359.9	359.9	359.9	191.47	1 HOUR	0	0
61106 Std Dev Hz Wind Direction	Degrees Compass	3	0973	2014	020	8633	47.1	45.0	43.6	42.5	16.60	1 HOUR	0	0
62201 Outdoor Temperature	Degrees Fahrenheit	3	0973	2014	040	8632	109	109	109	108	49.5	1 HOUR	0	0
	Relative Humidity	3	0973	2014	060	8622	100.0	100.0	100.0	100.0	70.35	1 HOUR	0	0
68103 Ambient Min Temperature	Degrees Centigrade	5	0973	2014	810	110	21.0	18.9	18.8	18.6	.95	24 HOUR	0	0
68104 Ambient Max Temperature	Degrees Centigrade	5	0973	2014	810	110	32.4	30.7	30.2	29.3	11.97	24 HOUR	0	0
68105 Ambient Temperature	Degrees Centigrade	1	0973	2014	143	54	26.6	24.4	24.2	23.5	6.78*	24 HOUR	0	0
68105 Ambient Temperature	Degrees Centigrade	2	0973	2014	143	54	26.4	25.6	25.4	25.3	10.27*	24 HOUR	0	0
68105 Ambient Temperature	Degrees Centigrade	5	0973	2014	810	110	26.4	24.5	24.1	23.8	6.40	24 HOUR	0	0
68106 Sample Min Baro Pressure	Millimeters (mercury)	5	0973	2014	810	110	730	729	729	728	714.7	24 HOUR	0	0
68107 Sample Max Baro Pressure	Millimeters (mercury)	5	0973	2014	810	110	742	738	738	738	722.7	24 HOUR	0	0
68108 Sample Baro Pressure	Millimeters (mercury)	1	0973	2014	143	54	734	733	732	730	720.7*	24 HOUR	0	0
68108 Sample Baro Pressure	Millimeters (mercury)	2	0973	2014	143	54	730	729	728	728	720.6*	24 HOUR	0	0
68108 Sample Baro Pressure	Millimeters (mercury)	5	0973	2014	810	110	736	733	733	732	717.9	24 HOUR	0	0
81102 PM10 Total 0-10um STP	Micrograms/cubic meter (25 C)	3	0973	2014	122	8418	418	336	309	232	21.6	1 HOUR	S	0
81102 PM10 Total 0-10um STP	Micrograms/cubic meter (25 C)	3	0973	2014	122	350	104	63	58	54	21.2	24-HR BLK	S	0
86101 PM10-2.5 - Local Conditions	Micrograms/cubic meter (LC)	3	0973	2014	185	8113	388.7	311.5	287.8	215.8	14.58	1 HOUR	0	0

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Parameter	Unit	City: Sioux Falls	County: Minnehaha	Address: 2001 E 8th St	P	O	C	PQAO	Year	Meth	Obs	#	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	Cert& Eval
88101 PM2.5 - Local Conditions	Micrograms/cubic meter (LC)				1	0973	2014	143	54	36.4	20.8	15.5	14.0	7.84*	24 HOUR	S	0		
88101 PM2.5 - Local Conditions	Micrograms/cubic meter (LC)				2	0973	2014	143	61	18.5	16.6	15.3	13.5	6.93*	24 HOUR	S	0		
88101 PM2.5 - Local Conditions	Micrograms/cubic meter (LC)				3	0973	2014	170	340	36.5	26.3	25.8	25.4	7.48	24-HR BLK AVG	S	0		
88101 PM2.5 - Local Conditions	Micrograms/cubic meter (LC)				3	0973	2014	170	8271	68.7	59.2	58.7	56.3	7.51	1 HOUR	S	0		
88102 Antimony PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.063	.059	.036	.033	.0199	24 HOUR	S	0		
88103 Arsenic PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.002	.002	.002	.002	.0003	24 HOUR	S	0		
88104 Aluminum PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.384	.140	.085	.084	.0248	24 HOUR	S	0		
88107 Barium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.030	.016	.006	.006	.0052	24 HOUR	S	0		
88109 Bromine PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.015	.008	.008	.007	.0025	24 HOUR	S	0		
88110 Cadmium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.027	.019	.016	.011	.0019	24 HOUR	S	0		
88111 Calcium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.227	.213	.154	.142	.0405	24 HOUR	S	0		
88112 Chromium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.038	.015	.010	.008	.0012	24 HOUR	S	0		
88113 Cobalt PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.002	.002	.002	.002	.0007	24 HOUR	S	0		
88114 Copper PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.025	.016	.012	.005	.0015	24 HOUR	S	0		
88115 Chlorine PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.687	.096	.052	.051	.0155	24 HOUR	S	0		
88117 Cerium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.043	.005	.005	.005	.0041	24 HOUR	S	0		
88118 Cesium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.023	.017	.017	.017	.0087	24 HOUR	S	0		

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Parameter	Unit	County:	City:	Site ID:	C	POAO	Year	Meth	# Obs	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	Certificate #
88126 Iron PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.155	.145	.130	.118	.0401	24 HOUR	0
88128 Lead PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.005	.004	.003	.003	.0006	24 HOUR	0
88131 Indium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.034	.027	.019	.017	.0104	24 HOUR	0
88132 Manganese PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.015	.008	.007	.007	.0014	24 HOUR	0
88136 Nickel PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.004	.003	.002	.002	.0003	24 HOUR	0
88140 Magnesium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.050	.039	.036	.026	.0091	24 HOUR	0
88152 Phosphorus PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.008	.008	.008	.008	.0053	24 HOUR	0
88154 Selenium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.001	.001	.001	.001	.0011	24 HOUR	0
88160 Tin PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.034	.034	.024	.022	.0136	24 HOUR	0
88161 Titanium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.011	.007	.007	.005	.0025	24 HOUR	0
88164 Vanadium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.002	.002	.002	.002	.0016	24 HOUR	0
88165 Silicon PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.367	.363	.270	.245	.0828	24 HOUR	0
88166 Silver PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.019	.019	.019	.019	.0076	24 HOUR	0
88167 Zinc PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.019	.015	.011	.009	.0036	24 HOUR	0
88168 Strontium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.008	.008	.003	.002	.0012	24 HOUR	0
88169 Sulfur PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	1.880	1.420	1.210	1.000	.3847	24 HOUR	0
88176 Rubidium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.002	.002	.001	.001	.0009	24 HOUR	0

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Parameter	Unit	City: Sioux Falls	County: Minnehaha	Address: 2001 E 8th St	P	QAO	Year	Meth	# Obs	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	Cert & Eval
88180 Potassium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.373	.152	.104	.081	.0378	24 HOUR	0
88184 Sodium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.402	.166	.155	.081	.0309	24 HOUR	0
88185 Zirconium PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	811	110	.019	.015	.012	.012	.0036	24 HOUR	0
88301 Ammonium Ion PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	812	109	6.98	2.70	2.43	2.32	.659	24 HOUR	0
88302 Sodium Ion PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	812	109	.51	.19	.18	.11	.040	24 HOUR	0
88303 Potassium Ion PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	812	109	.39	.10	.09	.08	.029	24 HOUR	0
88306 Total Nitrate PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	812	109	15.40	5.45	5.22	5.18	1.492	24 HOUR	0
88355 OC CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	839	108	6.240	5.230	4.460	2.800	1.4706	24 HOUR	0
88357 EC CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	840	108	.567	.502	.487	.380	.1591	24 HOUR	0
88370 OC CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	838	108	5.870	5.020	4.320	2.670	1.3764	24 HOUR	0
88374 OC1 CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	841	108	.424	.413	.323	.291	.1199	24 HOUR	0
88375 OC2 CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	841	108	1.050	1.010	.988	.678	.3040	24 HOUR	0
88376 OC3 CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	841	108	2.020	1.740	1.480	1.070	.4223	24 HOUR	0
88377 OC4 CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	841	108	1.140	.948	.557	.554	.2508	24 HOUR	0
88378 OP CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	842	108	1.240	1.110	.908	.573	.2796	24 HOUR	0
88380 EC CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	831	108	.940	.711	.557	.539	.2531	24 HOUR	0
88383 EC1 CSN_Rev Unadjusted PM2.5 LC	Micrograms/cubic meter (LC)				5	0973	2014	841	108	2.120	1.430	1.390	1.150	.4760	24 HOUR	0

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Parameter	Unit	P O C	QA/QC	Year	Meth	# Obs	1st Max Value				2nd Max Value				3rd Max Value				4th Max Value				Arith. Mean	Duration	Cert. Eval
							Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			
Site ID: 46-099-0008	City: Sioux Falls						County: Minnehaha				Address: 2001 E 8th St														
88384	EC2 CSN_Rev Unadjusted PM2.5 LC					5	0973	2014	841	108	.166	.140	.134	.134	.0566	24 HOUR	0								
88385	EC3 CSN_Rev Unadjusted PM2.5 LC					5	0973	2014	841	108	.007	.005	.001	.001	.0011	24 HOUR	0								
88388	OP CSN_Rev Unadjusted PM2.5 LC TOT					5	0973	2014	826	108	1.610	1.250	1.120	.877	.3737	24 HOUR	0								
88403	Sulfate PM2.5 LC					5	0973	2014	812	109	5.75	4.53	3.57	2.72	1.112	24 HOUR	0								
88502	Acceptable PM2.5 AQI & Speciation Mass					5	0973	2014	810	81	33.0	21.0	15.5	14.5	7.17*	24 HOUR	0								
Site ID: 46-103-0020	City: Rapid City						County: Pennington				Address: CREDIT UNION SITE, 106 KINNEY AVE.														
42401	Sulfur dioxide					3	0973	2014	060	8597	12.4	9.6	8.3	7.2	.68	1 HOUR	0								
42406	SO2 max 5-min avg					4	0973	2014	060	6876	19.2	18.4	14.8	9.7	.32	1 HOUR	0								
42601	Nitric oxide (NO)					3	0973	2014	074	8501	128.0	99.8	95.6	87.4	3.59	1 HOUR	0								
42602	Nitrogen dioxide (NO2)					3	0973	2014	074	8509	52.1	47.8	46.0	45.8	6.70	1 HOUR	0								
42603	Oxides of nitrogen (NOx)					3	0973	2014	074	8506	173.8	144.9	143.4	122.1	10.25	1 HOUR	0								
81102	PM10 Total 0-10um STP					3	0973	2014	150	8494	522	381	381	380	37.0	1 HOUR	0								
81102	PM10 Total 0-10um STP					3	0973	2014	150	356	131	123	115	104	36.5	24-HR BLK AVG	0								
88101	PM2.5 - Local Conditions					3	0973	2014	170	8235	39.5	39.5	39.2	39.0	6.08	1 HOUR	0								
88101	PM2.5 - Local Conditions					3	0973	2014	170	343	19.0	18.6	17.9	16.4	6.01	24-HR BLK AVG	0								
Site ID: 46-103-1001	City: Rapid City						County: Pennington				Address: CITY LIBRARY 6TH AND QUINCY														
68105	Ambient Temperature					1	0973	2014	143	53	26.1	25.6	25.3	24.5	8.97*	24 HOUR	0								
68105	Ambient Temperature					2	0973	2014	143	64	27.2	27.0	26.2	25.4	10.93*	24 HOUR	0								
68108	Sample Baro Pressure					1	0973	2014	143	53	683	683	683	682	674.1*	24 HOUR	0								
68108	Sample Baro Pressure					2	0973	2014	143	64	687	684	683	683	675.8*	24 HOUR	0								
81102	PM10 Total 0-10um STP					1	0973	2014	063	60	48	38	35	33	16.7*	24 HOUR	0								
81102	PM10 Total 0-10um STP					2	0973	2014	063	61	56	49	33	32	18.9*	24 HOUR	0								

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Parameter	Unit	P O C	POAO	Year	Meth	Obs	#	1st Max Value	2nd Max Value	3rd Max Value	4th Max Value	Arith. Mean	Duration	Cert & Eval
Site ID: 46-103-1001 City: Rapid City County: Pennington Address: CITY LIBRARY 6TH AND QUINCY														
85101	PM10 - LC	1	0973	2014	063	60	60	46	36	36	30	15.7*	24 HOUR	0
85101	PM10 - LC	2	0973	2014	063	61	61	53	49	32	32	17.8*	24 HOUR	0
88101	PM2.5 - Local Conditions	1	0973	2014	143	55	55	16.0	13.4	12.6	11.6	5.30*	24 HOUR	S 0
88101	PM2.5 - Local Conditions	2	0973	2014	143	65	65	17.0	16.2	11.3	11.3	5.63*	24 HOUR	S 0
Site ID: 46-127-0001 City: Not in a city County: Union Address: 31986 475th Ave														
42401	Sulfur dioxide	3	0973	2014	560	8666	8666	14.8	5.1	4.5	4.1	.70	1 HOUR	S 0
42406	SO2 max 5-min avg	4	0973	2014	560	8669	8669	23.7	18.2	17.2	10.7	.44	1 HOUR	0
42601	Nitric oxide (NO)	3	0973	2014	074	8640	8640	48.4	39.9	27.5	26.7	.64	1 HOUR	0
42602	Nitrogen dioxide (NO2)	3	0973	2014	074	8640	8640	32.7	31.0	28.4	27.8	2.98	1 HOUR	S 0
42603	Oxides of nitrogen (NOx)	3	0973	2014	074	8640	8640	71.2	61.3	58.7	41.0	3.65	1 HOUR	0
44201	Ozone	3	0973	2014	047	8716	8716	.067	.063	.062	.062	.0353	8-HR RUN	S 0
AVG BEGIN														
HOUR														
61103	Wind Speed - Resultant	3	0973	2014	020	8751	8751	33.3	33.1	32.1	30.3	7.37	1 HOUR	0
61104	Wind Direction - Resultant	3	0973	2014	020	8752	8752	359.9	359.9	359.9	359.8	201.04	1 HOUR	0
61106	Std Dev Hz Wind Direction	3	0973	2014	020	8754	8754	71.4	64.5	64.2	63.5	13.17	1 HOUR	0
62101	Outdoor Temperature	3	0973	2014	040	8681	8681	113	112	110	109	50.0	1 HOUR	0
81102	PM10 Total 0-10um STP	3	0973	2014	150	363	363	77	74	69	63	18.1	24-HR BLK	S 0
AVG														
81102	PM10 Total 0-10um STP	3	0973	2014	150	8647	8647	287	263	254	247	18.6	1 HOUR	S 0
(25 C)														
88101	PM2.5 - Local Conditions	3	0973	2014	170	8411	8411	83.1	82.6	76.0	75.0	8.62	1 HOUR	S 0
(LC)														
88101	PM2.5 - Local Conditions	3	0973	2014	170	348	348	35.4	34.7	34.3	28.8	8.58	24-HR BLK	S 0
(LC)														
AVG														

Note: The * indicates that the mean does not satisfy summary criteria.

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PARAMETER	METHOD CODE	COLLECTION METHOD	ANALYSIS METHOD
42101	554	INSTRUMENTAL	Gas Filter Correlation Thermo Electron 481-TLE
42401	060	INSTRUMENTAL	PULSED FLUORESCENT
42401	560	INSTRUMENTAL	Pulsed Fluorescent 43C-TLE/43i-TLE
42406	060	INSTRUMENTAL	PULSED FLUORESCENT
42406	560	INSTRUMENTAL	PULSED FLUORESCENT
42600	674	Instrumental	Chemiluminescence Thermo Electron 42C-Y, 42i-Y
42601	074	INSTRUMENTAL	CHEMILUMINESCENCE
42601	674	Instrumental	Chemiluminescence Thermo Electron 42C-Y, 42i-Y
42602	074	INSTRUMENTAL	CHEMILUMINESCENCE
42603	074	INSTRUMENTAL	CHEMILUMINESCENCE
44201	047	INSTRUMENTAL	ULTRA VIOLET
61103	020	INSTRUMENTAL	VECTOR SUMMATION
61104	020	INSTRUMENTAL	VECTOR SUMMATION
61106	020	INSTRUMENTAL	ARITHMETIC STANDARD DEVIATION
62101	040	INSTRUMENTAL	ELECTRONIC OR MACHINE AVG.
62201	060	Instrumental	Vaisala 435C RH/AT Sensor
68103	810	Met One SASS	Electronic
68104	810	Met One SASS	Electronic
68105	143	R & P Model 2000 PM-2.5 FEM Air Sampler	Electronic
68105	810	Met One SASS	Electronic
68106	810	Met One SASS	Barometric Sensor
68107	810	Met One SASS	Barometric Sensor
68108	143	R & P Model 2000 PM-2.5 FEM Air Sampler	Barometric Sensor
68108	810	Met One SASS	Barometric Sensor
81102	063	HI-VOL SA/GMW-1200	GRAVIMETRIC
81102	122	INSTRUMENT MET ONE 4 MODELS	BETA ATTENUATION
81102	150	T A Series FH 62 C14 Continuous	Beta Attenuation
85101	063	HI-VOL-SA/GMW1200	GRAVIMETRIC
86101	185	Met One BAM-1020 System	Paired Beta Difference
88101	143	R & P Model 2000 PM-2.5 Air Sampler w/VSSC	Gravimetric
88101	170	Met One BAM-1020 Mass Monitor w/VSSC	Beta Attenuation
88102	811	Met One SASS Teflon	Energy dispersive XRF
88103	811	Met OneSASS Teflon	Energy dispersive XRF
88104	811	Met One SASS Teflon	Energy dispersive XRF

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88107	811	Met One SASS Teflon	Energy dispersive XRF
88109	811	Met One SASS Teflon	Energy dispersive XRF
88110	811	Met One SASS Teflon	Energy dispersive XRF
88111	811	Met One SASS Teflon	Energy dispersive XRF
88112	811	Met One SASS Teflon	Energy dispersive XRF
88113	811	Met One SASS Teflon	Energy Dispersive XRF
88114	811	Met One SASS Teflon	Energy dispersive XRF
88115	811	Met One SASS Teflon	Energy Dispersive XRF
88117	811	Met One SASS Teflon	Energy Dispersive XRF
88118	811	Met One SASS Teflon	Energy Dispersive XRF
88126	811	Met One SASS Teflon	Energy Dispersive XRF
88128	811	Met One SASS Teflon	Energy Dispersive XRF
88131	811	Met One SASS Teflon	Energy Dispersive XRF
88132	811	Met One SASS Teflon	Energy Dispersive XRF
88136	811	Met One SASS Teflon	Energy Dispersive XRF
88140	811	Met One SASS Teflon	Energy Dispersive XRF
88152	811	Met One SASS Teflon	Energy Dispersive XRF
88154	811	Met One SASS Teflon	Energy Dispersive XRF
88160	811	Met One SASS Teflon	Energy Dispersive XRF
88161	811	Met One SASS Teflon	Energy Dispersive XRF
88164	811	Met One SASS Teflon	Energy Dispersive XRF
88165	811	Met One SASS Teflon	Energy Dispersive XRF
88166	811	Met One SASS Teflon	Energy Dispersive XRF
88167	811	Met One SASS Teflon	Energy Dispersive XRF
88168	811	Met One SASS Teflon	Energy Dispersive XRF
88169	811	Met One SASS Teflon	Energy Dispersive XRF
88176	811	Met One SASS Teflon	Energy Dispersive XRF
88180	811	Met One SASS Teflon	Energy Dispersive XRF
88184	811	Met One SASS Teflon	Energy Dispersive XRF
88185	811	Met One SASS Teflon	Energy Dispersive XRF
88301	812	Met One SASS Nylon	Energy Dispersive XRF
88302	812	Met One SASS Nylon	Energy Dispersive XRF
88303	812	Met One SASS Nylon	Ion Chromatography
			Ion Chromatography

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PARAMETER	METHOD CODE	COLLECTION METHOD	ANALYSIS METHOD
88306	812	Met One SASS Nylon	Ion Chromatography
88355	839	URG 3000N w/Pall Quartz filter and Cyclone In.	Ion Chromatography
88357	840	URG 3000N w/Pall Quartz filter and Cyclone In.	OC1+OC2+OC3+OC4+ (OP (TOT)) = (88374+88375+88376+88377+88388)
88370	838	URG 3000N w/Pall Quartz filter and Cyclone In.	EC1+EC2+EC3 - (OP (TOT)) = (88383+88384+88385 - 88388)
88374	841	URG 3000N w/Pall Quartz filter and Cyclone In.	OC1+OC2+OC3+OC4+ (OP (TOT)) = (88374+88375+88376+88377+88378)
88375	841	URG 3000N w/Pall Quartz filter and Cyclone In.	IMPROVE_A
88376	841	URG 3000N w/Pall Quartz filter and Cyclone In.	IMPROVE_A
88377	841	URG 3000N w/Pall Quartz filter and Cyclone In.	IMPROVE_A
88378	842	URG 3000N w/Pall Quartz filter and Cyclone In.	IMPROVE_A TOR
88380	831	URG 3000N w/Pall Quartz filter and Cyclone In.	EC1+EC2+EC3 - (OP (TOT)) = (88383+88384+88385 - 88378)
88383	841	URG 3000N w/Pall Quartz filter and Cyclone In.	IMPROVE_A
88384	841	URG 3000N w/Pall Quartz filter and Cyclone In.	IMPROVE_A
88385	841	URG 3000N w/Pall Quartz filter and Cyclone In.	IMPROVE_A
88388	826	URG 3000N w/Pall Quartz filter and Cyclone In.	IMPROVE_A TOR
88403	812	Met One SASS Nylon	Ion Chromatography
88502	810	Met One SASS Teflon	Gravimetric

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POAOS USED IN THIS REPORT

POAO	AGENCY DESCRIPTION
0973	South Dakota Dept Environmental Protection Air Quality Prog

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CERTIFICATION EVALUATION AND CONCURRENCE FLAG MEANINGS

FLAG	MEANING
M	The monitoring organization has revised data from this monitor since the most recent certification letter received from the state.
N	The certifying agency has submitted the certification letter and required summary reports, but the certifying agency and/or EPA has determined that issues regarding the quality of the ambient concentration data cannot be resolved due to data completeness, the lack of performed quality assurance checks or the results of uncertainty statistics shown in the AWP255 report or the certification and quality assurance report.
S	The certifying agency has submitted the certification letter and required summary reports. A value of "S" conveys no Regional assessment regarding data quality per se. This flag will remain until the Region provides an "N" or "Y" concurrence flag.
U	Uncertified. The certifying agency did not submit a required certification letter and summary reports for this monitor even though the due date has passed, or the state's certification letter specifically did not apply the certification to this monitor.
X	Certification is not required by 40 CFR 58.15 and no conditions apply to be the basis for assigning another flag value
Y	The certifying agency has submitted a certification letter, and EPA has no unresolved reservations about data quality (after reviewing the letter, the attached summary reports, the amount of quality assurance data submitted to AQS, the quality statistics, and the highest reported concentrations).

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