CHESAPEAKE ENERGY

EH&S/Regulatory

October 25, 2018

VIA EMAIL TO R6WellCompletion@epa.gov

Director; Air, Pesticides, and Toxics Division
U.S. Environmental Protection Agency – Region 6
1445 Ross Avenue
Dallas, TX 75202

Re: NSPS Subpart OOOOa Annual Report – Oklahoma
Chesapeake Operating, L.L.C.

Dear Sir or Madam:

Per 40 C.F.R. § 60.5420a(b), Chesapeake Operating, L.L.C. is submitting the annual report for affected facilities under 40 C.F.R. §60.5365a for the reporting period beginning on August 2, 2017.

This certification is based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

If you have any questions, please contact Jason Conway at (405) 935-6351.

Sincerely,

Chesapeake Operating, L.L.C.

Rich Snyder
Vice President – Mid-Continent Business Unit

Enclosure

cc: State of Oklahoma
Oklahoma State Department of Health, Air Quality Service
P.O. Box 53551
Oklahoma City, OK, 73152
VIA CERTIFIED MAIL 9414 8149 0108 4218 5848 85

NSPS SUBPART OOOOa REPORT- WELL AFFECTED FACILITIES
Chesapeake Operating, L.L.C. 8/2/2017-8/1/2018

Well Name	State	County	Facility Name	United States Well Number	Latitude (° NAD83)	Longitude (° NAD83)	Onset of Flowback Following Hydraulic Fracturing or Refracturing (Date/Time)	Flow Directed to Separator (Date/Time)	Returned to Initial Flowback Stage (Date/Time)	Time Well Shut in and Flowback Equipment Permanently Disconnected or the Startup of Production (Date/Time)	Duration of Flowback (Hours)	Duration of Recovery (Hours)	Disposition of Recovery	Duration of Combustion (Hours)	Duration of Venting (Hours)	Starting Date and Ending Date for the Period the Well Operated Under the Exception (date)	Specific Reasons for Venting in Lieu of Capture or Combustion and/or for the Claim of Technical Infeasibility	Record of Deviations
ADMIRAL 1-19-13 1HC	OKLAHOMA	BLAINE	ADMIRAL 1-19-13 1HC PAD	3501123834	36.158229	-98.546285	10/14/17 4:00 PM	10/14/17 4:00 PM		10/14/17 4:00 PM	0	0	Sales	0	0			No Deviation
ATLAS 33-26-17 1H	OKLAHOMA	WOODS	ATLAS 33-26-17 1H PAD	3515124527	36.696872	-99.042633	7/10/18 2:00 PM	7/10/18 2:00 PM		7/10/18 2:00 PM	0	0	Sales	0	0			No Deviation
BOLLENBACH 36-17-6 1H	OKLAHOMA	KINGFISHER	BOLLENBACH 36-17-6 PAD	3507325775	35.911913	-97.794975	11/10/17 12:00 PM	11/10/17 12:00 PM		11/10/17 12:00 PM	0	0	Sales	0	0			No Deviation
BOLLENBACH 36-17-6 2H	OKLAHOMA	KINGFISHER	BOLLENBACH 36-17-6 PAD	3507325776	35.91183	-97.794974	11/11/17 8:00 PM	11/11/17 8:00 PM		11/11/17 8:00 PM	0	0	Sales	0	0			No Deviation
BRADFORD 5-18-5 1H	OKLAHOMA	KINGFISHER	BRADFORD 5-18-5 PAD	3507325574	36.058739	-97.757357	8/10/17 4:00 PM	8/10/17 4:00 PM		8/10/17 4:00 PM	0	0	Sales	0	0			No Deviation
BRAVO 28-20-12 1HC	OKLAHOMA	MAJOR	BRAVO 28-20-12 1HC PAD	3509325083	36.187026	-98.492609	10/6/17 1:00 PM	10/6/17 1:00 PM		10/6/17 1:00 PM	0	0	Sales	0	0			No Deviation
BUCHMANN 8-18-7 1H	OKLAHOMA	KINGFISHER	BUCHMANN 8-18-7 PAD	3507325818	36.044956	-97.9778	1/10/18 4:00 PM	1/10/18 4:00 PM		1/10/18 4:00 PM	0	0	Sales	0	0			No Deviation
BULLIS 1-17-7 1HC	OKLAHOMA	KINGFISHER	BULLIS 1-17-7 PAD	3507325870	35.971831	-97.897096	3/9/18 3:00 PM	3/9/18 3:00 PM		3/9/18 3:00 PM	0	0	Sales	0	0			No Deviation
BULLIS 1-17-7 2HC	OKLAHOMA	KINGFISHER	BULLIS 1-17-7 PAD	3507325888	35.971832	-97.896995	3/9/18 2:00 PM	3/9/18 2:00 PM		3/9/18 2:00 PM	0	0	Sales	0	0			No Deviation
BULLIS 1-17-7 3HC	OKLAHOMA	KINGFISHER	BULLIS 1-17-7 PAD	3507325889	35.971833	-97.896893	3/9/18 2:00 PM	3/9/18 2:00 PM		3/9/18 2:00 PM	0	0	Sales	0	0			No Deviation
CITRA 9&4-20-12 1H	OKLAHOMA	MAJOR	CITRA 9&4-20-12 PAD	3509325064	36.216174	-98.481542	8/9/17 12:00 PM	8/9/17 12:00 PM		8/9/17 12:00 PM	0	0	Sales	0	0			No Deviation
CITRA 9&4-20-12 2H	OKLAHOMA	MAJOR	CITRA 9&4-20-12 PAD	3509325065	36.216174	-98.48144	8/9/17 1:00 PM	8/9/17 1:00 PM		8/9/17 1:00 PM	0	0	Sales	0	0			No Deviation
CURTIS 29-18-6 2H	OKLAHOMA	KINGFISHER	CURTIS 29-18-6 PAD	3507325568	36.016082	-97.867411	8/11/17 5:00 PM	8/11/17 5:00 PM		8/11/17 5:00 PM	0	0	Sales	0	0			No Deviation
CURTIS 29-18-6 3H	OKLAHOMA	KINGFISHER	CURTIS 29-18-6 PAD	3507325569	36.016	-97.86741	8/11/17 4:00 PM	8/11/17 4:00 PM		8/11/17 4:00 PM	0	0	Sales	0	0			No Deviation
EARL 14-18-6 1H	OKLAHOMA	KINGFISHER	EARL 14-18-6 PAD	3507325678	36.029839	-97.808967	9/7/17 4:00 PM	9/7/17 4:00 PM		9/7/17 4:00 PM	0	0	Sales	0	0			No Deviation
EARL 14-18-6 2H	OKLAHOMA	KINGFISHER	EARL 14-18-6 PAD	3507325679	36.029921	-97.808967	9/7/17 4:00 PM	9/7/17 4:00 PM		9/7/17 4:00 PM	0	0	Sales	0	0			No Deviation
EARL 14-18-6 3H	OKLAHOMA	KINGFISHER	EARL 14-18-6 PAD	3507325680	36.030004	-97.808968	9/7/17 4:00 PM	9/7/17 4:00 PM		9/7/17 4:00 PM	0	0	Sales	0	0			No Deviation
EARL 14-18-6 4HC	OKLAHOMA	KINGFISHER	EARL 14-18-6 4HC PAD	3507325919	36.029905	-97.804924	4/4/18 2:00 PM	4/4/18 2:00 PM		4/4/18 2:00 PM	0	0	Sales	0	0			No Deviation
FARRAR 11-18-6 2H	OKLAHOMA	KINGFISHER	FARRAR 11-18-6 PAD	3507325650	36.044229	-97.807834	8/18/17 3:00 PM	8/18/17 3:00 PM		8/18/17 3:00 PM	0	0	Sales	0	0			No Deviation
FARRAR 11-18-6 3H	OKLAHOMA	KINGFISHER	FARRAR 11-18-6 PAD	3507325651	36.044311	-97.807833	8/18/17 3:00 PM	8/18/17 3:00 PM		8/18/17 3:00 PM	0	0	Sales	0	0			No Deviation
GALENA 19&18-20-11 1H	OKLAHOMA	MAJOR	GALENA 19&18-20-11 1H PAD	3509325073	36.188276	-98.422181	8/16/17 4:00 PM	8/16/17 4:00 PM		8/16/17 4:00 PM	0	0	Sales	0	0			No Deviation
GM 12-17-7 1HC	OKLAHOMA	KINGFISHER	GM 12-17-7 PAD	3507325966	35.970486	-97.897092	5/18/18 3:00 PM	5/18/18 3:00 PM		5/18/18 3:00 PM	0	0	Sales	0	0			No Deviation
GM 12-17-7 2HC	OKLAHOMA	KINGFISHER	GM 12-17-7 PAD	3507325967	35.970486	-97.89699	5/18/18 3:00 PM	5/18/18 3:00 PM		5/18/18 3:00 PM	0	0	Sales	0	0			No Deviation
GM 12-17-7 3HC	OKLAHOMA	KINGFISHER	GM 12-17-7 PAD	3507325968	35.970487	-97.896889	5/18/18 3:00 PM	5/18/18 3:00 PM		5/18/18 3:00 PM	0	0	Sales	0	0			No Deviation
HARVESTER 11-25-12 1H	OKLAHOMA	ALFALFA	HARVESTER 11-25-12 PAD	3500323278	36.666164	-98.460354	9/13/17 12:00 PM	9/13/17 12:00 PM		9/13/17 12:00 PM	0	1	Sales	0	0			No Deviation
JOHN 15-16-6 1HC	OKLAHOMA	KINGFISHER	JOHN 15-16-6 1HC PAD	3507325904	35.857385	-97.829813	3/16/18 12:00 PM	3/16/18 12:00 PM		3/16/18 12:00 PM	0	0	Sales	0	0			No Deviation
JUSTIN 8-17-6 1H	OKLAHOMA	KINGFISHER	JUSTIN 8-17-6 PAD	3507325633	35.969966	-97.865562	10/20/17 3:00 PM	10/20/17 3:00 PM		10/20/17 3:00 PM	0	0	Sales	0	0			No Deviation
LIBERTY 28-18-6 2H	OKLAHOMA	KINGFISHER	LIBERTY 28-18-6 PAD	3507325785	36.014158	-97.843392	12/1/17 12:00 PM	12/1/17 12:00 PM		12/1/17 12:00 PM	0	0	Sales	0	0			No Deviation
LIBERTY 28-18-6 3H	OKLAHOMA	KINGFISHER	LIBERTY 28-18-6 PAD	3507325786	36.014076	-97.843392	12/1/17 2:00 PM	12/1/17 2:00 PM		12/1/17 2:00 PM	0	0	Sales	0	0			No Deviation
LIGHTLE 4-18-6 2HC	OKLAHOMA	KINGFISHER	LIGHTLE 4-18-6 2HC PAD	3507325829	36.058999	-97.844473	1/17/18 6:00 PM	1/17/18 6:00 PM		1/17/18 6:00 PM	0	0	Sales	0	0			No Deviation
MUEGGENBORG 5-17-6 1H	OKLAHOMA	KINGFISHER	JUSTIN 8-17-6 PAD	3507325622	35.969969	-97.865764	10/20/17 3:00 PM	10/20/17 3:00 PM		10/20/17 3:00 PM	0	0	Sales	0	0			No Deviation
MUEGGENBORG 5-17-6 2H	OKLAHOMA	KINGFISHER	JUSTIN 8-17-6 PAD	3507325623	35.969967	-97.865663	10/20/17 3:00 PM	10/20/17 3:00 PM		10/20/17 3:00 PM	0	0	Sales	0	0			No Deviation
MUEGGENBORG 5-17-6 3H	OKLAHOMA	KINGFISHER	JUSTIN 8-17-6 PAD	3507325624	35.969965	-97.86546	10/20/17 3:00 PM	10/20/17 3:00 PM		10/20/17 3:00 PM	0	0	Sales	0	0			No Deviation
NUGGET 34-20-12 1HC	OKLAHOMA	BLAINE	NUGGET 34-20-12 1HC PAD	3501123814	36.159224	-98.475176	8/23/17 3:00 PM	8/23/17 3:00 PM		8/23/17 3:00 PM	0	1	Sales	0	0			No Deviation
PATTON 25&24-26-11 1H	OKLAHOMA	ALFALFA	PATTON 25&24-26-11 PAD	3500323274	36.69619	-98.332142	8/30/17 2:00 PM	8/30/17 2:00 PM		8/30/17 2:00 PM	0	1	Sales	0	0			No Deviation
PATTON 25&24-26-11 2H	OKLAHOMA	ALFALFA	PATTON 25&24-26-11 PAD	3500323275	36.696273	-98.332142	8/22/17 10:00 PM	8/22/17 10:00 PM		8/22/17 10:00 PM	0	0	Sales	0	0			No Deviation
PERDUE 23-17-7 1H	OKLAHOMA	KINGFISHER	PERDUE 23-17-7 PAD	3507325839	35.926944	-97.913724	1/26/18 1:00 PM	1/26/18 1:00 PM		1/26/18 1:00 PM	0	0	Sales	0	0			No Deviation
PERDUE 23-17-7 2H	OKLAHOMA	KINGFISHER	PERDUE 23-17-7 PAD	3507325855	35.926945	-97.913825	1/26/18 3:00 PM	1/26/18 3:00 PM		1/26/18 3:00 PM	0	0	Sales	0	0			No Deviation
POLLARD 15-18-6 1H	OKLAHOMA	KINGFISHER	POLLARD 15-18-6 1H PAD	3507325796	36.042956	-97.82448	4/3/18 2:00 PM	4/3/18 2:00 PM		4/3/18 2:00 PM	0	0	Sales	0	0			No Deviation
STATES 15-18-6 4HC	OKLAHOMA	KINGFISHER	STATES 15-18-6 4HC PAD	3507326040	36.04298	-97.819639	6/18/18 12:00 PM	6/18/18 12:00 PM		6/18/18 12:00 PM	0	0	Sales	0	0			No Deviation
STUTEVILLE 23-17-7 3H	OKLAHOMA	KINGFISHER	STUTEVILLE 23-17-7 PAD	3507326002	35.926473	-97.920413	6/4/18 7:00 PM	6/4/18 7:00 PM		6/4/18 7:00 PM	0	0	Sales	0	0			No Deviation
STUTEVILLE 23-17-7 4H	OKLAHOMA	KINGFISHER	STUTEVILLE 23-17-7 PAD	3507326003	35.926474	-97.920515	6/5/18 11:00 AM	6/5/18 11:00 AM		6/5/18 11:00 AM	0	0	Sales	0	0			No Deviation
VADDER TRUST 8-18-5 1H	OKLAHOMA	KINGFISHER	BRADFORD 5-18-5 PAD	3507325576	36.058657	-97.757357	8/10/17 2:00 PM	8/10/17 2:00 PM		8/10/17 2:00 PM	0	0	Sales	0	0			No Deviation
VIRGIL 35-21-19 1HC	OKLAHOMA	WOODWARD	VIRGIL 35-21-19 1HC PAD	3515323605	36.24765	-99.209379	9/21/17 10:00 AM	9/21/17 10:00 AM		9/21/17 10:00 AM	0	0	Sales	0	0			No Deviation
WESLEY 31-24-13 1H	OKLAHOMA	WOODS	WESLEY 31-24-13 1H PAD	3515124526	36.52169	-98.626808	6/23/18 6:00 AM	6/23/18 6:00 AM		6/23/18 6:00 AM	0	1	Sales	0	0			No Deviation

NSPS Subpart OOOOa Annual Report for period beginning 8/2/2017 - collection of fugitive emissions components at a well site

Operator Name	CHESAPEAKE OPERATING LLC
Monitoring Instrument	FLIR GF320
Serial Number	44401080
Surveys Performed By	Nick Kauk
Operator Training and Experience	Trained and Certified for Optical Gas Imaging October 2014

Site Number	Site Name	Surface Latitude Value	Surface Longitude Value	OOOOa Survey Date	OOOOa Survey Start Time	OOOOa Survey End Time	Ambient Temperature (F)	Sky Conditions	Max Observed Wind Speed (mph)	Number of Leaking Components	Type of Leaking Component	Repair Date	Repair Verification Method	Number and type of leaking components not repaired	Number and type of difficult to monitor or unsafe to monitor	Number and type of components placed on delay of repair	Deviation from monitoring plan?
60.5420a(b)(1)(ii)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(7)(i)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(x)	60.5420a(b)(7)(xiii)	60.5420a(b)(7)(viii)	60.5420a(b)(7)(ix)	60.5420a(b)(7)(xi)	60.5420a(b)(7)(vi)
929479	CHINOOK 26-20-12 B PAD	36.17360	-98.44645	8/2/2017	13:15	13:45	73	Sunny	6	1	Fitting	8/10/2017	M21	0	0	0	N
928846	OK STATE 18-7-6 PAD	35.94272	-97.88882	8/16/2017	10:30	11:30	87	Sunny	9	1	Fitting	8/16/2017	OGI	0	0	0	N
929435	OK STATE 18-17-6 3H PAD	35.94254	-97.87277	8/16/2017	12:00	13:30	87	Sunny	9	2	Thief Hatch (1) Fitting (1)	8/16/2017	OGI	0	0	0	N
929433	CURTIS 29-18-6 PAD	36.01608	-97.86741	8/16/2017	14:00	15:30	87	Sunny	9	3	Fitting (1) Valve (1) Connection (1)	8/16/2017	OGI	0	0	0	N
929379	BRADFORD 5-18-5 PAD	36.05874	-97.75736	8/28/2017	12:30	13:00	83	Sunny	12	3	Connection (2) Fitting (1)	8/28/2017	OGI	0	0	0	N
929248	GALENA 19&18-20-11 1H PAD	36.18828	-98.42218	9/5/2017	13:00	13:30	76	Sunny	10	0	N/A	N/A	N/A	0	0	0	N
929132	CITRA 9&4-20-12 PAD	36.21617	-98.48154	9/5/2017	14:00	14:30	78	Sunny	5	0	N/A	N/A	N/A	0	0	0	N
929535	NUGGET 34-20-12 1HC PAD	36.15922	-98.47518	9/6/2017	8:30	9:00	51	Sunny	1	1	Connection	9/6/2017	OGI	0	0	0	N
929430	FARRAR 11-18-6 PAD	36.04423	-97.80783	9/6/2017	11:00	11:30	67	Sunny	1	2	Valve (1) Fitting (1)	9/6/2017		0	0	0	N
928833	FARRAR 11-18-6 1H PAD	36.04291	-97.81078	9/6/2017	12:30	13:00	68	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
927977	HULS USA 13-11-19 2H PAD	35.42260	-99.16304	9/7/2017	12:15	12:45	79	Sunny	6	0	N/A	N/A	N/A	0	0	0	N
913382	MOSS 7-11-18 1H PAD	35.43544	-99.14045	9/7/2017	13:00	13:30	82	Sunny	8	0	N/A	N/A	N/A	0	0	0	N
928616	PHILLIPS 22-11-19 1H PAD	35.40804	-99.19213	9/7/2017	11:30	12:00	74	Sunny	4	0	N/A	N/A	N/A	0	0	0	N
911563	PENDLETON 11-11-19 2H PAD	35.43552	-99.18560	9/7/2017	8:15	8:45	59	Sunny	4	0	N/A	N/A	N/A	0	0	0	N
928759	CALDWELL 22-18-6 1H PAD	36.01552	-97.82252	9/12/2017	13:00	13:30	76	Sunny	2	1	Thief hatch	9/12/2017	OGI	0	0	0	N
929005	INGLE 32-18-6 1H PAD	35.99950	-97.86697	9/12/2017	9:45	10:15	65	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
928753	DARLENE 28-18-6 1H PAD	36.01424	-97.84769	9/12/2017	11:30	12:00	76	Sunny	3	0	N/A	N/A	N/A	0	0	0	N
928754	VINCENT 25-18-7 1H PAD	36.00134	-97.89520	9/12/2017	8:30	9:00	55	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
928744	EUGENE 29-18-6 1H PAD	36.00103	-97.85563	9/12/2017	10:30	11:00	65	Sunny	1	1	Connection	9/12/2017	OGI	0	0	0	N
913373	SALISBURY 1-11-18 1H PAD	35.45005	-99.05441	9/13/2017	8:00	8:30	56	Sunny	2	1	Fitting	9/13/2017	OGI	0	0	0	N

NSPS Subpart OOOOa Annual Report for period beginning 8/2/2017 - collection of fugitive emissions components at a well site

Operator Name	CHESAPEAKE OPERATING LLC
Monitoring Instrument	FLIR GF320
Serial Number	44401080
Surveys Performed By	Nick Kauk
Operator Training and Experience	Trained and Certified for Optical Gas Imaging October 2014

Site Number	Site Name	Surface Latitude Value	Surface Longitude Value	OOOOa Survey Date	OOOOa Survey Start Time	OOOOa Survey End Time	Ambient Temperature (F)	Sky Conditions	Max Observed Wind Speed (mph)	Number of Leaking Components	Type of Leaking Component	Repair Date	Repair Verification Method	Number and type of leaking components not repaired	Number and type of difficult to monitor or unsafe to monitor	Number and type of components placed on delay of repair	Deviation from monitoring plan?
60.5420a(b)(1)(ii)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(7)(i)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(x)	60.5420a(b)(7)(xiii)	60.5420a(b)(7)(viii)	60.5420a(b)(7)(ix)	60.5420a(b)(7)(xi)	60.5420a(b)(7)(vi)
913211	DON 8-11-18 4H PAD	35.44999	-99.12344	9/13/2017	7:30	8:00	55	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
913386	STEHR 16-11-17 2H PAD	35.43552	-99.00929	9/13/2017	9:00	9:30	63	Sunny	2	1	Connection	9/13/2017	OGI	0	0	0	N
913228	KENNETH 6-11-18 2H PAD	35.45004	-99.14464	9/13/2017	6:45	7:15	51	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
928844	MUEGGENBORG 7-17-6 1H PAD	35.97035	-97.88770	9/14/2017	14:00	14:30	75	Sunny	2	4	Thief Hatch (2) Connection (1) Fitting (1)	9/14/2017	OGI	0	0	0	N
928755	THEMER 6-17-6 1H PAD	35.97162	-97.87641	9/14/2017	11:30	12:00	83	Sunny	2	3	Thief hatch (3)	9/14/2017	OGI	0	0	0	N
928617	FRIEDRICH 23-11-17 1H PAD	35.40807	-98.96264	9/18/2017	12:45	13:15	81	Sunny	7	0	N/A	N/A	N/A	0	0	0	N
913458	ANNAKATE 16-11-16 2H PAD	35.42237	-98.89865	9/18/2017	13:30	14:00	83	Sunny	8	0	N/A	N/A	N/A	0	0	0	N
928434	SCHUMACHER 5-11-17 1H PAD	35.45150	-99.01916	9/18/2017	14:30	15:00	83	Sunny	9	0	N/A	N/A	N/A	0	0	0	N
928745	HASTY 3-18-6 1H PAD	36.05867	-97.82253	9/20/2017	10:00	10:30	78	Sunny	10	0	N/A	N/A	N/A	0	0	0	N
928845	KOKOJAN 27-19-6 1H PAD	36.08788	-97.82073	9/20/2017	12:30	13:00	85	Sunny	10	0	N/A	N/A	N/A	0	0	0	N
928752	LIGHTLE 4-18-6 1H PAD	36.05886	-97.84173	9/20/2017	11:00	11:30	83	Sunny	9	0	N/A	N/A	N/A	0	0	0	N
928818	HILL 2-18-6 PAD	36.05867	-97.81302	9/20/2017	8:30	9:00	78	Sunny	10	1	Flange	10/11/2017	M21	0	0	0	N
927866	MERITT 12-18-6 1H PAD	36.04416	-97.79759	9/21/2017	8:30	9:00	80	Sunny	10	0	N/A	N/A	N/A	0	0	0	N
929467	EARL 14-18-6 PAD	36.02984	-97.80897	9/21/2017	12:30	13:30	93	Sunny	10	2	Connection (1) Thief hatch (1)	10/13/2017	M21	0	0	0	N
929346	ANDERSON 31-19-5 PAD	36.07311	-97.77957	9/21/2017	10:00	10:30	87	Sunny	10	0	N/A	N/A	N/A	0	0	0	N
920335	FAWVER 2-11-18 1H PAD	35.46598	-99.06596	9/28/2017	9:00	9:30	57	Overcast	2	2	Fitting (2)	9/28/2017	OGI	0	0	0	N
929348	CAULDER 31-23-14 1H PAD	36.42034	-98.73255	10/23/2017	14:30	15:00	73	Sunny	8	0	N/A	N/A	N/A	0	0	0	N
929494	JUSTIN 8-17-6 PAD	35.96997	-97.86556	12/6/2017	13:00	14:00	41	Sunny	4	5	Flange (3) Connection (1) Fitting (1)	12/6/2017	OGI	0	0	0	N
929438	PEARL 3-18-6 PAD	36.05887	-97.83104	12/11/2017	7:30	8:00	29	Sunny	2	0	N/A	N/A	N/A	0	0	0	N

NSPS Subpart OOOOa Annual Report for period beginning 8/2/2017 - collection of fugitive emissions components at a well site

Operator Name	CHESAPEAKE OPERATING LLC
Monitoring Instrument	FLIR GF320
Serial Number	44401080
Surveys Performed By	Nick Kauk
Operator Training and Experience	Trained and Certified for Optical Gas Imaging October 2014

Site Number	Site Name	Surface Latitude Value	Surface Longitude Value	OOOOa Survey Date	OOOOa Survey Start Time	OOOOa Survey End Time	Ambient Temperature (F)	Sky Conditions	Max Observed Wind Speed (mph)	Number of Leaking Components	Type of Leaking Component	Repair Date	Repair Verification Method	Number and type of leaking components not repaired	Number and type of difficult to monitor or unsafe to monitor	Number and type of components placed on delay of repair	Deviation from monitoring plan?
60.5420a(b)(1)(ii)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(7)(i)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(x)	60.5420a(b)(7)(xiii)	60.5420a(b)(7)(viii)	60.5420a(b)(7)(ix)	60.5420a(b)(7)(xi)	60.5420a(b)(7)(vi)
928817	VIVIAN 13-18-6 1H PAD	36.02976	-97.79705	12/11/2017	8:20	8:45	31	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
929387	CAROLYN 30-18-6 PAD	36.01454	-97.87725	12/11/2017	9:00	9:30	31	Sunny	3	0	N/A	N/A	N/A	0	0	0	N
927867	LUBER 28-18-7 1H PAD	36.01585	-97.95331	12/11/2017	10:00	10:30	39	Sunny	3	0	N/A	N/A	N/A	0	0	0	N
929398	SCHUELEIN 12-18-6 PAD	36.05883	-97.79325	12/11/2017	10:45	11:15	41	Sunny	3	0	N/A	N/A	N/A	0	0	0	N
928819	BROWN 27-17-6 PAD	35.91195	-97.82344	12/12/2017	7:30	8:00	28	Sunny	1	0	N/A	N/A	N/A	0	0	0	N
928808	FOSTER 31-17-5 PAD	35.89852	-97.77487	12/12/2017	8:15	8:45	29	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
928843	COPELAND 29-17-6 1H PAD	35.91341	-97.86536	12/12/2017	9:15	9:45	34	Sunny	1	0	N/A	N/A	N/A	0	0	0	N
928697	COLUMBUS 34&27-18-10 PAD	35.98502	-98.24781	12/14/2017	10:30	11:00	43	Sunny	4	0	N/A	N/A	N/A	0	0	0	N
929039	MORRIS 31-18-6 PAD	35.98678	-97.87581	12/18/2017	13:00	13:30	47	Sunny	6	2	Fitting (2)	1/22/2018		0	0	0	N
929885	PERDUE 23-17-7 PAD	35.92694	-97.91372	3/1/2018	14:00	14:30	70	Sunny	20	1	Fitting	3/1/2018	OGI	0	0	0	N
929434	EMERY 31-18-6 PAD	35.98703	-97.88373	3/1/2018	8:30	9:00	70	Sunny	20	0	N/A	N/A	N/A	0	0	0	N
929820	BUCHMANN 8-18-7 PAD	36.04496	-97.97780	3/1/2018	13:30	14:00	70	Sunny	20	0	N/A	N/A	N/A	0	0	0	N
929905	LIGHTLE 4-18-6 2HC PAD	36.05900	-97.84447	3/1/2018	12:00	12:30	70	Sunny	20	0	N/A	N/A	N/A	0	0	0	N
943733	HELEN 1-9 PAD	36.48129	-98.80257	3/7/2018	7:50	8:05	22	Partly Cloudy	2.5	0	N/A	N/A	N/A	0	0	0	N
911563	PENDLETON 11-11-19 2H PAD	35.43552	-99.18560	3/8/2018	14:30	15:00	66	Sunny	15	0	N/A	N/A	N/A	0	0	0	N
928759	CALDWELL 22-18-6 1H PAD	36.01552	-97.82252	3/12/2018	11:30	12:00	24	Sunny	3	0	N/A	N/A	N/A	0	0	0	N
927977	HULS USA 13-11-19 2H PAD	35.42260	-99.16304	3/12/2018	14:30	15:00	48	Sunny	5	0	N/A	N/A	N/A	0	0	0	N
929005	INGLE 32-18-6 1H PAD	35.99950	-97.86697	3/12/2018	9:30	10:00	24	Sunny	3	0	N/A	N/A	N/A	0	0	0	N
928754	VINCENT 25-18-7 1H PAD	36.00134	-97.89520	3/12/2018	8:30	9:00	24	Sunny	3	1	Connector	3/12/2018	OGI	0	0	0	N
913458	ANNAKATE 16-11-16 2H PAD	35.42237	-98.89865	3/12/2018	13:00	13:30	48	Sunny	5	1	Union	3/12/2018	OGI	0	0	0	N

NSPS Subpart OOOOa Annual Report for period beginning 8/2/2017 - collection of fugitive emissions components at a well site

Operator Name	CHESAPEAKE OPERATING LLC
Monitoring Instrument	FLIR GF320
Serial Number	44401080
Surveys Performed By	Nick Kauk
Operator Training and Experience	Trained and Certified for Optical Gas Imaging October 2014

Site Number	Site Name	Surface Latitude Value	Surface Longitude Value	OOOOa Survey Date	OOOOa Survey Start Time	OOOOa Survey End Time	Ambient Temperature (F)	Sky Conditions	Max Observed Wind Speed (mph)	Number of Leaking Components	Type of Leaking Component	Repair Date	Repair Verification Method	Number and type of leaking components not repaired	Number and type of difficult to monitor or unsafe to monitor	Number and type of components placed on delay of repair	Deviation from monitoring plan?
60.5420a(b)(1)(ii)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(7)(i)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(x)	60.5420a(b)(7)(xiii)	60.5420a(b)(7)(viii)	60.5420a(b)(7)(ix)	60.5420a(b)(7)(xi)	60.5420a(b)(7)(vi)
927867	LUBER 28-18-7 1H PAD	36.01585	-97.95331	3/12/2018	7:30	8:00	24	Sunny	3	0	N/A	N/A	N/A	0	0	0	N
929431	BRIDAL 22-18-6 PAD	36.01411	-97.82975	3/12/2018	13:30	14:00	24	Sunny	3	0	N/A	N/A	N/A	0	0	0	N
928744	EUGENE 29-18-6 1H PAD	36.00103	-97.85563	3/13/2018	10:30	11:00	24	Sunny	3	2	Connector (2) Valve (2) Thief Hatch (1)	3/13/2018	OGI	0	0	0	N
913382	MOSS 7-11-18 1H PAD	35.43544	-99.14045	3/14/2018	7:30	8:00	28	Sunny	4	0	N/A	N/A	N/A	0	0	0	N
928616	PHILLIPS 22-11-19 1H PAD	35.40804	-99.19213	3/14/2018	8:00	8:30	28	Sunny	4	0	N/A	N/A	N/A	0	0	0	N
913373	SALISBURY 1-11-18 1H PAD	35.45005	-99.05441	3/14/2018	9:00	9:30	28	Sunny	4	1	Fitting	3/14/2018	OGI	0	0	0	N
913228	KENNETH 6-11-18 2H PAD	35.45004	-99.14464	3/14/2018	6:30	7:00	28	Sunny	4	0	N/A	N/A	N/A	0	0	0	N
929039	MORRIS 31-18-6 PAD	35.98678	-97.87581	3/15/2018	9:00	10:00	46	Sunny	12	6	Thief Hatch (5) Fitting (1)	3/26/2018	OGI	0	0	0	N
928755	THEMER 6-17-6 1H PAD	35.97162	-97.87641	3/15/2018	13:30	14:00	46	Sunny	12	0	N/A	N/A	N/A	0	0	0	N
928697	COLUMBUS 34&27-18-10 PAD	35.98502	-98.24781	3/19/2018	10:30	11:00	43	Overcast	18	1	Valve	3/19/2018	OGI	0	0	0	N
928844	MUEGGENBORG 7-17-6 1H PAD	35.97035	-97.88770	3/19/2018	14:00	14:30	43	Overcast	18	0	N/A	N/A	N/A	0	0	0	N
929387	CAROLYN 30-18-6 PAD	36.01454	-97.87725	3/19/2018	13:30	14:00	43	Overcast	18	0	N/A	N/A	N/A	0	0	0	N
928745	HASTY 3-18-6 1H PAD	36.05867	-97.82253	3/20/2018	15:00	15:30	38	Sunny	11	0	N/A	N/A	N/A	0	0	0	N
928752	LIGHTLE 4-18-6 1H PAD	36.05886	-97.84173	3/20/2018	12:30	13:00	38	Sunny	11	0	N/A	N/A	N/A	0	0	0	N
929438	PEARL 3-18-6 PAD	36.05887	-97.83104	3/20/2018	13:30	14:00	38	Sunny	11	0	N/A	N/A	N/A	0	0	0	N
929494	JUSTIN 8-17-6 PAD	35.96997	-97.86556	3/20/2018	9:30	10:00	38	Overcast	11	4	Fitting (2) Connector (2)	3/20/2018	OGI	0	0	0	N
929398	SCHUELEIN 12-18-6 PAD	36.05883	-97.79325	3/20/2018	14:15	14:45	38	Sunny	11	0	N/A	N/A	N/A	0	0	0	N
929640	RAE 32-18-6 2H PAD	35.98510	-97.86386	3/20/2018	8:30	9:00	38	Overcast	11	0	N/A	N/A	N/A	0	0	0	N
928753	DARLENE 28-18-6 1H PAD	36.01424	-97.84769	3/21/2018	8:00	8:30	28	Sunny	1	0	N/A	N/A	N/A	0	0	0	N
928817	VIVIAN 13-18-6 1H PAD	36.02976	-97.79705	3/21/2018	11:00	11:30	38	Sunny	1	2	Thief Hatch (2)	3/21/2018	OGI	0	0	0	N

NSPS Subpart OOOOa Annual Report for period beginning 8/2/2017 - collection of fugitive emissions components at a well site

Operator Name	CHESAPEAKE OPERATING LLC
Monitoring Instrument	FLIR GF320
Serial Number	44401080
Surveys Performed By	Nick Kauk
Operator Training and Experience	Trained and Certified for Optical Gas Imaging October 2014

Site Number	Site Name	Surface Latitude Value	Surface Longitude Value	OOOOa Survey Date	OOOOa Survey Start Time	OOOOa Survey End Time	Ambient Temperature (F)	Sky Conditions	Max Observed Wind Speed (mph)	Number of Leaking Components	Type of Leaking Component	Repair Date	Repair Verification Method	Number and type of leaking components not repaired	Number and type of difficult to monitor or unsafe to monitor	Number and type of components placed on delay of repair	Deviation from monitoring plan?
60.5420a(b)(1)(ii)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(7)(i)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(x)	60.5420a(b)(7)(xiii)	60.5420a(b)(7)(viii)	60.5420a(b)(7)(ix)	60.5420a(b)(7)(xi)	60.5420a(b)(7)(vi)
927866	MERITT 12-18-6 1H PAD	36.04416	-97.79759	3/21/2018	13:45	14:15	60	Sunny	1	0	N/A	N/A	N/A	0	0	0	N
929430	FARRAR 11-18-6 PAD	36.04423	-97.80783	3/21/2018	14:30	15:00	61	Sunny	1	3	Thief Hatch (2) Valve (1)	3/21/2018	OGI	0	0	0	N
929467	EARL 14-18-6 PAD	36.02984	-97.80897	3/21/2018	9:30	10:00	28	Sunny	1	4	Valve (3) Connector (1)	4/2/2018	M21	0	0	0	N
920335	FAWVER 2-11-18 1H PAD	35.46598	-99.06596	3/22/2018	7:30	8:00	44	Sunny	6	0	N/A	N/A	N/A	0	0	0	N
928434	SCHUMACHER 5-11-17 1H PAD	35.45150	-99.01916	3/22/2018	9:00	9:30	44	Sunny	6	0	N/A	N/A	N/A	0	0	0	N
913386	STEHR 16-11-17 2H PAD	35.43552	-99.00929	3/22/2018	10:30	11:00	44	Sunny	6	0	N/A	N/A	N/A	0	0	0	N
929379	BRADFORD 5-18-5 PAD	36.05874	-97.75736	3/26/2018	15:45	16:15	81	Sunny	10	1	Fitting	3/26/2018	OGI	0	0	0	N
929490	CAIN TRUST 7-18-5 PAD	36.04417	-97.77343	3/26/2018	15:00	15:30	81	Sunny	10	0	N/A	N/A	N/A	0	0	0	N
928833	FARRAR 11-18-6 1H PAD	36.04291	-97.81078	3/26/2018	13:00	13:30	81	Sunny	10	1	Valve	4/16/2018	M21	0	0	0	N
928845	KOKOJAN 27-19-6 1H PAD	36.08788	-97.82073	3/27/2018	10:30	11:00	46	Overcast	4	0	N/A	N/A	N/A	0	0	0	N
928846	OK STATE 18-7-6 PAD	35.94272	-97.88882	3/27/2018	12:00	12:30	46	Overcast	4	0	N/A	N/A	N/A	0	0	0	N
929230	STITT 7-17-6 PAD	35.97026	-97.87519	3/27/2018	12:45	13:15	46	Overcast	4	1	Connector	3/27/2018	OGI	0	0	0	N
928818	HILL 2-18-6 PAD	36.05867	-97.81302	3/27/2018	8:00	8:30	46	Overcast	4	0	N/A	N/A	N/A	0	0	0	N
929346	ANDERSON 31-19-5 PAD	36.07311	-97.77957	3/27/2018	9:30	10:00	46	Overcast	4	0	N/A	N/A	N/A	0	0	0	N
929511	HOSKINS 5-19-12 2H PAD	36.14525	-98.51046	3/28/2018	9:00	9:30	42	Overcast	4	0	N/A	N/A	N/A	0	0	0	N
929535	NUGGET 34-20-12 1HC PAD	36.15922	-98.47518	3/28/2018	10:45	11:15	42	Overcast	2	1	Fitting	3/28/2018	OGI	0	0	0	N
929803	ADMIRAL 1-19-13 1HC PAD	36.15823	-98.54629	3/28/2018	8:00	8:30	42	Overcast	2	1	Valve	3/28/2018	OGI	0	0	0	N
929478	CHINOOK 26-20-12 1H PAD	36.17366	-98.45415	3/28/2018	11:30	12:00	42	Overcast		0	N/A	N/A	N/A	0	0	0	N
929479	CHINOOK 26-20-12 B PAD	36.17360	-98.44645	3/28/2018	12:00	12:30	42	Sunny	2	1	Connector	4/6/2018	OGI	0	0	0	N
929114	HOSKINS 5-19-12 1H PAD	36.14475	-98.49988	3/28/2018	9:45	10:15	42	Overcast	2	0	N/A	N/A	N/A	0	0	0	N

NSPS Subpart OOOOa Annual Report for period beginning 8/2/2017 - collection of fugitive emissions components at a well site

Operator Name	CHESAPEAKE OPERATING LLC
Monitoring Instrument	FLIR GF320
Serial Number	44401080
Surveys Performed By	Nick Kauk
Operator Training and Experience	Trained and Certified for Optical Gas Imaging October 2014

Site Number	Site Name	Surface Latitude Value	Surface Longitude Value	OOOOa Survey Date	OOOOa Survey Start Time	OOOOa Survey End Time	Ambient Temperature (F)	Sky Conditions	Max Observed Wind Speed (mph)	Number of Leaking Components	Type of Leaking Component	Repair Date	Repair Verification Method	Number and type of leaking components not repaired	Number and type of difficult to monitor or unsafe to monitor	Number and type of components placed on delay of repair	Deviation from monitoring plan?
60.5420a(b)(1)(ii)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(7)(i)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(x)	60.5420a(b)(7)(xiii)	60.5420a(b)(7)(viii)	60.5420a(b)(7)(ix)	60.5420a(b)(7)(xi)	60.5420a(b)(7)(vi)
929139	MOSAIC 23&14-20-12 1H PAD	36.18695	-98.44533	4/2/2018	11:00	11:30	34	Overcast	6	1	Fitting	4/2/2018	OGI	0	0	0	N
929107	SCHOEPPEL 16-20-12 1H PAD	36.20290	-98.49049	4/2/2018	13:30	14:00	34	Overcast	6	0	N/A	N/A	N/A	0	0	0	N
929248	GALENA 19&18-20-11 1H PAD	36.18828	-98.42218	4/2/2018	12:30	13:00	34	Overcast	6	1	Connector (1)	4/2/2018	OGI	0	0	0	N
929132	CITRA 9&4-20-12 PAD	36.21617	-98.48154	4/2/2018	14:15	14:45	34	Overcast	6	3	Valve (1) Fitting (2)	5/2/2018	OGI	0	0	0	N
929773	BRAVO 28-20-12 1HC PAD	36.18703	-98.49261	4/6/2018	9:30	10:00	49	Overcast	6	2	Fitting (2)	5/1/2018	M21	0	0	0	N
929146	OSMUS 22-20-10 1H PAD	36.18891	-98.25969	4/6/2018	11:30	12:00	49	Overcast	6	0	N/A	N/A	N/A	0	0	0	N
929133	WILLAMETTE 30&31-20-12 1H PAD	36.18703	-98.51132	4/6/2018	8:30	9:00	49	Overcast	6	2	Connector (1) Valve (1)	5/2/2018	M21	0	0	0	N
928819	BROWN 27-17-6 PAD	35.91195	-97.82344	4/24/2018	9:30	10:00	51	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
928808	FOSTER 31-17-5 PAD	35.89852	-97.77487	4/24/2018	11:00	11:30	51	Sunny	2	5	Valve (2) Fitting (3)	4/24/2018	OGI	0	0	0	N
928751	BOLLENBACH 36-17-6 PAD	35.91191	-97.79498	4/24/2018	10:30	11:00	51	Sunny	2	2	Valve (2)	5/2/2018	M21	0	0	0	N
929435	OK STATE 18-17-6 3H PAD	35.94254	-97.87277	4/24/2018	13:30	14:00	51	Sunny	2	1	Fitting	4/24/2018	OGI	0	0	0	N
929878	JOHN 15-16-6 1HC PAD	35.85739	-97.82981	4/24/2018	8:00	8:30	51	Sunny	2	1	Fitting	4/24/2018	OGI	0	0	0	N
928843	COPELAND 29-17-6 1H PAD	35.91341	-97.86536	4/24/2018	12:30	13:00	51	Sunny	2	0	N/A	N/A	N/A	0	0	0	N
929907	EARL 14-18-6 4HC PAD	36.02991	-97.80492	4/25/2018	13:00	13:30	44	Overcast	14	2	Fitting (2)	4/25/2018	OGI	0	0	0	N
929433	CURTIS 29-18-6 PAD	36.01608	-97.86741	4/25/2018	10:30	11:00	44	Overcast	14	2	Regulator (1) Fitting (1)	4/25/2018	OGI	0	0	0	N
929432	LIBERTY 28-18-6 PAD	36.01416	-97.84339	4/25/2018	12:00	12:30	44	Overcast	14	2	Fitting (2)	4/25/2018	OGI	0	0	0	N
929110	STEPHEN 26-18-17 1H PAD	36.00139	-98.98413	4/30/2018	16:30	17:00	77	Sunny	24	1	Connector	4/30/2018	OGI	0	0	0	N
929109	NICKELSON 17-22-15 1H PAD	36.37681	-98.82046	4/30/2018	13:00	13:30	77	Sunny	24	0	N/A	N/A	N/A	0	0	0	N
929348	CAULDER 31-23-14 1H PAD	36.42034	-98.73255	4/30/2018	14:00	14:30	77	Sunny	24	0	N/A	N/A	N/A	0	0	0	N
929477	PEACH 18-22-16 1H PAD	36.37623	-98.95965	4/30/2018	12:00	12:30	77	Sunny	24	0	N/A	N/A	N/A	0	0	0	N

NSPS Subpart OOOOa Annual Report for period beginning 8/2/2017 - collection of fugitive emissions components at a well site

Operator Name	CHESAPEAKE OPERATING LLC
Monitoring Instrument	FLIR GF320
Serial Number	44401080
Surveys Performed By	Nick Kauk
Operator Training and Experience	Trained and Certified for Optical Gas Imaging October 2014

Site Number	Site Name	Surface Latitude Value	Surface Longitude Value	OOOOa Survey Date	OOOOa Survey Start Time	OOOOa Survey End Time	Ambient Temperature (F)	Sky Conditions	Max Observed Wind Speed (mph)	Number of Leaking Components	Type of Leaking Component	Repair Date	Repair Verification Method	Number and type of leaking components not repaired	Number and type of difficult to monitor or unsafe to monitor	Number and type of components placed on delay of repair	Deviation from monitoring plan?
60.5420a(b)(1)(ii)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(7)(i)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(x)	60.5420a(b)(7)(xiii)	60.5420a(b)(7)(viii)	60.5420a(b)(7)(ix)	60.5420a(b)(7)(xi)	60.5420a(b)(7)(vi)
929441	SMITH 18-20-13 1H PAD	36.20300	-98.63235	4/30/2018	15:00	15:30	77	Sunny	24	0	N/A	N/A	N/A	0	0	0	N
929872	GM 12-17-7 PAD	35.97049	-97.89709	5/29/2018	13:15	13:30	87	Sunny	13	3	Fitting (2) Connector (1)	5/29/2018	OGI	0	0	0	N
929873	BULLIS 1-17-7 PAD	35.97183	-97.89710	5/29/2018	12:30	13:00	87	Sunny	13	0	N/A	N/A	N/A	0	0	0	N
928758	POLLARD 15-18-6 1H PAD	36.04296	-97.82448	5/30/2018	11:30	12:00	86	Sunny	10	0	N/A	N/A	N/A	0	0	0	N
929654	VIRGIL 35-21-19 1HC PAD	36.24765	-99.20938	6/4/2018	12:00	12:30	88	Sunny	8	1	Fitting	6/4/2018	OGI	0	0	0	N

NSPS Subpart OOOOa Annual Report for period beginning 8/2/2017 - collection of fugitive emissions components at a well site

Operator Name	CHESAPEAKE OPERATING LLC
Monitoring Instrument	FLIR GF320
Serial Number	44401182
Surveys Performed By	Wes Hope
Operator Training and Experience	Trained and Certified for Optical Gas Imaging Feb 2017

Site Number	Site Name	Surface Latitude Value	Surface Longitude Value	OOOOa Survey Date	OOOOa Survey Start Time	OOOOa Survey End Time	Ambient Temperature (F)	Sky Conditions	Max Observed Wind Speed (mph)	Number of Leaking Components	Type of Leaking Component	Repair Date	Repair Verification Method	Number and type of leaking components not repaired	Number and type of difficult to monitor or unsafe to monitor	Number and type of components placed on delay of repair	Deviation from monitoring plan?
60.5420a(b)(1)(ii)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(1)(i)	60.5420a(b)(7)(i)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(ii)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(iv)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(vii)	60.5420a(b)(7)(x)	60.5420a(b)(7)(xiii)	60.5420a(b)(7)(viii)	60.5420a(b)(7)(ix)	60.5420a(b)(7)(xi)	60.5420a(b)(7)(vi)
943733	HELEN 1-9 PAD	36.48129	-98.80257	10/16/2017	13:10	13:25	73	Sunny	9.5	0	N/A	N/A	N/A	0	0	0	N
929107	SCHOEPPEL 16-20-12 1H PAD	36.20290	-98.49049	11/30/2017	11:45	12:00	54	Partly Cloudy	7.5	0	N/A	N/A	N/A	0	0	0	N
929511	HOSKINS 5-19-12 2H PAD	36.14525	-98.51046	11/30/2017	13:20	13:35	55	Partly Cloudy	6	0	N/A	N/A	N/A	0	0	0	N
929773	BRAVO 28-20-12 1HC PAD	36.18703	-98.49261	11/30/2017	12:30	12:45	54	Partly Cloudy	3.5	0	N/A	N/A	N/A	0	0	0	N
929109	NICKELSON 17-22-15 1H PAD	36.37681	-98.82046	11/30/2017	8:15	8:30	44	Overcast	3.5	1	Thief Hatch	11/30/2017	OGI	0	0	0	N
929441	SMITH 18-20-13 1H PAD	36.20300	-98.63235	11/30/2017	14:00	14:15	54	Partly Cloudy	2.5	2	Fitting (2)	11/30/2017	OGI	0	0	0	N
929133	WILLAMETTE 30&31-20-12 1H PAD	36.18703	-98.51132	11/30/2017	12:00	12:15	54	Partly Cloudy	5.5	0	N/A	N/A	N/A	0	0	0	N
929114	HOSKINS 5-19-12 1H PAD	36.14475	-98.49988	11/30/2017	13:05	13:20	55	Partly Cloudy	6	1	Fitting	12/18/2017	M21	0	0	0	N
929477	PEACH 18-22-16 1H PAD	36.37623	-98.95965	12/1/2017	9:20	9:35	49	Partly Cloudy	8.5	0	N/A	N/A	N/A	0	0	0	N
929110	STEPHEN 26-18-17 1H PAD	36.00139	-98.98413	12/6/2017	9:55	10:10	42	Sunny	6.5	0	N/A	N/A	N/A	0	0	0	N
929654	VIRGIL 35-21-19 1HC PAD	36.24765	-99.20938	12/6/2017	12:05	12:20	51	Sunny	11	0	N/A	N/A	N/A	0	0	0	N