LT Environmental, Inc.
4600 West 60th Avenue
Arvada, Colorado 80003
T 303.433.9788 / F 303.433.1432

March 12, 2018

Ms. Alexis North
Office of Enforcement, Compliance & Environmental Justice
EPA Region 8
1595 Wynkoop Street (8ENF-AT)
Denver, CO 80202-1129

RE: NSPS Subpart OOOOa Initial Report
Cub Creek Energy

Dear Ms. North,

LT Environmental, Inc. (LTE) is submitting on behalf of Cub Creek Energy the attached initial report for NSPS Subpart OOOOa for the January 1, 2017 through December 31, 2017 reporting period. This package includes the appropriate portions of the EPA provided reporting template, as well as a signed certification of completeness by a responsible official.

Please feel free to contact me at 303-704-1066 or cdimarco@ltenv.com if you have questions.

Sincerely,

LT ENVIRONMENTAL, INC.

(b) (6)
[redacted]

Chris DiMarco
Project Air Quality Scientist

cc: Tracy Butzen – Cub Creek Energy

Responsible Official

Name: (Last) Baily (First) Scott (MI) B.

Title President of Cub Creek Energy, LLC

Street or P.O. Box 200 Plaza Drive, Suite 100

City Highlands Ranch State CO ZIP 80129 -

Telephone (303) 446 - 6140 Ext. Facsimile (303) 446 - 6148

Certification of Truth, Accuracy and Completeness (to be signed by the responsible official)

I certify under penalty of law, based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true, accurate and complete.

Name (signed) (b) (6) [redacted]

Name (typed) Scott B. Baily Date: 3 / 9 / 2018

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report
For each affected facility, an owner or operator must include the information specified in paragraphs (b)(1)(i) through (ix) of this section in all annual reports:

	Facility Record No. *	1	1	1	1	1	1	1	1	1	1	1	1
SITE INFORMATION	Company Name * (§60.5420a(b)(1)(i))	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy	Cub Creek Energy
	Facility Site Name * (§60.5420a(b)(1)(i))	Markham Pad	Markham Pad	Markham Pad	Markham Pad	Markham Pad	Markham Pad	Markham Pad	Markham Pad	Markham Pad	Markham Pad	Markham Pad	Markham Pad
	U/S Well ID or U/S Well ID Associated with the Affected Facility, if applicable. * (§60.5420a(b)(1)(i))	05-123-43650	05-123-43649	05-123-43249	05-123-43243	05-123-43247	05-123-43244	05-123-43245	05-123-43248	05-123-43246	05-123-43241	05-123-43275	05-123-43274
	Address of Affected Facility * (§60.5420a(b)(1)(i))	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W	NWSE Sec 32 T4N R68W
	Address 2												
	City *	Berthoud	Berthoud	Berthoud	Berthoud	Berthoud	Berthoud	Berthoud	Berthoud	Berthoud	Berthoud	Berthoud	Berthoud
	County *	Weld	Weld	Weld	Weld	Weld	Weld	Weld	Weld	Weld	Weld	Weld	Weld
	State Abbreviation *	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO	CO
	Zip Code *	80513	80513	80513	80513	80513	80513	80513	80513	80513	80513	80513	80513
	Responsible Agency Facility ID (State Facility Identifier)	123-9F48	123-9F48	123-9F48	123-9F48	123-9F48	123-9F48	123-9F48	123-9F48	123-9F48	123-9F48	123-9F48	123-9F48
ALTERNATIVE ADDRESS INFORMATION (IF NO PHYSICAL ADDRESS AVAILABLE FOR SITE *)	Description of Site Location (§60.5420a(b)(1)(i))	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location	2 miles east of I-25 and county road 38, then 0.25 miles north on county road 5, turn east into location
	Latitude of the Site (decimal degrees to 5 decimals using the North American Datum of 1983) (§60.5420a(b)(1)(i))	(b) (9) [redacted]											
	Longitude of the Site (decimal degrees to 5 decimals using the North American Datum of 1983) (§60.5420a(b)(1)(i))												
REPORTING INFORMATION	Beginning Date of Reporting Period. * (§60.5420a(b)(1)(ii))	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017
	Ending Date of Reporting Period. * (§60.5420a(b)(1)(ii))	12/31/2017	12/31/2017	12/31/2017	12/31/2017	12/31/2017	12/31/2017	12/31/2017	12/31/2017	12/31/2017	12/31/2017	12/31/2017	12/31/2017
PE Certification	Please provide the file name that contains the certification signed by a qualified professional engineer for each closed vent system routing to a control device or process. * (§60.5420a(b)(12)) Please provide only one file per record.												
ADDITIONAL INFORMATION	Please enter any additional information.												
	Enter associated file name reference.												

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For the collection of fugitive emissions components at each well site and the collection of fugitive emissions components at each compressor station within the company-defined area, an owner or operator must include the records of each monitoring survey including the information specified in paragraphs (b)(7)(i) through (xii) of this section in all annual reports:

	Facility Record No. *	1	1	1	1			
	Identification of Each Affected Facility * (§60.5420a(b)(1))	Markham Pad	Markham Pad	Markham Pad	Markham Pad			
	Date of Survey * (§60.5420a(b)(7)(i))	5/8/2017	5/8/2017	5/8/2017	10/13/2017			
	Survey Begin Time * (§60.5420a(b)(7)(ii))	12:00 PM	12:00 PM	12:00 PM	2:10 PM			
	Survey End Time * (§60.5420a(b)(7)(iii))	3:00 PM	3:00 PM	3:00 PM	3:12 PM			
	Name of Surveyor * (§60.5420a(b)(7)(iii))	(b) (6) [redacted]						
	Ambient Temperature During Survey * (§60.5420a(b)(7)(iv))	65F	65F	65F	57F			
	Sky Conditions During Survey * (§60.5420a(b)(7)(iv))	Sunny	Sunny	Sunny	Sunny			
	Maximum Wind Speed During Survey * (§60.5420a(b)(7)(iv))	15 mph	15 mph	15 mph	6 mph			
	Monitoring Instrument Used * (§60.5420a(b)(7)(v))	IR Camera	IR Camera	IR Camera	IR Camera			
	Deviations From Monitoring Plan (If none, state none.) * (§60.5420a(b)(7)(vi))	None	None	None	None			
	Type of Component for which Fugitive Emissions Detected * (§60.5420a(b)(7)(vii))	Valve	Connectors	Thief Hatch	Connectors			
	Number of Each Component Type for which Fugitive Emissions Detected * (§60.5420a(b)(7)(vii))	1	2	5	1			
	Type of Component Not Repaired as Required in §60.5397a(h) * (§60.5420a(b)(7)(viii))	NA	NA	NA	NA			
	Number of Each Component Type Not Repaired as Required in § 60.5397a(h) * (§60.5420a(b)(7)(viii))	0	0	0	0			
	Type of Difficult-to-Monitor Components Monitored * (§60.5420a(b)(7)(ix))	NA	NA	NA	NA			
	Number of Each Difficult-to-Monitor Component Type Monitored * (§60.5420a(b)(7)(ix))	0	0	0	0			
	Type of Unsafe-to-Monitor Component Monitored * (§60.5420a(b)(7)(ix))	NA	NA	NA	NA			
	Number of Each Unsafe-to-Monitor Component Type Monitored * (§60.5420a(b)(7)(ix))	0	0	0	0			
	Date of Successful Repair of Fugitive Emissions Component * (§60.5420a(b)(7)(x))	42863	42870	42879	43021			
	Type of Component Placed on Delay of Repair * (§60.5420a(b)(7)(xi))	NA	NA	NA	NA			
	Number of Each Component Type Placed on Delay of Repair * (§60.5420a(b)(7)(xi))	0	0	0	0			

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For the collection of fugitive emissions components at each well site and the collection of fugitive emissions components at each compressor station within the company defined area, an owner or operator must include the records of each monitoring survey including the information specified in paragraphs (b)(7)(i) through (xii) of this section in all annual reports:

	Facility Record No. *	1	1	1	1			
	Explanation for Delay of Repair * (§60.5420a(b)(7)(xi))	NA	NA	NA	NA			
	Type of Instrument Used to Resurvey Repaired Components Not Repaired During Original Survey * (§60.5420a(b)(7)(xi))	NA	IR Camera	IR Camera	IR Camera			
OGI	Training and Experience of Surveyor * (§60.5420a(b)(7)(ix))	2+ years of leak detection and repair experience in field	2+ years of leak detection and repair experience in field	2+ years of leak detection and repair experience in field	2+ years of leak detection and repair experience in field			
Compressor Station Affected Facility Only	Was a monitoring survey waived under § 60.5397a(g)(5)? * (§60.5420a(b)(7))							
	If a monitoring survey was waived, the calendar months that make up the quarterly monitoring period for which the monitoring survey was waived. * (§60.5420a(b)(7))							

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For each well affected facility, an owner or operator must include the information specified in paragraphs (b)(2)(i) through (iii) of this section in all annual reports:

	Facility Record No. *	1	1	1	1	1	1	1	1	1	1	1	1
	United States Well Number* (§60.5420a(b)(1)(i))	05-123-43650	05-123-43649	05-123-43245	05-123-43243	05-123-43247	05-123-43244	05-123-43245	05-123-43248	05-123-43246	05-123-43262	05-123-43275	05-123-43276
	Records of deviations where well completion operations with hydraulic fracturing were not performed in compliance with the requirements specified in § 60.5375a. * (§60.5420a(b)(2)(ii) and §60.5420a(c)(1)(iii))	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
§60.5432a Low Pressure Wells	Please provide the file name that contains the Record of Determination and Supporting Inputs and Calculations * (§60.5420a(b)(2)(iii) and §60.5420a(c)(1)(iv)) Please provide only one file per record.												
All Well Completions	Well Completion ID * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(i))	Completion A	Completion B	Completion C	Completion D	Completion E	Completion F	Completion G	Completion H	Completion I	Completion J	Completion K	Completion L
Well Affected Facilities Required to Comply with §60.5375a(a) and §60.5375a(f)	Well Location * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	(b) (9) [redacted]											
	Date of Onset of Flowback Following Hydraulic Fracturing or Refracturing * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017	1/1/2017
	Time of Onset of Flowback Following Hydraulic Fracturing or Refracturing * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.	12:00 a.m.
	Date of Each Attempt to Direct Flowback to a Separator * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	4/11/2017	4/11/2017	4/11/2017	4/20/2017	4/20/2017	4/20/2017	4/25/2017	4/28/2017	4/28/2017			
	Time of Each Attempt to Direct Flowback to a Separator * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM
	Date of Each Occurrence of Returning to the Initial Flowback Stage * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Time of Each Occurrence of Returning to the Initial Flowback Stage * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Date Well Shut In and Flowback Equipment Permanently Disconnected or the Startup of Production * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	4/11/2017	4/11/2017	4/11/2017	4/20/2017	4/20/2017	4/20/2017	4/25/2017	4/28/2017	4/28/2017	5/5/2017	5/5/2017	5/5/2017
	Time Well Shut In and Flowback Equipment Permanently Disconnected or the Startup of Production * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM
	Duration of Flowback in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	2448	2448	2448	2616	2616	2616	2736	2808	2808	2976	2976	2976
	Duration of Recovery in Hours * (Not Required for Wells Complying with §60.5375a(f)) (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A))	2448	2448	2448	2616	2616	2616	2736	2808	2808	2976	2976	2976
	Disposition of Recovery * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Pipeline	Pipeline	Pipeline	Pipeline	Pipeline	Pipeline	Pipeline	Pipeline	Pipeline	Pipeline	Pipeline	Pipeline

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For each well affected facility, an owner or operator must include the information specified in paragraphs (b)(1)(i) through (ix) of this section in all annual reports:

	Facility Record No. *	1	1	1	1	1	1	1	1	1	1	1	1
Exceptions Under §60.5375a(a)(5) - Technically Infeasible to Route to the Gas Flow Line or Collection System, Re-inject Into a Well, Use as an Onsite Fuel Source, or Use for Another Useful Purpose Served By a Purchased Fuel or Raw Material	Duration of Combustion in Hours * (§60.5420a(b)(1)(i) and §60.5420a(c)(1)(ii)(A)-(B))	0	0	0	0	0	0	0	0	0	0	0	0
	Duration of Venting in Hours * (§60.5420a(b)(1)(i) and §60.5420a(c)(1)(ii)(A)-(B))	0	0	0	0	0	0	0	0	0	0	0	0
	Reason for Venting in lieu of Capture or Combustion * (§60.5420a(b)(1)(i) and §60.5420a(c)(1)(ii)(A)-(B))	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Well Location * (§60.5420a(b)(1)(i) and §60.5420a(c)(1)(iv))												
	Specific Exception Claimed * (§60.5420a(b)(1)(i) and §60.5420a(c)(1)(iv))												
	Starting Date for the Period the Well Operated Under the Exception * (§60.5420a(b)(1)(i) and §60.5420a(c)(1)(iv))												
	Ending Date for the Period the Well Operated Under the Exception * (§60.5420a(b)(1)(i) and §60.5420a(c)(1)(iv))												
	Why the Well Meets the Claimed Exception * (§60.5420a(b)(1)(i) and §60.5420a(c)(1)(iv))												
	Name of Nearest Gathering Line * (§60.5420a(b)(1)(ii) and §60.5420a(c)(1)(v)(A)-(B))												
	Location of Nearest Gathering Line * (§60.5420a(b)(1)(ii) and §60.5420a(c)(1)(v)(A)-(B))												
	Technical Considerations Preventing Routing to this Line * (§60.5420a(b)(1)(ii) and §60.5420a(c)(1)(v)(A)-(B))												
	Capture, Reinjection, and Reuse Technologies Considered * (§60.5420a(b)(1)(ii) and §60.5420a(c)(1)(v)(A)-(B))												
	Aspects of Gas or Equipment Preventing Use of Recovered Gas as a Fuel Onsite * (§60.5420a(b)(1)(ii) and §60.5420a(c)(1)(v)(A)-(B))												
	Technical Considerations Preventing Use of Recovered Gas for Other Useful Purpose * (§60.5420a(b)(1)(ii) and §60.5420a(c)(1)(v)(A)-(B))												
	Additional Reasons for Technical Infeasibility * (§60.5420a(b)(1)(ii) and §60.5420a(c)(1)(v)(A)-(B))												
Well Affected Facilities Meeting the Criteria of §60.5375a(a)(1)(i)(A) - Not Hydraulically Fractured/Refractured with Liquids or Do Not Generate Condensate, Intermediate Hydrocarbon Liquids, or Produced Water (No Liquid Collection System or Separator Onsite)	Well Location * (§60.5420a(b)(1)(iii) and §60.5420a(c)(1)(vi)(A) and (C))												
	Date of Onset of Flowback Following Hydraulic Fracturing or Refracturing * (§60.5420a(b)(1)(iii) and §60.5420a(c)(1)(vi)(A) and (C))												
	Time of Onset of Flowback Following Hydraulic Fracturing or Refracturing * (§60.5420a(b)(1)(iii) and §60.5420a(c)(1)(vi)(A) and (C))												
	Date Well Shut In and Flowback Equipment Permanently Disconnected or the Startup of Production * (§60.5420a(b)(1)(iii) and §60.5420a(c)(1)(vi)(A) and (C))												

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For each well affected facility, an owner or operator must include the information specified in paragraphs (b)(2)(i) through (ix) of this section in all annual reports:

	Facility Record No. *	1	1	1	1	1	1	1	1	1	1	1	1
Well Affected Facilities Meeting the Criteria of §60.5375a(b)(1)(i)(A) - Not Hydraulically Fractured/Refractured with Liquids or Do Not Generate Condensate, Intermediate Hydrocarbon Liquids, or Produced Water (No Liquid Collection System or Separator Onsite)	Time Well Shut In and Flowback Equipment Permanently Disconnected or the Startup of Production * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(A) and (C))												
	Duration of Flowback in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(A) and (C))												
	Duration of Combustion in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(A) and (C))												
	Duration of Venting in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(A) and (C))												
	Reason for Venting in lieu of Capture or Combustion * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(A) and (C))												
	Does well still meet the conditions of §60.5375a(b)(1)(i)(A)? * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(C)(7))												
	If applicable: Date Well Completion Operation Stopped * ((§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(C)(7))												
	If applicable: Time Well Completion Operation Stopped * ((§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(C)(7))												
	If applicable: Date Separator Installed * ((§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(C)(7))												
	If applicable: Time Separator Installed * ((§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(C)(7))												
	Are there liquids collection at the well site? Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. * ((§60.5420a(b)(2)(i) and §60.5420a(c)(1)(ii)(C)(7))												
Well Affected Facilities Required to Comply with Both §60.5375a(b)(1) and (2) Using a Digital Photo in lieu of Records Required by §60.5420a(b)(1)(i) through (ix)	Please provide the file name that contains the Digital Photograph with Date Taken and Latitude and Longitude Embedded (or with Visible GPS), Showing Required Equipment (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iv)) Please provide only one file per record.												
Well Affected Facilities Meeting the Criteria of §60.5375a(g) - <300 scf of Gas per Stock Tank Barrel of Oil Produced	Well Location * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(vi)(B))												
	Please provide the file name that contains the Record of Analysis Performed to Claim Well Meets §60.5375a(g), including GOR Values for Established Leases and Data from Wells in the Same Basin and Field * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(vi)(A)) Please provide only one file per record.												
	Does the well meet the requirements of §60.5375a(g)? Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. * ((§60.5420a(b)(2)(i) and §60.5420a(c)(1)(vi)(C))												